

Phase Transition Enthalpy Measurements of Organic and Organometallic Compounds. Sublimation, Vaporization and Fusion Enthalpies From 1880 to 2015. Part 1. C₁ – C₁₀

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Phase Transition Enthalpy Measurements of Organic and Organometallic Compounds. Sublimation, Vaporization and Fusion Enthalpies From 1880 to 2015. Part 1. C₁-C₁₀

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A compendium of phase change enthalpies published in 2010 is updated to include the period 1880–2015. Phase change enthalpies including fusion, vaporization, and sublimation enthalpies are included for organic, organometallic, and a few inorganic compounds. Part 1 of this compendium includes organic compounds from C₁ to C₁₀. Part 2 of this compendium, to be published separately, will include organic and organometallic compounds from C₁₁ to C₁₉₂. Sufficient data are presently available to permit thermodynamic cycles to be constructed as an independent means of evaluating the reliability of the data. Temperature adjustments of phase change enthalpies from the temperature of measurement to the standard reference temperature, $T = 298.15$ K, and a protocol for doing so are briefly discussed. © 2016 American Institute of Physics for the National Institute of Standards and Technology NIST. [<http://dx.doi.org/10.1063/1.4948363>]

Key words: compendium; fusion enthalpy; sublimation enthalpy; vaporization enthalpy.

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1. Introduction

This compendium updates a previous report published in 2010 [2010ACR/CHI] on phase change enthalpies. Part 1 of this compendium is inclusive and includes organic compounds containing from one to ten carbon atoms published over the period of 1880 to 2015 and includes a total of over 6600 entries. Part 2 of this series to be published separately contains over 7400 entries covering both organic compounds from eleven to 192 carbons, organometallic, and organic ionic liquids. Current interest in thermochemical properties of these materials is reflected by the 15% increase in the number of publications reported during the five year interval since the 2010 publication. While many of these properties are freely available online [<http://webbook.nist.gov/chemistry/>, <http://trc.nist.gov/thermolit/>], each compound in these sources needs to be searched individually. A goal of this publication is to provide to those interested direct access to the entire collection of experimental phase change enthalpies of compounds that have been measured in addition to allowing electronic searching using available software. Since phase change properties are useful to a variety of disciplines they are frequently reported as part of other projects. A goal of this compendium is to provide a single location for identifying and accessing work that may have been published in specialty journals focusing on other topics.

2. Phase Change Enthalpies

Sublimation, vaporization, and fusion enthalpies are related to each other by Eq. (1) provided temperature T for all three terms is the same. Unlike fusion enthalpy, sublimation and vaporization enthalpies are frequently measured as a function of temperature, where T frequently refers to the mean temperature of measurement, T_m . Fusion enthalpies of pure materials occur on the other hand isothermally at T_{fus} . The complication that arises in applying Eq. (1) is that frequently it is necessary to adjust two or all three measurements to the same temperature, often the reference temperature, $T = 298.15$ K. In principle, to do so requires information regarding the heat capacity of at least two of the three phases involved, $Cp(g)$, $Cp(l)$, and $Cp(cr)$ and is further complicated by their temperature dependence,

$$\Delta_{sub}H_m(T) = \Delta_{vap}H_m(T) + \Delta_{fus}H_m(T). \quad (1)$$

Heat capacities for $Cp(l)$ and $Cp(cr)$ are available for many compounds and can be measured as a function of temperature. Experimental heat capacities of the gas phase at temperatures when the material is either solid or liquid are more problematic. Gas phase heat capacities for these materials are frequently calculated. Statistical mechanics combined with *ab initio* calculations are usually employed (see [2010SAN/ROC] for example). An alternative approach that has been developed for adjusting phase change enthalpies with temperature aimed at circumventing the scarcity of experimental gas phase heat capacities is described by Eq. (2)

for liquids and Eq. (3) for solids, [1993CHI/HOS]

$$\begin{aligned} \Delta_{vap}H_m(T/K)/\text{kJ mol}^{-1} \\ = \Delta_{vap}H_m(T_m/K) + \Delta_f^g Cp_{298K}(l) \cdot \Delta T, \end{aligned} \quad (2)$$

$$\begin{aligned} \text{where : } \Delta_f^g Cp(l) \cdot \Delta T \\ = (10.58 + 0.26Cp_{298K}(l)) \cdot (\Delta T)/1000 \text{ and} \end{aligned}$$

$$\begin{aligned} \Delta_{sub}H_m(T/K)/\text{kJ mol}^{-1} \\ = \Delta_{sub}H_m(T_m/K) + \Delta_{cr}^g Cp(l) \cdot \Delta T, \end{aligned} \quad (3)$$

$$\begin{aligned} \text{where : } \Delta_{cr}^g Cp(cr) \cdot \Delta T \\ = (0.75 + 0.15Cp_{298K}(cr)) \cdot (\Delta T)/1000. \end{aligned}$$

In both Eqs. (2) and (3), ΔT refers to $T_m - T_R$, where T_m/K often represents the mean temperature of measurement and T_R is usually the reference temperature, 298.15 K; $Cp_{298.15K}(l)$ and $Cp_{298.15K}(cr)$ refer to the heat capacity of the liquid and solid at $T = 298.15$, respectively. Either experimental or estimated heat capacities can be used. Equations (2) and (3) were derived using heat capacities estimated by group additivity. By appropriate manipulation of Eqs. (2) and (3), it is also possible to arrive at a means of adjusting fusion enthalpies with temperature, Eq. (4),

$$\begin{aligned} \Delta_{cr}^g Cp_{298K}(l) \cdot \Delta T - \Delta_f^g Cp_{298K}(cr) \cdot \Delta T \\ = \Delta_{cr}^l Cp_{298K}(cr) \cdot \Delta T \\ \Delta_{cr}^l Cp_{298K}(cr) \cdot \Delta T \\ = [0.15Cp_{298K}(cr) - 0.26Cp_{298K}(l) - 9.93] \cdot \Delta T. \end{aligned} \quad (4)$$

The term $\Delta_{cr}^g Cp_{298K}(cr) = (0.75 + 0.15Cp_{298K}(cr))$ has also been used for evaluating values of the gas phase heat capacity of a solid, Eq. (5). [2010MON/ALM] Similarly, gas phase heat capacities of the liquids could be evaluated using a similar approach together with Eq. (2). Although Eq. (2) does not seem to have been used in this manner, Eq. (6) can be derived in the same manner. This is illustrated for both solids and liquids in Sec. 3.2 for several compounds,

$$\begin{aligned} \Delta_{cr}^g Cp_{298K}(cr) &= [Cp_{298K}(g) - Cp_{298K}(cr)] \\ &= (0.75 + 0.15Cp_{298K}(cr)). \end{aligned}$$

Rearranging and solving for $Cp_{298K}(g)$,

$$Cp_{298K}(g) = 0.85Cp_{298K}(cr) - 0.75, \quad (5)$$

$$Cp_{298K}(g) = 0.74Cp_{298K}(l) - 10.58. \quad (6)$$

2.1. Estimation of condensed phase heat capacities

In order to apply Eqs. 2–6, reliable values of the heat capacity of the condensed phase are required. A number of methods have been developed over the years that vary in their

TABLE 1. Group values for estimation of liquid Γ (l) and solid Γ (s) heat capacities at $T = 298.15 \text{ K}^a$

	Group atoms	Γ (l) $\text{J K}^{-1} \text{ mol}^{-1}$	Γ (s) $\text{J K}^{-1} \text{ mol}^{-1}$
1. Hydrocarbon groups			
Primary sp^3 carbon	CH_3-	34.9 (25)	36.6 (14)
Secondary sp^3 carbon	$-\text{CH}_2-$	31.9 (24)	26.9 (14)
Tertiary sp^3 carbon	$>\text{CH}-$	22.4 (20)	9.0 (11)
Quaternary sp^3 carbon	$>\text{C}<$	14.0 (17)	-4.9 (41)
Secondary sp^2 carbon	$=\text{CH}_2$	25.8 (18)	[46.0] (5)
Tertiary sp^2 carbon	$=\text{CH}-$	27.8 (22)	21.4 (14)
Quaternary sp^2 carbon	$=\text{C}<$	21.7 (30)	6.9 (10)
Tertiary sp carbon	$\equiv\text{CH}$	[38.8] (9)	[25] (1)
Quaternary sp carbon	$\equiv\text{C}- ; =\text{C}=\text{C}$	29.1 (15)	[15.1] (3)
2. Aromatic hydrocarbon and nitrogen groups			
Tertiary aromatic sp^2 carbon	$=\text{C}_a\text{H}-$	21.8 (32)	17.5 (27)
Quaternary aromatic sp^2	$=\text{C}_a<$	15.3 (32)	8.5 (27)
Internal quaternary aromatic carbon ^b	$=\text{C}_a<$		[8.2] ^b (2)
Aromatic tertiary sp^2 nitrogen	$=\text{N}_a-$	20.7 (12)	13.9 (21)
3. Cyclic hydrocarbon groups			
Cyclic secondary sp^3 carbon	$-\text{C}_c\text{H}_2-$	25.9 (46)	24.6 (27)
Cyclic tertiary sp^3 carbon	$>\text{C}_c\text{H}-$	20.6 (40)	11.7 (20)
Cyclic quaternary sp^3 carbon	$>\text{C}_c<$	18 (13)	6.1 (21)
Cyclic tertiary sp^2 carbon	$=\text{C}_c\text{H}-$	21.8 (17)	18 (61)
Cyclic quaternary sp^2 carbon	$=\text{C}_c<$	21.2 (16)	6.6 (60)
Functional groups			
A. Monovalent groups			
Hydroxyl group (alcohols)	$-\text{OH}$	58.7 (85)	22.7 (42)
Hydroxyl group (phenols)	$-\text{OH}$	[74.9] (2)	23.2 (17)
Fluorine	$-\text{F}$	16.9 (45)	[24.0] (9)
Chlorine	$-\text{Cl}$	30.8 (76)	28.2 (32)
Bromine	$-\text{Br}$	34.5 (32)	30.9 (11)
Iodine	$-\text{I}$	[39.2] (9)	[27.6] (5)
Nitrile	$-\text{C}\equiv\text{N}$	49.9 (23)	41.6 (12)
Carboxylic acid	$-(\text{C}=\text{O})\text{OH}$	89.4 (16)	51.3 (84)
Aldehyde	$-(\text{C}=\text{O})\text{H}$	57.2 (22)	[36.3] (7)
Primary sp^3 nitrogen	$-\text{NH}_2$	59.4 (29)	23.5 (48)
Primary amide	$-(\text{C}=\text{O})\text{NH}_2$	[41.1] (1)	49.6 (27)
Nitro group	$-\text{NO}_2$	[64.1] (7)	54.9 (18)
Monosubstituted urea	$-\text{NH}(\text{C}=\text{O})\text{NH}_2$		86.5 (10)
Isocyanate	$-\text{N}=\text{C}=\text{O}$	[57.3] (8)	[54.5] (4)
Monosubstituted guanidine	$-\text{NH}(\text{C}=\text{NH})\text{NH}_2$		[69.5] (2)
Thiol	$-\text{SH}$	47.2 (23)	[54.5] (2)
B. Acyclic divalent groups			
Ether	$-\text{O}-$	28.0 (62)	18.5 (13)
Ketone	$-(\text{C}=\text{O})-$	49.4 (28)	[34.5] (9)
Ester	$-(\text{C}=\text{O})\text{O}-$	63.9 (83)	42.2 (19)
Secondary amine	$-\text{NH}-$	47.0 (10)	[9.8] (3)
Secondary amide	$-(\text{C}=\text{O})\text{NH}-$	80.9 (10)	46.9 (13)
Tertiary amide	$-(\text{C}=\text{O})\text{N}<$	[68.8] (5)	
Sulfide	$-\text{S}-$	42.3 (21)	[26] (4)
Disulfide	$-\text{S}-\text{S}-$	[72.7] (3)	[40.5] (1)
Sulfoxide	$>(\text{S} \rightarrow \text{O})$	[83.2] (1)	[47.7] (1)
Sulfone	$>(\text{S} \rightarrow \text{O})_2$		[54.8] (3)
Carbamate	$-\text{NH}(\text{C}=\text{O})\text{O}-$		[82.1] (6)
Oxime	$=\text{N}-\text{OH}$		[53.3] (2)
Carbonate	$-\text{O}(\text{C}=\text{O})\text{O}-$	[77.4] (1)	[68.7] (1)
C. Acyclic trivalent groups			
Tertiary sp^3 nitrogen (tert amine)	$-\text{N}<$	29.7 (14)	[37.9] (7)
Tertiary sp^2 nitrogen	$=\text{N}-$	[36.6] (3)	[18.5] (8)
Tertiary amide	$-(\text{C}=\text{O})\text{N}<$	[68.8] (5)	
Triphosphate ester	$>\text{O}_2(\text{P}=\text{O})-\text{O}-$		[44.6] (2)
D. Acyclic quaternary group			
Quaternary silicon	$>\text{Si}<$	37.6 (33)	[40.2] (5)

TABLE 1. Group values for estimation of liquid Γ (l) and solid Γ (s) heat capacities at $T = 298.15 \text{ K}^a$ —Continued

Group atoms	Γ (l) $\text{J K}^{-1} \text{ mol}^{-1}$	Γ (s) $\text{J K}^{-1} \text{ mol}^{-1}$
E. Cyclic functional groups		
Cyclic anhydride	$-(\text{C}=\text{O})\text{O}(\text{C}=\text{O})_c-$	[78.5] (4)
Cyclic carbonate	$-(\text{O}(\text{C}=\text{O})\text{O})_c-$	[84.5] (6)
Cyclic ether	$-\text{O}_c-$	23.2 (23)
Cyclic ester (lactone)	$-(\text{C}=\text{O})\text{O}_c-$	[69.4] (8)
Cyclic imide	$-((\text{C}=\text{O})\text{NH}(\text{C}=\text{O}))_c-$	[44.6] (6)
<i>N</i> -substituted cyclic imide	$-((\text{C}=\text{O})\text{NR}(\text{C}=\text{O}))_c-$	[71.4] (4)
Cyclic ketone	$-(\text{C}=\text{O})_c-$	[54.5] (5)
Cyclic secondary sp^3 nitrogen	$-\text{NH}_c-$	48.0 (12)
Cyclic tertiary sp^3 nitrogen	$-\text{N}_c<$	47.8 (14)
Cyclic tertiary sp^2 nitrogen	$=\text{N}_c-$	[24.4] (11)
Cyclic secondary amide	$-((\text{C}=\text{O})\text{NH})_c-$	20.7 (21)
Cyclic tertiary amide	$-((\text{C}=\text{O})\text{N}<)_c-$	[91.3] (1)
Cyclic sulfide	$-\text{S}_c-$	[96.3] (1)
Cyclic sulfone	$>(\text{S} \rightarrow \text{O})_{2c}$	33.2 (13)
Cyclic sulfoxide	$>(\text{S} \rightarrow \text{O})_c-$	21.7 (17)
Cyclic quaternary silicon	$>\text{Si}_c<$	[36.5] (4)
Cyclic thiocarbamate	$-(\text{NH}(\text{C}=\text{S})\text{O})_c-$	[27.5] (1)
Cyclic urethane	$-(\text{NH}(\text{C}=\text{O})\text{O})_c-$	[37] (10)
Cyclic urea	$-(\text{NH}(\text{C}=\text{O})\text{NH})_c-$	[64.6] (3)
		[55.1] (6)
		[61.2] (1)

^aValues in brackets are considered tentative values; values in parenthesis are the number of values used to establish the group value. Groups not specified refer to carbon or other heavy atoms.

^bAn internal quaternary aromatic carbon refers to internal carbon atoms as found in graphite [$8.1 \text{ J K}^{-1} \text{ mol}^{-1}$], acenaphthylene or coronene

complexity. Some of the earlier methods have been previously described. [1990LYM/REE, 1987CHI, 1966REI/SHE] Most recently, group additivity methods have frequently been used to evaluate values of $C_{p298K}(\text{cr})$, $C_{p298K}(\text{l})$, and indirectly, $C_{p298K}(\text{g})$, using Eq. (5). This work updates a previously reported method using group additivity methods to estimate the heat capacities of both liquids and solids. [2010ACR/CHI] The intention of the update is to take advantage of recent data to both bolster the statistics of many of the existing group values and to provide some additional new values. This work has taken advantage of an earlier compendium by Domalski and Hearing, [1996DOM/HEA] the exhaustive two volume compendium reported Zabransky *et al.* [1996ZAB/RUZ] and two additional supplements published subsequently [2001ZAB/RUZ, 2010ZAB/KOL] together with some recent literature results. Despite the influx of new data, some groups still have tentative values assigned to them. The reader should also be aware of a more sophisticated group additivity method that has also been reported to estimate liquid heat capacities [2004ZAB/RUZ]. These authors compare their results at $T = 298.15 \text{ K}$ to those evaluated by this method and note that the percent deviations obtained using their group contributions are generally somewhat less than those obtained by this group method. Their group contributions are represented by second order polynomials and their estimations are combined with some additional structural corrections. The additional complexity of the Zabransky and Ruzicka group method has the specific advantage of providing liquid heat capacities as a function of temperature. The major advantages of the group method described below are its relative simplicity and capability to provide both liquid and solid heat capacities at

$T = 298.15 \text{ K}$ within reasonable error limits and the potential of also providing gas phase heat capacities as illustrated below.

2.2. Group values for estimating liquid and solid heat capacities at $T = 298.15 \text{ K}$

The group additivity method and the group values used to evaluate heat capacities are summarized in Table 1. Groups defined in column 1 of the table are identified on the basis of the substitution pattern and hybridization. Primary, secondary, ... groups are defined by the number of hydrogens on carbon, 3, 2, ... The second column provides a structural basis for the group in question. Group values are assigned in column 3. Values in brackets refer to tentative assignments while the numbers in parenthesis refer to the number of compounds used in the assignment of the group value. Tentative assignments are characterized by less than ten experimental measurements. A blank entry indicates the lack of any experimental data. In a few cases some group values are based on a single entry. Group values for the hydrocarbon portion of the molecule are for the most part unchanged from previous versions. Exceptions include changes in two liquid and four solid group values due primarily to the inclusion of additional data. Values for the functional groups are changed but most changes are relatively small. For consistency and ease of identification, some group values previously combined have been defined separately. For example, a cyclic tertiary sp^2 hybridized nitrogen in imidazoline and also previously used for nitrogen in aromatic heterocycles is identified separately even though the value is the same for both groups.

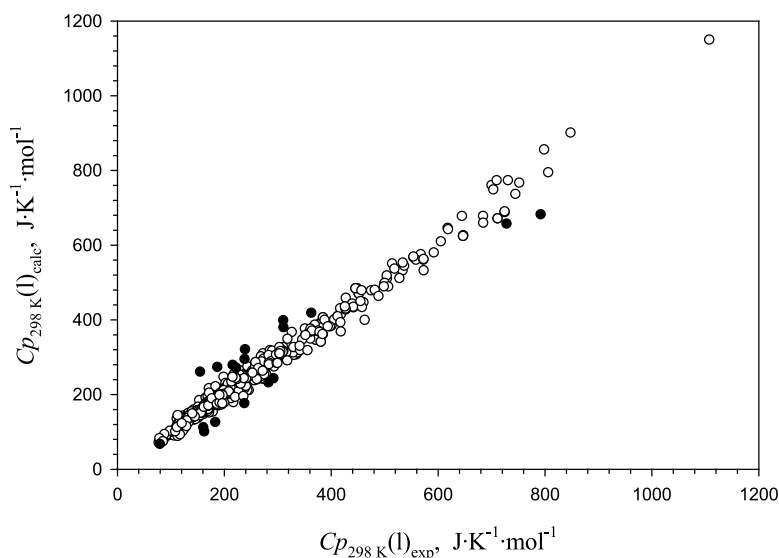


Fig. 1. A comparison of experimental and calculated liquid heat capacities at $T = 298.15$ K. The solid circles represent data that were not used in evaluating group values nor are they included in the equation of the line which is given by $Cp_{298K}(l)_{calc} = (1.003 \pm 0.004) \cdot Cp_{298K}(l)_{exp} - (4.42 \pm 1.19)$; $r^2 = 0.9878$.

2.3. Statistics in evaluation of group values

Values for most hydrocarbon groups were retained from previous work and were not evaluated in this update. A total of 709 liquids and 556 solid heat capacities, mostly substituted hydrocarbons were collected from the compendia and the current literature as noted above. A total of 691 entries were used to evaluate group values for liquids and 520 were used to evaluate the group values for solids reported in Table 1. Not included in this count are both liquid and solid hydrocarbons previously used to evaluate values that have remained unchanged. Heat capacities ranged from (73 to 730) and (79 to 1184) $J K^{-1} mol^{-1}$ for liquids and solids, respectively. Group values were evaluated by minimizing R in the following function for each functional group:

$$R = \sum_1^n \left(\frac{Cp_{exp} - Cp_{calc}}{Cp_{exp}} \right)^2. \quad (7)$$

Once a functional group was evaluated it was used as a known in substances containing multiple functionalities. In most cases it was necessary to reiterate the minimization. A total of 19 liquid and 36 solid experimental values were rejected. Compounds rejected were selected on the basis of the difference between estimated and calculated value when the fractional difference either exceeded 25% of the experimental value or was larger than $50 J K^{-1} mol^{-1}$. The value of $50 J K^{-1} mol^{-1}$ was selected as approximately three standard deviations of the uncertainty associated with previous correlations. The larger number of solids rejected is likely due to the fact that some solids either form plastic crystals, liquid crystals, or are not totally crystalline. These materials frequently exhibit larger heat capacities than conventional solids [2006ACR/CHI], [2013GOB/RAT]. Consistent with this interpretation is the finding that a total of 28 of the 39 experimental values rejected were larger than the calculated value while approximately half of the 18 rejected liquids (8/18) exceeded the calculated value. The standard deviation

($\pm 1 \sigma$) associated with estimations for 681 liquids was $\pm 14.4 J K^{-1} mol^{-1}$ and $\pm 17.0 J K^{-1} mol^{-1}$ for 524 solids. The absolute average fractional error $[(Cp_{exp} - Cp_{calc})/Cp_{exp}]$ for liquids was 0.045 and 0.053 for solids. Figures 1 and 2 compare experimental and estimated heat capacities for both the liquid and solid compounds included in the estimations. The solid circles in the figures identify values of the compounds not used in evaluating group values. These values were also not included in generating the statistics.

3. Applications

Sections 3.1 and 3.2 deal with the application of the group values evaluated to estimate values of $Cp_{298K}(cr)$, $Cp_{298K}(l)$, and $Cp_{298K}(g)$.

3.1. Estimation of condensed phase heat capacities

Figure 3 illustrates the structure of three compounds in which the groups in Table 1 are used to evaluate their heat capacity; the substances include simvastatin, used to decrease elevated lipid levels in blood, uridine, one of the five standard nucleosides, and risperidone, an antipsychotic medication. Estimations of these three solids are detailed below. Table 2 is included to provide some additional examples of some complex substances that can be addressed by this method. The table includes estimations of L-Tryptophan, 1,3-dimethylbarbituric acid, inosine, and β -ionone. L-Tryptophan is included to illustrate the applicability of using these group values in estimating amino acids despite the fact that they exist as dipolar ions. 1,3-dimethylbarbituric acid and inosine illustrate further examples of estimations in which the available functional groups can be used to evaluate their heat capacity. All but β -ionone are crystalline materials. The estimation of β -ionone represents an estimation of a liquid.

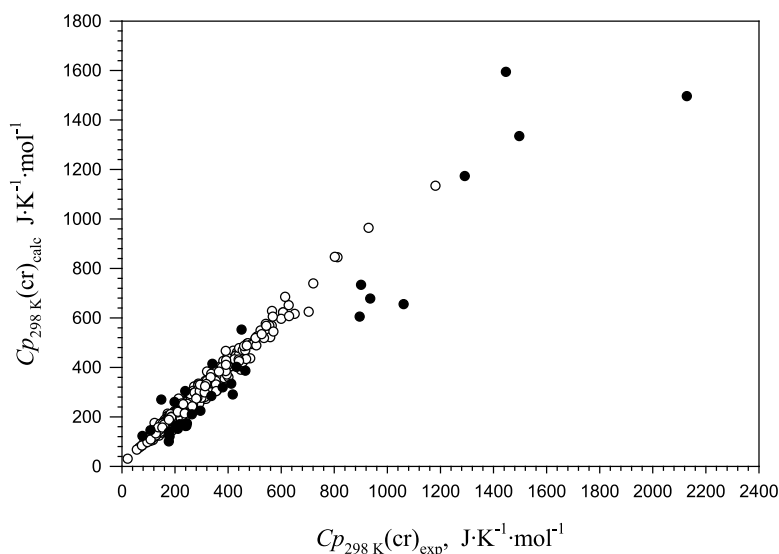


FIG. 2. A comparison of experimental and calculated solid heat capacities at $T = 298.15$ K. The solid circles represent data that were not used in evaluating group values nor are they included in the equation of the line which is given by $Cp_{298K}(cr)_{calc} = (0.986 \pm 0.006) \cdot Cp_{298K}(cr)_{exp} + (2.09 \pm 1.78)$; $r^2 = 0.9794$.

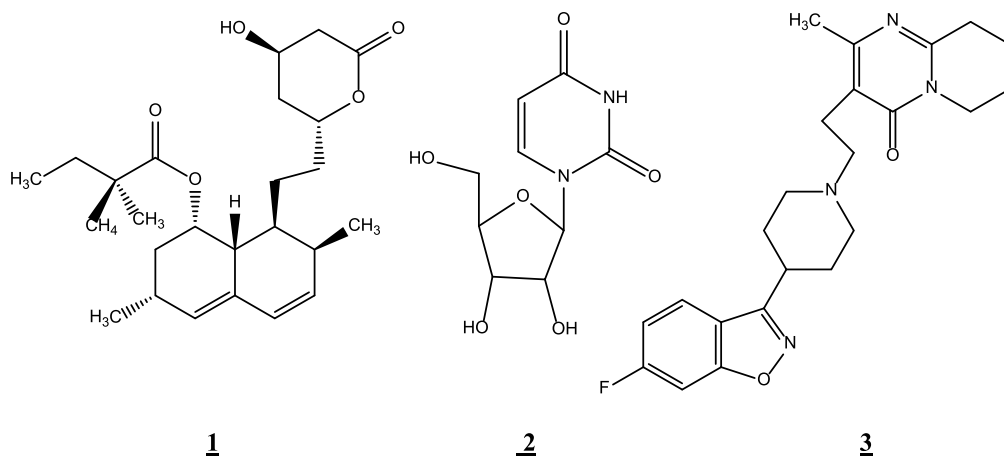


FIG. 3. Structures of simvastatin **1**, uridine **2**, and risperidone **3**.

Following the detailed description of the three compounds in Figure 3, estimation of the compounds in Table 2 should follow.

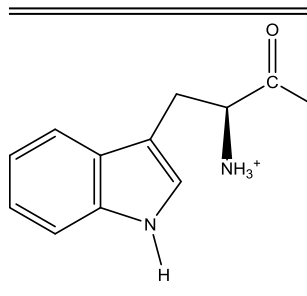
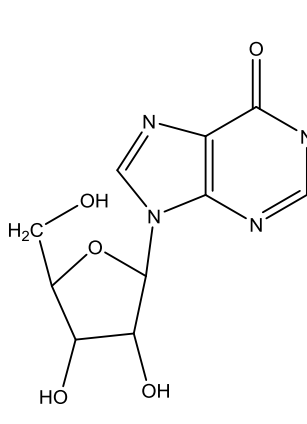
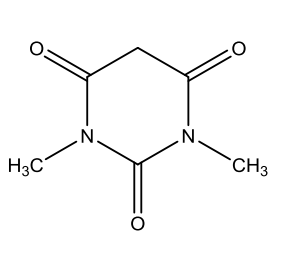
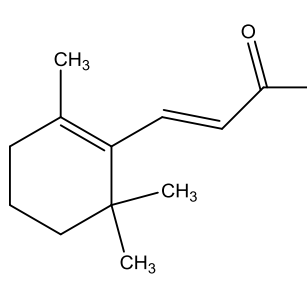
Simvastatin can be estimated by reducing the structure to the number and types of groups in the molecule. Identifying groups by beginning at the top of Table 1 and working downwards, the carbon component of simvastatin consists of 5 [CH_3 —], 3 [— CH_2 —], 1 [$>\text{C}<$], 3 [— C_cH_2 —], 7 [$>\text{C}_c\text{H}$ —], 3 [=C $_c\text{H}$ —], 1 [=C $_c$ <]. The three functional groups complete the estimation, 1 [—OH], 1 [—(C=O)O—], and 1 [—((C=O)O) $_c$ —], for a total of 26 groups. As a check, adding the carbons, hydrogens, nitrogens, and oxygens reproduces the molecular formula of simvastatin, $\text{C}_{25}\text{H}_{38}\text{O}_5$. Adding the values associated with each of these groups results in an estimated value for $Cp_{298K}(cr)$ of $(585.2 \pm 17) \text{ J K}^{-1} \text{ mol}^{-1}$ (lit. $576.5 \pm 23.1 \text{ J K}^{-1} \text{ mol}^{-1}$. [2013SIM/BER]) Heat capacity differences due to stereochemistry are frequently small. The reader should note that stereochemical considerations and positional isomers on rings are not addressed in this approach.

A similar estimation for uridine, molecular formula $\text{C}_9\text{H}_{12}\text{N}_2\text{O}_6$, results in the following for $Cp_{298K}(cr)$: 1 [— CH_2 —], 4 [$>\text{C}_c\text{H}$ —], 2 [=C $_c\text{H}$ —], 3 [—OH], 1 [— O_c —], 1 [—((C=O)NH) $_c$ —], and 1 [—((C=O)N) $_c$ <]. Adding the C, H, N, and O of these groups reproduces the correct molecular formula. Adding the values associated with each of these groups results in a value for $Cp_{298K}(cr)$ of $(278.9 \pm 17) \text{ J K}^{-1} \text{ mol}^{-1}$ (lit. 292.3 [2008SZT]).

The molecular formula of risperidone is $\text{C}_{23}\text{H}_{27}\text{FN}_4\text{O}_2$. The groups include 1 [CH_3 —], 2 [— CH_2 —], 3 [=C $_a\text{H}$ —], 3 [=C $_a\text{R}$ —], 8 [— C_cH_2 —], 1 [$>\text{C}_c\text{H}$ —], 4 [=C $_c$ <], 1 [—F], 1 [— O_c —], 1 [— N_c <], 2 [=N $_c$ —], 1 [—((C=O)N) $_c$ <]. Addition of the appropriate atoms reproduces the molecular formula and application of the group values results in a total $Cp_{298K}(cr)$ of $(509.2 \pm 17) \text{ J K}^{-1} \text{ mol}^{-1}$ (lit. $500 \text{ J K}^{-1} \text{ mol}^{-1}$ [2014MEA/SVA]).

Simvastatin, risperidone, and inosine were not included in the 550 solid heat capacities used in generating the group values. L-Tryptophan was one of the 48 entries used to evaluate the group value for primary amines, 1,3-dimethylbarbituric

TABLE 2. Estimation of L-tryptophan, inosine, 1,3-dimethylbarbituric acid and β -ionone

 <p style="text-align: center;">$C_{11} H_{12} N_2 O_2$</p>	<p>L-Tryptophan: $Cp_{298 K}(cr)_{calc} =$ $[-CH_2-] + [>CH-] + 4[=C_aH-] +$ $2[=C_aR-] + [=C_cH-] + [=C_c<-] +$ $[-NH_2] + [-(C=O)OH] + [-N_cH-]$ $Cp_{298 K}(cr)_{calc} = (240.1 \pm 17) J K^{-1} mol^{-1}$ (lit. 238.1 J K⁻¹ mol⁻¹ [1996DOM/HEA])</p>
 <p style="text-align: center;">$C_{12} H_{12} N_4 O_5$</p>	<p>Inosine: $Cp_{298 K}(cr)_{calc} =$ $[-CH_2-] + 4[>C_cH-] + 2[=C_cH-] +$ $2[=C_c<-] + 3[-OH] + [-O_c-] +$ $[-N_c<-] + 2[=N_c-] + (-(C=O)NH-)_c$ $Cp_{298 K}(cr)_{calc} = (277.5 \pm 17) J K^{-1} mol^{-1}$ (lit. 283.1 J K⁻¹ mol⁻¹ [2005BOE/HOP])</p>
	<p>1,3-Dimethylbarbituric acid $Cp_{298 K}(cr)_{calc} = 2[[CH_3-] +$ $[-C_cH_2-] + [-(C=O)N<-]_c +$ $[-((C-O)NR(C=O))_c-]$ $Cp_{298 K}(cr)_{calc} = (194.7 \pm 17) J K^{-1} mol^{-1}$ (lit. 188.5 J K⁻¹ mol⁻¹ [2011TEM/ROU])</p>
 <p style="text-align: center;">$C_{13} H_{20} O$</p>	<p>β-Ionone: $Cp_{298 K}(l)_{calc} =$ $4[CH_3-] + 2[=CH-] + 3[-C_cH_2-] +$ $[>C_c<-] + +2[=C_c<-] + [-(C=O)-]$ $Cp_{298 K}(l)_{calc} = (381.3 \pm 14.4) J K^{-1} mol^{-1}$ (lit. 377 J K⁻¹ mol⁻¹ [2005BOE/HOP])</p>

acid was one of the 38 compounds used to evaluate the group value for cyclic tertiary amides and β -ionone was one of the twelve entries used to evaluate the group value for liquid cyclic ketones.

3.2. Estimation of gas phase heat capacities

As noted above, Eq. (5) has been used to estimate the heat capacity of the corresponding gas phase. Figure 4 illustrates the structures of benzoic acid, 2,2,5,7,8-pentamethylchroman-6-ol, and 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid. The heat capacity of gaseous benzoic acid has recently been reported [2010SAN/ROC]. A theoretical value of $Cp_{298K}(g) =$

126 J K⁻¹ mol⁻¹ was calculated and compared to a value of 125.1 J K⁻¹ mol⁻¹ obtained spectroscopically [1996STE/REV]. The heat capacity of crystalline benzoic acid can be estimated as 5 [=C_aH-], 1 [=C_a<-], and [-(C=O)OH]. Addition of the appropriate group values results in a value, $Cp_{298K}(cr) = (147.3 \pm 17; \text{lit. } 146.8) J K^{-1} mol^{-1}$ [1996DOM/HEA]. Benzoic acid was one of the 84 entries used to evaluate the group value for a carboxylic acid. Applying Eq. (5) results in a gas phase heat capacity of $(124.5 \pm 17) J K^{-1} mol^{-1}$ in very good agreement with the literature value,

$$Cp_{298K}(g) (\text{benzoic acid}) = 0.85 \cdot [147.3] - 0.75 \\ = (124.5 \pm 17) J K^{-1} mol^{-1}$$

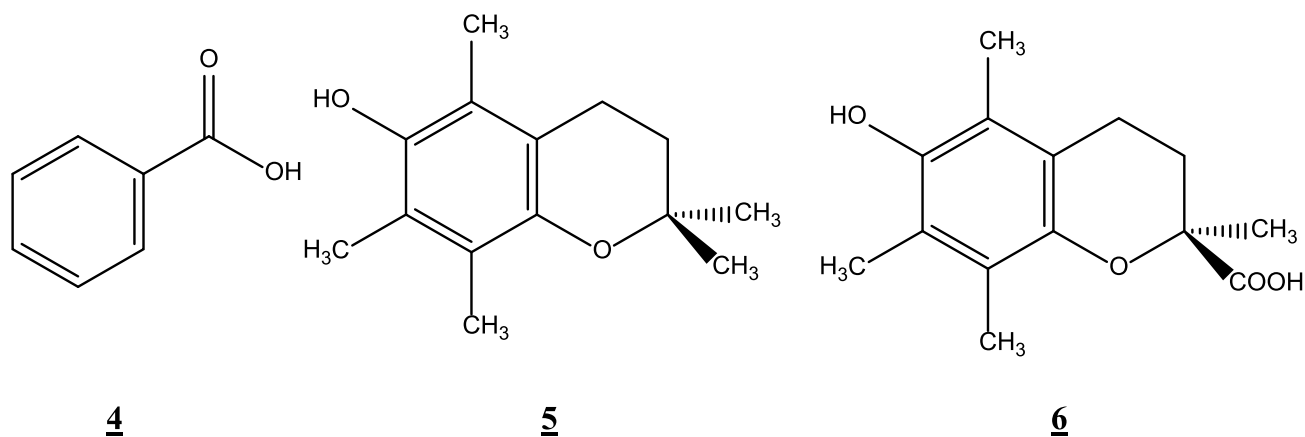


Fig. 4. Structures of benzoic acid (**4**), 2,2,5,7,8-pentamethylchroman-6-ol (**5**) and 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid (**6**).

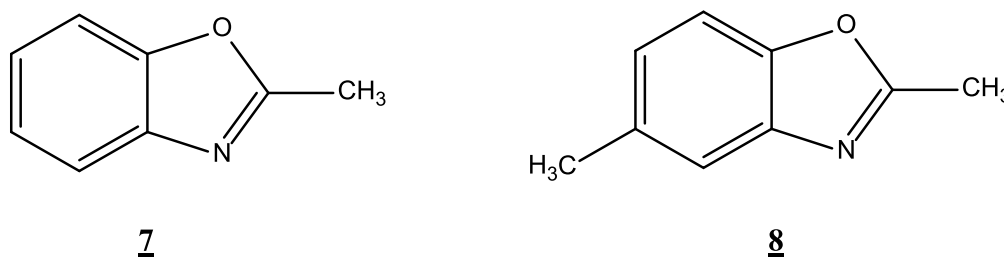


Fig. 5. Structures of 2-methylbenzoxazole (**7**) and 2,5-dimethylbenzoxazole (**8**).

Applying the appropriate group values to estimate the heat capacity of 2,2,5,7,8-pentamethylchroman-6-ol ($5 \times 36.6 + 6 \times 8.5 + 2 \times 24.6 + 6.1 + 23.2 + 10.3$) results in an estimation of $C_{p298K}(cr) = (322.8 \pm 17) \text{ J K}^{-1} \text{ mol}^{-1}$ [lit. $315.3 \pm 9.6 \text{ J K}^{-1} \text{ mol}^{-1}$ [2014BER/SIM]]. Similarly for 6-hydroxy-2,5,7,8-tetramethylchroman-2-carboxylic acid, replacing the value of one methyl group with a carboxylic acid group results in $C_{p298K}(cr) = (337.5 \pm 17) \text{ J K}^{-1} \text{ mol}^{-1}$ [lit. $(332 \pm 9.4) \text{ J K}^{-1} \text{ mol}^{-1}$ [2014BER/SIM]]. Neither of these two materials was included in the database. Applying Eq. (5) to the two estimated $C_{p298K}(cr)$ values results in gas phase heat capacities of $(273.5 \pm 17) \text{ J K}^{-1} \text{ mol}^{-1}$ for the former and $(286.1 \pm 17) \text{ J K}^{-1} \text{ mol}^{-1}$ for the latter compound. These values compare to gas phase values of $(293.9 \pm 20.6) \text{ J K}^{-1} \text{ mol}^{-1}$ and $(311 \pm 21.8) \text{ J K}^{-1} \text{ mol}^{-1}$, respectively, calculated by statistical mechanics based on structural parameters and vibrational frequencies obtained at the B3LYP/6-31+G(d,p) level of theory. The two sets of results appear to agree within their levels of uncertainty.

Figure 5 illustrates the structures of 2-methylbenzoxazole and 2,5-dimethylbenzoxazole. Liquid heat capacities of $(217.8 \pm 14.4) \text{ J K}^{-1} \text{ mol}^{-1}$ and $(244.4 \pm 14.4) \text{ J K}^{-1} \text{ mol}^{-1}$ are estimated for these two materials. Application of Eq. (6) suggests $C_{p298K}(g)$ values of $(150.6 \pm 14.4) \text{ J K}^{-1} \text{ mol}^{-1}$ and $(171.6 \pm 14.4) \text{ J K}^{-1} \text{ mol}^{-1}$, respectively. Gas phase heat capacities derived from statistical thermodynamics using the vibrational frequencies calculated at the B3LYP/6-31G(d) level of theory predict values of $(138.3$ and $164.3) \text{ J K}^{-1} \text{ mol}^{-1}$, respectively, [2013SIL/CIM] in reasonable accord with the estimated values.

4. The phase change enthalpy compendium

The phase change enthalpy data reported in this compendium have been reported over the time period of 1880–2015 with a few references from 2016. The data are a combination of the compendium published in 2010 together with results obtained from the literature up to 2016. Phase change enthalpies have been measured for many years and numerous techniques have been developed and used over this period of time. Both direct and indirect methods have been employed. Direct methods include calorimetric measurements and indirect methods usually include a direct or indirect measure of vapor pressure over a range of temperatures. Gas chromatographic techniques have also been developed which rely on established measurements. For many materials, a brief description of the method of measurement is provided by the acronyms defined in Table 3. Some entries may not have an acronym. In these cases either the method of measurement was not clearly evident, the information was not available from the source the information was retrieved (such as an abstract), or the method was not recorded at the time the article was referenced. A significant number of early measurements have been calculated from the Antoine Constants reported in the compilation by Stephenson and Malonowski. [1987STE/MAL] References to the original literature are not available for materials evaluated from this reference. In some cases the original reference has been identified independently by inference.

TABLE 3. List of acronyms and descriptions

A	Calculated from the vapor pressure data reported by the method of least squares
AC	Adiabatic calorimeter
B	Calculated from the difference of the enthalpies of sublimation at temperature T and fusion at the melting point.
BG	Bourdon gauge
BP	Boiling point temperature at different pressures
C	Calorimetric determination
CATH	Cathetometer
CC	Conduction calorimeter
CCM	Cooling curve method
CE	Critical evaluated value
CGC	Correlation-gas chromatography
CGC-	Combined correlation gas chromatography-differential
DSC	scanning calorimetry
CR	Cryoscopy
CRT	Chromatographic retention time
CVC	Calvet calorimeter
DBM	Dibutyl pthalate manometer
DM	Diaphragm manometer
DFM	Differential manometer
DP-LPD	Dew point low pressure distillation method
DSC	Differential scanning calorimeter
DTA	Differential thermal analysis
E	Estimated value
EM	Electronic manometer
EST	Estimated value
F	Fluorescence
FPM	freezing point method
FTIR	Fourier transform infrared spectroscopy
GC	Gas chromatography
GC-RT	Gas chromatography retention time
GCC	Gas chromatography-calorimetry
GS	Gas saturation, transpiration
GSM	Glass spring manometer
HG	Heise gauge
HBG	Heise-Bourdon gauge
HFC	Heat flux calorimetry
HSA	Head space analysis
I	Isoteniscope
IPM	Inclined piston manometry
IR	Infrared spectroscopy
KG	Knudsen gauge
LE	Langmuir evaporation
MDSC	Modulated differential scanning calorimetry
ME	Mass effusion-Knudsen effusion
MEM	Modified entrainment method
MG	McLeod gauge
MM	Mercury manometer
MS	Mass spectrometry
OM	Oil manometer
PG	Pressure gauge
QCM	Quartz crystal microbalance
QF	Quartz fiber
QR	Quartz resonator
RC	Radiation calorimeter
RG	Rodebush gauge
RS	Recirculating still
S-F	Sublimation-fusion
S-V	Sublimation-vaporization
SC	Solution calorimetry
SG	Spoon gauge
SRFG	Spinning rotor friction gauge
Static	Static method
STG	Strain gauge
T	Tensiometer

TABLE 3. List of acronyms and descriptions—Continued

TCC	Tin Calvet calorimeter
TCM	Thermal conductivity manometer
TE	Torsion effusion
TGA	Thermal gravimetric analysis
TG-TS	Thermogravimetric transpiration method
THBC	Triple heat bridge calorimeter
TPD	Temperature programmed desorption
TPTD	Temperature programmed thermal desorption
TSGC	Temperature scanning gas chromatography
U	Unreliable
UV	Ultraviolet spectroscopy
UV/VIS	Ultraviolet-visible spectroscopy
VS	Visible spectroscopy
V + F	vaporization + fusion
VG	Viscosity gauge
VP	Vapor pressure as a function of temperature
ZG	Zimmerli gauge

Organic compounds provided by the following tables are arranged according to the Hill system. The molecular formula is provided in the first column of the first row of each individual material. This is usually followed by the Chemical Abstracts reference number in the second column and the chemical name. The chemical name is usually the name provided by the authors of the article. Occasionally this may have resulted in redundant entries for some complex materials. The remaining information in subsequent columns includes the phase transition (column 2), the temperature or temperature range if any associated with the transition (column 3), the enthalpy associated with the transition (column 4), the mean temperature associated with the transition if measured over a temperature range (column 5), the acronym associated with the method of measurement (column 6), and reference to the source of information (column 7), usually to the original work. If an entry is not provided in one of these columns, it is likely that the information was not available in the source consulted. For liquids, the vaporization enthalpy (V) in kJ mol^{-1} follows the name in subsequent rows. For solids, depending on the nature of the material, the order of entry includes any solid–solid transitions available (TRS), followed in subsequent rows by each available solid to liquid transition (FUS), the sublimation enthalpy or enthalpies available (SUB), and the vaporization enthalpy (ies) if available. Some enthalpy values are cited without an accompanying reference on the same line. In these cases the reference cited directly below should be consulted since multiple enthalpy values may have been taken from the same source, particularly for compounds with multiple solid–solid phase transitions. A brief note summarizing some peculiarity in the data is also provided for some compounds, particularly if the value reported appears to be unreliable, U (e.g., “U 66 ± 22.1 ”).

The thermochemical data are arranged by carbon number. Table 4 contains thermochemical data for all compounds containing a single carbon atom that has been located. Table 5 continues with all compounds containing two carbons (C_2), Table 6, with three carbons (C_3), and so on. Tables 7-13 include compounds containing C_4 through C_{10} .

TABLE 4. Phase change enthalpies of C₁ organic compounds

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	Reference
CBrClF ₂	[353-59-3]	bromochlorodifluoromethane				
	V	(268–324)	23.0	283	A	[1987STE/MAL]
	V	(194–287)	23.1	272	A	[1987STE/MAL]
	V	(321–403)	22.4	336	A	[1987STE/MAL]
	V	(403–427)	23.1	415	A	[1987STE/MAL]
	V	(178–283)	26.0	193		[1979KUD/KUD]
	V	(178–283)	18.7	268		[1960GLE, 1984BOU/FRI]
CBrCl ₃	[75-62-7]	bromotrichloromethane				
	TRS		4.58	238.1		
	TRS		0.52	260.3		
	FUS		2.03	267.1	DSC	[2004BAR/PAR]
	TRS	(6–301)	4.62	238.2		
	TRS	(6–301)	0.53	259.4		
	FUS	(6–301)	2.03	267.9	AC	[1995OHT/YAM]
	FUS		2.54	267.5		[1991ACR, 1983WEA]
	V	(273–387)	35.0	288		[1979KUD/KUD]
	V	(294–443)	36.1	309	A	[1970DYK, 1987STE/MAL]
CBrF ₃	[75-63-8]	bromotrifluoromethane				
	V	(276–340)	17.8	291	A	[1987STE/MAL]
	V	(160–267)	17.7	252	A	[1987STE/MAL]
	V	(165–216)	19.1	180		[1979KUD/KUD]
CBrFO	[753-56-0]	carbonic bromide fluoride				
	V	(197–256)	22.9	241	A	[1987STE/MAL]
CBrN	[506-68-3]	cyanogen bromide				
	SUB	(273–308)	45.2 ± 4.2		MM	[1954LOR/WOO, 1970COX/PIL]
	SUB	(256–308)	47.0		GS	[1920BAX/BEZ]
	SUB	(273–313)	45.9	288		[1954LOR/WOO, 1984BOU/FRI]
CBrN ₃ O ₆	[560-95-2]	bromotrinitromethane				
	V	(318–335)	47.8	326	A, I	[1987STE/MAL, 1970CAR/ZIM]
CBr ₂ Cl ₂	[594-18-3]	dibromodichloromethane				
	TRS	(6–305)	5.43	258.8		
	FUS	(6–305)	2.31	294.4	AC	[1995OHT/YAM]
CBr ₂ F ₂	[75-61-6]	dibromodifluoromethane				
	V	(247–297)	26.1	282	A	[1987STE/MAL, 1959MCD/SHR, 1979KUD/KUD, 1970DYK]
	V	(156–218)	18.6	203		[1948BAN/EME]
CBr ₃ F	[353-54-8]	tribromofluoromethane				
	V	(315–380)	34.4	330	A	[1987STE/MAL, 1948BAN/EME]
CBr ₄	[558-13-4]	carbon tetrabromide				
	TRS		6.51	319.2		
	FUS		3.56	366.2	DSC	[2008LEV/BAR]
	FUS		3.35	365.0	DSC	[1984KAU/RUT]
	TRS	(298–343)	5.85	320.0		[1984TSE/YAO]
	TRS		6.6	320.0		
	FUS		3.5	367.0	DSC	[1970SIL/RUD]
	TRS		8.88	320.2		
	FUS		2.92	345.2		[1967TSE/GOD]
	TRS		6.67	320.0		[1956MAR/STA]
	TRS		5.94	320.0		
	FUS		3.95	363.2		[1996DOM/HEA, 1939FRE/HIL]
	SUB (mono)		54.5 ± 0.7	298	C	[1984BIC/MIN]
	SUB (mono)	(295–319)	54.4 ± 1.3	307	BG	[1959BRA/DRU]
	SUB (cubic)	(321–329)	49.4 ± 1.3	325	BG	[1959BRA/DRU]
	SUB (cubic)		48.3	320		[1955HAR/SWI]
	V	(375–463)	48.3	390		[1979KUD/KUD]

[Note: Numerical value was calculated from a fourth-order polynomial expression given in [1984KAU/RUT] that expressed the enthalpy of fusion as a function of composition for binary mixtures of carbon tetrachloride and hexachloroethane.]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
	V	(369–463)	48.2	384	A	[1987STE/MAL, 1947STU]
CClFO	[353-49-1]	carbonic chloride fluoride				
	V	(165–211)	22.7	196	A	[1987STE/MAL, 1964FIS/BUC]
	V	(157–227)	22.0	192		[1948EME/WOO]
CClF ₂ NO	[16847-30-6]	difluorocarbamoyl chloride				
	V	(189–234)	25.8	219	A	[1987STE/MAL, 1967FRA/SHR]
CClF ₃	[75-72-9]	chlorotrifluoromethane				
	V	(268–302)	16.0	283	A	[1987STE/MAL]
	V	(133–185)	17.0	170	A	[1987STE/MAL]
	V	(184–246)	15.7	231	A	[1987STE/MAL]
	V	(243–271)	15.7	257	A	[1987STE/MAL]
	V	(145–192)	16.8	177	A	[1987STE/MAL, 1979KUD/KUD]
	V	(124–191)	17.1	177	A	[1947STU]
	V	(134–298)	NA			[1941RIE]
	V	(161–192)	16.4	176		[1933THO/BUR]
CClF ₃ O	[22082-78-6]	trifluoromethyl hypochlorite				
	V	(160–226)	21.2	211	A	[1987STE/MAL, 1969SCH/MAY]
	V	(142–219)	19.6	204	A	[1987STE/MAL, 1969GOU/AND]
CClF ₃ O ₂	[32755-26-3]	peroxyhypochlorous acid, trifluoromethyl ester				
	V	(163–296)	23.4	281	A	[1987STE/MAL, 1971RAT/HAR]
CClF ₃ O ₃ S	[6069-31-4]	fluorosulfuric acid, chlorodifluoromethyl ester				
	V	(227–309)	32.1	243		[1999DYK/SVO]
	V	(228–310)	34.6	243	A	[1987STE/MAL, 1966DES/CAD]
CClF ₃ S	[421-17-0]	trifluoromethanesulfonyl chloride				
	V	(247–272)	24.5	260	A	[1987STE/MAL, 1999DYK/SVO, 1953HAS/KID]
CClF ₄ N	[13880-71-2]	difluoro(difluorochloromethyl)amine				
	V	(209–277)	26.6	262	A	[1987STE/MAL]
CClF ₄ NO ₂ S	[19419-95-5]	chloro(trifluoromethyl) sulfamoyl fluoride				
	V	(253–288)	28.8	273	A	[1987STE/MAL, 1999DYK/SVO, 1968ROE]
CClF ₄ NO ₁₂ S ₄	[53684-03-0]	fluorosulfuric acid, bis[[fluorosulfonyl]oxy]amino]chloromethylene ester				
	V		42.6	424		[1975KIR/LAS]
CClF ₇ S	[42179-04-4]	chlorotetrafluoro (trifluoromethyl) sulfur				
	V	(293–353)	25.9	323		[1999DYK/SVO, 1973ABE/SHR2]
CClF ₇ O ₃ S ₂	[81439-33-0]	<i>cis</i> -chlorotetrafluoro(trifluoromethanesulfano)sulfur				
	V		39.3			[1982JOH/KAT]
CCIN	[506-77-4]	cyanogen chloride				
	FUS		11.38	266.3		[1947DOU/WIN]
	SUB	(196–259)	35.7	228	A	[1947STU, 1987STE/MAL]
	V	(196–286)	32.2	271		[1947STU]
	V		26.8			[1947DOU/WIN]
CCl ₂ FNO	[32751-02-3]	dichlorocarbamic fluoride				
	V		40.7			[1972DEM/SHR]
CCl ₂ F ₂	[75-71-8]	dichlorodifluoromethane				
	V	(282–345)	20.0	297	A	[1987STE/MAL]
	V	(173–244)	21.4	229	A	[1987STE/MAL]
	V	(173–240)	21.6	225	A	[1987STE/MAL]
	V	(236–285)	20.4	270	A	[1987STE/MAL]
	V	(341–385)	20.5	356	A	[1987STE/MAL]
	V	(172–279)	22.9	187		[1979KUD/KUD]
	V	(154–243)	21.5	228		[1947STU]
	V		20.1	243		[1931BUF/FLE]
CCl ₂ F ₃ N	[24618-60-8]	<i>N,N</i> -difluoro-1,1-dichloro-1-fluoromethylamine				
	V	(209–277)	27.0	262	I	[1970ZAB/SHR]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)						
CCl ₂ F ₃ N	[13880-73-4]	<i>N,N</i> -dichloro-1,1,1-trifluoromethylamine		276	A	[1987STE/MAL] [1967HYN/BIS]			
	V	(226–291)	25.8						
	V		25.5						
CCl ₂ F ₃ N	[33757-11-8]	<i>N</i> ,1-dichloro- <i>N</i> ,1,1-trifluoromethylamine		258		[1971SWI/ZAB]			
	V	(226–291)	26.4						
CCl ₂ F ₃ NS	[10564-47-3]	(trifluoromethyl)imidodisulfurous dichloride		298	A	[1999DYK/SVO, 1966LUS] [1987STE/MAL]			
	V	(284–344)	35.4						
	V	(283–362)	33.7						
CCl ₂ F ₃ P	[421-58-9]	(trifluoromethyl)dichlorophosphine		260		[1964PET/BUR]			
	V	(208–276)	29.2						
CCl ₂ F ₃ PS	[18799-78-5]	dichloro(trifluoromethylthio) phosphine		308	A	[1987STE/MAL, 1999DYK/SVO, 1960EME/PUG]			
	V	(293–363)	31.7						
CCl ₂ O	[75-44-5]	phosgene				[1960GIA/OTT] [1948GIA/JON]			
	FUS (I)		5.74				145.4		
	FUS (II)		5.59				142.1		
	FUS (III)		4.73				139.2		
	FUS		5.73				145.3		
	V	(280–341)	24.5				295	A	[1987STE/MAL]
	V	(240–281)	25.7				266	A	[1987STE/MAL]
	V	(338–410)	24.5				353	A	[1987STE/MAL]
	V	(406–455)	24.4				421	A	[1987STE/MAL]
	V	(253–293)	25.2				273		[1970FET/EFR]
	V	(215–248)	27.0				233		[1948GIA/JON]
	V		24.4				281	C	[1948GIA/JON]
V	(180–273)	25.8	258		[1947STU]				
V		23.0	277		[1920ATK/HEY]				
CCl ₃ F	[75-69-4]	trichlorofluoromethane		162.7		[1996DOM/HEA, 1941OSB/GAR]			
	FUS		6.9						
	V	(213–301)	28.5				228	A	[1987STE/MAL]
	V	(213–249)	28.2				234	A	[1987STE/MAL]
	V	(295–363)	25.6				310	A	[1987STE/MAL]
	V	(357–429)	24.7				372	A	[1987STE/MAL]
	V	(424–468)	25.1				439	A	[1987STE/MAL]
	V	(237–293)	27.3				251		[1979KUD/KUD]
	V	(237–293)	27.1				276		[1941OSB/GAR]
	V		25.2				290	C	[1941OSB/GAR]
V	(244–334)	26.4	259		[1940BEN/MCH]				
CCl ₃ F ₂ N	[24708-52-9]	<i>N,N</i> -difluoro-1,1,1-trichloromethylamine		267	I	[1987STE/MAL, 1970ZAB/SHR]			
	V	(252–325)	33.4						
CCl ₃ F ₂ N	[33757-10-7]	<i>N</i> ,1,1-trichloro- <i>N</i> ,1-difluoromethylamine		296		[1971SWI/ZAB]			
	V	(273–319)	27.8						
CCl ₃ F ₂ P	[1112-03-4]	difluoro(trichloromethyl) phosphine		274	A, T	[1987STE/MAL, 1964NIX]			
	SUB	(264–283)	36.8						
	V	(289–313)	32.5				301	A, T	[1987STE/MAL, 1964NIX]
CCl ₃ F ₄ P	[1184-80-1]	trichloromethyl tetrafluorophosphorane				[1965NIX]			
	V	(257–300)	10.4						
CCl ₃ NO	[3711-49-7]	trichloronitrosomethane		268	A	[1987STE/MAL, 1968BRI/PRI]			
	V	(253–333)	32.4						
CCl ₃ NO ₂	[76-06-2]	trichloronitromethane (chloropicrin)		288	A	[1987STE/MAL, 1948RED/CHA5] [1987STE/MAL, 1970DYK] [1947STU] [1947GOU/HOL] [1920BAX/BEZ]			
	V	(273–333)	39.3						
	V	(301–449)	38.5				316	A	
	V	(247–385)	40.0				262		
	V	(299–328)	39.3				283		
CCl ₄	[56-23-5]	carbon tetrachloride							
	V								

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	Reference
	TRS		4.68	225.9		
	FUS		2.52	250.3	DSC	[2004BAR/PAR, 1999PAR/BAR]
	TRS		4.63	225.7		
	FUS		2.56	250.3	AC	[1996DOM/HEA, 1976MOR/RIC]
	TRS		4.63	225.3		
	FUS		2.54	250.3		[1974VAN/OON]
	FUS		2.56	250.3	AC	[1972ARE/VAN]
	TRS		4.48	226.6		
	FUS		2.49	247.8	DSC	[1970SIL/RUD]
	TRS		4.59	225.8		
	FUS		2.52	250.2		[1949STA/GUP]
	FUS		2.46	250.3	AC	[1947AST/FIN]
	TRS		4.58	225.4		
	FUS	(17–300)	2.52	250.3		[1996DOM/HEA, 1944HIC/HOO]
	TRS		4.60	225.6		
	FUS		2.43	250.4		[1996DOM/HEA, 1937STU]
	TRS		4.52	225.5		
	FUS		2.41	250.3	C	[1934JOH/LON]
	TRS		4.60	224.6		
	FUS		2.69	249.0		[1996DOM/HEA, 1922LAT]
	SUB		43.3	226	B	[1963BON]
	SUB	(209–225)	38.8	217		[1960JON, 1948NIT/SEK]
	SUB	(227–248)	37.9			[1948NIT/SEK]
	V	(349–416)	30.4	364	A	[1987STE/MAL]
	V	(412–497)	29.2	427	A	[1987STE/MAL]
	V	(494–555)	30.6	509	A	[1987STE/MAL]
	V		32.4	298	C	[1980MAJ/SVA]
	V		31.7	313	C	[1980MAJ/SVA]
	V		30.9	328	C	[1980MAJ/SVA]
	V		30.1	343	C	[1980MAJ/SVA]
	V		29.4	358	C	[1980MAJ/SVA]
	V		32.5 ± 0.1	298	C	[1973KON]
	V	(262–349)	33.7	277	A, EB	[1987STE/MAL, 1972BOU/AIM]
	V		32.4 ± 0.1	298	C	[1966WAD2]
	V	(293–351)	32.3	308		[1959HIL/MCD]
	V	(313–338)	31.7	325		[1953BAR/BRO]
CCl ₄ O ₂ S	[2547-61-7]	trichloromethanesulfonyl chloride				
	TRS		7.1	227.4		
	FUS		7.46	418.5	DSC	[1994DOU/FUE]
CFIO	[1495-48-3]	carbonyl fluoride iodide				
	V	(230–292)	26.1	277	A	[1987STE/MAL]
CFN	[1495-50-7]	cyanogen fluoride				
	SUB	(147–191)	28.9	176	A, I	[1987STE/MAL, 1964FAW/LIP]
	SUB	(139–192)	24.4	166		[1947STU]
	SUB	(133–203)	29.3	168		[1931COS]
	V	(201–227)	22.4	214	A, I	[1987STE/MAL, 1964FAW/LIP, 1970DYK]
CFNO ₃ S	[1495-51-8]	sulfonyl fluoride isocyanate				
	V	(294–335)	36.5	309	A	[1987STE/MAL, 1999DYK/SVO]
CFNO ₆ S ₂	[27931-74-4]	pyrosulfonyl fluoride isocyanate				
	V	(330–405)	40.9	345	A	[1987STE/MAL, 1999DYK/SVO, 1970NOF]
CFN ₃ O ₆	[1840-42-2]	fluorotrinitromethane				
	V	(274–358)	34.2	289	A, T	[1987STE/MAL, 1966ZIM/ROB]
CF ₂ N ₂	[7127-18-6]	difluorocyanamide				
	V	(179–198)	20.6	189	A	[1987STE/MAL, 1966MEY/FRA]
CF ₂ N ₂ OS	[19073-57-5]	cyanoimidosulfonyl fluoride				
	V	(262–354)	37.2	277	A	[1987STE/MAL, 1999DYK/SVO, 1967GLE/BIE3]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
CF ₂ N ₂ O ₄	[1185-11-1] V	difluorodinitromethane (283–310)	41.4	296	A	[1987STE/MAL, 1973PEP/LEB]
CF ₂ N ₂ S	[14453-41-9] V	<i>N</i> -cyano- <i>S,S</i> -difluorosulfilimine (271–320)	44.1	286	A	[1987STE/MAL, 1999DYK/SVO, 1967GLE/BIE2]
CF ₂ O	[353-50-4] FUS	carbonyl fluoride (12–188)	6.7	161.9	AC	[1968PAC/REN]
	SUB	(130–159)	23.2	145	A	[1987STE/MAL, 1968PAC/REN]
	V	(159–189)	20.0	174	A	[1987STE/MAL]
	V		16.1			[1934RUF/MIL]
CF ₂ O ₄ S	[7519-54-2] V	fluoroformyl fluorosulfate (250–296)	27.3	281	A	[1987STE/MAL, 1999DYK/SVO, 1966FOX/FRA]
CF ₂ S	[420-32-6] V	thiocarbonyl fluoride (133–211)	19.2	196	A	[1987STE/MAL, 1970DYK, 1962SUN/MEI]
	V	(178–211)	17.4	196	A	[1987STE/MAL, 1999DYK/SVO, 1962DOW]
CF ₃ I	[2314-97-8] V	iodotrifluoromethane (188–296)	22.5	281	A	[1987STE/MAL, 1970DYK, 1948BAN/EME]
CF ₃ NO	[2368-32-3] V	(difluoroamino) carbonyl fluoride (143–217)	21.6	202	A, MM	[1987STE/MAL, 1965FRA/SHR]
CF ₃ NO	[334-99-6] V	trifluoronitrosomethane (141–174)	17.1	159	A	[1987STE/MAL, 1953JAN/HAS]
	V		16.8			[1936RUF/GIE]
CF ₃ NOS	[3855-41-2] V	<i>S,S</i> -difluoro- <i>N</i> -(fluoroformyl)-sulfilimine (220–273)	37.3	246	A	[1987STE/MAL, 1999DYK/SVO, 1965CLI/KOB]
CF ₃ NOS	[24892-54-4] V	trifluoromethyl thionitrite (196–215)	25.8	205	T	[1969MAS]
CF ₃ NOS	[10564-49-5] V	(<i>N</i> -sulfinyl)-trifluoromethylamine (239–289)	27.0	274	A	[1987STE/MAL, 1999DYK/SVO, 1966LUS]
CF ₃ NO ₂	[335-02-4] V	trifluoronitromethane (238–243)	21.6	240	A	[1987STE/MAL, 1953JAN/HAS]
	V		24.4			[1953BAN]
CF ₃ NO ₄	[50311-48-3] V	(trifluoromethyl) peroxyxynitrate (193–247)	24.8	232	A	[1987STE/MAL, 1974HOH/DES]
CF ₃ NO ₆ S ₂	[19252-48-3] V	<i>N</i> -(fluoroformyl)- <i>N,O</i> -bis(fluorosulfonyl) hydroxylamine (325–392)	36.3	340	A	[1987STE/MAL, 1999DYK/SVO, 1968NOF/SHR]
CF ₄	[75-73-0] TRS	carbon tetrafluoride	1.46	76.09		
	FUS	(4–100)	0.71	89.53		[1996DOM/HEA, 1969ENO/SHI]
	TRS		1.71	76.23		
	FUS	(12–145)	0.71	89.56		[1996DOM/HEA, 1969SMI/PAC]
	TRS		1.73	76.09		
	FUS		0.69	88.44		[1996DOM/HEA, 1958KOS/SAM]
	TRS		1.48	76.2		
	FUS		0.70	89.5		[1938EUC/SCH, 1969ENO/SHI]
	SUB (α)	(76–90)	14.7	83	A	[1987STE/MAL, 1970GEN/DUV]
	SUB (β)	(70–76)	16.8	73	A	[1987STE/MAL, 1970GEN/DUV]
	SUB	(86–89)	14.7	88		[1967SIM/KNO]
	SUB		17.0	76		[1963BON]
	SUB	(80–86)	14.0	83	A	[1933MEN/MOH]
	V	(195–227)	12.1	212	A	[1987STE/MAL]
V	(89–163)	12.3	148	A	[1987STE/MAL]	

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T_m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
	V	(160–197)	11.9	182	A	[1987STE/MAL]
	V	(116–146)	12.4	131		[1969SMI/PAC]
	V	(93–146)	12.8	131		[1933MEN/MOH, 1987STE/MAL]
	V		12.3			[1933RUF/BRE]
CF ₄ N ₂ O	[815-10-1]	fluoro(trifluoromethyl) diimidoxide				
	V	(233–267)	27.7	252	A	[1987STE/MAL]
CF ₄ N ₂ O ₃ S ₂	[25523-80-2]	carbonyl bis(imidosulfuryl fluoride)				
	V	(316–331)	41.3	323	A	[1987STE/MAL, 1999DYK/SVO, 1969GLE/MEW2]
CF ₄ O	[373-91-1]	hypofluorous acid trifluoromethyl ester				
	V	(153–194)	15.5	179	A	[1987STE/MAL, 1948KEL/CAD]
[Note: The table in [1948KEL/CAD] gives the temperatures in °C; however, all of the equations and graphs in the article suggest that the temperature should be in Kelvin. We have assumed that the tabulated temperatures are in Kelvin; the results closely correspond to the entry in [1987STE/MAL].]						
CF ₄ OS	[812-12-4]	trifluoromethyl sulfinyl fluoride				
	V	(204–271)	22.7	256	A, I	[1987STE/MAL, 1968RAT/SHR, 1970DYK, 1999DYK/SVO]
CF ₄ O ₂	[34511-13-2]	hydroperoxyfluoric acid trifluoromethyl ester				
	V	(156–203)	18.7	188	A	[1987STE/MAL, 1972DES]
CF ₄ O ₂ S	[335-05-7]	trifluoromethane sulfonyl fluoride				
	V	(226–249)	23.4	237	A	[1987STE/MAL, 1999DYK/SVO, 1956GRA/HAS]
CF ₄ O ₃ S	[926-08-9]	trifluoromethyl fluorosulfonate				
	V	(194–269)	25.6	231		[1960VAN/CAD]
CF ₄ O ₄ S	[13990-10-8]	trifluoromethylperoxyfluorosulfonate				
	V	(233–286)	27.7	259		[1960VAN/CAD]
CF ₄ O ₅ S ₂	[21595-44-8]	fluorosulfonic acid trifluoromethane sulfonic acid anhydride				
	V	(308–338)	32.9	323	A	[1987STE/MAL, 1999DYK/SVO, 1968NOF]
CF ₄ O ₆ S ₂	[6123-47-3]	trifluoromethyl fluorodisulfate				
	V	(292–351)	34.4	321		[1960VAN/CAD]
CF ₅ N	[335-01-3]	pentafluoromethylamine				
	SUB	(128–141)	18.6	135		[1987STE/MAL, 1951COA/HAR]
	V	(151–198)	17.3	174		[1951COA/HAR]
CF ₅ NO	[4217-93-0]	pentafluoromethoxyamine				
	V	(167–210)	18.5	195	A	[1987STE/MAL, 1965SHR/DUN]
CF ₅ OPS	[52752-66-6]	phosphorothionic difluoride, <i>S</i> -trifluoromethyl ester				
	V	(293–353)	23.1	323		[1999DYK/SVO, 1974SPR/SHR]
	V		23.0			[1974SPR/SHR]
CF ₅ O ₃ P	[39125-42-3]	trifluoromethoxyphosphoryl difluoride				
	V	(225–264)	27.4	245		[1973BER/DES]
CF ₅ O ₃ P	[39125-42-3]	difluoroperoxyphosphoric acid trifluoromethyl ester				
	V	(241–280)	32.0	265	A	[1987STE/MAL, 1973BER/DES]
CF ₅ PS	[52752-65-5]	trifluoromethyl thiodifluorophosphine				
	V	(293–353)	22.3	323		[1999DYK/SVO, 1974SPR/SHR]
	V		24.3			[1974SPR/SHR]
CF ₆ N ₂ O ₂ S ₂	[20094-83-1]	<i>N,N'</i> -(difluoromethylene) bisimidisulfuryl fluoride				
	V	(283–308)	36.0	295		[1968GLE/VON]
CF ₆ N ₂ S ₂	[17686-45-2]	difluoromethane bis(<i>S, S</i> -difluorosulfilimine)				
	V	(230–313)	36.0	245	A	[1987STE/MAL, 1999DYK/SVO, 1967GLE/BIE2]
CF ₈ OS	[1873-23-0]	pentafluoro (trifluoromethoxy) sulfur				
	V	(217–262)	24.4	247	A	[1987STE/MAL, 1964DUN/CAD]
CF ₈ O ₃ S ₂	[81439-27-2]	pentafluoro(trifluoromethylsulfonato)sulfur				
	V		26.8			[1982JOH/KAT]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
CF ₃ S	[373-80-8]	trifluoro(pentafluorothio)methane				
	V	(223–252)	20.2	253	I	[2001KUL/DES]
	V	(205–262)	23.8	247	A	[1987STE/MAL, 1999DYK/SVO, 1950SIL/CAD]
CF ₃ NOS	[1840-45-5]	tetrafluoro(difluoroamino)(trifluoromethoxy) sulfur				
	V	(257–298)	28.7	272	A	[1987STE/MAL, 1964DUN/CAD2]
CF ₁₀ O ₅ S ₂	[60672-59-5]	[μ-(carbono)diperoxato]decafluorodisulfur				
	V		38.1			[1976HOP/DES]
CIN	[506-78-5]	cyanogen iodide				
	SUB	(337–426)	59.9	352	GSM	[1987STE/MAL, 1943KET/KRU]
	SUB	(298–414)	58.6	356	A	[1947STU]
	SUB	(337–426)	59.8 ± 0.4		GSM	[1943KET/KRU, 1970COX/PIL]
	SUB	(278–374)	58.3	326		[1933YOS/STO]
	V	(419–426)	40.0	423	A	[1987STE/MAL, 1943KET/KRU]
CN ₄ O ₈	[509-14-8]	tetranitromethane				
	SUB	(255–286)	47.4	271		[1987STE/MAL, 1941SEK/NIT]
	V	(286–373)	43.1	301	A	[1987STE/MAL]
	V	(313–373)	42.9	328	A	[1987STE/MAL, 1984BOU/FRI, 1952EDW]
	V	(273–313)	46.6	288		[1987STE/MAL, 1984BOU/FRI, 1949NIC]
CO	[630-08-0]	carbon monoxide				
	SUB	(54–61)	7.6	58	A	[1987STE/MAL]
	SUB	(51–68)	8.1	60	A	[1947STU]
	SUB	(57–68)	7.9	62	A	[1931CRO/BIJ]
	V	(68–108)	6.0	93	A	[1987STE/MAL]
	V	(93–132)	6.2	112		[1952MIC/WAS]
	V	(69–83)	6.0	81		[1932CLA/GIA]
	V		6.0	81	C	[1932CLA/GIA]
COS	[463-58-1]	carbonyl sulfide				
	V	(161–284)	20.4	176		[1999DYK/SVO]
	V	(284–379)	18.3	299		[1999DYK/SVO]
	V	(140–224)	19.5	209	A	[1987STE/MAL]
	V		19.0 ± 0.1	214		[1939FRA/CLU]
	V	(162–224)	19.5	209		[1937KEM/GIA]
CO ₂	[124-38-9]	carbon dioxide				
	FUS		7.94	215.6		[1928EUC/HAU]
	SUB	(198–216)	26.1	207	A	[1987STE/MAL]
	SUB	(194–216)	26.1	205		[1984FER/DEL]
	SUB	(70–102)	27.2 ± 0.4		LE	[1974BRY/CAZ]
	SUB	(179–198)	25.9	188		[1956AMB]
	SUB	(139–195)	26.3	167	A	[1947STU]
	SUB	(154–196)	25.2	195		[1937GIA/EGA]
	V	(273–304)	16.7	288	A	[1987STE/MAL]
	V	(216–273)	16.4	258	A	[1987STE/MAL]
	V	(216–243)	16.7	231		[1984FER/DEL]
	V	(267–303)	16.5	282		[1972BOU/AIM]
	V	(217–276)	16.6	247		[1950MIC/WAS2]
CS ₂	[75-15-0]	carbon disulfide				
	FUS		4.39	161.1		[1996DOM/HEA, 1937BRO/MAN]
	V	(255–354)	28.7	270		[1999DYK/SVO]
	V	(354–552)	27.1	369		[1999DYK/SVO]
	V	(260–353)	28.5	275	A	[1987STE/MAL]
	V	(338–408)	27.4	353	A	[1987STE/MAL]
	V	(388–497)	27.0	403	A	[1987STE/MAL]
	V	(490–533)	28.7	505	A	[1987STE/MAL]
	V	(255–318)	28.7	270	EB	[1972BOU/AIM, 1987STE/MAL]
	V	(277–353)	28.1	292	EB	[1962WAD/SMI]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference	
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)				
		V		28.1 ± 0.1	282	C	[1962WAD/SMI]
		V		27.5 ± 0.1	298	C	[1962WAD/SMI]
		V		26.7 ± 0.1	319	C	[1962WAD/SMI]
		V		27.7	298		[1961GOO/LAC]
		V	(303–358)	27.6	318		[1946THO]
CHBrF ₂	[1511-62-2]	bromodifluoromethane					
		V	(194–259)	24.0	244	A	[1987STE/MAL]
		V	(194–288)	24.7	209		[1979KUD/KUD]
CHBr ₃	[75-25-2]	tribromomethane					
		FUS		11.09	281.5		[1987KAF/DOR]
		V		46.1 ± 0.1	298	C	[1972LAY/WAD]
		V	(320–412)	42.3	335	EB	[1972BOU/AIM, 1979KUD/KUD]
		V	(303–373)	44.0	318		[1941KIR/SIT, 1984BOU/FRI]
CHClF ₂	[75-45-6]	chlorodifluoromethane					
		TRS		0.07	59		
		FUS		4.12	115.7		[1996DOM/HEA, 1957NEI/WHI]
		V	(275–327)	20.0	290	A	[1987STE/MAL]
		V	(170–233)	21.3	218	A	[1987STE/MAL]
		V	(230–275)	20.4	260	A	[1987STE/MAL]
		V	(324–366)	20.1	339	A	[1987STE/MAL]
		V	(194–310)	21.8	209		[1979KUD/KUD]
		V	(229–236)	21.0	232		[1964KLE]
		V		20.2	232	C	[1957NEI/WHI]
CHCl ₂ F	[75-43-4]	dichlorofluoromethane					
		V	(225–282)	26.1	267	A	[1987STE/MAL]
		V	(279–344)	25.3	294	A	[1987STE/MAL]
		V	(341–399)	24.2	356	A	[1987STE/MAL]
		V	(397–450)	24.1	412	A	[1987STE/MAL]
		V	(229–236)	U20.9	233		[1964KLE]
		V	(181–282)	26.2	267		[1947STU]
		V	(244–317)	36.7	259		[1940BEN/MCH]
CHCl ₂ FO ₃ S	[42016-50-2]	fluorosulfuric acid, dichloromethyl ester					
		V	(275–293)	36.2	284	A	[1987STE/MAL, 1999DYK/SVO, 1974CAF/SIC]
CHCl ₃	[67-66-3]	chloroform					
		FUS (α, microsample)		9.54	209.6		
		FUS (β, microsample)		8.9	200.0		[1979DUM]
		FUS		8.8	209.6		[1991ACR, 1972DUB/DEV]
		V	(306–427)	30.8	321		[1995CHE/WAN]
		V	(227–269)	31.8	254	A	[1987STE/MAL]
		V	(333–416)	30.4	348	A	[1987STE/MAL]
		V	(410–481)	28.9	425	A	[1987STE/MAL]
		V	(479–523)	30.1	494	A	[1987STE/MAL]
		V		31.1	298	C	[1980MAJ/SVA]
		V		30.4	313	C	[1980MAJ/SVA]
		V		29.6	328	C	[1980MAJ/SVA]
		V		28.8	343	C	[1980MAJ/SVA]
		V	(260–333)	32.5	275	EB	[1972BOU/AIM]
		V	(215–334)	35.0	230		[1947STU]
		V	(308–333)	30.9	320		[1938SCA/RAY]
		V		29.4	334		[1926MAT]
		V		31.3	298		[1913FLE/TYR, 2002MAN]
CHF ₂ I ₂	[1493-01-2]	diiododifluoromethane					
		V	(299–332)	32.9	314	A	[1987STE/MAL, 1979KUD/KUD, 1970DYK, 1936RUF/BRE]
CHFN ₂ O ₄	[7182-87-8]	fluorodinitromethane					
		V	(298–338)	43.6 ± 0.8	318	A	[1987STE/MAL, 1974PEP/NAT]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
CHFO	[1493-02-3]	formyl fluoride				
	V	(178–235)	24.4	220	A	[1987STE/MAL, 1964FIS/BUC, 1970DYK]
CHF ₂ I	[1493-03-4]	difluoroiodomethane				
	V	(227–287)	26.0	272	A	[1987STE/MAL, 1979KUD/KUD, 1970DYK, 1936RUF/BRE]
CHF ₃	[75-46-7]	trifluoromethane (fluoroform)				
	FUS		4.06	118		[1996DOM/HEA, 1962VAL/BRO]
	SUB	(89–118)	25.6	103	A	[1987STE/MAL]
	V	(138–190)	18.1	175	A	[1987STE/MAL]
	V	(198–298)	16.8	213	A	[1987STE/MAL]
	V	(146–192)	18.0	177		[1962VAL/BRO]
	V		16.7	191	C	[1962VAL/BRO]
V		17.9			[1937HEN]	
CHF ₃ O ₂	[16156-36-8]	trifluoromethyl hydroperoxide				
	V	(248–285)	30.9	270	A	[1987STE/MAL, 1971BER/HOH]
CHF ₃ O ₃ S	[1493-13-6]	trifluoromethylsulfonic acid				
	V	(354–435)	47.7	369	A	[1987STE/MAL, 1999DYK/SVO]
CHF ₃ S	[1493-15-8]	trifluoromethanethiol				
	FUS		4.93	116		[1996DOM/HEA, 1960DIN/PAC]
	V	(167–236)	21.8	183		[1999DYK/SVO]
	V	(167–236)	21.0	221	A	[1987STE/MAL, 1999DYK/SVO]
V		20.0	235		[1960DIN/PAC]	
CHF ₃ S ₂	[55860-39-4]	trifluoromethyldisulfane				
	V	(201–308)	29.0	254		[1975GOM/SEE]
CHF ₇ S	[420-67-7]	(difluoromethyl) sulfur pentafluoride				
	V	(221–292)	27.5	237		[1999DYK/SVO]
	V	(221–293)	25.6	278	A	[1987STE/MAL, 1999DYK/SVO, 1950SIL/CAD]
CHI ₃	[75-47-8]	iodoform				
	SUB	(308–365)	69.9	323		[1943NIT/SEK]
CHN	[74-90-8]	hydrogen cyanide				
	FUS		8.4	259.9		[1939GIA/RUE]
	SUB	(236–259)	35.6	248	A	[1987STE/MAL]
	SUB	(237–256)	37.7	247		[1982APP/VAN]
	SUB	(202–254)	37.6	228	A	[1947STU]
	SUB	(236–259)	35.9	248		[1934LEW/SCH]
	SUB	(244–258)	35.7	251		[1926PER/POR]
	V	(259–299)	28.1	274	A	[1987STE/MAL]
	V	(298–457)	27.8	313	A	[1987STE/MAL]
	V	(257–315)	28.1	272		[1975IWA/DAT]
	V		25.2	298		[1939GIA/RUE]
	V	(259–294)	28.0	277		[1934LEW/SCH]
	V	(256–319)	28.1	272	MM	[1926SIN/HAR]
V	(256–319)	27.2	303	MM	[1926SIN/HAR]	
V	(265–300)	27.8	282		[1926PER/POR]	
CDN	[3017-23-0]	deuterium cyanide				
	SUB	(227–259)	36.1	243		[1982APP/VAN]
	SUB	(235–260)	36.5	247		[1934LEW/SCH]
	V	(182–282)	26.2	267		[1947STU]
	V	(265–293)	27.6	279		[1934LEW/SCH]
CHNO	[420-05-3]	cyanic acid				
	V	(233–268)	30.7	253	A	[1987STE/MAL]
	V	(197–267)	NA			[1938LIN]
CHNS	[463-56-9]	thiocyanic acid				
	FUS		10.87	163.2		[1940BIR/BUC]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
CHN ₃ O ₆	V	(278–396)	28.0	293	A	[1987STE/MAL]
	[517-25-9]	trinitromethane				
	SUB		45.2 ± 2.1	298		[1999MIR/VOR]
	SUB		54.8 ± 4.2			[1970BON/CAT]
CH ₂ BrCl	SUB		46.7 ± 0.4			[1967MIR/LEB, 1970COX/PIL, 1977PED/RYL]
	V	(290–317)	32.6	303	A	[1987STE/MAL, 1967MIR/LEB]
	[74-97-5]	bromochloromethane				
CH ₂ Br ₂	V	(226–341)	42.0	241	A	[1987STE/MAL]
	V	(289–341)	33.5	304		[1959MCD/SHR, 1979KUD/KUD]
CH ₂ Br ₂	[74-95-3]	dibromomethane				
	V	(273–373)	36.5	288	C	[1979KUD/KUD]
	V	(293–343)	36.3	318	I	[1973PHI/JAM]
	V		37.0 ± 0.1	298	A, E	[1972LAY/WAD]
	V	(290–409)	37.2	305	A, E	[1987STE/MAL, 1956MAN, 1970DYK]
	V	(238–371)	37.8	253		[1947STU]
CH ₂ ClF	[593-70-4]	chlorofluoromethane				
	V	(140–264)	23.3	249	A	[1987STE/MAL, 1970DYK]
CH ₂ Cl ₂	[75-09-2]	dichloromethane				
	FUS	(15–301)	6.16	178.2		[1996DOM/HEA, 1978MOS/RAB]
	V	(286–311)	29.6	298		[2016VRB/DOH]
	V		30.6 ± 0.1	298	C	[1989AN/HU]
	V	(311–383)	29.0	326	A	[1987STE/MAL]
	V		28.8	298	C	[1980MAJ/SVA]
	V		28.1	313	C	[1980MAJ/SVA]
	V		27.3	328	C	[1980MAJ/SVA]
	V	(293–308)	29.4	300	I	[1973PHI/JAM]
	V	(264–311)	30.3	279	EB	[1972BOU/AIM]
	V	(303–313)	29.2	308		[1960MUE/IGN]
	V	(233–313)	30.2	248		[1948GAN/JUN]
	V		NA			[1946DZU]
V	(186–312)	29.4			[1927PER]	
CH ₂ F ₂	[75-10-5]	difluoromethane				
	FUS		4.36	136.4	AC	[1996LUE/MAG]
	V	(208–237)	20.8	222	EB	[1993WEB/GOO]
	V	(149–245)	20.6	230		[1987KAN/OI]
	V	(256–321)	19.9	271	A	[1987STE/MAL]
	V	(191–222)	21.2	207	A	[1987STE/MAL, 1968MAL/MEU]
	V	(191–258)	20.3	243	A	[1987STE/MAL]
	V	(316–351)	20.3	331	A	[1987STE/MAL]
	V	(191–221)	21.2	206		[1968MAL/MEU]
V	(191–242)	20.6	227		[1968MAL/MEU]	
CH ₂ F ₃ NS	[1512-33-0]	1,1,1-trifluoromethanesulfenamide				
	V	(218–291)	34.1	276	A	[1987STE/MAL, 1999DYK/SVO, 1960EME/NAB]
CH ₂ I ₂	[75-11-6]	diiodomethane				
	FUS		12.05	279.2		[1987KAF/DOR]
	V		45.6	298	GC	[1994CAR/LAY]
	V		49.0	298	C	[1987FUC/CHA]
	V	(293–455)	48.8	307		[1979KUD/KUD]
	V	(356–505)	45.4	371	A	[1987STE/MAL, 1970DYK]
CH ₂ N ₂	[420-04-2]	cyanamide				
	FUS		8.76	317.2		[1991ACR, 1983WEA]
	FUS	(90–330)	7.27	318.7	AC	[1983DEW/DEK]
	SUB	(227–289)	75.9	290	TE, ME	[1983DEW/VAN]
	SUB		75.2	298	TE, ME	[1983DEW/VAN]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
CH ₂ N ₄	[288-94-8]	2 <i>H</i> -tetrazole				
	FUS		18.0	430	THBC	[1993KAB/KOZ]
	[Note: Authors of [1993KAB/KOZ] report a small solid state enthalpy of transition of 14 J/mole in the range of 230 to 245 K.]					
	FUS		17.7	432.1		[1990KOZ/SIM3]
	FUS		18.4	430.7	DSC	[1989HIL/MOU]
	SUB		88.16	353	C	[1993KAB/KOZ]
	SUB	(333–404)	87.8 ± 1.4	369	ME	[1993KAB/KOZ]
	SUB	(333–404)	88.0 ± 1.6		ME	[1990KOZ/SIM]
CH ₂ O	[50-00-0]	formaldehyde				
	FUS		7.53	155		[1998VAS/LEB]
	V	(184–251)	24.3	236	A	[1987STE/MAL]
		(173–251)	24.2	236		[1935SPE/WIL, 1987STE/MAL]
CH ₂ O ₂	[64-18-6]	formic acid				
	SUB	(268–281)	60.5	275		[1987STE/MAL]
	SUB	(203–218)	62.1 ± 1	213	TE, ME	[1978CAL/CAL]
	SUB	(265–268)	60.7	266		[1930COO, 1960JON]
	SUB	(253–275)	60.1	264	A	[1947STU]
	V	(300–392)	35.2	315	EB	[1987AMB/GHI3]
	V	(283–384)	36.0	298	A	[1987STE/MAL]
	V (monomer)		20.1 ± 0.1	298	C	[1970KON/WAD]
	V		46.3 ± 0.5	298	C	[1970KON/WAD]
	V	(310–374)	35.2	325		[1949DRE/SHR, 1949DRE/MAR]
	V		19.9	298		[1941STO/FIS]
	V		29.6	303		[1934CAM/CAM]
	V	(273–373)	20.3	315		[1930COO]
	V	(273–373)	20.9	338		[1930COO]
	V		20.4	315	C	[1930COO]
	V		21.1	338	C	[1930COO]
V	(273–307)	36.8	288		[1894KAH]	
V	(295–374)	47.7	374		[1883KAH]	
(CH ₂ O ₂) ₂	[14523-98-9]	formic acid dimer				
	SUB	(203–218)	64.1 ± 1	213	TE, ME	[1978CAL/CAL]
CH ₂ O ₃	[463-79-6]	carbonic acid				
	SUB	(240–255)	71 ± 9	247	IR	[2010PEE/HUD]
CH ₃ Br	[74-83-9]	methyl bromide				
	TRS		0.47	173.8		
	FUS	(13–276)	5.98	179.5		[1996DOM/HEA, 1987KAF/DOR, 1938EGA/KEM]
	V	(223–278)	25.8	238		[1979KUD/KUD]
	V	(201–296)	24.6	281	A, E	[1987STE/MAL, 1961LI/ROS]
	V	(203–277)	25.2	262		[1947BEE/JUN]
		(203–278)	25.3	263		[1938EGA/KEM]
CH ₃ Cl	[74-87-31]	methyl chloride				
	FUS		6.42	174.5		[1996DOM/HEA, 1940MES/AST]
	SUB	(130–172)	31.6 ± 0.1	151		[1995BAH/DUP]
	SUB		28.0		B	[1940MES/AST]
	V	(247–310)	22.0	262	A	[1987STE/MAL]
	V	(368–416)	21.8	383	A	[1987STE/MAL]
	V	(308–373)	21.0	323	A	[1987STE/MAL]
	V	(198–278)	22.0	263		[1948GAN/JUN]
	V	(183–250)	22.7	235		[1947BEE/JUN]
	V	(191–249)	23.5	206		[1946THO]
		(192–249)	22.6	234		[1940MES/AST]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	Reference
	V		19.7	284	C	[1932GRI/AWB]
	V		20.1	293	C	[1926YAT]
	V		21.6	249		[1924SHO, 2002MAN]
CH ₃ ClFOP	[753-71-9] FUS	methylphosphonyl chlorofluoride	11.85	250.7	AC	[1964FUR/REI]
CH ₃ Cl ₂ P	[676-83-5] V	dichloromethyl phosphine (229–297)	35.5	282	A	[1987STE/MAL, 1963HOL/WAG]
CH ₃ Cl ₂ OP	[676-97-1] FUS SUB	methylphosphonic dichloride	18.08 62.3	306.1	AC	[1964FUR/REI] [1970COX/PIL, 1955NEA/WIL]
CH ₃ F	[593-53-3] V V V V V V V	methyl fluoride (205–242) (240–288) (133–211) (141–208) (165–217) (170–197) (268–318)	16.9 16.9 17.9 17.1 16.4 17.7 18.6	227 273 172 193 202 183 293	A A A, E A	[1987STE/MAL] [1987STE/MAL] [1983OI/SHU] [1987STE/MAL, 1961LI/ROS, 1970DYK] [1987STE/MAL, 1948MIC/WAS, 1984BOU/FRI] [1987STE/MAL, 1919MOL/BAT, 1984BOU/FRI] [1889COL]
CH ₃ FO	[36336-08-0] V	methyl hypofluorite (156–225)	23.4	190		[1991KOL/ROZ]
CH ₃ F ₂ N	[753-58-2] V V	<i>N,N</i> -difluoromethylamine (203–257)	23.5 22.9	242 257	A	[1987STE/MAL] [1960FRA]
CH ₃ F ₂ NS	[758-20-3] V V	methylimidodisulfurous difluoride (194–258) (194–258)	28.7 28.6	226 243	A	[1999DYK/SVO] [1987STE/MAL, 1999DYK/SVO, 1966COH/MAC]
CH ₃ F ₂ P	[753-59-3] V	difluoromethyl phosphine (174–236)	23.4	221	A	[1987STE/MAL]
CH ₃ F ₂ OP	[676-99-3] FUS	methylphosphonyl difluoride (15–335)	11.88	236.3	AC	[1964FUR/REI]
CH ₃ F ₂ OPS	[25237-37-0] V	difluorothiophosphoric, <i>S</i> -methyl ester (236–298)	31.2	251	A	[1987STE/MAL, 1999DYK/SVO, 1968CHA/CAV]
CH ₃ F ₂ PS ₂	[21348-13-0] V	difluorodithiophosphoric acid, methyl ester (253–298)	39.0	268	A	[1987STE/MAL, 1999DYK/SVO, 1968CHA/CAV]
CH ₃ F ₄ NP ₂ S ₂	[25741-62-2] V	<i>N,N</i> -bis(difluorothiophosphoral) methylamine (273–325)	38.7	288	A	[1987STE/MAL, 1999DYK/SVO, 1970CHA/CAV]
CH ₃ I	[74-88-4] FUS SUB SUB V V V V V V	methyl iodide (176–227)	9.12 40.2 ± 0.4 U 69.9 30.4 26.5 31.1 29.2 30.4 28.2	206.8 191	VG A A EB	[1982WRE/VIK] [1982WRE/VIK] [1943NIT/SEK, 1960JON] [1987STE/MAL] [1987STE/MAL] [1982WRE/VIK] [1972BOU/AIM, 1979KUD/KUD] [1947STU] [1936EWE]
CH ₃ NO	[75-12-7] FUS FUS SUB SUB SUB	formamide (85–290) (251–273) (251–273)	8.67 7.98 72.4 71.7 71.7	275.6 275.7 264 298 276	AC TE, ME TE, ME	[1983DEW/DEK] [1996DOM/HEA, 1965SOM/COO] [1983DEW/VAN] [1983DEW/VAN] [1979DAA/VAN]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	Reference
	V	(303–376)	60.6	340	GS	[2011EME/VER2]
	V	(303–376)	62.2 ± 0.3	298	GS	[2011EME/VER2]
	V	(344–484)	69.1	298	EB	[1989COX/WAG, 2011EME/VER2]
	V	(293–377)	70.8	308	A	[1987STE/MAL]
	V	(415–466)	61.2	430	A	[1987STE/MAL]
	V		60.2	298	A	[1985BAR/CAS, 1985MAJ/SVO]
	V	(391–466)	54.6	429	EB	[1979OLO, 2011EME/VER2]
	V	(391–466)	59.5 ± 0.2	298	EB	[1979OLO, 2011EME/VER2]
	V	(303–453)	59.3	378		[1967QUI, 2011EME/VER2]
	V	(303–453)	62.0 ± 0.7	298		[1967QUI, 2011EME/VER2]
	V	(251–273)	62.7 ± 0.7	298	TE, ME, S-F	[1967QUI/HOF, 2011EME/VER2]
	V	(298–333)	70.8 ± 0.3	298	ME	[1965SOM/COO, 2011EME/VER2]
	V	(343–483)	64.0	358		[1947STU]
CH ₃ NOS	[4291-05-8]	<i>N</i> -sulfinyl methanamine				
	V	(252–277)	31.8	264	A	[1987STE/MAL, 1999DYK/SVO, 1954BUR/WOO]
CH ₃ NO ₂	[624-91-9]	methyl nitrite				
	V	(218–273)	22.1	258	A	[1987STE/MAL]
	V	(154–225)	26.2	190		[1982ROO]
	V		22.6 ± 0.2			[1958GRA/PRA]
	V	(241–274)	21.0	257		[1937THO/DAI]
CH ₃ NO ₂	[75-52-5]	nitromethane				
	FUS		9.7	244.8		[1996DOM/HEA, 1947JON/GIA]
	V		38.5 ± 0.4	298		[1999MIR/VOR2]
	V	(313–353)	37.2	298	CGC	[1995CHI/HOS]
	V	(405–476)	35.2	420	A	[1987STE/MAL, 1967BER/WES]
	V	(328–410)	36.8	343	A	[1987STE/MAL, 1954MCC/SCO]
	V		37.2 ± 0.1	318	C	[1954MCC/SCO]
	V		36.3 ± 0.1	335	C	[1954MCC/SCO]
	V		35.2 ± 0.1	353	C	[1954MCC/SCO]
	V		34.0 ± 0.1	374	C	[1954MCC/SCO]
	V	(283–373)	38.0 ± 0.4	298	ZG	[1949HOL/DOR]
	V		38.3 ± 0.1	298	C	[1947JON/GIA]
	V		34.4	374	C	[1941PIT/GWI]
	V	(288–373)	37.2	330		[1940HOD]
	V		34.6	374	C	[1930PHI/WAT]
	V		33.9	373	C	[1926MAT]
	V	(310–374)	34.4	342		[1925WIL]
CH ₃ NO ₃	[598-58-3]	methyl nitrate				
	FUS		8.24	190.2		[1996DOM/HEA, 1953GRA/SMI]
	V	(273–303)	34.8	288	A	[1987STE/MAL, 1952MCK/MOE]
CH ₃ N ₅	[4418-61-5]	5-aminotetrazole				
	SUB	(383–443)	112.6 ± 1.2		ME	[1990KOZ/SIM]
CH ₄	[74-82-8]	methane				
	FUS		0.94	90.7		[1929CLU, 1931PAR/HUF, 1961SPE, 1976VOG/PIT]
	FUS		0.97	90.6		[1924EUC/KAR]
	SUB	(53–91)	9.7	72		[1987STE/MAL]
	SUB	(54–90)	9.2	72		[1963BON, 1955ARM/BRI]
	SUB	(79–89)	10.0	84		[1960JON]
	SUB	(48–78)	9.7	63	A, MS	[1951TIC/LOS]
	SUB	(67–88)	9.62	77	A	[1947STU]
	V	(90–120)	8.6	105	A	[1987STE/MAL]
	V	(115–149)	8.4	134	A	[1987STE/MAL]
	V	(148–189)	8.7	174	A	[1987STE/MAL]
	V	(91–127)	8.6	112		[1972PRY/GOO, 1984BOU/FRI]
	V	(91–190)	8.5	175		[1972PRY/GOO]
	V		8.1	137		[1971WIL/ZWO]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference	
		Transition	Temp. range (K)				$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)
		V	(100–190)	8.6		[1970AMB/COU]	
		V		8.2	C	[1961HES/WHI]	
		V		7.5	C	[1961HES/WHI]	
		V		5.9	C	[1961HES/WHI]	
		V		4.0	C	[1961HES/WHI]	
		V	(109–189)	8.5		[1961HES/WHI]	
		V		8.5 ± 0.1		[1939FRA/CLU]	
		V	(92–110)	8.6		[1921STO/HEN, 1984BOU/FRI]	
CH ₄ F ₂ NPS	[31411-30-0]		difluorothiophosphoric acid, <i>N</i> -methylamide				
	V		(273–325)	39.1	288	A	[1987STE/MAL, 1999DYK/SVO, 1971CAV/CHA]
CH ₄ N ₂	[12211-52-8]		ammonium cyanide				
	V		(222–305)	47.1	237		[1947STU]
CH ₄ N ₂	[26981-93-1]		methyl diazene				
	V		(195–236)	27.5	221	A	[1987STE/MAL]
	V		(209–236)	25.7	222		[1972ACK/HAL]
CH ₃ DN ₂	[34994-49-5]		<i>N</i> -deuteromethyl diazene				
	V			29.9			[1972ACK/HAL]
CH ₄ N ₂ O	[57-13-6]		urea				
	FUS			16.6	406.2	DSC	[2013AGA/MOS]
	FUS			14.6	406.2	DSC	[2012SHA/SHA]
	FUS			14.6	406.5	DSC	[2011RAI/MUD]
	FUS			15.13	407.5	DSC	[2010BAB/KUZ]
	FUS			13.9	405.8	DSC	[2010ZEN/LI]
	FUS			14.6	407.2	DSC	[1999RAI/RAI]
	FUS			14.6	406.7	DSC	[1998RAI/RAI]
	FUS			13.6	405.2	DSC	[1998JAM/PAL]
	FUS			15.03	407.9	DSC	[1995FER/DEL]
	FUS			U 11.42	408.2	DSC	[1993RAN/LAK]
	FUS			14.1	406.2		[1993STR/ARG]
	FUS			12.93	408.1		[1990KAB/MIR2]
	FUS			14.5	406.2	DSC	[1988GAM/BRO, 1987GAM/GAU]
	FUS			14.8	406.5	DSC	[1987DEL/FER]
	FUS			13.9	405.8		[1986KOZ/DAL]
	FUS			15.52	405.2		[1985OZA]
	FUS			14.41	406.2		[1983BRO/GAM]
	FUS			13.61	406.0		[1980VOG/SCH]
	FUS			13.47	406.3	DSC	[1972ZOR/HUR]
	FUS			13.8		CR	[1972ZOR/HUR]
	FUS			14.52	405.9		[1934MIL/DIT]
	SUB		(358–402)	95.5 ± 0.3	298	GS	[2006EME/KAB]
	SUB		(329–403)	94.6 ± 2.2	370	ME	[2003ZAI/KAB]
	SUB		(329–403)	95.1 ± 2.2	350	ME	[2003ZAI/KAB]
	SUB			96.0 ± 0.6	298		[2003ZAI/KAB]
	SUB			94.6 ± 0.5	350	C	[2003ZAI/KAB]
	SUB			97.6 ± 1.0		ME	[1987KRA/KOZ]
	SUB			90.9	381		[1987FER/DEL2]
	SUB		(345–368)	87.7	357	A	[1987STE/MAL]
	SUB		(338–362)	96.9	351	TE, ME	[1983DEW/VAN]
	SUB			98.6	298		[1983DEW/VAN]
	SUB			95.4	361		[1978TRI/VOO]
	SUB		(345–368)	87.9 ± 2.1	356		[1956SUZ/ONI, 1960JON, 1970COX/PIL]
	SUB			88.2	357		[1953BRA/CLE2, 1983DEW/VAN]
CH ₄ N ₂ O ₂	[598-57-2]		<i>N</i> -nitromethylamine				
	FUS			11.86	324.2	DSC	[2010FAR/RAJ]
CH ₄ N ₂ O ₂	[1111-78-0]		ammonium carbamate				
	V		(247–331)	54.1	262		[1947STU]
CH ₄ N ₂ S	[62-56-6]		thiourea				
	FUS			15.17	450.2	DSC	[2016WAN/YIN]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference	
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)				
		FUS		15.64	444.7	DSC	[2000DEL/JOZ]
		FUS		12.55	452.2	DSC	[1994KIM/LEE]
		TRS	(140–240)	0.026	169		
		TRS	(140–240)	0.113	200	AC	[1993IGA/LOP]
		FUS		16.96	454.2	DSC	[1993RAN/LAK]
		FUS		16.0		DSC	[1993STR/ARG]
		FUS		15.0	454.4	DSC	[1993DEM/BUC]
		FUS		14.42	445.5	DSC	[1990DON/DRE]
		FUS		15.28	455	DSC	[1988ASH]
		FUS		13.8	453.3	DSC	[1972ZOR/HUR]
		SUB		112.0 ± 2.0	298	ME	[2000DEL/JOZ]
		SUB		109.0 ± 2.0	408	TE	[1994FER/MAR]
		SUB		111.0 ± 3.0	298	TE	[1994FER/MAR]
		SUB	(378–396)	103.9 ± 0.3	387	ME	[1994TOR/HER]
		SUB	(348–382)	93.7 ± 4.7	365	DTA	[1988ASH]
		SUB	(348–382)	95.2 ± 4.8	298	DTA	[1988ASH]
		SUB	(368–395)	106.6	384	TE, ME	[1983DEW/VAN]
		SUB		107.6	298		[1983DEW/VAN]
		SUB		112.0 ± 1.5	298	C	[1982TOR/SAB]
		SUB		93.7 ± 10			[1975BAG/AND]
CH ₄ N ₄ O ₂	[556-88-7]	nitroguanidine					
		FUS		33.46	505.2	DTA	[2014CHE/LI]
		SUB	(463–498)	139	480	DTA	[2014CUD/POD]
		SUB	(402–473)	142.7 ± 2.0	298	ME	[1978CUN/PAL]
CH ₄ N ₄ O ₄	[14168-44-6]	<i>N,N'</i> -dinitrodiaminomethane					
		FUS		35.85	371	DTA	[1987OYU/BRI]
CH ₄ O	[67-56-1]	methanol					
		TRS	(78–320)	0.64	157.8		
		FUS	(78–320)	3.21	175.9	AC	[2006WAN/NAN]
		TRS	(6–325)	0.64	157.3		
		FUS	(6–325)	3.22	175.6	AC	[1996DOM/HEA, 1971CAR/WES]
		TRS		0.71	157.8		
		FUS		3.16	175.4		[1996DOM/HEA, 1949STA/GUP]
		TRS		0.65	157.4		
		FUS		3.17	175.2		[1996DOM/HEA, 1929KEL2]
		TRS		0.59	161.1		
		FUS		3.18	175.3		[1996DOM/HEA, 1925PAR]
		SUB (β)	(157–175)	44.2 ± 0.5	166	MS, FTIR	[2005LUC/FER]
		SUB (α)	(145–157)	46.9 ± 0.2	151	MS, FTIR	[2005LUC/FER]
		V	(298–333)	38.0	298		[2004NAS/ZIM]
		V		34.3			[1999FAT]
		V	(175–273)	39.2	258	A	[1987STE/MAL]
		V	(338–487)	36.9	353	A	[1987STE/MAL]
		V	(188–228)	43.7	213	A	[1987STE/MAL]
		V	(224–290)	38.9	275	A	[1987STE/MAL]
		V	(285–345)	38.3	300	A	[1987STE/MAL]
		V	(335–376)	37.0	350	A	[1987STE/MAL]
		V	(373–458)	36.1	388	A	[1987STE/MAL]
		V	(453–513)	35.1	468	A	[1987STE/MAL]
		V		32.7	373	C	[1986YER/WOR]
		V		28.1	423	C	[1986YER/WOR]
		V		20.6	473	C	[1986YER/WOR]
		V		7.4	510	C	[1986YER/WOR]
		V	(316–336)	37.5	331	EB	[1984CER/BOU]
		V	(243–303)	37.8	298		[1983SCH/STR]
		V	(288–337)	38.3	303		[1974GIB/CRE, 1984BOU/FRI]
		V	(337–383)	37.0	352		[1973WIL/ZWO]
		V		37.4 ± 0.1	298	C	[1973SVO/VES]
		V		36.7 ± 0.1	313	C	[1973SVO/VES]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
	V		36.2 ± 0.1	323	C	[1973SVO/VES]
	V		35.6 ± 0.1	333	C	[1973SVO/VES]
	V		35.3 ± 0.1	338	C	[1973SVO/VES]
	V		34.7 ± 0.1	343	C	[1973SVO/VES]
	V		35.2 ± 0.1	338	C	[1973COU/LEE]
	V		35.6 ± 0.1	331	C	[1973COU/LEE]
	V		36.2 ± 0.1	321	C	[1973COU/LEE]
	V		37.0 ± 0.1	306	C	[1973COU/LEE]
	V	(275–336)	38.7	290	EB	[1972BOU/AIM, 1987STE/MAL]
	V		37.43 ± 0.02	298	C	[1971POL/BEN]
	V		37.0 ± 0.1	308	C	[1971POL/BEN]
	V		36.5 ± 0.1	328	C	[1971POL/BEN]
	V		35.5 ± 0.1	328	C	[1971POL/BEN]
	V	(288–357)	38.3	303	EB	[1970AMB/SPR]
	V	(353–483)	36.3	368		[1967HIR/SUD]
	V		37.3 ± 0.1	298	C	[1966WAD]
	V		37.7 ± 0.1	298	C	[1963MCC/LAI]
	V	(278–323)	38.4	293		[1960KLY/MIS]
	V		38.5	273		[1949STA/GUP]
CH ₄ O ₂	[3031-73-0]	methyl hydroperoxide				
	V	(253–313)	37.7	268	A	[1987STE/MAL, 1951EGE/EMT]
CH ₄ O ₃ S	[75-75-2]	methanesulfonic acid				
	V	(395–440)	73.9	410	A	[1987STE/MAL, 1999DYK/SVO]
CH ₄ S	[74-93-1]	methyl mercaptan				
	TRS	(15–279)	2.2	137.6		
	FUS	(15–279)	5.9	150.2	AC	[1996DOM/HEA, 1942RUS/OSB]
	V	(208–298)	27.2	223		[1999DYK/SVO]
	V	(267–359)	25.2	359	A	[1987STE/MAL]
	V	(221–283)	25.7	268	A	[1987STE/MAL]
	V	(345–424)	23.7	360	A	[1987STE/MAL]
	V	(414–470)	24.2	429	A	[1987STE/MAL]
	V		23.8	298		[1971WIL/ZWO]
	V	(222–279)	25.8	264		[1987STE/MAL, 1942RUS/OSB]
	V		24.6 ± 0.1	279	C	[1942RUS/OSB]
CH ₅ N	[74-89-5]	methylamine				
	FUS		6.13	179.7		[1996DOM/HEA, 1937AST/SIL]
	V	(319–381)	24.8	334	A	[1987STE/MAL]
	V	(373–430)	23.5	388	A	[1987STE/MAL]
	V	(263–329)	26.1	278	A	[1987STE/MAL]
	V	(223–273)	27.2	258	A	[1987STE/MAL, 1970DYK]
	V	(190–267)	27.4	252		[1937AST/SIL, 1984BOU/FRI]
CH ₅ NO	[593-77-1]	<i>N</i> -methylhydroxylamine				
	SUB	(273–308)	56.6	288		[1987STE/MAL, 1957BIS/PAR]
	V	(293–338)	49.7	308	A	[1987STE/MAL, 1970DYK]
	V	(313–338)	49.3	325	A	[1987STE/MAL, 1957BIS/PAR, 1984BOU/FRI]
CH ₅ NO	[67-62-9]	<i>O</i> -methylhydroxylamine				
	V	(228–322)	36.9	243	A	[1987STE/MAL]
	V	(210–321)	38.0	225		[1957BIS/PAR, 1984BOU/FRI]
CH ₅ N ₃ O	[758-19-0]	1-methyl-1-nitrosohydrazine				
	SUB		79.5 ± 0.4	298		[1998LEB/CHI]
CH ₅ N ₃ S	[79-19-6]	thiosemicarbazide				
	SUB		125.8 ± 1.5	298	C	[1982TOR/SAB]
CH ₅ O ₃ P	[993-13-5]	methylphosphonic acid				
	FUS		10.41	382.1	DSC	[2015SHA/GE]
	SUB		48.1 ± 4.2			[1955NEA/WIL, 1970COX/PIL]

TABLE 4. Phase change enthalpies of C₁ organic compounds—Continued

Molecular formula	CAS reg. no. Transition	Compound		T_m (K)	Method	Reference
		Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
CH ₆ ClN	[593-51-1] V	methylamine hydrochloride (518–593)	114.5	533	A, I	[1987STE/MAL, 1967KIS]
CH ₆ N ₂	[60-34-4] FUS	methylhydrazine (274–299)	10.42	220.8		[1996DOM/HEA, 1951AST/FIN]
	V		41.8	286	A	[1987STE/MAL, 1951AST/FIN]
CH ₆ N ₄ O ₃	[506-93-4] FUS	guanidine nitrate	25.27	487.2	DSC	[2015ZHA/QIA]
	TRS		1.67	296		
	FUS		25.6	487	DSC	[1993SZA/CZA]
CH ₆ N ₄ S	[2231-57-4] SUB	thiocarbohydrazide	152.1 ± 3.0	298	C	[1982TOR/SAB]

TABLE 5. Phase change enthalpies of C₂ organic compounds

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ BrCl ₂ F ₃ O ₄	[38217-36-6]	perchloric acid, 1,2,2-trifluoro-1-chloro-2-bromoethyl ester				
	V	(273–294)	42.5	283	A	[1987STE/MAL, 1973SCH/PIL]
C ₂ BrCl ₃ O	[34069-94-8]	trichloroacetyl bromide				
	V	(265–416)	42.6	280	A	[1987STE/MAL, 1947STU]
C ₂ BrCl ₅	[79504-02-2]	bromopentachloroethane				
	SUB	(383–433)	44.4	398	A	[1987STE/MAL, 1949HIG/END]
C ₂ BrF ₃	[598-73-2]	bromotrifluoroethylene				
	V	(260–340)	25.0	275	A	[1987STE/MAL]
C ₂ BrF ₅ O ₃ S	[757-02-8]	2-bromotetrafluoroethyl fluorosulfate				
	V	(273–298)	33.2	285		[1963GIL/CAD]
C ₂ BrF ₉ S	[63011-81-4]	pentafluoro(1-bromo-1,2,2,2-tetrafluoroethyl) sulfur				
	V	(294–330)	30.7	309	A	[1987STE/MAL, 1999DYK/SVO, 1977NOF/FOX]
C ₂ Br ₂ ClF ₃	[354-51-8]	2-chloro-1,2-dibromo-1,1,2-trifluoroethane				
	V	(343–428)	31.4	358	A	[1987STE/MAL]
	V		35.0 ± 0.1	298	C	[1981MAJ/SVO]
	V		34.2 ± 0.1	313	C	[1981MAJ/SVO]
	V		33.5 ± 0.1	328	C	[1981MAJ/SVO]
	V		32.6 ± 0.1	343	C	[1981MAJ/SVO]
	V	(301–365)	31.6 ± 0.1	358	C	[1981MAJ/SVO]
C ₂ Br ₂ Cl ₄	[630-25-1]	1,2-dibromotetrachloroethane				
	SUB	(383–453)	52.5	398	A	[1987STE/MAL, 1949HIG/END]
	SUB	(323–423)	56.7	373	A	[1935CAR/DIC]
C ₂ Br ₂ F ₄	[124-73-2]	1,2-dibromotetrafluoroethane				
	FUS	(8–300)	7.04	162.8		[1991ACR, 1982KOS/ZHO]
	V	(283–357)	28.5	298	A	[1987STE/MAL]
	V	(354–443)	26.9	369	A	[1987STE/MAL]
	V	(440–488)	27.1	455	A	[1987STE/MAL]
	V	(298–320)	28.0 ± 0.5	298		[1985PAS/VAR]
	V		28.4 ± 0.1	298	C	[1981MAJ/SVO]
	V		27.5 ± 0.1	313	C	[1981MAJ/SVO]
	V		26.5 ± 0.1	328	C	[1981MAJ/SVO]
	V	(293–319)	28.8	306		[1981MAJ/SVO]
V	(246–295)	30.0	280		[1987STE/MAL, 1970DYK]	
C ₂ Br ₄	[79-28-7]	tetrabromoethylene				
	SUB	(221–310)	44.2	236	A	[1987STE/MAL]
C ₂ ClFN ₂	[30915-40-3]	<i>cis</i> -chloro(fluoroimino)acetonitrile				
	V	(254–320)	31.7	269	A	[1987STE/MAL, 1971ZAB/SHR]
C ₂ ClFN ₂	[30915-39-0]	<i>trans</i> -chloro(fluoroimino)acetonitrile				
	V	(257–320)	32.7	272	A	[1987STE/MAL, 1971ZAB/SHR]
C ₂ ClF ₂ NO ₂	[42016-33-1]	chloro(fluorocarbonyl)carbamic fluoride				
	V		36.8	376		[1973SPR/WRI]
C ₂ ClF ₃	[79-38-9]	chlorotrifluoroethylene				
	FUS	(16–245)	5.55	115	AC	[1996DOM/HEA, 1951OLI/GRI2]
	V	(206–262)	21.8	247	A	[1987STE/MAL, 1951OLI/GRI2]
	V	(298–379)	20.2	313	A	[1987STE/MAL, 1951OLI/GRI2]
C ₂ ClF ₃ O ₂	[23213-83-4]	chloroformic acid, trifluoromethyl ester				
	V	(195–273)	24.1	258	A	[1987STE/MAL, 1969SCH/MAY]
	V	(195–273)	25.2	234		[1969SCH/MAY]
C ₂ ClF ₃ O ₄ S	[6069-32-5]	difluorochloroacetic acid, fluorosulfuric acid anhydride				
	V	(265–352)	39.8	280	A	[1987STE/MAL, 1966DES/CAD, 1999DYK/SVO]
C ₂ ClF ₄ NO	[42016-31-9]	chloro(trifluoromethyl)carbamic fluoride				
	V		28.9	310		[1973SPR/WRI]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ ClF ₄ NO ₄ S	[42016-34-2]	fluorosulfuric acid, chloro(trifluoromethyl)carbamic acid anhydride				
	V		28.5	398		[1973SPR/WRI]
C ₂ ClF ₅	[76-15-3]	chloropentafluoroethane				
	TRS		2.63	80.2		
	FUS		1.88	173.7		[1996DOM/HEA, 1955AST/WIL]
	V	(262–317)	19.7	277	A	[1987STE/MAL]
	V	(234–265)	20.1	250	A	[1987STE/MAL]
	V	(312–353)	19.7	327	A	[1987STE/MAL]
	V	(178–234)	20.9	219		[1966MEA/ROS]
	V		20.9			[1956PLA]
V	(176–235)	20.9	220	A	[1987STE/MAL, 1955AST/WIL]	
V		19.4 ± 0.1	234	C	[1955AST/WIL]	
C ₂ ClF ₅ N ₂	[660-80-0]	1-(chlorodifluoromethyl)-2-(trifluoromethyl)diazene				
	V		24.5			[1967HYN/BIS]
C ₂ ClF ₅ O	[22675-67-8]	hypochlorous acid, pentafluoroethyl ester				
	V	(193–248)	25.0	233	A	[1987STE/MAL, 1973DEM/SHR]
	V	(193–248)	25.6	220		[1969SCH/MAY]
C ₂ ClF ₅ OS	[39937-08-1]	pentafluoroethanesulfinyl chloride				
	V	(273–338)	32.7	288	A	[1987STE/MAL, 1964RAT/SHR, 1999DYK/SVO]
C ₂ ClF ₅ O ₃ S	[649-61-6]	2-chlorotetrafluoroethyl fluorosulfate				
	V	(248–330)	32.9	289		[1963GIL/CAD]
C ₂ ClF ₅ O ₆ S ₂	[1957-17-1]	1,2,2-trifluoro-1-chloro-1,2-ethanediol bis(fluorosulfate)				
	V	(308–406)	53.2	323	A	[1987STE/MAL, 1999DYK/SVO]
C ₂ ClF ₆ NOS	[74366-11-3]	(pentafluoroethyl)imidodisulfurous chloride fluoride				
	V		35.6	326	I	[1980ABE/SHR]
C ₂ ClF ₆ P	[650-52-2]	bis(trifluoromethyl) chlorophosphine				
	V	(193–273)	27.8	258		[1964PET/BUR, 1984BOU/FRI]
C ₂ ClF ₆ PS	[18799-82-1]	bis(trifluoromethyl)phosphinothioic chloride				
	SUB	(229–251)	36.2	240		[1968GOS/BUR]
C ₂ ClF ₆ PS ₂	[660-05-9]	chloro bis(trifluoromethylthio)phosphine				
	V	(293–373)	33.0	333		[1960EME/PUG]
C ₂ ClF ₉ NP	[13105-57-2]	[bis(trifluoromethyl)amino]trifluorochlorophosphorous(V)				
	V	(223–273)	26.4	248		[1966RIN/ONE]
C ₂ ClF ₉ S	[646-63-9]	2-chlorotetrafluoroethylsulfur pentafluoride				
	V		28.3	320		[1961CAS/RAY, 1999DYK/SVO]
C ₂ ClF ₉ S	[42769-85-7]	sulfur, chlorotetrafluoro(pentafluoroethyl)				
	V		28.7			[1973ABE/SHR2]
C ₂ Cl ₂ F ₂	[598-88-9]	1,2-dichloro-1,2-difluoroethylene				
	V	(191–294)	27.9	279	A	[1987STE/MAL]
	V	(240–294)	27.2	279		[1933BOO/BUR]
C ₂ Cl ₂ F ₂ N ₂	[30913-21-4]	dichloro(difluoroamino)acetonitrile				
	V	(238–341)	26.8	253	A	[1987STE/MAL, 1971ZAB/SHR]
C ₂ Cl ₂ F ₂ O	[354-18-7]	fluorodichloroacetyl fluoride				
	V	(208–273)	21.8	258	A	[1987STE/MAL, 1973SCH/PIL]
	V	(208–273)	21.5	240		[1973SCH/PIL]
C ₂ Cl ₂ F ₃ NO	[32751-03-4]	<i>N, N'</i> -dichloro-2,2,2-trifluoroacetamide				
	V		40.9			[1972DEM/SHR]
C ₂ Cl ₂ F ₃ NO	[354-71-2]	1,2-dichlorotrifluoro-1-nitrosoethane				
	V	(307–310)	29.0	308	I	[1960GRI/HAZ]
C ₂ Cl ₂ F ₃ NOS	[24433-67-8]	<i>S, S</i> -dichloro- <i>N</i> -(trifluoroacetyl) sulfilimine				
	V	(306–333)	44.2	319	A	[1987STE/MAL, 1969GLE/VON, 1999DYK/SVO]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ Cl ₂ F ₃ NO ₂ S	[51587-33-8]	(trifluoromethyl)sulfonyl carbonimidic dichloride				
	V	(312–405)	44.1	327	A	[1987STE/MAL, 1999DYK/SVO, 1974BEH/HAA]
C ₂ Cl ₂ F ₄	[374-07-2]	1,1-dichloro-1,2,2,2-tetrafluoroethane				
	V	(231–373)	23.5	246	A	[1987STE/MAL, 1970DYK]
	V		23.2	233	BG	[1955MEA/STA]
	V		22.5	273	BG	[1955MEA/STA]
	V		20.8	313	BG	[1955MEA/STA]
C ₂ Cl ₂ F ₄	[76-14-2]	1,2-dichloro-1,1,2,2-tetrafluoroethane				
	TRS	(8–179)	1.21	109.3		
	TRS	(8–179)	2.63	134.6		
	FUS	(8–179)	1.51	180.6	AC	[1996DOM/HEA, 1981KOL/KOS]
	V	(277–391)	24.3	292	A	[1987STE/MAL]
C ₂ Cl ₂ F ₄ O ₄	[38126-28-2]	perchloric acid, 1,1,2,2-tetrafluoro-2-chloroethyl ester				
	V	(249–294)	32.6	279	A	[1987STE/MAL, 1973SCH/PIL]
C ₂ Cl ₂ F ₅ NS	[10564-48-4]	<i>S,S</i> -dichloro- <i>N</i> -(pentafluoroethyl) sulfilimine				
	V	(297–375)	37.4	312	A	[1987STE/MAL, 1999DYK/SVO, 1966LUS]
C ₂ Cl ₂ F ₈ NP	[13105-58-3]	[bis(trifluoromethyl)amino]difluorodichlorophosphorous(V)				
	V	(262–305)	32.9	293		[1966EME/ONA]
C ₂ Cl ₃ F ₃	[354-58-5]	1,1,1-trichloro-2,2,2-trifluoroethane				
	FUS		4.11	287.5	DSC	[1987OTT/WOO]
	V		28.1 ± 0.1	298	C	[1980MAJ/SVO]
	V		27.2 ± 0.1	313	C	[1980MAJ/SVO]
	V		26.3 ± 0.1	328	C	[1980MAJ/SVO]
	V	(297–319)	28.9	308		[1980MAJ/SVO]
C ₂ Cl ₃ F ₃	[76-13-1]	1,1,2-trichloro-1,2,2-trifluoroethane				
	TRS	(6–299)	0.83	82.5		
	FUS	(6–299)	2.47	236.9	AC	[1991ACR, 1981KOL/KOS]
	SUB	(205–233)	32.9	219	A	[1947STU]
	V	(238–364)	30.9	253	A	[1987STE/MAL]
	V	(360–473)	26.9	375	A	[1987STE/MAL]
	V	(297–317)	28.8	307	A	[1987STE/MAL]
	V		28.4 ± 0.1	298	C	[1980MAJ/SVO]
	V		27.5 ± 0.1	313	C	[1980MAJ/SVO]
	V		26.6 ± 0.1	328	C	[1980MAJ/SVO]
	V		28.2 ± 0.4	298		[1974VAR/BUL]
	V	(273–318)	28.2	288	A	[1963HIR/HIL, 1987STE/MAL]
	V	(248–356)	30.8	263		[1940BEN/MCH]
	V	(243–353)	NA			[1939REI]
	C ₂ Cl ₃ F ₃		trichlorotrifluoroethane			
V		(248–352)	30.5	263		[1938REI]
C ₂ Cl ₃ F ₃ O ₄	[38126-27-1]	perchloric acid, 1,2,2-trifluoro-1,2-dichloroethyl ester				
	V	(273–296)	26.9	284	A	[1987STE/MAL, 1973SCH/PIL]
C ₂ Cl ₃ N	[545-06-2]	trichloroacetonitrile				
	V	(289–357)	35.1	304	A	[1987STE/MAL, 1970DYK]
	V	(289–356)	34.7	304		[1954DAV/JEN]
C ₂ Cl ₄	[127-18-4]	tetrachloroethylene				
	TRS	(6–300)	0.82	210		
	FUS	(6–300)	10.88	250.8	AC	[1996DOM/HEA, 1986NOV/RAB]
	V	(307–393)	38.4	322		[1995DEJ/BUR]
			39.7	298	C	[1980MAJ/SVA]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		38.9	313	C	[1980MAJ/SVA]
	V		38.2	328	C	[1980MAJ/SVA]
	V		37.4	343	C	[1980MAJ/SVA]
	V		36.6	358	C	[1980MAJ/SVA]
	V	(310–393)	38.7	325	A	[1987STE/MAL, 1972BOU/AIM]
	V	(300–380)	38.9	315		[1970POL/MUR, 1984BOU/FRI]
	V	(333–373)	37.6	348		[1967FRI/GAL]
	V		39.6 ± 0.1	298	C	[1960AIH]
	V		34.7 ± 0.1	394		[1926MAT]
	V	(306–391)	35.7	397		[1913HER/RAT]
C ₂ Cl ₄ F ₂	[76-12-0]	1,2-difluoro-1,1,2,2-tetrachloroethane				
	TRS		0.79	130		
	FUS		3.7	297.9		[1991ACR, 1978KIS/SUG]
	FUS		3.7	299.7		[1978KOS/KOL]
	SUB	(235–293)	36.4	278	A	[1987STE/MAL, 1947STU]
	SUB	(237–293)	38.2	265	A	[1947STU]
	V	(313–361)	34.8 ± 0.4	298		[2007VAR/DRU, 1976VAR/BUL]
	V		34.6 ± 0.1	308	C	[1992SVO/KUB2]
	V		34.1 ± 0.1	315	C	[1992SVO/KUB2]
	V		33.6 ± 0.1	323	C	[1992SVO/KUB2]
	V		33.1 ± 0.1	330	C	[1992SVO/KUB2]
	V		32.6 ± 0.1	338	C	[1992SVO/KUB2]
	V	(301–365)	36.6	316	A	[1987STE/MAL]
	V	(235–293)	36.4	278	A	[1987STE/MAL]
	V	(312–362)	34.0	327	A	[1987STE/MAL, 1976VAR/BUL]
	V	(283–364)	32.7	298		[1933HOR/GEI]
C ₂ Cl ₄ F ₂ O ₃ S	[665-15-6]	2-fluorotetrachloroethyl fluorosulfate				
	V	(311–437)	42.0	329		[1963GIL/CAD]
C ₂ Cl ₄ F ₂ O ₄	[38126-29-3]	perchloric acid, 1,2-difluoro-1,2,2-trichloroethyl ester				
	V	(273–294)	30.2	283	A	[1987STE/MAL, 1973SCH/PIL]
C ₂ Cl ₄ F ₄ N ₂	[35695-53-5]	1,2-bis(dichloroamino) tetrafluoroethane				
	V		43.1			[1972DEM/SHR]
C ₂ Cl ₄ F ₆ OS	[762-90-3]	pentafluoro(2-fluoro-1,1,2,2-tetrachloroethoxy) sulfur				
	V	(314–418)	42.8	329	A	[1987STE/MAL, 1962WIL/CAD]
C ₂ Cl ₄ O	[16650-10-5]	tetrachloroethylene oxide				
	V	(308–348)	36.9	323	A	[1987STE/MAL, 1957FRA/JOH]
C ₂ Cl ₄ O	[76-02-8]	trichloroacetyl chloride				
	V	(305–393)	38.3	320	A	[1987STE/MAL, 1959MCD/SHR, 1970DYK]
C ₂ Cl ₆	[67-72-1]	hexachloroethane				
	TRS		2.10	316.8		
	TRS		6.30	345.0		[1996DOM/HEA, 1988PET/TSY]
	TRS	(14–360)	2.64	317.4		
	TRS	(14–360)	6.92	344.6	AC	[1996DOM/HEA, 1975RAK/GUT]
	TRS		2.61	320.2		
	TRS		6.31	344.7	DSC	[1970MUR/BRE2]
	TRS		3.12	316.2		[1967TSE/GOD]
	TRS	(295–351)	2.57	318		
	TRS	(295–351)	8.22	345		
	FUS	(295–351)	9.75	458	CC	[1996DOM/HEA, 1950SEK/MOM]
	SUB	(317–345)	58.9	331	A	[1987STE/MAL]
	SUB (m.p. 186.6)	(306–459)	48.8	382	A	[1947STU]
	SUB (triclinic)	(286–447)	59.1 ± 0.7	367	BG	[1947IVI/DAI, 1960JON, 1970COX/PIL]
	SUB (cubic)	(286–447)	51.0	367	BG	[1947IVI/DAI, 1960JON]
	SUB		NA		GSM	[1941NIT/SEK]
	SUB	(335–453)	50.5			[1935LEE]
	SUB	(288–333)	59.0	310	GS, A	[1930NEL]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(460–513)	40.3	475	A	[1987STE/MAL, 1935LEE]
	V	(345–460)	51.2	360	A	[1987STE/MAL, 1970DYK]
	V	(305–458)	53.7	320		[1947STU]
C ₂ FNO ₂	[15435-14-0]	fluorocarbonyl isocyanate				
	V	(228–264)	33.5	249	A	[1987STE/MAL, 1967GLE/BIE]
C ₂ F ₂ N ₂ O	[32837-63-1]	difluorocarbonylamidic amide				
	V		29.7	383		[1973WRI/SHR]
C ₂ F ₂ N ₂ O ₂	[32837-64-2]	difluorocarbonisocyanidic amide				
	V		33.9	327		[1973WRI/SHR]
C ₂ F ₂ N ₄ O ₈	[20165-39-3]	1,2-difluoro-1,1,2,2-tetranitroethane				
	V	(297–323)	62.8	310	A	[1987STE/MAL, 1973PEP/LEB]
C ₂ F ₂ O ₂	[359-40-0]	oxalyl fluoride				
	FUS		13.4	260.7		[1996DOM/HEA, 1971HOD]
	SUB	(234–260)	16.7	247	A	[1987STE/MAL]
	V	(264–272)	29.7	268	A	[1987STE/MAL]
C ₂ F ₂ O ₄	[692-74-0]	bis(fluorocarbonyl)peroxide				
	V	(226–266)	30.6	251		[1962VON/AYM, 1984BOU/FRI]
C ₂ F ₃ N	[353-85-5]	trifluoroacetonitrile				
	FUS		4.97	128.7		[1996DOM/HEA, 1961PAC/BOB]
	V	(151–206)	19.3	191	A	[1987STE/MAL]
	V	(141–203)	19.2	188	A	[1987STE/MAL]
	V	(197–241)	18.5	226	A	[1987STE/MAL]
	V	(282–336)	17.4	309	A	[1987STE/MAL]
	V	(272–311)	17.4	287	A	[1987STE/MAL]
	V	(142–206)	19.2	191		[1961PAC/BOB]
	V		17.8	205	C	[1961PAC/BOB]
C ₂ F ₃ NO	[460-49-1]	trifluoromethyl isocyanate				
	V	(195–228)	22.5	213	A	[1987STE/MAL, 1956BAR/HAS2]
C ₂ F ₃ NO	[2713-04-4]	trifluoronitrosoethylene				
	V	(247–250)	25.7	248	A, I	[1987STE/MAL, 1960GRI/HAZ]
C ₂ F ₃ NOS	[61951-27-7]	trifluoromethanesulfinyl cyanide				
	V		40.2	352	I	[1977BUR/SHR]
C ₂ F ₃ NOS	[691-03-2]	trifluoroethylsulfenyl isocyanate				
	V	(231–293)	27.9	278	A	[1987STE/MAL, 1999DYK/SVO, 1963EME/HAA]
C ₂ F ₃ NO ₂ S	[26454-68-2]	2,2,2-trifluoro- <i>N</i> -sulfinylacetamide				
	V	(267–302)	36.4	282	A	[1987STE/MAL, 1999DYK/SVO]
	V	(244–268)	35.4	256		[1970VON/GLE]
C ₂ F ₃ NO ₂ S ₂	[51587-30-5]	trifluoromethanesulfonyl isothiocyanate				
	V	(297–385)	41.0	312	A	[1987STE/MAL, 1999DYK/SVO, 1974BEH/HAA]
C ₂ F ₃ NO ₃ S	[30227-06-6]	trifluoromethanesulfonyl isocyanate				
	V	(275–345)	36.9	290	A	[1987STE/MAL, 1999DYK/SVO, 1974BEH/HAA]
C ₂ F ₃ NO ₆	[53340-26-4]	trifluoroacetyl peroxyhydrate				
	V	(223–293)	33.6	258		[1997KOP/BEU]
C ₂ F ₃ NO ₆	[227095-77-4]	trifluoromethoxycarbonyl peroxyhydrate				
	V	(213–263)	38.0	238		[2005VON/GAR]
C ₂ F ₃ NS	[690-24-4]	thiocyanic acid, trifluoromethyl ester				
	V	(226–294)	32.6	279	A	[1987STE/MAL, 1999DYK/SVO, 1963EME/HAA]
C ₂ F ₃ N ₃ O ₆	[20165-38-2]	1,1,2-trifluoro-1,2,2-trinitroethane				
	V	(313–353)	57.7	328	A	[1987STE/MAL, 1973PEP/LEB]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ F ₄	[116-14-3]	tetrafluoroethylene				
	FUS	(16–210)	7.71	142	AC	[1996DOM/HEA, 1953FUR/MCC]
	V	(197–273)	16.8	258	A	[1987STE/MAL]
	V	(273–306)	16.6	288	A	[1987STE/MAL]
	V	(142–208)	18.6	193	A	[1987STE/MAL, 1953FUR/MCC, 1984BOU/FRI]
	V		17.8			[1933RUF/BRE]
C ₂ F ₄ N ₂	[5131-88-4]	tetrafluoroaminoacetic, nitrile				
	V	(193–238)	23.9	223	A	[1987STE/MAL, 1965DRE/MER]
C ₂ F ₄ N ₂ O ₃	[679-08-3]	1,1,2,2-tetrafluoro-1-nitro-2-nitrosoethane				
	V	(233–293)	28.8	278	A	[1987STE/MAL, 1962BIR/BLO]
C ₂ F ₄ N ₂ O ₄	[356-16-1]	1,1,2,2-tetrafluoro-1,2-dinitroethane				
	V	(303–343)	67.8	323		[1973PEP/LEB]
	V	(259–333)	34.7	274	A, I	[1987STE/MAL, 1957FRA/SAN]
C ₂ F ₄ N ₂ O ₆ S ₂	[19252-50-7]	1,2-bis(fluoroformyl)-1,2-bis(fluorosulfonyl)hydrazine				
	V	(273–296)	49.8	284	A	[1987STE/MAL, 1999DYK/SVO, 1968NOF/SHR]
C ₂ F ₄ O	[354-34-7]	trifluoroacetyl fluoride				
	V	(161–215)	20.9	200	A	[1987STE/MAL, 1972PAC/HOD]
C ₂ F ₄ O ₂ S	[684-10-6]	trifluoroethylene sulfonyl fluoride				
	V	(270–313)	27.0	285	A	[1987STE/MAL, 1999DYK/SVO, 1966BAN/HAS]
C ₂ F ₄ O ₃	[16118-40-4]	fluoroperoxyformic acid, trifluoromethyl ester				
	V	(194–249)	27.3	234	A	[1987STE/MAL]
	V		25.9		BG	[1970DES]
C ₂ F ₄ O ₄ S	[5762-53-8]	trifluoroacetyl fluorosulfate				
	V	(262–321)	34.3	277	A	[1987STE/MAL, 1966DEL/SHR]
	V	(250–320)	34.9	265		[1966MEA/ROS]
C ₂ F ₄ S ₂	[1717-50-6]	tetrafluoro-1-3-dithietane				
	V		29.2			[1973ABE/SHR]
C ₂ F ₅ I	[354-64-3]	pentafluoroiodoethane				
	V	(248–283)	20.8	268	A	[1987STE/MAL, 1949EME/HAS]
C ₂ F ₅ NO	[32822-49-4]	pentafluoroacetamide				
	V		23.8	252	HG	[1971DEM/SHR]
C ₂ F ₅ NO	[354-72-3]	pentafluoronitrosoethane				
	V	(193–227)	20.9	212	A	[1987STE/MAL, 1956BAR/HAS]
C ₂ F ₅ NO	[60247-20-3]	3,3-difluoro-2-(trifluoromethyl)oxaziridine				
	V	(222–237)	22.5	229		[1976FAL/DES3]
C ₂ F ₅ NOS	[32837-66-4]	carbamothioic acid, difluoro- <i>S</i> -(trifluoromethyl) ester				
	V		23.0	315		[1973WRI/SHR]
C ₂ F ₅ NOS	[24433-65-6]	<i>S,S</i> -difluoro- <i>N</i> -(trifluoroacetyl) sulfilimine				
	V	(240–282)	34.4	267	A	[1987STE/MAL, 1969GLE/VON, 1999DYK/SVO]
C ₂ F ₅ NOS	[28103-61-9]	1,1,1-trifluoro- <i>N</i> -(fluoroformyl)methanesulfinimidyl fluoride				
	V	(276–323)	38.9	291	A	[1987STE/MAL, 1999DYK/SVO, 1970DUN]
C ₂ F ₅ NOS	[10564-50-8]	1,1,2,2,2-pentafluoro- <i>N</i> -sulfinyl ethylamine				
	V	(245–303)	29.0	260	A	[1987STE/MAL, 1999DYK/SVO, 1966LUS]
C ₂ F ₅ NO ₄ S	[19252-49-4]	(fluorosulfonyl)(trifluoromethoxy)carbamoyl fluoride				
	V	(277–290)	30.3	283		[1999DYK/SVO, 1968NOF/SHR]
C ₂ F ₅ N ₃ O ₃	[755-68-0]	fluoro(1,1,2,2-tetrafluoro-2-nitroethyl)-2-diimide oxide				
	V	(257–350)	38.0	272	A	[1987STE/MAL, 1953FRA/DUV]
C ₂ F ₆	[76-16-4]	hexafluoroethane				
	TRS		3.74	104		
	FUS		2.69	173.1		[1996DOM/HEA, 1948PAC/AST]
	SUB		26.0	103		[1963BON, 1948PAC/AST]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(172–200)	17.3	186	A	[1987STE/MAL]
	V	(180–196)	17.1	188		[1948PAC/AST]
	V		16.8			[1933RUF/BRE]
C ₂ F ₆ IN	[5764-87-4]	<i>N</i> -iodo-bis(trifluoromethyl)amine				
	V	(261–318)	28.5	276	A	[1987STE/MAL, 1966DOB/EME2]
C ₂ F ₆ IP	[359-64-8]	bis(trifluoromethyl) phosphinous iodide				
	V	(273–320)	33.2	288		[1964PET/BUR, 1984BOU/FRI]
C ₂ F ₆ N ₂	[372-63-4]	hexafluoroazomethane				
	V	(205–242)	22.9	227	A	[1987STE/MAL]
	V	(275–280)	26.8	280		[1954JAN/HAS2]
C ₂ F ₆ N ₂ O	[371-56-2]	hexafluoroazoxymethane				
	V	(274–281)	27.2	277	A	[1987STE/MAL, 1953JAN/HAS]
C ₂ F ₆ N ₂ O ₂	[359-75-1]	1,1,1-trifluoro- <i>N</i> -(nitrosooxy)- <i>N</i> -(trifluoromethyl)methanamine				
	V	(245–285)	26.8	270	A	[1987STE/MAL, 1965DIN/HAS2]
C ₂ F ₆ N ₂ O ₂	[367-54-4]	<i>N</i> -nitroso- <i>O,N</i> -bis(trifluoromethyl)hydroxylamine				
	V	(272–283)	25.4	277	A	[1987STE/MAL, 1954JAN/HAS]
C ₂ F ₆ OS	[30341-37-8]	bis(trifluoromethyl)sulfoxide				
	V	(248–303)	27.9	263	A	[1987STE/MAL, 1999DYK/SVO, 1970LAW]
	V		28.4			[1971SAU/SHR]
C ₂ F ₆ OS	[20621-31-2]	pentafluoroethyl sulfinyl fluoride				
	V	(234–293)	28.5	278	A, I	[1987STE/MAL, 1968RAT/SHR, 1999DYK/SVO]
C ₂ F ₆ OS ₂	[63548-94-7]	<i>S</i> -trifluoromethyl-(trifluoromethyl)thiosulfinate				
	V	(293–353)	30.7	333		[1999DYK/SVO, 1977GOM]
C ₂ F ₆ O ₂ S	[354-87-0]	perfluoroethyl fluorosulfate				
	V	(250–300)	28.8	275		[1963GIL/CAD]
C ₂ F ₆ O ₃	[1718-18-9]	bis(trifluoromethyl) trioxide				
	V	(193–248)	24.3	233	A	[1987STE/MAL]
	V	(193–248)	23.8	220.5		[1967AND/FOX]
C ₂ F ₆ O ₃ S	[3582-05-6]	trifluoromethanesulfonic acid, trifluoromethyl ester				
	V	(238–294)	29.4	252		[1999DYK/SVO, 1965NOF/CAD]
	V	(238–294)	27.6	279	A	[1987STE/MAL, 1965NOF/CAD]
C ₂ F ₆ O ₄ S	[1479-52-3]	bis(trifluoromethyl) sulfate				
	V	(219–304)	28.7	262		[1960VAN/CAD]
C ₂ F ₆ O ₅ S	[41765-14-4]	peroxysulfuric acid, bis(trifluoromethyl) ester				
	V	(253–319)	32.0	268		[1999DYK/SVO]
	V		29.9			[1973HOH/DES]
C ₂ F ₆ O ₆ S ₂	[1479-53-4]	tetrafluoroethylene glycol, bis(fluorosulfate)				
	V	(295–378)	43.7	310	A	[1987STE/MAL, 1970DYK, 1999DYK/SVO, 1961SHR/CAD]
C ₂ F ₆ O ₇ S ₂	[1002788-69-3]	bis(trifluoromethyl) disulfate				
	V	(328–357)	38.3	342		[1960VAN/CAD]
C ₂ F ₆ S	[371-78-8]	bis(trifluoromethyl) sulfide				
	V		23.6			[1952BRA/EME]
C ₂ F ₆ S ₂	[372-64-5]	bis(trifluoromethyl) disulfide				
	V		28.8			[1952BRA/EME]
C ₂ F ₇ N	[359-62-6]	perfluorodimethylamine				
	V	(199–230)	21.4	215	A	[1987STE/MAL, 1965DIN/HAS3]
	V	(203–233)	18.6	218	A	[1987STE/MAL, 1949THO/EME]
C ₂ F ₇ N	[354-80-3]	perfluoroethylamine				
	V	(171–236)	20.8	221	A	[1987STE/MAL, 1970DYK, 1951COA/HAR]
C ₂ F ₇ NOS	[59617-28-6]	(pentafluoroethyl)imidodisulfuryl fluoride				

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		30.7			[1976STA/MEW]
C ₂ F ₇ NO ₃ S	[4188-34-5]	fluorosulfuric acid, 1,1,2,2-tetrafluoro-2-(difluoroamino)ethyl ester (262–321)	31.1	291	A	[1987STE/MAL, 1999DYK/SVO, 1965LUS/RUF]
C ₂ F ₇ NO ₁₂ S ₄	[53684-02-9]	fluorosulfuric acid, 1-[bis[(fluorosulfonyl)oxo]amino]-2,2,2-trifluoroethylidene ester	43.4	418		[1975KIR/LAS]
C ₂ F ₈ NOP	[13105-59-4]	[bis(difluoromethyl)amino] difluorophosphine oxide (233–278)	30.4	255		[1966EME/ONA]
C ₂ F ₈ NOP	[36544-19-1]	phosphorous bis(trifluoromethyl)nitroxide difluoride	28.0	288		[1973WAN/SHR]
C ₂ F ₈ OS	[33716-15-3]	difluoro-oxo-bis-(trifluoromethyl)sulfur (239–299)	22.4	254	A	[1987STE/MAL, 1999DYK/SVO, 1971SAU/SHR3]
C ₂ F ₈ OS	[82390-51-0]	pentafluoro(trifluoroacetyl) sulfur (162–290)	26.6	177		[1999DYK/SVO, 1982DEM/FOX]
C ₂ F ₈ O ₃ S	[60672-61-9]	pentafluoro (trifluoroethaneperoxoato) sulfur	28.0			[1976HOP/DES]
C ₂ F ₈ S	[1186-51-2]	trifluorovinyl sulfur pentafluoride	25.1	292		[1961CAS/RAY]
C ₂ F ₈ S	[30341-38-9]	difluoro bis(trifluoromethyl) sulfur	28.8			[1971SAU/SHR]
C ₂ F ₁₀ OS	[1580-07-0]	pentafluoro(pentafluoroethoxy) sulfur (245–287)	27.6	272	A	[1987STE/MAL, 1962WIL/CAD]
C ₂ F ₁₀ O ₂ S	[2004-38-8]	tetrafluoro bis(trifluoromethoxy) sulfur (246–302)	29.9	261	A	[1987STE/MAL, 1964DUN/CAD]
C ₂ F ₁₀ O ₃ S	[41938-43-6]	(trifluoromethoxy)[(trifluoromethyl)dioxy] sulfur tetrafluoride	32.5	270		[1999DYK/SVO]
	V	(255–317)	30.7			[1973HOH/DES]
C ₂ F ₁₀ O ₃ S ₂	[68010-32-2]	pentafluoro[1,2,2,2-tetrafluoro-1-[(fluorosulfonyl)oxy]ethyl] sulfur	34.8			[1978DEM/FOX]
C ₂ F ₁₀ S	[42179-02-2]	<i>trans</i> -tetrafluoro bis(trifluoromethyl) sulfur (233–293)	23.3	278	A	[1987STE/MAL, 1999DYK/SVO]
C ₂ F ₁₁ NS	[13888-13-6]	[bis(trifluoromethyl)amino] sulfur pentafluoride (233–306)	29.3	248	A	[1987STE/MAL, 1966DOB, 1999DYK/SVO]
C ₂ F ₁₂ S ₂	[42060-66-2]	perfluoro-1,3-dithietane octafluoride	35.6			[1973ABE/SHR]
C ₂ N ₂	[460-19-5]	cyanogen	8.11	245.3	C	[1996DOM/HEA, 1939RUE/GIA]
	FUS					
	SUB	(202–239)	33.0	224	A	[1987STE/MAL]
	SUB	(177–230)	33.6	204	A	[1947STU]
	SUB	(202–245)	34.4		CATH	[1939RUE/GIA]
	SUB	(198–240)	32.4	224		[1975GRO, 1925PER/BAR]
	SUB		NA			[1916TER]
	V	(240–253)	24.5	246	A	[1987STE/MAL]
	V	(246–273)	23.9	257		[1925PER/BAR]
	V	(246–273)	23.5	267		[1925PER/BAR]
	V		NA			[1916TER]
C ₂ N ₄ O ₆ (??)	SUB	trinitroacrylonitrile (???)	66.9 ± 1.3		V + F	[2002MAT/LEB]

[Note: Authors of [2002MAT/LEB] call the compound trinitroacrylonitrile; however, they give a structural formula of (NO₂)₃CCN which is not consistent with the name. We have listed the compound under the structural formula and indicated with question marks that there was an inconsistency in how the name and formula were given.]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ N ₆ O ₁₂	[918-37-6]	hexanitroethane				
	TRS		12.4	290.5	DSC	[1970KRI/LIC]
	SUB		70.7	298		[1999MIR/VOR]
	SUB	(293–343)	U30.4	308	A	[1987STE/MAL, 1963NOB/REE]
	SUB	(293–313)	70.7 ± 1.7	303	ME	[1969MIR/LEB, 1977PED/RYL]
	SUB	(293–343)	70.7 ± 1.7			[1968PEP/MIR]
C ₂ HBr	[593-61-3]	bromoacetylene				
	V	(214–273)	25.6	273	A	[1987STE/MAL]
C ₂ HBrClF ₃	[151-67-7]	2-bromo-2-chloro-1,1,1-trifluoroethane				
	FUS		4.84	154.7		[1996DOM/HEA, 1984GOL/KOL]
	V	(302–323)	29.8 ± 0.4	298		[2007VAR/DRU, 1985PAS/VAR]
	V	(298–323)	30.0	310	A	[1987STE/MAL]
	V		29.6 ± 0.3	298		[1981PAP/ERA]
	V		29.6 ± 0.1	298	C	[1980MAJ/SVO]
	V		28.7 ± 0.1	313	C	[1980MAJ/SVO]
	V		27.8 ± 0.1	328	C	[1980MAJ/SVO]
	V		26.8 ± 0.1	343	C	[1980MAJ/SVO]
	V	(227–318)	34.3	242		[1965KUD/SAV]
	V	(222–329)	33.2	237	A	[1987STE/MAL, 1963BOT/SEI, 1970DYK]
C ₂ HBrClF ₃	[354-06-3]	1-bromo-2-chloro-1,1,2-trifluoroethane				
	FUS		4.38	146.2		[1996DOM/HEA, 1984GOL/KOL]
	V		30.0 ± 0.1	298	C	[1981MAJ/SVO]
	V		29.0 ± 0.1	313	C	[1981MAJ/SVO]
	V		28.1 ± 0.1	328	C	[1981MAJ/SVO]
	V		27.2 ± 0.1	343	C	[1981MAJ/SVO]
	V	(300–325)	30.2	313		[1981MAJ/SVO]
C ₂ HBrF ₈ S	[82390-50-9]	(1-bromo-2,2,2-trifluoroethyl)sulfur pentafluoride				
	V		32.0			[1982DEM/FOX]
C ₂ HBr ₂ FO ₂	[353-99-1]	dibromofluoroacetic acid				
	V	(403–468)	60.2	468	A	[1987STE/MAL]
C ₂ HBr ₃ O	[115-17-3]	tribromoacetaldehyde				
	V	(291–447)	47.8	306	A	[1987STE/MAL, 1947STU]
C ₂ HCl	[593-63-5]	chloroacetylene				
	V	(204–238)	21.8	223	A	[1987STE/MAL]
	V	(205–237)	22.5	244		[1938BAS/EME, 2002MAN]
C ₂ HClF ₂	[359-10-4]	1,1-difluoro-2-chloroethene				
	V		23.5	233	BG	[1955MEA/STA]
	V		21.4	273	BG	[1955MEA/STA]
	V		18.5	313	BG	[1955MEA/STA]
	V		14.1	353	BG	[1955MEA/STA]
C ₂ HClF ₆ OS	[20407-78-7]	<i>trans</i> -[(2-chloro-2-fluorovinyl)oxy] sulfur pentafluoride				
	V		36.8			[1968PLA/WIL]
C ₂ HClF ₆ OS	[20407-79-8]	<i>cis</i> -[(2-chloro-2-fluorovinyl)oxy] sulfur pentafluoride				
	V		34.3			[1968PLA/WIL]
C ₂ HClF ₈ OS	[20334-47-8]	(2-chloro-1,2,2-trifluoroethoxy) sulfur pentafluoride				
	V		33.3			[1968PLA/WIL]
C ₂ HClF ₈ S	[22756-13-4]	(1,1,2-trifluoro-2-chloroethyl) sulfur pentafluoride				
	V	(279–323)	30.2	294	A	[1987STE/MAL, 1999DYK/SVO, 1969BAN/HAS]
C ₂ HClF ₁₂ O ₂ S	[20563-90-0]	[(2-chloro-2,2-difluoroethylidene)dioxy]bis(pentafluoro)sulfur				
	V		39.0			[1968PLA/WIL]
C ₂ HCl ₂ F ₃	[306-83-2]	1,1,1-trifluoro-2,2-dichloroethane				
	FUS		5.51	145.7		[2002VAR/DRU]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		26.6 ± 0.3	298		[2002VAR/DRU]
	V	(243–448)	28.7	258	MM	[1992OGU/YAM]
C ₂ HCl ₂ F ₃	[354-23-4]	1,1,2-trifluoro-1,2-dichloroethane				
	FUS		7.08	135.7		[1999DRU/VAR]
	V		26.8 ± 0.3	298		[2002VAR/DRU]
C ₂ HCl ₃	[79-01-6]	trichloroethylene				
	FUS		8.45	188.5		[1996DOM/HEA, 1984GOL/KOL]
	V	(297–360)	34.2	313		[1995AUC/GON]
	V		34.5 ± 0.1	298	C	[1980MAJ/SVA]
	V		33.8	313	C	[1980MAJ/SVA]
	V		33.2	328	C	[1980MAJ/SVA]
	V		32.3	343	C	[1980MAJ/SVA]
	V		31.5	358	C	[1980MAJ/SVA]
	V	(280–428)	34.6	295	A	[1987STE/MAL, 1970DYK]
	V	(290–359)	36.2	305		[1944MCD]
	V	(298–360)	35.6	313		[1913HER/RAT, 1984BOU/FRI]
	V	(298–360)	31.1	350		[1913HER/RAT]
C ₂ HCl ₃ F ₂	[354-21-2]	1,1-difluoro-1,2,2-trichloroethane				
	V	(297–345)	32.8 ± 0.4	298		[2007VAR/DRU, 1997VAR/PAS]
	V		32.9 ± 0.1	298	C	[1997VAR/PAS]
C ₂ HCl ₃ F ₂	[354-15-4]	1,2-difluoro-1,1,2-trichloroethane				
	V	(289–346)	33.0 ± 0.4	298		[2007VAR/DRU, 1997VAR/PAS]
	V		33.1 ± 0.1	298	C	[1997VAR/PAS]
C ₂ HCl ₃ F ₂ O ₃ S	[42087-88-7]	fluorosulfuric acid, 2-fluoro-1,1,2-trichloroethyl ester				
V	(317–353)	36.6	332	A	[1987STE/MAL, 1999DYK/SVO, 1974CAF/SIC]	
C ₂ HCl ₃ O	[75-87-6]	trichloroacetaldehyde				
	V	(235–371)	36.6	250	A	[1987STE/MAL, 1947STU]
C ₂ HCl ₃ O ₂	[76-03-9]	trichloroacetic acid				
	FUS		5.88	330.7		[1991ACR, 1983WEA]
	FUS		5.90	332.3		[1895PIC]
	V	(326–473)	65.0	341	A	[1987STE/MAL, 1970DYK]
	V	(385–470)	57.2	400		[1959MCD/SHR]
C ₂ HCl ₄ FS	[2822-06-2]	(dichloromethyl)(fluorodichloromethyl) sulfide				
	V	(322–352)	46.5	337	A	[1987STE/MAL, 1999DYK/SVO]
C ₂ HCl ₅	[76-01-7]	pentachloroethane				
	V	(274–434)	40.9	289	A	[1987STE/MAL]
	V	(298–435)	45.5	313		[1930NEL]
	V	(342–431)	36.9	420		[1913HER/RAT]
C ₂ HFN ₄ O ₂	[221057-70-1]	1-fluoro-3-nitro-1 <i>H</i> -1,2,4-triazole				
	SUB		79.7 ± 0.6	298		[2003MIR/LEB]
C ₂ HFN ₄ O ₂	[501682-32-2]	1-fluoro-4-nitro-1 <i>H</i> -1,2,3-triazole				
	SUB		79.5 ± 0.6	298		[2003MIR/LEB]
C ₂ HF ₃ O ₂	[76-05-1]	trifluoroacetic acid				
	V	(285–345)	35.9	300	A	[1987STE/MAL, 1962KRE, 1970DYK, 1984BOU/FRI]
C ₂ HF ₅	[354-33-6]	pentafluoroethane				
	FUS		2.25	172.6	AC	[1996LUE/MAG]
	V		22.8	175	C	[1999WEB]
	V		21.9	190	C	[1999WEB]
	V		20.9	205	C	[1999WEB]
V		20.3	215	C	[1999WEB]	
C ₂ HF ₅ O	[3822-68-2]	pentafluorodimethyl ether				
	V	(216–238)	22.3	239	I	[2001KUL/DES]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(229–331)	19.3	260	EB	[1996WEB/DEF2]
	V	(229–331)	17.6	280	EB	[1996WEB/DEF2]
	V	(229–331)	15.6	300	EB	[1996WEB/DEF2]
	V	(240–313)	20.4	255	A	[1992SAL/WAN]
C ₂ HF ₆ NOS	[34556-22-4]	S,S-bis(trifluoromethyl)sulfoximine				
	V		35.1	346	I	[1972SAU/SHR]
C ₂ HF ₆ NS ₂	[763-24-6]	bis(trifluoromethane) sulphenimide				
	V	(243–293)	36.5	268		[1960EME/NAB]
C ₂ HF ₆ OP	[359-65-9]	phosphinous acid, bis(trifluoromethyl) ester				
	SUB	(233–251)	46.6	242		[1987STE/MAL, 1962GRI/BUR]
C ₂ HF ₆ OPS	[35814-49-4]	bis(trifluoromethyl) thiophosphinic acid				
	V	(283–324)	38.3	298	A	[1987STE/MAL]
	V	(277–324)	37.4	300		[1972PIN/CAV]
C ₂ HF ₆ PS	[1486-19-7]	bis(trifluoromethyl)(mercapto)phosphine				
	V	(269–304)	30.7	286		[1964CAV/EME]
	V	(217–280)	32.9	265	A	[1987STE/MAL, 1999DYK/SVO, 1965BUR/GOS]
C ₂ HF ₆ PS ₂	[18799-75-2]	phosphinodithioic acid, bis(trifluoromethyl) ester				
	SUB	(273–287)	41.9	280	A	[1987STE/MAL, 1968GOS/BUR]
C ₂ HF ₇ S	[58636-78-5]	(2,2-difluoroethyl) pentafluorosulfur				
	V		27.7			[1978DEM/FOX]
C ₂ HF ₉ S	[63011-80-3]	pentafluoro (1,2,2,2-tetrafluoroethyl) sulfur				
	V		28.0			[1978DEM/FOX]
C ₂ H ₂	[74-86-2]	acetylene				
	TRS		2.54	142.7		
	FUS		3.76	192.4		[1976MIS/RIE]
	SUB	(98–145)	23.5	130		[1987STE/MAL]
	SUB	(133–191)	21.8	162		[1960JON]
	SUB	(151–193)	25.2	193		[1956AMB]
	SUB	(130–189)	22.7	160	A	[1947STU]
	SUB	(89–169)	22.1	129	A	[1943BUR]
	SUB		23.0			[1907MCI]
	V	(258–308)	16.3	273	A	[1987STE/MAL]
	V	(192–308)	16.7	207	A	[1987STE/MAL]
	V	(192–225)	16.7	210	A	[1987STE/MAL]
	V		17.0	214		[1971WIL/ZWO]
	V	(215–308)	16.4	230		[1964AMB/TOW]
	V	(193–207)	16.8	200		[1956AMB, 1984BOU/FRI]
C ₂ H ₂ Br ₂	[590-11-4]	<i>cis</i> -1,2-dibromoethylene				
	V	(299–351)	40.6	314	A	[1987STE/MAL, 1950NOY/NOY, 1970DYK]
C ₂ H ₂ Br ₂	[590-12-5]	<i>trans</i> -1,2-dibromoethylene				
	V	(277–344)	35.2	310	A	[1987STE/MAL, 1970DYK, 1950NOY/NOY, 1984BOU/FRI]
C ₂ H ₂ Br ₂ Cl ₂	[75-81-0]	1,2-dibromo-1,1-dichloroethane				
	V	(354–519)	45.9	369	A	[1987STE/MAL, 1970DYK]
C ₂ H ₂ Br ₂ Cl ₂	[683-68-1]	1,2-dibromo-1,2-dichloroethane				
	FUS		8.3	206.3		[1991ACR, 1983WEA]
	V	(320–379)	45.9	335	A	[1987STE/MAL]
C ₂ H ₂ Br ₄	[630-16-0]	1,1,1,2-tetrabromoethane				
	V	(331–473)	61.5	346	A	[1987STE/MAL, 1947STU]
C ₂ H ₂ Br ₄	[79-27-6]	1,1,2,2-tetrabromoethane				
	V	(413–573)	56.9	428	A	[1987STE/MAL, 1970DYK]
C ₂ H ₂ ClFO	[359-14-8]	chloroacetyl fluoride				
	V	(273–333)	38.0	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1970DYK]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ H ₂ ClFO	[359-06-8]	fluoroacetyl chloride				
	V	(273–333)	36.7	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₂ H ₂ ClF ₃ O ₂ S	[57169-80-9]	chlorosulfurous acid, 2,2,2-trifluoroethyl ester				
	V		36.0			[1975DEM/KOV2]
C ₂ H ₂ ClF ₇ S	[68010-35-5]	(2-chloro-2,2-difluoroethyl)pentafluorosulfur				
	V		32.9			[1978DEM/FOX]
C ₂ H ₂ Cl ₂	[75-35-4]	1,1-dichloroethylene				
	FUS	(13–291)	6.51	150.59	AC	[1996DOM/HEA, 1959HIL/MCD]
	V	(245–305)	28.4	260	A	[1987STE/MAL, 1959HIL/MCD, 1970DYK]
C ₂ H ₂ Cl ₂	[156-59-2]	<i>cis</i> -1,2-dichloroethylene				
	V	(332–495)	29.3	347	A	[1987STE/MAL]
	V	(273–334)	31.5	288	A	[1987STE/MAL, 1970DYK]
	V	(292–335)	31.6	307		[1951FLO/ALP]
C ₂ H ₂ Cl ₂	[156-60-5]	<i>trans</i> -1,2-dichloroethylene				
	V	(321–473)	29.0	336	A	[1987STE/MAL]
	V	(273–319)	30.1	288		[1983MAC]
	V	(263–323)	30.4	278	A	[1987STE/MAL, 1970DYK]
	V	(287–325)	29.6	306		[1951FLO/ALP]
C ₂ H ₂ Cl ₂ F ₂	[1649-08-7]	1,2-dichloro-1,1-difluoroethane				
	V	(323–493)	27.8	338	A	[1987STE/MAL]
	[1842-05-3]	1,2-difluoro-2,2-dichloroethane				
	FUS	(13–313)	8.19	163.0	AC	[1996DOM/HEA, 1992LEB/KUL]
	[20334-44-5]	(1,2-dichloro-2-fluoroethoxy)pentafluoro sulfur				
C ₂ H ₂ Cl ₂ F ₆ OS	[20334-44-5]	(1,2-dichloro-2-fluoroethoxy)pentafluoro sulfur				
	V		38.8			[1968PLA/WIL]
C ₂ H ₂ Cl ₂ F ₆ OS	[20334-45-6]	(2,2-dichloro-2-fluoroethoxy)pentafluoro sulfur				
	V		38.5			[1968PLA/WIL]
C ₂ H ₂ Cl ₂ O	[79-04-9]	chloroacetyl chloride				
	V	(253–379)	45.0	268	A	[1987STE/MAL, 1970DYK]
	V	(301–380)	40.8	316		[1959MCD/SHR]
	V	(290–373)	44.1	305		[1935KIR/POP]
C ₂ H ₂ Cl ₂ O ₂	[79-43-6]	dichloroacetic acid				
	FUS		12.34	286.5		[1996DOM/HEA, 1961GLA/TIM]
	FUS		U7.64	284.0		[1996DOM/HEA, 1895PIC]
	V	(317–468)	55.7	332	A	[1987STE/MAL, 1947STU]
C ₂ H ₂ Cl ₄	[630-20-6]	1,1,1,2-tetrachloroethane				
	V		41.1 ± 0.2	298		[1978GUN/HEA]
	V	(316–447)	40.1	331	A	[1987STE/MAL, 1970DYK]
	V	(332–403)	39.2	347		[1949DRE/SHR, 1949DRE/MAR]
C ₂ H ₂ Cl ₄	[79-34-5]	1,1,2,2-tetrachloroethane				
	FUS		10.10	231.0	DSC	[2013NEG/BAR]
	TRS		0.54	207.3		
	FUS		9.17	230.8		[1996DOM/HEA, 1982KOS/KOL]
	V	(343–418)	42.5	358	EB	[2006TEO/BAR]
	V	(377–419)	40.4	392	A	[1987STE/MAL]
	V	(371–419)	40.8	394		[1984CAS/FRA]
	V		44.7	313	C	[1980MAJ/SVA]
	V		43.8	328	C	[1980MAJ/SVA]
	V		42.8	343	C	[1980MAJ/SVA]
	V		41.8	358	C	[1980MAJ/SVA]
	V	(377–418)	40.1	398		[1978SUN/VIS]
	V		39	415		[1977RAO/VIU]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		45.8 ± 0.2	298	C	[1972LAY/WAD]
	V	(328–464)	41.9	343	A	[1987STE/MAL, 1970DYK]
	V	(298–403)	47.7	313		[1950MAT/SUM]
	V	(304–419)	45.7	319		[1930NEL]
C ₂ H ₂ Cl ₄ S	[51174-93-7]	bis(dichloromethyl) sulfide				
	V	(355–462)	47.6	370	A	[1987STE/MAL]
C ₂ H ₂ FN	[503-20-8]	fluoroacetonitrile				
	V	(273–333)	38.1	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₂ H ₂ F ₂	[75-38-7]	1,1-difluoroethene				
	V		13.2	233	BG	[1955MEA/STA]
	V		9.5	273	BG	[1955MEA/STA]
C ₂ H ₂ F ₃ NO	[354-38-1]	trifluoroacetamide				
	TRS	(78–404)	5.58	336.9		
	TRS	(78–404)	11.5	347.6		
	FUS	(78–404)	1.34	388.9	AC	[2000DI/TAN]
	SUB	(288–329)	81.0	302	A, I	[1987STE/MAL, 1978BER/SPI]
	SUB	(288–329)	77.7 ± 1.4	298	I	[1978BER/SPI]
C ₂ H ₂ F ₄	[811-97-2]	1,1,1,2-tetrafluoroethane				
	TRS		3.62	124.1		
	FUS		2.01	169.4		[1999ZHE/KAT]
	V	(221–246)	23.7	249	I	[2001KUL/DES]
	V	(279–315)	19.6			[1998WIL/LIU]
	V		26.4	180		[1998BLA/KLI]
	V		25.0	200		[1998BLA/KLI]
	V		23.8	220		[1998BLA/KLI]
	V		22.7	240		[1998BLA/KLI]
	V	(279–363)	22.0	294		[1992ZHU/WU]
C ₂ H ₂ F ₄ O ₂ S	[75988-14-6]	fluorosulfurous acid, 2,2,2-trifluoroethyl ester				
	V		33.6			[1975DEM/KOV2]
C ₂ H ₂ F ₆ P ₂	[462-57-7]	1,2-bis-(trifluoromethyl) diphosphine				
	V	(233–292)	33.8	277	A, SG	[1987STE/MAL, 1958MAH/BUR]
C ₂ H ₂ F ₈ S	[65227-29-4]	pentafluoro (2,2,2-trifluoroethyl) sulfur				
	V		29.3			[1978DEM/FOX]
C ₂ H ₂ I ₂	[590-26-1]	<i>cis</i> -1,2-diiodoethylene				
	V	(302–425)	46.5	317	A	[1987STE/MAL, 1970DYK, 1950NOY/NOY]
C ₂ H ₂ I ₂	[590-27-2]	<i>trans</i> -1,2-diiodoethylene				
	SUB	(253–265)	40.7	258	ME	[1933BRO/FRA, 1960JON, 1987STE/MAL]
	V	(350–403)	42.3	365	A	[1987STE/MAL, 1970DYK, 1950NOY/NOY]
C ₂ H ₂ N ₄ O ₃	[932-64-9]	5-nitro-1,2,4-triazol-3-one				
	SUB	(478–523)	147	500	DTA	[2014CUD/POD]
C ₂ H ₂ O	[463-51-4]	ketene				
	V	(159–224)	20.4 ± 0.1	209	A, MM	[1987STE/MAL, 1969RUE]
C ₂ H ₂ O ₄	[144-62-7]	oxalic acid (anhydrous)				
	FUS		3.42	370	DSC	[2010BOO/BAR]
	SUB		75 ± 19		ME, MS	[2009BOO/MAR]
	SUB (α)	(303–328)	93.4	316	A	[1987STE/MAL]
	SUB (β)	(310–325)	93.3	318	A	[1987STE/MAL]
	SUB (α)		98.5			[1983DEW/BOW]
	SUB (β)		92.5			[1983DEW/BOW]
	SUB (α)	(303–328)	93.7 ± 1.3	298	TE	[1975DEK/VAN]
	SUB	(311–325)	97.9 ± 2.2	318		[1953BRA/COT, 1960JON]
	(orthorhombic)					
	SUB (monoclinic)	(311–323)	93.3	317		[1953BRA/COT, 1960JON]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		SUB	(292–320)	61.8	306	A	[1947GRA]
		SUB	(333–378)	90.6		GS	[1926NOY/WEB]
C ₂ H ₃ Br	[593-60-2]	vinyl bromide					
	V	(224–319)	27.3	239	A	[1987STE/MAL, 1970DYK]	
	V	(186–289)	24.8	274		[1937GUY/SCH, 1984BOU/FRI]	
	V	(207–285)	26.9	270		[1934MEH, 1984BOU/FRI]	
C ₂ H ₃ BrO	[506-96-7]	acetyl bromide					
	V	(289–334)	29.5	304	A	[1987STE/MAL]	
	V	(275–333)	31.4	290		[1969DEV/ONE]	
C ₂ H ₃ BrO ₂	[79-08-3]	bromoacetic acid					
	FUS		13.9	319.2	DSC	[2001LAG/DIO]	
	SUB		83.5 ± 3.0	298	ME	[2001LAG/DIO]	
	SUB		84.0 ± 3.0	280	ME	[2001LAG/DIO]	
	V	(327–481)	57.2	342	A	[1987STE/MAL]	
C ₂ H ₃ Br ₃	[78-74-0]	1,1,2-tribromoethane					
	FUS		9.11	244		[1991ACR, 1983WEA]	
	V	(368–511)	50.5	383	A	[1987STE/MAL, 1970DYK]	
	V	(305–461)	52.9	321		[1947STU]	
C ₂ H ₃ Cl	[75-01-4]	vinyl chloride					
	FUS	(60–300)	4.92	119.3		[1996DOM/HEA, 1967LEB/RAB]	
	V	(243–288)	22.7	265		[1967DAN/GOL]	
	V	(213–273)	22.9	258		[1967HAC/MAT]	
	V	(209–260)	23.3	245	A	[1987STE/MAL, 1959MCD/SHR, 1970DYK]	
	V	(244–333)	20.1	298		[1927DAN/BAR, 2002MAN]	
C ₂ H ₃ ClF ₂	[75-68-3]	1-chloro-1,1-difluoroethane					
	FUS		2.69	142.4		[1996DOM/HEA, 1937PER]	
	V	(225–285)	24.2	240	EB	[1993SIL/WEB]	
	V	(248–390)	22.7	263	A	[1987STE/MAL, 1970DYK, 1955MEA/STA]	
	V	(248–390)	24.0	233	BG	[1955MEA/STA]	
	V	(248–390)	21.9	273	BG	[1955MEA/STA]	
	V	(248–390)	19.2	313	BG	[1955MEA/STA]	
	V	(248–390)	15.4	353	BG	[1955MEA/STA]	
C ₂ H ₃ ClF ₃ N	[16276-45-2]	<i>N</i> -chloro- <i>N</i> ,1,1-trifluoroethanamine					
	V	(220–294)	30.8	279	BG	[1987STE/MAL, 1967LUS]	
C ₂ H ₃ ClF ₃ P	[4669-76-5]	chloromethyl(trifluoromethyl)phosphine					
	V	(236–294)	30.9	279	A	[1987STE/MAL, 1966BUR/JOS]	
C ₂ H ₃ ClO	[75-36-5]	acetyl chloride					
	V	(273–323)	24.5	288	A	[1987STE/MAL]	
	V	(267–324)	31.5	282	A	[1987STE/MAL, 1959MCD/SHR, 1970DYK]	
C ₂ H ₃ ClO ₂	[79-11-8]	chloroacetic acid					
	FUS		16.3	334.8	DSC	[2001LAG/DIO]	
	FUS		12.35		DSC	[1992SHA/SHA]	
	FUS (α)		12.28	334.4		[1983WEA, 1991ACR]	
	FUS (β)		13.88	329.2		[1983WEA, 1991ACR]	
	FUS (α)		16.3	334.3		[1996DOM/HEA, 1895PIC]	
	FUS (β)		13.93	329.2		[1996DOM/HEA, 1895PIC]	
	SUB		82.2 ± 0.9	298	ME	[2001LAG/DIO]	
	SUB		82.7 ± 0.9	282	ME	[2001LAG/DIO]	
	SUB		75.3 ± 4.2			[1927STE/JOH, 1949DRE/MAR, 1949DRE/SHR, 1970COX/PIL]	
		V	(336–463)	61.1	351	A	[1987STE/MAL]
		V	(377–463)	56.8	392	A	[1987STE/MAL, 1959MCD/SHR, 1970DYK]
	V	(396–460)	55.7	411		[1949DRE/SHR, 1949DRE/MAR]	
C ₂ H ₃ Cl ₂ F	[1717-00-6]	1,1-dichloro-1-fluoroethane					

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(250–450)	28.7	265		[1997DUA/HWA]
	V	(270–312)	27.8	285	EB	[1992WEB]
C ₂ H ₃ Cl ₃	[71-55-6]	1,1,1-trichloroethane				
	TRS	(11–450)	7.49	224.8		
	FUS	(11–450)	2.35	243.1	AC	[1973AND/COU, 1996DOM/HEA]
	TRS		5.13	220.5		
	FUS		1.89	239.2	DSC	[1970SIL/RUD]
	TRS		0.21	205		
	TRS		7.47	223.6		
	FUS		1.88	240.1		[1996DOM/HEA, 1950CRO/SMY2]
	TRS		7.47	224.2		
	FUS		1.88	240.2		[1944RUB/LEV]
	V	(295–372)	32.3	310	A	[1987STE/MAL]
	V	(349–408)	30.5	364	A	[1987STE/MAL]
	V	(399–487)	29.4	414	A	[1987STE/MAL]
	V	(479–545)	29.5	494	A	[1987STE/MAL]
	V		32.5 ± 0.1	298	C	[1980MAJ/SVA]
	V		31.8	313	C	[1980MAJ/SVA]
	V		30.9	328	C	[1980MAJ/SVA]
	V		30.1	343	C	[1980MAJ/SVA]
	V		29.2	358	C	[1980MAJ/SVA]
	V	(335–377)	30.8	350		[1979SUN/VIS]
	V		32.4	344		[1977RAO/VIU]
	V	(196–298)	37.6	211		[1973AMB/SPR]
	V		31.5	315	C	[1973AND/COU]
V		30.4	335	C	[1973AND/COU]	
V		29.7	347	C	[1973AND/COU]	
V		32.5 ± 0.1	298	C	[1972LAY/WAD, 1971MAN/RIN]	
V		32.4	298		[1972HU/SIN]	
V	(268–290)	33.4	279		[1944RUB/LEV]	
V		33.4 ± 0.1	284	C	[1944RUB/LEV]	
C ₂ H ₃ Cl ₃	[79-00-5]	1,1,2-trichloroethane				
	FUS		11.38	237.1		[1996DOM/HEA, 1950CRO/SMY2]
	V	(316–384)	40.1 ± 0.6	298		[2007VAR/DRU]
	V	(316–384)	38.6	331	A	[1987STE/MAL]
	V		40.2 ± 0.1	298	C	[1980MAJ/SVA]
	V		39.3	313	C	[1980MAJ/SVA]
	V		38.5	328	C	[1980MAJ/SVA]
	V		37.5	343	C	[1980MAJ/SVA]
	V		36.6	358	C	[1980MAJ/SVA]
	V		40.3 ± 0.1	298	C	[1972LAY/WAD]
	V	(302–428)	38.2	317		[1987STE/MAL, 1970DYK]
	V		40.0	298		[1957WIL/HAR]
	V	(323–386)	38.3	338		[1949DRE/SHR, 1949DRE/MAR]
C ₂ H ₃ Cl ₃ O	[115-20-8]	2,2,2-trichloroethanol				
	FUS		10.05	290.6		[1997JEN/SAN]
C ₂ H ₃ Cl ₃ O ₂	[302-17-0]	chloral hydrate				
	SUB	(263–319)	50.9	291	A	[1947STU]
	V	(300–348)	38.4	324	EB	[1994WIB/MOR]
	V	(325–370)	49.6	340	A	[1987STE/MAL]
	V	(263–369)	51.5	278		[1947STU]
C ₂ H ₃ F	[75-02-5]	vinyl fluoride				
	V	(124–201)	17.1	162		[1966KRE]
	V	(124–201)	16.6	186	A	[1987STE/MAL, 1947STU]
C ₂ H ₃ FN ₂ O ₅	[17003-75-7]	2-fluoro-2,2-dinitroethanol				
	SUB		55.6 ± 2.1			[1977PED/RYL, 1968BAR/CAR]
	V	(313–373)	55.7	343		[1968BAR/CAR]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ H ₃ FO	[557-99-3]	acetyl fluoride				
	V	(195–281)	14.3	266	A	[1987STE/MAL]
C ₂ H ₃ FO ₂	[144-49-0]	fluoroacetic acid				
	V	(293–443)	52.3	308	A	[1987STE/MAL, 1970DYK]
	V	(293–443)	53.6	308	T	[1955JAS/MIL]
C ₂ H ₃ FO ₂	[78948-09-1]	acetyl hypofluorite				
	V	(209–253)	35.6 ± 2.4	231		[1985APP/MEN]
C ₂ H ₃ F ₂ P	[51130-03-1]	vinylidifluorophosphine				
	V	(176–250)	26.1	213		[1974LIN/CEN]
C ₂ H ₃ F ₃	[420-46-2]	1,1,1-trifluoroethane				
	FUS		6.19	161.9		[1991ACR, 1983WEA]
	V	(236–280)	18.1	240	EB	[1996WEB/DEF]
	V	(236–280)	17.5	250	EB	[1996WEB/DEF]
	V	(236–280)	16.7	260	EB	[1996WEB/DEF]
	V	(236–280)	15.9	270	EB	[1996WEB/DEF]
	V		18.9	233	BG	[1955MEA/STA]
	V		16.4	273	BG	[1955MEA/STA]
	V		13.8	303	BG	[1955MEA/STA]
	V	(174–226)	8.7	333	BG	[1955MEA/STA]
	V		20.5	211		[1944RUS/GOL]
	V		19.2 ± 0.1	224	C	[1944RUS/GOL]
C ₂ H ₃ F ₃ N ₂	[690-21-1]	1,1,1-trifluoroazomethane				
	V	(240–273)	26.4	258	A	[1987STE/MAL, 1965DIN/HAS]
C ₂ H ₃ F ₃ O	[421-14-7]	trifluoromethyl methyl ether				
	V	(233–313)	22.5	248	A	[1992SAL/WAN]
C ₂ H ₃ F ₃ O	[75-89-8]	2,2,2-trifluoroethanol				
	V	(276–302)	45.9	289	A	[1987STE/MAL]
	V	(298–328)	44.0	313	A	[1987STE/MAL, 1970DYK]
	V	(298–328)	41.5	313	MM	[1973ROC/SYM]
	V	(273–298)	44.5	285	MM	[1967MEE/GOL]
C ₂ H ₃ F ₃ O ₂ S	[30957-42-7]	methanesulfinic acid, trifluoromethyl ester				
	V		31.8	346		[1971SAU/SHR2]
C ₂ H ₃ F ₃ O ₃ S	[60672-60-8]	(ethaneperoxoato) pentafluoro sulfur				
	V	(217–377)	36.2	297		[1999DYK/SVO, 1976HOP/DES]
C ₂ H ₃ F ₃ S	[865-54-3]	vinylsulfur pentafluoride				
	V		28.5	314		[1961CAS/RAY2]
C ₂ H ₃ IO	[507-02-8]	acetyl iodide				
	V	(276–302)	37.1	289	A	[1987STE/MAL, 1969DEV/ONE]
C ₂ H ₃ IO ₂	[64-69-7]	iodoacetic acid				
	FUS		15.5	355.1	DSC	[2001LAG/DIO]
	SUB		86.5 ± 1.0	298	ME	[2001LAG/DIO]
	SUB		87.2 ± 1.0	279	ME	[2001LAG/DIO]
C ₂ H ₃ N	[75-05-8]	acetonitrile				
	FUS		8.00	228.2	DSC	[2015SOL/ROD]
	TRS	(15–300)	0.9	216.9		
	FUS	(15–300)	8.17	229.3		[1996DOM/HEA, 1965PUT/MCE]
	FUS		8.91	229.2		[1935TIM]
	V	(307–354)	33.0	325		[2013ZHA/LV]
	V	(354–462)	32.5	370	EB	[2004EWI/SAN, 2010WAN/ZEN]
	V	(290–362)	33.8	305	EB	[2004EWI/SAN]
	V	(302–353)	33.0	298	EB	[2004ANT/GAL]
	V		33.0	298		[1983AN/MAN]
V	(288–362)	33.8	303		[1974DOJ/HEI]	
V	(314–355)	33.3	329	A, EB	[1987STE/MAL, 1971MEY/REN]	

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(299–343)	34.8	315	BG	[1971HAL/BAL]
	V		32.9 ± 0.1	298	C	[1970HOW/WAD]
	V	(273–323)	34.2	288		[1968KUS/MIS]
	V	(280–300)	33.9	290		[1965PUT/MCE]
	V		33.3	298	C	[1965PUT/MCE]
	V		32.9	298	C	[1950IWA, 1970HOW/WAD]
	V		33.6	298		[1933HEI, 1970HOW/WAD]
	V		31.1	387	C	[1901KAH2]
C ₂ H ₃ NO	[624-83-9]	methyl isocyanate				
	FUS		7.45	178.5	DSC	[2013DAV/KIL]
	V		28.7 ± 0.1	298	C	[2013DAV/KIL]
	V	(265–308)	29.9	280	A	[1987STE/MAL]
C ₂ H ₃ NO ₃	V	(253–310)	31.7	268	A	[1987STE/MAL]
	[471-47-6]	oxalic acid, monoamide				
C ₂ H ₃ NO ₅	SUB		108.9 ± 2.1	298	ME	[1988NUN/BAR]
	SUB	(355–363)	107.9	359	ME	[1953BRA/CLE2, 1960JON, 1987STE/MAL]
C ₂ H ₃ NO ₅	[2278-22-0]	acetyl nitro peroxide				
	V	(277–330)	34.6	292	A	[1987STE/MAL]
C ₂ H ₃ NS	V	(277–330)	38.1	303		[1978KAC/SOL]
	[556-64-9]	methyl thiocyanate				
C ₂ H ₃ NS	V	(259–406)	40.7	274	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]
	[556-61-6]	methyl isothiocyanate				
C ₂ H ₃ NS	SUB	(238–293)	31.5	266	A	[1947STU]
	V	(309–392)	37.4	324	A	[1987STE/MAL, 1999DYK/SVO]
	V	(283–323)	37.3	298		[1935BAU/BUR, 1984BOU/FRI]
C ₂ H ₃ N ₃	[288-88-0]	1,2,4-triazole				
	FUS		16.1	393.5	DSC	[1996DOM/HEA, 1989HIL/MOU]
	FUS		10.76	393.3		[1999SAB/PER]
	SUB		80.7 ± 0.5	298	C	[1999SAB/PER]
	SUB		84.0 ± 0.7	298	ME	[1989JIM/ROU]
	SUB		80.6 ± 0.5			[1985SKI/PIL]
C ₂ H ₃ N ₃ O ₆	SUB		84.1		ME	[1961ZIM/GEI]
	[595-86-8]	1,1,1-trinitroethane				
	TRS		4.6	311.7		
	FUS		11.72	329.2	DSC	[1969ROS, 1969ROS/HOL]
C ₂ H ₃ N ₃ O ₇	SUB		72.0 ± 8.8	298		[1999MIR/VOR]
	[918-54-7]	2,2,2-trinitroethanol				
	TRS		17.99	312.5		
C ₂ H ₃ N ₃ O ₇	FUS		2.72	344.9	DSC	[1969ROS/HOL]
	[74-85-1]	ethylene				
C ₂ H ₄	FUS		3.35	104		[1996DOM/HEA, 1937EGA/KEM]
	FUS		2.92	103.6		[1928EUC/HAU]
	SUB	(77–103)	15.0			[1982MEN]
	SUB	(99–104)	19.4	99		[1977BIG/FUK]
	SUB	(79–104)	18.4	91.5	A, MS	[1987STE/MAL, 1951TIC/LOS]
	V	(252–282)	14.0	267	A	[1987STE/MAL]
	V	(170–273)	13.7	258	A	[1987STE/MAL]
	V	(120–170)	14.4	155	A	[1987STE/MAL]
	V	(169–211)	13.7	196	A	[1987STE/MAL]
	V	(209–254)	13.6	239	A	[1987STE/MAL]
	V	(104–119)	15.7	111		[1982MEN]
	V	(120–182)	14.1	167	A	[1987STE/MAL, 1970DYK]
	V	(150–190)	14.0	175		[1950MIC/WAS]
	V	(148–174)	14.3	161		[1940LAM/ROP]
V	(124–171)	14.4	156		[1937EGA/KEM]	

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	Transition	Temp. range (K)					
		V		13.5	169	C	[1937EGA/KEM]
C ₂ H ₄ BrCl	[593-96-4]	1-bromo-1-chloroethane					
		V	(290–356)	33.1	305	A	[1987STE/MAL]
		V	(237–356)	46.7	252		[1947STU]
C ₂ H ₄ BrCl	[107-04-0]	1-bromo-2-chloroethane					
		TRS	(90–320)	3.1	182		
		FUS	(90–320)	9.62	256.4	CC	[1996DOM/HEA, 1939RAI]
		V		37.6 ± 0.1	308	C	[1992SVO/KUB2]
		V		37.3 ± 0.1	315	C	[1992SVO/KUB2]
		V		36.9 ± 0.1	323	C	[1992SVO/KUB2]
		V		36.6 ± 0.1	330	C	[1992SVO/KUB2]
		V	(244–379)	36.4 ± 0.1	338	C	[1992SVO/KUB2]
				39.5			[1947STU]
C ₂ H ₄ Br ₂	[557-91-5]	1,1-dibromoethane					
		V	(301–421)	39.6	316	E	[1987STE/MAL, 1956MAN, 1970DYK]
C ₂ H ₄ Br ₂	[106-93-4]	1,2-dibromoethane					
		TRS		1.94	249.5		
		FUS		10.94	283.0		[1996DOM/HEA, 1940PIT2]
		TRS	(90–320)	1.88	250.6		
		FUS	(90–320)	10.84	283.1	CC	[1996DOM/HEA, 1939RAI]
		SUB	(229–248)	54.8	239		[1948NIT/SEK]
		SUB	(251–281)	49.8	258	A	[1948NIT/SEK, 1947STU, 1987STE/MAL]
		SUB		58.8 ± 0.8			[1944ODA/MID]
		V	(331–426)	41.7 ± 0.8	298		[2007VAR/DRU]
		V	(283–323)	42.4	298		[1994GRA/PER]
		V	(325–403)	41.7 ± 0.8	298		[1993VAR/PUC]
		V		41.7 ± 0.1	308	C	[1992SVO/KUB2]
		V		41.7 ± 0.1	315	C	[1992SVO/KUB2]
		V		41.6 ± 0.1	323	C	[1992SVO/KUB2]
		V		41.5 ± 0.1	330	C	[1992SVO/KUB2]
		V		41.4 ± 0.1	338	C	[1992SVO/KUB2]
		V	(283–317)	41.8	298	A	[1987STE/MAL, 1948NIT/SEK]
		V	(316–488)	40.0	331	A	[1987STE/MAL]
		V	(404–578)	37.4	419	A	[1987STE/MAL]
		V	(285–298)	49.6	291	MM, A	[1957CAL]
V	(325–404)	39.6	340		[1949DRE/SHR, 1949DRE/MAR]		
V	(246–404)	31.1	261		[1947STU]		
C ₂ H ₄ ClF	[762-50-5]	1-chloro-2-fluoroethane					
		V	(288–327)	32.1	303	A	[1987STE/MAL]
C ₂ H ₄ ClN ₃	[53422-48-3]	1-chloro-2-azidoethane					
		V	(273–333)	43.8	288	A	[1987STE/MAL, 1948RED/CHA5]
C ₂ H ₄ Cl ₂	[75-34-3]	1,1-dichloroethane					
		FUS	(14–294)	7.87	176.2		[1991ACR, 1996DOM/HEA, 1956LI/PIT]
		V	(326–345)	33.5	336		[1987GAR/TRE]
		V	(323–535)	29.2	338	A	[1987STE/MAL]
		V	(363–535)	28.2	378	A	[1987STE/MAL]
		V		30.6 ± 0.1	298	C	[1972LAY/WAD]
		V	(234–290)	31.9	275		[1956LI/PIT]
		V		31.0	293	C	[1956LI/PIT]
		V	(213–330)	34.4	228		[1947STU]
V	(258–365)	32.2	273	E	[1987STE/MAL, 1956MAN, 1970DYK]		
C ₂ H ₄ Cl ₂	[107-06-2]	1,2-dichloroethane					
		FUS		8.74	237.3	DTA	[1994TAN/SAB3]
		FUS		8.83	237.2		[1996DOM/HEA, 1940PIT2, 1991ACR]
		TRS	(90–320)	2.85	175.0		
		FUS	(90–320)	8.75	237.6	CC	[1996DOM/HEA, 1939RAI]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(299–356)	35.2 ± 0.4	298		[2007VAR/DRU]
	V		34.4	298	GC	[1994CAR/LAY]
	V		35.1 ± 0.1	298	C	[1989AN/HU]
	V	(356–558)	31.1	371	A	[1987STE/MAL]
	V	(279–374)	34.8	294	A	[1987STE/MAL]
	V	(368–524)	31.1	383	A	[1987STE/MAL]
	V	(523–561)	40.8	538	A	[1987STE/MAL]
	V	(301–357)	34.7	316		[1982GUT/KNA]
	V		35.2 ± 0.1	298	C	[1980MAJ/SVA]
	V		34.4	313	C	[1980MAJ/SVA]
	V		33.6	328	C	[1980MAJ/SVA]
	V		32.7	343	C	[1980MAJ/SVA]
	V		31.9	358	C	[1980MAJ/SVA]
	V	(279–434)	34.8	294		[1987STE/MAL, 1970DYK]
	V		35.1 ± 0.1	298	C	[1968WAD]
	V		34.7			[1956KIR, 1938EFT]
	V	(243–372)	37.5	258		[1929PEA/PET]
	V		32.0 ± 0.1	355	C	[1926MAT]
C ₂ H ₄ Cl ₂ S	[3592-44-7]	bis(chloromethyl) sulfide				
	V	(320–430)	45.1	335	A	[1987STE/MAL, 1999DYK/SVO]
C ₂ H ₄ D ₂ O ₂	[2219-52-5]	dihydroxyethane-d ₂				
	FUS	(80–300)	9.75	258.8	AC	[1967NIK/RAB]
C ₂ H ₄ FNO ₃	[763-97-3]	2-fluoroethyl nitrate				
	V	(273–333)	38.3	288	GS	[1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₂ H ₄ F ₂	[75-37-6]	1,1-difluoroethane				
	FUS		1.57	154.6		[1998MAG]
	V	(218–248)	22.7	249	I	[2001KUL/DES]
	V	(303–333)	22.1	318		[1999LIM/PAR]
	V	(219–273)	23.3	234	EB	[1993SIL/WEB]
	V	(250–386)	21.8	265	A	[1987STE/MAL]
	V	(193–275)	22.1	260	A, E	[1987STE/MAL, 1970DYK, 1956MAN]
	V		21.8	233	BG	[1955MEA/STA]
	V		20.4	273	BG	[1955MEA/STA]
	V		17.8	313	BG	[1955MEA/STA]
	V		12.9	353	BG	[1955MEA/STA]
	V	(161–247)	23.8	232		[1947STU]
C ₂ H ₄ F ₃ NS	[62067-12-3]	1,1,1-trifluoro- <i>N</i> -methyl methanesulfenamide				
	V	(223–294)	33.6	279	A	[1987STE/MAL, 1960EME/NAB]
C ₂ H ₄ F ₃ OP	[6395-71-7]	(trifluoromethyl)phosphinous acid, methyl ester				
	V	(194–291)	29.4	276	A	[1987STE/MAL, 1977BUR]
C ₂ H ₄ F ₃ OP	[26348-89-0]	methyl(trifluoromethyl)phosphine oxide				
	V	(305–322)	50.7	313		[1970BUR/KAN]
C ₂ H ₄ F ₆ OS	[870-28-0]	pentafluoro(2-fluoroethoxy) sulfur				
	V	(290–364)	39.3	305	A	[1987STE/MAL, 1962WIL/CAD, 1999DYK/SVO]
C ₂ H ₄ I ₂	[624-73-7]	1,2-diiodoethane				
	SUB		65.7 ± 4.1			[1954ABR/DAV, 1970COX/PIL]
	SUB	(288–328)	65.7	308		[1929MOO/LUD]
	V		49.8	298	GC	[1994CAR/LAY]
	V	(371–526)	47.7	386	A	[1987STE/MAL, 1970DYK]
C ₂ H ₄ N ₂ O ₂	[628-36-4]	diformylhydrazine				
	SUB	(340–373)	205.1 ± 0.7	356	ME	[1980LEB/KAL]
	SUB	(370–403)	100.8			[1956SUZ/ONI, 1960JON]
C ₂ H ₄ N ₂ O ₂	[471-46-5]	oxamide				
	TRS		1.88	356.2		
	TRS		3.56	455.5		

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	TRS		6.24	494.3		
	FUS		Decomposed prior to melting		DSC	[2006BAD/DEL]
	SUB		117.3 ± 1.2	298	TE, ME	[1988NUN/BAR]
	SUB	(370–398)	115.8	387	TE, ME	[1983DEW/VAN]
	SUB	(353–369)	113	361	ME	[1953BRA/CLE, 1960JON, 1970COX/PIL]
C ₂ H ₄ N ₂ O ₄	[600-40-8]	1,1-dinitroethane				
	V	(303–363)	51.0	318	A	[1987STE/MAL]
C ₂ H ₄ N ₂ O ₆	[628-96-6]	ethylene glycol dinitrate				
	V	(283–535)	70.5	298	A	[1987STE/MAL]
	V	(343–465)	55.3	358	A	[1987STE/MAL]
	V	(240–298)	68.3	255	GS	[1987STE/MAL, 1977PEL]
	V	(278–390)	62.3 ± 0.4			[1941BEL]
	V	(278–390)	61.3	334		[1940BEL]
	V	(293–323)	68.6 ± 0.4			[1938BRA]
C ₂ H ₄ N ₂ S ₂	[628-96-6]	dithiooxamide				
	SUB		103.8	298	TE, ME	[1988NUN/BAR]
	SUB	(345–372)	105.1	361	TE, ME	[1983DEW/VAN]
	SUB	(360–378)	105.4	369	ME	[1953BRA/CLE2, 1960JON, 1987STE/MAL]
C ₂ H ₄ N ₄	[461-58-5]	dicyandiamide				
	FUS	(330–573)	25.0	482.7	DSC	[2014ZHA/QIA]
	TRS	(80–370)	2.98	269.5	AC	
	FUS	(330–500)	22.96	487.6	DSC	[1997ZHA/TAN]
	SUB	(420–450)	128.7	436	TE, ME	[1983DEW/VAN]
C ₂ H ₄ N ₄	[16681-77-9]	1-methyltetrazole				
	FUS		15.7	315		[1990KOZ/SIM3]
	SUB	(282–311)	86.7 ± 1.9		ME	[1990KOZ/SIM]
C ₂ H ₄ N ₄	[16681-78-0]	2-methyltetrazole				
	FUS		12.37	286		[1990KOZ/SIM3]
C ₂ H ₄ N ₄	[4076-36-2]	5-methyltetrazole				
	FUS		16.0	418		[1990KOZ/SIM3]
	SUB	(323–418)	93.8 ± 0.5		ME	[1990KOZ/SIM]
C ₂ H ₄ N ₄	[61-82-5]	1 <i>H</i> -1,2,4-triazol-3-amine				
	FUS		21.93	428.3	DSC	[1990DON/DRE]
C ₂ H ₄ N ₄ O ₄	[145250-81-3]	1,1-diamino-2,2-dinitroethene				
	TRS		6.31	387.2	DSC	[2006GAO/ZHA]
C ₂ H ₄ O	[75-07-0]	acetaldehyde				
	TRS	(13–300)	2.31	149.8		
	FUS	(13–300)	1.72	242.9	AC	[1996DOM/HEA, 1988LEB/VAS]
	V	(293–377)	26.0	308	A	[1987STE/MAL]
	V	(293–345)	26.3	308		[1977KIM/KIM]
	V	(272–294)	27.6	283	A	[1987STE/MAL, 1970DYK]
	V	(293–377)	26.9	298	EB	[1963BUL/SER, 2003VER/KRA2]
	V	(273–307)	27.0	307		[1950COL/POP]
	V		25.7 ± 0.1	292		[1949COL/DEV]
C ₂ H ₄ O	[75-21-8]	ethylene oxide (oxirane)				
	FUS		5.17	160.7		[1996DOM/HEA, 1949GIA/GOR]
	V	(283–385)	25.9	298	A	[1987STE/MAL]
	V	(239–284)	26.8	269	A	[1987STE/MAL, 1959MCD/SHR, 1970DYK]
	V	(223–284)	26.8	269	A	[1987STE/MAL, 1949GIA/GOR]
	V	(268–313)	26.9	290		[1937MOO/KAN]
C ₂ D ₄ O	[6552-57-4]	ethylene oxide – d ₄ oxide				
	V	(230–273)	27.6	258		[1952LEI/MOR, 1984BOU/FRI]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ H ₄ OS	[507-09-5]	thioacetic acid				
	V	(307–360)	35.2	333		[1999DYK/SVO]
C ₂ H ₄ O ₂	[64-19-7]	acetic acid				
	FUS		11.72	289.65	DSC	[2010HEN/CAM]
	FUS	(14–350)	11.72	289.7	AC	[1996DOM/HEA, 1982MAR/AND]
	FUS		10.83	289.8		[1911LOU/DUP]
	FUS		11.52	283.7		[1910MEY]
	FUS		11.13	290.1	SC	[1996DOM/HEA, 1895PIC]
	FUS		11.6	290.1		[1879PET, 1895PIC]
	FUS		11.1	290.1	SC	[1873BER, 1895PIC]
	SUB	(213–230)	67.3 ± 1	223	TE, ME	[1978CAL/CAL]
	SUB	(213–230)	70 ± 1	213	TE, ME	[1978CAL/CAL]
	V	(298–353)	42.1	313		[2011FAN/LI]
	V	(320–395)	40.9	335		[2001VER/VAZ]
	V	(345–383)	39.1	360	EB	[2001MUN/KRA]
	V	(303–378)	50.3	298	CGC	[2000VER2]
	V	(391–550)	37.9	406	A	[1987STE/MAL]
	V	(290–396)	42.0	305	A	[1987STE/MAL]
	V	(391–447)	38.7	406	A	[1987STE/MAL]
	V	(437–535)	38.1	452	A	[1987STE/MAL]
	V	(525–593)	38.8	540	A	[1987STE/MAL]
	V		43.0	308		[1983TAM/DRA]
	V	(289–392)	41.6	304	A	[1987STE/MAL, 1970DYK]
	V (monomer)		23.3 ± 0.1	298	C	[1970KON/WAD]
V		51.6 ± 1.6	298	C	[1970KON/WAD]	
V	(325–391)	40.3	340		[1959MCD/SHR]	
V (monomer)		23.6	359	C	[1955WEL]	
V (monomer)		23.6	279	C	[1955WEL]	
V (monomer)		23.6	392	C	[1955WEL]	
V	(303–399)	41.6	318	MM	[1954POT/RIT]	
C ₂ D ₄ O ₂	[1186-52-3]	perdeuterioacetic acid				
	V	(298–398)	41.8	313	MM	[1954POT/RIT]
(C ₂ H ₄ O ₂) ₂		acetic acid dimer				
	SUB	(213–230)	70.2 ± 1	213	TE	[1978CAL/CAL]
	SUB	(213–230)	68.9 ± 1	213	ME	[1978CAL/CAL]
C ₂ H ₄ O ₂	[107-31-3]	methyl formate				
	V	(279–305)	29.6	292	A	[1987STE/MAL]
	V	(305–443)	28.4	320	A	[1987STE/MAL]
	V		28.7 ± 0.1	293	C	[1976CIH/HYN]
	V		27.9 ± 0.1	305	C	[1976CIH/HYN]
	V		27.4 ± 0.1	313	C	[1976CIH/HYN]
	V		28.4	298	EB	[1974HIN/KLU, 2012SAM/NAZ]
	V	(261–305)	30.1	283	BG	[1971HAL/BAL]
	V	(294–304)	27.6	298		[1928NEL, 1984BOU/FRI, 2012SAM/NAZ]
	V		28.2 ± 0.3	304	C	[1926MAT]
	V		28.5 ± 0.3	298	C	[1926MAT, 2012SAM/NAZ]
	C ₂ H ₄ O ₂	[141-46-8]	hydroxyacetaldehyde			
V		(273–304)	70 ± 5	288		[2010PET/REY]
C ₂ H ₄ O ₂ S	[68-11-1]	mercaptoacetic acid				
	V	(333–427)	56.8	348	A	[1987STE/MAL, 1999DYK/SVO]
C ₂ H ₄ O ₃	[289-14-5]	ethylene ozonide				
	V	(273–289)	34.8	281	A	[1987STE/MAL, 1956GAR/SCH]
C ₂ H ₄ O ₃	[79-14-1]	hydroxyacetic acid (glycolic acid)				
	FUS		19.3	351.3	DSC	[2010EME/VER2]
	SUB	(323–343)	92.6 ± 0.6	298	GS	[2010EME/VER2]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		74.6 ± 0.6	298	S-F	[2010EME/VER2]
	V	(350–375)	51.8	362	A	[1987STE/MAL]
C ₂ H ₄ O ₃	[79-21-0]	peroxyacetic acid				
	V	(273–383)	44.2	288	A	[1987STE/MAL, 1970DYK, 1951EGE/EMT]
C ₂ H ₄ O ₃	[7456-87-3]	methyl hydrogen carbonate				
	SUB	(204–237)	18.2 ± 1.6	220		[1973BEH/GAT]
C ₂ H ₄ O ₄	[291-15-6]	1,2,4,5-tetroxane				
	SUB		11.19			[2003ROM/LEI]
C ₂ H ₄ S	[420-12-2]	ethylene sulfide				
	V	(291–361)	30.5	306	A	[1987STE/MAL, 1952GUT/SCO2, 1999DYK/SVO]
	V		30.3	298		[1971WIL/ZWO]
C ₂ H ₅ Br	[74-96-4]	ethyl bromide				
	V	(334–504)	26.9	349	A	[1987STE/MAL]
	V	(326–454)	26.6	341	A	[1987STE/MAL]
	V	(452–503)	31.0	467	A	[1987STE/MAL]
	V		27.6 ± 0.1	305	C	[1977SVO/MAJ]
	V		27.0 ± 0.1	312	C	[1977SVO/MAJ]
	V		26.2 ± 0.1	323	C	[1977SVO/MAJ]
	V	(225–333)	30.6	240	E	[1987STE/MAL, 1961LI/ROS, 1970DYK]
	V	(301–348)	27.9	316		[1930ZMA, 1984BOU/FRI]
C ₂ H ₅ BrO	[540-51-2]	2-bromoethanol				
	V		54.1 ± 0.4	298	C	[2007BER/MIN]
C ₂ H ₅ Cl	[75-00-3]	ethyl chloride				
	FUS		4.45	134.8		[1991ACR, 1983WEA]
	V	(285–344)	25.1	300	A	[1987STE/MAL]
	V	(334–413)	24.4	349	A	[1987STE/MAL]
	V	(403–460)	24.4	418	A	[1987STE/MAL]
	V	(207–305)	27.8	222	A, E	[1987STE/MAL, 1961LI/ROS, 1970DYK]
	V	(218–285)	25.9	270		[1948GOR/GIA]
	V		24.9	288	C	[1932GRI/AWB]
	V		24.4	296	C	[1932GRI/AWB]
	V		24.8 ± 0.1	298	C	[1926YAT, 2002MAN]
	V		24.2	294		[1923JEN/SHO, 2002MAN]
	V		24.5	294		[1871REG, 2002MAN]
C ₂ H ₅ ClFOPS	[460-51-5]	ethyl chlorofluorothiophosphate				
	V		38.0			[1948BOO/MAR]
C ₂ H ₅ ClO	[107-07-3]	2-chloroethanol				
	V		48.3 ± 0.4	298	C	[2007BER/MIN]
	V	(328–401)	43.3	343	A	[1987STE/MAL]
	V	(323–363)	46.9	338		[1973GOT/MEN]
	V	(363–403)	39.1	378		[1973GOT/MEN]
	V	(269–401)	45.7	284		[1947STU]
C ₂ H ₅ ClO	[107-30-2]	methyl(chloromethyl) ether				
	V	(290–332)	32.2	305	A	[1987STE/MAL, 1966MAT/RAS]
C ₂ H ₅ ClO ₂ S	[594-44-5]	ethane sulfonyl chloride				
	V	(349–449)	47.7	364		[1999DYK/SVO]
	V	(233–263)	56.4	248	A	[1987STE/MAL, 1999DYK/SVO, 1963QUI/NOW]
C ₂ H ₅ Cl ₂ OP	[1066-50-8]	ethylphosphonic acid dichloride				
	V		42.7 ± 4.2			[1956NEA/WIL, 1982PIL/SKI]
C ₂ H ₅ Cl ₂ OPS	[1498-64-2]	ethyl dichlorothiophosphate				
	V		40.4			[1948BOO/MAR]
C ₂ H ₅ Cl ₂ P	[1498-40-4]	dichloroethyl phosphine				
	V	(313–385)	36.8	328	A	[1987STE/MAL]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ H ₅ F	[353-36-6]	ethyl fluoride				
	V	(200–235)	20.7	236	I	[2001KUL/DES]
	V	(275–353)	20.2	290	A	[1987STE/MAL]
	V	(235–280)	20.5	265	A	[1987STE/MAL]
	V	(343–375)	20.7	358	A	[1987STE/MAL]
	V	(170–255)	U4.2	240		[1975IWA/DAT]
	V	(173–251)	20.8	236	E	[1987STE/MAL, 1961LI/ROS, 1970DYK]
V	(156–241)	22.0	226		[1947STU]	
C ₂ H ₅ FO	[371-62-0]	2-fluoroethanol				
	V	(273–333)	44.1	288	GS	[1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₂ H ₅ FO ₃ S	[371-69-7]	ethyl fluorosulfonate				
	V	(273–333)	38.5	288	GS	[1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₂ H ₅ F ₂ N	[758-18-9]	<i>N,N</i> -difluoroethylamine				
	V	(241–259)	27.3	250	A	[1987STE/MAL]
	V	(241–259)	25.7	288		[1960FRA]
C ₂ H ₅ F ₂ OPS	[460-53-7]	ethyl difluorothiophosphate				
	V		32.5			[1948BOO/MAR]
C ₂ H ₅ F ₃ NP	[4669-74-3]	methyl(trifluoromethyl) phosphinic acid amide				
	V	(238–294)	36.8	279		[1987STE/MAL, 1966BUR/JOS]
C ₂ H ₅ I	[75-03-6]	ethyl iodide				
	V	(313–353)	31.7	298	CGC	[1995CHI/HOS]
	V		31.9 ± 0.1	298	C	[1968WAD]
	V	(249–369)	33.6	264	E	[1987STE/MAL, 1961LI/ROS]
	V	(219–345)	34.7	234		[1947STU]
	V	(254–293)	32	278		[1944MIL2]
	V	(303–333)	31.7	318		[1929SMY/ENG]
C ₂ H ₅ IO	[151-56-4]	2-iodoethanol				
	V		57.0 ± 0.2	288	C	[2007BER/MIN]
C ₂ H ₅ N	[151-56-4]	aziridine				
	V	(274–303)	34.9	288	A	[1987STE/MAL, 1968CAB/CON]
C ₂ H ₅ NO	[107-29-9]	acetaldehyde oxime				
	V	(288–388)	48.0	303	A	[1987STE/MAL]
C ₂ H ₅ NO	[60-35-5]	acetamide				
	FUS		15.5	355.2	DSC	[1999SHA/BUD]
	FUS		15.5	354.1	DSC	[1989NIK/TRI]
	FUS		15.6	353.5	DSC	[1986EMO/NAU]
	FUS	(90–346)	15.6	353.3	AC	[1996DOM/HEA, 1983DEW/DEK]
	FUS		14.86		CCM	[1937HRY/SMO]
	FUS		16.4	355.5		[1914MUL, 1989NIK/TRI]
	SUB		78.5 ± 0.3			[1998PRI/HAW]
	SUB	(273–293)	77.8	284	TE, ME	[1983DEW/VAN]
	SUB		77.2	298		[1983DEW/VAN]
	SUB		78.7 ± 0.3			[1975BAR/PIL, 1977PED/RYL]
	SUB		80.3 ± 1	298		[1971MOR2]
	SUB		80.3 ± 1.3	298	C	[1965WAD]
	SUB	(298–349)	77.4 ± 0.4	323	GS	[1959DAV/JON2, 1987STE/MAL]
	SUB	(293–306)	U57.2	300		[1952AIH]
	V	(381–492)	63.8	396	A	[1987STE/MAL]
V	(338–495)	60.9	353		[1947STU]	
C ₂ H ₅ NO	[123-39-7]	<i>N</i> -methylformamide				
	TRS		1.23	228.1		
	FUS		10.44	270.6		[1999AHL/LOH]
	V	(340–440)	53.8	355	Static	[1996USH/SED]
	V	(340–440)	54.4 ± 1.3	298	Static	[1996USH/SED]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(310–391)	54.5	325	A	[1987STE/MAL]
	V		56.2	298	A	[1985BAR/CAS, 1986VAR]
	V	(369–472)	53.4	384	A	[1987STE/MAL, 1961HEI/ILA, 1970DYK]
C ₂ H ₅ NO ₂	[109-95-5]	ethyl nitrite				
	V	(252–276)	25.7	264	A	[1987STE/MAL, 1937THO/DAI]
	V		27.8			[1934GOO]
C ₂ H ₅ NO ₂	[598-55-0]	methyl carbamate				
	FUS		16.46	328.8	AC,DSC	[2010ZEN/LI]
	FUS		16.7	328.6		[1996DOM/HEA, 1976BER/BOU]
	SUB	(341–393)	53.0	360	EB	[2013XU/LI]
	SUB		73.6 ± 1.3	298	C	[2013SAN/RIB]
	SUB	(287–305)	74.5 ± 0.8	296	GS	[1959DAV/JON]
	V	(333–388)	45.7	348	A	[1987STE/MAL]
C ₂ H ₅ NO ₂	[79-24-3]	nitroethane				
	FUS	(80–300)	9.85	183.7	AC	[1996DOM/HEA, 1966LIU/ZIE]
	V	(324–388)	38.6	339	EB	[1987STE/MAL, 1956TOO, 1970DYK]
	V	(283–383)	41.5 ± 0.4	289	ZG	[1949HOL/DOR]
	V	(252–387)	41.3	267		[1947STU]
	V		38			[1934GOO]
C ₂ H ₅ NO ₂	[56-40-6]	glycine				
	TRS		0.09	435.5	DSC	[2008DIC/SGH]
	TRS (γ to α)		1.8	453.2	DSC	
	TRS (γ to α)		1.2	438.2	DSC	[2001PER/HAN]
[Note: Authors of [2001PER/HAN] report that the phase transition was sensitive to the conditions under which the γ-phase was grown.]						
	SUB	(408–431)	136.5 ± 2	419	TE, ME	[1979DEK/VOO]
	SUB	(325–425)	U96.2 ± 4	375	LE	[1977GAF/PIE]
	SUB	(413–450)	138.1 ± 4.6	298	C	[1977NGA/SAB]
	SUB	(453–471)	136.4 ± 4.0	462	ME	[1965SVE/CLY, 1970COX/PIL, 1964CLY/SVE, 1989CHI/GRO]
	SUB	(412–417)	130.5 ± 2	414	ME	[1959TAK/CHI]
C ₂ H ₅ NO ₃	[625-58-1]	ethyl nitrate				
	FUS		8.53	178.6		[1996DOM/HEA, 1954GRA/SMI]
	V	(273–361)	37.0	288	A	[1987STE/MAL, 1970DYK]
	V	(273–343)	37.3	288		[1957GRA/PRA]
	V	(273–333)	37.0	288		[1956GRA/PRA]
	V		38.5			[1934GOO]
C ₂ H ₅ NS	[62-55-5]	thioacetamide				
	FUS		18.36	385.7	DSC	[1990DON/DRE]
	SUB		83.3 ± 0.3	298	C	[1982INA/MUR, 1985MUR/SAK]
	SUB		82.8 ± 0.3	298	C	[1982SAB/TOR]
C ₂ H ₅ N ₃	[871-31-8]	azidoethane				
	V	(296–320)	31.5	308	A	[1987STE/MAL, 1970DYK]
	V	(253–298)	28.9	268	A	[1987STE/MAL, 1964GEI/KON, 1984BOU/FRI]
C ₂ H ₅ N ₃ O	[1517-05-1]	2-azidoethanol				
	V	(284–316)	62.2 ± 0.3	298	GS	[2011VER/EME2]
	V		33.9 ± 1.3			[1997KOR/API]
C ₂ H ₅ N ₃ O ₂		bis(nitrosomethyl)amine				
	V	(276–426)	43.5	291	A	[1987STE/MAL, 1947STU]
C ₂ H ₅ N ₅	[5422-44-6]	1-methyl-5-aminotetrazole				
	SUB	(379–438)	116.4 ± 1.7		ME	[1990KOZ/SIM]
C ₂ H ₅ N ₅	[6154-04-7]	2-methyl-5-aminotetrazole				
	SUB	(310–373)	90.6 ± 1.1		ME	[1990KOZ/SIM]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ H ₆	[74-84-0]	ethane				
	TRS		2.28	89.8		
	FUS		0.58	90.3		[1976ATA/CHI]
	FUS		2.86	89.9		[1996DOM/HEA, 1937WIT/KEM]
	FUS		2.79	89.5		[1996DOM/HEA, 1930WIE/HUB]
	SUB	(80–90)	22.6	85		[1972REG]
	SUB		20.5	90	B	[1963BON]
	V	(273–305)	15.3	288	A	[1987STE/MAL]
	V	(154–185)	15.7	170	A	[1987STE/MAL]
	V	(95–129)	17.7	114	A	[1987STE/MAL]
	V	(185–229)	14.9	214	A	[1987STE/MAL]
	V	(228–274)	14.9	259	A	[1987STE/MAL]
	V	(91–144)	17.1	129		[1973CAR/KOB]
V		14.7	210		[1971WIL/ZWO]	
V		14.7	184		[1937WIT/KEM]	
V	(136–200)	15.3	185		[1926LOO/WAL]	
C ₂ H ₆ BrF ₄ NS	[63324-17-4]	bromotetrafluoro(<i>N</i> -methylmethanaminato) sulfur				
	V		38.1	372	I	[1977KIT/SHR2]
C ₂ H ₆ ClF ₄ NS	[63324-16-3]	chlorotetrafluoro(<i>N</i> -methylmethanaminato) sulfur				
	V		36.0	359	I	[1977KIT/SHR2]
C ₂ H ₆ CIP	[811-62-1]	chlorodimethyl phosphine				
	SUB	(233–268)	55.5	253	A	[1987STE/MAL, 1958BUR/SLO]
	V	(273–306)	32.9	288	A	[1987STE/MAL, 1958BUR/SLO]
C ₂ H ₆ Cl ₂ NP	[683-85-2]	(dimethylamino)dichlorophosphine				
	V		40.8 ± 0.7	298	STG	[1995ALM/FIN2]
C ₂ H ₆ ClO ₃ P	[16672-87-0]	2-chloroethylphosphonic acid				
	FUS		14.79	347.9	DSC	[1990DON/DRE]
C ₂ H ₆ FN	[14722-43-1]	fluorodimethylamine				
	V	(249–273)	29.9	261	A	[1987STE/MAL, 1966WIE/RUF]
C ₂ H ₆ FO ₃ P	[5954-50-7]	dimethylfluorophosphate				
	V	(273–333)	44.4	288	A, GS	[1987STE/MAL, 1948RED/CHA4]
C ₂ H ₆ F ₂ NOP	[354-43-8]	<i>N,N</i> -dimethylphosphoramidic difluoride				
	V		50.1			[1967CAV]
C ₂ H ₆ F ₂ NP	[814-97-1]	(dimethylamino)difluorophosphine				
	V	(263–313)	29.3	288	I	[1964CAV]
C ₂ H ₆ F ₃ NOS	[22519-52-4]	(dimethylaminato)trifluoro-oxo sulfur				
	V	(313–357)	44.9	335		[1968GLE/VON2]
C ₂ H ₆ F ₃ NS	[3880-03-3]	(dimethylamino) sulfur trifluoride				
	V	(296–327)	40.5	311	A	[1987STE/MAL, 1999DYK/SVO, 1967DEM/KEN]
C ₂ H ₆ F ₄ NP	[2353-98-2]	(dimethylamino) tetrafluorophosphorane				
	V		37.1			[1966BRO/FRA]
C ₂ H ₆ N ₂	[503-28-6]	azomethane				
	V	(195–273)	26.4	258	A	[1987STE/MAL]
	V	(209–236)	25.3	222	A	[1987STE/MAL]
C ₂ H ₆ N ₂	[51283-79-5]	methylammonium cyanide				
	V	(251–295)	49.1	280	A	[1987STE/MAL, 1973DIE/MAR]
C ₂ H ₆ N ₂ O	[598-50-5]	<i>N</i> -methylurea				
	FUS		12.5	372	DSC	[2005HAS/TAJ]
	FUS		16.6	375	DSC	[1995FER/DEL]
	FUS		14.06	378.1		[1990KAB/MIR2]
	FUS		15.75	373.8	DSC	[1987DEL/FER]
	FUS		13.97	375.3	DSC	[1972ZOR/HUR]
	SUB	(331–365)	95.5 ± 0.5	298	GS	[2006EME/KAB]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
		SUB (322–371)	96.9 ± 1.2	347	ME	[2003ZAI/KAB]
		SUB (322–371)	96.8 ± 1.2	350	ME	[2003ZAI/KAB]
		SUB	94.4 ± 0.8	350	C	[2003ZAI/KAB]
		SUB	96.3 ± 0.4	298		[2003ZAI/KAB]
		SUB	94.4 ± 0.8	343	C	[1993KOZ/KAB]
		SUB	97.1 ± 0.4	298		[1993KOZ/KAB]
		SUB	94.9 ± 0.6	337	C	[1990KAB/MIR]
		SUB	93.3 ± 1.2	355	TE	[1990PIA/FER, 1987FER/DEL2]
		SUB	87.3	348		[1987FER/DEL2]
		SUB	99.3 ± 0.7			[1986KRA/KOZ2]
		SUB		78.2	E	[1982AIR/CHA]
C ₂ H ₆ N ₂ O ₂	[4164-28-7]	<i>N</i> -nitro- <i>N</i> -methylaminomethane				
	FUS		37.66	327	DTA	[1987OYU/BRI]
	SUB		67.4 ± 1.3	298	C	[2009MIR/KON]
[Note: Authors of [2009MIR/KON] tabulate the experimental value as an enthalpy of vaporization; however, they report that the compound is crystalline and use the value to calculate the standard molar enthalpy of formation. Given the crystalline state and how the value was used, we have tabulated the value as an enthalpy of sublimation.]						
	SUB	(315–324)	69.9	319	DBM	[1952BRA/COT, 1977PED/RYL]
C ₂ H ₆ N ₂ O ₂	[4164-28-7]	2-nitro-2-azapropane				
	FUS		17.26	331.5	DSC	[1997ZEM]
C ₂ H ₆ N ₂ S	[598-52-7]	<i>N</i> -methylthiourea				
	FUS		19.46	392.4	DSC	[2000DEL/JOZ]
	FUS		16.3	393	DSC	[1993DEM/BUC]
	SUB		112.9 ± 3	298	ME	[2000DEL/JOZ]
	SUB		111 ± 3.0	381	TE	[1994FER/MAR]
C ₂ H ₆ N ₂ S	[13849-02-0]	sulfur diimide, dimethyl				
	V	(248–298)	37.2	263	A	[1987STE/MAL, 1999DYK/SVO, 1966COH/MAC]
C ₂ H ₆ N ₄ O ₄	[505-71-5]	<i>N,N'</i> -dinitroethanediamine				
	FUS		29.5	450	DTA	[1987OYU/BRI]
C ₂ H ₆ O	[115-10-6]	dimethyl ether				
	FUS		4.94	131.7		[1996DOM/HEA, 1941KEN/SAG]
	V	(180–249)	22.8	234	A	[1987STE/MAL]
	V	(293–360)	21.2	308	A	[1987STE/MAL]
	V	(349–400)	21.1	364	A	[1987STE/MAL]
	V	(241–303)	22.2	256	A	[1987STE/MAL]
	V	(171–248)	18.5	298		[1976AMB/ELL]
	V	(171–248)	21.4	248		[1976AMB/ELL]
	V	(183–265)	22.6	250	A	[1987STE/MAL, 1969KUD/REE]
	V	(195–248)	22.7	233		[1941KEN/SAG]
	V		21.5 ± 0.1	248	C	[1941KEN/SAG]
C ₂ H ₆ O	[64-17-5]	ethanol				
	FUS		5.08	158.6	DTA	[1994TAN/SAB3]
	FUS		4.64	158.8		[1996DOM/HEA, 1977HAI/SUG]
	TRS		3.14	111.4		
	FUS		4.64	158.8		[1996DOM/HEA, 1967NIK/RAB2]
	FUS		4.97	159.0		[1944YOS]
	FUS		5.02	158.5		[1929KEL4]
	FUS		4.96	158.7		[1925PAR]
	FUS		4.63	156.2		[1920GIB/PAR]
	V	(317–351)	41.3	332		[2011SAP/UUS]
	V	(325–352)	41.2 ± 0.4		I	[2010GER/PEL]
	V	(311–351)	41.7	326		[2010MEJ/SEG]
	V	(298–348)	41.7	298		[2004NAS/ZIM]
	V		38.9			[1999FAT]
	V	(323–357)	39.3	338		[1999AUC/LOR]
	V	(309–343)	40.7	321	EB	[1995DIO/SAN]
	V	(309–343)	42.4	298	EB	[1995DIO/SAN]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(342–357)	40.5	357		[1990ORT/SUS]
	V		35.2	393	C	[1989VIN/WOR]
	V		30.6	423	C	[1989VIN/WOR]
	V		25.7	453	C	[1989VIN/WOR]
	V		21.8	473	C	[1989VIN/WOR]
	V		17.3	493	C	[1989VIN/WOR]
	V		14.2	503	C	[1989VIN/WOR]
	V		40.9	320	C	[1988DON/LIN]
	V		40.4	328	C	[1988DON/LIN]
	V		40.2	335	C	[1988DON/LIN]
	V		39.4	344	C	[1988DON/LIN]
	V		38.8	351	C	[1988DON/LIN]
	V	(320–359)	41.3	335	A	[1987STE/MAL]
	V	(210–271)	45.6	256	A	[1987STE/MAL]
	V	(193–223)	44.0	208	A	[1987STE/MAL]
	V	(320–359)	41.3	335	A	[1987STE/MAL]
	V	(349–374)	40.1	361	A	[1987STE/MAL]
	V	(370–464)	39.1	385	A	[1987STE/MAL]
	V	(459–514)	36.1	474	A	[1987STE/MAL]
	V	(292–353)	42.5	307	A	[1987STE/MAL]
	V	(243–303)	42.3	298		[1983SCH/STR]
	V	(271–373)	42.9	286		[1973WIL/ZWO]
	V		42.26 ± 0.02	298	C	[1971POL/BEN]
	V		41.7 ± 0.1	308	C	[1971POL/BEN]
	V		41.2 ± 0.1	318	C	[1971POL/BEN]
	V		40.1 ± 0.1	328	C	[1971POL/BEN]
	V		41.0 ± 0.1	320	C	[1970COU/FEN]
	V		40.0 ± 0.1	335	C	[1970COU/FEN]
	V		38.7 ± 0.1	351	C	[1970COU/FEN]
	V	(293–366)	42.5	308	A, EB	[1987STE/MAL, 1970AMB/SPR]
	V	(288–348)	42.4	303		[1967VAN/SOC]
	V		42.3 ± 0.1	298	C	[1966WAD]
	V		42.2 ± 0.1	298	C	[1963MCC/LAI]
	V	(298–351)	42.2	313		[1949KRE/WIE]
	V		40.0	351		[1934OGU/ANJ]
	V	(286–351)	54.1	301		[1883KAH]
C ₂ H ₆ O _S	[67-68-5]	dimethyl sulfoxide				
	FUS		12.34	292.2	DSC	[2015SOL/ROD]
	FUS	(5–350)	14.37	291.7	AC	[1996DOM/HEA, 1970CLE/WES]
	V	(402–463)	47.5	425		[2013ZHA/LV]
	V		53.3	298	CE	[2011FUL/RUZ]
	V	(377–483)	48.6	392		[1999DYK/SVO]
	V	(353–383)	48.1	368	TGA	[1987ALN/ALS]
	V	(305–464)	51.7	320	A	[1987STE/MAL]
	V	(298–318)	52.3	308		[1974SAS/KON]
	V	(325–442)	50.6	340	MM	[1972JAK/VAN, 1984BOU/FRI]
	V	(303–423)	52.1	318		[1972NIS/HAK]
	V	(293–323)	52.5	308		[1969MES]
	V	(293–323)	52.9 ± 0.4	298	RG	[1948DOU]
C ₂ H ₆ O _S	[60-24-2]	2-mercaptoethanol				
	V	(293–440)	54.1	308	A	[1987STE/MAL, 1970DYK, 1999DYK/SVO]
C ₂ H ₆ O ₂	[107-21-1]	ethylene glycol				
	FUS		11.98	261.2	DSC	[2015SOL/ROD]
	FUS		11.1	261.6	DSC	[2012ROD/SOL]
	FUS		9.5	256.6	DTA	[1990KNA/SAB]
	FUS		9.96	260.6		[1996DOM/HEA, 1967NIK/RAB]
	FUS		11.6	260.6		[1925PAR/KEL]
	FUS		11.2			[1901DEF2]
	V	(307–384)	62.4 ± 4.0	345		[2010PET/REY]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	Transition	Temp. range (K)					
		V		63.9 ± 0.9	298	CGC	[2006UMN/KWE]
		V	(308–336)	65.4 ± 0.3	298	GS	[2005VAS/VER]
		V	(278–328)	66.0 ± 0.2	298	GS	[2004VER2]
		V	(260–350)	66.2	298		[2003DER/MIC, 2004VER2]
		V	(264–353)	63.4 ± 0.1	298		[1999MOK/PRC, 2004VER2]
		V		65.6 ± 0.3	298	C	[1988KNA/SAB, 1990KNA/SAB2]
		V	(363–408)	57.4	385	TGA	[1987ALN/ALS]
		V	(323–473)	65.2	338	A	[1987STE/MAL]
		V	(363–418)	62.5	378	A	[1987STE/MAL]
		V	(283–373)	66.1 ± 0.3	298	GS	[1981HAL/COG, 2004VER2]
		V	(335–420)	68.2 ± 0.8	298	EB	[1981JOO/ARL, 2004VER2]
		V	(374–495)	63.7 ± 0.1	298	EB	[1981AMB/HAL, 2005VAS/VER]
		V	(333–443)	63.6	298		[1972GAR/HUS, 2005VAS/VER]
		V	(323–473)	64.0	338		[1952JON/TAM, 1972GAR/HUS]
		V	(333–443)	63.8	298	DFM	[1937GAL/HIB, 2004VER2, 1972GAR/HUS]
		V	(363–403)	61.1	383		[1935SCH/STA]
		V	(403–470)	57.3	436		[1935SCH/STA]
		V	(395–459)	61.1	403		[1901DEF]
		V	(395–459)	64.8 ± 0.3	298		[1901DEF, 2004VER2]
C ₂ H ₆ O ₂	[3031-74-1]	ethyl hydroperoxide					
		V	(253–363)	64.0	268	A	[1987STE/MAL, 1951EGE/EMT, 1970DYK]
C ₂ H ₆ O ₂ S	[67-71-0]	dimethyl sulfone					
		FUS	(5–420)	18.28	382	AC	[1996DOM/HEA, 1970CLE/WES]
		SUB		77 ± 2.9			[1970COX/PIL, UR/MAC]
		V	(387–523)	56.0	404	A, BG	[1987STE/MAL, 1970DYK, 1999DYK/SVO, 1961BUS/IVI]
C ₂ H ₆ O ₃ S	[616-42-2]	dimethyl sulfite					
		V		40.2 ± 1.7	298	BP	[1969MAC/STE2]
C ₂ H ₆ O ₄	[17088-73-2]	bis-hydroxymethyl peroxide					
		SUB		94.1 ± 4.2		ME	[1953JEN/STY, 1970COX/PIL]
C ₂ H ₆ O ₄ S	[77-78-1]	dimethyl sulfate					
		V	(340–470)	46.7	355	A	[1987STE/MAL, 1999DYK/SVO]
		V		48.5 ± 1.7	298	BP	[1969MAC/STE2]
C ₂ H ₆ S	[75-18-3]	dimethyl sulfide					
		FUS		7.98	174.9		[1996DOM/HEA, 1942OSB/DOE]
		V		28.5 ± 0.1			[1997BAE]
		V		27.9 ± 0.6	298	C	[1989VOR/KLY]
		V	(268–319)	28.9	283	A	[1987STE/MAL]
		V	(307–379)	27.7	322	A	[1987STE/MAL]
		V	(372–453)	26.6	387	A	[1987STE/MAL]
		V	(447–503)	26.7	462	A	[1987STE/MAL]
		V		27.5	298		[1981SHI/SAI]
		V		27.7	298		[1971WIL/ZWO]
		V		28.8 ± 0.1	276	C	[1957MCC/HUB]
		V		27.9 ± 0.1	292	C	[1957MCC/HUB]
		V		27.0 ± 0.1	310	C	[1957MCC/HUB]
		V	(287–318)	28.2	302	EB	[1952WHI/BAR]
		V	(251–293)	28.9	278		[1942OSB/DOE]
		V		28.9	310		[1935THO/LIN]
C ₂ H ₆ S	[75-08-1]	ethyl mercaptan (ethanethiol)					
		FUS		4.97	195.3		[1996DOM/HEA, 1952MCC/SCO]
		V	(273–313)	28.4	288	A	[1987STE/MAL]
		V	(303–375)	27.5	318	A	[1987STE/MAL]
		V	(265–448)	26.3	380	A	[1987STE/MAL]
		V	(442–499)	26.6	457	A	[1987STE/MAL]
		V		27.3	298		[1971WIL/ZWO]
		V	(273–339)	28.4	288		[1966OSB/DOU]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(273–339)	28.4	288	A, EB	[1987STE/MAL, 1952MCC/SCO, 1966OSB/DOU] [1935THO/LIN]
	V		28.7	306		
C ₂ H ₆ S ₂	[540-63-6] V	1,2-ethanedithiol	44.7 ± 0.1	298		[1962MAN/SUN]
C ₂ H ₆ S ₂	[624-92-0] FUS	dimethyl disulfide	9.19	188.4		[1996DOM/HEA, 1950SCO/FIN]
	V		38.5 ± 0.6	298	C	[1989VOR/KLY]
	V	(297–402)	37.8	312	A	[1987STE/MAL]
	V		37.8 ± 0.1	298	C	[1985KUS]
	V		37.8	298		[1981SHI/SAI]
	V		38.4	298		[1971WIL/ZWO]
	V		36.0 ± 0.1	341	C	[1958HUB/DOU]
	V		34.9 ± 0.1	360	C	[1958HUB/DOU]
	V		33.7 ± 0.1	383	C	[1958HUB/DOU]
	V	(321–388)	36.7	336	EB	[1952WHI/BAR]
	V	(334–401)	36.2	349		[1950SCO/FIN]
	V	(288–333)	38.2	303		[1950SCO/FIN]
C ₂ H ₇ N	[124-40-3] FUS	dimethylamine	5.94	181		[1996DOM/HEA, 1939AST/EID]
	V	(277–360)	27.0	292	A	[1987STE/MAL]
	V	(358–438)	23.8	373	A	[1987STE/MAL]
	V	(202–279)	28.4	264	A	[1987STE/MAL, 1939AST/EID, 1984BOU/FRI]
	V		27.2	280		[1935WIB/SUT]
C ₂ H ₇ N	[75-04-7]	ethyl amine				
	V	(213–297)	29.0	282	A	[1987STE/MAL]
	V	(290–449)	27.2	305	A	[1987STE/MAL]
	V	(291–387)	27.6	306	A	[1987STE/MAL]
	V	(377–456)	25.9	392	A	[1987STE/MAL]
	V	(275–288)	29.1	281	EB	[1962BIT/KAU2]
	V	(190–290)	28.9	275		[1947STU]
C ₂ H ₇ NO	[5725-96-2] V	<i>N,N</i> -dimethylhydroxyl amine	45.7	305	A	[1987STE/MAL, 1957BIS/PAR, 1984BOU/FRI]
C ₂ H ₇ NO	[1117-97-1] V	<i>N,O</i> -dimethylhydroxyl amine	34.3	243	A	[1987STE/MAL, 1957BIS/PAR, 1984BOU/FRI]
C ₂ H ₇ NO	[141-43-5] FUS FUS	2-aminoethanol	13.32 13.8	283.2 283.9	DSC DSC	[2015SOL/ROD] [2014PEN/UUS]
	V	(283–363)	60.6	298	Static	[2009BEL/RAZ]
	V	(357–435)	55.9	372	EB	[2008KIM/SVE]
	V	(279–324)	59.6 ± 0.3	298	GS	[2005KAP/SLO]
	V	(358–440)	59.4	298	EB	[1999TOC/AKI, 2005KAP/SLO]
	V	(352–613)	59.0	298	EB	[1987DAU/JAL, 2005KAP/SLO]
	V	(310–444)	61.7	325	A	[1987STE/MAL]
	V	(298–308)	56.1	298		[1982TOU/OKA, 2005KAP/SLO]
	V	(293–298)	54.8	298		[1974GUS/REN, 2005KAP/SLO]
	V	(325–443)	57.7	298		[1969DAN/MAT, 2005KAP/SLO]
	V	(379–443)	54.7	394		[1959MCD/SHR]
	V	(273–301)	U50.8	287	A, GS	[1957BES/KOC]
	V	(338–443)	58.9	353		[1950MAT/SUM, 1984BOU/FRI]
	V	(303–373)	57.4	298	EB	[1947LEI/SHO, 2005KAP/SLO]
	V	(341–453)	57.9	298		[1935WIL, 2005KAP/SLO]
C ₂ H ₇ NO ₃ S	[107-35-7] FUS	2-aminoethanesulfonic acid	22.20	588.45	DSC	[2012HAN/ZHO]

[Note: Enthalpy of fusion in [2010HAN/ZHO] was given as a negative value, we have changed the sign as solid-to-liquid transitions are generally endothermic processes.]

TABLE 5. Phase change enthalpies of C₂ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₂ H ₇ O ₃ P	[868-85-9]	dimethyl phosphite				
	V	(353–443)	46.7	368		[2010FAN/WAN]
	V	(243–443)	48.3	243	GS	[2009BUT/BUC]
	V	(243–443)	47.9	263	GS	[2009BUT/BUC]
	V	(243–443)	46.7	298	GS	[2009BUT/BUC]
	V	(243–443)	46.4	313	GS	[2009BUT/BUC]
	V	(243–443)	46.0	333	GS	[2009BUT/BUC]
	V	(243–443)	45.4	373	GS	[2009BUT/BUC]
C ₂ H ₇ O ₃ P	[15845-66-6]	ethylphosphonic acid				
	SUB		50.6 ± 4.2			[1955NEA/WIL, 1970COX/PIL]
C ₂ H ₇ P	[676-59-5]	dimethyl phosphine				
	V	(226–288)	26.2	257		[1942DAV/BRO]
C ₂ H ₈ ClN	[506-59-2]	dimethylammonium chloride				
	V	(429–533)	95.6	444	A, I	[1987STE/MAL, 1967KIS]
	V	(533–569)	143.9	548	A, I	[1987STE/MAL, 1967KIS]
C ₂ H ₈ ClN	[557-66-4]	ethylammonium chloride				
	V	(382–480)	34.3	397	A, I	[1987STE/MAL, 1967KIS]
C ₂ H ₈ NOPS ₂	[10265-92-6]	<i>O,S</i> -dimethyl phosphoroamidothioate				
	FUS		13.34	316.8	DSC	[1990DON/DRE]
C ₂ H ₈ N ₂	[57-14-7]	1,1-dimethylhydrazine				
	FUS	(12–298)	10.07	216	AC	[1996DOM/HEA, 1953AST/WOO]
	V	(267–303)	34.1	284		[2000BOU/YE]
C ₂ H ₈ N ₂						
	V	(238–292)	36.5	277	A	[1987STE/MAL, 1953AST/WOO, 1984BOU/FRI]
C ₂ H ₈ N ₂	[540-73-8]	1,2-dimethylhydrazine				
	FUS		13.64	264.3		[1996DOM/HEA, 1951AST/JAN]
	V	(274–297)	41.0	286	A	[1987STE/MAL, 1951AST/JAN, 1984BOU/FRI]
C ₂ H ₈ N ₂	[107-15-3]	ethylenediamine				
	FUS		21.08	284.1	DSC	[1997LEE/CHA]
	TRS	(11–334)	0.49	189		
	FUS	(11–334)	22.58	284.3	AC	[1991ACR, 1994LEE/LIE, 1975MES/FIN]
	SUB	(242–278)	65.6	263	IPM	[1987STE/MAL, 1975MES/FIN]
	V	(286–365)	48.0	301		[2011AHM/NEG]
	V	(294–325)	41.6	298	TGA	[1988AFZ/BUT, 2010EFI/EME]
	V	(303–391)	43.9	318	A	[1987STE/MAL]
	V		45.7 ± 0.1	298		[1978CAB/MOL]
	V	(284–419)	45.9	299	A, IPM	[1987STE/MAL, 1975MES/FIN]
	V		45.0 ± 0.1	298	C	[1969WAD]
	V	(314–388)	54.4 ± 1.0	298	I	[1967SIV/MAT, 2010EFI/EME]
	V		46.0 ± 0.2	298	IPM	[1965DOU/OSB, 1970GOO/MOO]
	V	(302–312)	47.2	307		[1934HIE/WOE]
V	(380–390)	39.0	385		[1934HIE/WOE]	
V	(299–390)	45.6	314		[1934HIE/WOE, 1984BOU/FRI]	
C ₂ H ₈ N ₆ O ₂	[216489-95-1]	1, 1'-(1,2-ethanediy)bis(1-nitrosohydrazine)				
	SUB		172.4 ± 1.3	298		[1998LEB/CHI]

TABLE 6. Phase change enthalpies of C₃ organic compounds

Molecular formula	CAS Reg. No. Transition	Compound		T _m (K)	Method	References
		Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
C ₃ BrClF ₆ O ₄	[38126-26-0] V	perchloric acid, 1,1,2,3,3,3-hexafluoro-2-bromopropyl ester (273–293)	38.1	283	A	[1987STE/MAL, 1973SCH/PIL]
C ₃ BrF ₅ O	[6129-62-0] V	2-bromo-2,3,3,3-tetrafluoropropionyl fluoride (224–282)	30.2	267	A	[1987STE/MAL, 1973SCH/PIL]
C ₃ BrF ₆ NO	[2967-12-6] V	<i>N,N</i> -bis(trifluoromethyl) carbamoyl bromide (233–293)	30.7	278	A	[1987STE/MAL, 1964EME/TAT]
C ₃ BrF ₉ N ₂	[13105-66-3] V	<i>N</i> -bromo-tris(trifluoromethyl)hydrazine (283–333)	36.8	308		[1966BRO/FRA]
C ₃ BrF ₁₀ NS	[62977-73-5] V	bromotrifluoro[1,1,1,2,3,3,3-heptafluoro-2-propanaminoato(2-)] sulfur (299–335)	35.1	394	I	[1977KIT/SHR2]
C ₃ Br ₂ F ₆ O	[2356-57-2] V	(trifluoromethyl)(1,2-dibromo-1,2,2-trifluoroethyl) ether (299–335)	34.6	314	A	[1987STE/MAL, 1968HAS/TIP]
C ₃ Br ₃ F ₆ NO	[29528-78-7] V	1, 1, 1, 1', 1', 1'-hexafluoro- <i>N</i> -(tribromomethoxy)dimethylamine (297–338)	28.9	312	A	[1987STE/MAL, 1970EME/SPA]
C ₃ ClF ₂ NO ₂	[1403964-33-9] V	2-chloro-2,2-difluoroacetyl isocyanate (235–295)	32.2	265		[2012RAM/ULI]
C ₃ ClF ₄ NO ₂	[42016-32-0] V	chloro(trifluoroacetyl)carbamic fluoride (232–303)	39.3	371		[1973SPR/WRI]
C ₃ ClF ₅ O	[79-53-8] V	chloropentafluoroacetone (232–303)	27.3	247	A	[1987STE/MAL, 1964MUR, 1984BOU/FRI]
C ₃ ClF ₅ O	[28627-00-1] V	2-chloro-2,3,3,3-tetrafluoropropionyl fluoride (195–273)	23.9	258	A	[1987STE/MAL]
C ₃ ClF ₆ NO ₂	[15496-01-2] V	<i>O</i> -(chloroformyl)- <i>N,N</i> -bis(trifluoromethyl)hydroxylamine (227–286)	34.5	271	A	[1987STE/MAL, 1967BAB/SHR]
C ₃ ClF ₆ NS	[38005-18-4] V	chloro(hexafluoroisopropylidene)imino sulfur (196–287)	37.7	368	I	[1972MET/SHR]
C ₃ ClF ₇ O	[22675-68-9] V V V	heptafluoroisopropyl hypochochite (196–287) (194–273) (195–273)	26.7 22.7 23.2	272 258 234	A A	[1987STE/MAL, 1969GOU/AND] [1987STE/MAL] [1969SCH/MAY]
C ₃ ClF ₈ N	[33757-13-0] V	<i>N</i> -chloro- <i>N</i> -1,2,2,2-pentafluoro-1-(trifluoromethyl)ethylamine (240–311)	28.8	255	A	[1987STE/MAL, 1971SWI/ZAB]
C ₃ ClF ₈ NOS	[74366-14-6] V	(heptafluoropropyl)imidodisulfuryl chloride fluoride (195–273)	26.7	346	I	[1980ABE/SHR]
C ₃ ClF ₁₀ NS	[62977-71-3] V	chlorotrifluoro[1,1,1,2,3,3,3-heptafluoro-2-propanaminoato(2-)] sulfur (267–339)	33.5	391	I	[1977KIT/SHR2]
C ₃ ClF ₁₁ S	[42769-86-8] V	sulfur, chlorotetrafluoro(heptafluoropropyl) (283–318)	33.9			[1973ABE/SHR2]
C ₃ Cl ₂ F ₅ N	[4222-33-7] V	2,2-difluoro-1,2-dichloro- <i>N</i> -(trifluoromethyl)ethylideneimine (283–318)	31.2	298	A	[1987STE/MAL, 1965BAN/HAS]
C ₃ Cl ₂ F ₆	[661-97-2] V V V	1,2-dichlorohexafluoropropane (296–307)	28.1 26.9 ± 0.1 25.9 ± 0.1	301 298 313	 C C	 [1980MAJ/SVO] [1980MAJ/SVO] [1980MAJ/SVO]
C ₃ Cl ₂ F ₆ N ₂	[13105-65-2] V	bis(trifluoromethyl)aminocarbonylamine chloride (267–339)	35.0	303		[1966DOB/EME]
C ₃ Cl ₂ F ₆ O	[22675-69-0] V	hypochlorous acid, 2-chloro-1,1,2,3,3,3-hexafluoropropyl ester (273–293)	29.6	283	A	[1987STE/MAL]
C ₃ Cl ₂ F ₇ N	[32751-04-5] V	<i>N,N</i> -dichloro-1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethylamine (299–344)	32.7	314	A	[1987STE/MAL, 1971SWI/ZAB]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
		Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₃ Cl ₂ F ₇ NS	[26454-66-0]	V	<i>S,S</i> -dichloro- <i>N</i> -[tetrafluoro-1-(trifluoromethyl)ethyl]sulfilimine (313–347)	39.3	328	A	[1987STE/MAL, 1970VON/GLE]
C ₃ Cl ₂ F ₇ NS		V	C ₃ F ₇ N = SCl ₂	25.9	361	I	[1980ABE/SHR]
C ₃ Cl ₂ F ₇ P	[662-55-5]	V	dichloro(heptafluoropropyl)phosphine (273–348)	33.5	310		[1959EME/SMI]
C ₃ Cl ₃ F ₅ O	[37136-24-6]	V	chlorodifluoromethyl 2,2-dichloro-1,1,2-trifluoroethyl ether (302–350)	33.4	317	A	[1987STE/MAL]
		V		34.0 ± 0.1	298	C	[1981VAR/BUL2]
		V		33.8 ± 0.5	298	EB	[1976AMM/BUL]
C ₃ Cl ₃ F ₃ O	[428-73-9]	V	trichloromethyl 2,2-dichloro-1,1,2-trifluoroethyl ether (341–423)	42.2	356	A	[1987STE/MAL]
		V		45.9 ± 0.3	298	C	[1981VAR/BUL2]
		V		45.7 ± 0.7	298	EB	[1976AMM/BUL]
C ₃ Cl ₆	[1888-71-7]	V	hexachloropropylene (366–510)	54.8 ± 0.4	298	EB	[1997STE/CHI4]
		V	(366–510)	51.1 ± 0.4	360	EB	[1997STE/CHI4]
		V	(366–510)	48.7 ± 0.3	400	EB	[1997STE/CHI4]
		V	(366–510)	46.0 ± 0.3	440	EB	[1997STE/CHI4]
		V	(366–510)	43.1 ± 0.5	480	EB	[1997STE/CHI4]
		V	(382–540)	49.3	397	A	[1987STE/MAL, 1970DYK]
C ₃ Cl ₆	[2065-35-2]	FUS	hexachlorocyclopropane	18.6	376	DSC	[1996DOM/HEA, 1990SUH/MAN]
C ₃ F ₃ N ₂ P	[58310-46-6]	V	dicyano(trifluoromethyl)phosphine (291–334)	45.6	306	A	[1987STE/MAL]
C ₃ F ₃ N ₃	[675-14-9]	V	2,4,6-trifluoro-1,3,5-triazine (277–344)	38.8	292	A	[1987STE/MAL, 1959SEE/BAL]
C ₃ F ₄	[20174-11-2]	V	tetrafluoropropyne (179–218)	18.8	203	A	[1987STE/MAL, 1969BAN/BAR]
C ₃ F ₄ O ₂ S ₂	[58936-60-0]	V	ethane(dithioperoxy)acid, fluoroxytrifluoromethyl ester	34.9	385	I	[1976BUR/SHR]
C ₃ F ₄ O ₂ S ₂	[868052-03-3]	V	fluoroformyl trifluoroacetyl disulfide (230–277)	39.8	253		[2005ERB/DEL]
C ₃ F ₅ N	[3291-42-7]	V	2,2-difluoro-3-(trifluoromethyl)-2 <i>H</i> -azirine (193–249)	24.0	234	A	[1966BAN/MOO, 1987STE/MAL]
		V	(193–249)	24.3	221		[1966BAN/MOO]
C ₃ F ₅ N	[3291-41-6]	V	2,3-difluoro-2-(trifluoromethyl)-2 <i>H</i> -azirine (193–248)	24.3	208	A	[1966BAN/MOO, 1987STE/MAL]
		V	(193–249)	24.0	220		[1966BAN/MOO]
C ₃ F ₆	[116-15-4]	V	perfluoropropene (178–228)	23.4	203	I	[1953ATK/TRE]
		V	(233–293)	21.9	278	A	[1987STE/MAL, 1952WHI, 1970DYK, 1984BOU/FRI]
C ₃ F ₆ N ₂ OS	[34556-28-0]	V	<i>N</i> -cyano- <i>S,S</i> -bis(trifluoromethyl)sulfoximine	30.8	382	I	[1972SAU/SHR]
C ₃ F ₆ O	[425-82-1]	V	hexafluorooxetane (232–313)	22.3	247	A	[1992SAL/WAN]
C ₃ F ₆ O	[116-16-5]	FUS	perfluoroacetone	8.38	147.7		[1996DOM/HEA, 1967PLA/PAC]
		V	(195–246)	23.6	231	A	[1987STE/MAL, 1967PLA/PAC, 1984BOU/FRI]
		V	(240–357)	22.3	253		[1964MUR, 1984BOU/FRI]
		V	(213–245)	23.1	229		[1955MOR/AYS]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₃ F ₆ O	[1187-93-5]	trifluoromethyl trifluorovinyl ether				
	V	(248–338)	20.3	298		[2007LIU/LIU]
	V	(208–241)	22.9	226	A	[1987STE/MAL, 1968HAS/TIP]
C ₃ F ₆ OS ₂	[58936-59-7]	2,2,2-trifluoroethane(dithioperoxy) acid, trifluoromethyl ester				
V			27.8	329	I	[1976BUR/SHR]
C ₃ F ₆ O ₂	[426-47-1]	pentafluoropropionyl hypofluorite				
	V	(214–248)	25.8	233	A	[1987STE/MAL, 1954MEN/CAD]
C ₃ F ₆ O ₂	[21297-65-4]	1,3-perfluorodioxolane				
	V	(234–367)	22.3	249	A	[1992SAL/WAN]
C ₃ F ₆ O ₃	[30321-53-0]	2,2,2-trifluoroethaneperoxy acid, trifluoromethyl ester				
	V		30.7			[1971BER/HOH]
C ₃ F ₆ O ₄	[41864-59-9]	bis(trifluoromethyl) peroxy carbonate				
	V		29.2			[1973HOH/DES]
C ₃ F ₆ O ₄ S	[51689-98-6]	pentafluoropropionic fluorosulfuric acid anhydride				
	V	(252–335)	39.2	267	A	[1987STE/MAL, 1966DES/CAD]
C ₃ F ₆ O ₅	[16156-35-7]	carbonodiperoxy acid, bis(trifluoromethyl) ester				
	V		32.0			[1971BER/HOH]
C ₃ F ₆ O ₇ S ₂	[6378-48-9]	hydroacrylic acid, tetrafluoroanhydride with fluorosulfuric acid, fluorosulfate				
	V	(308–403)	49.4	323		[1999DYK/SVO, 1966DES/CAD]
C ₃ F ₇ I ₂ P	[678-07-9]	diiodo(heptafluoropropyl)phosphine				
	V	(313–393)	39.6	353		[1959EME/SMI]
C ₃ F ₇ N	[428-71-7]	perfluoro-(2-ethyl-1,2-oxazetidine)				
	V		25.6			[1961BAR/HAS]
C ₃ F ₇ N	[760-43-0]	perfluoro(ethylidenemethylamine)				
	V		21.4			[1961BAR/HAS]
C ₃ F ₇ NO	[32822-50-7]	heptafluoropropionamide				
	V		27.2	279	HG	[1971DEM/SHR]
C ₃ F ₇ NO	[423-26-7]	perfluoro-1-nitrosopropane				
	V		24.9	239		[1956BAR/HAS]
	V		30.5			[1952BAN, 1953BAN]
C ₃ F ₇ NOS	[26454-67-1]	1,1,1,2,3,3,3-heptafluoro- <i>N</i> -sulfinyl-2-propanamine				
	V	(252–280)	34.1	266	A	[1987STE/MAL, 1999DYK/SVO, 1970VON/GLE]
C ₃ F ₇ NOS	[74366-13-5]	1,1,2,2,3,3,3-heptafluoro- <i>N</i> -sulfinyl-1-propanamine				
	V		26.3	325		[1980ABE/SHR]
C ₃ F ₇ NO ₂	[423-33-6]	perfluoro-1-nitropropane				
	V	(247–296)	28.5	281	A	[1956BAR/HAS, 1987STE/MAL]
	V		29.4			[1953BAN]
C ₃ F ₇ NS	[62067-06-5]	2,2,2-trifluoro- <i>N</i> -[(trifluoromethyl)thio]ethanimidoyl fluoride				
	V		28.0	305	I	[1977BUR/SHR2]
C ₃ F ₈	[76-19-7]	perfluoropropane				
	TRS		3.56	99.4		
	FUS		0.48	125.5		[1996DOM/HEA, 1967PAC/PLA]
	V	(193–237)	21.6	222	A	[1987STE/MAL, 1967PAC/PLA]
	V	(213–259)	20.9	244		[1963BRO]
C ₃ F ₈ N ₂ O ₂	[32837-67-5]	<i>N</i> -[[difluoroamino]carbonyl]oxy]-1,1,1-trifluoro- <i>N</i> -(trifluoromethyl)-methanamine				
	V		31.4	310		[1973WRI/SHR]
C ₃ F ₈ OS	[33622-17-2]	pentafluoroethyl trifluoromethyl sulfur				
	V		32.5			[1971SAU/SHR]
C ₃ F ₈ O ₅	[29291-73-4]	difluoro[(trifluoromethyl)dioxy][(trifluoromethyl)trioxy]methane				
	V		27.6		BG	[1970DES]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No. Transition	Compound				
		Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₃ F ₈ S	[33547-10-3] V	pentafluoroethyl trifluoromethyl sulfide	28.8			[1971SAU/SHR]
C ₃ F ₉ N	[432-03-1] V	perfluorotrimethylamine (193–263)	23.9	248	A	[1987STE/MAL]
C ₃ F ₉ NO	[671-63-6] V	1,1,1-trifluoro- <i>N</i> -(trifluoromethoxy)- <i>N</i> -(trifluoromethyl)-methanamine (226–268)	27.0	253	A	[1987STE/MAL, 1965DIN/HAS3]
C ₃ F ₉ NOS	[59617-29-7] V	[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl] imidosulfuryl fluoride	28.7			[1976STA/MEW]
C ₃ F ₉ NOS ₂	[34556-26-8] V	<i>S,S</i> -bis(trifluoromethyl)- <i>N</i> -[(trifluoromethyl)thio]sulfoximine	31.2	360	I	[1972SAU/SHR]
C ₃ F ₉ NO ₂ S ₂	[34556-27-9] V	<i>S,S</i> -bis(trifluoromethyl)- <i>N</i> -[(trifluoromethyl)sulfinyl]sulfoximine	37.2	388	I	[1972SAU/SHR]
C ₃ F ₉ NO ₂ S ₃	[29749-02-8] V	1,1,1-trifluoro- <i>N,N</i> -bis(trifluoromethyl)thio]methanesulfonamide (288–403)	43.5	303	A	[1987STE/MAL, 1999DYK/SVO]
C ₃ F ₉ N ₃ O	[10405-30-8] V V	nitrosotris(trifluoromethyl) hydrazine (279–300) (233–294)	29.5 33.5	289 263	A	[1987STE/MAL, 1966HAS/TIP] [1966DOB/EME]
C ₃ F ₉ N ₃ O ₂	[10405-31-9] V	nitrotris(trifluoromethyl) hydrazine (293–321)	31.6	307	A	[1987STE/MAL, 1966HAS/TIP]
C ₃ F ₉ P	[432-04-2] V	tris(trifluoromethyl)phosphine (248–285)	24.7	270	A	[1987STE/MAL, 1953BEN/EME]
C ₃ F ₉ PS	[671-64-7] V	bis(trifluoromethyl)trifluoromethylthiophosphine (242–293)	32.5	267		[1962EME/PAC]
C ₃ F ₉ PS	[2025-08-3] V	tris(trifluoromethyl)phosphine sulfide (282–308)	29.1	295		[1964CAV/EME2]
C ₃ F ₉ PS ₂	[36121-49-0] V	(trifluoromethyl)dithiophosphite acid, bis(trifluoromethyl) ester (273–296)	37.9	284	A	[1987STE/MAL, 1999DYK/SVO]
C ₃ F ₉ P ₃ S ₅	[26349-17-7] SUB	2,4,5-tris(trifluoromethyl)-1,3,2,4,5-dithiatriphospholane-2,4,5-trisulfide (363–373)	96.6	368		[1970BUR/PAR]
C ₃ F ₁₀ OS	[33564-24-8] V V	difluoro(oxo(trifluoromethyl)(pentafluoroethyl) sulfur (291–324) (270–324)	30.6 28.0	306 297	A	[1987STE/MAL, 1999DYK/SVO] [1971SAU/SHR3]
C ₃ F ₁₀ O ₃ S	[60672-62-0] V	pentafluoro (pentafluoropropaneperoxoato)sulfur	34.4			[1976HOP/DES]
C ₃ F ₁₀ S	[68010-33-3] V	[2,2-difluoro-(1-trifluoromethyl)ethenyl] pentafluoro sulfur	30.0			[1978DEM/FOX]
C ₃ F ₁₀ S	[31222-06-7] V	difluoro(pentafluoroethyl)(trifluoromethyl) sulfur	29.2			[1971SAU/SHR]
C ₃ F ₁₁ NO ₃ S ₂	[65844-08-8] V	trifluoro(trifluorosulfato- <i>O</i>)[1,1,1,2,3,3,3-heptafluoro-2-propanaminoato(2-)]sulfur	33.5	391	I	[1977KIT/SHR2]
C ₃ F ₁₂ O ₃ S ₂	[68010-30-0] V	pentafluoro [2,2,2-trifluoro-1-(fluorosulfonyl)oxo]-1-(trifluoromethyl)ethyl] sulfur	37.2			[1978DEM/FOX]
C ₃ N ₃ P	[1116-01-4] SUB SUB	tricyanophosphine (293–323)	78.3 75.3 ± 2.9	308 298	ME	[1987STE/MAL, 1976DAV/FIN] [1995ALM/FIN, 1976DAV/FIN]
C ₃ HCIF ₆ O ₂ S	[57169-81-0] V	chlorosulfurous acid, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester	36.7			[1975KIR/LAS]
C ₃ HCIF ₁₀ S	[68010-36-6] V	[1-(chlorodifluoromethyl)-2,2,2-trifluoroethyl] pentafluorosulfur	31.2			[1978DEM/FOX]
C ₃ HCl ₇	[594-89-8]	1,1,1,2,2,3,3-heptachloropropane				

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
		Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
		V	(413–473)	34.8	428	A	[1987STE/MAL, 1949HIG/END, 1970DYK]
C ₃ HFN ₄ O ₄	[604739-69-7]	SUB	1-fluoro-2,5-dinitro-1-imidazole	74.1 ± 0.8	298		[2003MIR/LEB]
C ₃ HFN ₄ O ₄	[604739-70-0]	SUB	1-fluoro-3,4-dinitro-1 <i>H</i> -pyrazole	88.3 ± 1.7	298		[2003MIR/LEB]
C ₃ HFN ₆ O ₆	[604739-71-1]	SUB	1-(trifluorodinitromethyl)3-nitro-1 <i>H</i> -1,2,4-triazole	99.6 ± 0.8	298		[2003MIR/LEB]
C ₃ HF ₃	[661-54-1]	V	3,3,3-trifluoropropene	(138–213) 21.5	198	A	[1987STE/MAL, 1951HAS2]
C ₃ HF ₆ N	[3291-64-3]	V	2,2,3-trifluoro-3-fluoromethylaziridine	(268–298) 30.2	283	A	[1987STE/MAL, 1966BAN/MOO]
C ₃ HF ₇	[431-89-0]	V	1,1,1,2,3,3,3-heptafluoropropane	18.9	298		[2007ECK/HUA]
		V	(278–308)	22.7	293		[2002BOB/ART]
		V	(293–353)	22.6	308		[2002VAL/COQ]
		V	(279–315)	23.2			[1998WIL/LIU]
		V	(237–370)	22.3	250		[1992SAL/WAN]
		V	(237–370)	14.5	300		[1992SAL/WAN]
		V	(237–370)	12.5	325		[1992SAL/WAN]
C ₃ HF ₇ O	[2356-61-8]	V	trifluoromethyl 1 <i>H</i> -pentafluoroethyl ether	(232–313) 27.3	247	A	[1992SAL/WAN]
C ₃ HF ₇ O ₂ S	[52225-56-6]	V	fluorosulfurous acid, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester	33.8			[1975DEM/KOV2]
C ₃ HF ₈ NOS	[34556-23-5]	V	<i>S</i> -(pentafluoroethyl)- <i>S</i> -(trifluoromethyl)sulfoximine	36.3	358	I	[1972SAU/SHR]
C ₃ HF ₈ NO ₂	[60247-19-0]	V	<i>N</i> -[difluoro[(trifluoromethyl)dioxy]methyl]-1,1,1-trifluoromethanamine	37.5			[1976FAL/DES3]
C ₃ HF ₉ N ₂	[13105-67-4]	V	tris(trifluoromethyl)hydrazine	(238–307) 29.9	273		[1966DOB/EME]
C ₃ HF ₁₁ S	[68010-34-4]	V	pentafluoro [2,2,2-trifluoro-1-(1-trifluoromethyl)ethyl]sulfur	30.1			[1978DEM/FOX]
C ₃ HN	[68010-34-4]	FUS	cyanoacetylene	14.1		S-V	[1963DAN/FLU]
		SUB	(247–279)	42.3	264	A	[1987STE/MAL, 1963DAN/FLU]
		V	(279–315)	28.1	294	A	[1987STE/MAL, 1963DAN/FLU]
C ₃ H ₂ ClF ₃	[2730-43-0]	V	1-chloro-3,3,3-trifluoro-1-propene	(263–352) 26.3	308		[2012HUL/BAS]
C ₃ H ₂ ClF ₃	[2730-62-3]	V	2-chloro-3,3,3-trifluoro-1-propene	(263–373) 24.3	298	Static	[2014ZHA/WEI, 2013ZHA/YAN]
C ₃ H ₂ ClF ₅	[460-92-4]	FUS	3-chloro-1,1,1,3,3-pentafluoropropane	10.47	165.4		[1996DOM/HEA, 1974VOR/KOL]
C ₃ H ₂ ClF ₅ O	[13838-16-9]	V	1-chloro-1,2,2-trifluoro-2-(difluoromethoxy)ethane	(274–351) 33.8	289		[1988AMB/GHI2]
		V	(290–329)	32.9	305	A	[1987STE/MAL, 1978ROD/HIL]
		V		32.6 ± 0.1	298	C	[1984UCH/MAJ]
		V		31.3 ± 0.1	313	C	[1984UCH/MAJ]
		V		30.2 ± 0.1	328	C	[1984UCH/MAJ]
		V		29.1 ± 0.1	343	C	[1984UCH/MAJ]
C ₃ H ₂ ClF ₅ O	[26675-46-7]	V	2-chloro-1,1,1-trifluoro-2-(difluoromethoxy)ethane	(280–344) 31.7	295		[1988AMB/GHI2]
		V	(283–312)	31.9	297	A	[1987STE/MAL, 1978ROD/HIL]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
		Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₃ H ₂ Cl ₂ F ₄	[64712-27-2] V	3,3-dichloro-1,1,1,3-tetrafluoropropane (297–333)	31.7	312	A	[1987STE/MAL, 1976VAR/BUL]	
C ₃ H ₂ Cl ₂ F ₄ O	[37031-38-2] V	2-chloro-1,1,2-trifluoroethyl chlorofluoromethyl ether	37.5 ± 0.1	298	C	[1984MAJ/UCH]	
	V		36.4 ± 0.1	313	C	[1984MAJ/UCH]	
	V		35.3 ± 0.1	328	C	[1984MAJ/UCH]	
	V		34.1 ± 0.1	343	C	[1984MAJ/UCH]	
	V		32.9 ± 0.1	353	C	[1984MAJ/UCH]	
C ₃ H ₂ Cl ₃ F ₃	[7125-84-0] FUS	1,1,1-trichloro-3,3,3-trifluoropropane (12–300)	14.07	232.7	AC	[1991ACR, 1971KOL/VOL]	
	V		36.8 ± 0.1	298	C	[2007VAR/DRU]	
	V	(320–365)	35.2	335	A	[1987STE/MAL]	
C ₃ H ₂ Cl ₄	[60320-18-5] V	1,1,2,3-tetrachloropropylene (347–416)	42.9	362	A	[1987STE/MAL]	
	V		(348–416)	43.4		382	[1969OTO/BES]
C ₃ H ₂ Cl ₂ F ₄	[64712-27-2] V	1,1,1,3-tetrafluoro-3,3-dichloropropane (297–333)	31.9 ± 0.5	298		[2007VAR/DRU]	
C ₃ H ₂ Cl ₂ N ₂	[15965-30-7] SUB	4,5-dichloroimidazole (338–395)	94.5 ± 0.8	298	Static	[2012ALM/MON]	
C ₃ H ₂ D ₅ N	[153557-95-0] V	cyclopropanamine (D ₅) (283–330)	31.7	298		[1993WOL/KIM]	
C ₃ H ₂ FNOS	[459-71-2] V	fluoracetyl isothiocyanate (273–353)	49.3	288	A	[1987STE/MAL, 1970DYK, 1999DYK/SVO]	
C ₃ H ₂ F ₆	[690-39-1] V	1,1,1,3,3,3-hexafluoropropane (283–323)	24.5	303	A	[2000BOB/CAM]	
C ₃ H ₂ F ₆ N ₂ S	[38005-20-8] V	amino (hexafluoroisopropylideneimino) sulfur 37.7	388		I	[1972MET/SHR]	
C ₃ H ₂ F ₆ N ₂ S	[62067-09-8] V	2,2,2-trifluoro- <i>N</i> -[(trifluoromethyl)thiol]ethanimidamide (322–390)	39.8	337	A, I	[1987STE/MAL, 1977BUR/SHR2, 1999DYK/SVO]	
C ₃ H ₂ F ₆ O	[57041-67-5] V	2-(difluoromethoxy)-1,1,1,2-tetrafluoroethane (274–311)	24.9	293		[1996SUS/SMI]	
C ₃ H ₂ F ₆ O	[920-66-1] V	1,1,1,3,3,3-hexafluoro-2-propanol (294–330)	40.2	309	A, MM	[1987STE/MAL, 1973ROC/SYM]	
	V		(294–330)	41.6	298	MM	[1973ROC/SYM]
	V		(273–296)	47.3	284		[1967VAN/SOC]
C ₃ H ₂ F ₆ O ₂	[30957-44-9] FUS	bis-(difluoromethoxy)difluoromethane (243–308)	7.2	153	DSC	[1999MAR/BAS]	
	V			31.5 ± 0.4			[1999MAR/BAS]
C ₃ H ₂ F ₆ O ₂ S	[30957-44-9] V	trifluoromethanesulfinic acid, 2,2,2-trifluoromethyl ester 36.8	363			[1971SAU/SHR2]	
C ₃ H ₂ F ₈ N ₂ S	[2433-66-1] V	<i>S,S</i> -difluoro- <i>N</i> -[1-amino-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]sulfilimine (295–313)	38.7	304	A	[1987STE/MAL, 1969GLE/VON, 1999DYK/SVO]	
C ₃ H ₂ N ₂	[109-77-3] TRS	malononitrile (6–319)	0.43	260.9			
	FUS		10.7	305	DSC	[2007BAD/BLA]	
	FUS		10.8	305	AC	[1996DOM/HEA, 1968GIR/WES]	
	SUB		(278–299)	78.2 ± 1.0	298		[1990BEC/DOG]
	SUB			79.1 ± 8		ME	[1967BOY/GUH, 1970COX/PIL]
C ₃ H ₂ N ₂ O ₃	[120-89-8] TRS	imidazolidine-2,4,5-trione (parabanic acid) (263–473)	2.1	392.3			
	FUS (decomp)				DSC	[2008RIB/RIB2]	

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		SUB	(381–406)	114.6 ± 0.6	393.7	ME	[2008RIB/RIB2]
		SUB	(381–406)	119.4 ± 0.6	298	ME	[2008RIB/RIB2]
C ₃ H ₂ N ₄ O ₄	[5213-49-0]	2,5-dinitroimidazole					
		SUB		112.1 ± 0.8	298		[2003MIR/LEB]
C ₃ H ₂ N ₄ O ₄	[38858-92-3]	3,4-dinitro-1 <i>H</i> -pyrazole					
		SUB		112.5 ± 0.8	298		[2003MIR/LEB]
C ₃ H ₂ OS ₂	[2314-40-1]	1,3-dithiol-2-one					
		SUB		73.6 ± 0.8	298		[1973RAU/GEI, 1977PED/RYL]
C ₃ H ₂ OS ₃	[930-35-8]	1,3-dithiole-2-thione					
		SUB		75.4 ± 0.4	298		[1973RAU/GEI, 1977PED/RYL]
C ₃ H ₂ O ₃	[872-36-6]	vinylene carbonate					
		V	(308–350)	46.9	323	A	[1987STE/MAL]
		V	(308–400)	41.3		MM	[1971CHO/JON]
C ₃ H ₃ Cl	[7747-84-4]	1-chloro-1-propyne					
		V	(200–289)	28.3	274	A	[1987STE/MAL]
C ₃ H ₃ ClF ₄	[421-73-8]	2-chloro-1,1,1,2-tetrafluoropropane					
		V	(268–349)	24.6	298		[2014YAN/KOU]
C ₃ H ₃ Cl ₂ F ₃	[460-69-5]	1,1-dichloro-3,3,3-trifluoropropane					
		TRS		0.2	167.7		
		FUS		10.13	182.2	AC	[1996DOM/HEA, 1972KOL/VOR, 1972VOR/KOL]
		V		34.1 ± 0.1	298	C	[2007VAR/DRU]
		V	(301–342)	33.7	316	A	[1987STE/MAL]
C ₃ H ₃ Cl ₂ F ₃ O	[428-92-2]	2-chloro-1,1,2-trifluoroethyl chloromethyl ether					
		V		42.4 ± 0.1	298	C	[1984UCH/MAJ]
		V		41.2 ± 0.1	313	C	[1984UCH/MAJ]
		V		40.1 ± 0.1	328	C	[1984UCH/MAJ]
		V		39.0 ± 0.1	343	C	[1984UCH/MAJ]
		V		37.8 ± 0.1	358	C	[1984UCH/MAJ]
C ₃ H ₃ Cl ₃ O ₂	[598-99-2]	methyl trichloroacetate					
		V		48.3 ± 0.1	298	C	[1972LAY/WAD]
C ₃ H ₃ Cl ₅	[16714-68-4]	1,1,2,2,3-pentachloropropane					
		V	(365–447)	46.3	380	A	[1987STE/MAL, 1970DYK]
		V	(365–446)	45.5	405		[1969OTO/BES]
C ₃ H ₃ F ₂ P	[37805-59-7]	1-propnyl difluorophospine					
		V	(228–278)	32.7	253		[1973LIN/CEN]
C ₃ H ₃ F ₃	[677-21-4]	3,3,3-trifluoro-1-propene					
		V	(283–363)	22.0	298	A	[1987STE/MAL]
C ₃ H ₃ F ₃ O ₃	[33017-08-2]	peroxyacetic acid, trifluoromethyl ester					
		V		32.5			[1971BER/HOH]
C ₃ H ₃ F ₄ I	[1737-76-4]	1,1,1,2-tetrafluoro-3-iodopropane					
		V	(295–356)	28.4	310	A	[1987STE/MAL, 1970HAS/KEE]
C ₃ H ₃ F ₄ I	[460-74-2]	1,1,1,3-tetrafluoro-3-iodopropane					
		V	(301–356)	31.2	316	A	[1987STE/MAL, 1970HAS/KEE]
C ₃ H ₃ F ₄ NO ₂	[72316-36-0]	methoxy (trifluoromethyl)carbamic fluoride					
		V		27.8			[1979SEK/DES]
C ₃ H ₃ F ₅	[679-86-7]	1,1,2,2,3-pentafluoropropane					
		V	(258–353)	30.2	273	A	[2002DIN/PAS]
C ₃ H ₃ F ₅	[1814-88-6]	1,1,1,2,2-pentafluoropropane					
		V	(232–283)	22.9	268	A	[1987STE/MAL, 1970DYK]
		V	(233–379)	23.0	248		[1967SHA]
C ₃ H ₃ F ₅ O	[422-05-9]	2,2,3,3,3-pentafluoro-1-propanol					

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(273–297)	47.0	285	A, MM	[1987STE/MAL, 1967MEE/GOL, 1984BOU/FRI]
	V		44.4	298	MM	[1973ROC/SYM, 1967MEE/GOL]
	V		41.3	298		[1967MUR/KIV]
C ₃ H ₃ F ₅ O	[37031-31-5]	1,1,2,2-tetrafluoro-1-(fluoromethoxy)ethane				
	V	(288–317)	33.5	303	I	[2002MUR/YAM]
C ₃ H ₃ F ₆ NOS	[34556-25-7]	<i>N</i> -methyl- <i>S,S</i> -bis(trifluoromethyl)sulfoximine				
	V		30.7	338	I	[1972SAU/SHR]
C ₃ H ₃ F ₆ NS	[13105-12-9]	<i>N,N</i> -bis(trifluoromethyl)methanesulfenamide				
	V	(269–309)	31.1	284	A,T	[1987STE/MAL, 1966EME/TAT]
C ₃ H ₃ F ₆ OPS	[71040-58-9]	phosphinothioic acid, bis(trifluoromethyl)-, <i>O</i> -methyl ester				
	V	(263–333)	35.1	298		[1979CAV/PIN]
C ₃ H ₃ F ₆ OPS	[71009-87-5]	phosphinothioic acid, bis(trifluoromethyl)-, <i>S</i> -methyl ester				
	V	(293–353)	33.8	318		[1979CAV/PIN]
C ₃ H ₃ F ₆ O ₂ P	[25439-11-6]	bis(trifluoromethyl)phosphinic acid, methyl ester				
	V	(258–313)	40.5	273	A	[1987STE/MAL, 1969BUR/MIS]
C ₃ H ₃ F ₆ PS	[1486-18-6]	bis(trifluoromethyl) methylthiophosphine				
	V	(273–321)	36.9	297	T	[1964CAV/EME]
C ₃ H ₃ F ₆ PS ₂	[18799-79-6]	bis(trifluoromethyl)dithiophosphinic acid, methyl ester				
	V	(273–344)	41.5	288	A	[1987STE/MAL, 1999DYK/SVO, 1968GOS/BUR]
C ₃ H ₃ N	[107-13-1]	acrylonitrile				
	TRS		1.19	162.5		
	FUS		6.23	189.6		[1996DOM/HEA, 1972FIN/MES]
	V	(257–352)	33.6	272	A	[1987STE/MAL]
	V	(283–343)	31.6	298	A	[1987STE/MAL]
	V	(222–351)	35.5	237		[1964SEV/SOK]
	V	(293–343)	32.9	308		[1964GUB/FER]
	V	(273–353)	32.6			[1945DAV/WIE]
C ₃ H ₃ NO	[288-42-6]	oxazole				
	V	(293–344)	34.6	308	A, EB	[1987STE/MAL, 1975SOU/BAR]
	V		32.5 ± 0.1	298	C	[1978MCC/HAM]
C ₃ H ₃ NO	[288-14-2]	isoxazole				
	V	(314–404)	37.2 ± 0.2	298	EB	[1996STE/CHI3]
	V	(314–404)	37.1 ± 0.2	300	EB	[1996STE/CHI3]
	V	(314–404)	35.1 ± 0.2	340	EB	[1996STE/CHI3]
	V	(314–404)	33.0 ± 0.2	380	EB	[1996STE/CHI3]
	V		36.5 ± 0.1	298	C	[1978MCC/HAM]
C ₃ H ₃ NO ₂	[17640-15-2]	cyanoformic acid, methyl ester				
	V	(273–333)	39.3	288	A	[1987STE/MAL, 1970DYK, 1948RED/CHA5]
C ₃ H ₃ NS	[288-47-1]	thiazole				
	FUS		9.58	239.4		[1968GOU/WES2, 1966MEY/MET]
	V	(333–393)	39.7	348	A	[1987STE/MAL]
	V	(336–391)	38.9	351	A	[1987STE/MAL, 1969SOU/GOU2]
C ₃ H ₃ N ₃	[290-87-9]	1,3,5-triazine				
	TRS	(12–347)	0.07	197.7		
	FUS	(12–347)	14.56	353.4	AC	[1991ACR, 1988VAN/VAN]
	TRS	(134–382)	0.07	197.6		
	FUS	(134–382)	14.58	353.9	C	[1979BRI/VAN]
	TRS	(100–355)	0.02	198.1	AC	[1978SMI/RAE]
	SUB	(212–229)	58.2	222	TE, ME	[1983DEW/VAN]
	SUB		54.2 ± 0.2	298	C	[1982BYS]
	SUB	(283–313)	56.5 ± 2.1			[1982INI/LOP]

[Note: In [1982BYS] the author quotes an unpublished calorimetric value of *SUB* 55.2 ± 0.2 kJ/mole determined by K. Arvidsson.]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
		Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
		SUB	(242–264)	U43.1	253	ME	[1968MAS/RAE]
		V	(342–373)	38.8 ± 1.9	298	CGC	[2009LIP/CHI2, 2009LIP/CHI]
C ₃ H ₃ N ₃ O ₂	[461-89-2]	6-azauracil					
		SUB	452.6	118.1 ± 2.0	298	C	[2016AMA/SZT]
		SUB	(377–399)	119.1 ± 1.7	388	ME	[2016AMA/SZT]
		SUB	(377–399)	120.7 ± 1.7	298	ME	[2016AMA/SZT]
		SUB		141		LE	[1974YAN/VER]
C ₃ H ₃ N ₃ O ₃	[108-80-5]	cyanuric acid					
		SUB	(440–473)	131	458	ME,TE	[1983DEW/VAN]
		SUB		133	298		[1983DEW/VAN]
C ₃ H ₃ N ₃ O ₃	[77666-53-6]	3-methyl-4-nitrofurazan					
		V		51.9 ± 0.9	298	C	[2012KON/MAT]
C ₃ H ₃ N ₅ O ₁₀	[62626-83-9]	1,1,1,2,2-pentanitropropane					
		SUB		77.4 ± 1.3	298		[1999MIR/VOR]
C ₃ H ₄	[463-49-0]	allene					
		V	(136–274)	22.6	259	A	[1987STE/MAL]
		V	(193–246)	19.9	231	A	[1987STE/MAL]
		V	(153–238)	21.3	223		[1947STU]
		V	(138–189)	22.9	174		[1940LAM/ROP, 1984BOU/FRI]
		V	(203–236)	20.9	220	MM	[1930LIV/HEI]
		V	(200–260)	21.5	245		[1921MAA/WRI, 1984BOU/FRI]
C ₃ H ₄	[74-99-7]	1-propyne					
		V	(183–257)	23.0	242	A	[1987STE/MAL]
		V	(257–402)	20.8	272	A	[1987STE/MAL]
		V	(303–361)	21.2	318	A	[1987STE/MAL]
		V	(359–402)	21.9	374	A	[1987STE/MAL]
		V	(249–306)	23.2	264	A	[1987STE/MAL]
		V		22.1	275		[1971WIL/ZWO]
		V	(162–255)	23.9	240		[1967VAN]
		V	(323–400)	21.6	338		[1962VOH/KAN]
		V	(194–250)	23.4	235		[1933BOO/BUR, 1984BOU/FRI]
		V	(200–260)	21.4	230		[1921MAA/WRI]
C ₃ H ₄ Br ₂	[513-31-5]	2,3-dibromopropylene					
		V	(267–415)	43.1	282	A	[1987STE/MAL, 1947STU]
C ₃ H ₄ Br ₄	[54268-02-9]	1,2,2,3-tetrabromopropane					
		V	(418–580)	57.7	433	A	[1987STE/MAL, 1970DYK]
C ₃ H ₄ ClFO ₃	[462-27-1]	carbonochloridic acid, 2-fluoroethyl ester					
		V	(273–333)	46.6	288	GS	[1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₃ H ₄ ClF ₃	[460-35-5]	1-chloro-3,3,3-trifluoropropane					
		TRS		4.49	169.8		
		FUS		5.31	179.4		[1996DOM/HEA, 1974KOL/VOR]
		V	(297–315)	29.9	306	A	[1987STE/MAL]
		V	(301–341)	33.7	316		[1972VAR/DRU]
C ₃ H ₄ ClF ₃ O	[425-87-6]	2-chloro-1,1,2-trifluoroethyl methyl ether					
		V		34.4 ± 0.1	298	C	[1984MAJ/UCH]
		V		33.4 ± 0.1	313	C	[1984MAJ/UCH]
		V		31.1 ± 0.1	343	C	[1984MAJ/UCH]
C ₃ H ₄ ClF ₃ O ₂ S	[61915-99-9]	trifluoromethanesulfinic acid, 2-chloroethyl ester					
		V	(320–403)	40.5	335	I	[1987STE/MAL, 1977BUR/SHR, 1999DYK/SVO]
C ₃ H ₄ Cl ₂ F ₂ O	[76-38-0]	2,2-dichloro-1,1-difluoro-1-methoxyethane					
		V	(279–378)	40.3	294	A	[1987STE/MAL, 1970HER]
C ₃ H ₄ Cl ₂ O	[513-88-2]	1,1-dichloroacetone					
		V	(292–382)	35.8	307	A	[1987STE/MAL, 1970SMI/THO]
C ₃ H ₄ Cl ₂ O	[534-07-6]	1,3-dichloroacetone					

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
		Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
		V	(348–445)	49.6	363	A	[1987STE/MAL, 1970SMI/THO]
C ₃ H ₄ Cl ₂ O ₂	[116-54-1]	methyl dichloroacetate					
		V		47.7 ± 0.1	298	C	[1972LAY/WAD]
		V	(331–481)	44.9	346	A	[1987STE/MAL, 1970DYK]
		V	(276–416)	47.2	291		[1947STU]
C ₃ H ₄ Cl ₄	[812-03-3]	1,1,1,2-tetrachloropropane					
		V	(331–469)	42.3	346	A	[1987STE/MAL, 1970DYK]
C ₃ H ₄ Cl ₄	[1070-78-6]	1,1,1,3-tetrachloropropane					
		TRS		2.2	219.9		
		FUS		10.49	237.7		[1996DOM/HEA, 1974KOL/VOR]
		V	(300–377)	57.8	315	A	[1987STE/MAL]
C ₃ H ₄ Cl ₄	[13116-53-5]	1,2,2,3-tetrachloropropane					
		V	(346–415)	42.8	361	A	[1987STE/MAL]
		V	(335–415)	42.9	375		[1969OTO/BES]
C ₃ H ₄ F ₂ O ₂	[433-53-4]	methyl difluoroacetate					
		V	(273–333)	41.9	288	GS	[1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₃ H ₄ F ₄ O	[32778-16-8]	2-difluoromethoxy-1,1-difluoroethane					
		V	(288–328)	32.9	303	I	[2002MUR/YAM]
C ₃ H ₄ F ₄ O	[76-37-9]	2,2,3,3-tetrafluoro-1-propanol					
		V	(303–380)	47.9	318	A	[1987STE/MAL]
		V	(298–333)	50.3	313	MM	[1973ROC/SYM]
		V	(298–333)	53.6	298	MM	[1973ROC/SYM]
C ₃ H ₄ F ₆ NOP	[31411-29-7]	<i>N</i> -methyl- <i>P,P</i> -bis(trifluoromethyl)phosphinic amide					
		V	(293–342)	40.3			[1971CAV/CHA]
C ₃ H ₄ N ₂	[288-32-4]	imidazole					
		FUS		13.1	359.3	DSC	[2012ALM/MON]
		FUS		11.18	362.3	DSC	[2002DOM/KOZ2]
		FUS		12.5	363.2	DSC	[1989HIL/MOU]
		FUS	(90–370)	12.82	361.9	AC	[1996DOM/HEA, 1983DEW/DEK, 1983DEW/OFF]
		SUB	(304–358)	81.4 ± 0.1	360		[2012ALM/MON]
		SUB	(304–358)	82.5 ± 0.1	298		[2012ALM/MON]
		SUB	(292–309)	83.1 ± 0.2	300	ME	[1987JIM/ROU]
		SUB		83.1 ± 0.2	298	ME	[1986JIM/ROU]
		SUB	(288–310)	80.8	301	ME,TE	[1983DEW/VAN]
		SUB		74.5 ± 0.4	298	C	[1980SAB2]
		SUB		85.3	298		[1961ZIM/GEI]
		V	(334–385)	67.3 ± 0.4	360		[2012ALM/MON]
		V	(334–385)	71.3 ± 0.4	298		[2012ALM/MON]
C ₃ H ₄ N ₂	[288-13-1]	pyrazole					
		FUS		14.2	343.2	DSC	[1996DOM/HEA, 1989HIL/MOU]
		FUS	(300–385)	13.8	333.1	DSC	[1983DEW/OFF]
		SUB	(268–287)	74.3 ± 0.4	275	ME	[1987JIM/ROU]
		SUB		74.0 ± 0.4	298		[1987JIM/ROU, 1986JIM/ROU]
		SUB	(253–273)	72.7	265	TE, ME	[1983DEW/VAN]
		SUB		69.2 ± 0.3	298	C	[1980SAB2]
		SUB		71.8			[1979DAA/VAN]
		SUB		67.7			[1961ZIM/GEI]
C ₃ H ₄ N ₂ O	[107-91-5]	2-cyanoacetamide					
		FUS		18.81	394.7	DSC	[2013SIN/PAN]
		FUS		18.97	394.2	DSC	[2011SIN/RAI]
		TRS	(300–420)	1.2	346.5		
		FUS	(300–420)	21.7	387.3	DSC	[1996DOM/HEA, 1983DEW/OFF]
		SUB	(325–348)	99.7	336	TE, ME	[1983DEW/VAN]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound						
		Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₃ H ₄ N ₂ OS	[503-87-7]	2-thioxo-4-imidazolidinone						
		FUS	(298–500)	27.1	506.1	DSC	[2013SIL/CIM2]	
		SUB		117.2 ± 0.5	399	ME	[2013SIL/CIM2]	
		SUB		119.1 ± 0.4	298	ME	[2013SIL/CIM2]	
C ₃ H ₄ N ₂ O ₂	[461-72-3]	2,4-imidazolidinedione						
		FUS	(298–500)	24.8	495.8	DSC	[2013SIL/CIM2]	
		SUB		114.6 ± 1.0	389	ME	[2013SIL/CIM2]	
		SUB		116.3 ± 1.0	298	ME	[2013SIL/CIM2]	
C ₃ H ₄ N ₂ O ₄	[4122-45-6]	3-nitro-2-isoxazoline-2-oxide						
		SUB		71.1 ± 8.4			[1977PED/RYL, 1969MIR/LEB]	
		C ₃ H ₄ N ₂ S	[96-50-4]	2-aminothiazole				
				SUB	(295–303)	85.2 ± 1.6	299	ME
SUB	(295–303)			85.2 ± 1.6	298	ME	[2014SIL/MON]	
C ₃ H ₄ N ₂ S	[872-35-5]	1,3-dihydro-2 <i>H</i> -imidazole-2-thione						
		SUB		85.9 ± 1.0	298	C	[2014SIL/MON]	
		FUS		17.5	503.5	DSC	[2016SIL/MOR]	
C ₃ H ₄ N ₂ S	[872-35-5]	1,3-dihydro-2 <i>H</i> -imidazole-2-thione						
		SUB		114.4 ± 1.3	298	C	[2016SIL/MOR]	
		FUS		17.5	503.5	DSC	[2016SIL/MOR]	
C ₃ H ₄ N ₄ O ₂	[107945-73-3]	2-methyl-4-nitro-1,2,3-triazole						
		SUB	(288–314)	74.6 ± 3.1	301	ME	[2008MAT/IVA]	
		SUB	(288–314)	74.7 ± 3.1	298	ME	[2008MAT/IVA]	
C ₃ H ₄ N ₄ O ₆	[97645-24-4]	1,3,3-trinitroazetidene						
		FUS		25.9	372.9	DSC	[2010SHA/REN]	
		FUS		29.0	373.8		[2003SUC/RAJ]	
		FUS		30.31	375.5	DSC	[1996ZHA/HU, 1997ZHA/HU]	
		SUB		95.3	373.8	F + V	[2003SUC/RAJ]	
		V	(373–413)	66.8	393		[2003SUC/RAJ]	
C ₃ H ₄ O	[107-02-8]	acrolein						
		V	(250–306)	32.3	265	A	[1987STE/MAL]	
		V	(304–325)	30.9	314		[1979MAR/SAC]	
		V	(208–326)	33.5	223	A	[1987STE/MAL, 1947STU]	
C ₃ H ₄ O	[107-19-7]	propargyl alcohol (2-propyn-1-ol)						
		V	(293–387)	42.0	308	A	[1987STE/MAL]	
C ₃ H ₄ OS ₂	[2080-58-2]	1,3-dithiolan-2-one						
		SUB		80.3 ± 0.4			[1973RAU/GEL, 1977PED/RYL]	
C ₃ H ₄ O ₂	[79-10-7]	acrylic acid						
		FUS		11.40	286.35	DSC	[2010HEN/CAM]	
		FUS		11.16	285.5		[1991ACR, 1983WEA]	
		FUS		9.51	285.7	AC	[1985KAR/ABD]	
		V		53.1 ± 4.2	298	C	[1996VAN/YU]	
		V		57.3	298		[1980VIL/PER]	
		V	(341–414)	45.3	356	A	[1987STE/MAL, 1973LIN/WIC]	
		V	(293–343)	32.7	308		[1964GUB/FER]	
C ₃ H ₄ O ₂	[57-57-8]	β -propiolactone (2-oxetanone)						
		FUS	(14–341)	9.41	239.9	AC	[1996DOM/HEA, 1983LEB/YEV]	
		V	(324–435)	46.4	339	A	[1987STE/MAL]	
C ₃ H ₄ O ₂	[57-57-8]	β -propiolactone (2-oxetanone)						
		V		47.0 ± 0.1	298	C	[1966BOR/NAK]	
C ₃ H ₄ O ₂ S	[7285-32-7]	thiete sulfone (2 <i>H</i> -thiete-1,1-dioxide)						
		SUB		83.7 ± 2.5		B	[1969MAC/MCN, 1969MAC/MCN2, 1977PED/RYL]	
C ₃ H ₄ O ₃	[96-49-1]	ethylene carbonate						

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References	
		Transition	Temp. range (K)				$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)
		FUS		13.02	311.2	DSC	[2004DIN]
		FUS		13.3	309.5		[1973VAS/KOR]
		SUB	(273–297)	68.7	285	A	[1987STE/MAL]
		SUB	(274–297)	78.5 ± 4.2			[1971CHO/JON, 1977PED/RYL]
		SUB		73.2 ± 2.5			[1970COX/PIL, 1958HOY/PEP]
		V	(310–369)	60.8 ± 0.1	298	GS	[2008VER/TOK]
		V	(451–505)	64.0 ± 0.1	298	EB	[2004CHE/CLE, 2008VER/TOK]
		V	(381–437)	59.6	396	A	[1987STE/MAL]
		V	(368–449)	60.3	383	EB	[1982HON/WAK]
		V	(368–449)	56.3	423	EB	[1982HON/WAK]
		V	(368–433)	55.0	433	EB	[1982HON/WAK]
		V	(382–437)	63.4 ± 0.3	298	EB	[1975PET/SAN, 2008VER/TOK]
		V		62.4	298	EB	[1958PEP, 2008VER/TOK]
C ₃ H ₄ O ₃	[127-17-3]	pyruvic acid					
		V	(294–438)	51.4	309	A	[1987STE/MAL, 1947STU]
C ₃ H ₄ O ₄	[141-82-2]	malonic acid					
		FUS		18.74	406	DSC	[2010BOO/BAR]
		FUS		23.1	407.5	DSC	[2004HAN/BEY]
		TRS	(13–371)	0.02	47.3		
		TRS	(13–371)	1.84	352.2	AC	[1991FUK/MAT]
[Note: Authors of [1991FUK/MAT] did not determine the enthalpy of fusion.]							
		SUB		91 ± 4		ME, MS	[2009BOO/MAR]
		SUB	(339–357)	108.9 ± 0.7	348	ME	[1999RIB/MON]
		SUB	(339–357)	111.4 ± 0.7	298	ME	[1999RIB/MON]
		SUB	(291–320)	72.7	306	A	[1987STE/MAL, 1947GRA]
		SUB		105.1 ± 0.8		C	[1983ALT/PIL]
C ₃ H ₄ O ₅	[80-69-3]	tartronic acid (2-hydroxymalonic acid)					
		FUS		30.62	428	DSC	[2010BOO/BAR]
		SUB		116.4 ± 0.3		C	[1983ALT/PIL]
C ₃ H ₄ S ₃	[822-38-8]	1,3-dithiolan-2-thione					
		V	(294–303)	82.9	298		[1999DYK/SVO]
		SUB	(294–303)	81.8 ± 0.8	298		[1967GEI/SCH, 1970COX/PIL]
C ₃ H ₅ Br	[106-95-6]	allyl bromide					
		V	(297–338)	32.2	312	A, EB	[1987STE/MAL, 1977SVO/MAJ]
		V		31.7 ± 0.1	318	C	[1977SVO/MAJ]
		V		31.0 ± 0.1	330	C	[1977SVO/MAJ]
		V		30.4 ± 0.1	341	C	[1977SVO/MAJ]
C ₃ H ₅ Br	[590-14-7]	<i>cis</i> -1-bromopropylene					
		V	(257–366)	32.0	272	A	[1987STE/MAL, 1970DYK]
C ₃ H ₅ Br	[590-14-7]	<i>trans</i> -1-bromopropylene					
		V	(262–372)	32.5	277	A	[1987STE/MAL, 1970DYK]
C ₃ H ₅ Br ₃	[96-11-7]	1,2,3-tribromopropane					
		FUS		23.78	289.4		[1991ACR, 1983WEA]
		V	(390–595)	50.8	405	A	[1987STE/MAL]
		V	(400–478)	50.2	415		[1949DRE/SHR, 1949DRE/MAR, 1984BOU/FRI]
C ₃ H ₅ Cl	[107-05-1]	allyl chloride (3-chloro-1-propene)					
		V	(203–318)	33.1	218	A	[1987STE/MAL]
		V	(276–320)	29.9	298		[1960DYK/PAU]
		V	(286–317)	30.0	301		[1944IOF/YAM, 1984BOU/FRI]
C ₃ H ₅ Cl	[590-21-6]	1-chloropropene					
		V	(191–310)	29.5	206		[1947STU]
C ₃ H ₅ Cl	[16136-84-8]	<i>cis</i> -1-chloropropene					
		V	(276–332)	27.9	291		[2001HOR/GAR]
		V	(237–338)	29.2	252	A	[1987STE/MAL, 1970DYK]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
		Transition	Temp. range (K)			
C ₃ H ₅ Cl	[16136-85-9]	<i>trans</i> -1-chloropropene				
		V	(277–340)	28.5	292	[2001HOR/GAR]
		V	(241–343)	29.7	256	A [1987STE/MAL, 1970DYK]
C ₃ H ₅ Cl	[557-98-2]	2-chloropropene				
		V	(229–327)	28.0	244	A [1987STE/MAL, 1970DYK]
C ₃ H ₅ ClO	[106-89-8]	epichlorohydrin				
		V	(316–388)	40.4	331	EB [2007PAL/OR2]
		V	(256–391)	42.9	272	[1947STU]
C ₃ H ₅ ClO	[78-95-5]	chloroacetone				
V	(316–392)	40.1	331	A [1987STE/MAL]		
C ₃ H ₅ ClO ₂	[96-34-4]	methyl chloroacetate				
		V		46.7 ± 0.1	298	C [1972LAY/WAD]
		V	(318–402)	45.5	333	A [1987STE/MAL, 1967GOE/SCH, 1984BOU/FRI]
		V	(298–403)	46.7	313	[1928NEL2, 1984BOU/FRI]
C ₃ H ₅ ClO ₂	[541-41-3]	ethyl chloroformate				
		V	(281–286)	38.7 ± 0.2	283	BG [1980DAV/FIN]
		V	(281–286)	37.8 ± 0.2	298	BG [1980DAV/FIN]
C ₃ H ₅ ClO ₂	[29617-66-1]	<i>(S)</i> -2-chloropropionic acid				
		V	(287–328)	63.4	308	GS [2002LAG/DIO]
		V	(287–328)	64.9 ± 0.5	298	GS [2002LAG/DIO]
C ₃ H ₅ Cl ₃	[7789-89-1]	1,1,1-trichloropropane				
		V	(244–382)	38.8	259	A [1987STE/MAL, 1947STU]
C ₃ H ₅ Cl ₃	[20395-25-9]	1,1,3-trichloropropane				
		V	(328–464)	41.8	343	A [1987STE/MAL, 1970DYK]
C ₃ H ₅ Cl ₃	[96-18-4]	1,2,3-trichloropropane				
		V		47.8 ± 0.1	298	C [1989AN/HU]
		V	(337–477)	43.0	352	A [1987STE/MAL, 1970DYK]
		V	(361–429)	43.0	376	[1959URB]
		V	(282–431)	46.8	297	[1947STU]
C ₃ H ₅ FO	[503-09-3]	1,2-epoxy-3-fluoropropane				
		V	(273–333)	39.9	288	A, GS [1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₃ H ₅ FO ₂	[453-18-9]	methyl fluoroacetate				
		V	(273–333)	42.7	288	A, GS [1987STE/MAL, 1948RED/CHA4, 1970DYK]
C ₃ H ₅ F ₃ O	[428-66-0]	1,1,2-trifluoro-1-methoxyethane				
		V	(276–317)	31.1	291	I [2002MUR/YAM]
C ₃ H ₅ F ₃ O	[374-01-6]	1,1,1-trifluoro-2-propanol				
		V	(292–333)	44.2	307	A, MM [1987STE/MAL, 1973ROC/SYM, 1984BOU/FRI]
		V	(294–333)	44.8	298	MM [1973ROC/SYM]
C ₃ H ₅ F ₃ O ₂ S	[30957-43-8]	trifluoromethylsulfonic acid, trifluoromethyl ester				
		V		37.2	370	[1971SAU/SHR2]
C ₃ H ₅ F ₃ S ₂	[691-05-4]	ethyl(trifluoromethyl) disulfide				
		V	(253–303)	33.8	268	A [1987STE/MAL, 1999DYK/SVO]
C ₃ H ₅ N	[107-12-0]	propionitrile				
		TRS		1.71	177	
		FUS	(15–297)	5.03	180.4	[1996DOM/HEA, 1962WEB/KIL]
		V	(310–353)	37.1 ± 0.3	298	EB [2004ANT/GAL, 2005EME/VER]
		V	(288–371)	36.1	303	A [1987STE/MAL]
		V	(308–363)	36.7	326	BG [1971HAL/BAL]
		V		36.0 ± 0.1	298	C [1970HOW/WAD]
		V		36.2	298	C [1962WEB/KIL]
		V	(283–297)	36.3	290	[1962WEB/KIL]
		V	(189–295)	36.5	280	MG [1956MIL, 1984BOU/FRI]
		V	(333–393)	35.9	298	[1950IWA, 1962WEB/KIL]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(308–370)	35.9	323		[1949DRE/SHR, 1949DRE/MAR, 1984BOU/FRI]
	V	(294–394)	36.7 ± 0.3	298	MM	[1933HEI, 2005EME/VER]
C ₃ H ₅ NO	[79-06-1]	acrylamide				
	FUS		15.33	358		[1996DOM/HEA, 1989STE/CHI2]
	SUB	(303–358)	81.8	330		[1957CAR/DAV]
	V	(357–413)	61.5	372	A	[1987STE/MAL]
	V	(373–413)	76.5	388	A	[1987STE/MAL]
	V	(388–408)	63.1	398		[1978MAT/TRA]
C ₃ H ₅ NO	[1738-36-9]	methoxyacetone				
	V	(285–316)	41.7 ± 0.6	298	GS	[1995VER/BEC]
C ₃ H ₅ NO	[109-78-4]	2-cyanoethanol				
	V	(306–361)	62.3 ± 0.5	298	GS	[2007ROU/NOT]
	V	(331–494)	53.4	346	A	[1987STE/MAL]
	V	(331–494)	60.9	298		[1947STU, 2007ROU/NOT]
C ₃ H ₅ NO	[5314-33-0]	2-propenal oxime				
	V	(303–381)	42.2	318	A	[1987STE/MAL]
	V		42.7			[1963KOR/GEL]
C ₃ H ₅ NO	[930-21-2]	2-azetidinone				
	FUS		17.5	349.2	DSC	[2012EME/VER]
	SUB	(296–343)	78.1 ± 0.5	298	GS	[2012EME/VER]
	SUB	(280–298)	77.4 ± 0.3	298	ME	[1996ROU/JIM2]
	V	(351–371)	63.2 ± 0.8	298	GS	[2012EME/VER]
C ₃ H ₅ NOS	[5840-81-3]	2-mercapto-2-oxazoline				
	FUS		15.9	370	DSC	[2008TEM/ROU3]
	SUB	(325–354)	104.3 ± 4.4	340	ME	[2009ROU/TEM]
	SUB	(325–354)	105.0 ± 4.4	298	ME	[2009ROU/TEM]
C ₃ H ₅ NO ₂	[3156-70-5]	1-nitropropylene				
	V	(301–373)	37.1	337		[1984BOS/TUR]
	V	(273–333)	44.1	288	A	[1987STE/MAL, 1970DYK, 1948RED/CHA5]
C ₃ H ₅ NO ₂	[4749-28-4]	2-nitropropylene				
	V	(273–333)	38.2	288	A	[1987STE/MAL, 1970DYK, 1948RED/CHA5]
C ₃ H ₅ NO ₂	[497-25-6]	dimethylene urethane (2-oxazolidinone)				
	FUS	(320–373)	17.3	360		[2004SMI/MAR]
	SUB	(323–353)	89.3 ± 0.9	298	GS	[2015EME/TUR]
C ₃ H ₅ NS	[542-85-8]	ethyl isothiocyanate				
	V	(283–404)	40.2	298	A	[1987STE/MAL]
	V	(283–323)	39.8	298		[1935BAU/BUR, 1984BOU/FRI]
C ₃ H ₅ NS	[542-90-5]	ethyl thiocyanate				
	V	(358–422)	44.2	373	A	[1987STE/MAL, 1999DYK/SVO]
C ₃ H ₅ NS ₂	[96-53-7]	2-mercapto-2-thiazoline				
	FUS		16.8	377	DSC	[2008TEM/ROU3]
	SUB	(333–351)	99.8 ± 3.4	342	ME	[2009ROU/TEM]
	SUB	(333–351)	100.5 ± 3.4	298	ME	[2009ROU/TEM]
C ₃ H ₅ N ₃ O ₉	[55-63-0]	glycerol trinitrate				
	FUS	(80–275)	20.13	275.9	AC	[1997URY/MOC]
	FUS		21.87	285.5		[1991ACR, 1983WEA]
	V		92.0 ± 2.1	298	C	[1988MIR/KOR, 2010SUC/MUS]
	V	(293–373)	104.5	308	A	[1987STE/MAL]
	V	(293–333)	100.2	313		[1959VAC/STA]
	V	(400–524)	58.6	415		[1947STU]
C ₃ H ₅ P	[114596-02-0]	2-propynylphosphine				

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
		Transition	Temp. range (K)			
		V	(228–273)	36.8		[1988SHA/DIE]
C ₃ H ₆	[75-19-4]	FUS	cyclopropane	5.44	145.6	[1996DOM/HEA, 1946RUE/POW]
		SUB		29.2	145	[1963BON]
		SUB	(115–141)	28.2	128	A,MS [1951TIC/LOS]
		V	(195–225)	21.8	210	[1997CAL/FIL]
		V	(358–398)	20.4	373	A [1987STE/MAL]
		V	(297–359)	19.9	312	A [1987STE/MAL]
		V	(188–239)	20.3	224	A [1987STE/MAL]
		V	(239–298)	19.9	254	A [1987STE/MAL]
		V		17.02	298	[1970LIN/SIL]
		V	(276–388)	20.4	332	[1958BOO/MOR]
		V	(183–241)	21.1	226	[1946RUE/POW, 1984BOU/FRI]
	V		20.1	240	C [1946RUE/POW]	
C ₃ H ₆	[115-07-1]	FUS	propylene	3.00	87.9	[1939POW/GIA]
		FUS		2.93	88.2	C [1996DOM/HEA, 1931HUF/PAR]
		V	(297–363)	18.7	312	A [1987STE/MAL]
		V	(104–161)	22.2	146	A [1987STE/MAL]
		V	(228–271)	18.7	256	A [1987STE/MAL]
		V	(270–327)	18.5	285	A [1987STE/MAL]
		V	(325–363)	18.8	340	A [1987STE/MAL]
		V	(161–242)	19.2	227	A [1987STE/MAL, 1970DYK]
		V	(298–423)	18.7	360	[1953MIC/WAS]
		V	(166–226)	19.6	211	[1939POW/GIA]
		V	(236–283)	19.3	268	[1921MAA/WRI, 1984BOU/FRI]
C ₃ H ₆ BrCl	[109-70-6]	V	1-bromo-3-chloropropane	42.0	341	A [1987STE/MAL, 1970DYK]
			(326–488)			
C ₃ H ₆ BrNO	[7119-91-7]	V	2-bromo-2-nitrosopropane	41.0	254	A [1987STE/MAL, 1970DYK]
			(239–356)			
C ₃ H ₆ Br ₂	[598-17-4]	V	1,1-dibromopropane	42.5	337	A, E [1987STE/MAL, 1956MAN, 1970DYK]
			(322–449)			
C ₃ H ₆ Br ₂	[78-75-1]	V	1,2-dibromopropane	41.4	327	A [1987STE/MAL]
		V	(312–403)	42.2	298	[1991BAS/SVO, 1975PIS/ROZ2]
		V		41.7 ± 0.1	298	C [1980VAR/PIS]
		V		42.3 ± 0.7	298	EB [1975PIS/ROZ]
		V	(329–456)	44.6	344	A [1987STE/MAL, 1970DYK]
		V	(266–415)	42.8	281	[1947STU]
C ₃ H ₆ Br ₂	[109-64-8]	FUS	1,3-dibromopropane	14.64	238.6	[1996DOM/HEA, 1950CRO/SMY2]
		V		47.6	298	GC [1994CAR/LAY]
		V		47.3 ± 0.1	308	C [1992SVO/KUB2]
		V		46.7 ± 0.1	315	C [1992SVO/KUB2]
		V		46.1 ± 0.1	323	C [1992SVO/KUB2]
		V		45.5 ± 0.1	330	C [1992SVO/KUB2]
		V		44.8 ± 0.1	338	C [1992SVO/KUB2]
		V	(307–437)	46.6	322	A [1987STE/MAL]
		V	(351–487)	47.8	366	A [1987STE/MAL, 1970DYK]
		V	(283–440)	45.3	298	[1947STU]
C ₃ H ₆ Br ₂ O	[96-13-9]	V	2,3-dibromo-1-propanol	57.3	345	A [1987STE/MAL, 1947STU]
			(330–492)			
C ₃ H ₆ ClNO ₂	[594-71-8]	TRS	2-chloro-2-nitropropane	9.54	213.8	
		FUS		1.34	261.6	[1996DOM/HEA, 1950CRO/SMY2]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References	
		Transition	Temp. range (K)				$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)
C ₃ H ₆ Cl ₂	[78-99-9]	1,1-dichloropropane					
		V		35.2 ± 0.4	298	C	[2007VAR/DRU]
		V	(310–360)	35.2	298		[1967HAC/MAT, 1991BAS/SVO]
		V	(282–399)	35.5	297	A, E	[1987STE/MAL, 1956MAN, 1970DYK]
C ₃ H ₆ Cl ₂	[78-87-5]	1,2-dichloropropane					
		FUS		6.4	172.7		[1991ACR, 1983WEA]
		V	(303–368)	36.3 ± 0.5	298		[2007VAR/DRU]
		V		36.2 ± 0.1	298	C	[2007VAR/DRU]
		V	(294–406)	38.4 ± 0.3	298	EB	[1997STE/CHI3]
		V	(300–370)	36.3	298		[1991BAS/SVO]
		V		36.1 ± 0.1	298	C	[1989AN/HU]
		V	(239–373)	39.4	254	A	[1987STE/MAL]
		V	(321–369)	34.7	336		[1949DRE/SHR, 1949DRE/MAR]
		V	(288–373)	34.3	303		[1933NEL/YOU]
C ₃ H ₆ Cl ₂	[142-28-9]	1,3-dichloropropane					
		V		41.0	298	GC	[1994CAR/LAY]
		V	(330–400)	41.0	298		[1987VAR/LOS, 1991BAS/SVO]
		V		40.6 ± 0.1	298	C	[1989AN/HU]
		V	(307–435)	39.0	322	A	[1987STE/MAL, 1970DYK]
C ₃ H ₆ Cl ₂	[594-20-7]	2,2-dichloropropane					
		TRS	(5–301)	0.01	171.6		
		TRS	(5–301)	6.08	188.2		
		FUS	(5–301)	2.39	239.6	AC	[1999KOB/OGU]
		TRS		5.98	188.0		
		FUS		2.34	239.3		[1996DOM/HEA, 1972VAN]
		V	(295–340)	32.1	298	A	[1987VAR/LOS, 1991BAS/SVO]
		V	(267–378)	33.2	282	A	[1987STE/MAL, 1970DYK]
C ₃ H ₆ Cl ₂ O	[616-23-9]	2,3-dichloro-1-propanol					
		V	(384–419)	48.5	399	A	[1987STE/MAL]
C ₃ H ₆ Cl ₂ O	[96-23-1]	1,3-dichloro-2-propanol					
		V	(301–448)	50.4	316	A	[1987STE/MAL, 1947STU]
C ₃ H ₆ F ₂	[430-61-5]	1,1-difluoropropane					
		V	(219–311)	27.2	234	A, E	[1987STE/MAL, 1956MAN, 1970DYK]
C ₃ H ₆ F ₂	[420-45-1]	2,2-difluoropropane					
		V	(211–302)	25.6	226	A	[1987STE/MAL, 1970DYK]
C ₃ H ₆ F ₂ O	[461-57-4]	1,1-difluoro-2-methoxyethane					
		V	(288–322)	31.8	303	I	[2002MUR/YAM]
C ₃ H ₆ F ₃ NS	[62067-13-4]	dimethyl(trifluoromethylthio)amine					
		V	(273–329)	31.1	288	A	[1987STE/MAL, 1999DYK/SVO]
		V	(223–295)	30.2	259		[1960EME/NAB]
C ₃ H ₆ F ₃ OP	[26348-84-5]	methyl(trifluoromethyl)phosphinous acid, methyl ester					
		V	(232–285)	33.9	258		[1970BUR/KAN]
C ₃ H ₆ F ₃ OP	[26348-91-4]	dimethyl(trifluoromethyl)phosphine oxide					
		SUB	(320–341)	75.4	330		[1970BUR/KAN]
		V	(347–360)	52.4	358		[1970BUR/KAN]
C ₃ H ₆ F ₃ O ₂ P	[684-56-0]	(trifluoromethyl)phosphonic acid, dimethyl ester					
		V	(237–318)	37.4	252	A	[1987STE/MAL, 1961BUR/GRI]
C ₃ H ₆ F ₃ PS	[26348-86-7]	methyl(trifluoromethyl)phosphinothious acid, methyl ester					
		V	(273–313)	38.4	293		[1970BUR/KAN]
C ₃ H ₆ F ₃ PS	[26348-92-5]	dimethyl(trifluoromethyl)phosphine sulfide					
		SUB	(300–320)	68.0	310		[1970BUR/KAN]
		V	(323–357)	47.2	340		[1970BUR/KAN]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References	
		Transition	Temp. range (K)				$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)
C ₃ H ₆ I ₂	[627-31-6]	V	1,3-diiodopropane	54.1	298	GC [1994CAR/LAY]	
C ₃ H ₆ N ₂ O	[120-93-4]		2-imadazolidinone	3.6	344.6	DSC [2008RIB/RIB] DSC [1999DEF/DEO, 1999DEF] DSC [1984WEI/LEF] ME [2008RIB/RIB] ME [2008RIB/RIB] V+ F [1999DEF/DEO, 1999DEF]	
				11.5	401.2		
				14.7	403		
				3.27	344		
				5.11	397.3		
				(327–349)	94.5 ± 0.8		338
				(327–349)	96.6 ± 0.8		298
					83.7 ± 1.9		298
C ₃ H ₆ N ₂ O ₂	[591-07-1]		acetylurea	102.4 ± 0.7	383	C [1988IMA/MUR] C [1988IMA/MUR] C [1985MUR/SAK]	
				103.1 ± 0.7	298		
				103.1 ± 0.7	298		
C ₃ H ₆ N ₂ O ₂	[108-13-4]		malonamide (propanediamide)	24.2	431.1	DSC [2014COR/GUI] DSC [2009CHE/PET] DSC [2006BAD/DEL] DSC [1996DOM/HEA, 1989SAK/IMA, 2014COR/GUI] C [1989IMA/TAK]	
				30.3	439.5		
				28.8	444.0		
				1.40	410.2		
				23.2	445.9		
				1.89	418.9		
				29.85	444.2		
				1.9	393		
				35.8	443		
				126.4 ± 0.5	298		
				C ₃ H ₆ N ₂ O ₄	[601-76-3]		V
(323–383)	62.5 ± 0.6	298					
(323–383)							
C ₃ H ₆ N ₂ O ₄	[595-49-3]		2,2-dinitropropane	1.87	259.7	DSC [1972ROG/ORT] [1958BIL/NOL] A [1987STE/MAL]	
				11.28	267.7		
				2.64	324.5		
				10.42	266.5		
				2.41	326.0		
				12.22	268		
				46.3	378		
				(363–553)			
C ₃ H ₆ N ₂ O ₅	[918-52-5]		2,2-dinitro-1-propanol	15.06	281.7	[1969ROS/HOL]	
				2.85	366.7		
C ₃ H ₆ N ₂ O ₆	[6423-43-4]	V	1,2-propanediol dinitrate (288–328)	63.8	303	A [1987STE/MAL, 1970DYK]	
C ₃ H ₆ N ₂ O ₆	[3457-90-7]	V	1,3-propanediol dinitrate (293–313)	74.3 ± 4.6	303	A, GS [1987STE/MAL, 1957KEM/GOL]	
C ₃ H ₆ N ₂ O ₆	[2736-80-3]	TRS	2,2-dinitro-1,3-propanediol	21.34	341.2	[1969ROS/HOL]	
[Note: Decomposes before melting.]							
C ₃ H ₆ N ₄	[5144-11-6]	FUS	1,5-dimethyltetrazole	14.7	349	[1990KOZ/SIM3] ME [1990KOZ/SIM]	
				(303–343)	86.2 ± 1.0		
C ₃ H ₆ N ₄	[4135-93-7]		2,5-dimethyltetrazole				

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References		
		Transition	Temp. range (K)				$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	
		FUS		13.5		[1990KOZ/SIM3]		
C ₃ H ₆ N ₄ O ₂	[5465-96-3]	FUS	4,5-dihydro- <i>N</i> -nitro-1 <i>H</i> -imidazol-2-amine	34.24	495.1	DSC [2011CAI/XIA]		
C ₃ H ₆ N ₄ O ₄	[5754-91-6]	FUS	1,3-dinitro-1,3-diazacyclopentane	25.08	410	[1996DOM/HEA, 1971HAL]		
		SUB		105.4 ± 0.8	298	C [2009MIR/KON]		
[Note: Authors of [2009MIR/KON] tabulate the experimental value as an enthalpy of vaporization; however, they report that the compound is crystalline and use the value to calculate the standard molar enthalpy of formation. Given the crystalline state and how the value was used, we have tabulated the value as an enthalpy of sublimation.]								
C ₃ H ₆ N ₆	[108-78-1]	SUB	2,4,6-triamino- <i>s</i> -triazine (melamine)	(417–614)	121.3 ± 4.2	515	GS [1960HIR/STE, 1970COX/PIL]	
		SUB		(417–447)	123.3	432	A [1987STE/MAL]	
C ₃ H ₆ N ₆ O ₃	[13980-04-6]	TRS	1,3,5-trinitroso-1,3,5-triazacyclohexane	17.78		367		
		FUS		3.77		376	DSC [1996DOM/HEA, 1971HAL]	
		SUB	(348–383)	99.5			TGA [2011FEL/RAM]	
		SUB	(343–447)	134.3 ± 0.7		298	ME [1978CUN/PAL]	
		SUB	(383–411)	112.1			ME [1974PEP/MAT]	
		SUB		112.1			[1953EDW, 1960JON]	
C ₃ H ₆ N ₆ O ₅	[5755-27-1]	FUS	1,3-dinitro-5-nitroso-1,3,5-triazacyclohexane	25.97		446	DTA [1987OYU/BRI]	
C ₃ H ₆ N ₆ O ₆	[121-82-4]	FUS (β)	hexahydro-1,3,5-trinitro-1,3,5-triazine	12.63		459.9	DSC [2013HUN/SUT]	
		FUS (α)		33.5		476.7	DSC [2010SHA/REN]	
		FUS (α)		32.98		478.5	[2003MCK/KRA]	
		FUS (α)		33.60		477.4	DSC [1997ZEM]	
		FUS (α)		33.43		478.3	DSC [1995YIN/LIU]	
		FUS (α)		37.66		478.2	[1996DOM/HEA, 1992MAK]	
		FUS (α)		30.7		477.4	DSC [1977KIS, 1997ZEM]	
		FUS (α)		35.65		478.5	DSC [1971HAL, 1997ZEM]	
		SUB	(443–473)	147		458	DTA [2014CUD/POD]	
		SUB		128.0 ± 1.3		298	C [2009MIR/KON]	
		SUB				134.3	298	[1978CUN/PAL]
		SUB	(325–360)	112.5 ± 0.8			ME [1974PEP/MAT]	
		SUB	(329–371)	130.1		350	[1969ROS/DIC]	
		V	(503–523)	84.4		513	A [1987STE/MAL]	
C ₃ H ₆ O	[107-18-6]	V	2-propen-1-ol	(311–355)	46.1	298	EB [2004LUB/MAL]	
		V		(323–373)	47.3	298	CGC [1995CHI/HOS]	
C ₃ H ₆ O	[503-30-0]	V	oxetane		29.8	298	C [1981HOS/SCO]	
C ₃ H ₆ O	[67-64-1]	TRS	acetone	(78–320)	0.04	126.2		
		FUS		(78–320)	5.77	179.0	AC [2006WAN/NAN]	
		FUS			5.72	176.6	[1996DOM/HEA, 1929KEL3]	
		FUS			5.69	177.6	[1928PAR/KEL]	
		FUS			4.77	178.5	[1925MAA/WAL]	
		V	(310–330)	31.7 ± 0.4			I [2010GER/PEL]	
		V	(298–318)	32.1		308	[2008SON/RAM]	
		V	(329–488)	29.9		344	A [1987STE/MAL]	

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(178–243)	32.9	228	A	[1987STE/MAL]
	V	(203–269)	33.8	254	A	[1987STE/MAL]
	V	(323–379)	30.6	338	A	[1987STE/MAL]
	V	(374–464)	29.5	389	A	[1987STE/MAL]
	V	(457–508)	29.7	472	A	[1987STE/MAL]
	V		26.1	373	C	[1986DMI/KAC]
	V		21.7	423	C	[1986DMI/KAC]
	V		15.3	473	C	[1986DMI/KAC]
	V		9.2	498	C	[1986DMI/KAC]
	V	(285–329)	31.9	300	EB	[1986BAL/GNA]
	V	(305–333)	31.8	319		[1984CAS/FRA3]
	V		30.5 ± 0.6	298	C	[1981GAT/STR]
	V	(259–351)	32.8	274	A	[1987STE/MAL, 1974AMB/SPR2, 1975AMB/ELL]
	V		31.3	298		[1975AMB/ELL]
	V	(261–328)	32.7	276	A, EB	[1987STE/MAL, 1972BOU/AIM]
	V	(278–293)	32.6	285		[1963SOK/ZHI]
	V		30.8 ± 0.1	300	C	[1957PEN/KOB]
	V		29.8 ± 0.1	318	C	[1957PEN/KOB]
	V		29.1 ± 0.1	329	C	[1957PEN/KOB]
	V		28.5 ± 0.1	338	C	[1957PEN/KOB]
	V		28.1 ± 0.1	345	C	[1957PEN/KOB]
	V	(310–329)	31.1	319		[1957BRO/SMI]
	V	(304–329)	31.3	316		[1952BAC/SIM]
	V	(204–339)	35	253	MG	[1926FEL/DUR]
	V	(204–339)	32.1	293	MG	[1926FEL/DUR]
	V	(204–339)	30.7	313	MG	[1926FEL/DUR]
C ₃ H ₆ O	[107-18-6]	allyl alcohol				
	V	(310–340)	44.6	325		[2002LUB/BAN]
	V	(301–375)	45.1	315		[1983MAR/SHV]
	V	(253–370)	46.7	268	A	[1987STE/MAL]
	V		NA			[1936EWE]
	V	(283–313)	44.8	298		[1935BAU/BUR]
C ₃ H ₆ O	[107-25-5]	methyl vinyl ether				
	V	(278–412)	23.4	293	A	[1987STE/MAL]
C ₃ H ₆ O	[503-30-0]	trimethylene oxide				
	FUS	(85–270)	6.27	173.2	C	[1985HAN]
C ₃ H ₆ O	[123-38-6]	propanal				
	FUS		8.59	171.3		[1996DOM/HEA, 1977KOR/VAS]
	V	(263–373)	31.5	278		[1977KIM/KIM]
	V	(286–321)	NA	301		[1974AMB/SPR]
	V		28.3	321		[1972COU/LEE]
	V		29.4	303		[1972COU/LEE]
	V		30.3	286		[1972COU/LEE]
	V		29.6	298		[1972COU/LEE]
	V	(290–322)	30.3	305	A	[1987STE/MAL, 1970DYK]
	V		29.7 ± 0.4	298	EB	[1967BUC/COX, 2003VER/KRA2]
	V		30.0	298	EB	[1962TJE2, 2003VER/KRA2]
	V	(250–330)	31.9	265	EB	[1987STE/MAL, 1951SMI/BON]
C ₃ H ₆ O	[75-56-9]	propylene oxide				
	FUS	(11–330)	6.53	161.3	AC	[1996DOM/HEA, 1964OET]
	V	(225–308)	31.6	240	A	[1987STE/MAL, 1970DYK]
	V	(292–345)	28.5	307		[1966BOT/ADL]
	V		27.9	298	C	[1962SIN/HIL]
	V	(249–308)	30.1	264		[1959MCD/SHR]
	V	(285–322)	28.2	303		[1937MOO/KAN]
	V	(243–306)	32.9	273		[1935KIR/POP]
C ₃ H ₆ O ₂	[646-06-0]	1,3-dioxolane				
	TRS		2.68	142.4		
	FUS		6.57	175.9		[1996DOM/HEA, 1969CLE/MEL2]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
		Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
		V	(305–347)	34.6	326		[1989WU/SAN]
		V	(280–323)	35.8	295	A	[1987STE/MAL]
		V	(321–357)	33.7	339		[1982CAS/FRA]
		V	(306–346)	33.7	326		[1980FRA/CAS]
		V	(280–355)	34.1	296		[1968CHE/TUR, 1984BOU/FRI]
		V		35.6 ± 0.4			[1959FLE/MOR]
C ₃ H ₆ O ₂	[109-94-4]	ethyl formate					
		V	(300–326)	31.4	313	EB	[1993FAR/WIC]
		V	(300–326)	32.1 ± 0.1	298	EB	[1993FAR/WIC, 2012SAM/NAZ]
		V	(327–498)	29.9	342	A	[1987STE/MAL]
		V		31.6 ± 0.1	304	C	[1976CIH/HYN]
		V		30.9 ± 0.1	313	C	[1976CIH/HYN]
		V		29.8 ± 0.1	328	C	[1976CIH/HYN]
		V		32.2	298	EB	[1974HIN/KLU]
		V	(213–336)	35.8	228	A	[1987STE/MAL, 1970DYK]
		V		30.1 ± 0.2	326	C	[1926MAT]
		V		31.5 ± 0.2	298	C	[1926MAT, 2012SAM/NAZ]
C ₃ H ₆ O ₂	[79-20-9]	methyl acetate					
	FUS	(13–290)	7.49	174.9	AC		[1992OKA/OGU]
	V	(296–353)	32.6	312			[1997MON/BUR]
	V	(260–351)	34.1	275	A		[1987STE/MAL]
	V		31.7 ± 0.7	298	C		[1981GAT/STR]
	V		32.3 ± 0.1	298	C		[1980SVO/UCH]
	V		29.5 ± 0.1	343	C		[1980SVO/UCH]
	V	(308–338)	31.8	323	DTA		[1980MEY/AWE]
	V		32.6 ± 0.1	298	C		[1979SUN/SVE2]
	V		32.2 ± 0.1	304	C		[1977SVO/VES]
	V		31.6 ± 0.1	313	C		[1977SVO/VES]
	V		30.5 ± 0.1	328	C		[1977SVO/VES]
	V		30.3 ± 0.1	331	C		[1977SVO/VES]
	V		32.5	295			[1976CON/COU]
	V		30.2	330			[1976CON/COU]
	V	(273–318)	34.5	296	BG		[1971HAL/BAL]
	V	(274–329)	33.4	289	A		[1987STE/MAL, 1965MER/POL, 1970DYK]
C ₃ H ₆ O ₂	[79-09-4]	propionic acid					
	FUS		11.25	252.5	DSC		[2010HEN/CAM]
	FUS	(15–353)	10.66	252.7	AC		[1996DOM/HEA, 1982MAR/AND]
	FUS		U7.24	253.4			[1909MAS/FAU]
	SUB	(225–238)	74.1 ± 1	233	TE		[1978CAL/CAL]
	SUB		73.2 ± 1	233	ME		[1978CAL/CAL]
	V	(303–378)	54.4	298	CGC		[2000VER]
	V	(353–393)	54.9	298	CGC		[1995CHI/HOS]
	V	(343–419)	47.0	358	A		[1987STE/MAL]
	V	(414–511)	60.6	429	A		[1987STE/MAL]
	V	(345–401)	46.4	360	A		[1987STE/MAL]
	V		56.0	303			[1983TAM/DRA]
	V (monomer)		31.1 ± 0.1	298	C		[1970KON/WAD]
	V		55 ± 2	298	C		[1970KON/WAD]
	V	(328–437)	48.3	343			[1981AMB/ELL]
(C ₃ H ₆ O ₂) ₂	[32574-16-6]	propionic acid dimer					
	SUB	(225–238)	81.3 ± 1	233	TE		[1978CAL/CAL]
	SUB		79.4 ± 1.0	233	ME		[1978CAL/CAL]
C ₃ H ₆ O ₂	[116-09-6]	hydroxyacetone					
	V	(296–356)	42 ± 3	326			[2010PET/REY]
C ₃ H ₆ O ₂ S	[107-96-0]	β-thiolactic acid					
	FUS		16.97	291.9			[1996DOM/HEA, 1935HUF/ELL]
C ₃ H ₆ O ₃	[625-45-6]	2-methoxyacetic acid					

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		V	(325–477)	54.5	340	A	[1987STE/MAL, 1947STU]
C ₃ H ₆ O ₃	[96-35-5]	FUS	methyl glycolate	11.4	272.8	DSC	[2000JAR/MAR]
		V	(326–381)	52.5 ± 6.3	298	EB	[1996STE/CHI2]
		V	(326–381)	50.2 ± 5.2	320	EB	[1996STE/CHI2]
		V	(326–381)	47.0 ± 4.2	360	EB	[1996STE/CHI2]
		V	(282–425)	47.4	297	A	[1987STE/MAL, 1947KET/VAN]
C ₃ H ₆ O ₃	[616-38-6]	TRS	dimethylcarbonate	Not reported	220.1		
		FUS		11.58	278.2	DSC	[2004DIN]
		V	(274–304)	38.0 ± 0.2	298	GS	[2008KOZ/EME]
		V	(326–411)	36.4	341		[2002ROD/CAN]
		V	(311–397)	37.7 ± 0.2	298	EB	[1997STE/CHI4, 1997STE/CHI2]
		V	(311–397)	36.4 ± 0.2	320	EB	[1997STE/CHI4, 1997STE/CHI2]
		V	(311–397)	33.8 ± 0.3	360	EB	[1997STE/CHI4, 1997STE/CHI2]
		V	(311–397)	30.9 ± 0.5	400	EB	[1997STE/CHI4, 1997STE/CHI2]
C ₃ H ₆ O ₃	[4212-43-5]	V	peroxypropionic acid (273–393)	43.2	288	A	[1987STE/MAL, 1951EGE/EMT, 1970DYK]
C ₃ H ₆ O ₃	[38787-96-1]	V	propylene ozonide (261–296)	36.9	281	A	[1987STE/MAL, 1956GAR/SCH]
C ₃ H ₆ O ₃	[110-88-3]	FUS	1,3,5-trioxane (7–346)	15.1	333.4	AC	[1996DOM/HEA, 1991ACR, 1988VAN/VAN]
		SUB	(212–231)	57.9	223	TE, ME	[1983DEW/VAN]
		SUB		55.6	298		[1983DEW/VAN]
		SUB		56.5	298	C	[1975BOG/BER]
		SUB		56.2 ± 0.2	298	C	[1969MAN/MOR, 1977PED/RYL]
		V	(329–386)	40.0	344	A	[1987STE/MAL, 1965SER/BYK]
C ₃ H ₆ O ₃	[50-21-5]	FUS	(<i>dl</i>)-lactic acid	11.34	289.9		[1996DOM/HEA, 1944YOS]
C ₃ H ₆ O ₃	[79-33-4]	V	L-(+)-lactic acid (<i>S</i> -lactic acid)	69.1 ± 1.0	298	GS	[2010EME/VER3]
C ₃ H ₆ S	[1072-43-1]	V	2-methylthiirane (272–423)	34.6	287	A	[1987STE/MAL, 1970DYK, 1999DYK/SVO]
C ₃ H ₆ S	[287-27-4]	TRS	thiacyclobutane (thietane)	0.67	176.7		
		FUS	(12–321)	8.24	199.9		[1996DOM/HEA, 1953SCO/FIN]
		V	(275–393)	36.5	290		[1999DYK/SVO]
		V		35.8	298		[1971WIL/ZWO]
		V	(321–404)	34.6	336	A, EB	[1987STE/MAL, 1953SCO/FIN, 1966OSB/DOU]
C ₃ H ₆ S ₃	[291-21-4]	FUS	1,3,5-trithiane	32.22	488.4	DSC	[2002VAN/VAN2]
		SUB		93.2 ± 0.2	298	ME	[2001ROU/JIM]
		SUB	(320–339)	91.5	331	TE, ME	[1983DEW/VAN]
		SUB		93.9	298		[1983DEW/VAN]
C ₃ H ₇ Br	[106-94-5]	V	1-bromopropane (301–344)	31.8	316	A, EB	[1987STE/MAL, 1977SVO/MAJ]
		V		31.1 ± 0.1	322	C	[1977SVO/MAJ]
		V		30.5 ± 0.1	332	C	[1977SVO/MAJ]
		V		30.1 ± 0.1	339	C	[1977SVO/MAJ]
		V		29.3 ± 0.1	352	C	[1977SVO/MAJ]
		V		31.9 ± 0.1	298	C	[1966WAD]
		V	(250–368)	34.1	265	A, E	[1987STE/MAL, 1961LI/ROS, 1970DYK]
		V	(220–344)	35.5	235		[1947STU]
		V	(273–303)	32.6	288		[1906REX, 1984BOU/FRI]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References		
		Transition	Temp. range (K)				$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	
C ₃ H ₇ Br	[75-26-3]	FUS	2-bromopropane	6.55	184.1		[1996DOM/HEA, 1950KUS/CRO]	
			V	(323–363)	30.6	298	CGC	[1995CHI/HOS]
			V	(236–328)	32.1	251	A	[1987STE/MAL]
			V	(299–332)	30.1	314	EB	[1987STE/MAL, 1977SVO/MAJ]
			V		29.8 ± 0.1	305	C	[1977SVO/MAJ]
			V		29.2 ± 0.1	318	C	[1977SVO/MAJ]
			V		28.5 ± 0.1	330	C	[1977SVO/MAJ]
			V		28.0 ± 0.1	338	C	[1977SVO/MAJ]
			V	(297–333)	30.4	315		[1974VAN/HOU]
			V		30.2 ± 0.1	298	C	[1966WAD]
C ₃ H ₇ Cl	[540-54-5]	V	1-chloropropane	29.0	298		[1984BOU/FRI, 1991BAS/SVO]	
			V	(250–320)	28.5 ± 0.2	298	C	[1977MAN/SEL]
			V	(248–320)	31.0	263	A	[1987STE/MAL, 1969KEM/KRE, 1970DYK]
			V	(205–319)	33.1	219		[1947STU]
			V					
C ₃ H ₇ Cl	[75-29-6]	FUS	2-chloropropane	7.39	155.8	DTA	[1994TAN/SAB3]	
			V	(239–310)	30.2	254	A	[1987STE/MAL]
			V	(271–312)	27.6	298		[1960DYK/PAU]
			V	(194–309)	30.6	209		[1947STU]
			V	(273–303)	27.3	288		[1906REX, 1984BOU/FRI]
			V					
C ₃ H ₇ ClO	[127-00-4]	V	1-chloro-2-propanol	45.0 ± 2.2	340	EB	[2002STE/CHI]	
			V	(308–399)	42.2 ± 1.9	380	EB	[2002STE/CHI]
			V					
C ₃ H ₇ ClO	[78-89-7]	V	2-chloro-1-propanol	45.0	331	A	[1987STE/MAL]	
			V	(316–399)				
C ₃ H ₇ ClO ₂	[96-24-2]	V	3-chloro-1,2-propanediol	66.6	358		[1996GIL/WIL]	
			V	(343–409)				
C ₃ H ₇ ClO ₂ S	[10147-36-1]	V	1-propanesulfonyl chloride	52.3	288		[1999DYK/SVO]	
			V	(273–362)	49.9	377		[1999DYK/SVO]
			V	(362–464)	60.1	258	A	[1987STE/MAL, 1999DYK/SVO, 1963QUI/NOW]
			V	(243–273)				
C ₃ H ₇ ClS	[542-81-4]	V	methyl(2-chloroethyl) sulfide	42.4	308	A, GS	[1987STE/MAL, 1948RED/CHA, 1970DYK]	
			V	(293–333)				
C ₃ H ₇ F	[460-13-9]	V	1-fluoropropane	24.0	274	A, E	[1987STE/MAL, 1961LI/ROS, 1970DYK]	
			V	(196–289)				
C ₃ H ₇ F	[420-26-8]	V	2-fluoropropane	23.7	249	A	[1987STE/MAL]	
			V	(190–264)				
C ₃ H ₇ I	[107-08-4]	V	1-iodopropane	37.8	256	A	[1987STE/MAL]	
			V	(171–271)	36.3 ± 0.1	298	C	[1968WAD]
			V	(271–402)	36.8	286	A, E	[1987STE/MAL, 1961LI/ROS, 1970DYK]
			V	(237–375)	37.0	252		[1947STU]
			V					
C ₃ H ₇ I	[75-30-9]	V	2-iodopropane	34.0	298	CGC	[1995CHI/HOS]	
			V	(313–353)	36.7	247	A	[1987STE/MAL]
			V	(173–262)	34.1 ± 0.1	298	C	[1968WAD]
			V	(230–363)	36.3	244		[1947STU]
			V					
C ₃ H ₇ N	[765-30-0]	FUS	cyclopropylamine	13.18	237.8	AC	[1991ACR, 1981FIN/MES]	
			V	(13–319)	31.3 ± 0.4	298	EB	[1971GOO/MOO]
			V					

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
		Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₃ D ₇ N	[153557-96-1]	perdeuterocyclopropylamine					
		V	(283–336)	32.0	298		[1993WOL/KIM]
C ₃ H ₇ N	[107-11-9]	allylamine					
		V	(273–303)	33.0	288	A	[1987STE/MAL]
C ₃ H ₇ N	[503-29-7]	azetidine					
		V	(273–303)	34.6	288	A	[1987STE/MAL, 1968CAB/CON]
C ₃ H ₇ NO	[127-06-0]	acetone oxime					
		SUB	(313–333)	59.6	323	I	[1987STE/MAL, 1975MES/BAE]
C ₃ H ₇ NO	[79-05-0]	propionamide					
		FUS		12.9	352.6	DSC	[2008ABA/BAD, 2000BRU/DEL]
C ₃ H ₇ NO	[68-12-2]	<i>N,N</i> -dimethylformamide					
		FUS		8.95	212.9	AC	[2007SMI/TSV]
		FUS		8.95	212.9		[1996DOM/HEA, 1978KAR/RAB]
		V	(463–513)	46.7 ± 0.5	298	CGC	[2009PAN/ANT]
		V	(346–425)	43.1	361		[2005MUN/MON]
		V	(377–426)	41.8	392		[1997BLA/BEL]
		V	(338–425)	43.6	353		[1995MAR/GAB]
		V	(301–426)	49.2	316	A	[1987STE/MAL]
		V		46.9	298	A	[1985BAR/CAS, 1985MAJ/SVO]
		V	(318–423)	42.5	370		[1979BLU/BAE]
C ₃ H ₇ NO	[627-45-2]	<i>N</i> -ethylformamide					
		V		58.4	298	A	[1985BAR/CAS, 1985MAJ/SVO]
C ₃ H ₇ NO	[79-16-3]	<i>N</i> -methylacetamide					
		FUS		10.11	303.7		[1999AHL/LOH]
		FUS		9.73	303.8	C	[1969KRE/WOO]
		FUS		8.37	303.8	C	[1964BON/JOR]
		SUB	(266–278)	70.8 ± 2.0	298	ME	[1996ROU/JIM2]
		SUB		69.9 ± 0.3	298	C	[1984STA/WAD]
		SUB	(288–303)	54.0			[1952AIH, 1960JON]
C ₃ H ₇ NO	[627-39-4]	propionaldehyde oxime					
		V	(313–339)	51.2	326	A	[1987STE/MAL]
		V	(363–414)	55.5	378		[1995SCH/PUS]
		V	(353–428)	62.0	368		[1993AUC/MON]
		V	(333–443)	59.6	348	A	[1987STE/MAL, 1975MAN/KOR, 2008MAC/SHI]
C ₃ H ₇ NO ₂	[51-79-6]	ethyl carbamate					
		FUS	(90–336)	16.79	321.4	AC	[1983DEW/DEK]
		FUS		20.9	321.7		[1976BER/BOU]
		FUS		15.23	321.9		[1991ACR, 1889EYK]
		SUB		77.7 ± 1.4	298	C	[2013SAN/RIB]

[Note: The value of 54.0 kJ/mole disagrees with the value of 70.8 kJ/mole given in [1996ROU/JIM2]. Given the disagreement and closeness of the value to other reported V values we believe that the value might be an enthalpy of vaporization, rather than enthalpy of sublimation.]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
		Transition	Temp. range (K)			
		SUB	(256–273)	77.7	265	TE, ME [1983DEW/VAN]
		SUB		76.3	298	[1983DEW/VAN]
		SUB		71.9	322	[1976BAR/BOU]
		SUB	(292–307)	89.1 ± 0.8	299	GS [1959DAV/JON]
		V	(323–373)	U25.8	338	[2004AHM/GIE]
		V	(338–457)	56.6	353	A [1987STE/MAL, 1947STU]
C ₃ H ₇ NO ₂	[541-42-4]	isopropyl nitrite				
		V	(253–268)	26.0	260	A [1987STE/MAL, 1937THO/DAI]
C ₃ H ₇ NO ₂	[108-03-2]	1-nitropropane				
		V	(313–353)	43.9	298	CGC [1995CHI/HOS]
		V	(293–405)	42.6	308	A, EB [1987STE/MAL, 1956TOO, 1970DYK]
		V	(331–404)	40.6	346	[1949DRE/SHR, 1949DRE/MAR]
		V	(283–403)	43.4 ± 0.4	298	ZG [1949HOL/DOR]
C ₃ H ₇ NO ₂	[79-46-9]	2-nitropropane				
		V	(313–353)	43.9	298	CGC [1995CHI/HOS]
		V	(284–394)	40.9	299	A, EB [1987STE/MAL, 1947STU, 1956TOO, 1970DYK]
		V	(283–383)	41.3 ± 0.4	298	ZG [1949HOL/DOR]
C ₃ H ₇ NO ₂	[543-67-9]	propyl nitrite				
		V	(253–268)	28.3	260	A [1987STE/MAL, 1937THO/DAI]
C ₃ H ₇ NO ₂	[56-41-7]	L-(<i>d</i>)-alanine				
		SUB		132.8 ± 1.0	414	TE, ME [1979DEK/VOO]
		SUB	(413–450)	132.4 ± 1.3	433	C [1977NGA/SAB]
		SUB		144.8 ± 4.2	298	C [1977NGA/SAB]
C ₃ H ₇ NO ₂	[338-69-2]	D-(<i>l</i>)-alanine				
		SUB	(407–426)	132.8	417	A [1987STE/MAL]
		SUB	(342–442)	U105 ± 8	392	LE [1977GAF/PIE]
		SUB	(453–469)	138.3 ± 8	461	ME [1965SVE/CLY, 1970COX/PIL, 1964CLY/SVE, 1989CHI/GRO]
C ₃ H ₇ NO ₂	[302-72-7]	DL-(α)-alanine				
		SUB	(397–419)	135.9 ± 2.7	408	ME [2010RIB/RIB2]
		SUB	(397–419)	138.0 ± 2.7	298	ME [2010RIB/RIB2]
C ₃ H ₇ NO ₂	[107-95-9]	β -alanine				
		SUB	(388–402)	136.2 ± 1.7	395	ME [2010RIB/RIB2]
		SUB	(388–402)	137.9 ± 1.7	298	ME [2010RIB/RIB2]
		SUB	(384–402)	133.1 ± 0.7	393	C [1983SKO/SAB]
		SUB		134 ± 2	298	C [1983SKO/SAB]
		SUB	(318–418)	U105 ± 4	368	LE [1977GAF/PIE]
C ₃ H ₇ NO ₂	[107-97-1]	sarcosine (<i>N</i> -methylglycine)				
		FUS		20.6	481.6	DSC [2011ROU/NOT2]
		SUB	(381–403)	128.0 ± 0.7	392	ME [2013AMA/SAN]
		SUB	(381–403)	129.2 ± 0.7	298	ME [2013AMA/SAN]
		SUB	(380–413)	146 ± 1	298	C [1978SAB/LAF]
C ₃ H ₇ NO ₂ S	[52-90-4]	L-cysteine				
		SUB	(410–436)	140.3 ± 1.4	423	ME [2010ROU/FOC]
		SUB	(410–436)	146.4 ± 1.4	298	ME [2010ROU/FOC]
		SUB	(337–437)	U96.2 ± 4.2	387	LE [1977GAF/PIE]
C ₃ H ₇ NO ₂ S	[3374-22-9]	(<i>dl</i>)-cysteine				
		TRS	(6–309)	2.3	300	AC [2010PAU/KOV]
		TRS		1.36	283	DTA [1979MAN/LAU]
C ₃ H ₇ NO ₃	[1712-64-7]	isopropyl nitrate				
		FUS	(14–300)	10.1	190.9	AC [1988LUS/RUB]
		V		35.3 ± 0.6		DSC [1999JON/FEN]
		V	(273–343)	39.7	288	A [1987STE/MAL, 1957GRA/PRA, 1970DYK]
C ₃ H ₇ NO ₃	[627-13-4]	propyl nitrate				

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		V	(273–343)	41.7	288	A	[1987STE/MAL, 1957GRA/PRA, 1970DYK]
C ₃ H ₇ NO ₃	[302-84-1]	(<i>dl</i>)-serine	(354–454)	U83.7 ± 4	404	LE	[1977GAF/PIE]
C ₃ H ₇ N ₃	[22293-25-0]	1-azidopropane	(253–298)	31.1	268	A	[1987STE/MAL, 1964GEI/KON, 1984BOU/FRI]
C ₃ H ₇ N ₃	[691-57-6]	2-azidopropane	(253–298)	33.2	268	A	[1987STE/MAL, 1964GEI/KON, 1984BOU/FRI]
C ₃ H ₇ P	[81637-99-2]	2-propenylphosphine	(210–273)	32.7	241		[1988SHA/DIE]
C ₃ H ₈	[74-98-6]	propane					
	FUS			3.51	85.5	AC	[2009PER/OCH]
	FUS			3.50	85.5		[1981PAV/BES]
	FUS			3.52	85.5		[1991ACR, 1983WEA, 1938KEM/EGA]
	SUB			28.5	86	B	[1963BON]
	V	(278–332)	18.8	293	A	[1987STE/MAL]	
	V	(165–248)	19.5	233	A	[1987STE/MAL]	
	V	(104–165)	22.1	150	A	[1987STE/MAL]	
	V	(231–281)	19.0	266	A	[1987STE/MAL]	
	V	(329–369)	19.2	344	A	[1987STE/MAL]	
	V	(312–367)	18.9	327		[1980MAJ/SVA]	
	V		18.77	256		[1971WIL/ZWO]	
	V	(166–231)	20.0	216		[1938REI]	
	V		18.8	231	C	[1938KEM/EGA]	
	V		18.7	231		[1926DAN/JEN, 1938KEM/EGA]	
C ₃ H ₈ N ₂	[51283-80-8]	dimethyl ammonium cyanide	(251–295)	49.0	280	A	[1987STE/MAL, 1973DIE/MAR]
C ₃ H ₈ N ₂ O	[625-52-5]	<i>N</i> -ethylurea					
	FUS			9.6	356.7	DSC	[2005HAS/TAJ]
	TRS			1.0	294.6		
	FUS			14.65	368.9	DSC	[1995FER/DEL]
	FUS			13.9		DSC	[1995STR/ARG]
	FUS			14.39	365.1		[1990KAB/MIR2]
	FUS			13.94	367.8	DSC	[1987DEL/FER]
	SUB	(323–364)	98.1 ± 1.1	344	ME	[2003ZAI/KAB]	
	SUB	(323–364)	97.8 ± 1.1	350	ME	[2003ZAI/KAB]	
	SUB		96.4 ± 1.1	350	C	[2003ZAI/KAB]	
	SUB		99.3 ± 0.8	298		[2003ZAI/KAB]	
	SUB	(333–365)	91.8 ± 1.2	354	TE	[1990PIA/FER, 1987FER/DEL2]	
	SUB		100.3 ± 0.7			[1986KRA/KOZZ]	
C ₃ H ₈ N ₂ O	[598-94-7]	1,1-dimethylurea					
	FUS			29.61	454	DSC	[1991ACR, 1987DEL/FER]
	FUS			22.97	455.2	DSC	[1972ZOR/HUR]
	SUB	(346–398)	93.5 ± 0.3	298	GS	[2006EME/KAB]	
	SUB	(323–372)	94.7 ± 1.4	348	ME	[2003ZAI/KAB]	
	SUB	(323–372)	94.7 ± 1.4	350	ME	[2003ZAI/KAB]	
	SUB		93.3 ± 0.5	350	C	[2003ZAI/KAB]	
	SUB		94.9 ± 0.4	298		[2003ZAI/KAB]	
	SUB	(326–369)	92.5 ± 1.3	357	TE	[1990PIA/FER, 1987FER/DEL2]	
	SUB		99.1 ± 0.4			[1986KRA/KOZZ]	
C ₃ H ₈ N ₂ O	[96-31-1]	1,3-dimethylurea	(303–403)	12.76	375.2	DSC	[2016ZHU/CHE2]
	TRS			0.32	161.3		
	TRS	(5–320)	0.08	301.2	AC	[1995KAB/KOZZ]	
	FUS			13.0	379.5		[1995KAB/KOZZ, 1990KAB/MIR2]
	FUS			13.62	379.5	DSC	[1987DEL/FER]
	FUS			12.43	379.9	DSC	[1972ZOR/HUR]
	FUS			13.0		CR	[1972ZOR/HUR]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
		Transition	Temp. range (K)			
		SUB	(313–357)	89.3 ± 0.4	298	GS [2006EME/KAB]
		SUB	(317–377)	87.6 ± 1.0	347	ME [2003ZAI/KAB]
		SUB	(317–377)	87.5 ± 1.0	350	ME [2003ZAI/KAB]
		SUB		86.6 ± 0.5	350	C [2003ZAI/KAB]
		SUB		88.3 ± 0.4	298	[2003ZAI/KAB]
		SUB	(316–373)	87.2 ± 0.6	353	TE [1990PIA/FER, 1987FER/DEL2]
C ₃ H ₈ N ₂ O ₂	[4114-31-2]	ethyl carbazate				
		FUS	(78–371)	20.0	318.9	AC [2001DI/SUN2]
C ₃ H ₈ N ₂ S	[534-13-4]	1,3-dimethylthiourea				
		FUS		13.71	337	DSC [2000DEL/JOZ]
		FUS		12.7	336.9	[1994FER/MAR]
		FUS		11.4	339	DSC [1993DEM/BUC]
		SUB		111.8 ± 3	298	B [2000DEL/JOZ]
		SUB		107.3 ± 4.0	298	B [1994TER/PIA]
		SUB		108 ± 3.0	361	B [1994FER/MAR]
		V	(342–375)	93 ± 4.0	359	ME, TE [1994TER/PIA]
C ₃ H ₈ N ₂ S	[625-53-6]	1-ethylthiourea				
		FUS		21.34	380.8	DSC [2000DEL/JOZ]
		SUB	(360–380)	116.1 ± 2.0	370	ME, TE [2007FER/BAD]
		SUB	(360–380)	118.8 ± 2.1	298	ME, TE [2007FER/BAD]
		SUB		118.8 ± 5	298	ME [2000DEL/JOZ]
C ₃ H ₈ N ₄ O ₂	[39197-62-1]	1-ethyl-2-nitroguanidine				
		V		70.5 ± 3.3		[2009AST/DYU]
C ₃ H ₈ N ₄ O ₄	[13232-00-3]	2,4-dinitro-2,4-diazapentane				
		FUS		16.81	327.1	DSC [2010FAR/RAJ]
		FUS		16.79	327.6	DSC [2003SPI/WAN]
		FUS		16.36	330.2	DSC [1997ZEM]
		SUB		102.5 ± 0.4	298	C [2009MIR/KON]
[Note: Authors of [2009MIR/KON] tabulate the experimental value as an enthalpy of vaporization; however, they report that the compound is crystalline and use the value to calculate the standard molar enthalpy of formation. Given the crystalline state and how the value was used, we have tabulated the value as an enthalpy of sublimation.]						
C ₃ H ₈ O	[540-67-0]	methyl ethyl ether				
		V	(281–433)	30.1	296	A [1987STE/MAL]
		V	(216–299)	37.0	231	A [1987STE/MAL, 1969KUD/REE]
		V	(281–438)	37.1	296	A [1987STE/MAL]
		V	(278–281)	NA		[1967SHA]
		V	(182–280)	26.3	265	[1947STU]
C ₃ H ₈ O	[71-23-8]	1-propanol				
		FUS	(10–350)	5.4	148.7	[2004VAN/VAN]
		FUS		5.37	148.8	[1968COU/LEE]
		V	(278–323)	47.4	298	[2012GIM/MAR]
		V	(335–370)	44.6	350	[2011SAP/UUS]
		V	(298–363)	45.7	298	[2004NAS/ZIM]
		V	(310–356)	47.8	298	EB [2004LUB/MAL]
		V		41.2	371	[2000WOR/VIN]
		V		35.2	423	[2000WOR/VIN]
		V		29.4	453	[2000WOR/VIN]
		V		21.0	498	[2000WOR/VIN]
		V		11.4	528	[2000WOR/VIN]
		V	(323–373)	49.2	298	CGC [1995CHI/HOS]
		V	(303–370)	47.0	318	[1995AUC/GON]
		V	(360–377)	42.9	375	[1990ORT/SUS]
		V	(200–228)	48.0	214	A [1987STE/MAL]
		V	(356–376)	43.5	366	A [1987STE/MAL]
		V	(369–407)	42.3	384	A [1987STE/MAL]
		V	(401–482)	40.1	416	A [1987STE/MAL]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
	V	(478–507)	36.5	492	A	[1987STE/MAL]
	V	(243–303)	46.3	298		[1983SCH/STR]
	V	(275–373)	49.3	290		[1973WIL/ZWO]
	V		46.4 ± 0.1	313	C	[1973SVO/VES]
	V		45.7 ± 0.1	323	C	[1973SVO/VES]
	V		44.9 ± 0.1	333	C	[1973SVO/VES]
	V		44.0 ± 0.1	343	C	[1973SVO/VES]
	V		43.2 ± 0.1	353	C	[1973SVO/VES]
	V		42.4 ± 0.1	363	C	[1973SVO/VES]
	V		47.49 ± 0.02	298	C	[1971POL/BEN]
	V		46.8 ± 0.1	308	C	[1971POL/BEN]
	V		46.2 ± 0.1	318	C	[1971POL/BEN]
	V		45.0 ± 0.1	328	C	[1971POL/BEN]
	V	(333–377)	44.7	348	EB	[1970AMB/SPR, 1987STE/MAL]
	V	(292–370)	46.9	307	DTA	[1969KEM/KRE]
	V	(288–348)	46.7	303		[1967VAN/SOC]
	V		47.3 ± 0.1	298	C	[1966WAD]
	V	(338–378)	44.3	353	EB	[1963BID/COL]
	V		46.6	298	C	[1963MCC/LAI]
	V	(405–537)	40.7	420		[1963AMB/TOW]
	V	(343–385)	44.1	358		[1961MAT/MCK]
	V		43.9 ± 0.1	343	C	[1961MAT/MCK]
	V		42.3 ± 0.1	360	C	[1961MAT/MCK]
	V		41.2 ± 0.1	370	C	[1961MAT/MCK]
	V		40.3 ± 0.1	378	C	[1961MAT/MCK]
	V		39.7 ± 0.1	384	C	[1961MAT/MCK]
	V	(321–367)	45.5			[1959ARO/KAS]
	V		43.2	354		[1957WIL/HAR]
C ₃ H ₈ O	[67-63-0]	2-propanol				
	FUS		5.41	185.2		[1996DOM/HEA, 1963AND/COU]
	FUS		5.37	184.7		[1929KEL3]
	FUS		5.30	184.6		[1925PAR/KEL, 1928PAR/KEL]
	V	(298–353)	44.0	298		[2004NAS/ZIM]
	V	(322–355)	43.2	337		[2002SEG/GAL]
	V		39.8	355		[2000WOR/VIN2]
	V		29.7	423		[2000WOR/VIN2]
	V		23.7	453		[2000WOR/VIN2]
	V		16.5	483		[2000WOR/VIN2]
	V		10.5	503		[2000WOR/VIN2]
	V		40.4			[1999FAT]
	V	(300–355)	44.8	315		[1995AUC/GON]
	V	(195–228)	50.3	213	A	[1987STE/MAL]
	V	(347–368)	42.0	355	A	[1987STE/MAL]
	V	(350–383)	41.3	365	A	[1987STE/MAL]
	V	(379–461)	39.2	394	A	[1987STE/MAL]
	V	(453–508)	35.3	468	A	[1987STE/MAL]
	V	(273–374)	45.7	288		[1973WIL/ZWO]
	V	(325–362)	43.1	340	A, EB	[1987STE/MAL, 1970AMB/SPR]
	V		45.34 ± 0.02	298	C	[1971POL/BEN]
	V		44.7 ± 0.1	308	C	[1971POL/BEN]
	V		43.9 ± 0.1	318	C	[1971POL/BEN]
	V		42.5 ± 0.1	328	C	[1971POL/BEN]
	V	(288–348)	45.5	303		[1967VAN/SOC]
	V		45.2 ± 0.1	298	C	[1966WAD]
	V		42.7 ± 0.1	330	C	[1964BER/LAR]
	V		41.0 ± 0.1	346	C	[1964BER/LAR]
	V		39.8 ± 0.1	355	C	[1964BER/LAR]
	V		38.9 ± 0.1	363	C	[1964BER/LAR]
	V	(329–363)	42.8	344	EB	[1963BID/COL]
	V		44.0	298	C	[1963MCC/LAI]
	V	(395–508)	39.1	410		[1963AMB/TOW]
	V		43.2	324	C	[1963HAL/COX]
	V		41.7	339	C	[1963HAL/COX]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
		Transition	Temp. range (K)			
		V		39.8	C	[1963HAL/COX]
		V	(354–420)	41.1		[1955FOZ/MOR]
		V	(273–363)	44.4		[1928PAR/BAR]
C ₃ H ₈ OS ₂	[59-52-9]		2,3-dimercaptopropanol			
		V	(353–413)	61.2		[1999DYK/SVO, 1987STE/MAL]
C ₃ H ₈ O ₂	[109-86-4]		2-methoxyethanol			
		V	(364–396)	46.3	EB	[2012RED/KUM]
		V	(346–397)	43.0		[2010MAR/LOR]
		V	(333–423)	42.8	A	[1987STE/MAL]
		V		45.2 ± 0.2	C	[1971KUS/WAD]
		V	(324–343)	43.7		[1968GAR/BOV]
		V	(329–396)	42.9		[1956PIC/FRI]
C ₃ H ₈ O ₂	[109-87-5]		dimethoxymethane			
	FUS			8.33		[1996DOM/HEA, 1964MCE/KIL]
		V	(273–357)	29.6		[2001ALB/HAH]
		V	(273–316)	31.2	A	[1987STE/MAL]
		V	(273–318)	29.8	A	[1987STE/MAL]
		V	(296–314)	30.3		[1976BRA/PES]
		V		28.9 ± 0.2	C	[1964MCE/KIL]
		V	(290–300)	30.0		[1964MCE/KIL]
		V	(273–308)	30.1		[1949NIC/LAF]
C ₃ H ₈ O ₂	[57-55-6]		1,2-propanediol (propylene glycol)			
		V	(378–461)	57.5		[2011MAT/KIM]
		V	(284–331)	67.5 ± 0.5	GS	[2009VER/KOZ]
		V	(284–331)	64.5 ± 0.2	GS	[2004VER2]
		V	(293–423)	76	EB	[2004CHY/FRA2]
		V	(366–396)	62.2	TGA	[2002TAT/DOL]
		V	(365–496)	60.0 ± 0.3	EB	[2002STE/CHI3]
		V	(365–496)	56.2 ± 0.2	EB	[2002STE/CHI3]
		V	(365–496)	52.0 ± 0.3	EB	[2002STE/CHI3]
		V	(365–496)	47.5 ± 0.6	EB	[2002STE/CHI3]
		V	(348–453)	63.6 ± 0.3	EB	[1991WIL/WIL, 2004VER2]
		V		U71.2 ± 0.1	C	[1990KNA/SAB3, 2004VER2]
		V	(373–408)	66.5	TGA	[1987ALN/ALS]
		V		U51.7	I	[1971SUN/EIS]
		V	(359–461)	64.7	EB	[1966THO/MEA, 2004VER2]
		V	(318–461)	58.6	A	[1987STE/MAL, 1947STU]
		V	(353–403)	58.2		[1935SCH/STA]
		V	(403–460)	56		[1935SCH/STA]
C ₃ H ₈ O ₂	[4254-14-2]		(R)-1,2-propanediol (propylene glycol)			
	FUS			8.4	DSC	[1995JAB/LET]
C ₃ H ₈ O ₂	[4254-15-3]		(S)-1,2-propanediol (propylene glycol)			
	FUS			8.4	DSC	[1995JAB/LET]
		V	(294–338)	69.2 ± 0.3	GS	[2009VER/KOZ]
C ₃ H ₈ O ₂	[504-63-2]		1,3-propanediol			
	FUS			13.47	DSC	[2015SOL/ROD]
	FUS			11.4	DSC	[1998JAB/LET]
	FUS			7.1	DTA	[1990KNA/SAB]
		V	(293–346)	70.5 ± 0.3	GS	[2015EME/VER]
		V	(313–462)	73.6 ± 0.9		[2012MOK/SAW]
		V	(314–460)	66.5	EB	[2008RIB/SAN4]
		V	(353–383)	U84.2	TGA	[2007BAR/COZ, 2015EME/VER]
		V	(293–342)	70.5 ± 0.2	GS	[2007VER]
		V		69.8 ± 1.1	CGC	[2006UMN/KWE]
		V	(480–716)	69.1 ± 0.2		[2002WIL/VON, 2007VER]
		V	(418–488)	70.1 ± 1.0		[1999MUN/LEE, 2015EME/VER]
		V	(413–458)	70.6 ± 0.5	EB	[1996OLS, 2007VER]

[Note: The author recalculated this earlier value in a later paper [2009VER/KOZ]. The recalculated value was reported to be 68.5 ± 0.5 kJ/mole.]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
		Transition	Temp. range (K)			
		V	(402–488)	70.1 ± 0.3	298	EB [1981MAR/SAC, 2007VER]
		V	(367–489)	71.4 ± 0.8	298	EB [1966THO/MEA, 2007VER, 2015VER/EME]
		V		72.4 ± 0.3	298	C [1988KNA/SAB, 1990KNA/SAB2]
		V	(332–448)	57.2	347	A [1987STE/MAL, 1947STU]
		V	(373–488)	65.2	298	EB [1937GAL/HIB, 2007VER]
		V	(383–433)	63.3	408	EB [1935SCH/STA]
		V	(383–433)	69.5 ± 1.6	298	EB [1935SCH/STA, 2015EME/VER]
		V	(433–488)	60.4	460	[1935SCH/STA]
		V	(433–488)	69.6 ± 1.8	298	[1935SCH/STA, 2015EME/VER]
C ₃ H ₈ O ₂ S	[594-43-4]	ethyl methyl sulfone				
	FUS			11.3	307.7	RC [1961BUS/IVI]
	SUB			77.8 ± 2.9		[UR/MAC, 1970COX/PIL]
C ₃ H ₈ O ₃	[56-81-5]	glycerol				
	TRS			0.61	229.1	
	FUS			14.7	289.7	DSC [2011SOU/NIS]
	FUS			18.28	291	[1991ACR, 1923GIB/GIA]
	V	(338–370)	85.5 ± 0.7	354	GS [2015VER/ZAI2]	
	V	(338–370)	90.7 ± 0.9	298	GS [2015VER/ZAI2]	
	V	(304–436)	81.3 ± 0.1	370	Static [2015VER/ZAI2]	
	V	(304–436)	90.5 ± 0.5	298	Static [2015VER/ZAI2]	
	V	(477–521)	75.8 ± 1.4	499	EB [2013VEN/BEN, 2015VER/ZAI2]	
	V	(477–521)	94.9	298	EB [2013VEN/BEN, 2015VER/ZAI2]	
	V	(352–463)	88.2 ± 0.9	298	Static [2012MOK/SAW]	
	V	(497–561)	69.3 ± 0.1	529	EB [2010SOU/SAT, 2015VER/ZAI2]	
	V	(497–561)	91.2 ± 1.7	298	EB [2010SOU/SAT, 2015VER/ZAI2]	
	V	(463–543)	72.9	503	TGA [2008YAN/SUP, 2015VER/ZAI2]	
	V	(463–543)	92.3 ± 2.5	298	TGA [2008YAN/SUP, 2015VER/ZAI2]	
	V		91.7 ± 0.9	298	C [1988BAS/NIL]	
	V	(469–563)	78.5	484	A [1987STE/MAL]	
	V	(291–341)	86.8	316	ME [1977CAM/SCH]	
	V		67.5	343	GC [1977NOV/NOV]	
	V		66.8	353	GC [1977NOV/NOV]	
	V		66.2	363	GC [1977NOV/NOV]	
	V		65.5	373	GC [1977NOV/NOV]	
	V		64.8	383	GC [1977NOV/NOV]	
	V	(278–323)	71.5	300	[1972MCF/SOM]	
	V	(439–563)	71.4 ± 0.3	501	EB [1972SOK/TSY, 2015VER/ZAI2]	
	V	(439–563)	90.5 ± 1.5	298	EB [1972SOK/TSY, 2015VER/ZAI2]	
	V	(293–343)	85.8	308	ME [1987STE/MAL, 1962ROS/HEI, 1970DYK]	
	V	(323–473)	82.8 ± 0.4	398	EB [1928STE, 2015VER/ZAI2]	
	V	(323–473)	91.5 ± 0.8	298	EB [1928STE, 2015VER/ZAI2]	
	V	(456–553)	86	471	EB [1886RIC]	
C ₃ H ₈ O ₃ S	[10315-59-0]	ethyl methyl sulfite				
	V			43.5 ± 1.7	298	BP [1969MAC/STE2]
C ₃ H ₈ S	[624-89-5]	ethyl methyl sulfide				
	FUS			9.76	167.2	[1996DOM/HEA, 1951SCO/FIN]
	V	(253–363)	33.7	268		[1999DYK/SVO]
	V		31.5	298		[1981SHI/SAI]
	V		32.3	287		[1960MAC/MAY]
	V	(296–373)	31.8	311	A, EB	[1987STE/MAL, 1951SCO/FIN]
	V		31.8	298		[1971WIL/ZWO, 1966OSB/DOU, 1954HUB/WAD]
	V		31.6	302		[1951SCO/FIN]
	V		30.7	320		[1951SCO/FIN]
	V		29.5	340		[1951SCO/FIN]
	V		30.3	338		[1935THO/LIN]
C ₃ H ₈ S	[107-03-9]	1-propanethiol				
	TRS	(12–320)	3.97	142.1		
	FUS	(12–320)	5.48	160	AC	[1996DOM/HEA, 1956PEN/SCO]
	V	(254–364)	33.7	269		[1999DYK/SVO]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
		Transition	Temp. range (K)			
		V		31.9		[1971WIL/ZWO]
		V	(297–375)	31.8	A, EB	[1987STE/MAL, 1956PEN/SCO, 1966OSB/DOU, 1954HUB/WAD]
		V		31.6 ± 0.1	C	[1956PEN/SCO]
		V		30.7 ± 0.1	C	[1956PEN/SCO]
		V		29.5 ± 0.1	C	[1956PEN/SCO]
		V	(284–340)	31.5		[1933TAY/LAY]
C ₃ H ₈ S	[75-33-2]		2-propanethiol			
		TRS		0.05		
		FUS		5.73		[1996DOM/HEA, 1954MCC/FIN2]
		V	(242–348)	31.9		[1999DYK/SVO]
		V		29.5		[1971WIL/ZWO]
		V	(283–358)	30.1	A, EB	[1987STE/MAL, 1954MCC/FIN2, 1966OSB/DOU, 1954HUB/WAD]
C ₃ H ₈ S ₂	[109-80-8]		1,3-propanedithiol			
		V	(338–446)	50.9		[1999DYK/SVO]
		V	(377–446)	41.6	A	[1987STE/MAL]
		V		49.7 ± 0.1		[1962MAN/SUN]
C ₃ H ₉ N	[75-31-0]		isopropylamine			
		FUS		7.33		[1991ACR, 1972FIN/MES]
		V		28.4		[1979MAJ/SVO2]
		V		27.2		[1979MAJ/SVO2]
		V	(277–334)	29.7	A, EB, IPM	[1987STE/MAL, 1968OSB/DOU, 1970DYK]
C ₃ H ₉ N	[107-10-8]		propylamine			
		FUS		10.97		[1991ACR, 1972FIN/MES]
		V		31.3		[1979MAJ/SVO2]
		V		30.1		[1979MAJ/SVO2]
		V		28.9		[1979MAJ/SVO2]
		V	(296–350)	31.3	A, EB, IPM	[1987STE/MAL, 1968OSB/DOU, 1970DYK]
C ₃ H ₉ N	[75-50-3]		trimethylamine			
		FUS		6.55		[1991ACR, 1983WEA, 1944AST/SAG]
		V	(333–403)	23.0		[1950DAY/FEL]
		V	(273–313)	24.1		[1945SWI/HOC]
		V	(193–276)	24.6	A	[1987STE/MAL, 1944AST/SAG]
		V		24.5	C	[1944AST/SAG]
		V		22.2		[1935WIB/SUT]
C ₃ H ₉ NO	[109-83-1]		2-(methylamino)ethanol			
		V	(275–320)	57.8 ± 0.2	GS	[2005KAP/SLO]
		V	(269–401)	57.9		[1998NOL/VAL, 2005KAP/SLO]
		V	(340–461)	54.7 ± 0.5	EB	[1997STE/CHI3]
		V	(340–461)	51.9 ± 0.4	EB	[1997STE/CHI3]
		V	(340–461)	50.2 ± 0.4	EB	[1997STE/CHI3]
		V	(340–461)	46.4 ± 0.5	EB	[1997STE/CHI3]
		V	(340–461)	57.0 ± 0.5	EB	[1997STE/CHI3]
		V	(351–410)	57.6	EB	[1987SMI/TER, 2005KAP/SLO]
		V	(298–308)	57.5		[1982TOU/OKA, 2005KAP/SLO]
C ₃ H ₉ NO	[78-96-6]		1-amino-2-propanol			
		V	(306–431)	51.6	A	[1987STE/MAL]
C ₃ H ₉ NO	[156-87-6]		3-amino-1-propanol			
		FUS		20.42	DSC	[2015SOL/ROD]
		FUS		16.9	DSC	[2003CAC/BAU]
C ₃ H ₉ NO	[5669-39-6]		<i>N</i> -methoxy dimethyl amine (trimethylhydroxylamine)			
		V	(194–297)	28	A	[1987STE/MAL, 1957BIS/PAR]
C ₃ H ₉ NO	[109-85-3]		2-methoxyethyl amine			
		V	(278–318)	38.8	A	[1987STE/MAL, 1978CAB/MOL]
		V	(278–318)	38.3 ± 0.1		[1978CAB/MOL]

TABLE 6. Phase change enthalpies of C₃ organic compounds—Continued

Molecular formula	CAS Reg. No.	Compound		T _m (K)	Method	References
		Transition	Temp. range (K)			
C ₃ H ₉ NO ₂ S	[177634-55-8]	SUB	trimethyl amine . sulfur dioxide complex (292–349)	60.6	307	A [1987STE/MAL, 1943BUR2]
C ₃ H ₉ O P	[676-96-0]	SUB	trimethyl amine . sulfur dioxide complex	50.2 ± 4.2		E [1982PIL/SKI, 1960CLA/FOW]
C ₃ H ₉ O ₃ P	[756-79-6]	V	methyolphosphonic acid, dimethyl ester (258–454)	54.9	273	GS [2009BUT/BUC]
		V	(258–454)	52.8	298	GS [2009BUT/BUC]
		V	(258–454)	51.8	313	GS [2009BUT/BUC]
		V	(258–454)	50.6	333	GS [2009BUT/BUC]
		V	(258–454)	49.5	353	GS [2009BUT/BUC]
		V	(336–408)	64.0	351	A [1987STE/MAL, 1955KOS]
C ₃ H ₉ O ₃ P	[121-45-9]	V	trimethyl phosphite (302–342)	42.5	317	EB [1990DUT/KAH]
		V	(422–494)	32.8	437	A [1987STE/MAL]
C ₃ H ₉ O ₄ P	[512-56-1]	V	trimethyl phosphate (408–438)	47.5	298	CGC [2007PAN/ANT2]
		V	(296–466)	48.8	311	A [1987STE/MAL, 1947STU]
		V	(346–469)	47.3	408	[1930EVA/DAV]
C ₃ H ₉ P	[594-09-2]	V	trimethyl phosphine (248–310)	28.9	263	A [1987STE/MAL]
		V		28.0 ± 2.1		[1957LON/SAC, 1962BER/MCK]
		V		29.0		[1955LON/SAC2]
		V		29.1		[1940ROS/SAN]
C ₃ H ₉ PS	[2404-55-9]	SUB	trimethylphospine sulfide (366–394)	70.3	380	[1966BUR]
C ₃ H ₁₀ N ₂	[109-76-2]	FUS	1,3-diaminopropane	22.36	262.19	DSC [2005DOM/MAR]
		TRS		10.53	260.6	
		FUS		12.19	262.4	DSC [2002DAL/DEL]
		V	(243–300)	50.3	298	Static [2014FUL/RUZ]
		V	(278–338)	49.5	308	GS [2011POZ/VER]
		V	(278–338)	50.1 ± 0.2	298	GS [2011POZ/VER]
		V		50.2 ± 0.1	298	C [1969WAD]
C ₃ H ₁₀ N ₂	[78-90-0]	TRS	(dl)-1,2-propanediamine (12–367)	0.07	222	
		FUS	(12–367)	18.42	236.5	AC [1996DOM/HEA, 1975MES/FIN]
		V	(274–306)	46.7 ± 0.3	298	GS [2015VER/EME2]
		V	(293–393)	42.2	308	A [1987STE/MAL]
		V	(242–293)	47.2	278	A, IPM [1987STE/MAL, 1975MES/FIN]
		V	(242–293)	43.9 ± 0.2	298	IPM [1975MES/FIN]
		V	(242–293)	46.1 ± 0.2	298	IPM [1975MES/FIN, 2015VER/EME2]
[Note: Error in data treatment noted in [1975MES/FIN].]	V		44.2 ± 0.2	298	IPM [1965DOU/OSB, 1970GOO/MOO]	
C ₃ H ₁₀ N ₂	[1741-01-1]	FUS	trimethylhydrazine (12–294)	9.49	201.2	[1996DOM/HEA, 1955AST/ZOL]
		V	(257–287)	34.6	272	[1955AST/ZOL]
		V		33.4 ± 0.1	292	C [1955AST/ZOL]
C ₃ N ₂ O	[1115-12-4]	V	carbonyl cyanide (250–291)	37.5	276	A [1987STE/MAL, 1948GLE/HAU]
C ₃ O ₂	[504-64-3]	V	carbon suboxide (161–249)	26.2	234	A [1987STE/MAL, 1965MCD/KIL]
		V	(242–277)	25.4	260	[1927EDW/WIL]
C ₃ S ₂	[627-34-9]	V	carbon subsulfide (287–383)	45.1	302	A [1987STE/MAL]

TABLE 7. Phase change enthalpies of C₄ organic compounds

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ BrClF ₉ N	[4905-97-9] V	1,1,2-trifluoro-2-chloro-2-bromo- <i>N,N</i> -bis(trifluoromethyl)ethylamine (329–364)	33.1	344	A	[1987STE/MAL, 1965HAS/TIP]
C ₄ BrCl ₂ F ₈ N	[4905-98-0] V	2-bromo-1,2-dichloro-1,2-difluoro- <i>N,N</i> -bis(trifluoromethyl)ethylamine (358–394)	36.5	376		[1965HAS/TIP]
C ₄ BrF ₆ N	[22130-38-7] V	2-bromo- <i>N,N</i> -bis(trifluoromethyl)ethynylamine (311–329)	30.4	320	A	[1987STE/MAL, 1969FRE/TIP]
C ₄ BrF ₈ N	[17725-57-4] V	<i>N,N</i> -bis(trifluoromethyl)-2,2-difluoro-1-bromovinylamine (293–320)	31.2	320	A	[1987STE/MAL, 1968HAS/TIP]
C ₄ BrF ₈ NO	[104550-50-7] V	4-bromo-3-(trifluoromethyl)perfluorooxazolidine	30.7			[1986OBR/LAM]
C ₄ BrF ₉ O ₃ S	[14609-27-9] V	2-bromo-3-fluorosulfatooctafluorobutane (313–372)	43.5	342		[1966EAR/HIL]
C ₄ BrF ₁₀ N	[2261-32-7] V	1,1,2,2-tetrafluoro-2-bromo- <i>N,N</i> -bis(trifluoromethyl)ethylamine (289–329)	30.4	304	A	[1987STE/MAL, 1965HAS/TIP]
C ₄ Br ₂ Cl ₂ F ₆	[375-42-8] V V	1,4-dibromo-2,3-dichloro-1,1,2,3,4,4-hexafluorobutane	47.7 ± 0.1 46.9 ± 0.1	308 315	C C	[1992SVO/KUB2] [1992SVO/KUB2]
C ₄ Br ₂ F ₉ N	[17725-58-5] V	1,2-dibromo-1,2,2-trifluoro- <i>N,N</i> -bis(trifluoromethyl)ethylamine (326–366)	34.3	341	A	[1987STE/MAL, 1968HAS/TIP]
C ₄ Br ₄ S	[3958-03-0] FUS	tetrabromothiophene	21.1	391.8	DSC	[2014YAN/WAN]
C ₄ ClF ₈ N	[14003-64-6] V	2-chloro-1,2-difluoro- <i>N,N</i> -bis(trifluoromethyl)vinylamine (273–312)	29.1	288	A	[1987STE/MAL, 1968HAS/TIP]
C ₄ ClF ₈ NO	[82135-35-1] V	4-chloro-3-(trifluoromethyl)perfluorooxazolidine	27.9			[1986OBR/LAM]
C ₄ ClF ₁₀ N	[54566-79-9] V	<i>N</i> -chloro-1,1,2,2,2-pentafluoro- <i>N</i> -(pentafluoroethyl)ethanamine	27.2	325		[1975PET/SHR2]
C ₄ ClF ₁₀ N	[53684-04-1] V	<i>N</i> -chloro-1,1,1,2,3,3,3-heptafluoro- <i>N</i> -(trifluoromethyl)-2-propanamine	28.9	325		[1975KIR/LAS]
C ₄ ClF ₁₂ NS	[62609-69-2] V	chlorodifluoro[1,1,1,2,3,3,3-heptafluoro-2-propanamino(2-)](trifluoromethyl) sulfur	37.7	402		[1977KIT/SHR2]
C ₄ ClF ₁₃ S	[42769-87-9] V	sulfur, chlorotetrafluoro(nonafluorobutyl)-	37.1			[1973ABE/SHR2]
C ₄ Cl ₂ F ₆	[20972-44-5] V	1,4-dichloro-hexafluoro-2-butene (279–330)	34.0	294	A	[1987STE/MAL]
C ₄ Cl ₂ F ₆	[2418-22-6] V	<i>cis</i> -2,3-dichloro-hexafluoro-2-butene (298–341)	32.5	313	A	[1987STE/MAL, 1958DIC/HIL]
C ₄ Cl ₂ F ₆	[2418-21-5] V	<i>trans</i> -2,3-dichloro-hexafluoro-2-butene (298–340)	32.2	313	A	[1987STE/MAL, 1958DIC/HIL]
C ₄ Cl ₂ F ₇ N	[89033-96-5] V	2,3,4,4-tetrafluoro-2,3-dichloro-(trifluoromethyl)azetidine (273–333)	32.6	288	A	[1987STE/MAL, 1965BAN/BAR]
C ₄ Cl ₂ F ₇ N	[4776-86-7] V	2,3-dichlorotetrafluoropropylidene(trifluoromethyl)amine (283–343)	27.0	313		[1965BAN/BAR]
C ₄ Cl ₃ F ₇	[335-44-4] V V V	2,3,3-trichloroheptafluorobutane (350–371) (350–371) (302–446)	33.3 35.6 36.4	360 298 317		[1959YEN/REE] [1959YEN/REE] [1987STE/MAL, 1956CAP/JAC]
C ₄ Cl ₄ F ₄	[357-19-7] V	1,2,3,4-tetrachlorotetrafluoro-1-butene (362–414)	39.4	377	A	[1987STE/MAL]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ Cl ₄ F ₆ O	[61136-57-0]	trichloromethyl 2-chloro-1,1,2,3,3,3-hexafluoropropyl ether				
	V	(325–403)	40.3	340	A	[1987STE/MAL]
	V		42.8 ± 0.7	298	EB	[1976AMM/BUL]
C ₄ Cl ₄ N ₂	[1780-40-1]	2,4,5,6-tetrachloropyrimidine				
	SUB		83.0 ± 1.0	298	C	[2007RIB/AMA]
C ₄ Cl ₆	[87-68-3]	perchloro-1,3-butadiene				
	V	(343–484)	58.6	358	A	[1987STE/MAL]
	V	(343–473)	60.4	358		[1971GEL/SIM, 1984BOU/FRI]
C ₄ Cl ₆ O ₃	[4124-31-6]	trichloroacetic anhydride				
	V	(329–496)	56.0	344	A	[1987STE/MAL, 1947STU]
C ₄ F ₂ N ₈ O ₄	[604739-72-2]	1,1'-difluoro-3,3'-dinitro-5,5'-bi-1 <i>H</i> -1,2,4-triazole				
	SUB		105.4 ± 3.3	298		[2003MIR/LEB]
C ₄ F ₆	[685-63-2]	hexafluoro-1,3-butadiene				
	V	(273–343)	25.9	288		[2002BOB/FED]
C ₄ F ₆ N ₂ S	[71148-78-2]	3,4-bis(trifluoromethyl)-1 <i>λ</i> 4-1,2,5-thiadiazole				
	FUS		11.5	284	DSC	[2000BRO/DU, 1989HAN]
	FUS		10.8	284	S-F	[2000BRO/DU]
	SUB	(253–283)	49.0 ± 1.5	268	PG	[2000BRO/DU]
	V		38.1 ± 0.5			[2000BRO/DU]
C ₄ F ₆ O ₃	[407-25-0]	trifluoroacetic anhydride				
	V	(271–312)	34.7	286	A	[1987STE/MAL, 1962KRE, 1971DYK]
C ₄ F ₇ NO	[4222-29-1]	4,4-difluoro-3-(difluoromethylene)-2-(trifluoromethyl)-1,2-oxazetidine				
	V	(238–283)	31.1	268	A, I	[1987STE/MAL, 1960GRI/HAZ]
C ₄ F ₇ NO	[4777-13-3]	3,6-dihydro-2,2,3,3,5,6,6-heptafluoro-2 <i>H</i> -1,4-oxazine				
	V	(249–293)	27.3	278	A	[1987STE/MAL, 1965BAN/BUR]
C ₄ F ₇ NO ₃ S	[26404-53-5]	fluorosulfuric ester 3,3,3-trifluoro-2-(trifluoromethyl)lactonitrile				
	V	(262–320)	31.2	277	A	[1987STE/MAL, 1970LUS]
C ₄ F ₈	[357-26-6]	perfluoro-1-butene				
	V	(203–279)	28.9	264	A, I	[1987STE/MAL, 1971DYK, 1953ATK/TRE]
	V	(250–293)	U14.4	265		[1984BOU/FRI]
	V	(203–279)	28.9	241	I	[1953ATK/TRE]
C ₄ F ₈	[115-25-3]	perfluorocyclobutane				
	FUS	(17–270)	2.77	233.0	AC	[1954FUR/MCC]
	V	(289–348)	23.5	304	A	[1987STE/MAL]
	V	(343–388)	23.2	358	A	[1987STE/MAL]
	V	(233–388)	25	248		[1967KLE/PET]
	V	(234–269)	25	254		[1962MAR, 1984BOU/FRI]
	V	(233–274)	24.9	259	A	[1987STE/MAL, 1954FUR/MCC]
SUB	(235–261)	24.8	248	I	[1953ATK/TRE]	
	SUB	(223–233)	30.3	228	I	[1953ATK/TRE]
C ₄ F ₈ N ₂ O ₂ S	[66918-60-3]	<i>N,N</i> -bis(trifluoroacetyl)sulfur difluorodiimide				
	V	(328–383)	43.5	355		[1978STA/MEW]
C ₄ F ₈ N ₂ O ₃	[382-38-7]	perfluoro-2-(tetrafluoro-2-nitroethyl)-1,2-oxazetidine				
	V	(273–343)	31.0	288	A	[1987STE/MAL, 1962BIR/BLO]
C ₄ F ₈ OS	[42060-62-8]	perfluorotetramethylene sulfoxide				
	V		37.1			[1973ABE/SHR]
C ₄ F ₈ O ₂ S	[42060-64-0]	perfluorotetramethylene sulfone				
	V		31.1			[1973ABE/SHR]
C ₄ F ₈ O ₄ S	[6069-35-8]	heptafluorobutyric acid and fluorosulfuric acid anhydride				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ F ₈ S	V	(268–352)	44.8	283	A	[1987STE/MAL, 1966DES/CAD]
	[706-76-3]	octafluorotetramethylene sulfide				
	TRS		10.88	146		
C ₄ F ₈ S ₂	FUS		2.09	266.7		[1961VAN]
	V		26.9			[1973ABE/SHR]
C ₄ F ₈ S ₂	[710-65-6]	perfluoro-1,4-dithiane				
	V		33.0			[1973ABE/SHR]
C ₄ F ₉ N	[453-22-5]	1,1,1-trifluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]methanamine				
	V		22.2	288		[1975KIR/LAS]
C ₄ F ₉ N	[13821-49-3]	perfluoro[<i>N,N</i> -dimethyl(vinylamine)]				
	V	(257–280)	27.5	268	A	[1987STE/MAL, 1968HAS/TIP]
C ₄ F ₉ N	[680-23-9]	perfluoro[<i>N</i> -methyl(propylidineamine)]				
	V	(245–280)	26.6	265	A	[1987STE/MAL, 1968HAS/TIP]
C ₄ F ₉ N	[378-00-7]	perfluoro[<i>N</i> -propyl(methylenamine)]				
	V	(250–291)	28.3	276	A	[1987STE/MAL, 1956BAR/HAS]
C ₄ F ₉ NO	[32822-51-8]	nonafluorobutyramide				
	V		29.7	306	HG	[1971DEM/SHR]
C ₄ F ₉ NO	[359-68-2]	2,2,4,4,5,5-hexafluoro-3-(trifluoromethyl)oxazolidine				
	V	(253–293)	27.4	278	A	[1987STE/MAL, 1965BAN/BUR]
	V		27.8			[1986OBR/LAM]
C ₄ F ₉ NO	[714-52-3]	perfluoro[2,4-bis(trifluoromethyl)-1,2-oxazetidine]				
	V	(266–289)	25.9	278	A	[1987STE/MAL, 1961BAR/HAS]
C ₄ F ₉ NOS	[31340-35-9]	1,1,1-trifluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]methanesulfonamide				
	V		36.4	361	I	[1972SWI/BAB]
C ₄ F ₉ NO ₂	[15496-02-3]	<i>O</i> -(trifluoroacetyl)- <i>N,N</i> -bis(trifluoromethyl)hydroxylamine				
	V	(234–296)	30.5	281	A	[1987STE/MAL, 1967BAB/SHR]
C ₄ F ₉ NO ₂ S	[34556-29-1]	<i>N</i> -(trifluoroacetyl)- <i>S,S</i> -bis(trifluoromethyl)sulfoximine				
	V		35.1	363	I	[1972SAU/SHR]
C ₄ F ₉ NO ₃	[55064-78-3]	2,2,2-trifluoro-1,1-bis(trifluoromethyl) nitrate				
	V		33.5			[1975WAL/DES]
C ₄ F ₉ NS	[31340-34-8]	1,1,1-trifluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]methanesulfenamide				
	V		31.4	324	I	[1972SWI/BAB]
C ₄ F ₁₀	[355-25-9]	perfluorobutane				
	V	(272–327)	24.2	287	A	[1987STE/MAL]
	V	(233–273)	24.2	258	A	[1987STE/MAL]
	V	(323–386)	23.1	338	A	[1987STE/MAL]
	V	(233–383)	21.0	293		[1958BRO/MEA]
	V	(233–383)	17.1	333		[1958BRO/MEA]
	V	(233–260)	25.8	247		[1952SIM/MAU, 1984BOU/FRI]
C ₄ F ₁₀ OS	[33622-18-3]	heptafluoropropyl trifluoromethyl sulfoxide				
	V		33.6			[1971SAU/SHR]
C ₄ F ₁₀ OS	[33622-19-4]	bis(pentafluoroethyl) sulfoxide				
	V		35.1			[1971SAU/SHR]
C ₄ F ₁₀ O ₃ S	[5762-52-7]	fluorosulfuric acid, perfluoro(1-methylpropyl) ester				
	V	(294–342)	33.8	309	A	[1987STE/MAL]
	V	(266–354)	32.2	343		[1966DEL/SHR]
C ₄ F ₁₀ O ₄ S	[55064-77-2]	fluoroperoxymonosulfuric acid, 2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethyl ester				
	V			37.6		[1975WAL/DES]
C ₄ F ₁₀ O ₆ S ₂	[2261-44-1]	1,1,1,2,3,4,4,4-octafluoro-2,3-bis(fluorosulfato)butane				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(316–393)	30.1	331	A	[1987STE/MAL, 1964RAT/SHR]
	V	(392–411)	27.1	401	A	[1987STE/MAL, 1964RAT/SHR]
C ₄ F ₁₀ S	[42060-60-6] V	octafluoroetramethylene sulfur difluoride	41.5			[1973ABE/SHR]
C ₄ F ₁₀ S	[33547-11-4] V	heptafluoropropyl trifluoromethyl sulfide	27.7			[1971SAU/SHR]
C ₄ F ₁₁ NOS	[62609-62-5] V	difluoro(1,1,1,3,3,3-hexafluoro-2-propaniminato)oxo(trifluoromethyl) sulfur	35.1	396	I	[1977KIT/SHR]
C ₄ F ₁₁ NS	[37826-43-0] V	fluoro(trifluoromethyl)[2,2,2,1-tetrafluoro-1-(trifluoromethyl)ethyl]imino sulfur	32.4	315	A, I	[1987STE/MAL, 1972SWI/SHR]
C ₄ F ₁₂ N ₂ O	[10405-32-0] V	perfluoro(2,3-dimethyl)-4-oxo-diazepentane	32	291	A	[1987STE/MAL, 1971DYK, 1966HAS/TIP]
C ₄ F ₁₂ N ₂ O	[6141-72-6] V	perfluoro(2,4-dimethyl)-3-oxo-diazepentane	30.1	303	A	[1987STE/MAL, 1971DYK, 1966HAS/TIP]
C ₄ F ₁₂ N ₂ S	[4101-59-1] V	difluoro bis[1,1,2,2,2-pentafluorothananaminato]sulfur	37.0			[1976STA/MEW]
C ₄ F ₁₂ OP ₂ S ₂	[35814-50-7] V	bis(trifluoromethyl)thiophosphinic anhydride	37.1	307		[1972PIN/CAV]
C ₄ F ₁₂ OS	[33564-25-9] V V	difluoro bis[1,1,2,2,2-pentafluorothananaminato]sulfur	33.8 28.6	299 299		[1999DYK/SVO] [1971SAU/SHR]
C ₄ F ₁₂ O ₂ S	[63465-11-2] V	bis(trifluoromethyl)bis(trifluoromethoxy) sulfur	29.3	288	A, I	[1987STE/MAL, 1977KIT/SHR3, 1978KIT/SHR]
C ₄ F ₁₂ O ₃ S	[66632-46-0] V	oxo bis(trifluoromethyl)bis(trifluoromethoxy) sulfur	33.4	288	A, I	[1987STE/MAL, 1978KIT/SHR]
C ₄ F ₁₂ P ₂ S	[1486-20-0] V	di[bis(trifluoromethyl)phosphino] sulfide	42.2	304	T	[1964CAV/EME]
C ₄ F ₁₂ P ₄	[393-02-2] SUB V	1,2,3,4-tetrakis(trifluoromethyl)tetraphosphetane	65.3 43.2	307 328	A A, SG	[1987STE/MAL, 1958MAH/BUR] [1987STE/MAL, 1958MAH/BUR]
C ₄ F ₁₂ S	[33622-15-0] V V	difluorobis(pentafluoroethyl) sulfur	34.0 32.2	299	A	[1987STE/MAL] [1971SAU/SHR]
C ₄ F ₁₂ S	[31206-31-2] V	difluoro(heptafluoropropyl) (trifluoromethyl) sulfur	32.8			[1971SAU/SHR]
C ₄ F ₁₃ NOS	[65844-09-9] V	trifluoro[1,1,1,2,3,3,3-heptafluoro-2-propanaminoato(2-)](trifluoromethanolato) sulfur	33.9	389	I	[1978KIT/SHR]
C ₄ F ₁₅ N ₂ O ₂ P	[36544-20-4] V	phosphorous bis[bis(trifluoromethyl)nitroxide] difluoride	37.6	336		[1973WAN/SHR]
C ₄ F ₁₆ S ₂	[4556-31-4] V	hexadecafluoro-octahydro-1,4-dithiane	40.5	365		[1999DYK/SVO, 1973ABE/SHR]
C ₄ N ₂	[1071-98-3] SUB V V	dicyanoacetylene	44.3 27.3 28.8	268 310	I A	[1957SAG, 1975GRO, 1987STE/MAL] [1987STE/MAL] [1957SAG]
C ₄ N ₆ O ₇	[152845-81-3] V	3,3'-dinitrofurazanyl ether	57.4	583	BG	[2016SIN/BUR]
C ₄ HBrF ₇ N	[25273-49-8]	1-bromo-2-fluoro- <i>N,N</i> -bis(trifluoromethyl)vinylamine				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(321–342)	29.8	331	A	[1987STE/MAL, 1969FRE/TIP2]
C ₄ HBrF ₉ N	[4908-99-0]	2-bromo-1,1,2-trifluoro- <i>N,N</i> -bis(trifluoromethyl)ethylamine				
	V	(308–342)	31.9	323	A	[1987STE/MAL, 1965HAS/TIP]
C ₄ HBrF ₉ N	[4908-99-0]	2-bromo-1,2,2-trifluoro- <i>N,N</i> -bis(trifluoromethyl)ethylamine				
	V	(301–332)	33.8	316	A	[1987STE/MAL, 1965HAS/TIP]
C ₄ HBr ₂ F ₆ N	[22298-34-6]	<i>trans</i> -1,2-dibromo- <i>N,N</i> -bis(trifluoromethyl)vinylamine				
	V	(355–382)	33.4	369	A	[1987STE/MAL, 1969FRE/TIP]
C ₄ HCl ₂ F ₅ O ₂	[375-07-5]	3,4-dichloro-2,2,3,4,4-pentafluorobutyric acid				
	V	(373–456)	54.8	388	A	[1987STE/MAL, 1957BAR/SEF]
C ₄ HCl ₃ N ₂	[3764-01-0]	2,4,6-trichloropyrimidine				
	V		55.6 ± 0.6	298	C	[2007RIB/AMA]
C ₄ HF ₅	[7096-51-7]	3,3,4,4,4-pentafluoro-1-butyne				
	V	(203–261)	23.6	246	A	[1987STE/MAL, 1952HAS/LEE]
C ₄ HF ₆ N	[13747-21-2]	<i>N,N</i> -bis(trifluoromethyl)ethynylamine				
	V	(229–271)	26.0	256	A	[1987STE/MAL, 1968FRE/TIP]
C ₄ HF ₆ N ₃	[709-62-6]	3,5-bis(trifluoromethyl)-1,2,4-triazole				
	SUB	(271–283)	75.6 ± 0.8	277	ME	[1994TIP/JIM]
	SUB	(271–283)	74.7 ± 0.8	298	ME	[1994TIP/JIM]
C ₄ HF ₇ O ₂	[375-22-4]	perfluorobutyric acid				
	V	(310–426)	50.1 ± 0.2	320	EB	[2002STE/CHI5]
	V	(310–426)	45.9 ± 0.2	360	EB	[2002STE/CHI5]
	V	(310–426)	41.0 ± 0.5	400	EB	[2002STE/CHI5]
	V	(329–493)	47.8	344	A	[1987STE/MAL]
	V	(353–393)	47.3	368	A	[1987STE/MAL]
C ₄ HF ₈ N	[14003-49-7]	<i>N,N</i> -bis(trifluoromethyl)-1,2-difluorovinylamine				
	V	(276–296)	28.8	286	A	[1987STE/MAL, 1968HAS/TIP]
C ₄ HF ₈ N	[13747-23-4]	<i>N,N</i> -bis(trifluoromethyl)-2,2-difluorovinylamine				
	V	(274–291)	27.7	282	A	[1987STE/MAL, 1968HAS/TIP]
C ₄ HF ₈ NO	[13580-54-6]	2,2,3,3,5,5,6,6-octafluoromorpholine				
	V	(273–323)	32.7	288	A	[1987STE/MAL, 1967BAN/HAS]
C ₄ HF ₈ NOS	[77589-47-0]	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-iminothiophene-1-oxide				
	V		28.0	397		[1981ABE/SHR]
C ₄ HF ₉ N ₂ OS	[62609-65-8]	1,1,1-trifluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]methanesulfonimidamide				
	V		37.2	388	I	[1977KIT/SHR]
C ₄ HF ₉ O ₂ S	[52225-50-0]	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester				
	V		39.3	362	HG	[1974MAJ/SHR]
C ₄ HF ₁₀ N	[54566-81-3]	1,1,1,2,3,3,3-heptafluoro- <i>N</i> -(pentafluoroethyl)ethanamine				
	V		26.4	306		[1975PET/SHR2]
C ₄ HF ₁₀ N	[53684-05-2]	1,1,1,2,3,3,3-heptafluoro- <i>N</i> -(trifluoromethyl)-2-propanamine				
	V		28.1	309		[1975KIR/LAS]
C ₄ HF ₁₀ NOS	[34556-24-6]	<i>S,S</i> -bis(pentafluoroethyl)sulfoximine				
	V		35.6	366	I	[1972SAU/SHR]
C ₄ H ₂	[460-12-8]	1,3-butadiyne				
	SUB	(190–232)	36.2	211	A	[1947STU]
	SUB	(188–234)	36.3			[1933TAN]
	V	(237–283)	26.1	268	A	[1987STE/MAL, 1971DYK]
	V	(191–282)	26.4	267		[1947STU]
	V	(188–234)	33.4	219		[1933TAN, 1984BOU/FRI]
	V	(195–273)	25.4	258		[1926STR, 1984BOU/FRI]
C ₄ H ₂ BrF ₆ N	[19451-87-7]	1-bromo- <i>N,N</i> -bis(trifluoromethyl)vinylamine				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(288–327)	32.8	303	A	[1987STE/MAL, 1968FRE/TIP]
C ₄ H ₂ BrF ₆ N	[19483-21-7]	<i>cis</i> -2-bromo- <i>N,N</i> -bis(trifluoromethyl)vinylamine				
	V	(314–346)	29.7	329	A	[1987STE/MAL, 1968FRE/TIP]
C ₄ H ₂ BrF ₆ N	[19483-20-6]	<i>trans</i> -2-bromo- <i>N,N</i> -bis(trifluoromethyl)vinylamine				
	V	(314–341)	30.0	327	A	[1987STE/MAL, 1968FRE/TIP]
C ₄ H ₂ BrF ₈ N	[6857-63-2]	2-bromo-1,2-difluoro- <i>N,N</i> -bis(trifluoromethyl)ethylamine				
	V	(323–348)	32.4	328	A	[1987STE/MAL, 1965HAS/TIP]
C ₄ H ₂ BrF ₈ N	[5003-73-6]	2-bromo-2,2-difluoro- <i>N,N</i> -bis(trifluoromethyl)ethylamine				
	V	(313–348)	33.6	328	A	[1987STE/MAL, 1965HAS/TIP]
C ₄ H ₂ Br ₂ S	[3141-26-2]	3,4-dibromothiophene				
	V	(333–374)	32.1	348	A, I	[1987STE/MAL, 1971EON/POM, 1999DYK/SVO]
C ₄ H ₂ Cl ₂ N ₂	[4774-14-5]	2,6-dichloropyrazine				
	SUB		69.9 ± 2.0	298	C	[2004MOR/MIR]
C ₄ H ₂ Cl ₂ N ₂	[3934-20-1]	2,4-dichloropyrimidine				
	SUB		76.5 ± 2.0	298	C	[2007RIB/AMA]
C ₄ H ₂ Cl ₂ O ₂	[627-63-4]	<i>trans</i> -fumaroyl chloride				
	V	(288–433)	45.6	303	A	[1987STE/MAL, 1947STU]
C ₄ H ₂ Cl ₂ S	[3172-52-9]	2,5-dichlorothiophene				
	FUS		12.0	231.4	DSC	[2011TAN/FUJ]
	FUS	(13–300)	11.87	232.7	AC	[2006FUJ/MAT]
	V	(323–425)	49.9	338		[1999DYK/SVO]
	V	(323–425)	36.2	338		[1999DYK/SVO]
	V	(323–425)	40.7	338		[1981DIT/SKO]
	V	(333–374)	33.7	348	A, I	[1987STE/MAL, 1971EON/POM, 1999DYK/SVO]
C ₄ H ₂ F ₄	[407-70-5]	1,1,4,4-tetrafluoro-1,3-butadiene				
	V	(239–271)	22.4	256	A	[1987STE/MAL]
C ₄ H ₂ F ₈	[662-35-1]	1,1,1,2,2,3,3,4-octafluorobutane				
	V	(260–278)	28.9	269	EB	[1997DEF/CAR]
C ₄ H ₂ F ₆ OS	[35709-12-7]	<i>S</i> -(1,2,2-trifluoroethyl) trifluorothioacetate				
	V	(282–322)	32.6	302		[1971WEE/GAR]
C ₄ H ₂ F ₆ O ₂	[407-38-5]	trifluoroacetic acid, 2,2,2-trifluoroethyl ester				
	V		31.8	330	HG	[1973MAJ/SHR]
C ₄ H ₂ F ₇ N	[25273-51-2]	<i>cis</i> -2-fluoro- <i>N,N</i> -bis(trifluoromethyl)vinylamine				
	V	(289–311)	29.1	300	A	[1987STE/MAL, 1969FRE/TIP2]
C ₄ H ₂ F ₇ N	[25211-47-6]	<i>trans</i> -2-fluoro- <i>N,N</i> -bis(trifluoromethyl)vinylamine				
	V	(273–295)	28.5	284	A	[1987STE/MAL, 1969FRE/TIP2]
C ₄ H ₂ F ₈	[662-35-1]	1,1,1,2,2,3,3,4-octafluorobutane				
	V	(260–278)	28.9	269	EB	[1997DEF/CAR]
C ₄ H ₂ F ₈ O	[26103-08-2]	2-difluoromethoxy-1,1,1,3,3,3-hexafluoropropane				
	V	(283–315)	31.1	298	I	[2002MUR/YAM]
C ₄ H ₂ F ₈ O ₂	[188690-78-0]	1,2-bis(difluoromethoxy)-1,1,2,2-tetrafluoroethane				
	FUS		11.8	195	DSC	[1999MAR/BAS]
	V	(253–331)	36.1 ± 0.2			[1999MAR/BAS]
C ₄ H ₂ F ₈ O ₃	[249932-25-0]	oxybis[(difluoromethoxy)difluoromethane]				
	FUS		3.1	153	DSC	[1999MAR/BAS]
	V	(253–341)	35.2 ± 0.2			[1999MAR/BAS]
C ₄ H ₂ N ₂	[764-42-1]	fumaronitrile				
	SUB	(250–269)	69.6	260	TE, ME	[1983DEW/VAN]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		68.6	298		[1983DEW/VAN]
	SUB	(245–281)	72 ± 0.8	263	ME	[1967BOY/GUH, 1970COX/PIL]
C ₄ H ₂ N ₂ O ₄ S	[5347-12-6]	2,4-dinitrothiophene				
	V	(388–523)	59.7	403	A	[1987STE/MAL, 1971DYK, 1999DYK/SVO, 1929BAB/JAC]
C ₄ H ₂ N ₂ O ₄ S	[59434-05-8]	2,5-dinitrothiophene				
	V	(388–523)	59.6	403		[1999DYK/SVO, 1929BAB/JAC]
C ₄ H ₂ N ₂ S	[1452-15-9]	4-cyanothiazole				
	SUB		73.9 ± 0.4	298	C	[1966MAN/SUN, 1970COX/PIL]
C ₄ H ₂ O ₃	[108-31-6]	maleic anhydride				
	FUS	(90–350)	13.55	325.7	AC	[1983DEW/DEK]
	FUS		8.8		DTA	[1978VIL, 1983DEW/DEK]
	FUS		12.26	325.7		[1996DOM/HEA, 1978MAR/CIO]
	FUS		13.65	326.0	AC	[1957MAS]
	FUS		12.93	325.0		[1952SPE/TAM]
	SUB	(308–326)	85.4	317		[1987STE/MAL]
	SUB		68.8	258	TE, ME	[1983DEW/VAN]
	SUB		70.0	298		[1978VIL/PER]
	SUB	(308–325)	71.5 ± 5.0			[1949WIN/KUL, 1970COX/PIL]
	V	(336–475)	49.1	351	A	[1987STE/MAL]
	V	(326–350)	54.8			[1949WIN/KUL]
	V	(317–475)	56.7	332		[1947STU]
	V	(345–433)	46.2	389		[1923WEI/DOW]
C ₄ H ₂ O ₄	[142-45-0]	butyndioic acid				
	SUB		NA			[1972LEB/KAT]
C ₄ H ₂ O ₄	[2892-51-5]	3,4-dihydroxy-3-cyclobutene-1,2-dione				
	SUB	(469–499)	152.5	486	ME, TE	[1983DEW/VAN]
	SUB	(469–499)	154.3	298	ME, TE	[1983DEW/VAN]
	SUB		83.7 ± 16.7	298	E	[1971SEL2, 1977PED/RYL]
C ₄ H ₃ BrF ₇ N	[25237-12-1]	2-bromo-2-fluoro- <i>N,N</i> -bis(trifluoromethyl)ethylamine				
	V	(329–355)	30.9	342	A	[1987STE/MAL, 1969FRE/TIP2]
C ₄ H ₃ BrN ₂ O ₂	[51-20-7]	5-bromouracil				
	SUB	(405–414)	148.1		ME	[2002SZT/KAM]
	SUB		151.4 ± 2.5	298	ME	[2002SZT/KAM, 2005ZIE/SZT]
	SUB		128.4		LE	[1974YAN/VER]
C ₄ H ₃ BrS	[1003-09-4]	2-bromothiophene				
	TRS		0.01	55.3		
	FUS		7.90	203.9	AC	[1996DOM/HEA, 1993FUJ/OGU2]
	V	(333–373)	27.9	348	A, I	[1987STE/MAL, 1971EON/POM, 1999DYK/SVO]
C ₄ H ₃ BrS	[872-31-1]	3-bromothiophene				
	V	(333–373)	28.9	348	A, I	[1987STE/MAL, 1971EON/POM, 1999DYK/SVO]
C ₄ H ₃ ClF ₆ O ₂ S	[57169-82-1]	chlorosulfurous acid, 2,2,2-trifluoro-1-methyl-1-(trifluoromethyl)ethyl ester				
	V		39.7			[1975DEM/KOV2]
C ₄ H ₃ ClN ₂	[14508-49-7]	2-chloropyrazine				
	V		45.1 ± 1.5	298	C	[2004MOR/MIR]
C ₄ H ₃ ClN ₂	[1722-12-9]	2-chloropyrimidine				
	SUB		70.1 ± 1.3	298	C	[2007RIB/AMA]
C ₄ H ₃ ClN ₂ O ₂	[1820-81-1]	5-chlorouracil				
	SUB	(402–412)	145.5 ± 3.3	407	ME	[2002SZT/KAM]
	SUB		148.3 ± 2.4	298	ME	[2002SZT/KAM, 2005ZIE/SZT]
C ₄ H ₃ ClN ₂ O ₂	[4270-27-3]	6-chlorouracil				
	SUB	(381–394)	134.3 ± 2.7	387	ME	[2002SZT/KAM]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₃ ClS	[96-43-5]	2-chlorothiophene				
	FUS	(13–300)	8.97	201.3	AC	[1993FUJ/OGU]
	V	(313–401)	34.7	328		[1999DYK/SVO]
	V	(320–401)	36.9	335		[1999DYK/SVO, 1981DIT/SKO]
	V	(333–374)	34.4	348	A, I	[1987STE/MAL, 1971EON/POM, 1999DYK/SVO]
C ₄ H ₃ ClS	[17249-80-8]	3-chlorothiophene				
	FUS	(13–300)	9.39	214.2	AC	[2004FUJ/TOD]
C ₄ H ₃ Cl ₃ OS		2,3,3-trichloro-2-propenethioic acid, O-methyl ester				
	V	(383–423)	64.8		GC	[1980PIT/KIS]
C ₄ H ₃ FN ₂ O ₂	[51-21-8]	5-fluorouracil				
	SUB	(411–433)	130.1 ± 1.2	422	ME	[2014AMA/SZT]
	SUB	(411–433)	132.5 ± 1.2	298	ME	[2014AMA/SZT]
	SUB	(394–405)	129.9 ± 1.5	399	ME	[2002SZT/KAM]
	SUB		133.2 ± 2.1	298	ME	[2002SZT/KAM, 2005ZIE/SZT]
	SUB	(421–483)	150 ± 2		TE	[2002BRU/POR]
C ₄ H ₃ F ₃ OS	[35709-11-6]	trifluoroacetic acid, S-(2,2-difluoroethyl) ester				
	V	(282–322)	39.3	297	A	[1987STE/MAL, 1999DYK/SVO, 1971WEE/GAR]
C ₄ H ₃ F ₅ O ₃	[2195-84-8]	α-(trifluoromethoxy)-α,α-difluoromethyl acetate				
	FUS		8.51	167.4		[1996DOM/HEA, 1984GOL/KOL]
C ₄ H ₃ F ₆ NO ₂	[22743-78-8]	N,N-bis(trifluoromethyl)acetamide-N-oxide				
	V	(268–336)	40.6	283	A	[1987STE/MAL, 1968NAS/BAB]
C ₄ H ₃ F ₆ O ₂ P	[2022-79-9]	bis(trifluoromethyl)acetoxyposphine				
	V	(273–313)	41	288		[1964PET/BUR, 1984BOU/FRI]
C ₄ H ₃ F ₇ O	[375-01-9]	2,2,3,3,4,4,4-heptafluoro-1-butanol				
	V	(273–298)	43.6	286	A, MM	[1987STE/MAL, 1971DYK, 1967MEE/GOL]
C ₄ H ₃ F ₇ O	[171182-95-9]	1-(2,2-difluoroethoxy)-1,1,2,2,2-pentafluoroethane				
	V	(288–318)	31.5	303	I	[2002MUR/YAM]
C ₄ H ₃ F ₇ O	[406-78-0]	1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)ethane				
	V	(283–329)	34	298	I	[2002MUR/YAM]
C ₄ H ₃ F ₇ O	[1683-81-4]	1,1,2,2-tetrafluoro-3-(trifluoromethoxy)propane				
	V	(288–319)	31.3	303	I	[2002MUR/YAM]
C ₄ H ₃ F ₇ O	[28523-86-6]	1,1,1,3,3,3-hexafluoro-2-fluoromethoxypropane				
	V	(288–331)	34.1	303	I	[2002MUR/YAM]
C ₄ H ₃ F ₇ O	[56860-81-2]	3-(difluoromethoxy)-1,1,1,2,2-pentafluoropropane				
	V	(283–319)	31.2	298	I	[2002MUR/YAM]
C ₄ H ₃ F ₇ O ₂ S	[57169-83-2]	fluorosulfurous acid, 2,2,2-trifluoro-1-methyl-1-(trifluoromethyl)ethyl ester				
	V		36.4			[1975DEM/KOV2]
C ₄ H ₃ IN ₂ O ₂	[696-07-1]	5-iodouracil				
	SUB	(403–414)	152.5 ± 2.9	409	ME	[2002SZT/KAM]
	SUB	(402–413)	153.5 ± 2.5	407	ME	[2002SZT/KAM]
C ₄ H ₃ IS	[3437-95-4]	2-iodothiophene				
	V	(333–374)	29.0	348	A, I	[1987STE/MAL, 1971EON/POM, 1999DYK/SVO]
C ₄ H ₃ NO ₂ S	[609-40-5]	2-nitrothiophene				
	V	(378–443)	48.6	393		[1999DYK/SVO]
	V	(321–498)	50.4	336	A	[1987STE/MAL]
C ₄ H ₃ NO ₃	[609-39-2]	2-nitrofuran				
	SUB		75.3 ± 2.1			[1980BAL/LEB, 1986PED/NAY]
C ₄ H ₃ N ₃ O ₄	[611-08-5]	5-nitrouracil				
	SUB	(431–453)	159.1 ± 2.1	442	ME	[2003ZIE/SZT]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(435–448)	157.6 ± 4.9	441	ME	[2003ZIE/SZT]
	SUB	(435–448)	161.4	298	ME	[2003ZIE/SZT]
C ₄ H ₄	[689-97-4] V	1-butene-3-yne (180–278)	26.0	236	A	[1987STE/MAL, 1947STU]
C ₄ H ₄ BrF ₆ N	[1683-83-6] V	2-bromo- <i>N,N</i> -bis(trifluoromethyl)ethylamine (323–356)	31.0	338	A	[1987STE/MAL, 1965HAS/TIP]
C ₄ H ₄ BrN ₃ O	[2240-25-7] SUB	5-bromocytosine (403–468)	148.4 ± 1.5	435		[1975STEP/YAN]
C ₄ H ₄ Cl ₂	[3574-40-1] V	1,2-dichloro-1,3-butadiene (260–308)	33.3	275	A	[1987STE/MAL]
C ₄ H ₄ Cl ₂	[1653-19-6] V	2,3-dichloro-1,3-butadiene (299–368)	33.8	314	A	[1987STE/MAL, 1968CIH/VOJ2]
C ₄ H ₄ Cl ₂ N ₂	[1192-53-6] FUS	4,5-dichloro-1-methylimidazole	17.0	330.1	DSC	[2012ALM/MON]
	SUB	(288–326)	80.7 ± 0.1	328	Static	[2012ALM/MON]
	SUB	(288–326)	81.4 ± 0.1	298	Static	[2012ALM/MON]
	V	(330–350)	63.5 ± 0.3	328	Static	[2012ALM/MON]
	V	(330–350)	66.3 ± 0.3	298	Static	[2012ALM/MON]
C ₄ H ₄ Cl ₂ O ₂	[543-20-4] V	succinyl chloride (312–466)	54.7	327	A	[1987STE/MAL, 1947STU]
C ₄ H ₄ Cl ₂ O ₃	[541-88-8] V	chloroacetic acid anhydride (340–490)	61.8	355	A	[1987STE/MAL, 1947STU]
C ₄ H ₄ Cl ₄ O ₂ S	[3737-41-5] SUB	3,3,4,4-tetrachlorotetrahydrothiophene-1,1-dioxide (303–348)	88.6	318	A	[1987STE/MAL, 1999DYK/SVO]
	[Note: The compound is a solid at this temperature.] SUB	(303–348)	88.7	325	ME	[1978DEP]
C ₄ H ₄ F ₃ NO ₃	[383-70-0] SUB	<i>N</i> -(trifluoroacetyl)aminoacetic acid (273–393)	98.8	288	A	[1987STE/MAL, 1960WEY/KLI]
C ₄ H ₄ F ₄ OS	[35709-10-5] V	trifluorothioacetic acid, <i>S</i> -(2-fluoroethyl) ester (282–322)	41.4	297	A	[1987STE/MAL, 1999DYK/SVO, 1971WEE/GAR]
C ₄ H ₄ F ₆ N ₂ S	[62067-10-1] V	2,2,2-trifluoro- <i>N</i> -methyl- <i>N'</i> -(trifluoromethyl)thio]ethanimidamide (339–387)	34.9	354	A, I	[1987STE/MAL, 1977BUR/SHR2, 1999DYK/SVO]
C ₄ H ₄ F ₆ O	[35042-99-0] V	3-difluoromethoxy-1,1,2,2-tetrafluoropropane (283–349)	35.9	298	I	[2002MUR/YAM]
C ₄ H ₄ F ₆ O	[13171-18-1] V	1,1,1,3,3,3-hexafluoro-2-methoxypropane (283–324)	32.6	298	I	[2002MUR/YAM]
C ₄ H ₄ F ₆ O	[25449-61-0] V	1,1,1-trifluoro-2-(1,1,2-trifluoroethoxy)ethane (283–338)	35.4	298	I	[2002MUR/YAM]
C ₄ H ₄ F ₆ O	[333-36-8] V	1,1,1-trifluoro-2-(2,2,2-trifluoroethoxy)ethane (283–337)	35.0	298	I	[2002MUR/YAM]
C ₄ H ₄ F ₆ O	[50807-77-7] V	1-(1,1-difluoroethoxy)-1,1,2,2-tetrafluoroethane (288–352)	38.1	303	I	[2002MUR/YAM]
C ₄ H ₄ F ₆ O	[382-34-3] V	1,1,1,2,3,3-hexafluoro-3-methoxypropane (288–327)	32.4	303	I	[2002MUR/YAM]
C ₄ H ₄ F ₆ O	[160620-20-2] V	1,1,2,2,3,3-hexafluoro-1-methoxypropane (288–341)	34.5	303	I	[2002MUR/YAM]
C ₄ H ₄ F ₆ O ₂ S	[52225-48-6] V	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1-methylethyl ester	36.8	375	HG	[1974MAJ/SHR]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₄ IN ₃ O	[1122-44-7] SUB	5-iodocytosine (4-amino-5-iodopyrimidinone) (413–463)	144 ± 1.5	438		[1975TEP/YAN]
C ₄ H ₄ N ₂	[290-37-9] TRS FUS TRS TRS FUS FUS SUB (I) SUB (II) SUB SUB V V V V V	pyrazine (5–380) (5–380) (5–380) (274–300) (303–314) (288–317) (342–373) (354–426) (354–426) (354–426) (332–373)	1.0 15.3 1.09 0.05 14.78 12.95 57.5 ± 0.4 56.4 ± 0.8 56.2 56.3 ± 0.5 40.5 ± 1.7 38.8 ± 0.1 36.5 ± 0.2 34.1 ± 0.4 37.9	304.0 326.5 300.5 309.8 325.4 328.2 298 298 303 298 340 380 420 352	DSC AC CGC EB EB EB	[2012VER/EME4] [2003CHI/KNJ] [1978BOU/LEC] [2012VER/EME4] [2012VER/EME4] [1995SAK/UEO] [1962TJE, 1970COX/PIL] [2009LIP/CHI2, 2009LIP/CHI] [2002STE/CHI3] [2002STE/CHI3] [2002STE/CHI3] [1995SAK/UEO]
C ₄ H ₄ N ₂	[289-95-2] TRS FUS SUB V V V V	pyrimidine (275–292) (293–328) (342–373)	2.6 13.0 58.3 ± 0.6 44.1 ± 0.4 41.0 ± 1.9 49.9 ± 0.6 49.8 ± 0.3	238.4 294.3 298 298 298 298 298	DSC GS GS CGC C C	[2012VER/EME4] [2012VER/EME4] [2012VER/EME4] [2009LIP/CHI2, 2009LIP/CHI] [1977NAB/SAB] [1962TJE]
C ₄ H ₄ N ₂	[289-80-5] V V V	pyridazine (283–343)	54.6 ± 0.2 53.1 ± 2.4 53.5 ± 0.4	298 298 298	GS CGC C	[2012VER/EME4] [2010LIP/PLI] [1962TJE]
C ₄ H ₄ N ₂	[110-61-2] FUS TRS FUS FUS TRS FUS SUB	succinonitrile (5–350) (279–298)	3.7 6.09 3.75 3.72 6.2 3.7 70.0 ± 0.3	329.7 233.6 330.3 331.2 233.3 331.2 289	DSC DSC DSC AC	[2009RAI/RED] [2007BAD/BLA] [2004STU/WIT] [1996DOM/HEA, 1963WUL/WES] [1960WOO/MUR, 1977PED/RYL, 1971RAP/WES, 1969STU/WES]
C ₄ H ₄ N ₂ O	[4562-27-0] SUB	4(3 <i>H</i>)-pyrimidinone 104.8 ± 0.8		298	ME	[2014GAL/ROC]
C ₄ H ₄ N ₂ OS	[141-90-2] SUB SUB SUB	2-thiouracil (421–443) (421–443)	131.8 ± 1.1 138.5 ± 1.1 129.3	432 298	ME ME LE	[2013RIB/AMA] [2013RIB/AMA] [1974YAN/VER]
C ₄ H ₄ N ₂ OS	[591-28-6] SUB	4-thiouracil 125.5			LE	[1974YAN/VER]
C ₄ H ₄ N ₂ O ₂	[2423-84-9] SUB	pyrazine 1,4-dioxide 116.9 ± 0.8		298	C	[1997ACR/POW]
C ₄ H ₄ N ₂ O ₂	[66-22-8] SUB SUB SUB SUB	uracil (424–493) (424–493) (315–435) (399–411)	131.9 ± 0.5 131.9 ± 0.7 125.3 ± 0.2 101.3	298 298 425	GS GS QR, ME ME	[2015EME/VER2] [2014ACH/EME] [2006DEB/MED] [2002SZT/KAM]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(394–494)	127.0 ± 2.0	439	TE	[2000BRU/PIA]
	SUB	(452–587)	130.6 ± 4.0	519	ME, TE	[1980BAR/BEN]
	SUB	(452–587)	131 ± 5	298	TE, GS	[1980BAR/BEN]
	SUB	(378–428)	120.5 ± 1.3	403	QR	[1980TEP/YAN]
	SUB		121.7	425	MS	[1979YAN/TEP]
	SUB	(500–545)	133.9 ± 8	523	HSA	[1978NOW/SZC]
	SUB		122.9	440	C	[1977NAB/SAB]
	SUB		125.9 ± 2.5	298	C	[1977NAB/SAB, 2015EME/VER2]
	SUB	(393–458)	120.5 ± 5.2	426	LE	[1975YAN/TEP, 1974YAN/VER]
	SUB		115.5 ± 2.1		ME	[1972ROM/SUK, 2000BRU/PIA]
	SUB		U 83.7			[1965CLA/PES]
C ₄ H ₄ N ₂ O ₂ S	[504-17-6]	thiobarbituric acid				
	TRS	(265–430)	0.7	458.9		
	TRS	(265–430)	0.2	483.8		
	TRS	(265–430)	0.3	503.1		
	FUS	(265–430)	14.8	516.4	DSC	[2012ROU/NOT]
[Note: Authors of [2012ROU/NOT] noted that an exothermic decomposition occurred immediately after fusion.]						
	SUB	(412–442)	118.3 ± 2.2	298	GS	[2012ROU/NOT2]
	SUB	(400–461)	110 ± 4.0	430	TE	[1999BRU/PIA]
C ₄ H ₄ N ₂ O ₃	[67-52-7]	barbituric acid				
	TRS		1.3	513.2		
	FUS		20.33	526.2	DSC	[2009ZEN/GST]
	TRS		1.3	516		
	FUS		20.87	526.4	DSC	[2008ROU/TEM2]
	SUB	(410–501)	115.1 ± 0.7	298	GS	[2008ROU/TEM2]
	SUB	(294–438)	111.3 ± 0.3		GS	[1999ZIE/PER]
	SUB	(392–493)	113 ± 4.0	442	TE	[1999BRU/PIA]
	SUB	(404–479)	123.3 ± 1.7	440	ME	[1990SOL/KAB]
C ₄ H ₄ N ₂ S ₂	[2001-93-6]	2,4-dithiouracil				
	SUB	(393–443)	119.7 ± 2.4	418		[1975TEP/YAN]
C ₄ H ₄ ClN ₃	[5469-69-2]	6-chloro-3-aminopyridazine				
	FUS		36.3	493.9	DSC	[2013WAN]
C ₄ H ₄ N ₄ O ₂	[5424-94-2]	<i>N</i> -nitro-bis(<i>N,N</i> -cyanomethyl) amine				
	FUS		38.66	367	DTA	[1987OYU/BRI]
C ₄ H ₄ N ₄ O ₇	[57449-43-1]	furazandimethanol dinitrate				
	V	(399–433)	58.7	414	A	[1987STE/MAL, 1975PEP/MAT]
C ₄ H ₄ N ₄ O ₈	[57449-44-2]	furazandimethanol dinitrate, 2-oxide				
	V	(413–453)	64.3	428	A	[1987STE/MAL, 1975PEP/MAT]
C ₄ H ₄ N ₆	[1123-54-2]	8-azaadenine				
	SUB	(418–463)	128.4 ± 1.3	440		[1975TEP/YAN]
C ₄ H ₄ N ₈ O ₁₃	[34882-73-0]	bis-(2,2,2-trinitroethyl)- <i>N</i> -nitrosoamine				
	SUB	(333–354)	97.9 ± 0.8	343	ME	[1973DEK/OON]
C ₄ H ₄ N ₈ O ₁₄	[19836-28-3]	bis-(2,2,2-trinitroethyl)- <i>N</i> -nitroamine				
	SUB	(340–356)	117.6 ± 0.8	348	ME	[1973DEK/OON]
C ₄ H ₄ O	[110-00-9]	furan				
	TRS	(11–299)	2.05	150.0		
	FUS	(11–299)	3.8	187.6		[1996DOM/HEA, 1952GUT/SCO]
	SUB		NA			[1953MIL/PAO]
	V	(238–356)	30.2	253	A	[1987STE/MAL]
	V	(277–323)	28.2	298		[1970MOI/ANT]
	V	(275–334)	28.6	290		[1952GUT/SCO, 1984BOU/FRI]
	V		28.5	279	C	[1952GUT/SCO]
	V		27.7	293	C	[1952GUT/SCO]
	V		27.1	305	C	[1952GUT/SCO]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₄ OS	[3354-32-3] V	2-(5 <i>H</i>)-thiophenone	56.0 ± 1.2	298	C	[2010RIB/SAN3]
C ₄ H ₄ O ₂	[674-82-8] V	diketene (297–388)	42.9	312	A	[1987STE/MAL]
	V		42.9 ± 0.1	298	C	[1968MAN/NAK]
C ₄ H ₄ O ₂	[33689-28-0] SUB	cyclobutane-1,2-dione (251–289)	69.1 ± 3.5	270	HSA	[UR/CHI]
	SUB	(295–335)	54.8	315		[1985CAO/BAC]
C ₄ H ₄ O ₂	[15506-53-3] SUB	cyclobutane-1,3-dione (274–322)	73.6 ± 3.7	298	HSA	[1978CHI/SHE]
C ₄ H ₄ O ₂	[497-23-4] V	2-(5 <i>H</i>)-furanone	55.6 ± 1.3	298	C	[2010RIB/SAN3]
C ₄ H ₄ O ₃	[108-30-5] SUB	succinic anhydride (298–320)	80.5 ± 1.6	309	ME	[1990MEN/PIL]
	SUB		80.7 ± 1.6	298	C	[1990MEN/PIL]
	SUB	(290–311)	82.2	302	ME, TE	[1983DEW/VAN]
	V	(401–534)	57.3	416	A	[1987STE/MAL]
C ₄ H ₄ O ₄	[110-16-7] FUS	<i>cis</i> -butenedioic acid (maleic acid)	26.9	411.9	DSC	[2010GUO/SAD]
	SUB	(348–389)	105.4 ± 1.7	368	ME	[1974ARS]
	SUB	(357–367)	110 ± 2.5			[1938WOL/WEG, 1960JON, 1970COX/PIL]
	SUB	(356–371)	109 ± 4.2			[1934WOL/TRI]
C ₄ H ₄ O ₄	[110-17-8] FUS	<i>trans</i> -butenedioic acid (fumaric acid)	11.8	494.1	DSC	[2012BRU/MAI]
	SUB	(371–391)	123.6 ± 2.0	381	TE, ME	[1977DEK/VAN]
	SUB		136 ± 6.3	365	QF	[1938WOL/WEG, 1935TRI, 1960JON]
	SUB	(358–371)	134 ± 4.2			[1934WOL/TRI]
C ₄ H ₄ O ₄	[4480-83-5] FUS	diglycolic anhydride	17.3	371.3	DSC	[2011EME/STE]
	SUB	(319–356)	90.5 ± 0.6	298	GS	[2011EME/STE]
	SUB	(282–303)	84.2 ± 1.1	294	ME, TE	[1983DEW/VAN]
	V	(372–383)	74.5 ± 1.0	298	GS	[2011EME/STE]
C ₄ H ₄ O ₄	[502-97-6] TRS	1,4-dioxane-2,5-dione (14–397)	1.81	312.1		
	FUS	(14–397)	14.8	356.2	AC	[1996DOM/HEA, 1988LEB/KUL]
	SUB	(326–352)	87.8 ± 1.6	298	GS	[2010EME/VER2]
	V	(376–513)	50.4	391	A	[1987STE/MAL, 1947STU]
C ₄ H ₄ O ₄	[3524-70-7] FUS	ethylene oxalate (1,4-dioxane-2,3-dione) (8–450)	13.4	415	AC, DSC	[1996DOM/HEA, 1982LEB/KUL]
C ₄ H ₄ O ₅	[328-42-7] FUS	2-ketosuccinic acid	50.38	437	DSC	[2010BOO/BAR]
C ₄ H ₄ S	[110-02-1] TRS	thiophene (13–300)	0.81	170.7		
	FUS	(13–300)	5.04	235.0	AC	[1996DOM/HEA, 1985FIG/SZW]
	TRS		0.64	171.6		
	FUS		5.09	235.0		[1949WAD/KNO]
	TRS		1.21	171.1		
	FUS		4.97	233.7		[1996DOM/HEA, 1934JAC/PAR]
	SUB	(195–228)	46.8	213	A	[1987STE/MAL, 1956MIL]
	SUB	(192–213)	49	203	MG	[1944MIL]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(275–365)	35.2	298		[2014KHE/MUT]
	V	(267–381)	35.8	282		[1999DYK/SVO]
	V	(333–373)	34.8	348	I	[1971EON/POM]
	V		34.6	298		[1971WIL/ZWO]
	V	(300–366)	34.1	315	EB	[1952WHI/BAR]
	V	(311–393)	33.7	326		[1949WAD/KNO]
	V		33.6 ± 0.1	319	C	[1949WAD/KNO]
	V		32.7 ± 0.1	336	C	[1949WAD/KNO]
	V		31.5 ± 0.1	357	C	[1949WAD/KNO]
	V	(344–363)	32.6	353		[1945FAW/RAS]
	V	(228–289)	35	270	MG	[1944MIL]
C ₄ H ₅ Cl	[126-99-8]	2-chloro-1,3-butadiene				
	V	(243–263)	29.6	253	A	[1987STE/MAL]
	V	(279–333)	29.6	294	A	[1987STE/MAL, 1971DYK]
	V	(293–333)	30.9	308		[1964GUB/FER, 1984BOU/FRI]
C ₄ H ₅ ClO	[920-46-7]	methacryloyl chloride				
	V	(313–372)	36.1	328	A	[1987STE/MAL]
C ₄ H ₅ ClO ₂	[6214-28-4]	Z-3-chloro-2-butenoic acid				
	FUS		20.71	366.8		[1996DOM/HEA, 1928SKA/SAX]
C ₄ H ₅ ClO ₂	[55831-56-6]	E-3-chloro-2-butenoic acid				
	FUS		13.81	333.7		[1996DOM/HEA, 1928SKA/SAX]
C ₄ H ₅ ClO ₃	[4755-77-5]	ethyl chloroglyoxylate				
	V	(268–408)	44.9	283		[1947STU]
C ₄ H ₅ Cl ₃ O ₂	[515-84-4]	ethyl trichloroacetate				
	V	(293–440)	49	308	A	[1987STE/MAL]
	V		51.0 ± 0.1	298	C	[1972LAY/WAD]
	V	(317–368)	47.5	332		[1959USA/DEM, 1984BOU/FRI]
C ₄ H ₅ Cl ₅	[2431-52-9]	1,2,2,3,4-pentachlorobutane				
	V	(368–498)	62.6	383	A	[1987STE/MAL, 1968CIH/VOJ]
C ₄ H ₅ F ₂ I	[692-26-2]	1,1-difluoro-4-iodo-1-butene				
	V	(318–342)	40.6	330	A	[1987STE/MAL]
C ₄ H ₅ F ₃ O	[406-90-6]	vinyl 2,2,2-trifluoroethyl ether				
	V	(293–317)	32.0	305	A	[1987STE/MAL, 1978ROD/HIL]
C ₄ H ₅ F ₃ OS	[383-64-2]	trifluorothioacetic acid, S-ethyl ester				
	V	(273–313)	42.0	288	A	[1987STE/MAL, 1971WEE/GAR]
C ₄ H ₅ F ₃ O ₂	[383-63-1]	trifluoroacetic acid, ethyl ester				
	V		34.6	335	Static	[2015HUA/JIA]
	V		34.7	335	HG	[1973MAJ/SHR]
C ₄ H ₅ F ₅	[406-58-6]	1,1,1,3,3-pentafluorobutane				
	V	(303–358)	29.2	318		[2002MAR/OLI]
C ₄ H ₅ F ₅ O	[378-16-5]	1,1,1,2,2-pentafluoro-3-methoxypropane				
	V	(283–321)	31.6	298	I	[2002MUR/YAM]
C ₄ H ₅ F ₅ O	[69948-24-9]	1-(difluoromethoxy)-1,1,2-trifluoroethane				
	V	(283–316)	31.7	298	I	[2002MUR/YAM]
C ₄ H ₅ F ₆ OP	[1692-49-5]	ethyl bis(trifluoromethyl)phosphinite				
	V	(248–328)	33.2	288		[1959EME/SMI]
C ₄ H ₅ N	[109-75-1]	3-butenenitrile				
	V	(293–417)	40.3	308	A	[1987STE/MAL]
	V		40.0	298		[1969KON/PRO]
	V	(254–392)	41.6	268		[1947STU]
C ₄ H ₅ N	[627-26-9]	(E)-2-butenenitrile				
	V		40.0	298		[1969KON/PRO]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₄ H ₅ N	[1190-76-7] V	(Z)-2-butenitrile	38.9	298		[1969KON/PRO]	
C ₄ H ₅ N	[1190-76-7] V	<i>cis</i> -crotonitrile (297–405)	37.1	312	A	[1987STE/MAL]	
	V		(244–381)	39.0		259	[1947STU]
C ₄ H ₅ N	[627-26-9] V	<i>trans</i> -crotonitrile (292–420)	39.7	307	A	[1987STE/MAL]	
	V		(254–395)	40.5		268	[1947STU]
C ₄ H ₅ N	[126-98-7] V	methacrylonitrile (273–373)	36.5	288	A	[1987STE/MAL]	
	V		(229–363)	35.4		243	[1947STU]
C ₄ H ₅ N	[5500-21-0] V	cyclopropylcyanide (310–391)	41.9 ± 0.1	298	C	[1982FUC/HAL]	
	V		39.4	325	BG	[1971HAL/BAL]	
	V		39.8 ± 0.4	298	BG	[1971HAL/BAL]	
C ₄ H ₅ N	[109-97-7] FUS	pyrrole (12–360)	7.91	249.7		[1996DOM/HEA, 1967SCO/BER]	
	SUB		NA		[1941MIL]		
	V		(285–329)	42.5	300		[1992KIM/SZY]
	V		(313–373)	41.9	328	I	[1971EON/POM]
	V		(338–440)	42.5	353	A, EB, IPM	[1987STE/MAL, 1968OSB/DOU, 1967SCO/BER]
	V			45.2	298		[1967SCO/BER]
	V			41.4	362	C	[1967SCO/BER]
	V			40.2	381	C	[1967SCO/BER]
	V			38.7	403	C	[1967SCO/BER]
	V		(333–373)	41.8	348		[1961ZIM/GEI] [1947STU]
C ₄ DH ₄ N	[10162-82-0] V	<i>N</i> -deuteropyrrole (285–329)	42.9	300		[1992KIM/SZY]	
C ₄ H ₅ NO	[30842-90-1] V	3-methylisoxazole	39.8 ± 0.2	298	C	[1978HAM/BEN]	
C ₄ H ₅ NO	[5765-44-6] V	5-methylisoxazole	39.7 ± 0.2	298	C	[1978HAM/BEN]	
C ₄ H ₅ NO ₂	[105-34-0] V	methyl cyanoacetate (292–322)	66.2 ± 0.9	298	GS	[1995VER/BEC]	
	V		(385–573)	54.9	400	A	[1987STE/MAL, 1971DYK]
C ₄ H ₅ NO ₂	[123-56-8] FUS	2,5-pyrrolidinedione (succinimide)	15.2	401.9	DSC	[2012WAN/HU]	
	FUS		17.0	400		[1996DOM/HEA, 1989STE/CHI2]	
	SUB		(317–340)	83.1 ± 1.5	329	ME	[1990MEN/PIL]
	SUB		(317–340)	83.6 ± 1.5	298	ME	[1990MEN/PIL]
	SUB			88.0		B	[1989STE/CHI2]
	V		(416–561)	66.9	431	A	[1987STE/MAL]
	V		(388–560)	73.5	403		[1947STU]
C ₄ H ₅ NS	[57-06-7] V	allyl isothiocyanate (277–323)	47.6		GC	[1997LIM/TUN]	
	V		(370–430)	56.8	385	A	[1987STE/MAL]
	V		(283–323)	42.1	298		[1935BAU/BUR, 1984BOU/FRI, 1999DYK/SVO]
C ₄ H ₅ NS	[3581-87-1] FUS	2-methylthiazole	12.16	248.6		[1968GOU/WES, 1969SOU/GOU]	
	V		(353–402)	39.4	368	A	[1987STE/MAL, 1999DYK/SVO]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₅ NS	V	(342–404)	40.0	357	A	[1987STE/MAL, 1969SOU/GOU]
	[693-95-8] FUS	4-methylthiazole	8.9	229.1		[1966MEY/MET]
C ₄ H ₅ NS	V	(346–408)	40.8	361	A, EB	[1987STE/MAL, 1975SOU/BAR]
	V		43.8 ± 0.2	298	C	[1966MAN/SUN]
C ₄ H ₅ NS	[3581-89-3] FUS	5-methylthiazole	7.65	232.8		[1966MEY/MET]
C ₄ H ₅ N ₃ O	[71-30-7] SUB	cytosine				
	SUB	(398–445)	155.3 ± 1.1	421	QCM	[2015EME/ZAI2]
	SUB	(398–445)	157.8 ± 1.8	298	QCM	[2015EME/ZAI2]
	SUB	(493–533)	153.7 ± 0.9	513	GS	[2015EME/ZAI2]
	SUB	(493–533)	158.1 ± 1.7	298	GS	[2015EME/ZAI2]
	SUB	(320–410)	167.7 ± 0.5	365	QR, ME	[2006DEB/MED]
	SUB	(505–525)	151.7 ± 0.7		GS	[1998ZIE/WSZ]
	SUB	(423–483)	147.2 ± 2.6	453	ME	[1984BUR/MOR]
	SUB		155.0 ± 3.0	298		[1984BUR/MOR]
	SUB		167 ± 10	298	TE	[1980FER/BEN]
	SUB	(450–470)	176 ± 10	298	C	[1980SAB]
	SUB		NA			[1977SAB/NAB]
SUB		150.6		ME	[1974YAN/VER, 1975YAN/TEP]	
C ₄ H ₅ N ₃ OS	[615-76-9] SUB	6-aza-2-thiothymine 427	120.1 ± 2.8	298	ME	[2016AMA/SZT]
C ₄ H ₅ N ₃ O ₂	[932-52-5] SUB	5-aminouracil (433–453)	135.6 ± 1.7	443	ME	[2003ZIE/SZT]
	SUB	(433–446)	135.3 ± 4.6	440	ME	[2003ZIE/SZT]
	SUB		138.1	298	ME	[2003ZIE/SZT]
	SUB		145.6		LE	[1974YAN/VER]
C ₄ H ₅ N ₃ O ₂	[873-83-6] SUB	6-aminouracil (479–493)	147.6 ± 4.0	486	ME	[2003ZIE/SZT]
	SUB	(479–491)	146.5 ± 4.5	485	ME	[2003ZIE/SZT]
	SUB		150.4	298	ME	[2003ZIE/SZT]
C ₄ H ₅ N ₃ O ₂	[932-53-6] SUB	6-azathymine 427	109.1 ± 2.3	298	C	[2016AMA/SZT]
	SUB	(358–403)	112.5 ± 2.3	380		[1974MAN3]
C ₄ H ₅ N ₃ S	[333-49-3] SUB	2-thiocytosine (408–458)	158 ± 1.6	433		[1975TEP/YAN]
C ₄ H ₅ N ₇ O ₁₂	[34880-53-0] SUB	2,2,2-trinitro- <i>N</i> -(2,2,2-trinitroethyl)ethanamine (338–349)	80.8 ± 0.4		ME, A	[1973DEK/OON, 1977PED/RYL, 1987STE/MAL]
C ₄ H ₆	[590-19-2] FUS	1,2-butadiene	6.95	136.9		[1996DOM/HEA, 1947AST/SZA]
	V	(243–291)	25.3	276	A	[1987STE/MAL]
	V	(204–243)	26.4	228	A	[1987STE/MAL]
	V		23.9	298		[1971WIL/ZWO]
	V	(184–291)	25.2	276		[1947STU]
	V		24.6 ± 0.1	273	C	[1947AST/SZA]
C ₄ H ₆	[106-99-0] FUS	1,3-butadiene	7.82	164.2	AC	[1947AST/FIN]
	FUS		7.98	164.2	AC	[1991ACR, 1945SCO/MEY]
	FUS		7.98	164.3		[1943WOO/HIG]
	V	(270–318)	23.0	285	A	[1987STE/MAL]
	V	(193–213)	25.7	203	A	[1987STE/MAL]
	V	(213–276)	23.6	261	A	[1987STE/MAL]
	V	(315–382)	22.4	330	A	[1987STE/MAL]
	V	(380–425)	22.9	395	A	[1987STE/MAL]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		21.1	298		[1971WIL/ZWO]
	V		23.5	247	C	[1945SCO/MEY]
	V		22.5	268	C	[1945SCO/MEY]
	V		21.0	295	C	[1945SCO/MEY]
	V	(193–313)	26.3	253		[1943WOO/HIG]
	V	(198–271)	23.7	256		[1984BOU/FRI, 1933HEI2]
	V	(191–249)	24.7	235		[1932VAU, 1984BOU/FRI]
C ₄ H ₆	[107-00-6]	1-butyne				
	FUS		6.03	147.4		[1996DOM/HEA, 1950AST/MAS]
	V	(205–289)	26.0	274	A	[1987STE/MAL]
	V		23.7	298		[1971WIL/ZWO]
	V		25.8 ± 0.1	263	C	[1950AST/MAS]
	V		24.5 ± 0.1	281	C	[1950AST/MAS]
C ₄ H ₆	[503-17-3]	2-butyne				
	FUS		9.23	240.9		[1991ACR, 1983WEA, 1941YOS/OSB]
	SUB	(200–239)	37.4	220	A	[1947STU]
	V	(240–308)	29.0	255	A	[1987STE/MAL]
	V		26.7	298		[1971WIL/ZWO]
	V		26.9 ± 0.1	291	C	[1941YOS/OSB]
C ₄ H ₆	[822-35-5]	cyclobutene				
	V	(206–275)	24.7	260	A	[1987STE/MAL]
	V	(196–275)	24.6	260		[1941HEI, 1984BOU/FRI]
C ₄ H ₆ ClFO ₂	[1537-62-8]	2-chloroethyl fluoroacetate				
	V	(273–333)	56.4	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1971DYK]
C ₄ H ₆ ClF ₃ O	[310-71-4]	2-chloro-1,1,2-trifluoroethyl ethyl ether				
	V		37.5 ± 0.1	298	C	[1984UCH/MAJ]
	V		36.5 ± 0.1	313	C	[1984UCH/MAJ]
	V		35.3 ± 0.1	328	C	[1984UCH/MAJ]
	V		34.2 ± 0.1	343	C	[1984UCH/MAJ]
	V		32.9 ± 0.1	358	C	[1984UCH/MAJ]
C ₄ H ₆ Cl ₂	[760-23-6]	3,4-dichloro-1-butene				
	V	(320–396)	38.0	335	A	[1987STE/MAL]
C ₄ H ₆ Cl ₂	[7415-31-8]	<i>trans</i> -1,3-dichloro-2-butene				
	V	(306–401)	39.3	321	A	[1987STE/MAL, 1969CIH/VOJ]
C ₄ H ₆ Cl ₂	[110-57-6]	<i>trans</i> -1,4-dichloro-2-butene				
	V	(340–379)	45.6	355	A	[1987STE/MAL]
C ₄ H ₆ Cl ₂ O ₂	[3848-12-2]	2-chloroethyl chloroacetate				
	V	(319–478)	53.3	334	A	[1987STE/MAL, 1947STU]
C ₄ H ₆ Cl ₂ O ₂	[535-15-9]	ethyl dichloroacetate				
	V		50.6 ± 0.1	298	C	[1972LAY/WAD]
	V	(283–430)	46.2	298	A	[1987STE/MAL, 1947STU]
C ₄ H ₆ Cl ₄	[13138-51-7]	1,2,3,3-tetrachlorobutane				
	V	(349–464)	54.2	364	A	[1987STE/MAL, 1968CIH/VOJ]
C ₄ H ₆ FN	[407-83-0]	4-fluorobutyronitrile				
	V	(273–333)	45.2	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1971DYK]
C ₄ H ₆ F ₂ O ₂	[459-99-4]	2-fluoroethyl fluoroacetate				
	V	(273–333)	55.1	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1971DYK]
C ₄ H ₆ F ₃ I	[540-87-4]	1,1,1-trifluoro-3-iodobutane				
	V	(304–321)	32.4	312	A	[1987STE/MAL, 1970HAS/KEE]
C ₄ H ₆ F ₃ I	[26653-47-4]	1,1,1-trifluoro-3-iodo-2-methylpropane				
	V	(298–368)	30.4	313	A	[1987STE/MAL, 1970HAS/KEE]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₆ F ₃ NO ₃	[72316-38-2] V	carbamic acid, methoxy(trifluoromethyl)-, methyl ester 39				[1979SEK/DES]
C ₄ H ₆ F ₄ O	[512-51-6] V	1-ethoxy-1,1,2,2-tetrafluoroethane (283–330)	33	298	I	[2002MUR/YAM]
C ₄ H ₆ F ₄ O	[60598-17-6] V	1,1,2,2-tetrafluoro-3-methoxypropane (293–347)	35.2	308	I	[2002MUR/YAM]
C ₄ H ₆ F ₄ O ₂	[73287-23-7] FUS V	1,2-dimethoxytetrafluoroethane (270–356)	10.75 33.7	252	DSC	[2005MAR/AVA] [2005MAR/AVA]
C ₄ H ₆ F ₆ N ₂ O	[30295-33-1] V	1,1-dimethyl-2,2-bis(trifluoromethyl)hydrazine-2-oxide (287–356)	36.4	302	A	[1987STE/MAL, 1970ELN/EME]
C ₄ H ₆ F ₆ P ₂ S	[26348-88-9] V	methyl(trifluoromethyl)phosphinothious acid, anhydrosulfide (316–342)	46.7	329		[1970BUR/KAN]
C ₄ H ₆ N ₂	[616-47-7] FUS FUS SUB SUB V V V V V V V	1-methylimidazole (256–265) (256–265) (257–305) (257–305)	12.3 12.11 67.5 ± 0.5 66.9 ± 0.5 53.8 ± 0.2 52.0 ± 0.2 55.6 ± 0.6 55.2 ± 0.5 54.6 ± 1.9 47.2 ± 0.1 64.7 ± 1.3 54.5 ± 0.5	268.6 272.2 269 298 269 298 298 298 298 298 298 298	DSC DSC Static Static Static Static C GS CGC C C C	[2012ALM/MON] [2011VER/ZAI] [2012ALM/MON] [2012ALM/MON] [2012ALM/MON] [2012ALM/MON] [2011VER/ZAI] [2011VER/ZAI] [2010LIP/PLI] [2002KOS/MIR, 2011VER/ZAI] [1999MO/YAN] [1989CAT/CAB]
C ₄ H ₆ N ₂	[693-98-1] FUS SUB SUB	2-methylimidazole (301–318) (301–318)	12.67 88.2 ± 0.7 88.4 ± 0.7	419 309 298	DSC ME ME	[2002DOM/KOZ2] [1992JIM/ROU] [1992JIM/ROU]
C ₄ H ₆ N ₂	[930-36-9] FUS V V V	1-methylpyrazole (254–293)	11.4 48.0 ± 0.2 48.0 ± 2.3 48.0 ± 1.3	229.2 298 298 298	DSC Static CGC C	[2014ALM/MON2] [2014ALM/MON2] [2010LIP/PLI] [1999MO/YAN]
C ₄ H ₆ N ₂	[1453-58-3] V	3-methylpyrazole	65.9 ± 2.0	298	C	[2008RIB/FIG]
C ₄ H ₆ N ₂ O	[1072-67-9] SUB	3-amino-5-methylisoxazole	81.6 ± 2.5			[1973HAM/AYE, 1977PED/RYL]
C ₄ H ₆ N ₂ O	[4975-21-7] V	dimethylfurazan (353–427)	51.1	368	A	[1987STE/MAL, 1971MAT/PEP]
C ₄ H ₆ N ₂ O	[4344-87-0] SUB SUB	3-methyl-3-pyrazoline-5-one (348–370) (348–370)	108.4 ± 0.6 111.4 ± 0.6	359 298	ME ME	[2012RIB/CAB] [2012RIB/CAB]
C ₄ H ₆ N ₂ O	[13315-23-6] SUB SUB	4-methyl-2-pyrazoline-5-one (346–368) (346–368)	108.8 ± 1.1 111.8 ± 1.1	357 298	ME ME	[2012RIB/CAB] [2012RIB/CAB]
C ₄ H ₆ N ₂ O ₂	[106-57-0] SUB SUB	2,5-piperazinedione (419–441) (419–441)	130.3 ± 1.1 134.0 ± 1.1	430 298	ME ME	[2013SAN/AMA] [2013SAN/AMA]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(413–450)	103.8	428	A	[1987STE/MAL]
C ₄ H ₆ N ₂ O ₂	[2518-42-5] V	dimethylfurazan-2-oxide (353–493)	57.0	368	A	[1987STE/MAL, 1971MAT/PEP]
C ₄ H ₆ N ₂ O ₂	[504-07-4] SUB	5,6-dihydrouracil	114.4 ± 1.6	298	C	[2013GAL/ROC]
	SUB	(377–405)	114.2 ± 0.9	391	ME	[2013GAL/ROC]
	SUB	(377–405)	116.0 ± 1.2	298	ME	[2013GAL/ROC]
C ₄ H ₆ N ₂ O ₂	[616-04-6] FUS	1-methylhydantoin	21.5	428.9	DSC	[2014NOG/ILD]
C ₄ H ₆ N ₄	[156-81-0] SUB	2,4-diaminopyrimidine	105.4 ± 0.7	347	ME	[2012RIB/GAL]
	SUB		106.3 ± 0.8	298	ME	[2012RIB/GAL]
C ₄ H ₆ N ₄ O	[56-06-4] SUB	2,4-diamino-6-hydroxypyrimidine (423–471)	147.6 ± 0.2		GS	[1999ZIE/PER]
C ₄ H ₆ N ₄ O ₂	[107945-67-5] TRS	1-ethyl-4-nitro-1 <i>H</i> -1,2,3-triazole	2.13	223.6 and 259.7		
	FUS		16.40	349.0	AC	[2013BLO/KOH]
	SUB	(313–343)	93.5 ± 0.8	328	ME	[2013BLO/KOH]
C ₄ H ₆ N ₄ O ₃ S ₂	[59-66-5] TRS	2-acetamido-1,3,4-thiadiazole-5-sulfonamide	1.2	506.2		
	FUS		28.6	532.2	DSC	[2009BAR/GAM]
C ₄ H ₆ N ₄ O ₆	[14760-99-7] FUS	2,5-dinitro-2,5-diazahexane-3,4-dione	23.4	397.1	DSC	[1997ZEM]
C ₄ H ₆ N ₄ O ₈	[3759-60-2] SUB	1,1,3,3-tetranitrobutane	97.1 ± 1.2	298	C	[2011MIR/KON]
	SUB		87.9 ± 0.8	298		[1999MIR/VOR]
C ₄ H ₆ N ₄ O ₈	[20919-97-5] SUB	2,2,3,3-tetranitrobutane	79.5 ± 0.8	298	C	[2011MIR/KON]
	SUB		78.2 ± 0.8	298		[1999MIR/VOR]
C ₄ H ₆ N ₄ O ₈	[20919-96-4] SUB	1,1,1,4-tetranitrobutane	102.5 ± 1.6	298	C	[2011MIR/KON]
	SUB		99.6	298		[1999MIR/VOR]
C ₄ H ₆ N ₄ O ₈	[42216-58-0] SUB	1,1,1,3-tetranitro-2-methylpropane	91.2	298		[1999MIR/VOR]
	V	(304–327)	75.7	316	A	[1987STE/MAL]
C ₄ H ₆ N ₄ O ₁₀	[99171-29-6] V	4-nitroso-1,2,3-butanetriol trinitrate (313–353)	72.9	333		[1959VAC/STA]
C ₄ H ₆ N ₄ O ₁₁	[20820-44-4] V	2-nitro-2-hydroxymethyl-1,3-propanedioltrinitrate (313–353)	72.9	328	A	[1987STE/MAL]
C ₄ H ₆ N ₆ O ₈	[81360-42-1] FUS	1,3,5,5-tetranitro-1,3-diazacyclohexane	29.37	430	DTA	[1987OYU/BRI, 1995SKA/GOL]
C ₄ H ₆ O	[123-73-9] V	<i>trans</i> -crotonaldehyde (314–411)	36.6 ± 0.1	320	EB	[2002STE/CHI2]
	V	(314–411)	34.5 ± 0.2	360	EB	[2002STE/CHI2]
	V	(314–411)	32.1 ± 0.5	400	EB	[2002STE/CHI2]
C ₄ H ₆ O	[4170-30-3] V	crotonaldehyde	37.3 ± 0.4	298	C	[1996VAN/YU]

[Note: Authors of [2013BLO/KOH] report that the peaks for the two phase transitions at 223.6 K and 259.7 K overlapped and could not be resolved. The value of 2.13 kJ/mole represents the sum of the two transition enthalpies.]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		38.8	325	EB	[1994WIB/MOR]
	V	(288–376)	35.1 ± 0.5	332	Static	[1988BAG/GUR]
	V	(304–377)	37.3	319		[1979MAR/SAC]
	V	(306–376)	36.8	321	A	[1987STE/MAL, 1973WAR/SKU, 1984BOU/FRI]
C ₄ H ₆ O	[1191-95-3]	cyclobutanone				
	FUS		10.8	220.5	DSC	[1998GON/SZW]
	V	(301–344)	37.7	322	EB	[1994WIB/MOR]
	V	(283–313)	38.4	298	A	[1987STE/MAL, 1972WOL]
	V	(317–380)	36.3	332	A, EB	[1987STE/MAL, 1976MEY/HOT]
	V	(283–313)	38.2 ± 0.4	298	VP	[1972WOL]
	V	(249–298)	38.5	273		[1942BEN/KIS, 1984BOU/FRI]
C ₄ H ₆ O	[109-93-3]	divinyl ether				
	V	(253–323)	29.2	268	A	[1987STE/MAL]
	V	(253–323)	26.1	301	I	[1933MIL/MEN]
C ₄ H ₆ O	[78-94-4]	methyl vinyl ketone				
	V	(279–355)	32.9	294	A	[1987STE/MAL]
	V	(300–355)	33.6	315	A	[1987STE/MAL]
C ₄ H ₆ O	[1191-99-7]	2,3-dihydrofuran				
	V	(302–360)	30.8 ± 0.1	300	EB	[2002STE/CHI5]
	V	(302–360)	28.6 ± 0.3	340	EB	[2002STE/CHI5]
C ₄ H ₆ O	[927-74-2]	3-butyn-1-ol				
	V	(343–393)	51.7 ± 0.9	298	CGC	[2005VAL/QUI]
C ₄ H ₆ OS	[1115-15-7]	divinyl sulfoxide				
	V		51.2 ± 0.9	298	C	[1989VOR/KLY]
C ₄ H ₆ O ₂	[1759-53-1]	cyclopropane carboxylic acid				
	V	(357–473)	58.9 ± 0.3	340	EB	[2002STE/CHI5]
	V	(357–473)	55.7 ± 0.2	380	EB	[2002STE/CHI5]
	V	(357–473)	52.4 ± 0.2	420	EB	[2002STE/CHI5]
	V	(357–473)	48.8 ± 0.4	460	EB	[2002STE/CHI5]
C ₄ H ₆ O ₂	[431-03-8]	2,3-butanedione (biacetyl)				
	V	(273–348)	38.5	288	A, I	[1987STE/MAL, 1972NEE/HAL]
	V	(273–293)	39.6 ± 0.2	283		[1954NIC/SZA]
C ₄ H ₆ O ₂	[503-64-0]	<i>cis</i> -2-butenic acid				
	V	(306–445)	55.8	321	A	[1987STE/MAL, 1947STU]
C ₄ H ₆ O ₂	[107-93-7]	<i>trans</i> -2-butenic acid				
	V	(353–458)	56.7	368	A	[1987STE/MAL, 1947STU]
C ₄ H ₆ O ₂	[110-65-6]	2-butyne-1,4-diol				
	V		81.5 ± 0.3	298	CGC	[2006UMN/KWE]
	V	(418–520)	69.0	433	A	[1987STE/MAL, 1966GAN/SEM, 1971DYK]
C ₄ H ₆ O ₂	[96-48-0]	γ -butyrolactone				
	FUS	(14–328)	9.57	229.8	AC	[1991ACR, 1983LEB/YEV]
	V	(377–477)	48.5	392		[2011MAT/KIM]
	V	(293–333)	47.6 ± 4.0	298		[1997KLE, 2008EME/KOZ]
	V	(378–406)	49.5 ± 0.1	392	EB	[1991WIB/WAL]
	V	(378–406)	55.2 ± 1.3	298	EB	[1991WIB/WAL]
	V	(345–370)	51.8 ± 0.6	357	MM	[1991WIB/WAL]
	V	(345–370)	55.6 ± 1.4	298	MM	[1991WIB/WAL]
	V	(392–555)	48.9 ± 0.3	298		[1990RAM/KUD, 2008EME/KOZ]
	V		54.4 ± 0.4	298	C	[1990LEI/PIL2]
	V	(361–522)	54.9 ± 0.2	298	EB	[1989STE/CHI2, 2008EME/KOZ]
	V	(357–435)	51.5	298	EB	[1988ISM/GAB, 2008EME/KOZ]
	V	(392–474)	48.2	407	A	[1987STE/MAL, 1950MCK/COP, 1981YAR/KAL]
	V	(273–478)	54.6 ± 0.2	298	GS	[1980JAR/AFA, 2008EME/KOZ]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(413–478)	53.1 ± 0.2	298	EB	[1980JAR/AFA, 2008EME/KOZ]
	V		48.0 ± 0.4	298	EB	[1980YEV/LEB, 2008EME/KOZ]
C ₄ H ₆ O ₂	[79-41-4]	2-methyl-2-propenoic acid				
	V		47.5 ± 0.4	298	C	[1996VAN/YU]
	V	(321–435)	53.9	336	A	[1987STE/MAL]
	V	(298–434)	51.6	313	A	[1987STE/MAL, 1947STU]
C ₄ H ₆ O ₂	[96-33-3]	methyl acrylate				
	FUS		9.73	197.5	AC	[1996DOM/HEA, 1985KAR/ABD]
	V	(278–348)	35.8	298		[2013LOM/GIN]
	V	(316–354)	34.2	331	A	[1987STE/MAL]
	V	(299–337)	28.8	314	BG	[1971HAL/BAL]
	V	(229–353)	38	244		[1947STU]
C ₄ H ₆ O ₂	[108-05-4]	vinyl acetate				
	FUS	(13–330)	8.46	180.6	AC	[1997KUL/LEB, 1998LEB/KUL]
	V	(294–346)	34.4	309	A, EB	[1987STE/MAL, 1971DYK, 1963CAP/FRI, 1984BOU/FRI]
	V	(340–355)	31.4	348		[1965SWA/VAN]
	V	(273–345)	34.4	309		[1933MAR/CUT]
C ₄ H ₆ O ₂	[79-41-4]	α -methylacrylic acid				
	FUS		8.06	287.5	AC	[1996DOM/HEA, 1985KAR/ABD]
C ₄ H ₆ O ₂	[503-64-0]	<i>cis</i> -crotonic acid				
	FUS		12.57	344.4		[1991ACR, 1983WEA]
C ₄ H ₆ O ₂ S	[3232-39-1]	diacetyl sulfide				
	V	(325–355)	54.2	340		[1999DYK/SVO]
	V	(325–355)	50.9	340	A	[1987STE/MAL]
C ₄ H ₆ O ₂ S	[77-77-0]	divinyl sulfone				
	V		56.4 ± 0.9	298	C	[1989VOR/KLY]
	V		56.5 ± 0.8	298		[1969MAC/MCN]
C ₄ H ₆ O ₃	[108-24-7]	acetic anhydride				
	V	(349–429)	43.3	364	EB	[1987AMB/GHI]
	V	(413–526)	47.6	428	A	[1987STE/MAL]
	V	(320–413)	45.5	335	A	[1987STE/MAL, 1971DYK]
	V	(336–412)	44.2	351		[1959MCD/SHR]
C ₄ H ₆ O ₃	[108-32-7]	propylene carbonate				
	FUS		8.96	220.3	DSC	[2004DIN]
	FUS	(13–300)	8.01	218.7	AC	[1994FUJ/OGU]
	FUS		9.62	218.2		[1974VAS/KOR]
	V	(408–486)	54.1	423		[2011MAT/KIM]
	V	(298–345)	61.5 ± 0.3	298	GS	[2008VER/TOK]
	V	(294–473)	71.3	298		[2005NAS/NEU]
	V	(460–513)	61.3 ± 0.1	298	E	[2004CHE/CLE, 2008VER/TOK]
	V	(668–762)	71.2 ± 0.6	298		[2002WIL/VON, 2008VER/TOK]
	V	(412–466)	54.4	427	A	[1987STE/MAL]
	V	(368–462)	57.8	383	EB	[1982HON/WAK]
	V	(368–462)	55.2	423	EB	[1982HON/WAK]
	V	(368–462)	53.0	443	EB	[1982HON/WAK]
	V	(293–353)	55.2	323		[1972GRA/SAL]
	V	(323–370)	33.8	338	A, MM	[1987STE/MAL, 1971CHO/JON]
C ₄ H ₆ O ₃	[3041-16-5]	<i>p</i> -dioxanone				
	FUS	(5–450)	16.14	301.7	AC, DSC	[1995LEB/BYK]
C ₄ H ₆ O ₄	[553-90-2]	dimethyl oxalate				
	FUS		21.3		DSC	[1996CHI/SAB]
	FUS		21.07	327.6		[1991ACR, 1983WEA]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₄ H ₆ O ₄		SUB	74.6 ± 0.7	298	C	[1996CHI/SAB]	
		SUB	(268–298)	75.6 ± 1.6	283	HSA	[1996CHI/SAB]
		SUB		75.3 ± 1.6	298		[1996CHI/SAB]
		SUB		74.9 ± 0.6		B	[1996CHI/SAB]
		SUB	(289–306)	U47.4 ± 0.5	298	BG	[1976ANT/CAR2, 1975ANT/CAR]
		V	(330–365)	54.7 ± 0.3	298	GS	[2006VER/KOZ]
		V	(328–443)	52.5	298		[2004MA/LIU, 2006VER/KOZ]
		V	(347–485)	44.7	416	HG, EB	[1988ASK/DAU]
		V	(293–437)	48.8	308	A	[1987STE/MAL, 1947STU]
		[110-15-6]	succinic acid				
		FUS		U15.82		DSC	[2014HAS/JIR]
		FUS		27.4	460.1	DSC	[2013PAL/MCC]
		FUS		31.26	458	DSC	[2010BOO/BAR]
	FUS		34.0	455.2	DSC	[2005ROU/TEM]	
	FUS		32.95	457	DSC	[1991ACR, 1974CIN/BER]	
	SUB		93 ± 6		ME, MS	[2009BOO/MAR]	
	SUB	(318–358)	128 ± 2		TPD	[2007CAP/LOV]	
	SUB	(280–302)	119.5		TPTD	[2005CHA/ZIE]	
	SUB	(360–375)	123.2 ± 2.6	298	ME	[2001RIB/MON2]	
	SUB	(356–376)	120.5	368	TE, ME	[1983DEW/VAN]	
	SUB		123.1	298		[1983DEW/VAN]	
	SUB	(372–401)	118.1 ± 3.3	386	ME	[1970COX/PIL, 1960DAV/THO]	
	SUB		120.3 ± 4.4	298		[1970COX/PIL, 1960DAV/THO]	
	SUB		121.8 ± 3.3	298		[1960DAV/THO, 1999RIB/MON]	
	SUB	(292–320)	73.6	306	A	[1947GRA]	
	V	(424–503)	94.4	298	CGC	[2005ROU/TEM]	
C ₄ H ₆ O ₄	[516-05-2]	2-methylmalonic acid					
	FUS		30.73	403	DSC	[2010BOO/BAR]	
	SUB	(341–355)	117.4 ± 1.9	298	ME	[2000RIB/MON]	
	SUB		113.2 ± 0.4		C	[1983ALT/PIL]	
C ₄ H ₆ O ₄	[629-15-2]	ethylene glycol dimethanoate					
	V	(303–325)	50.3 ± 1.4		GS	[2011MAS/KRA]	
C ₄ H ₆ O ₄	[931-40-8]	4-(hydroxymethyl)-1,3-dioxolan-2-one					
	V	(330–398)	85.4 ± 0.4	298	GS	[2008VER/TOK]	
	V	(430–455)	87.8 ± 0.4	298	EB	[2002WIL/VON, 2008VER/TOK]	
C ₄ H ₆ O ₅	[6915-15-7]	(dl)-malic acid I					
	FUS		29.03	403	DSC	[2010BOO/BAR]	
	FUS (I)		33.52	402		[1996DOM/HEA, 1990CEO/SZW]	
	FUS (II)		30.17	396		[1996DOM/HEA, 1990CEO/SZW]	
C ₄ H ₆ O ₅	[636-61-3]	(d)-malic acid					
	FUS		23.01	376	DSC	[1976LEC/COL]	
C ₄ H ₆ O ₆	[147-73-9]	meso-tartaric acid					
	SUB		156.9			[1983DEW/BOW]	
C ₄ H ₆ O ₆	[87-69-4]	L-(+)-tartaric acid					
	FUS		36.3	445.0	DSC	[2012MEL/PIN]	
	FUS		32.3	445.1	DSC	[1998MUR/BET]	
C ₄ H ₆ S	[5954-75-6]	2-vinylthiirane					
	V	(273–335)	38.7	288	A	[1987STE/MAL, 1999DYK/SVO]	
C ₄ H ₆ S	[627-51-0]	divinyl sulfide					
	V		38.3 ± 0.7	298	C	[1989VOR/KLY]	
C ₄ H ₆ S	[1120-59-8]	2,3-dihydrothiophene					
	V		37.7 ± 0.4	298	C	[1962DAV/SUN]	

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₆ S	[1708-32-3] V	2,5-dihydrothiophene	40.0 ± 0.3	298	C	[1962DAV/SUN]
C ₄ H ₆ S ₃	[1748-15-8] SUB	1,3-dithian-2-thione	88.6	335		[1967GEI/SCH]
	SUB	(321–348)	91.4 ± 2.5	298		[1967GEI/SCH, 1970COX/PIL]
C ₄ H ₇ Br	[31849-78-2] V	<i>cis</i> -1-bromo-1-butene	35.1	295	A	[1987STE/MAL, 1971DYK] [1947STU]
	V	(280–397)	36.5	244		
C ₄ H ₇ Br	[32620-08-9] V	<i>trans</i> -1-bromo-1-butene	36.1	249	A	[1987STE/MAL, 1947STU]
		(234–368)				
C ₄ H ₇ Br	[23074-36-4] V	2-bromo-1-butene	34.5	291	A	[1987STE/MAL, 1971DYK] [1947STU]
	V	(276–391)	36.1	241		
C ₄ H ₇ Br	[3017-71-8] V	<i>cis</i> -2-bromo-2-butene	36.5	249	A	[1987STE/MAL, 1947STU]
		(234–367)				
C ₄ H ₇ Br	[3017-68-3] V	<i>trans</i> -2-bromo-2-butene	35.7	243	A	[1987STE/MAL, 1947STU]
		(228–359)				
C ₄ H ₇ BrO	[816-40-0] V	1-bromo-2-butanone	49.9	337	A	[1987STE/MAL, 1948CAT/ELL] [1947STU]
	V	(322–428)	47.7	294		
C ₄ H ₇ BrO	[814-75-5] V	3-bromo-2-butanone	46.4	321	A	[1987STE/MAL, 1948CAT/ELL]
		(306–409)				
C ₄ H ₇ BrO	[2736-37-0] V	isobutyryl bromide	45.7	301	A	[1987STE/MAL, 1947STU]
		(286–436)				
C ₄ H ₇ Br ₃	[62127-48-4] V	1,3-dibromo-2-(bromomethyl)propane	66.1	490	A	[1987STE/MAL]
		(475–660)				
C ₄ H ₇ Br ₃	[3675-68-1] V	1,1,2-tribromobutane	49.4	376	A	[1987STE/MAL]
		(361–490)				
C ₄ H ₇ Br ₃	[3675-69-2] V	1,2,2-tribromobutane	48.4	371	A	[1987STE/MAL] [1947STU]
	V	(356–487)	50.7	329		
C ₄ H ₇ Br ₃	[632-05-3] V	1,2,3-tribromobutane	54.1	409	A	[1987STE/MAL, 1971DYK] [1947STU]
	V	(394–546)	51.3	333		
C ₄ H ₇ Br ₃	[38300-67-3] V	1,2,4-tribromobutane	53.5	405	A	[1987STE/MAL, 1971DYK]
		(390–541)				
C ₄ H ₇ Br ₃	[62127-47-3] V	2,2,3-tribromobutane	51.7	326	A	[1987STE/MAL, 1947STU]
		(311–480)				
C ₄ H ₇ Cl	[513-37-1] V	1-chloro-2-methyl-1-propene	33.2	300	A	[1987STE/MAL]
		(285–343)				
C ₄ H ₇ Cl	[563-47-3] V	3-chloro-2-methyl-1-propene	33.3	300	A	[1987STE/MAL]
		(285–348)				
C ₄ H ₇ ClO	[616-27-3] V	1-chloro-2-butanone	49.2	322	A	[1987STE/MAL, 1971DYK]
		(307–411)				
C ₄ H ₇ ClO	[4091-39-8] V	3-chloro-2-butanone	38.8	328	A	[1987STE/MAL, 1965PES/NAS]
		(313–389)				
C ₄ H ₇ ClO	[40605-42-3] V	3-chloro-2-butene-1-ol	50.0	360	A	[1987STE/MAL]
		(345–437)				
C ₄ H ₇ ClO ₂	[109-61-5]	propyl chloroformate				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(293–303)	40.7 ± 0.4	298		[1990DAV/FIN]
	V		40.7 ± 0.4	298	C	[1990DAV/FIN]
C ₄ H ₇ ClO ₂	[105-39-5]	ethyl chloroacetate				
	V	(274–418)	45.0	289	A	[1987STE/MAL]
	V		49.5 ± 0.1	298	C	[1972LAY/WAD]
	V	(298–418)	48.5	313		[1928NEL2, 1984BOU/FRI]
C ₄ H ₇ ClS	[760996-44-9]	2-butene-3-chloro-1-thiol				
	V	(341–397)	48.2	356	A	[1987STE/MAL]
C ₄ H ₇ Cl ₂ O ₄ P	[62-73-7]	dimethyl-(2,2-dichlorovinyl) phosphate				
	V	(283–387)	68	298	A	[1987STE/MAL]
C ₄ H ₇ Cl ₃	[18338-40-4]	1,2,3-trichlorobutane				
	V	(273–442)	41.3	288	A	[1987STE/MAL, 1947STU]
C ₄ H ₇ FOS	[462-31-7]	2-fluoroethyl thioacetate				
	V	(273–333)	44.7	288	A, GS	[1987STE/MAL, 1948RED/CHA4]
C ₄ H ₇ FO ₂	[459-72-3]	ethyl fluoroacetate				
	V	(273–333)	41.9	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1971DYK]
C ₄ H ₇ F ₃	[460-34-4]	1,1,1-trifluorobutane				
	V	(226–320)	28.1	241	A	[1987STE/MAL, 1971DYK]
C ₄ H ₇ IO ₂	[623-48-3]	ethyl iodoacetate				
	V	(301–362)	52.1	316	A	[1987STE/MAL, 1947GOU/HOL]
C ₄ H ₇ N	[78-82-0]	isobutyronitrile				
	V	(324–354)	35.9	339		[1979SUK/VLA]
	V	(303–352)	37.5	321	BG	[1971HAL/BAL]
	V		37.1 ± 0.1	298	C	[1970HOW/WAD]
C ₄ H ₇ N	[109-74-0]	butyronitrile				
	V		39.2 ± 0.1	298	C	[1982FUC/HAL]
	V	(303–493)	38.8	318	EB	[1971MEY/REN]
	V		39.3 ± 0.1	298	C	[1970HOW/WAD]
	V	(332–401)	37.7	347	A, EB	[1987STE/MAL, 1947STU, 1973MEY/HOT]
	V		37.0	298	EB	[1959EVA/SKI, 2005EME/VER]
V	(294–415)	40.5 ± 0.2	298	MM	[1933HEI, 2005EME/VER]	
C ₄ H ₇ NO	[75-86-5]	2-hydroxy-2-methylpropanenitrile (acetone cyanohydrin)				
	V	(355–393)	106.5	370	A	[1987STE/MAL]
C ₄ H ₇ NO	[4476-02-2]	2-hydroxybutyronitrile				
	V	(314–452)	57.9	329	A	[1987STE/MAL, 1947STU]
C ₄ H ₇ NO	[1120-64-5]	2-methyl-2-oxazoline				
	V		39.1 ± 0.3	298	C	[1976HAM/THO]
C ₄ H ₇ NO	[79-39-0]	methylacrylamide				
	FUS		15.0	385.1		[1996DOM/HEA, 1991STE/CHI2]
	V	(390–418)	86.3	404	A	[1987STE/MAL]
	V	(390–418)	90.0	404		[1978MAT/TRA]
C ₄ H ₇ NO	[62957-60-2]	ethoxyacetonitrile				
	V	(273–313)	46.5 ± 0.3	298	GS	[1995VER/BEC]
C ₄ H ₇ NO	[110-67-8]	3-methoxypropionitrile				
	V	(328–438)	47.6	343	A	[1987STE/MAL]
	V	(293–436)	52.3	308	A	[1987STE/MAL]
	V	(293–436)	50.5	308		[1978STR/ROG]
C ₄ H ₇ NO	[616-45-5]	2-pyrrolidone				
	FUS		13.92	299		[1996DOM/HEA, 1959KOL/PAU]
V	(391–484)	73.6 ± 1.3	298	EB, BG	[1998MOR/KOP]	

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		41.7 ± 0.6			[1995VIE/DEQ]
	V		69.1 ± 0.5	298	C	[1990LEI/PIL2]
	V	(395–518)	60	410	A	[1987STE/MAL]
C ₄ H ₇ NO	[31110-30-2]	<i>cis</i> -2-butenic acid amide				
	SUB	(353–387)	68.0	368	A	[1987STE/MAL]
C ₄ H ₇ NO	[625-37-6]	<i>trans</i> -2-butenic acid amide				
	SUB	(363–413)	80.0	378	A	[1987STE/MAL]
C ₄ H ₇ NOS	[17374-18-4]	tetrahydro-2 <i>H</i> -1,3-oxazine-2-thione				
	FUS		18.4	400.2	DSC	[2008TEM/ROU3]
	SUB	(345–380)	107.5 ± 5.1	362	ME	[2011ROU/TEM]
	SUB	(345–380)	108.9 ± 5.1	298	ME	[2011ROU/TEM]
C ₄ H ₇ NO ₂	[625-77-4]	diacetamide				
	SUB		73.2 ± 0.8	298	C	[1965WAD, 1971MOR]
	V	(368–496)	59.7	383	A	[1987STE/MAL]
	V	(343–496)	64.6	358		[1947STU]
C ₄ H ₇ NO ₂	[2783-12-2]	2-nitro-1-butene				
	V	(273–333)	44.0	288	A	[1987STE/MAL, 1971DYK, 1948RED/CHA5]
C ₄ H ₇ NO ₂	[22677-21-0]	(<i>R</i>)-4-hydroxy-2-pyrrolidone				
	FUS		23.41	392	DSC	[2004WAN/WIE]
C ₄ H ₇ NO ₂	[68108-18-9]	(-)-4-hydroxy-2-pyrrolidone				
	FUS		28.49	429.8	DSC	[1999LI/ZEL]
C ₄ H ₇ NO ₂	[25747-41-5]	(+)-4-hydroxy-2-pyrrolidone				
	FUS		26.74	394.8	DSC	[1999LI/ZEL]
C ₄ H ₇ NO ₃	[543-24-8]	<i>N</i> -acetylglycine				
	SUB		127.0 ± 1.0	389	TE, ME	[1979DEK/VOO]
C ₄ H ₇ NO ₄	[56-84-8]	<i>L</i> -aspartic acid				
	SUB	(370–470)	U 96 ± 4.2	420	LE	[1977GAF/PIE]
C ₄ H ₇ NS	[2346-00-1]	2-methyl-2-thiazoline				
	FUS		6.6	209.1	DSC	[2013FLO/MEN]
C ₄ H ₇ N ₃ O ₆	[7283-33-2]	1,1,1-trinitrobutane				
	V		66.5 ± 0.8	298	C	[2011MIR/KON]
C ₄ H ₇ N ₃ O ₉	[6859-60-5]	1,2,4-butanetriol trinitrate				
	V	(293–313)	60.0 ± 11.3	303	A, GS	[1987STE/MAL, 1957MCC/DOU]
C ₄ H ₇ N ₅	[1004-38-2]	2,4,6-triaminopyrimidine				
	SUB		124.1 ± 1.5	402.1	ME	[2012RIB/GAL]
	SUB		125.4 ± 1.8	298	ME	[2012RIB/GAL]
C ₄ H ₈	[106-98-9]	1-butene				
	FUS		3.85	87.8		[1996DOM/HEA, 1946AST/FIN]
	V	(200–274)	23.3	259	A	[1987STE/MAL]
	V	(126–192)	28.3	177	A	[1987STE/MAL]
	V	(267–345)	22.8	282	A	[1987STE/MAL]
	V	(342–411)	22.0	357	A	[1987STE/MAL]
	V	(267–411)	22.5	282	A	[1987STE/MAL]
	V		20.1	298		[1971WIL/ZWO]
	V		25.3	202		[1946AST/FIN]
	V		24.5	219		[1946AST/FIN]
	V		23.3	242		[1946AST/FIN]
	V		21.9	267		[1946AST/FIN]
	V	(216–273)	23.2	258		[1940LAM/ROP, 1984BOU/FRI]
C ₄ H ₈	[590-18-1]	<i>cis</i> -2-butene				
	FUS		7.05	134.5	AC	[1947AST/FIN]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		7.31	134.3		[1996DOM/HEA, 1944SCO/FER]
	FUS		7.32	133.8		[1996DOM/HEA, 1936TOD/PAR]
	V	(221–290)	24.4	275	A	[1987STE/MAL]
	V	(276–325)	24.0	291	A	[1987STE/MAL]
	V	(324–386)	23.6	339	A	[1987STE/MAL]
	V	(383–431)	23.6	398	A	[1987STE/MAL]
	V		22.1	298		[1971WIL/ZWO]
	V		22.5	246	C	[1944SCO/FER]
	V	(195–267)	25.3	252		[1942BEN, 1984BOU/FRI]
C ₄ H ₈	[624-64-6]	<i>trans</i> -2-butene				
	FUS		9.76	167.6		[1996DOM/HEA, 1945GUT/PIT]
	FUS		9.87	167.6		[1996DOM/HEA, 1936TOD/PAR]
	V	(205–287)	23.9	272	A	[1987STE/MAL]
	V	(273–315)	23.6	288	A	[1987STE/MAL]
	V	(313–385)	23.3	328	A	[1987STE/MAL]
	V	(382–428)	23.2	397	A	[1987STE/MAL]
	V		21.3	298		[1971WIL/ZWO]
	V		22.8 ± 0.1	274	C	[1945GUT/PIT]
	V	(203–274)	24.2	259		[1945GUT/PIT, 1984BOU/FRI]
	V	(205–283)	23.9	268		[1940LAM/ROP, 1984BOU/FRI]
C ₄ H ₈	[287-23-0]	cyclobutane				
	TRS		5.71	145.7		
	FUS		1.09	182.4		[1996DOM/HEA, 1953RAT/GWI]
	TRS		5.78	146.4		
	FUS		1.04	183.0		[1952KAA/COO]
	SUB		36.4	145	B	[1963BON]
	V	(198–287)	25.2	272	A	[1987STE/MAL]
	V	(217–285)	25.2	270		[1953RAT/GWI, 1984BOU/FRI]
C ₄ H ₈	[594-11-6]	methylcyclopropane				
	V	(177–278)	24.8	263	A	[1987STE/MAL, 1947STU]
C ₄ H ₈	[115-11-7]	2-methylpropene				
	FUS		5.92	132.4		[1996DOM/HEA, 1936TOD/PAR]
	V	(212–279)	23.1	264	A	[1987STE/MAL]
	V	(266–313)	22.7	281	A	[1987STE/MAL]
	V	(310–376)	22.2	325	A	[1987STE/MAL]
	V	(371–418)	22.3	386	A	[1987STE/MAL]
	V		20.6	298		[1971WIL/ZWO]
	V	(303–398)	22.2	350		[1942BEA/ING]
	V	(216–273)	22.8	258		[1940LAM/ROP, 1984BOU/FRI]
C ₄ H ₈ BrClO	[51070-66-7]	2-bromoethyl 2-chloroethyl ether				
	V	(309–469)	53.3	324	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ Br ₂	[62168-25-6]	1,1-dibromobutane				
	V	(342–477)	45.8	357	A, EST	[1987STE/MAL, 1956MAN, 1971DYK]
C ₄ H ₈ Br ₂	[533-98-2]	1,2-dibromobutane				
	V	(338–425)	43.5	353	A	[1987STE/MAL]
	V	(330–425)	45.9	298		[1975PIS/ROZ2, 1975PIS/ROZ]
	V		45.6 ± 0.7	298	EB	[1975PIS/ROZ]
	V	(281–439)	42.8	296	A	[1987STE/MAL, 1947STU]
	V	(273–333)	45.1	300		[1941LIS]
C ₄ H ₈ Br ₂	[107-80-2]	1,3-dibromobutane				
	V	(351–450)	44.7	366	A	[1987STE/MAL]
	V		49.4	298		[1980VAR/PIS]
C ₄ H ₈ Br ₂	[110-52-1]	1,4-dibromobutane				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		52.6	298	GC	[1994CAR/LAY]
	V	(375–520)	51.4	390	A	[1987STE/MAL, 1971DYK]
	V	(305–470)	49.4	320		[1947STU]
C ₄ H ₈ Br ₂	[5780-13-2]	<i>meso</i> -2,3-dibromobutane				
	V	(274–431)	41.7	289	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ Br ₂	[598-71-0]	<i>threo</i> -2,3-dibromobutane				
	V	(278–434)	40.9	293	A	[1987STE/MAL]
C ₄ H ₈ Br ₂	[594-34-3]	1,2-dibromo-2-methylpropane				
	V		43.3 ± 0.1		C	[1974SUN/WUL]
	V	(244–422)	33.3	259	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ Br ₂	[28148-04-1]	1,3-dibromo-2-methylpropane				
	V	(287–448)	45.1	302	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ Br ₂ O	[5414-19-7]	bis(2-bromoethyl) ether				
	V	(320–486)	55.1	335	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ Br ₂ O ₂	[1947-58-6]	<i>dl</i>)-2,3-dibromo-1,4-butanediol				
	FUS		29.29	363.2		[1981CHI/GAR]
C ₄ H ₈ Br ₂ O ₂		<i>d</i>)-2,3-dibromo-1,4-butanediol				
	FUS		33.89	388.2		[1981CHI/GAR]
C ₄ H ₈ Cl ₂	[541-33-3]	1,1-dichlorobutane				
	V	(310–390)	39.5	298		[1991BAS/SVO]
	V	(304–386)	38.7	319	A	[1987STE/MAL]
	V		39.4 ± 0.6	298	EB	[1977PIS/ROZ]
	V	(303–428)	38.8	318	EST	[1987STE/MAL, 1956MAN]
C ₄ H ₈ Cl ₂	[616-21-7]	1,2-dichlorobutane				
	V		40.1 ± 0.1	298	C	[1992HE/AN]
	V		40.2 ± 0.1	298	C	[1989AN/HU]
	V	(312–394)	39.0	327	A	[1987STE/MAL]
	V	(310–390)	40.4	298		[1982ROO, 1991BAS/SVO]
	V		40.1 ± 0.6	298	EB	[1975PIS/ROZ2]
	V	(249–397)	38.1	264	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ Cl ₂	[1190-22-3]	1,3-dichlorobutane				
	V		42.2 ± 0.1	298	C	[1992HE/AN]
	V	(320–400)	42.3	298		[1991BAS/SVO]
	V		42.3 ± 1.8	298	C	[1990AN/HE]
	V	(318–407)	40.5	333	A	[1987STE/MAL]
	V		42.1	298		[1980VAR/PIS]
C ₄ H ₈ Cl ₂	[110-56-5]	1,4-dichlorobutane				
	V		46.7	298	GC	[1994CAR/LAY]
	V		46.5 ± 0.1	298	C	[1992HE/AN]
	V	(325–425)	46.4	298		[1991BAS/SVO]
	V		46.4 ± 0.1	298	C	[1990AN/HE]
	V		46.4 ± 0.1	298	C	[1989AN/HU]
	V	(336–425)	43.4	351	A	[1987STE/MAL, 1971DYK]
C ₄ H ₈ Cl ₂	[4279-22-5]	2,2-dichlorobutane				
	V		36.3 ± 0.1	298	C	[1992HE/AN]
	V	(300–370)	36.7	298		[1991BAS/SVO]
	V	(293–376)	36.4	308	A	[1987STE/MAL]
	V		33.7 ± 0.6	298	EB	[1977PIS/ROZ]
C ₄ H ₈ Cl ₂	[4028-56-2]	<i>meso</i> -2,3-dichlorobutane				
	V		38.4	298	C	[1992HE/AN, 1993HE/AN]
C ₄ H ₈ Cl ₂	[2211-67-8]	<i>dl</i>)-2,3-dichlorobutane				
	V		39.7	298	C	[1993HE/AN]
C ₄ H ₈ Cl ₂	[7581-97-7]	2,3-dichlorobutane				
	V	(247–389)	39.6	262	A	[1987STE/MAL]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₈ Cl ₂	[598-76-5] V	1,1-dichloro-2-methylpropane (242–379)	38.7	257	A	[1987STE/MAL]
C ₄ H ₈ Cl ₂	[594-37-6] V	1,2-dichloro-2-methylpropane (247–381)	40.4	262	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ Cl ₂	[616-19-3] V	1,3-dichloro-2-methylpropane (270–408)	45.1	285	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ Cl ₂ O	[111-44-4] FUS V	bis(2-chloroethyl) ether (297–452)	8.39 49.8	226.5 312	 A	[1996DOM/HEA, 1948TSC] [1987STE/MAL, 1947STU]
C ₄ H ₈ Cl ₂ S	[505-60-2] SUB SUB SUB V V	bis(2-chloroethyl) sulfide (248–293) (263–287) (288–358) (353–393)	80.9 77.2 84.5 59.6 50.3	271 275 303 373	 A B A, MM	[2006BUC/BUE] [1987STE/MAL] [1963BON, 1947BAL/DEN] [1987STE/MAL, 1947BAL/DEN, 1984BOU/FRI, 1948BEN/FRA] [1943HOL/MEL]
C ₄ H ₈ Cl ₂ S ₃	[19149-77-0] V	bis(2-chloroethyl) trisulfide (293–333)	68.2	308	A, GS	[1987STE/MAL, 1948RED/CHA, 1999DYK/SVO]
C ₄ H ₈ Cl ₃ O ₄ P	[52-68-6] FUS FUS (I) FUS (II) FUS (III) SUB	(1-hydroxy-2,2,2-trichloroethyl)phosphonic acid dimethyl ester (293–357)	20.37 22.4 25.0 20.3 107	351 357 384 351 308	DSC DSC	[1990DON/DRE, 1996DOM/HEA] [1989UTS/GAE] [1987STE/MAL]
C ₄ H ₈ F ₂	[353-81-1] V	1,1-difluorobutane (246–347)	31	261	A, EST	[1987STE/MAL, 1956MAN, 1971DYK]
C ₄ H ₈ F ₂	[353-81-1] V	2,2-difluorobutane (238–336)	30	253	A	[1987STE/MAL, 1971DYK]
C ₄ H ₈ F ₂ O	[184899-81-8] V	1,1,1,2,2,3,3-heptafluoro-3-(fluoromethoxy)propane (283–316)	31	298	I	[2002MUR/YAM]
C ₄ H ₈ F ₂ O ₄ S	[381-46-4] V	bis(2-fluoroethyl) sulfate (273–333)	63.9	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1999DYK/SVO]
C ₄ H ₈ I ₂	[628-21-7] V	1,4-diiodobutane 	59	298	GC	[1994CAR/LAY]
C ₄ H ₈ N ₂	[926-64-7] V	(dimethylamino)acetonitrile (277–307)	45.4 ± 0.6		GS	[1997WEL/VER]
C ₄ H ₈ N ₂	[1606-49-1] V V V	1,4,5,6-tetrahydropyrimidine (330–395) (330–395) (330–395)	75.6 ± 2.0 73.6 ± 1.4 72.1 ± 1.2	298 340 380	IPM IPM IPM	[1996STE/CHI3] [1996STE/CHI3] [1996STE/CHI3]
C ₄ H ₈ N ₂ O	[1852-17-1] FUS SUB SUB	tetrahydro-2-pyrimidone (363–385)	30.6 113.4 ± 0.7 89.3 ± 2.5	523 298 298	DSC ME V+ F	[1999DEF/DEO, 1999DEF] [2008RIB/RIB] [1999DEF/DEO, 1999DEF]
C ₄ H ₈ N ₂ O ₂	[3148-73-0] SUB	1,2-diacetylhydrazine (347–358)	103.1 ± 1.7	352.5	A	[1987STE/MAL, 1959TAK/SHI]
C ₄ H ₈ N ₂ O ₂	[95-45-4] SUB SUB	dimethylglyoxime (331–352)	96.8 97.1 ± 2.1	341.5	A	[1987STE/MAL] [1956SEK/SUZ, 1970COX/PIL, 1960JON]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₈ N ₂ O ₂	[2620-63-5]	<i>N</i> -acetylglycine amide				
	FUS		26.7	412.2	DSC	[1997ABA/PAL]
	FUS		25.6	408.2	DSC	[1996DOM/HEA, 1988FER/DEL]
	SUB		123.5 ± 1.7	376	C	[1999DEL/BAR]
	SUB		126.3 ± 2.3			[1999DEL/BAR]
	SUB	(378–406)	140.2 ± 2.3	298	C	[1995DEL/SAB]
			135 ± 3	392	TE	[1988FER/DEL, 1986BAR/FER]
C ₄ H ₈ N ₂ O ₂	[110-14-5]	succinamide				
	FUS		6.08	485.9	DSC	[2006BAD/DEL]
C ₄ H ₈ N ₂ O ₂	[59-89-2]	<i>N</i> -nitrosomorpholine				
	V		50.2	343		[1988GOL/SIT]
C ₄ H ₈ N ₂ O ₃	[4164-32-3]	<i>N</i> -nitromorpholine				
	SUB		81.6	288		[1988GOL/SIT]
C ₄ H ₈ N ₂ O ₃	[556-50-3]	α -glycylglycine				
	FUS	(6–440)	62.0	493	AC, DSC	[2006DRE/KOV]
[Note: Authors report melting is accompanied by decomposition.]						
C ₄ H ₈ N ₂ O ₄	[3759-55-5]	1,1-dinitrobutane				
	V		64.9 ± 0.8	298	C	[2011MIR/KON]
C ₄ H ₈ N ₂ O ₄	[4286-49-1]	1,4-dinitrobutane				
	V		77.4 ± 0.8	298	C	[2011MIR/KON]
C ₄ H ₈ N ₂ O ₆	[6423-44-5]	1,3-butanediol dinitrate				
	FUS		16.7	253.4	FPM	[1957KEM/GOL]
	V	(293–313)	71.4 ± 7.1	303	A, GS	[1987STE/MAL, 1957KEM/GOL]
C ₄ H ₈ N ₂ O ₆	[3457-91-8]	1,4-butanediol dinitrate				
	FUS		26.7	285.5	FPM	[1957KEM/GOL]
	V	(293–313)	57.4 ± 0.8	303	A, GS	[1987STE/MAL, 1957KEM/GOL]
C ₄ H ₈ N ₂ O ₇	[693-21-0]	diethyleneglycol dinitrate				
	FUS	(80–320)	25.4	276.5	AC	[2000URY/KUP]
	V	(293–333)	93.3	308	A	[1987STE/MAL, 1959VAC/STA]
C ₄ H ₈ N ₄ O ₂	[140-79-4]	1,4-dinitrosopiperazine				
	SUB	(325–360)	101.3 ± 8	343		[1974PEP/MAT, 1977PED/RYL]
C ₄ H ₈ N ₄ O ₄	[4164-37-8]	1,4-dinitropiperazine				
	FUS		200.8	489.2	DSC	[2001OXL/SMI]
[Note: Enthalpy of fusion is abnormally high, compound may be decomposing.]						
	FUS		33.93	489.6	DSC	[1997ZEM]
	SUB		102.9 ± 1.3	298	C	[2009MIR/KON]
[Note: Authors of [2009MIR/KON] tabulate the experimental value as an enthalpy of vaporization; however, they report that the compound is crystalline and use the value to calculate the standard molar enthalpy of formation. Given the crystalline state and how the value was used, we have tabulated the value as an enthalpy of sublimation.]						
	SUB	(325–360)	111.3 ± 8	343		[1974PEP/MAT, 1977PED/RYL]
C ₄ H ₈ N ₄ O ₄	[5754-89-2]	1,3-dinitro-1,3-diazacyclohexane				
	TRS		15.8	343		
	FUS		2.97	354		[1991PIC/RYL]
C ₄ H ₈ N ₆ O ₅	[5800-63-5]	1,5-dinitro-3-nitroso-1,3,5-triazacycloheptane				
	TRS		25.7	404		
	FUS		2.9	440		[1991PIC/RYL]
C ₄ H ₈ N ₆ O ₆	[5790-78-3]	1,3,5-trinitro-1,3,5-triazacycloheptane				
	FUS		27.74	435.9	DSC	[1997ZEM]
C ₄ H ₈ N ₈ O ₈	[2691-41-0]	1,3,5,7-tetranitro-1,3,5,7-tetrazacyclooctane				
	FUS (δ)		69.87	553.2		[1996DOM/HEA, 1992MAK]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		176.1 ± 1.7	298	C	[2009MIR/KON]
[Note: Authors of [2009MIR/KON] tabulate the experimental value as an enthalpy of vaporization; however, they report that the compound is crystalline and use the value to calculate the standard molar enthalpy of formation. Given the crystalline state and how the value was used, we have tabulated the value as an enthalpy of sublimation.]						
	SUB	(461–487)	161.9	474		[1976TAY/CRO]
	SUB (δ)	(415–479)	161 ± 0.3	447		[1978CUN/PAL]
	SUB (β)	(371–403)	175.2	385		[1969ROS/DIC]
C ₄ H ₈ N ₁₂ O ₆	[62209-57-8]	1,7-diazido-2,4,6-trinitro-2,4,6-triazahexane				
	FUS		40.17	406	DTA	[1987OYU/BRI]
C ₄ H ₈ O	[2919-23-5]	cyclobutanol				
	FUS		8.53	228.4		[1982DWO/FUC]
C ₄ H ₈ O	[78-93-3]	2-butanone				
	FUS		8.44	186.5		[1991ACR, 1972FIN/MES]
	V	(294–342)	34.6	309	A	[1987STE/MAL]
	V	(353–403)	32.5	368	A	[1987STE/MAL]
	V	(397–479)	31.6	412	A	[1987STE/MAL]
	V	(473–537)	31.1	488	A	[1987STE/MAL]
	V		34.8 ± 0.1	298	C	[1983UCH/MAJ]
	V		35.0 ± 0.6	298	C	[1981GAT/STR]
	V		34.5 ± 0.1	298	C	[1979SUN/SVE2]
	V	(258–362)	35.6	273		[1978CAV/CHA]
	V		34.7			[1975AMB/ELL]
	V	(315–363)	33.9	330	A, EB, GS	[1987STE/MAL, 1975AMB/ELL, 1965COL/COU]
	V		33.8	315	C	[1973GEI/QUI]
	V		33.8 ± 0.1	314	C	[1961NIC/KOB]
	V		32.3 ± 0.1	338	C	[1961NIC/KOB]
	V		31.3 ± 0.1	352	C	[1961NIC/KOB]
	V		30.5 ± 0.1	363	C	[1961NIC/KOB]
	V		30.0 ± 0.1	370	C	[1961NIC/KOB]
	V	(314–370)	33.9	329		[1947STU]
C ₄ H ₈ O	[513-42-8]	2-methyl-2-propen-1-ol				
	V	(323–373)	51.9	298	CGC	[1995CHI/HOS]
C ₄ H ₈ O	[627-27-0]	3-buten-1-ol				
	V	(343–393)	50.8 ± 0.0	298	CGC	[2005VAL/QUI]
	V		50.9 ± 0.1	313	C	[1996ULB/KLU]
	V		48.8 ± 0.1	328	C	[1996ULB/KLU]
	V		46.7 ± 0.1	343	C	[1996ULB/KLU]
C ₄ H ₈ O	[6118-14-5]	(<i>dl</i>)-3-buten-2-ol				
	V	(304–370)	39.2	319	A	[1987STE/MAL]
C ₄ H ₈ O	[123-72-8]	butyraldehyde				
	FUS		11.09	176.8		[1996DOM/HEA, 1989VAS/LEB]
	V	(313–353)	33.2	298	CGC	[1995CHI/HOS]
	V	(293–349)	34.2	308	A	[1987STE/MAL]
	V		33.7 ± 0.4	298	EB	[1967BUC/COX, 2003VER/KRA2]
	V	(330–348)	32.9	339	EB	[1963WOJ]
	V	(304–347)	33.3	319		[1959SEP/PAU, 1984BOU/FRI]
	V	(258–353)	33.9	306		[1938KUC]
C ₄ H ₈ O	[106-88-7]	(<i>dl</i>)-1,2-epoxybutane				
	V		33.4 ± 1.3	298	EB	[2013MOR/ELL]
	V	(297–361)	32.1	312		[1997MON/BUR]
	V	(254–347)	24.7	269	A	[1987STE/MAL]
C ₄ H ₈ O	[558-30-5]	1,2-epoxy-2-methylpropane (2,2-dimethyloxirane)				
	V	(204–329)	30.6	219	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ O	[109-92-2]	ethyl vinyl ether				
	V	(223–309)	29.5	238	A	[1987STE/MAL]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₈ O	[78-84-2]	isobutyraldehyde				
	V	(313–353)	32.3	298	CGC	[1995CHI/HOS]
	V	(313–324)	31.4	318		[1984ENG/SAN]
	V	(309–337)	31.8	324		[1976BRA/PES]
	V	(333–347)	33.4	340	EB	[1963WOJ]
	V	(283–337)	32.8	298	A	[1987STE/MAL, 1959SEP/PAU, 1964SER/TIM]
C ₄ H ₈ O	[116-11-0]	2-methoxy-1-propene				
	V	(281–309)	28.3 ± 0.1	295	Static	[1988BAG/GUR]
C ₄ H ₈ O	[4188-68-5]	<i>cis</i> -methyl propenyl ether				
	V	(293–318)	30.6	305	A	[1987STE/MAL]
C ₄ H ₈ O	[4188-69-6]	<i>trans</i> -methyl propenyl ether				
	V	(293–322)	29.5	307	A	[1987STE/MAL]
C ₄ H ₈ O	[109-99-9]	tetrahydrofuran				
	FUS	(8–322)	8.54	164.8	AC	[1991ACR, 1978LEB/RAB2]
	V	(290–339)	32.3	305		[2001LOR/AUC]
	V	(273–339)	33.1	288	A	[1987STE/MAL]
	V	(399–479)	29.0	414	A	[1987STE/MAL]
	V	(467–541)	29.6	482	A	[1987STE/MAL]
	V		32.0	298	C	[1981HOS/SCO]
	V	(235–340)	32.5 ± 0.2	288		[1976BOR/CHU]
	V	(302–339)	30.8	320		[1975RIV]
	V	(273–308)	32.8	288		[1970KOI/OCU, 1984BOU/FRI]
	V	(296–373)	31.9	311		[1970SCO, 1984BOU/FRI]
	V	(224–360)	32.9	298		[1970MOJ/ANT]
V	(293–341)	U26.9	308		[1959BIS/FIN]	
V	(293–313)	31.8	313		[1948KLA/MOH, 1958CAS/FLE3]	
C ₄ H ₈ O	[1758-33-4]	<i>cis</i> -2,3-dimethyloxirane				
	V		33.9 ± 1.3	298	EB	[2013MOR/ELL]
C ₄ H ₈ O	[21490-63-1]	<i>trans</i> -2,3-dimethyloxirane				
	V		33.1 ± 1.3	298	EB	[2013MOR/ELL]
C ₄ H ₈ O	[558-30-5]	2,2-dimethyloxirane				
	V		30.9 ± 1.3	298	EB	[2013MOR/ELL]
C ₄ H ₈ OS	[1600-44-8]	tetrahydrothiophene 1-oxide				
	TRS		5.85	223.9		
	FUS		0.51	231.8	DSC	[1990HAI/GIL]
C ₄ H ₈ OS	[15980-15-1]	1,4-oxathiane				
	V	(342–411)	42.1	378		[1999DYK/SVO]
	V	(342–411)	44.8	357	A	[1987STE/MAL, 1933JOH]
C ₄ H ₈ OS	[625-60-5]	<i>S</i> -ethyl thiolacetate				
	V		40.0 ± 0.2	298	C	[1966WAD]
C ₄ H ₈ OS ₂	[16487-10-8]	1,3-dithiane sulfoxide				
	FUS		22.6	361.9	DSC	[2003ROU/TEM2]
	SUB	(320–337)	97.7 ± 0.8	298	ME	[2004ROU/TEM4]
C ₄ H ₈ O ₂	[497-26-7]	2-methyl-1,3-dioxolane				
	V	(270–308)	43.0 ± 0.6		GS	[1998VER/PEN, 2002VER]
C ₄ H ₈ O ₂	[6117-80-2]	<i>cis</i> -2-butene-1,4-diol				
	V	(373–508)	74.7	388	A	[1987STE/MAL]
C ₄ H ₈ O ₂	[922-69-0]	1,1-dimethoxyethene				
	V	(303–362)	39.6	333		[1995GUT/LIU]
C ₄ H ₈ O ₂	[107-92-6]	butanoic acid				
	FUS		7.55	267.55	DSC	[2010HEN/CAM]
	TRS		1.04	222.2		
	FUS	(16–373)	11.59	268	AC	[1982MAR/AND]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		11.07	267.4		[1991ACR, 1926PAR/AND]
	SUB	(238–255)	76.0 ± 1.5	248	TE, ME	[1978CAL/CAL]
	V	(384–435)	52.5	399		[2004CLI/RAM]
	V	(391–429)	50.3	406	EB	[2001MUN/KRA]
	V	(303–378)	58.5	298	CGC	[2000VER2]
	V	(278–308)	58.5 ± 0.3	293	GS	[2000VER2]
	V	(278–308)	58.2 ± 0.3	298	GS	[2000VER2]
	V	(353–393)	60.7	298	CGC	[1995CHI/HOS]
	V	(437–592)	47.7	452	A	[1987STE/MAL]
	V	(301–358)	51.1	316	A	[1987STE/MAL]
	V	(355–453)	53.2	370	A	[1987STE/MAL, 1971DYK]
	V (monomer)		40.5 ± 0.1	298	C	[1970KON/WAD]
	V		58 ± 4	298	C	[1970KON/WAD]
	V	(363–436)	52.0	378		[1949DRE/SHR, 1949DRE/MAR, 1984BOU/FRI]
(C ₄ H ₈ O ₂) ₂	[19496-06-1]	butanoic acid dimer				
	SUB	(238–255)	85 ± 1.5	248	TE, ME	[1978CAL/CAL]
C ₄ H ₈ O ₂	[505-22-6]	1,3-dioxane				
	V		39.1 ± 0.1	298	C	[1982BYS/MAN]
	V		35.6 ± 0.4			[1959FLE/MOR]
C ₄ H ₈ O ₂	[123-91-1]	1,4-dioxane				
	FUS		16.39	277.2	DSC	[2015SOL/ROD]
	FUS		10.30	284.3	DSC	[2012ROD/SOL]
	TRS		2.35	272.9		
	FUS		12.84	284.1		[1996DOM/HEA, 1934JAC/PAR]
	FUS		11.88	283.2		[1933ROT/MEY]
	SUB	(237–272)	35.6	255	A	[1947STU]
	V	(285–375)	38.0	300	A	[1987STE/MAL]
	V	(329–372)	36.5	350		[1984CAS/FRA]
	V		38.6 ± 0.1	298	C	[1982BYS/MAN]
	V	(293–398)	37.3	308		[1963VIN/MAR, 1984BOU/FRI]
	V	(283–353)	37.0	318		[1936HOV/SCH]
C ₄ H ₈ O ₂	[141-78-6]	ethyl acetate				
	FUS		10.48	189.3		[1991ACR, 1983WEA, 1933PAR/HUF]
	V	(300–390)	34.1	315		[1997HER/ORT]
	V	(313–353)	35.0	298	CGC	[1995CHI/HOS]
	V	(271–373)	36.7	286		[1981AMB/ELL, 1984BOU/FRI]
	V		35.6 ± 0.1	298	C	[1980SVO/UCH]
	V		34.6 ± 0.1	313	C	[1980SVO/UCH]
	V		31.4 ± 0.1	343	C	[1980SVO/UCH]
	V		33.8 ± 0.1	326	C	[1977SVO/VES]
	V		33.4 ± 0.1	331	C	[1977SVO/VES]
	V		32.4 ± 0.1	344	C	[1977SVO/VES]
	V		31.9 ± 0.1	351	C	[1977SVO/VES]
	V		31.0 ± 0.1	363	C	[1977SVO/VES]
	V		34.0	320		[1976CON/COU]
	V		31.9	350		[1976CON/COU]
	V		35.1 ± 0.2	298	C	[1966WAD]
	V	(288–351)	35.7	303	A	[1987STE/MAL, 1965MER/POL, 1971DYK]
C ₄ H ₈ O ₂	[513-86-0]	3-hydroxy-2-butanone (acetoin)				
	V	(363–393)	48.7 ± 0.4	298	CGC	[2005TEM/CHI]
	V	(372–417)	40.2	395	I	[1947EFR/BLO]
	V	(273–418)	38.4	288	A	[1987STE/MAL, 1934POU/WIL]
C ₄ H ₈ O ₂	[79-31-2]	2-methylpropanoic acid				
	V	(375–426)	50.5	390		[2004CLI/RAM]
	V	(303–378)	56.3	298	CGC	[2000VER2]
	V	(278–308)	55.8 ± 0.3	293	GS	[2000VER2]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(278–308)	55.5 ± 0.3	298	GS	[2000VER2]
	V	(344–445)	51.6	359	EB	[1987AMB/GHI3]
	V	(288–428)	50.9	303	A	[1987STE/MAL]
	V	(428–562)	45.4	443	A	[1987STE/MAL]
	V	(228–243)	53.4 ± 3	398	TE	[1979DEK/OON]
	V (monomer)		35.5 ± 0.1	298	C	[1970KON/WAD]
	V		53 ± 4	298	C	[1970KON/WAD]
C ₄ H ₈ O ₂	[625-55-8]	isopropyl formate				
	V	(221–342)	34.5	236	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ O ₂	[554-12-1]	methyl propanoate				
	V		35.7 ± 1.2	298	CGC	[2015KOZ/GOB]
	V	(335–387)	34.1	350	EB	[2014RIO/ORT]
	V	(313–363)	28.9	298	CGC	[1995CHI/HOS]
	V		35.6 ± 0.4	298	GC	[1987AZA]
	V	(231–353)	39.1	246	A	[1987STE/MAL]
	V	(353–486)	32.8	368	A	[1987STE/MAL]
	V		36.0 ± 0.7	298	C	[1981GAT/STR]
	V		35.9 ± 0.1	298	C	[1980SVO/UCH]
	V		34.9 ± 0.1	313	C	[1980SVO/UCH]
	V		36.3 ± 0.3	298	GCC	[1980FUC/PEA]
	V		35.8 ± 0.1	298	C	[1979SUN/SVE2]
	V		34.2 ± 0.1	326	C	[1977SVO/VES]
	V		33.8 ± 0.1	331	C	[1977SVO/VES]
	V		32.8 ± 0.1	344	C	[1977SVO/VES]
	V		32.1 ± 0.1	355	C	[1977SVO/VES]
	V		31.5 ± 0.1	363	C	[1977SVO/VES]
	V	(293–353)	35.9	308	A	[1987STE/MAL, 1965MER/POL]
C ₄ H ₈ O ₂	[110-74-7]	propyl formate				
	V	(328–371)	36.6 ± 0.1	298	EB	[1999GON/ORT, 2012SAM/NAZ]
	V	(302–353)	35.3	317	EB	[1993FAR/WIC]
	V	(302–353)	36.4 ± 0.1	298	EB	[1993FAR/WIC, 2012SAM/NAZ]
	V	(354–518)	32.7	369	A	[1987STE/MAL]
	V	(230–355)	36.8	245	A	[1987STE/MAL]
	V		37.5 ± 0.1	298	C	[1980SVO/UCH]
	V		36.5 ± 0.1	313	C	[1980SVO/UCH]
	V		35.8 ± 0.1	326	C	[1976CIH/HYN]
	V		35.4 ± 0.1	331	C	[1976CIH/HYN]
	V		34.4 ± 0.1	344	C	[1976CIH/HYN]
	V		33.8 ± 0.1	351	C	[1976CIH/HYN]
	V		33.5 ± 0.1	355	C	[1976CIH/HYN]
	V		32.9 ± 0.1	363	C	[1976CIH/HYN]
	V	(299–355)	35.6	314	EB	[1928NEL, 1984BOU/FRI]
	V		36.4	298	EB	[1928NEL, 2012SAM/NAZ]
	V		32.5 ± 0.5	353	C	[1926MAT]
	V		32.5 ± 0.5	298	C	[1926MAT, 2012SAM/NAZ]
C ₄ H ₈ O ₂	[497-26-7]	2-methyl-1,3-dioxolane				
	V		35.6			[2003CHO/DHA]
	V		34.9			[1969PIH/HEI, 2003CHO/DHA]
C ₄ H ₈ O ₂ S	[16215-14-8]	allyl methyl sulfone				
	V	(405–450)	68.2	420	A, BG	[1987STE/MAL, 1999DYK/SVO, 1961BUS/IVI]
C ₄ H ₈ O ₂ S	[126-33-0]	tetrahydrothiophene-1,1-dioxide (sulfolane)				
	TRS		7.86	288.6		
	FUS		1.37	301.7		[1999AHL/LOH]
	TRS		5.35	288.6		
	FUS		1.43	301.6		[1996DOM/MOO]
	V		69.1 ± 1.4	298	C	[2004MOR/MAT]
	V	(423–529)	59.0	438		[1999DYK/SVO]
	V	(364–529)	53.7	379		[1999DYK/SVO]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(424–542)	67.8 ± 0.8	298	EB	[1997STE/CHI3]
	V	(424–542)	58.0 ± 0.4	440	EB	[1997STE/CHI3]
	V	(424–542)	56.9 ± 0.3	480	EB	[1997STE/CHI3]
	V	(424–542)	57.8 ± 0.3	520	EB	[1997STE/CHI3]
	V	(373–453)	58.2	413	TGA	[1987ALN/ALS]
	V	(303–328)	31.0	315	A	[1987STE/MAL]
	V	(413–558)	58.7	428	A	[1987STE/MAL]
	V	(360–400)	54.5	380		[1984SHC/KAP]
	V		62.8	373		[1959DEA/EVA, 1997STE/CHI3]
	V		61.6	473		[1959DEA/EVA, 1997STE/CHI3]
C ₄ H ₈ O ₂ S ₂	[55337-75-2]	1,3-dithiane sulfone				
	FUS		23.47	413.8	DSC	[2004ROU/TEM3]
	FUS		22.0	414	DSC	[2003ROU/TEM2]
	SUB	(342–358)	102.3 ± 0.9	350	ME	[2004ROU/TEM3]
	SUB	(342–358)	103.6 ± 0.9	298	ME	[2004ROU/TEM3]
C ₄ H ₈ O ₂ S ₂	[139408-38-1]	1,4-dithiane sulfone				
	FUS		26.0	474.2	DSC	[2006TEM/ROU]
	SUB	(340–354)	99.9 ± 1.2	298	ME	[2006ROU/TEM]
	SUB	(340–354)	98.7 ± 1.2	347	ME	[2006ROU/TEM]
C ₄ H ₈ O ₃	[627-03-2]	ethoxyacetic acid				
	V	(280–310)	69.1	295	A	[1987STE/MAL]
C ₄ H ₈ O ₃	[19693-75-5]	2-methoxy-1,3-dioxolane				
	V	(278–308)	46.4 ± 0.8	298	GS	[2002VER]
	V	(278–308)	46.8 ± 0.8		GS	[1995RAK/VER2]
C ₄ H ₈ O ₃	[623-50-7]	ethyl glycolate				
	V	(287–432)	47.1	302	A	[1987STE/MAL, 1947STU]
C ₄ H ₈ O ₃	[594-61-6]	2-hydroxyisobutyric acid				
	V	(371–485)	67.5	386	A	[1987STE/MAL]
C ₄ H ₈ O ₃	[6149-41-3]	methyl 3-hydroxypropionate				
	V	(330–343)	60	336	A	[1987STE/MAL]
C ₄ H ₈ O ₃	[6290-49-9]	methoxyacetic acid, methyl ester				
	V	(285–310)	39.3	297	A	[1987STE/MAL]
C ₄ H ₈ O ₃	[547-64-8]	(dl)-methyl lactate				
	V	(303–378)	50.0	318		[2014LOM/GIN]
	V	(313–418)	44.7	328	A	[1987STE/MAL, 1950REH/DIX]
C ₄ H ₈ O ₃	[542-59-6]	ethylene glycol monoacetate				
	V	(301–346)	63.9 ± 0.3	298	GS	[2009VER/EME2]
	V	(363–448)	55.1	378	EB	[2007SCH/DOE]
C ₄ H ₈ O ₃	[13122-71-9]	peroxybutyric acid				
	V	(273–393)	45.5	288	A	[1987STE/MAL, 1971DYK, 1951EGE/EMT]
C ₄ H ₈ O ₃	[623-53-0]	ethyl methyl carbonate				
	FUS		11.24	219.4	DSC	[2004DIN]
C ₄ H ₈ O ₃ S	[109577-03-9]	1,3-oxathiane sulfone				
	FUS		15.2	352.9	DSC	[2006TEM/ROU]
	SUB	(307–324)	92.1 ± 0.7	298	ME	[2007ROU/TEM2]
	SUB	(307–324)	91.7 ± 0.7	316	ME	[2007ROU/TEM2]
C ₄ H ₈ O ₃ S	[107-61-9]	1,4-oxathiane sulfone				
	TRS + FUS		20.2	403.3	DSC	[2006TEM/ROU]
	SUB	(307–322)	92.0 ± 1.0	298	ME	[2007ROU/TEM2]
	SUB	(307–322)	91.6 ± 1.0	314	ME	[2007ROU/TEM2]
C ₄ H ₈ O ₄	[293-30-1]	1,3,5,7-tetroxane				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		22.59	385		[1996DOM/HEA, 1969CLE/MEL]
	SUB		79.6 ± 0.2	298	C	[1977PED/RYL, 1969MAN/MOR]
	SUB		79.5		C	[1975BOG/BER]
C ₄ H ₈ S	[3772-13-2]	2,2-dimethylthiirane				
	V	(273–473)	37.0	288	A	[1987STE/MAL, 1971DYK, 1999DYK/SVO]
C ₄ H ₈ S	[3195-86-6]	2-ethylthiirane				
	V	(298–450)	39.7	313	A	[1987STE/MAL, 1971DYK]
C ₄ H ₈ S	[110-01-0]	tetrahydrothiophene				
	FUS	(13–333)	7.35	177		[1985DEA, 1952HUB/FIN]
	V	(333–373)	37.4	353	I	[1971EON/POM]
	V		38.8	298		[1971WIL/ZWO]
	V		39.2 ± 0.3	298	C	[1962DAV/SUN]
	V	(331–401)	37.7	346	EB	[1952WHI/BAR]
	V	(343–434)	37.1	358	A, EB	[1987STE/MAL, 1952HUB/FIN, 1966OSB/DOU]
	V		36.9	350	C	[1952HUB/FIN]
	V		35.9	370	C	[1952HUB/FIN]
	V		34.6	394	C	[1952HUB/FIN]
C ₄ H ₈ S ₂	[505-23-7]	1,3-dithiane				
	TRS	(300–370)	0.8	316.4		
	FUS	(300–370)	14.4	327.2	DSC	[1996DOM/HEA, 1983DEW/OFF]
	SUB	(266–279)	62.9 ± 0.7	298	ME	[1999ROU/DAV]
	SUB		69.9 ± 0.4	298	GC	[1989AZA]
	SUB	(250–271)	72.6	263	TE, ME	[1983DEW/VAN]
	SUB		52.3 ± 0.8	298	C	[1971MOR]
	V		66.9 ± 0.4		GC	[1989AZA]
C ₄ H ₈ S ₂	[505-29-3]	1,4-dithiane				
	FUS	(300–400)	21.6	384.6	DSC	[1996DOM/HEA, 1983DEW/OFF]
	SUB		63	298		[1999DAV/FLO]
	SUB		68.9	298		[1989AZA]
	SUB	(253–276)	72.4	268	E	[1983DEW/VAN]
	V	(389–437)	48.7	404		[1999DYK/SVO]
	V		68.9 ± 0.5		GC	[1989AZA]
	V	(388–437)	47.9	403	A	[1987STE/MAL]
C ₄ H ₉ Br	[109-65-9]	1-bromobutane				
	FUS		9.12	160.9	AC	[2011PAU/KAB]
	FUS		9.23	160.4		[1996DOM/HEA, 1931DEE]
	V	(323–363)	36.4	298	CGC	[1995CHI/HOS]
	V	(340–370)	36.4	298		[1991BAS/SVO]
	V	(338–373)	34.6	353	A, EB	[1987STE/MAL, 1977SVO/MAJ]
	V		35.6 ± 0.1	322	C	[1977SVO/MAJ]
	V		34.9 ± 0.1	332	C	[1977SVO/MAJ]
	V		34.5 ± 0.1	339	C	[1977SVO/MAJ]
	V		33.7 ± 0.1	352	C	[1977SVO/MAJ]
	V		33.0 ± 0.1	366	C	[1977SVO/MAJ]
	V		36.6 ± 0.1	298	C	[1968WAD]
	V		36.7 ± 0.1	298	C	[1966WAD]
	V	(273–400)	37.5	288	A, EST	[1987STE/MAL, 1961LI/ROS, 1971DYK]
	V	(293–343)	33.5	308		[1929SMY/ENG, 1984BOU/FRI]
C ₄ H ₉ Br	[78-76-2]	2-bromobutane				
	FUS		6.88	160.3		[1991ACR, 1983WEA]
	V	(281–403)	33.9	296	A	[1987STE/MAL, 1971DYK]
	V		34.5 ± 0.1	298	C	[1968WAD]
	V		34.8 ± 0.1	298	C	[1966WAD]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₉ Br	[78-77-3]	1-bromo-2-methylpropane				
	V	(305–363)	34.1	320	A, EB	[1987STE/MAL, 1977SVO/MAJ]
	V		33.1 ± 0.1	330	C	[1977SVO/MAJ]
	V		32.6 ± 0.1	341	C	[1977SVO/MAJ]
	V		32.0 ± 0.1	353	C	[1977SVO/MAJ]
	V		31.4 ± 0.1	366	C	[1977SVO/MAJ]
	V	(281–404)	34.0	296	A	[1987STE/MAL, 1971DYK]
V		34.9 ± 0.1	298	C	[1968WAD]	
C ₄ H ₉ Br	[507-19-7]	2-bromo-2-methylpropane				
	TRS		5.85	209.3		
	TRS		0.96	231.8		
	FUS		Not given		DSC	[1986WEN/SCH]
	TRS		5.65	208.6		
	TRS		1.05	231.5		
	FUS		1.97	256.1	C	[1996DOM/HEA, 1950KUS/CRO]
	V	(248–346)	31.4	263	A	[1987STE/MAL]
	V	(270–345)	31.0	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(298–323)	31.5	313		[1969CAL/VAL]
V		31.8 ± 0.1	298	C	[1968WAD]	
V	(273–346)	31.2	288		[1951BRY/HOW, 1984BOU/FRI]	
C ₄ H ₉ BrO	[2482-57-7]	1-bromo-2-butanol				
	V	(296–418)	58.4	311	A	[1987STE/MAL, 1947STU]
C ₄ H ₉ Cl	[109-69-3]	1-chlorobutane				
	V	(260–350)	33.5	298		[1984BOU/FRI, 1991BAS/SVO]
	V		33.5 ± 0.1	298	C	[1981TEK/MAJ]
	V		32.7 ± 0.1	313	C	[1981TEK/MAJ]
	V		31.8 ± 0.1	328	C	[1981TEK/MAJ]
	V		30.9 ± 0.1	343	C	[1981TEK/MAJ]
	V		30.0 ± 0.1	358	C	[1981TEK/MAJ]
	V		29.4 ± 0.1	358	C	[1981TEK/MAJ]
	V	(256–352)	35.6	271	DTA	[1969KEM/KRE]
	V		33.5 ± 0.1	298	C	[1968WAD]
	V	(257–389)	35.0	272	A, EST	[1987STE/MAL, 1961LI/ROS, 1971DYK]
	V	(284–350)	33.8			[1933LEN]
V	(293–343)	37.2	308		[1929SMY/ENG, 1984BOU/FRI]	
C ₄ H ₉ Cl	[78-86-4]	2-chlorobutane				
	V	(315–341)	30.9	328	EB	[1996DAH/WIC]
	V	(266–377)	33.1	281	A	[1987STE/MAL]
	V		31.5 ± 0.1	298	C	[1981TEK/MAJ]
	V		30.7 ± 0.1	313	C	[1981TEK/MAJ]
	V		29.9 ± 0.1	328	C	[1981TEK/MAJ]
	V		29.1 ± 0.1	343	C	[1981TEK/MAJ]
	V		28.2 ± 0.1	358	C	[1981TEK/MAJ]
	V		31.6 ± 0.1	298	C	[1968WAD]
	V	(273–312)	31.8	288		[1928ROL, 1984BOU/FRI]
C ₄ H ₉ Cl	[513-36-0]	1-chloro-2-methylpropane				
	V	(219–342)	36.1	234	A	[1987STE/MAL, 1947STU]
	V		31.7 ± 0.1	298	C	[1968WAD]
C ₄ H ₉ Cl	[507-20-0]	2-chloro-2-methylpropane				
	TRS		2.08	183.6		
	TRS		5.75	219.8		
	FUS		1.89	247.8	DSC	[2000TAM/LOP]
	TRS	(11–300)	1.84	183.3		
	TRS	(11–300)	5.61	219.7		
	FUS	(11–300)	1.92	248.6	AC	[1999KOB/OGU]
	TRS		1.87	182.9		
	TRS		5.88	219.3		
	FUS		1.97	248.1		[1985DEA]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
			1.86	183.1		
			5.66	219.4		
			1.99	248.4		[1972URB/JAN]
			1.87	182.9		
			5.88	219.3		
		(77–273)	2.07	247.5	AC	[1966DWO/GUI]
			1.71	183.2		
			5.82	219.7		
			2.01	248.2	C	[1950KUS/CRO]
		(313–353)	28.6	298	CGC	[1995CHI/HOS]
		(253–358)	32.3	268	A	[1987STE/MAL, 1971DYK]
		(295–323)	27.8	309	A	[1987STE/MAL, 1969CAL/VAL]
		(295–323)	27.0	310		[1969CAL/VAL, 1984BOU/FRI]
			29.0 ± 0.1	298	C	[1968WAD]
		(254–324)	29.1	269		[1947STU]
C ₄ H ₉ ClO ₂	[628-89-7]	2-(2-chloroethoxy)ethanol				
	V	(326–469)	59.8	341	A	[1987STE/MAL, 1947STU]
C ₄ H ₉ ClO ₂ S	[2386-60-9]	butyl sulfonyl chloride				
	V	(283–373)	55.7	298		[1999DYK/SVO]
	V	(373–474)	52.9	388		[1999DYK/SVO]
	V	(253–283)	60.2	268	A	[1987STE/MAL, 1999DYK/SVO, 1963QUI/NOW]
C ₄ H ₉ ClS	[693-07-2]	ethyl (2-chloroethyl) sulfide				
	V	(293–333)	44.4	308	A, GS	[1987STE/MAL, 1948RED/CHA, 1971DYK]
C ₄ H ₉ F	[2366-52-1]	1-fluorobutane				
	V	(222–326)	30.1	237	A, EST	[1987STE/MAL, 1961LI/ROS, 1971DYK]
C ₄ H ₉ F	[359-01-3]	2-fluorobutane				
	V	(233–329)	29.2	248	A	[1987STE/MAL, 1971DYK]
C ₄ H ₉ F	[353-61-7]	2-fluoro-2-methylpropane				
	V	(222–315)	27.6	237	A	[1987STE/MAL, 1971DYK]
C ₄ H ₉ FO	[372-93-0]	4-fluoro-1-butanol				
	V	(323–343)	64.0	333	A	[1987STE/MAL]
C ₄ H ₉ I	[542-69-8]	1-iodobutane				
	V	(313–353)	40.3	298	CGC	[1995CHI/HOS]
	V	(313–353)	39.7	298	CGC	[1995CHI/HOS]
	V		40.6 ± 0.1	298	C	[1968WAD]
	V	(292–431)	39.9	307	A, EST	[1987STE/MAL, 1961LI/ROS, 1971DYK]
C ₄ H ₉ I	[513-48-4]	2-iodobutane				
	V	(313–353)	37.9	298	CGC	[1995CHI/HOS]
	V	(313–353)	38.8	298	CGC	[1995CHI/HOS]
	V		38.5 ± 0.1	298	C	[1968WAD]
C ₄ H ₉ I	[513-38-2]	1-iodo-2-methylpropane				
	V	(258–303)	38.8 ± 0.1	298	Static	[2010FUL/RUZ]
	V	(256–393)	41.1	271	A	[1987STE/MAL, 1947STU]
	V		38.8 ± 0.1	298	C	[1968WAD]
C ₄ H ₉ I	[558-17-8]	2-iodo-2-methylpropane				
	SUB	(202–223)	49.8	212.5	MG	[1987STE/MAL, 1944MIL2]
	V	(313–353)	37.0	298	CGC	[1995CHI/HOS]
	V	(236–294)	34.8	279	A	[1987STE/MAL, 1971DYK]
	V		35.4 ± 0.1	298	C	[1968WAD]
C ₄ H ₉ Li	[109-72-8]	butyl lithium				
	SUB	(333–368)	109.7	350.5	A	[1987STE/MAL, 1962LEB/MIR]
C ₄ H ₉ N	[123-75-1]	pyrrolidine				
	TRS		0.54	207.1		

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		8.58	215.3		[1996DOM/HEA, 1959HIL/SIN]
	V	(273–313)	38.4	288	A	[1987STE/MAL]
	V	(273–313)	37.6	298		[1968CAB/CON]
	V	(316–394)	35.8	331	EB, IPM	[1987STE/MAL, 1959MCC/DOU, 1968OSB/DOU]
	V		35.8 ± 0.1	322	C	[1959MCC/DOU]
	V		34.5 ± 0.1	340	C	[1959MCC/DOU]
	V		33.0 ± 0.1	360	C	[1959MCC/DOU]
	V	(294–360)	37.3	309		[1959HIL/SIN, 1984BOU/FRI]
C ₄ H ₉ NO	[96-29-7]	2-butanone oxime				
	V	(283–329)	58.6 ± 0.2	306	GS	[2009VER/EME4]
	V	(283–329)	59.1 ± 0.2	298	GS	[2009VER/EME4]
	V	(308–425)	53.7	323	A	[1987STE/MAL]
	V	(318–343)	55.5	330	A	[1987STE/MAL]
	V	(313–333)	57.2	323		[1975MES/BAE, 2009VER/EME4]
	V	(313–333)	57.7	298		[1975MES/BAE, 2009VER/EME4]
C ₄ H ₉ NO	[3376-35-0]	<i>O</i> -methyloxime acetone				
	V	(308–344)	37.0	323		[2013WAN/LI, 2013YE/DON]
C ₄ H ₉ NO	[625-50-3]	<i>N</i> -ethylacetamide				
	V	(361–423)	55.7	376		[1995SCH/PUS]
	V		64.9 ± 0.2	298	C	[1984STA/WAD]
C ₄ H ₉ NO	[110-69-0]	butyraldehyde oxime				
	V	(313–343)	55.8	328	A	[1987STE/MAL]
C ₄ H ₉ NO	[541-35-5]	butyramide				
	FUS		19.2	387.3	DSC	[2008ABA/BAD, 2000BRU/DEL]
	SUB	(288–354)	82 ± 4.0	298	TE	[2000BRU/DEL]
	SUB	(298–347)	82 ± 4.0	298	TE	[2000BRU/DEL]
	SUB		86.4 ± 0.4			[1975BAR/PIL, 1977PED/RYL]
	SUB	(292–304)	85.4 ± 1.7	298	ME	[1973LEB/KAT2, 1977PED/RYL]
	SUB	(353–373)	87	363		[1960JON]
	SUB	(336–382)	86.4 ± 0.4	359	GS	[1959DAV/JON2]
	SUB	(298–341)	87.0 ± 0.8	320	ME	[1959DAV/JON2]
	SUB		79.9			[1960THO]
	V		72.3 ± 2.4	298	CGC	[2013GUT/RAT]
	V	(397–504)	64	412	A	[1987STE/MAL]
C ₄ H ₉ NO	[563-83-7]	2-methylpropanamide				
	FUS		19.8	401.2	DSC	[2013GUT/RAT]
	FUS		19.2	400.1	DSC	[2008ABA/BAD]
	SUB		82			[2000BRU/DEL]
	SUB	(285–302)	86.1 ± 0.2	294	ME	[1989ABB/JIM]
	SUB		86.0 ± 0.2	298		[1989ABB/JIM]
	V		70.7 ± 2.9	298	CGC	[2013GUT/RAT]
C ₄ H ₉ NO	[127-19-5]	<i>N,N</i> -dimethylacetamide				
	FUS		10.2	254.2		[2007SMI/TSV]
	FUS		8.2	253.2	DSC	[2000LIS/JAM]
	FUS		10.42	251.4		[1999AHL/LOH]
	V	(463–513)	50.7 ± 0.7	298	CGC	[2009PAN/ANT]
	V	(298–423)	45.8	298		[2005NAS/NEU]
	V	(371–423)	45.1	386	A	[1987STE/MAL]
	V		50.2	298	A	[1985BAR/CAS, 1985MAJ/SVO]
	V		45.6 ± 2.0			[1978BEA/LEE]
	V	(297–438)	67.9	312		[1974MYA/SCH, 1984BOU/FRI]
	V		43.7	298	I	[1971SUN/EIS]
	V	(303–363)	45.2	318	A	[1987STE/MAL, 1968GOP/RIZ]
C ₄ H ₉ NO	[1187-58-2]	<i>N</i> -methylpropanamide				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(307–371)	64.0 ± 0.2	339	GS	[2009VER/EME4]
	V	(307–371)	66.6 ± 0.2	298	GS	[2009VER/EME4]
	V	(368–473)	66.9 ± 1.3	298	EB, BG	[1998MOR/KOP]
	V	(368–473)	64.0 ± 0.3	420	EB, BG	[1998MOR/KOP]
	V	(361–414)	54.2	376		[1995SCH/PUS]
	V		64.9 ± 0.3	298	C	[1984STA/WAD]
	V	(303–363)	54.4	318	A	[1987STE/MAL, 1968GOP/RIZ]
	V	(381–480)	56.6 ± 0.2	431	EB	[1983VAS, 2009VER/EME4]
	V	(381–480)	63.9 ± 0.2	431	EB	[1983VAS, 2009VER/EME4]
C ₄ H ₉ NO	[110-91-8]	morpholine				
	V		46.5 ± 0.4	298	C	[2014FRE/GOM2]
	V		45.3 ± 0.5	298	DSC	[2005ROJ/GIN]
	V	(308–393)	42.9	323		[2005LEE/SU]
	V	(274–303)	45.6 ± 0.4	288	GS	[1998VER2]
	V	(274–303)	45.0 ± 0.4	298	GS	[1998VER2]
	V	(346–401)	40.8	361		[1991WU/LOC]
	V	(313–343)	44.3	328	TGA	[1987ALN/ALS]
	V	(273–318)	45.3	288	A	[1987STE/MAL, 1975CAB/CON]
	V	(273–318)	44.5 ± 0.1	298		[1975CAB/CON, 1998VER2]
	V	(317–443)	42.3	332	A	[1987STE/MAL]
	V	(318–401)	42.3	333	EB	[1983PAL/CHO]
	V		39.8			[1947BOL/COL]
C ₄ H ₉ NO	[3619-34-9]	<i>N</i> -methylimidoacetate				
	V		42.7 ± 2.1			[1978BEA/LEE]
C ₄ H ₉ NO ₂	[2835-81-6]	<i>dl</i> -2-aminobutyric acid				
	TRS		0.67	233	DSC	[2012GOR/ALE]
	SUB		132 ± 2	409	TE, ME	[1979DEK/VOO]
	SUB	(400–418)	132	409	A	[1987STE/MAL]
C ₄ H ₉ NO ₂	[1492-24-6]	<i>S</i> 2-aminobutyric acid				
	SUB	(449–462)	162.8 ± 0.8	455	ME	[1965SVE/CLY, 1964CLY/SVE]
	SUB	(449–462)	162.5	455	A	[1987STE/MAL, 1965SVE/CLY]
C ₄ H ₉ NO ₂	[62-57-7]	2-aminoisobutyric acid				
	SUB	(439–462)	125.8	450.5	A	[1987STE/MAL, 1965SVE/CLY]
	SUB	(403–424)	134.2	413.5	A	[1987STE/MAL]
	SUB	(439–462)	125.9 ± 0.4	455	ME	[1965SVE/CLY, 1964CLY/SVE]
C ₄ H ₉ NO ₂	[56-12-2]	4-aminobutanoic acid				
	FUS		35.41	463.8	DSC	[2010YAN/LEI]
	SUB	(460–475)	139 ± 4			[2009LEG/BAC]
	SUB	(384–407)	138.9 ± 0.6	395	C	[1983SKO/SAB]
	SUB		140 ± 2	298	C	[1983SKO/SAB]
	V	(493–500)	87 ± 2			[2009LEG/BAC]
C ₄ H ₉ NO ₂	[924-43-6]	<i>sec</i> -butyl nitrite				
	V	(267–287)	29.6	277	A	[1987STE/MAL, 1937THO/DAI]
C ₄ H ₉ NO ₂	[540-80-7]	<i>tert</i> -butyl nitrite				
	V	(267–337)	30.8	282	A	[1987STE/MAL, 1937THO/DAI]
C ₄ H ₉ NO ₂	[51676-15-4]	lactic acid <i>N</i> -methyl amide				
	V	(359–415)	72.7	374	A	[1987STE/MAL, 1950RAT]
C ₄ H ₉ NO ₂	[105-40-8]	<i>N</i> -methyl carbamic acid, ethyl ester				
	V	(299–443)	51.7	314	A	[1987STE/MAL, 1947STU]
C ₄ H ₉ NO ₂	[625-74-1]	2-methyl-1-nitropropane				
	V	(347–415)	41.1	362	A, EB	[1987STE/MAL, 1956TOO, 1971DYK]
C ₄ H ₉ NO ₂	[594-70-7]	2-methyl-2-nitropropane				
	TRS		4.34	216.4		

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	TRS		4.64	260.0		
	FUS		2.56	298.5	DSC	[1999SAL/LOP]
	TRS		4.2	215.3		
	TRS		4.7	260.1		
	FUS		2.6	299.2		[1997REU/BUS, 1975URB/TOM]
	V		42.7 ± 0.4	298	C	[2011MIR/KON]
	V	(334–401)	39.1	349	EB	[1987STE/MAL, 1956TOO, 1971DYK]
C ₄ H ₉ NO ₂	[627-05-4]	1-nitrobutane				
	V		48.1 ± 0.4	298	C	[2011MIR/KON]
	V	(313–353)	47.0	298	CGC	[1995CHI/HOS]
	V	(357–426)	42.7	372	A, EB	[1987STE/MAL, 1956TOO, 1971DYK]
	V	(283–423)	48.5 ± 0.5	298	ZG	[1949HOL/DOR]
C ₄ H ₉ NO ₂	[600-24-8]	(<i>dl</i>)-2-nitrobutane				
	V		46.4 ± 0.8	298	C	[2011MIR/KON]
	V	(345–413)	40.3	360	A, EB	[1987STE/MAL, 1956TOO, 1971DYK]
	V	(323–383)	43.8 ± 0.4	298	ZG	[1949HOL/DOR]
C ₄ H ₉ NO ₂	[627-12-3]	propyl carbamate				
	V	(325–468)	61.6	340	A	[1987STE/MAL, 1947STU]
C ₄ H ₉ NO ₃	[928-45-0]	butyl nitrate				
	V	(273–343)	44.1	288	A	[1987STE/MAL, 1971DYK, 1957GRA/PRA]
C ₄ H ₉ NO ₃	[543-29-3]	isobutyl nitrate				
	V	(273–343)	42.8	288	A	[1987STE/MAL, 1971DYK, 1957GRA/PRA]
C ₄ H ₉ NO ₃	[80-68-2]	(<i>dl</i>)-threonine				
	SUB	(341–441)	U 96 ± 8	391	LE	[1977GAF/PIE]
C ₄ H ₉ NO ₃	[76-39-1]	2-methyl-2-nitro-1-propanol				
	TRS		14.64	311.5		
	FUS		3.17	363.9	DSC	[1999SAL/LOP]
	TRS		17.2	310		
	FUS		3.74	361	DSC	[1996DOM/HEA, 1970MUR/BRE]
	TRS		15.0	312		
	FUS		3.3	364	DSC	[1995BAR/LOP]
	SUB (cryst)	(293–309)	78 ± 1			[1995FON/MUN]
	SUB (plastic)	(319–333)	64 ± 2			[1995FON/MUN]
	SUB (plastic)		59.5 ± 3.0	319	C	[1994FON/MUN]
	SUB (cryst)		73.2 ± 3.7	311	C	[1994FON/MUN]
C ₄ H ₉ NO ₄	[77-49-6]	2-methyl-2-nitro-1,3-propanediol				
	TRS		25.72	352		
	FUS		3.84	424	DSC	[1996DOM/HEA, 1970MUR/BRE]
	SUB (cryst)	(330–349)	98 ± 4			[1995FON/MUN]
	SUB (plastic)	(361–382)	74 ± 5			[1995FON/MUN]
	SUB (plastic)		79.3 ± 4.0	368	C	[1994FON/MUN]
	SUB (cryst)		102.0 ± 5.1	339	C	[1994FON/MUN]
C ₄ H ₉ NO ₅	[126-11-4]	2-hydroxymethyl-2-nitro-1,3-propanediol				
	SUB (cryst)	(332–347)	107 ± 10			[1995FON/MUN]
	SUB (plastic)	(354–378)	76 ± 8			[1995FON/MUN]
	SUB (plastic)		77.3 ± 3.9	368	C	[1994FON/MUN]
C ₄ H ₉ NS	[123-90-0]	thiomorpholine				
	V		54.0 ± 1.5	298	C	[2014FRE/GOM2]
C ₄ H ₉ N ₃ O ₂		bis(nitrosoethyl)amine				
	V	(291–450)	46.4	306	A	[1987STE/MAL]
C ₄ H ₉ N ₃ O ₂	[216489-98-4]	1-[2-(ethenyloxy)ethyl]-1-nitrosohydrazine				
	SUB		112.1 ± 1.9	298		[1998LEB/CHI]
C ₄ H ₉ ONa	[865-48-5]	sodium <i>tert</i> -butoxide				

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		NA			[1990VOR/ZVE]
C ₄ H ₉ O ₂ PS ₂	[695-68-1] V	2-mercapto-4,5-dimethyl-1,3,2-dioxaphospholane-2-sulfide	66	298		[2008SAG/SAF]
C ₄ H ₉ P	[6617-97-6] V	ally(methyl)phosphine (242–291)	34.4	276	A	[1987STE/MAL, 1966WAG/WIL]
C ₄ H ₉ P	[114596-01-9] V	3-butenylphosphine (252–295)	34.5	273		[1988SHA/DIE]
C ₄ H ₉ P	[89123-47-7] V	dimethylvinylphosphine (273–291)	32.4	282		[1959KAE/STO]
C ₄ H ₉ P	[3466-00-0] V	phospholane (257–347)	37.4	272	A	[1987STE/MAL, 1960BUR/SLO]
C ₄ H ₁₀	[106-97-8] TRS FUS TRS FUS SUB V V V V V V V V	butane	2.05 4.66 2.12 4.37 35.9 22.9 23.4 23.2 22.6 22.8 27.0 22.4 23.1 23.9	107.6 134.9 107.0 134.1 107 308 277 288 331 390 198 298 264 258		[1996DOM/HEA, 1940AST/MES] [1931HUF/PAR] [1966GEI/QUI] [1997SAK/HOR] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL, 1973CAR/KOB] [1971WIL/ZWO] [1945WAC/LIN, 1984BOU/FRI] [1940AST/MES, 1984BOU/FRI]
C ₄ H ₁₀	[75-28-5] FUS FUS FUS V V V V V V V V	2-methylpropane (isobutane)	4.49 4.56 4.50 21.5 22.4 26.9 21.9 21.4 21.6 21.6 21.3 22.6	113.7 113.7 113.2 318 265 172 278 316 376 292 286 247	AC A A A A A	[2009PER/MAG] [1996DOM/HEA, 1940AST/KEN] [1937PAR/SHO] [1999LIM/PAR] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1976STE/POL, 1984BOU/FRI] [1971WIL/ZWO] [1940AST/KEN, 1984BOU/FRI]
C ₄ H ₁₀ F ₃ NOS	[26458-94-6] V	(diethylamino)trifluoroosulfur (329–354)	49.5	341	A	[1987STE/MAL, 1999DYK/SVO, 1970VON/GLE2]
C ₄ H ₁₀ F ₃ NS	[38078-09-0] V	(<i>N</i> -ethylethaneaminato)trifluoro sulfur (318–340)	45.2	329	A	[1987STE/MAL, 1999DYK/SVO, 1970VON/GLE2]
C ₄ H ₁₀ N ₂	[110-85-0] FUS FUS FUS SUB SUB SUB V	piperazine	26.7 22.1 22.1 72.1 65.2 73.1 50.1 ± 1.9	384.6 381.8 384.6 298 385 294 298	DSC DSC CR B EB	[1997STE/CHI4] [1997LEE/CHA] [1954WIT] [1998VER2] [1997STE/CHI4] [1987STE/MAL, 1975CAB/CON] [1997STE/CHI4]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(417–460)	42.1 ± 0.3	400	EB	[1997STE/CHI4]
	V	(417–460)	38.9 ± 0.4	440	EB	[1997STE/CHI4]
C ₄ H ₁₀ N ₂	[28871-28-5]	trimethylammonium cyanide				
	SUB	(219–236)	45.0	227.5		[1987STE/MAL]
C ₄ H ₁₀ N ₂ O	[927-67-3]	<i>N</i> -propylurea				
	TRS		2.4	291.3		
	FUS		11.9	370.2	DSC	[2005HAS/TAJ]
	TRS		3.0	289.6		
	FUS		14.92	383	DSC	[1995FER/DEL]
	FUS		14.63	381	DSC	[1991ACR, 1987DEL/FER]
	SUB	(333–357)	101.4 ± 0.6	298	GS	[2006EME/KAB]
	SUB	(332–373)	90.7 ± 1.0	366		[1990PIA/FER, 1987FER/DEL2]
C ₄ H ₁₀ N ₂ O	[691-60-1]	<i>N</i> -isopropylurea				
	TRS		1.41	280.8	AC	[1990KAB/MIR2]
	TRS		2.31	375.5		
	FUS		17.4	427.4	DSC	[1987DEL/FER]
	SUB	(333–372)	96.7 ± 1.6	353	ME	[2003ZAI/KAB]
	SUB	(333–372)	96.8 ± 1.6	350	ME	[2003ZAI/KAB]
	SUB		97.2 ± 0.6	350	C	[2003ZAI/KAB]
	SUB		98.1 ± 0.6	298		[2003ZAI/KAB]
	SUB		100.6 ± 1.3	389		[1990PIA/FER]
C ₄ H ₁₀ N ₂ O	[632-14-4]	1,1,3-trimethylurea				
	FUS		14.3	344.4	DSC	[1991ACR, 1987DEL/FER]
	V	(345–375)	89.7 ± 1.2	360		[1990PIA/FER]
C ₄ H ₁₀ N ₂ O ₂	[7119-92-8]	diethylnitramine				
	V		47.3 ± 0.8	298	C	[2009MIR/KON]
	V	(338–378)	49.7	358		[1958CAS/FLE]
C ₄ H ₁₀ N ₂ S	[2489-77-2]	1,1,3-trimethylthiourea				
	FUS (I)		17.3	358.3		
	FUS (II)		19.3	357.1	DSC	[2013NAT/JES]
C ₄ H ₁₀ N ₄ O ₄	[4164-34-5]	<i>N,N'</i> -dimethyl- <i>N,N'</i> -dinitro-1,2-ethanediamine				
	FUS		60.32	410	DTA	[1987OYU/BRI]
	SUB		110.9 ± 1.3	298	C	[2009MIR/KON]
[Note: Authors of [2009MIR/KON] tabulate the experimental value as an enthalpy of vaporization; however, they report that the compound is crystalline and use the value to calculate the standard molar enthalpy of formation. Given the crystalline state and how the value was used, we have tabulated the value as an enthalpy of sublimation.]						
C ₄ H ₁₀ N ₄ O ₄	[168983-72-0]	<i>N</i> -ethyl- <i>N'</i> -methyl- <i>N,N'</i> -dinitromethanediamine				
	FUS		19.28	304.4	DSC	[2010FAR/RAJ]
	FUS		19.28	304.8	DSC	[2003SPI/WAN]
C ₄ H ₁₀ N ₆ O ₆	[13126-25-5]	2,4,6-trinitro-2,4,6-triazaheptane				
	FUS		34.01	442.4	DSC	[1997ZEM]
C ₄ H ₁₀ O	[71-36-3]	1-butanol				
	FUS		9.28	183.9		[1991ACR, 1925PAR]
	V	(313–393)	50.9 ± 0.1	298		[2012ZAI/NEG]
	V	(298–363)	48.4	298		[2004NAS/ZIM]
	V	(357–389)	46.0	372	EB	[2001MUN/KRA]
	V		38.2	423		[2000WOR/FEN]
	V		29.6	473		[2000WOR/FEN]
	V		20.8	523		[2000WOR/FEN]
	V		44.1			[1999FAT]
	V	(323–373)	52.5	298	CGC	[1995CHI/HOS]
	V	(315–390)	49.9	330		[1995DEJ/BUR]
	V	(364–403)	45.3	379		[1993SUS/ORT2]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(283–323)	55.2	298		[1992GRA/SAN]
	V	(376–399)	45.3	387	A	[1987STE/MAL]
	V	(323–413)	50.1	338	A	[1987STE/MAL]
	V	(413–550)	41.9	428	A	[1987STE/MAL]
	V	(209–251)	51.6	236	A	[1987STE/MAL]
	V	(376–397)	45.4	386	A	[1987STE/MAL]
	V	(391–429)	43.8	406	A	[1987STE/MAL]
	V	(415–501)	41.9	430	A	[1987STE/MAL]
	V	(497–563)	37.4	512	A	[1987STE/MAL]
	V	(243–303)	51.7	298		[1983SCH/STR]
	V	(329–391)	49.0	344		[1982SAC/PES]
	V		52.1	298	C	[1982FUC/PEA]
	V	(288–404)	55.0	303		[1973WIL/ZWO]
	V		49.5 ± 0.1	333	C	[1973SVO/VES]
	V		48.6 ± 0.1	343	C	[1973SVO/VES]
	V		47.5 ± 0.1	353	C	[1973SVO/VES]
	V		46.4 ± 0.1	363	C	[1973SVO/VES]
	V		52.34 ± 0.02	298	C	[1971POL/BEN]
	V		51.6 ± 0.1	308	C	[1971POL/BEN]
	V		51.0 ± 0.1	318	C	[1971POL/BEN]
	V		49.8 ± 0.1	328	C	[1971POL/BEN]
	V	(351–397)	47.2	366	EB	[1987STE/MAL, 1970AMB/SPR]
	V	(295–391)	53.0	310	DTA	[1969KEM/KRE]
	V		52.3 ± 0.1	298	C	[1966WAD]
	V		47.2 ± 0.1	356	C	[1965COU/HAL]
	V		45.4 ± 0.1	381	C	[1965COU/HAL]
	V		43.1 ± 0.1	391	C	[1965COU/HAL]
	V	(419–563)	42.1	434		[1963AMB/TOW]
	V	(362–398)	46.6	377	EB	[1963BID/COL]
	V		51.0 ± 0.1	298	C	[1963MCC/LAI]
	V	(337–390)	48.3	352		[1959BRO/SMI, 1984BOU/FRI]
	V	(314–390)	48.3	352		[1898KAH, 1984BOU/FRI]
C ₄ H ₁₀ O	[78-92-2] FUS	2-butanol	5.97	184.7		[1971AND/CON]
	V	(358–372)	44.2	360		[2012LAA/ZAI]
	V	(313–393)	48.1 ± 0.1	298		[2012ZAI/NEG]
	V	(315–371)	48.8	330	EB	[2009GIE/KOS]
	V	(320–379)	46.2	335		[2009MAR/LLA]
	V	(298–563)	46.2	298		[2004NAS/ZIM]
	V	(306–373)	47.7	321		[1995DEJ/BUR]
	V	(303–403)	49.3	318	A	[1987STE/MAL]
	V	(359–381)	43.2	370	A	[1987STE/MAL]
	V	(372–524)	47.9	387	A	[1987STE/MAL]
	V	(210–303)	57.5	225	A	[1987STE/MAL]
	V	(359–380)	43.2	369	A	[1987STE/MAL]
	V	(368–404)	42.0	383	A	[1987STE/MAL]
	V	(395–485)	39.6	410	A	[1987STE/MAL]
	V	(476–536)	35.0	491	A	[1987STE/MAL]
	V	(307–373)	47.8	322		[1982SAC/PES]
	V	(293–380)	53.2	308		[1978CAV/CHA]
	V	(319–372)	44.1	334		[1975BRA/AND]
	V	(280–314)	50.2	295		[1975CAB/CON2]
	V	(298–393)	48.1	313		[1973WIL/ZWO]
	V		49.74 ± 0.02	298	C	[1971POL/BEN]
	V		48.8 ± 0.1	308	C	[1971POL/BEN]
	V		47.9 ± 0.1	318	C	[1971POL/BEN]
	V		46.1 ± 0.1	328	C	[1971POL/BEN]
	V	(323–373)	46.3	338		[1969BRO/FOC, 1984BOU/FRI]
	V		49.7 ± 0.1	298	C	[1966WAD]
	V	(422–538)	38.4	437		[1963AMB/TOW]
	V	(345–381)	44.1	360	EB	[1963BID/COL]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		48.5	298	C	[1963MCC/LAI]
	V	(340–379)	44.7	355	EB	[1987STE/MAL, 1962BER/MCK, 1970AMB/SPR]
	V		45.3 ± 0.1	340	C	[1962BER/MCK]
	V		43.3 ± 0.1	355	C	[1962BER/MCK]
	V		41.9 ± 0.1	365	C	[1962BER/MCK]
	V		40.8 ± 0.1	372	C	[1962BER/MCK]
C ₄ H ₁₀ O	[4221-99-2] FUS	(+)-2-butanol	6.0	177.4		[1971AND/CON]
C ₄ H ₁₀ O	[78-83-1] FUS	2-methyl-1-propanol	6.32	171.2		[1968COU/LEE]
	V	(350–400)	48.8	298		[1999ORT/HER]
	V	(350–400)	45.4	365	EB	[1993SUS/ORT]
	V	(313–411)	49.5	328	A	[1987STE/MAL]
	V	(381–524)	46.0	396	A	[1987STE/MAL]
	V	(202–243)	55.0	228	A	[1987STE/MAL]
	V	(369–389)	44.2	379	A	[1987STE/MAL]
	V	(383–416)	42.6	398	A	[1987STE/MAL]
	V	(401–493)	41.1	416	A	[1987STE/MAL]
	V	(483–548)	36.2	498	A	[1987STE/MAL]
	V		50.8 ± 0.1	298	C	[1984MAJ/SVO]
	V		49.7 ± 0.1	313	C	[1984MAJ/SVO]
	V		48.3 ± 0.1	328	C	[1984MAJ/SVO]
	V		45.0 ± 0.1	358	C	[1984MAJ/SVO]
	V	(320–382)	48.1	335		[1982SAC/PES]
	V	(293–388)	52.6	308		[1973WIL/ZWO]
	V		50.79 ± 0.02	298	C	[1971POL/BEN]
	V		50.1 ± 0.1	308	C	[1971POL/BEN]
	V		49.3 ± 0.1	318	C	[1971POL/BEN]
	V		47.9 ± 0.1	328	C	[1971POL/BEN]
	V		46.2 ± 0.1	347	C	[1970COU/FEN]
	V		44.2 ± 0.1	363	C	[1970COU/FEN]
	V		41.9 ± 0.1	381	C	[1970COU/FEN]
	V	(342–389)	46.2	357	A, EB	[1987STE/MAL, 1970AMB/SPR]
	V	(333–381)	47.0	348		[1969BRO/FOC, 1984BOU/FRI]
	V		50.8 ± 0.1	298	C	[1966WAD]
	V	(423–548)	40.1	438		[1963AMB/TOW]
	V	(353–388)	45.2	368	EB	[1963BID/COL]
	V		49.8	298	C	[1963MCC/LAI]
C ₄ H ₁₀ O	[75-65-0] FUS	2-methyl-2-propanol	6.42	295.1	DSC	[2011BOG/DAO]
	TRS	(15–330)	0.83	286.1		
	TRS	(15–330)	0.49	294.5		
	FUS	(15–330)	6.7	299.0	AC	[1996DOM/HEA, 1963OET]
	FUS		6.78	298.5		[1996DOM/HEA, 1926PAR/AND]
	SUB		51.5			[2011BOG/DAO]
	SUB	(253–298)	51.3	275	A	[1947STU]
	V		45.0			[2011BOG/DAO]
	V	(306–355)	47.4	298	EB	[2007MAL]
	V	(323–368)	42.7	338		[2003ORT/ESP]
	V	(321–359)	43.4	336		[1999AUC/LOR]
	V	(323–373)	45.4	298	CGC	[1995CHI/HOS]
	V	(299–375)	46.2	314	A	[1987STE/MAL]
	V	(347–363)	41.4	355	A	[1987STE/MAL]
	V	(356–480)	43.2	371	A	[1987STE/MAL]
	V	(347–363)	41.4	355	A	[1987STE/MAL]
	V	(357–461)	39.8	372	A	[1987STE/MAL]
	V	(453–506)	33.6	468	A	[1987STE/MAL]
	V		46.2 ± 0.1	303	C	[1984MAJ/SVO]
	V		44.9 ± 0.1	313	C	[1984MAJ/SVO]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		43.0 ± 0.1	328	C	[1984MAJ/SVO]
	V		41.0 ± 0.1	343	C	[1984MAJ/SVO]
	V		37.2 ± 0.1	368	C	[1984MAJ/SVO]
	V	(306–357)	44.7	321		[1982SAC/PES]
	V	(293–376)	46.5	308		[1973WIL/ZWO]
	V		46.94 ± 0.02	298	C	[1971POL/BEN]
	V		45.8 ± 0.1	308	C	[1971POL/BEN]
	V		44.6 ± 0.1	318	C	[1971POL/BEN]
	V		42.7 ± 0.1	328	C	[1971POL/BEN]
	V	(313–355)	44.2	328		[1969BRO/FOC, 1984BOU/FRI]
	V		46.6 ± 0.1	298	C	[1966WAD]
	V	(333–363)	42.1	348	EB	[1963BEN/MCK]
	V		42.5 ± 0.1	330	C	[1963BEN/MCK]
	V		41.3 ± 0.1	340	C	[1963BEN/MCK]
	V		40.4 ± 0.1	346	C	[1963BEN/MCK]
	V		40.0 ± 0.1	349	C	[1963BEN/MCK]
	V		39.0 ± 0.1	356	C	[1963BEN/MCK]
	V	(329–363)	42.6	344	EB	[1987STE/MAL, 1970AMB/SPR, 1963BEN/MCK]
	V		44.9	298	C	[1963MCC/LAI]
	V	(373–506)	38.7	388		[1963AMB/TOW]
	V	(293–363)	44.7	323		[1928PAR/BAR]
C ₄ H ₁₀ O	[60-29-7]	diethyl ether				
	FUS		7.19	156.9		[1971COU/LEE]
	V	(298–317)	28.0 ± 0.4		I	[2010GER/PEL]
	V	(286–329)	28.1	301	A	[1987STE/MAL]
	V	(307–457)	26.9	322	A	[1987STE/MAL]
	V	(305–360)	27.5	320	A	[1987STE/MAL]
	V	(351–420)	26.6	366	A	[1987STE/MAL]
	V	(417–467)	26.7	432	A	[1987STE/MAL]
	V		27.1 ± 0.1	298	C	[1980MAJ/WAG]
	V		26.1 ± 0.1	313	C	[1980MAJ/WAG]
	V	(250–329)	27.2	298		[1976AMB/ELL]
	V	(250–329)	29.5	265	A	[1987STE/MAL, 1972AMB/SPR, 1976AMB/ELL]
	V	(213–293)	28.4	278		[1922TAY/SMI]
C ₄ H ₁₀ O	[598-53-8]	isopropyl methyl ether				
	FUS	(13–311)	5.85	127.3	AC	[1996DOM/HEA, 1975AND/MAR]
	V	(250–325)	28.8	265	A	[1987STE/MAL]
	V		26.4 ± 0.1	298	C	[1980MAJ/WAG]
	V		25.5 ± 0.1	313	C	[1980MAJ/WAG]
	V	(260–325)	28.4	275	A	[1987STE/MAL, 1976AMB/ELL]
	V		26.4	298		[1976AMB/ELL]
C ₄ H ₁₀ O	[557-17-5]	methyl propyl ether				
	FUS	(16–308)	7.67	134	AC	[1996DOM/HEA, 1975AND/MAR]
	V	(325–407)	27.2	340	A	[1987STE/MAL]
	V	(401–476)	26.7	416	A	[1987STE/MAL]
	V		27.6 ± 0.1	298	C	[1980MAJ/WAG]
	V		26.7 ± 0.1	313	C	[1980MAJ/WAG]
	V		25.8 ± 0.1	328	C	[1980MAJ/WAG]
	V	(253–328)	29.7	268	A	[1987STE/MAL, 1976AMB/ELL]
	V		27.5	298		[1976AMB/ELL]
	V		27.9 ± 0.2	298	C	[1975FEN/HAR]
	V	(273–321)	30.7	288	A	[1987STE/MAL, 1969KUD/REE]
	V	(273–312)	29.7	288		[1910BIN, 1984BOU/FRI]
C ₄ H ₁₀ OS	[70-29-1]	diethyl sulfoxide				
	V	(298–318)	58.7 ± 3.3	308		[2005MAR/ZAT]
C ₄ H ₁₀ O ₂	[26171-83-5]	(±)-1,2-butanediol				
	V	(283–332)	70.4 ± 0.3	298	GS	[2004VER2]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		73.3 ± 0.4	298	C	[2003EUS/LOP]
	V	(372–506)	71.6 ± 0.8	298	EB	[1996STE/CHI]
	V	(372–506)	51.46 ± 0.4	360	EB	[1996STE/CHI]
	V	(372–506)	48.9 ± 0.4	400	EB	[1996STE/CHI]
	V	(372–506)	46.3 ± 0.4	440	EB	[1996STE/CHI]
	V	(372–506)	43.6 ± 0.4	480	EB	[1996STE/CHI]
	V	(372–506)	40.7 ± 0.5	520	EB	[1996STE/CHI]
C ₄ H ₁₀ O ₂	[107-88-0]	(±)-1,3-butanediol				
	V	(288–332)	72.6 ± 0.3	298	GS	[2007VER]
	V		72.8 ± 0.6	298	C	[2003EUS/LOP]
	V	(365–518)	74.5 ± 1.0	298	EB	[1996STE/CHI]
	V	(365–518)	72.3 ± 0.8	320	EB	[1996STE/CHI]
	V	(365–518)	68.3 ± 0.7	360	EB	[1996STE/CHI]
	V	(365–518)	64.1 ± 0.6	400	EB	[1996STE/CHI]
	V	(365–518)	59.5 ± 0.5	440	EB	[1996STE/CHI]
	V	(365–518)	54.4 ± 0.6	480	EB	[1996STE/CHI]
	V	(362–483)	67.6	377	A	[1987STE/MAL]
	V	(373–423)	59.7	398		[1935SCH/STA]
	V	(423–480)	58.1	451		[1935SCH/STA]
C ₄ H ₁₀ O ₂	[6290-03-5]	(R)-1,3-butanediol				
	V		72.3 ± 0.7	298	C	[2003EUS/LOP]
C ₄ H ₁₀ O ₂	[110-63-4]	1,4-butanediol				
	FUS		17.48	294.2	DSC	[2015SOL/ROD]
	FUS	(103–303)	18.1	292.6	DSC	[2010MAR/JES]
	FUS	(103–303)	17.0	289	DSC	[2010MAR/JES]
	FUS		12.0	289.9	DTA	[1990KNA/SAB]
	FUS		18.7	293.6		[1996DOM/HEA, 1979NIS/BAB]
	V		77.1 ± 0.6	298	CGC	[2006UMN/KWE]
	V	(330–363)	79.0 ± 0.9	298	GS	[2005VAS/VER]
	V		78.3 ± 0.3	298	C	[2003EUS/LOP]
	V		79.3 ± 0.5	298	C	[1988KNA/SAB, 1990KNA/SAB2]
	V	(380–510)	72.0	395	A	[1987STE/MAL]
	V	(416–501)	76.1 ± 0.5	298	EB	[1984PAL/CHO, 2005VAS/VER]
	V	(419–490)	76.6 ± 1.7	298		[1972GAR/HUS, 2003EUS/LOP]
C ₄ H ₁₀ O ₂	[513-85-9]	(dl)-2,3-butanediol				
	V	(348–457)	62.5	363	A	[1987STE/MAL]
	V	(317–455)	58.4	332		[1947STU]
	V	(353–403)	57.9	378		[1935SCH/STA]
	V	(303–456)	55.7	380		[1935SCH/STA]
C ₄ H ₁₀ O ₂	[5341-95-7]	meso-2,3-butanediol				
	FUS		10.8	306.6	DSC	[2003EUS/LOP]
	V		66.6 ± 0.4	298	C	[2003EUS/LOP]
	V	(413–453)	54.6	433		[1946KNO/SCH]
C ₄ H ₁₀ O ₂	[24347-58-8]	levo 2,3-butanediol				
	V	(413–453)	52.6	433		[1946KNO/SCH]
C ₄ H ₁₀ O ₂	[19132-06-0]	(S,S) 2,3-butanediol				
	FUS	(103–303)	11.6	291.3	DSC	[2010MAR/JES]
	V		63.2 ± 0.7	298	C	[2003EUS/LOP]
C ₄ H ₁₀ O ₂	[2163-42-0]	2-methyl-1,3-propanediol				
	V	(297–375)	73.6 ± 0.2	298	GS	[2007VER]
	V	(488–708)	71.3 ± 0.5	298		[2002WIL/VON, 2007VER]
C ₄ H ₁₀ O ₂	[628-37-5]	diethylperoxide				
	V	(253–333)	29.0	268	A	[1987STE/MAL, 1951EGE/EMT, 1971DYK]
C ₄ H ₁₀ O ₂	[534-15-6]	1,1-dimethoxyethane				
	V		36.4 ± 0.1	298	C	[1970KUS/WAD]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(273–333)	33.4	288	A	[1987STE/MAL, 1949NIC/LAF, 1971DYK]
C ₄ H ₁₀ O ₂	[110-71-4]	1,2-dimethoxyethane				
	V	(304–358)	34.5		EB	[2009LI/FAN]
	V	(305–392)	36.8 ± 0.2	298	EB	[1996STE/CHI2]
	V	(238–298)	39.4	253	A	[1987STE/MAL]
	V	(238–363)	39.1	253	A	[1987STE/MAL]
	V	(225–366)	33.9	240		[1947STU]
C ₄ H ₁₀ O ₂	[110-80-5]	2-ethoxyethanol				
	V	(388–407)	44.3	398	EB	[2012RAN/BHA]
	V	(374–406)	46.9	298	EB	[2012RED/KUM]
	V	(310–385)	47.4	325	EB	[2001CHY/FRA]
	V	(313–353)	49.4	298	EB	[1999ANT/FRA]
	V	(313–363)	50.0	298	EB	[1999ANT/FRA]
	V	(323–353)	45.9	338	TGA	[1987ALN/ALS]
	V		48.2 ± 0.1	298	C	[1971KUS/WAD]
	V		49.2	298	I	[1971SUN/EIS]
	V	(333–341)	46.7	337		[1968GAR/BOV]
	V	(336–408)	44.7	351	A	[1987STE/MAL, 1956PIC/FRI]
C ₄ H ₁₀ O ₂	[107-98-2]	1-methoxy-2-propanol				
	V	(331–373)	46.2	298	EB	[2004ANT/GAL]
	V	(347–378)	46.4	298	EB	[2004CHY/FRA2]
C ₄ H ₁₀ O ₂ S	[111-48-8]	bis(2-hydroxyethyl) sulfide				
	V	(298–521)	86.8	298	DSC, GS	[2014BRO/TEV]
	V	(368–483)	U27.1	383	A	[1987STE/MAL]
	V	(315–558)	U28.3	330		[1947STU]
[Note: Authors of [2014BRO/TEV] noted that abnormally low enthalpies of vaporization are calculated from the earlier vapor pressure data.]						
C ₄ H ₁₀ O ₂ S	[597-35-3]	diethyl sulfone				
	SUB		86.2 ± 2.5			[UR/MAC, 1970COX/PIL]
C ₄ H ₁₀ O ₂ S ₂	[21884-56-0]	<i>meso</i> -1,2-bis(methylsulfinyl)ethane				
	FUS		34.31	446.7	DSC	[2001CAL/MEL]
C ₄ H ₁₀ O ₂ S ₂		racemic 1,2-bis(methylsulfinyl)ethane				
	FUS		22.18	405.4	DSC	[2001CAL/MEL]
[Note: The enthalpy and entropy of fusion values given in the paper are not consistent.]						
C ₄ H ₁₀ O ₃	[111-46-6]	diethylene glycol				
	V	(410–539)	66.9 ± 0.3	420	EB	[2002STE/CHI2]
	V	(410–539)	63.1 ± 0.3	460	EB	[2002STE/CHI2]
	V	(410–539)	59.2 ± 0.3	500	EB	[2002STE/CHI2]
	V	(410–539)	55.1 ± 0.5	540	EB	[2002STE/CHI2]
	V	(373–453)	66.5	413	TGA	[1987ALN/ALS]
	V	(364–518)	59.8	379	A	[1987STE/MAL]
	V	(412–513)	66.8	427		[1981AMB/HAL, 1984BOU/FRI]
	V	(403–513)	69.2	418		[1927RIN, 1984BOU/FRI]
C ₄ H ₁₀ O ₃	[4435-50-1]	1,2,3-butanetriol				
	V	(375–537)	68.1	390		[1947STU]
C ₄ H ₁₀ O ₃	[149-73-5]	orthoformic acid trimethyl ester				
	V	(273–358)	39.0	288	A	[1987STE/MAL]
	V		38.1 ± 0.8	298		[1971PIH/TUO]
C ₄ H ₁₀ O ₃ S	[623-81-4]	diethyl sulfite				
	V		44.7			[1975DEM/KOV]
	V		48.5 ± 1.7	298	BP	[1969MAC/STE2]
	V	(283–431)	44.5	298	A	[1987STE/MAL, 1947STU, 1999DYK/SVO, 1937ISH/TAN]
C ₄ H ₁₀ O ₄	[149-32-6]	<i>meso</i> -erythritol				
	FUS		42.0	390.2	DSC	[2008KAI/MAR]
	FUS		38.9	391.2	DSC	[2005LOP/TOM]
	FUS		41.2	391.8	DSC	[2004STU/WIT]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		40.3	392.2		[2002JON/COO]
	FUS		41.8			[1950NIT/SEK2]
	SUB		140	298	V + F	[2005LOP/TOM]
	SUB		157	298	B	[1990BAR/DEL]
	SUB		135.1 ± 2.2			[1960JON, 1970COX/PIL, 1950NIT/SEK2]
	V		97 ± 1	398	C	[2005LOP/TOM]
	V	(397–428)	113.6 ± 1.1	412	TE	[1990BAR/DEL]
	V	(394–401)	93.3	397	A	[1987STE/MAL, 1950NIT/SEK2]
C ₄ H ₁₀ O ₄	[2319-57-5]	(l)-threitol				
	FUS		29.1	361.8	DSC	[2005LOP/TOM]
	SUB		123	298	V + F	[2005LOP/TOM]
	V		86 ± 1	398	C	[2005LOP/TOM]
C ₄ H ₁₀ O ₄ S	[64-67-5]	diethyl sulfate				
	V	(413–484)	50.1	428	A	[1987STE/MAL]
	V		56.9 ± 1.7	298	BP	[1969MAC/STE2]
	V	(320–482)	54.9	335		[1947STU, 1999DYK/SVO]
C ₄ H ₁₀ S	[109-79-5]	1-butanethiol				
	FUS		10.46	157.5		[1996DOM/HEA, 1957SCO/FIN]
	V		36.5	298		[1971WIL/ZWO]
	V	(323–409)	35	338	A, EB	[1987STE/MAL, 1957SCO/FIN, 1966OSB/DOU]
	V		34.7 ± 0.1	330	C	[1957SCO/FIN]
	V		33.6 ± 0.1	350	C	[1957SCO/FIN]
	V		32.2 ± 0.1	371	C	[1957SCO/FIN]
C ₄ H ₁₀ S	[513-53-1]	(dl)-2-butanethiol				
	FUS		6.48	133		[1996DOM/HEA, 1958MCC/FIN]
	V		34.1	298		[1971WIL/ZWO]
	V	(310–395)	33.2	325	A, EB	[1987STE/MAL, 1958MCC/FIN, 1966OSB/DOU]
	V		32.9 ± 0.1	318	C	[1958MCC/FIN]
	V		32.3 ± 0.1	329	C	[1958MCC/FIN]
	V		31.8 ± 0.1	337	C	[1958MCC/FIN]
	V		30.6 ± 0.1	358	C	[1958MCC/FIN]
C ₄ H ₁₀ S	[513-44-0]	2-methyl-1-propanethiol				
	FUS		4.98	128.3		[1996DOM/HEA, 1958SCO/MCC]
	V		34.6	298		[1971WIL/ZWO]
	V	(314–399)	33.6	329	A, EB	[1987STE/MAL, 1958SCO/MCC, 1966OSB/DOU]
	V		33.3 ± 0.1	321	C	[1958SCO/MCC]
	V		32.3 ± 0.1	340	C	[1958SCO/MCC]
	V		31.0 ± 0.1	361	C	[1958SCO/MCC]
C ₄ H ₁₀ S	[75-66-1]	tert-butyl mercaptan				
	TRS	(12–329)	4.07	151.6		
	TRS	(12–329)	0.65	157.0		
	TRS	(12–329)	0.97	199.4		
	FUS	(12–329)	2.48	274.4		[1996DOM/HEA, 1953MCC/SCO]
	V	(275–293)	30.1	284		[1998STO/NG]
	V		30.8	298		[1971WIL/ZWO]
	V	(293–373)	30.9	308	A, EB	[1987STE/MAL, 1953MCC/SCO, 1966OSB/DOU]
	V		30.8 ± 0.1	298	C	[1953MCC/SCO]
	V		29.7 ± 0.1	317	C	[1953MCC/SCO]
	V		28.4 ± 0.1	337	C	[1953MCC/SCO]
C ₄ H ₁₀ S	[352-93-2]	diethyl sulfide				
	FUS		11.92	169.2		[1996DOM/HEA, 1952SCO/FIN]
	V	(293–361)	34.9	327		[2008BAE]
	V		35.8 ± 0.7	298	C	[1989VOR/KLY]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
			35.5	298		[1981SHI/SAI]
			35.8	298		[1971WIL/ZWO]
		(318–396)	34.4	333	A, EB	[1987STE/MAL, 1952SCO/FIN, 1966OSB/DOU]
			34.3	325	C	[1952SCO/FIN]
			33.1	344	C	[1952SCO/FIN]
			31.8	365	C	[1952SCO/FIN]
		(309–371)	34.8	324	EB	[1952WHI/BAR]
		(233–361)	37.5	248		[1947STU]
			33.5	364		[1935THO/LIN]
C ₄ H ₁₀ S	[1551-21-9]	methyl isopropyl sulfide				
	FUS		9.36	171.7		[1996DOM/HEA, 1955MCC/FIN]
			34.1	298		[1971WIL/ZWO]
			33.0 ± 0.1	318	C	[1955MCC/FIN]
			32.0 ± 0.1	336	C	[1955MCC/FIN]
			30.7 ± 0.1	358	C	[1955MCC/FIN]
		(298–368)	33.8	313	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₄ H ₁₀ S	[3877-15-4]	methyl propyl sulfide				
	FUS		9.91	160.2		[1996DOM/HEA, 1957SCO/FIN]
			36.2	298		[1971WIL/ZWO]
		(308–374)	35.3	323	A, EB	[1987STE/MAL, 1952WHI/BAR]
			34.5 ± 0.1	328	C	[1957SCO/FIN]
			33.4 ± 0.1	347	C	[1957SCO/FIN]
			32.1 ± 0.1	369	C	[1957SCO/FIN]
C ₄ H ₁₀ S ₂	[1191-08-8]	1,4-butanedithiol				
		(347–469)	50.9	362	A	[1987STE/MAL, 1999DYK/SVO]
			55.3 ± 0.4	298		[1962MAN/SUN]
			54.9 ± 0.3	298		[1962MAN/SUN]
C ₄ H ₁₀ S ₂	[110-81-6]	diethyl disulfide				
	FUS		9.4	171.6		[1996DOM/HEA, 1952SCO/FIN2]
		(383–423)	44.8	298	CGC	[1995CHI/HOS]
			45.4 ± 0.8	298	C	[1989VOR/KLY]
		(287–434)	45.7	302	A	[1987STE/MAL]
			45.2 ± 0.1	298	C	[1985KUS]
			45.2	298		[1981SHI/SAI]
			45.6	298		[1971WIL/ZWO]
		(373–431)	40.9	388	EB	[1987STE/MAL, 1966OSB/DOU, 1952SCO/FIN2]
			40.9	374	C	[1952SCO/FIN2]
			39.2	400	C	[1952SCO/FIN2]
		(359–433)	41.5	374	EB	[1952WHI/BAR]
C ₄ H ₁₁ N	[109-73-9]	butylamine				
		(298–343)	35.2	313	I	[2000BEL/BEL]
		(283–373)	36.0	298		[1995WOL/LAN]
		(323–373)	35.6	298	CGC	[1995CHI/HOS]
		(313–350)	34.7	328	A	[1987STE/MAL, 1971LET/BAY]
			35.7 ± 0.2	298	C	[1985KUS]
		(296–349)	35.5	311	EB	[1979MAJ/SVO2]
			35.7 ± 0.1	298	C	[1979MAJ/SVO2]
			34.7 ± 0.1	313	C	[1979MAJ/SVO2]
			33.5 ± 0.1	323	C	[1979MAJ/SVO2]
			32.4 ± 0.1	343	C	[1979MAJ/SVO2]
			31.1 ± 0.1	358	C	[1979MAJ/SVO2]
			35.7 ± 0.1	298	C	[1969WAD]
C ₄ H ₁₁ N	[13952-84-6]	sec-butylamine				
		(274–354)	33.8	298		[2012AHM/NEG]
		(300–335)	32.4	315	EB	[1979MAJ/SVO2]
			32.7 ± 0.1	298	C	[1979MAJ/SVO2]
			31.6 ± 0.1	313	C	[1979MAJ/SVO2]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
	V		30.5 ± 0.1	328	C	[1979MAJ/SVO2]	
	V		29.4 ± 0.1	343	C	[1979MAJ/SVO2]	
	V	(264–371)	34.1	279	A	[1987STE/MAL, 1971DYK]	
	V		32.6 ± 0.1	298	C	[1969WAD]	
C ₄ H ₁₁ N	[78-81-9]	isobutylamine					
	V	(248–347)	37.6	263		[1987STE/MAL]	
	V		33.9 ± 0.1	298	C	[1979MAJ/SVO2]	
	V		32.7 ± 0.1	313	C	[1979MAJ/SVO2]	
	V		31.6 ± 0.1	328	C	[1979MAJ/SVO2]	
	V	(297–340)	33.5	313	EB	[1979MAJ/SVO2]	
	V		33.8 ± 0.1	298	C	[1969WAD]	
C ₄ H ₁₁ N	[75-64-9]	<i>tert</i> -butylamine					
	TRS	(12–332)	0.11	91.3			
	TRS	(12–332)	6.05	202.3			
	FUS	(12–332)	0.88	206.2	AC	[1996DOM/HEA, 1972FIN/MES]	
	V	(283–343)	30.5	298		[1995WOL/LAN]	
	V		29.6 ± 0.1	298	C	[1969WAD]	
C ₄ H ₁₁ N	[109-89-7]	diethylamine					
	FUS		13.3	224.7	DSC	[2015ROT/VRB]	
	V	(302–328)	31.2	315	A	[1987STE/MAL, 1971LET/BAY]	
	V	(325–437)	30.4	340	A	[1987STE/MAL]	
	V	(431–496)	28.4	446	A	[1987STE/MAL]	
	V		31.3 ± 0.1	298	C	[1979MAJ/SVO2]	
	V		30.2 ± 0.1	313	C	[1979MAJ/SVO2]	
	V		29.1 ± 0.1	328	C	[1979MAJ/SVO2]	
	V		28.0 ± 0.1	343	C	[1979MAJ/SVO2]	
	V		31.2 ± 0.1	298	C	[1969WAD]	
C ₄ H ₁₁ N	[4747-21-1]	<i>N</i> -methyl isopropyl amine					
	V		30.7 ± 0.1	298	C	[1979PET/MAJ]	
	V		29.5 ± 0.1	313	C	[1979PET/MAJ]	
	V		27.1 ± 0.1	343	C	[1979PET/MAJ]	
	V	(293–319)	30.9	306	EB	[1979PET/MAJ]	
	C ₄ H ₁₁ NO	[108-01-0]	2-(dimethylamino)ethanol				
		V	(274–363)	46.7	298	Static	[2013CHI/DER]
		V	(278–316)	46.5 ± 0.4	298	GS	[2005KAP/SLO]
		V	(350–387)	43.2	365	A	[1987STE/MAL]
		V	(323–408)	42.7	338	A	[1987STE/MAL]
V		(298–308)	47.9	298		[1982TOU/OKA, 2005KAP/SLO]	
C ₄ H ₁₁ NO	[5332-73-0]	3-methoxypropylamine					
	V	(278–390)	44.5	293	A	[1987STE/MAL]	
C ₄ H ₁₁ NO	[124-68-5]	2-methyl-2-amino-1-propanol					
	V	(293–373)	63.3	308	Static	[2010BEL/AHM]	
C ₄ H ₁₁ NO	[13325-10-5]	4-amino-1-butanol					
	FUS		21.83	292.2	DSC	[2015SOL/ROD]	
C ₄ H ₁₁ NO ₂	[111-42-2]	2,2'-iminodiethanol					
	V	(463–582)	69	478		[1959MCD/SHR]	

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₄ H ₁₁ NO ₂	[111-42-2]	diethanolamine				
	SUB		96.7 ± 1.2	298	C	[1982MIN/SAB]
	V	(423–542)	74.4	438	A	[1987STE/MAL]
	V	(376–454)	77.0	391		[1969DAN/MAT, 1984BOU/FRI]
	V	(466–514)	70.6	481		[1959MCD/SHR, 1984BOU/FRI]
C ₄ H ₁₁ NO ₂	[115-69-5]	2-amino-2-methyl-1,3-propanediol				
	TRS	(78–405)	24.33	351.6		
	FUS	(78–405)	4.01	380.6	AC	[2010TON/TAN]
	TRS		23.55	356.7		
	FUS		2.76	384.1	DSC	[2006DIV/CHE]
	TRS		20.1	353.2		
	FUS		2.52	383.4	DSC	[2004STU/WIT]
	TRS		25.21	352		
	FUS		2.99	384		[1996DOM/HEA, 1994LOP/VAN]
	TRS	(283–393)	5.0	352.9		
	TRS	(283–393)	18.46	353.7		
	FUS	(283–393)	2.78	384.1	AC	[1990ZHA/YAN]
	SUB (cryst)	(330–346)	110 ± 6			[1995FON/MUN]
SUB (plastic)	(354–372)	81 ± 8			[1995FON/MUN]	
SUB (plastic)		86.5 ± 4.3	368	C	[1994FON/MUN]	
SUB (cryst)		114.5 ± 5.7	339	C	[1994FON/MUN]	
C ₄ H ₁₁ NO ₂	[929-06-6]	1-amino-2-(2-hydroxyethoxy)ethane				
	V	(303–359)	73.4	331	GS	[2011VER/TON]
	V	(303–359)	75.9 ± 0.4	298	GS	[2011VER/TON]
	V	(391–516)	59.4	454	EB	[1994CUN/JON, 2011VER/TON]
	V	(391–516)	71.2 ± 0.6	298	EB	[1994CUN/JON, 2011VER/TON]
C ₄ H ₁₁ NO ₂ S	[6338-68-7]	<i>N,N</i> -dimethylethanesulfonamide				
	V	(384–517)	54.3	399	A	[1987STE/MAL]
	V	(384–517)	54.0			[1978LUK/MAK]
C ₄ H ₁₁ NO ₃	[77-86-1]	2-amino-2-hydroxymethylpropane-1,3-diol				
	TRS		33.48	409.2		
	FUS		3.1	444.6	DSC	[2006DIV/CHE]
	TRS	(294–450)	33.42	407.5	AC	[1990YIN/LIN, 1994LOP/VAN]
	FUS	(294–450)	2.41	443.6	AC	[1990YIN/LIN, 1994LOP/VAN]
C ₄ H ₁₁ NS	[108-02-1]	2-dimethylaminoethanethiol				
	V	(275–364)	42.7	283	DSC,GS	[2013WIL/HUL]
	V	(275–364)	41.1	303	DSC,GS	[2013WIL/HUL]
	V	(275–364)	39.8	323	DSC,GS	[2013WIL/HUL]
	V	(275–364)	38.2	353	DSC,GS	[2013WIL/HUL]
C ₄ H ₁₁ O ₂ PS ₂	[298-06-6]	<i>O,O</i> -diethyl phosphorodithioate				
	V		67.7	298		[2008SAG/SAF]
C ₄ H ₁₁ O ₃ P	[762-04-9]	diethylphosphite				
	V		49.3	298		[2008SAG/SAF]
	V	(338–471)	38.1	353	A	[1987STE/MAL, 1958PAG/PUR]
C ₄ H ₁₁ O ₃ P	[6163-75-3]	dimethyl ethylphosphonate				
	V	(333–410)	70.1	348	A	[1987STE/MAL, 1955KOS, 1984BOU/FRI]
C ₄ H ₁₁ P	[1605-51-2]	ethyl dimethylphosphine				
	V	(273–297)	32.8	285		[1959KAE/STO]
C ₄ H ₁₂ ClN	[3858-78-4]	butylammonium chloride				
	V	(489–508)	62.1	498	A,I	[1987STE/MAL, 1967KIS]
C ₄ H ₁₂ ClN	[660-68-4]	diethylamine hydrochloride				
	V	(513–558)	177.6	528	A, I	[1987STE/MAL, 1967KIS]
C ₄ H ₁₂ ClN ₂ P	[3348-44-5]	bis(dimethylamino)chlorophosphine				
	V		45.9 ± 1.2	298	STG	[1995ALM/FIN2]

TABLE 7. Phase change enthalpies of C₄ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₄ H ₁₂ FN ₂ OP	[115-26-4] V	bis(dimethylamido)fluorophosphate (312–350)	50.4	327	A	[1987STE/MAL]	
C ₄ H ₁₂ NP	[683-84-1] V	dimethyl(dimethylamino)phosphine (264–372)	36.8	279	A	[1987STE/MAL]	
C ₄ H ₁₂ N ₂	[4426-48-6] V	<i>(dl)</i> -1,2-butanediamine (251–293)	50.2	278	A	[1987STE/MAL, 1975MES/FIN]	
	V		46.9	298	IPM	[1975MES/FIN]	
	V		48.9 ± 0.3	298	IPM	[1975MES/FIN, 2015VER/EME2]	
	[Note: Error noted in the treatment in [1975MES/FIN].] V		46.3 ± 0.2	298	IPM	[1965DOU/OSB, 1970GOO/MOO]	
C ₄ H ₁₂ N ₂	[110-60-1] FUS	butane-1,4-diamine	28.06	295.1	DSC	[2002DAL/DEL]	
	SUB		(256–295)	87.1	298	Static	[2014FUL/RUZ]
	V		(300–345)	53.6	323	GS	[2011POZ/VER]
	V		(300–345)	55.2 ± 0.3	298	GS	[2011POZ/VER]
C ₄ H ₁₂ N ₂	[811-93-8] TRS	2-methyl-1,2-propanediamine (12–375)	15.46	237.5			
	FUS		(12–375)	2.23	256.1	AC	[1996DOM/HEA, 1975MES/FIN]
	V		(276–309)	47.3 ± 0.2	298	GS	[2015VER/EME2]
	V		(256–293)	47.2	278	IPM	[1987STE/MAL, 1975MES/FIN]
	V		(256–293)	43.5 ± 0.2	298	IPM	[1975MES/FIN]
	V		(256–293)	45.8 ± 0.3	298	IPM	[1975MES/FIN, 2015VER/EME2]
	[Note: Error noted in the treatment in [1975MES/FIN].] V		43.6 ± 0.2	298	IPM	[1965DOU/OSB, 1970GOO/MOO]	
C ₄ H ₁₂ N ₂	[110-72-5] V	<i>N</i> -ethyl-1,2-ethanediamine (358–402)	43.0	373		[2013BUR/STR]	
C ₄ H ₁₂ N ₂	[6415-12-9] V	tetramethylhydrazine (290–346)	32.9	305	T	[1987STE/MAL, 1957AYL]	
C ₄ H ₁₂ N ₂	[6291-84-5] V	3-(methylamino)propylamine (277–303)	53.1 ± 0.4	298	GS	[2012VER/CHE]	
	V		(327–413)	45.9	342	EB	[2008KIM/SVE]
	V		(327–413)	48.7 ± 0.3	298	EB	[2008KIM/SVE, 2012VER/CHE]
C ₄ H ₁₂ N ₂ O	[111-41-1] V	<i>N</i> -(2-hydroxyethyl)ethylenediamine (323–374)	71.2	349	GS	[2011VER/TON]	
	V		(323–374)	75.1 ± 0.3	298	GS	[2011VER/TON]
	V		(323–433)	58.2	378		[2001XIE/CHE]
	V		(323–433)	64.2 ± 1.6	298		[2001XIE/CHE]
	V		(383–517)	62.8	398	A	[1987STE/MAL]
C ₄ H ₁₂ N ₂ OS	[3768-60-3] V	tetramethyl sulfurous diamide (320–351)	41.9	335	A	[1987STE/MAL, 1999DYK/SVO, 1954BUR/WOO]	
C ₄ H ₁₂ N ₂ O ₂ S	[3768-63-6] V	<i>N,N,N',N'</i> -tetramethylsulfamide (358–495)	53.2	373	A	[1987STE/MAL, 1999DYK/SVO, 1954BUR/WOO]	
C ₄ H ₁₂ N ₂ S	[2129-20-6] V	tetramethylsulfoxylic diamide (301–326)	40.4	313	A	[1987STE/MAL, 1954BUR/WOO]	
C ₄ H ₁₃ NP ₂	[98023-09-7] SUB	bis(dimethylphosphino)amine (300–310)	61.7	305		[1953WAG/BUR]	
C ₄ H ₁₃ N ₃	[111-40-0] V	2,2'-diaminodiethylamine (283–442)	64.4	298	Static	[2016BOU/DER]	
	V		(371–521)	63.4 ± 0.7	298	EB	[1999RIB/MAT2]
	V		(371–441)	54.8	386	A,I	[1987STE/MAL, 1967SIV/MAT]

TABLE 8. Phase change enthalpies of C₅ organic compounds

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ BrF ₁₂ N	[4908-96-7] V	1,1,2,3,3,3-hexafluoro-2-bromo- <i>N,N</i> -bis(trifluoromethyl)propylamine (324–351)	30.2	337	A	[1987STE/MAL, 1965HAS/TIP]
C ₅ ClF ₅	[30221-57-9] V	1-chloro-2,3,4,5,5-pentafluoro-1,3-cyclopentadiene (273–303)	31.0	288	A	[1987STE/MAL, 1970BAN/BRI]
C ₅ ClF ₅	[30221-56-8] V	5-chloro-1,2,3,4,5-pentafluoro-1,3-cyclopentadiene (283–323)	28.7	298	A	[1987STE/MAL, 1970BAN/BRI]
C ₅ ClF ₁₀ N	[54120-14-8] V	2,2,2-trifluoro- <i>N</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethylidene]ethanimidoyl chloride	28.6	361		[1975PET/SHR2]
C ₅ ClF ₁₂ N	[54566-78-8] V	<i>N</i> -chloro-1,1,2,3,3,3-heptafluoro- <i>N</i> -(pentafluoroethyl)-2-propanamine	28.6	346		[1975PET/SHR2]
C ₅ Cl ₂ F ₆	[706-79-6] V V	1,2-dichlorohexafluorocyclopentene (344–364) (344–364)	33.0 36.5	354 298		[1959YEN/REE] [1959YEN/REE]
C ₅ Cl ₂ F ₉ N	[54566-77-7] V	1,1-dichloro-2,2,2-trifluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene]ethanamine	31.2	361		[1975PET/SHR2]
C ₅ Cl ₃ F ₇ O	[61196-11-0] V V	(1,1,2-trifluoro-2,2-dichloroethyl)(2,2,3,3-tetrafluoro-1,1,3-trichloropropyl) ether (362–449)	45.3 50.7 ± 0.8	377 298	A EB	[1987STE/MAL] [1976AMM/BUL]
C ₅ Cl ₅ N	[2176-62-7] FUS	pentachloropyridine	27.7	398.2	DSC	[2004RAI]
C ₅ Cl ₆	[77-47-4] SUB V V	hexachlorocyclopentadiene (335–512)	73.6 53.7 67.4	283 350	B A	[1963BON, 1958UNG/MCB] [1987STE/MAL] [1977LYU/SMO]
C ₅ Cl ₈	[706-78-5] V	octachlorocyclopentene	83.4			[1977LYU/SMO]
C ₅ F ₅ N	[700-16-3] V	perfluoropyridine (273–363)	36.3	288	A	[1987STE/MAL, 1961BAN/GIN, 1972DYK]
C ₅ F ₈	[21972-01-0] V	perfluoro-1,2-pentadiene (262–276)	26.1	269	A	[1987STE/MAL, 1968BAN/BRA]
C ₅ F ₉ N	[19451-91-3] V	3,3,3-trifluoro- <i>N,N</i> -bis(trifluoromethyl)-1-propynylamine (277–293)	24.9	285	A	[1987STE/MAL, 1968FRE/TIP]
C ₅ F ₉ N	[714-37-4] V	2,3,4,5-tetrahydrononafluoropyridine (249–310)	29.3	264	A	[1987STE/MAL, 1962BAN/CHE]
C ₅ F ₉ NO	[52225-57-7] V	2,2,2-trifluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]acetamide	32.1	319		[1974PET/SHR]
C ₅ F ₉ NO	[4827-67-2] V	3,3,4,5,6,6-hexafluoro-3,6-dihydro-2-trifluoromethyl-2 <i>H</i> -1,2-oxazine (263–323)	31.4	278	A	[1987STE/MAL, 1965BAN/BAR]
C ₅ F ₉ NO ₃ S	[34805-64-6] V	nonafluoro-1-butanefulfonyl isocyanate (309–401)	48.2	324	A	[1987STE/MAL, 1974BEH/HAA]
C ₅ F ₁₀	[376-77-2] TRS FUS SUB SUB V V V	perfluorocyclopentane (229–281)	4.95 2.99 32.1 38.2 27.0 25.6 26.3	118.2 283.5 266 115 291 298 298		[1951BUR/CAD] [1987STE/MAL, 1967CRO/TAY] [1963BON, 1951BUR/CAD, 1956BAR/CAD] [1987STE/MAL, 1967CRO/TAY] [1984BOU/FRI, 1991BAS/SVO] [1956BAR/CAD]
C ₅ F ₁₀ N ₂ O ₂	[32822-52-9] V	decafluoroglutaramide	35.6	368	HG	[1971DEM/SHR]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ F ₁₀ N ₂ O ₂	[1840-07-9] V	1-nitrodecafluoropiperadine (283–343)	29.6	298	A	[1987STE/MAL, 1964BAN/CHE]
C ₅ F ₁₀ O ₂	[55064-79-4] V	carbonofluoridic acid, 2,2,2-trifluoro-1,1-bis(trifluoromethyl) ethyl ether (275–305)	32.2	290	A	[1987STE/MAL, 1975WAL/DES2]
C ₅ F ₁₀ O ₃ S	[2993-14-8] V	perfluorocyclopentyl fluorosulfate (255–360)	36.6	307		[1963GIL/CAD]
C ₅ F ₁₀ O ₆ S ₂	[741-20-8] V	octafluorocyclopentanediol bis(fluorosulfate) (334–423)	49.5	349		[1972DYK, 1987STE/MAL, 1999DYK/SVO, 1961SHR/CAD]
C ₅ F ₁₁ N	[836-77-1] TRS TRS FUS V	perfluoropiperidine (12–318) (12–318) (12–318) (302–355)	6.63 1.84 2.82 30.0	161 171.9 274.1 317	A, EB	[1996DOM/HEA, 1963GOO/TOD] [1987STE/MAL, 1963GOO/TOD, 1972DYK]
C ₅ F ₁₁ N	[2344-10-7] V	octafluoro-1-(trifluoromethyl)pyrrolidine (249–306)	29.4	264	A	[1987STE/MAL, 1962BAN/CHE]
C ₅ F ₁₁ NO	[52225-65-7] V	<i>N</i> ,2,2,2-tetrafluoro- <i>N</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]acetamide (32.6)	32.6	332		[1974PET/SHR]
C ₅ F ₁₂	[594-91-2] V V V V	perfluoro-2-methylbutane (290–340) (228–308) (290–337)	26.3 31.0 26.1 27.4	298 243 303 298	A	[1984BOU/FRI, 1991BAS/SVO] [1987STE/MAL, 1967CRO/TAY] [1967CRO/TAY] [1956BAR/CAD]
C ₅ F ₁₂	[678-26-2] FUS SUB V V V V	perfluoropentane (6.8) (43.7) (280–340) (221–303) (288–338)	6.8 43.7 26.6 31.1 26.4 27.5	147.8 145 298 236 302 298	A	[1951BUR/CAD] [1963BON, 1951BUR/CAD, 1956BAR/CAD] [1984BOU/FRI, 1991BAS/SVO] [1987STE/MAL, 1967CRO/TAY] [1967CRO/TAY] [1956BAR/CAD]
C ₅ F ₁₂ N ₂	[53684-06-3] V	[2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethyl](trifluoromethyl)diazene (23.7)	23.7	309		[1975KIR/LAS]
C ₅ F ₁₂ O ₂	[20822-11-1] V	bis(pentafluoroethoxy)difluoromethane (246–299)	32.7	261	A	[1987STE/MAL, 1968HOH/SHR]
C ₅ F ₁₂ O ₂ S	[52225-54-4] V	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1,1-bis(trifluoromethyl) ethyl ether (37.7)	37.7	355	HG	[1974MAJ/SHR]
C ₅ F ₁₂ O ₄ S	[60672-63-1] V	pentafluoro(2,2,3,3,4,4,5-heptafluoro-5-oxopentaneperoxoato)sulfur (39.2)	39.2			[1976HOP/DES]
C ₅ F ₁₃ N	[1481-55-6] FUS TRS FUS V V	<i>N</i> -(trifluoromethyl)bis(pentafluoroethyl)amine (4.60) (5.53) (6–300) (7.16) (298–319) (29.4 ± 0.4)	4.60 5.53 7.16 30.2 29.4 ± 0.4	150.1 126.0 149.7 308 298	A	[1996DOM/HEA, 1984GOL/KOL] [1996DOM/HEA, 1980ZHO/KOS] [1987STE/MAL] [1977VAR/AMM2]
C ₅ F ₁₃ NS	[37826-44-1] V	<i>N</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- <i>S</i> , <i>S</i> -bis(trifluoromethyl)sulfilimine (31.3)	31.3		A	[1987STE/MAL, 1999DYK/SVO]
C ₅ F ₁₄ N ₂ O	[17636-89-4] V	1-[difluoro(trifluoromethoxy)methyl]-1,2,2-tris(trifluoromethyl)hydrazine (302–331)	34.7		A	[1987STE/MAL, 1967HAS/TIP]
C ₅ F ₁₄ N ₂ O	[17636-88-3] V	1,1-difluoro- <i>N</i> -(trifluoromethoxy)- <i>N</i> , <i>N</i> ', <i>N</i> '-tris(trifluoromethyl)methanediamine (282–323)	33.7	297	A	[1987STE/MAL, 1967HAS/TIP]
C ₅ F ₁₄ OS	[736-59-4]	pentafluoro(nonfluorocyclopentyl)oxyl] sulfur				

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(300–361)	36.1	315	A	[1987STE/MAL, 1999DYK/SVO]
C ₅ F ₁₅ N	[758-48-5] V	<i>N</i> -(trifluoromethyl)bis(pentafluoroethyl)amine	29.4 ± 0.4	298		[1977VAR/AMM]
C ₅ F ₁₅ NS	[65844-10-2] V	difluoro[1,1,1,2,3,3,3-heptafluoro-2-propanamino(2-)]-bis(trifluoromethyl) sulfur	32.2	375	I	[1978KIT/SHR]
C ₅ F ₁₅ P ₅	[745-23-3] V	1,2,3,4,5-pentakis(trifluoromethyl)pentaphospholane	51.8	334	A, SG	[1987STE/MAL, 1958MAH/BUR]
C ₅ N ₄	[24331-09-7] SUB	tetracyanomethane	61.1 ± 8.8	298	DSC	[1973BAR/MOR2]
	[Note: Authors of [1972RUB/RUD] report that no phase transitions were observed between 123 K and the decomposition temperature of 433 K.]					
C ₅ O ₂	[51799-36-1] V	pentacarbon dioxide	4.6	258	A	[1987STE/MAL, 1937KLE/WAG]
C ₅ HCIF ₈ O ₂	[52225-55-5] V	trifluoroacetic acid, 1-(chlorodifluoromethyl)-2,2,2-trifluoroethyl ester	37.2	338	HG	[1974MAJ/SHR]
C ₅ HF ₉ O ₄	[151772-58-6] V V V V	perfluoro-3,6-dioxaheptanoic acid	66.4 64.4 62.8 61.3	263 278 293 308	GS GS GS GS	[2013SCH/BUC] [2013SCH/BUC] [2013SCH/BUC] [2013SCH/BUC]
C ₅ HF ₁₀ NO	[52225-63-5] V	2,2,2-trifluoro- <i>N</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]acetamide	42.3	367		[1974PET/SHR]
C ₅ HF ₉	[376-65-8] V V	nonafluorocyclopentane	29.6 29.4	304 298	A	[1987STE/MAL, 1956BAR/CAD] [1956BAR/CAD]
C ₅ HF ₉ IN	[20257-34-5] V	<i>cis</i> -3,3,3-trifluoro-1-iodo- <i>N,N</i> -bis(trifluoromethyl)propenylamine	31.3	354	A	[1987STE/MAL, 1968FRE/TIP]
C ₅ HF ₉ IN	[20257-35-6] V	<i>trans</i> -3,3,3-trifluoro-1-iodo- <i>N,N</i> -bis(trifluoromethyl)propenylamine	35	356	A	[1987STE/MAL, 1968FRE/TIP]
C ₅ HF ₉ O ₂	[42031-15-2] V	trifluoroacetic acid, 2,2,2-1-(trifluoromethyl)ethyl ester	28.5	321	HG	[1973MAJ/SHR]
C ₅ HF ₁₀ N	[559-31-9] V	2,2,3,3,4,4,5,5,6,6-decafluoropiperidine	32.7	288	A	[1987STE/MAL, 1964BAN/CHE]
C ₅ HF ₁₂ N	[54566-80-2] V	1,1,1,2,3,3,3-heptafluoro- <i>N</i> -(pentafluoroethyl)-2-propanamine	29.8	325		[1975PET/SHR2]
C ₅ HN ₃	[997-76-2] V	ethylenetricarbonitrile	66.0	328	A, MG	[1987STE/MAL, 1963BOY]
C ₅ H ₂ BrF ₈ N	[19451-93-5] V	2-bromo-3,3-difluoro- <i>N,N</i> -bis(trifluoromethyl)allylamine	33.8	351	A	[1987STE/MAL, 1968FRE/TIP]
C ₅ H ₂ Cl ₃ N	[16063-70-0] SUB	2,3,5-trichloropyridine	74.4 ± 1.5	298	C	[2005GOM/AMA]
C ₅ H ₂ C ₁₃ NO	[6515-38-4] FUS V	3,5,6-trichloro-2-pyridinol	25.79 63.0	448.1 388	DSC GC	[1991ACR, 1990DON/DRE] [2007GOE/MCC]
C ₅ H ₂ F ₆ N ₂	[14704-41-7] SUB	3,5-bis(trifluoromethyl)pyrazole	69.0 ± 0.6	266	ME	[1991ELG/YRA]
C ₅ H ₂ F ₆ O ₂	[1522-22-1] V V	1,1,1,5,5,5-hexafluoropentan-2,4-dione	33.1 30.6 ± 0.1	301 298	GS C	[1998GEO/YOU] [1997RIB/GON, 1975IRV/RIB, 1978RIB/IRV]
C ₅ H ₂ F ₉ N	[25273-42-1] V	<i>trans</i> -3,3,3-trifluoro- <i>N,N</i> -bis(trifluoromethyl)propenylamine	28.2	302	A	[1987STE/MAL, 1968FRE/TIP]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₂ F ₉ NOS	[62067-07-6] V	2,2,2-trifluoro- <i>N</i> -[(trifluoromethyl)thio]ethanimidic acid, 2,2,2-trifluoroethyl ester	35.8	373	I	[1977BUR/SHR2]
C ₅ H ₂ F ₉ NS	[57682-29-8] V	2,2,2-trifluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethyl]ethanethioamide	36.9			[1975PET/SHR3]
C ₅ H ₂ F ₁₀	[138495-42-8] V	1,1,1,2,2,3,4,5,5,5-decafluoropentane (289–326)	33.4	298		[2001LOR/AUC]
C ₅ H ₂ F ₁₀	[142347-07-7] V	(<i>threo</i>) 1,1,1,2,2,3,4,5,5,5-decafluoropentane (293–328)	40.8	298	EB	[2004KAO/SIE]
C ₅ H ₂ F ₁₀	[142347-08-8] V	(<i>erythro</i>) 1,1,1,2,2,3,4,5,5,5-decafluoropentane (293–328)	37.9	298	EB	[2004KAO/SIE]
C ₅ H ₂ F ₁₀ O	[142469-08-7] V	1,1,1,2,2,3,3-heptafluoro-3-(2,2,2-trifluoroethoxy)propane (288–325)	31.5	303	I	[2002MUR/YAM]
C ₅ H ₂ F ₁₀ O	[347148-74-7] V	1,1,1,2,4,4,4-heptafluoro-2-(trifluoromethoxy)butane (288–323)	31.8	303	I	[2002MUR/YAM]
C ₅ H ₂ F ₁₀ O	[155653-44-4] V	1,1,1,2,2-pentafluoro-3-(pentafluoroethoxy)propane (288–320)	31.2	303	I	[2002MUR/YAM]
C ₅ H ₂ F ₁₀ O ₃	[188690-77-9] V	1-(difluoromethoxy)-2-[(difluoromethoxy)difluoromethoxy]-1,1,2,2-tetrafluoroethane (263–357)	36.5 ± 0.7			[1999MAR/BAS]
C ₅ H ₂ N ₄	[1122-28-7] FUS SUB	4,5-dicyanoimidazole (383–403)	22.6 119.5 ± 0.9	449.0 298	DSC ME	[2012ALM/MON] [2012ALM/MON]
C ₅ H ₂ N ₄ O ₆	[78013-51-1] FUS SUB	2,4,6-trinitropyridine (335–357)	22.0 101.7 ± 2.9	436.2		[1988LIC/RIT] [1995LEB/CHI]
C ₅ H ₂ N ₄ O ₇	[25242-76-6] SUB	2,4,6-trinitropyridine <i>N</i> -oxide (377–403)	106.3 ± 2.9			[1995LEB/CHI]
C ₅ H ₃ BrF ₉ N	[19451-92-4] V	2-bromo-3,3,3-trifluoro- <i>N</i> , <i>N</i> -bis(trifluoromethyl)propylamine (342–365)	34.2	353	A	[1987STE/MAL, 1968FRE/TIP]
C ₅ H ₃ Br ₂ N	[624-28-2] SUB	2,5-dibromopyridine	82.1 ± 2.2	298	C	[1997RIB/MAT]
C ₅ H ₃ Br ₂ N	[626-05-1] SUB	2,6-dibromopyridine	85.6 ± 3.0	298	C	[1997RIB/MAT]
C ₅ H ₃ Cl ₂ N	[2402-77-9] SUB	2,3-dichloropyridine	73.5 ± 3.1	298	C	[1997RIB/MAT]
C ₅ H ₃ Cl ₂ N	[16110-09-1] SUB	2,5-dichloropyridine	67.1 ± 2.0	298	C	[1997RIB/MAT]
C ₅ H ₃ Cl ₂ N	[2402-78-0] SUB	2,6-dichloropyridine	72.0 ± 1.6	298	C	[1997RIB/MAT]
C ₅ H ₃ Cl ₂ N	[2457-47-8] SUB	3,5-dichloropyridine	67.3 ± 1.9	298	C	[1997RIB/MAT]
C ₅ H ₃ F ₃ N ₂ O ₂	[54-20-6] SUB SUB	5-(trifluoromethyl)uracil (373–392) (373–392)	108.5 ± 0.9 110.8 ± 0.9	382 298	ME ME	[2004ZIE/SZT] [2004ZIE/SZT]
C ₅ H ₃ F ₆ N	[25237-11-0] V	<i>N</i> , <i>N</i> -bis(trifluoromethyl)-1-propynylamine (295–312)	31.1	303	A	[1987STE/MAL, 1969FRE/TIP2]
C ₅ H ₃ F ₇ O ₂	[356-24-1] FUS V	methyl perfluorobutyrate (373–392)	11.77 34.5	191.4		[1996DOM/HEA, 1984GOL/KOL] [1977DIT/KOL, 1978KOL/DIT]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₃ F ₈ NOS	[77589-48-1] V	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-(methylimino)-thiophene-1-oxide	33.9	330		[1981ABE/SHR]
C ₅ H ₃ F ₉ N ₂ OS	[62609-63-6] V	1,1,1-trifluoro- <i>N'</i> -methyl- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]methanesulfonimidamide	32.6	417	I	[1977KIT/SHR]
C ₅ H ₃ F ₉ O	[176310-27-3] V	1,1,2,2-tetrafluoro-3-(pentafluoroethoxy)propane (288–336)	34.0	303	I	[2002MUR/YAM]
C ₅ H ₃ F ₉ O	[176310-28-4] V	1-(2,2-difluoroethoxy)-1,1,2,2,3,3,3-heptafluoropropane (288–340)	34.8	303	I	[2002MUR/YAM]
C ₅ H ₃ F ₉ O	[50807-74-4] V	1,1,1,2,2-pentafluoro-3-(1,1,2,2-tetrafluoroethoxy)propane (293–343)	35.6	308	I	[2002MUR/YAM]
C ₅ H ₃ F ₉ O	[439152-54-2] V	1,1,1,2,4,4-hexafluoro-2-(trifluoromethoxy)butane (283–332)	33.8	298	I	[2002MUR/YAM]
C ₅ H ₃ F ₉ O	[66670-22-2] V	1,1,1,3,3,3-hexafluoro-2-methoxy-2-(trifluoromethyl)propane (288–326)	31.3	303	I	[2002MUR/YAM]
C ₅ H ₃ F ₉ O	[993-95-3] V	1,1,1,2,3,3-hexafluoro-3-(2,2,2-trifluoroethoxy)propane (293–346)	36.1	308	I	[2002MUR/YAM]
C ₅ H ₃ F ₉ O	[69948-43-2] V	1,1,1,2,3,3-hexafluoro-4-(trifluoromethoxy)butane (288–338)	34.0	303	I	[2002MUR/YAM]
C ₅ H ₃ F ₉ O ₂ S	[52225-51-1] V	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1-methyl-1-(trifluoromethyl)ethyl ester	34.3	385	HG	[1974MAJ/SHR]
C ₅ H ₃ NO	[617-90-3] V	2-furancarbonitrile	44.8 ± 0.4	298	C	[2009RIB/AMA]
C ₅ H ₃ NO ₃	[698-63-5] SUB	5-nitro-2-furancarboxaldehyde	75.3 ± 2.1			[1980BAL/LEB, 1986PED/NAY]
C ₅ H ₃ NO ₃ S	[4521-33-9] SUB SUB	5-nitro-2-thiophenecarboxaldehyde (299–315) (299–315)	91.5 ± 0.5 92.0 ± 0.5	307 298	ME ME	[2010RIB/SAN4] [2010RIB/SAN4]
C ₅ H ₃ NS	[1003-31-2] V	2-thiophenecarbonitrile	49.5 ± 1.1	298	C	[2008RIB/SAN]
C ₅ H ₃ NS	[1641-09-4] V	3-thiophenecarbonitrile	51.6 ± 1.9	298	C	[2008RIB/SAN]
C ₅ H ₃ NS	[10359-20-3] FUS SUB V	2,2-dicyanopropionitrile (293–333) (293–333)	18.7 73.9 ± 0.5 55.2	367.2 313	 T B	[1994RAK/VER] [1994RAK/VER] [1994RAK/VER]
C ₅ H ₃ N ₃	[19847-12-2] V	pyrazinecarbonitrile	58.7 ± 1.2	298	C	[2005RIB/MIR]
C ₅ H ₄ BrF ₆ N	[25273-47-6] V	<i>cis</i> -2-bromo- <i>N, N</i> -bis(trifluoromethyl)propenylamine (346–367)	35.3	356	A	[1987STE/MAL, 1969FRE/TIP2]
C ₅ H ₄ BrF ₆ N	[25273-48-7] V	<i>trans</i> -2-bromo- <i>N, N</i> -bis(trifluoromethyl)propenylamine (336–360)	33.3	348	A	[1987STE/MAL, 1969FRE/TIP2]
C ₅ H ₄ BrN	[109-04-6] V V	2-bromopyridine (233–323)	54.4 ± 1.3 51.0	298 298	C ME	[1997RIB/MAT] [1991AUE/WEB]
C ₅ H ₄ BrN	[626-55-1] V V V	3-bromopyridine (233–323) (289–447)	52.1 ± 1.3 45.2 47.4	298 298 304	C ME A	[1997RIB/MAT] [1991AUE/WEB] [1987STE/MAL, 1947STU]
C ₅ H ₄ ClF ₇ O	[65064-83-7] V	3-(2-chloro-1,1,2-trifluoroethoxy)-1,1,2,2-tetrafluoropropane	44.4 ± 0.2	298	C	[1981VAR/BUL2]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₄ ClN	[109-09-1]	2-chloropyridine				
	V		51.0 ± 1.2	298	C	[1997RIB/MAT2]
	V	(283–298)	46.2	298		[1979ARN/CHA]
	V	(286–444)	53	301	A	[1987STE/MAL, 1947STU]
C ₅ H ₄ ClN	[626-60-8]	3-chloropyridine				
	V		47.9 ± 1.1	298	C	[1997RIB/MAT2]
	V	(283–298)	43.4	298		[1979ARN/CHA]
C ₅ H ₄ ClNO	[6636-78-8]	2-chloro-3-hydroxypyridine				
	SUB		89.2 ± 1.7	298	C	[2013MIR/MAT]
C ₅ H ₄ ClNO	[89-64-5]	2-chloro-6-hydroxypyridine				
	SUB		91.7 ± 1.2	298	C	[2013MIR/MAT]
C ₅ H ₄ ClNO	[610-78-6]	3-chloro-5-hydroxypyridine				
	SUB		99.5 ± 2.0	298	C	[2013MIR/MAT]
C ₅ H ₄ F ₄ N ₄ O ₁₀	[58715-08-5]	bis(2-fluoro-2,2-dinitroethyl)difluoroformal				
	V	(323–357)	72.7	340		[1997MIN/BEH]
C ₅ H ₄ FN	[372-48-5]	2-fluoropyridine				
	V	(233–323)	43.5	298	ME	[1991AUE/WEB]
C ₅ H ₄ FN	[372-47-4]	3-fluoropyridine				
	V	(233–323)	45.2	298	ME	[1991AUE/WEB]
C ₅ H ₄ F ₇ I	[1513-88-8]	1,1,1,2,2,3,3-heptafluoro-5-iodopentane				
	V	(317–386)	38.7	332	A	[1987STE/MAL]
C ₅ H ₄ F ₈ O	[16627-68-2]	1,1,2,2-tetrafluoro-3-(1,1,2,2-tetrafluoroethoxy)propane				
	V	(293–366)	40.2	308	I	[2002MUR/YAM]
C ₅ H ₄ F ₈ O	[382-26-3]	1,1,1,3,3-pentafluoro-3-methoxy-2-trifluoromethylpropane				
	V	(288–343)	34.5	303	I	[2002MUR/YAM]
C ₅ H ₄ F ₉ N	[19451-89-9]	3,3,3-trifluoro- <i>N,N</i> -bis(trifluoromethyl)propylamine				
	V	(290–333)	31	305	A	[1987STE/MAL, 1968FRE/TIP]
C ₅ H ₄ N ₂	[37580-43-1]	<i>cis</i> -2-methyl-2-butenedinitrile				
	V	(395–467)	58.5	410	A	[1987STE/MAL, 1972DYK]
C ₅ H ₄ N ₂	[37580-44-2]	<i>trans</i> -2-methyl-2-butenedinitrile				
	V	(339–411)	47.9	354	A	[1987STE/MAL, 1972DYK]
C ₅ H ₄ N ₂	[4513-94-4]	2-pyrrolicarbonitrile				
	V		65.3 ± 1.4	298	C	[2012SAN/RIB]
C ₅ H ₄ N ₂ O ₂	[98-97-5]	2-pyrazinecarboxylic acid				
	SUB		103.6 ± 2.9	298	C	[2005RIB/MIR]
C ₅ H ₄ N ₂ O ₃	[1124-33-0]	4-nitropyridine- <i>N</i> -oxide				
	SUB		108.9 ± 0.3	298	C	[1995ACR/TUC]
	SUB	(311–335)	89.1 ± 2.5			[1995LEB/CHI]
C ₅ H ₄ N ₄	[275-02-5]	1,2,4-triazolo[1,5- <i>a</i>]pyrimidine				
	FUS		19.4	419.5		[1997STE/CHI4]
	SUB		86.9	419		[1997STE/CHI4]
	V		70.7 ± 4.5	298	CGC	[2011LIP/RAT]
	V		63.7 ± 2.7	298	CGC	[2011LIP/RAT]
	V	(370–523)	82.5 ± 13.1	298	EB	[1997STE/CHI4]
	V	(370–523)	63.5 ± 2.2	480	EB	[1997STE/CHI4]
	V	(370–523)	61.2 ± 2.0	520	EB	[1997STE/CHI4]
C ₅ H ₄ N ₄	[120-73-0]	purine				
	SUB		NA			[1974TEP/SUK]
C ₅ H ₄ N ₄ O	[68-94-0]	hypoxanthine				
	SUB	(423–473)	158.1 ± 1.6	448		[1975TEP/YAN]

TABLE 8. Phase change enthalpies of C_5 organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
$C_5H_4N_4S$	[6112-76-1] SUB	6-mercaptapurine (413–458)	148.5 ± 1.5	435		[1975TEP/YAN]
C_5H_4OS	[98-03-3] V	2-thiophenecarboxyaldehyde	54.9 ± 1.1	298	C	[2008RIB/SAN2]
C_5H_4OS	[498-62-4] V	3-thiophenecarboxyaldehyde	52.6 ± 1.2	298	C	[2008RIB/SAN2]
$C_5H_4O_2$	[98-01-1] FUS	2-furfuraldehyde	14.37	235.1		[1996DOM/HEA, 1935MIL]
	V	(277–323)	50.7 ± 0.2	298	GS	[2007EME/DAB]
	V	(357–435)	44.7	372	A	[1987STE/MAL]
	V	(366–394)	50.7 ± 0.2	298	EB	[1987HAU/WU, 2007EME/DAB]
	V	(329–433)	48.2	344		[1950MAT/SUM, 1984BOU/FRI]
	V	(365–443)	47.6	380		[1926EVA/AYL, 1984BOU/FRI]
	V	(329–434)	50.6 ± 0.4	298	EB	[1926MAT, 2007EME/DAB]
$C_5H_4O_2$	[498-60-2] V	3-furanaldehyde	48.1 ± 0.5	298	C	[2009RIB/AMA]
$C_5H_4O_2S$	[527-72-0] FUS	2-thiophenecarboxylic acid	21	400.9	DSC	[2003ROU/TEM]
	SUB	(307–328)	90.8 ± 1.3	314	ME	[2002TEM/ROU]
	SUB	(307–328)	91.2 ± 1.3	298	ME	[2002TEM/ROU]
	SUB	(315–323)	97.1	319	E	[1953BRA/CAR, 1960JON, 1999DYK/SVO]
	SUB	(315–323)	97.5	298	E	[1953BRA/CAR, 2002TEM/ROU]
$C_5H_4O_2S$	[88-13-1] FUS	3-thiophenecarboxylic acid	18.3	412.9	DSC	[2003ROU/TEM]
	SUB	(308–325)	91.4 ± 0.9	317	ME	[2002TEM/ROU]
	SUB	(308–325)	91.9 ± 0.9	298	ME	[2002TEM/ROU]
$C_5H_4O_3$	[616-02-4] V	citraconic anhydride (320–487)	53.3	335	A	[1987STE/MAL, 1947STU]
$C_5H_4O_3$	[88-14-2] FUS	2-furancarboxylic acid	23.33	402.4	DTA	[2014SOB/VAN, 2015SOB/VAN]
	FUS		20.5	403.6	DSC	[2014GUO/YIN]
	FUS		22.6	402.5	DSC	[2004ROU/TEM2]
	SUB	(324–372)	91.9 ± 0.8	340	ME	[2014SOB/VAN]
	SUB	(285–304)	88.4 ± 1.5	298	ME	[2003ROU/TEM3]
	SUB	(317–328)	108.4 ± 2.2		ME	[1953BRA/CAR, 1960JON, 1970COX/PIL]
$C_5H_4O_3$	[488-93-7] FUS	3-furancarboxylic acid	21.3	394.8	DSC	[2004ROU/TEM2]
	SUB	(283–298)	87.1 ± 0.5	298	ME	[2003ROU/TEM3]
$C_5H_5ClN_2O_2$	[31737-09-4] SUB	1-methyl-6-chlorouracil (417–465)	108.8 ± 8		HSA	[1978NOW/SZC]
$C_5H_5ClN_2O_2$	[4318-56-3] SUB	3-methyl-6-chlorouracil (444–493)	104.6 ± 6		HSA	[1978NOW/SZC]
$C_5H_5Cl_3OS$	[76619-92-6] V	2,3,3-trichloro-2-propenethioic acid, <i>O</i> -ethyl ester (383–423)	66.9		GC	[1980PIT/KIS]
$C_5H_5FN_2O_2$	[155-16-8] SUB	1-methyl-5-fluorouracil (381–423)	116 ± 2		TE	[2002BRU/POR]
	SUB	(480–515)	125.5 ± 8		HSA	[1978NOW/SZC]
$C_5H_5FN_2O_2$	[4840-69-1] SUB	3-methyl-5-fluorouracil (465–487)	79.5 ± 17		HSA	[1978NOW/SZC]
$C_5H_5F_3N_2$	[10010-93-2] SUB	3(5)-trifluoromethyl-5(3)-methylpyrazole	78.2 ± 0.8	297	ME	[1991ELG/YRA]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₅ NO	[142-08-5] SUB	2-hydroxypyridine	86.6 ± 1.3	298	C	[1982SUR/SAI, 1986PED/NAY]
C ₅ H ₅ NO	[109-00-2] SUB	3-hydroxypyridine	88.3 ± 1.3	298	C	[1982SUR/SAI, 1986PED/NAY]
C ₅ H ₅ NO	[626-64-2] SUB SUB	4-hydroxypyridine	118.6 ± 5.2	298	C	[1992RIB/MAT]
			103.8 ± 1.7	298	C	[1982SUR/SAI, 1986PED/NAY]
C ₅ H ₅ NO	[694-59-7] SUB V V	pyridine <i>N</i> -oxide	79.3 ± 1.0	298		[1988SHA/PIL]
			(389–546) 59.4	404		[2012ZEN/CHE]
			(389–546) 66.6 ± 0.1	298		[2012ZEN/CHE]
C ₅ H ₅ NO ₂	[13161-30-3] SUB	2-hydroxypyridine <i>N</i> -oxide	89.4 ± 0.9	298	C	[2004RIB/MAT]
C ₅ H ₅ NO ₂	[6602-28-4] SUB	3-hydroxypyridine <i>N</i> -oxide	(345–392) 121.8 ± 4.4	298	ME	[1998RIB/MAT]
C ₅ H ₅ NO ₂	[634-97-9] SUB SUB SUB	pyrrole-2-carboxylic acid	(331–353) 98.6 ± 0.9	342	ME	[2009SAN/RIB]
			(331–353) 100.8 ± 0.9	298	ME	[2009SAN/RIB]
			(350–354) 126.8	352	ME	[1953BRA/CAR, 1960JON]
C ₅ H ₅ NO ₂	[930-88-1] SUB SUB	<i>N</i> -methylmaleimide	(276–289) 75.3 ± 0.5	282	ME	[1997ROU/JIM]
			(276–289) 73.3 ± 0.5	298	ME	[1997ROU/JIM]
C ₅ H ₅ NO ₂	[137-05-3] V	2-cyanoacrylic acid, methyl ester	(258–283) 57.8	270	A	[1987STE/MAL, 1969WOO/ADI, 1972DYK]
C ₅ H ₅ NO ₂	[16867-04-2] SUB	2,3-dihydroxypyridine	109.1 ± 4.3	298	C	[2006MOR/MIR]
C ₅ H ₅ N ₃ O	[98-96-4] FUS TRS FUS FUS TRS ($\alpha \rightarrow \gamma$) TRS ($\delta \rightarrow \gamma$) FUS (γ) FUS SUB SUB SUB	pyrazine carboxamide (pyrazinamide)	27.1	465.7	DSC	[2015BLO/SHA]
			1.62	420.4		
			28.14	461.4	DSC	[2012LOU/MEL, 2013MEL/BOG]
			28.1	461.5	DSC	[2011CAS/RIB]
			1.63	420.1		
			2.1	411.2		
			28.1	461.5	DSC	[2010CAS/MAR]
			30.28	463		[1960NEG/MIK2]
			(359–383) 112.6 ± 1.5	298	GS	[2015BLO/SHA]
			120.0 ± 2.1	298	C	[2005RIB/MIR]
			(353–383) 87.9	368	ME	[1987STE/MAL, 1960NEG/MIK, 1959HAR]
C ₅ H ₅ N ₃ O ₂	[4214-76-0] FUS	2-amino-5-nitropyridine	(80–395) 29.2	461.4	AC	[2007SHI/TAN2]
C ₅ H ₅ N ₅	[73-24-5] SUB SUB SUB SUB SUB SUB SUB SUB SUB SUB	adenine	(338–380) 140.1 ± 1.1	359	QCM	[2015EME/ZAI2]
			(338–380) 143.8 ± 1.6	298	QCM	[2015EME/ZAI2]
			(452–492) 139.4 ± 0.7	472	GS	[2015EME/ZAI2]
			(452–492) 143.3 ± 1.4	298	GS	[2015EME/ZAI2]
			(305–360) 130 ± 2	330	QR, ME	[2006DEB/MED]
			(406–438) 144.2 ± 2.0	422	ME	[2000ZIE]
			(400–434) 137.7 ± 2.2	417	ME	[2000ZIE]
			(448–473) 109.2	460.5	A	[1987STE/MAL]
			(403–439) 127.2 ± 1.9		ME	[1984ZIE/ZIE]
			126.3		LE	[1975YAN/TEP, 1974YAN/VER]
			108.7 ± 8		ME	[1965CLA/PES, 1970COX/PIL]
C ₅ H ₅ N ₅ O	[73-40-5] SUB SUB	guanine	(325–405) 168.3 ± 0.6	365	QR, ME	[2006DEB/MED]
			186.2		LE	[1975YAN/TEP, 1974YAN/VER]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₅ N ₇ O ₁₄	[20919-99-7]	1,1,1,3,5,5,5-heptanitropentane				
	SUB		114.2 ± 1.3	298	C	[2011MIR/KON]
	SUB		111.7	298		[1999MIR/VOR]
C ₅ H ₅ NO	[1003-29-8]	2-pyrrolicarboxaldehyde				
	SUB		78.6 ± 1.3	298	C	[2011SAN/RIB3]
C ₅ H ₆	[542-92-7]	1,3-cyclopentadiene				
	FUS		8.01	176.6		[1996DOM/HEA, 1977LEB/LIT]
	V	(271–314)	28.2	286		[1967LES/OGO, 1984BOU/FRI]
	V	(291–314)	28.1	302	A, MM	[1987STE/MAL, 1965HUL/REI]
	V	(291–314)	28.4 ± 0.3	298	MM	[1965HUL/REI]
	V	(291–314)	27.6 ± 0.3	312	MM	[1965HUL/REI]
C ₅ H ₆	[6746-94-7]	ethynylcyclopropane				
	V	(290–320)	31.1	305	A	[1987STE/MAL]
C ₅ H ₆	[78-80-8]	isopropenylacetylene				
	V		27.2			[1977LEB/RYA]
C ₅ H ₆ ClN	[32366-08-8]	4-chloro-3-pentenenitrile				
	V	(349–433)	63.9	364	A	[1987STE/MAL]
C ₅ H ₆ Cl ₂ O ₂	[2873-74-7]	glutaryl chloride				
	V	(329–490)	55.9	344	A	[1987STE/MAL, 1947STU]
C ₅ H ₆ F ₂ N ₄ O ₁₀	[17003-79-1]	bis(2-fluoro-2,2-dinitroethyl)formal				
	V	(323–365)	85.1	344		[1997MIN/BEH]
C ₅ H ₆ F ₃ NO ₃	[383-72-2]	glycine, <i>N</i> -(trifluoroacetyl) methyl ester				
	SUB	(293–463)	57.3	308		[1987STE/MAL, 1960WEY/KLI]
C ₅ H ₆ F ₆ N ₂ S	[62067-11-2]	2,2,2-trifluoro- <i>N,N</i> -dimethyl- <i>N'</i> -[(trifluoromethyl)thio]ethanimidamide				
	V		40.4	400	I	[1977BUR/SHR2]
C ₅ H ₆ F ₆ O	[58705-93-4]	1,1,1,2,3,3-hexafluoro-4-methoxybutane				
	V	(293–360)	37.0	308	I	[2002MUR/YAM]
C ₅ H ₆ F ₆ N ₂ S	[38005-19-5]	dimethylamino(hexafluoroisopropylideneimino) sulfur				
	V		39.7	383	I	[1972MET/SHR]
C ₅ H ₆ F ₆ O ₂ S	[52225-49-7]	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1,1-dimethylethyl ester				
	V		35.6	388	HG	[1974MAJ/SHR]
C ₅ H ₆ F ₆ O ₅ S ₂	[61915-97-7]	3,3-bis[(trifluoromethyl)sulfonyl]-1-propanol				
	V	(333–418)	32.8	348	A, I	[1987STE/MAL, 1977BUR/SHR, 1999DYK/SVO]
C ₅ H ₆ N ₂	[7321-55-3]	dimethylmalononitrile				
	TRS		9.87	302.6		
	FUS	(5–350)	4.05	307.5	AC	[1996DOM/HEA, 1967RIB/WES]
	SUB		62.0 ± 0.7	298		[1990BEC/DOG]
	V	(322–413)	47.5	337	A	[1987STE/MAL, 1967RIB/WES]
C ₅ H ₆ N ₂	[109-08-0]	2-methylpyrazine				
	V	(342–373)	43.7 ± 1.9	298	CGC	[2009LIP/CHI2]
	V	(288–392)	42.4	340		[1995SAK/UEO]
C ₅ H ₆ N ₂	[1632-76-4]	3-methylpyridazine				
	V		56.6 ± 2.5	298	CGC	[2010LIP/PLI]
	V	(342–373)	49.7 ± 2.8	298	CGC	[2009LIP/CHI2]
C ₅ H ₆ N ₂	[3438-46-8]	4-methylpyrimidine				
	V		43.8 ± 2.6	298	CGC	[2010LIP/PLI]
	V	(342–373)	44.2 ± 2.4	298	CGC	[2009LIP/CHI2]
C ₅ H ₆ N ₂	[544-13-8]	glutaronitrile				
	FUS		12.03	242	DSC	[2007BAD/BLA]
	FUS		12.59	244.2		[1996DOM/HEA, 1965CLE/WUL]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₆ N ₂	V	(364–560)	60.1	379	A	[1987STE/MAL]
	V	(277–303)	66.8	290	A	[1987STE/MAL, 1972DYK, 1960WOO/MUR]
	[504-29-0]	2-aminopyridine				
	FUS		15.3	331.5	DTA	[1998SAB/DAS]
	SUB		76.5 ± 0.4	298	C	[1998SAB/DAS]
	SUB	(233–323)	52.7	298	ME	[1991AUE/WEB]
[Note: Experimental value in [1991AUE/WEB] was referred to as an enthalpy of vaporization; however, the temperature range studied was below the melting point temperature.]						
	SUB		38.6 ± 1.9		DSC	[1985BRO/INI]
	SUB		78.7 ± 0.8	298	C	[1984BIC/PIL]
C ₅ H ₆ N ₂	[462-08-8]	3-aminopyridine				
	FUS		14.4	335.5	DTA	[1998SAB/DAS]
	SUB		80.7 ± 0.3	298	C	[1998SAB/DAS]
	SUB	(233–323)	84.9	298	ME	[1991AUE/WEB]
[Note: Experimental value in [1991AUE/WEB] was referred to as an enthalpy of vaporization; however, the temperature range studied was below the melting point temperature.]						
	SUB		84.0 ± 1.4	298	C	[1984BIC/PIL]
C ₅ H ₆ N ₂	[504-24-5]	4-aminopyridine				
	FUS		19.3	432.1	DTA	[1998SAB/DAS]
	FUS		20.07	429.9	DSC	[1990DON/DRE]
	SUB		87.1 ± 0.4	298	C	[1998SAB/DAS]
	SUB	(233–323)	90.0	298	ME	[1991AUE/WEB]
[Note: Experimental value in [1991AUE/WEB] was referred to as an enthalpy of vaporization; however, the temperature range studied was below the melting point temperature.]						
	SUB		53.8 ± 0.8		DSC	[1985BRO/INI]
	SUB		88.1 ± 1.1	298	C	[1984BIC/PIL]
C ₅ H ₆ N ₂ OS	[2361-27-5]	2-thiophenecarboxylic acid hydrazide				
	SUB	(339–361)	110.7 ± 0.5	350	ME	[2008RIB/AMA3]
	SUB	(339–361)	113.3 ± 0.5	298	ME	[2008RIB/AMA3]
C ₅ H ₆ N ₂ OS	[636-26-0]	5-methyl-2-thiouracil				
	SUB	(413–433)	131.0 ± 0.9	423	ME	[2013RIB/AMA]
	SUB	(413–433)	137.3 ± 0.9	298	ME	[2013RIB/AMA]
C ₅ H ₆ N ₂ OS	[56-04-2]	6-methyl-2-thiouracil				
	SUB	(421–447)	133.6 ± 0.9	439	ME	[2013RIB/AMA]
	SUB	(421–447)	140.7 ± 0.9	298	ME	[2013RIB/AMA]
C ₅ H ₆ N ₂ O ₂	[615-77-0]	1-methyluracil				
	SUB	(343–428)	121.7 ± 4.0	439	TE	[2000BRU/PIA]
	SUB	(378–418)	112.5 ± 2.6	398	QR	[1980TEP/YAN]
	SUB	(435–480)	104.6 ± 8	457	HSA	[1978NOW/SZC]
C ₅ H ₆ N ₂ O ₂	[608-34-4]	3-methyluracil				
	SUB	(344–419)	118.8 ± 3.0	382	TE	[2000BRU/PIA]
	SUB	(438–498)	75.3 ± 8	463	HSA	[1978NOW/SZC]
C ₅ H ₆ N ₂ O ₂	[65-71-4]	5-methyluracil (thymine)				
	FUS		17.51	321.3		[1996DOM/HEA, 1889EYK]
	SUB	(409–472)	126.8 ± 0.3	298	GS	[2015EME/VER2]
	SUB	(409–428)	126.3 ± 1.2	298	GS	[2014ACH/EME]
	SUB	(305–355)	135.8 ± 0.4	330	QR, ME	[2006DEB/MED]
	SUB	(383–438)	125.7 ± 3.6	411	ME	[1984BUR/MOR]
	SUB		131.3 ± 4.0	298		[1984BUR/MOR]
	SUB	(378–428)	124.4 ± 1.3	403	QR	[1980TEP/YAN]
	SUB		138 ± 10	298	TE	[1980FER/BEN]
	SUB		134.1 ± 4.2	298	C	[1977NAB/SAB]
SUB		124.3		LE	[1975YAN/TEP, 1974YAN/VER]	
C ₅ H ₆ N ₂ O ₂	[626-48-2]	6-methyluracil				
	SUB	(426–503)	131	298		[1980FER/BEN2]
C ₅ H ₆ N ₂ O ₂	[3326-71-4]	2-furancarboxylic acid hydrazide				

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		SUB	(309–325)	98.1 ± 0.7	317	ME	[2008RIB/AMA3]
		SUB	(309–325)	99.0 ± 0.7	298	ME	[2008RIB/AMA3]
C ₅ H ₆ O	[534-22-5]	2-methylfuran					
	FUS	(8–307)	8.55	181.9	AC	[1965CAR/WES]	
	V		33.5 ± 0.2	298	C	[2010RIB/AMA]	
	V	(289–337)	32.4	304		[2002LOR/AUC]	
	V	(251–338)	34.4	266	A	[1987STE/MAL]	
	V	(309–339)	31.5	324		[1986KRE/PRA]	
	V	(288–303)	32.5	295		[1972DYK]	
	V	(333–373)	30.9	348		[1971EON/POM, 1984BOU/FRI]	
C ₅ H ₆ OS	[16839-97-7]	2-methoxythiophene					
	V	(278–323)	48.3 ± 0.3	298	GS	[2014TEM/NOT]	
C ₅ H ₆ OS	[17573-92-1]	3-methoxythiophene					
	V	(278–325)	48.5 ± 0.2	298	GS	[2014TEM/NOT]	
C ₅ H ₆ O ₂	[591-12-8]	5-methyl-2(3 <i>H</i>)-furanone					
	V	(324–442)	40.3	339	A	[1987STE/MAL]	
C ₅ H ₆ O ₂	[591-11-7]	<i>(dl)</i> -5-methyl-2(5 <i>H</i>)-furanone					
	V	(356–481)	48.2	371	A	[1987STE/MAL]	
C ₅ H ₆ O ₂	[98-00-0]	furfuryl alcohol					
	FUS	(78–300)	13.1	258.6		[1996DOM/HEA, 1956PAR/KEN]	
	FUS		14.8	253.3		[1996DOM/HEA, 1935MIL]	
	V	(275–365)	55.7	298	Static	[2014BEN/NEG]	
	V	(273–412)	58.6	298		[2014NEG/MOK]	
C ₅ H ₆ O ₂		V	(304–443)	53.6	319	A	[1987STE/MAL, 1947KET/VAN]
	[15441-65-3]	5-hydroxy-3-pentyn-2-one					
C ₅ H ₆ O ₃	[108-55-4]	glutaric anhydride					
	SUB	(298–320)	85.9 ± 1.6	309	ME	[1990MEN/PIL]	
C ₅ H ₆ O ₃		SUB	(298–320)	86.1 ± 1.6	298	ME	[1990MEN/PIL]
		V	(373–560)	60.9	388	A	[1987STE/MAL, 1947STU]
	[4100-80-5]	<i>(dl)</i> -monmethylsuccinic anhydride					
C ₅ H ₆ O ₃		V	(342–521)	59.3	357	A	[1987STE/MAL, 1947STU]
	[598-10-7]	1,1-cyclopropanedicarboxylic acid					
C ₅ H ₆ O ₄	FUS		17.4	413	DSC	[2011BOO/MON]	
	SUB	(298–318)	126	308	ME	[2011BOO/MON]	
C ₅ H ₆ O ₄	[498-23-7]	<i>cis</i> -methylbutenedioic acid					
	FUS (I)		17.7	356.4			
	FUS (II)		25.3	365.3	DSC	[2010LEO/PIN]	
C ₅ H ₆ O ₅	[328-50-7]	α -ketoglutaric acid					
	FUS		28.59	388.7	DSC	[2005CON/CHI]	
		SUB	(269–285)	100	TPTD	[2005CHA/ZIE]	
[Note: Values based on TPTD method are not consistent with values determined by other experimental methods.]							
C ₅ H ₆ O ₅	[542-05-2]	3-oxopentanedioic acid					
	SUB	(310–322)	160.2		TPTD	[2005CHA/ZIE]	
[Note: Values based on TPTD method are not consistent with values determined by other experimental methods.]							
C ₅ H ₆ S	[554-14-3]	2-methylthiophene					
	FUS		9.47	207.8		[1956PEN/FIN]	
	V	(333–373)	36.8	348	I	[1971EON/POM, 1984BOU/FRI]	
	V		38.7	298		[1971WIL/ZWO]	
		V	(324–391)	37.2	339	A, EB	[1987STE/MAL, 1952WHI/BAR, 1999DYK/SVO]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₆ S	[616-44-4]	3-methylthiophene				
	FUS		10.54	204.2		[1985DEA]
	V	(333–388)	37.3	348		[2009SAP/UUS]
	V	(326–398)	36.8	357		[1999DYK/SVO]
	V	(333–373)	37.4	348	I	[1971EON/POM, 1984BOU/FRI]
	V	(327–399)	39.5	298		[1971WIL/ZWO]
C ₅ H ₇ ClO ₃	[54166-91-5]	acetic acid, chlorooxo, propyl ester				
	V	(282–396)	52.7	297	A	[1987STE/MAL, 1947STU]
C ₅ H ₇ Cl ₃ O ₂	[17831-70-8]	3-chloro-2,2-bis(chloromethyl)propionic acid				
	FUS		20.9	383.9	DTA, DSC	[1999GOT/BUH]
C ₅ H ₇ FO ₂	[406-23-5]	allyl fluoroacetate				
	V	(273–333)	48.9	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1972DYK]
C ₅ H ₇ F ₆ OP	[71009-82-0]	phosphinous acid, bis(trifluoromethyl)-, 1-methylethyl ester				
	V	(273–323)	35.2	298		[1979CAV/PIN]
C ₅ H ₇ F ₆ OPS	[71009-91-1]	phosphinothioic acid, bis(trifluoromethyl)-, <i>O</i> -(1-methylethyl) ester				
	V	(273–343)	32.7	308		[1979CAV/PIN]
C ₅ H ₇ F ₆ OPS	[71009-89-7]	phosphinothioic acid, bis(trifluoromethyl)-, <i>S</i> -(1-methylethyl) ester				
	V	(288–343)	39.1	316		[1979CAV/PIN]
C ₅ H ₇ F ₆ PS	[71009-84-2]	phosphinothious acid, bis(trifluoromethyl)-, 1-methylethyl ester				
	V	(288–333)	39.8	311		[1979CAV/PIN]
C ₅ H ₇ N	[4426-11-3]	cyclobutanecarbonitrile				
	V		44.3	298	C	[1983FUC/HAL]
	V	(328–402)	39.6	347	BG	[1971HAL/BAL]
	V		40.0 ± 0.4	298	BG	[1971HAL/BAL]
C ₅ H ₇ N	[1647-11-6]	2-ethylacrylonitrile				
	V	(244–387)	37.1	259	A	[1987STE/MAL, 1947STU]
C ₅ H ₇ N	[20068-02-4]	angelic acid, nitrile				
	V	(265–413)	42.8	280	A	[1987STE/MAL, 1947STU]
C ₅ H ₇ N	[96-54-8]	1-methylpyrrole				
	FUS	(12–365)	7.82	216.9	AC	[1996DOM/HEA, 1988MES/TOD]
	SUB		NA			[1941MIL]
	V		40.3 ± 2.5	298	CGC	[2010LIP/PLI]
	V	(333–373)	38	343	I	[1971EON/POM]
C ₅ H ₇ N	[25899-50-7]	<i>(Z)</i> -2-pentenenitrile				
	V		43.2	298		[1969KON/PRO]
C ₅ H ₇ N	[16529-66-1]	<i>(E)</i> -3-pentenenitrile				
	V		44.8	298		[1969KON/PRO]
C ₅ H ₇ N	[26294-98-4]	<i>(E)</i> -2-pentenenitrile				
	V		44.9	298		[1969KON/PRO]
C ₅ H ₇ N	[4635-87-4]	<i>(ZE)</i> -3-pentenenitrile				
	V	(339–417)	38.8	354		[2016WAN/YAO]
C ₅ H ₇ N	[30574-97-1]	tiglic acid, nitrile				
	V	(247–395)	37.4	262	A	[1987STE/MAL, 1947STU]
C ₅ H ₇ NO	[927-56-0]	4-oxo-pentanenitrile				
	V	(293–473)	52.3	308	A	[1987STE/MAL]
C ₅ H ₇ NO ₂	[105-56-6]	ethyl cyanoacetate				
	FUS	(90–300)	11.78	246.8		[1996DOM/HEA, 1987KHO/BUG]
	V	(340–479)	66.9	355	A	[1987STE/MAL, 1947STU]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₇ NO ₂	[1121-89-7]	glutarimide				
	SUB	(317–340)	93.6 ± 1.6	329	ME	[1990MEN/PIL]
	SUB	(317–340)	94.1 ± 1.6	298	ME	[1990MEN/PIL]
C ₅ H ₇ NO ₂	[98-79-3]	L-pyroglutamic acid				
	TRS		0.53	341.2		
	FUS		16.79	435.2	DSC	[2010WU/REE]
[Note: DSC thermogram showed a peak of 1.83 kJ/mole at 427.2 K, which the authors attributed to a small amount of (<i>dl</i>)-pyroglutamic acid impurity.]						
C ₅ H ₇ NO ₂	[1121-07-9]	<i>N</i> -methylsuccinimide				
	SUB	(280–298)	80.6 ± 0.3	289	ME	[1997ROU/JIM]
	SUB	(280–298)	80.1 ± 0.3	298	ME	[1997ROU/JIM]
C ₅ H ₇ NO ₃	[149-87-1]	(<i>dl</i>)-5-oxoproline				
	SUB	(394–416)	133.2 ± 1	405	TE, ME	[1979DEK/VOO]
C ₅ H ₇ NS	[3386-97-8]	isothiocyanic acid, 3-butenyl ester				
V	(342–443)	45.2	357	A	[1987STE/MAL, 1999DYK/SVO]	
C ₅ H ₇ NS	[541-58-2]	2,4-dimethylthiazole				
	FUS		2.9	222.9	CR	[1966MEY/MET]
	V	(357–421)	42.0	372	A, EB	[1987STE/MAL, 1975SOU/BAR]
C ₅ H ₈ N ₂ O ₂	[696-04-8]	5,6-dihydro-5-methyluracil				
	SUB	(379–401)	121.6 ± 0.7	390	ME	[2013AMA/SZT]
	SUB	(379–401)	124.0 ± 0.7	298	ME	[2013AMA/SZT]
C ₅ H ₈ N ₂ O ₂	[2434-49-3]	5,6-dihydro-6-methyluracil				
	SUB	(371–393)	116.7 ± 0.8	382	ME	[2013AMA/SZT]
	SUB	(371–393)	118.8 ± 0.8	298	ME	[2013AMA/SZT]
C ₅ H ₇ N ₃	[108-52-1]	2-amino-4-methylpyrimidine				
	SUB	(288–312)	88.5 ± 0.5	300	ME	[2013GAL/RIB]
	SUB	(288–312)	88.5 ± 0.5	298	ME	[2013GAL/RIB]
C ₅ H ₇ N ₃ O	[1122-47-0]	1-methylcytosine				
	SUB	(455–487)	141.2 ± 0.6		GS	[1998ZIE/WSZ]
	SUB	(423–443)	141.8 ± 8.8	433	ME	[1984BUR/MOR]
	SUB	(423–443)	149.1 ± 9.0	298	ME	[1984BUR/MOR]
C ₅ H ₇ N ₃ O	[4776-08-3]	3-methylcytosine				
	SUB	(487–526)	150.6		HSA	[1965CLA/PES]
C ₅ H ₇ N ₃ O	[1122-04-9]	3,5-dimethyl-4-nitrosopyrazole				
	SUB		102.9 ± 3.0	298	C	[2001RIB/FER]
C ₅ H ₇ N ₃ O	[873-50-7]	3-methyl-1-pyrazolecarboxamide				
	SUB	(290–310)	93.4 ± 1.1	300	ME	[2012RIB/CAB]
	SUB	(290–310)	93.5 ± 1.1	298	ME	[2012RIB/CAB]
C ₅ H ₇ N ₃ O ₂	[20541-50-8]	1-methyl- <i>N</i> -hydroxycytosine				
	SUB		126.7 ± 1.5			[1998ZIE/WSZ]
C ₅ H ₇ N ₃ O ₂	[2434-53-9]	6-amino-1-methyluracil				
	SUB	(457–470)	152.1 ± 3.7	464	ME	[2003ZIE/SZT]
	SUB	(459–471)	156.5 ± 4.9	465	ME	[2003ZIE/SZT]
	SUB		158.2	298	ME	[2003ZIE/SZT]
C ₅ H ₇ N ₃ O ₅	[179894-08-7]	<i>N</i> -acetyl-3,3-dinitroazetidine				
	FUS		22.9	387.6	DSC	[2015LI/YAN]
	FUS		25.65	386.9		[1999MCK/STE]
C ₅ H ₈	[185-94-4]	bicyclo[2.1.0]pentane				
	V		28.0 ± 0.5	298	EB	[1998KOL/PIM, 1996VAR/PAS]
	V	(296–315)	28.6	305	A	[1987STE/MAL]
C ₅ H ₈	[157-40-4]	spiropentane				
	FUS		6.43	166.1		[1996DOM/HEA, 1950SCO/FIN2]
	V	(276–344)	28.6	291	A	[1987STE/MAL, 1950SCO/FIN]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₈		V	28.3 ± 0.1	283	C	[1950SCO/FIN2]
		V	27.5 ± 0.1	298	C	[1950SCO/FIN2]
		V	26.7 ± 0.1	312	C	[1950SCO/FIN2]
C ₅ H ₈	[693-86-7]	vinylcyclopropane				
		V (289–310)	28.9	299	A	[1987STE/MAL]
C ₅ H ₈	[142-29-0]	cyclopentene				
		TRS	0.48	87.07		
		FUS	3.36	138.1		[1996DOM/HEA, 1948HUF/EAT]
		V (249–318)	29.9	264	A	[1987STE/MAL]
		V (289–318)	24.8	299	MM	[1950FOR/CAM]
		V (230–293)	28.4	300		[1941LIS]
C ₅ H ₈	[1120-56-5]	methylenecyclobutane				
		FUS (12–301)	5.86	138.5	AC	[1996DOM/HEA, 1981FIN/MES, 1991ACR]
		FUS (13–301)	5.76	138.5	AC	[1978LEB/TSV]
		V (290–316)	26.1	303	A	[1987STE/MAL]
		V (292–306)	29.1	299	A	[1987STE/MAL, 1978LEB/TSV, 1978LEB/TSV2]
		V	27.7 ± 0.4	298	EB	[1974GOO/MOO]
C ₅ H ₈	[598-25-4]	3-methyl-1,2-butadiene				
		FUS	7.95	159.5		[1996DOM/HEA, 1970MES/TOD]
		V (227–253)	31	240	A	[1987STE/MAL]
		V (252–323)	29.9	267	A	[1987STE/MAL]
		V	28.0	298		[1971WIL/ZWO]
		V (213–242)	31.6	230	IPM	[1969OSB/DOU]
		V (274–319)	29.0	291	EB	[1969OSB/DOU]
C ₅ H ₈	[78-79-5]	2-methyl-1,3-butadiene				
		FUS	4.86	127.2	DTA	[1994TAN/SAB3]
		FUS	4.92	127.3		[1996DOM/HEA, 1970MES/TOD]
		FUS (20–300)	4.83	126.4		[1937BEK/WOO, 1965WAR/PET]
		V (221–254)	29.4	239	A	[1987STE/MAL]
		V (254–316)	28.3	269	A	[1987STE/MAL]
		V	26.4	298		[1971WIL/ZWO]
		V (216–235)	31.5	225	IPM	[1969OSB/DOU]
		V (290–308)	27.3	299	MM	[1950FOR/CAM]
		V (258–318)	27.4	288		[1938KUC]
C ₅ H ₈	[598-23-2]	3-methyl-1-butyne				
		V (218–320)	30.2	233	A	[1987STE/MAL]
		V	25.8	298		[1971WIL/ZWO]
C ₅ H ₈	[591-95-7]	1,2-pentadiene				
		FUS	7.56	135.9		[1996DOM/HEA, 1970MES/TOD]
		V (231–249)	31.6	240	A	[1987STE/MAL]
		V (249–331)	30.6	264	A	[1987STE/MAL]
		V	28.7	298		[1971WIL/ZWO]
		V (213–245)	32.2	231	IPM	[1969OSB/DOU]
		V (285–319)	29.1	300	MM	[1950FOR/CAM]
C ₅ H ₈	[1574-41-0]	<i>cis</i> -1,3-pentadiene				
		FUS	5.64	132.4		[1996DOM/HEA, 1970MES/TOD]
		V (255–326)	30.1	270	A	[1987STE/MAL]
		V (230–255)	31.2	242	A	[1987STE/MAL]
		V	28.3	298		[1971WIL/ZWO]
		V (213–242)	31.9	230	IPM	[1969OSB/DOU]
		V (289–318)	28.8	304	MM	[1950FOR/CAM]
C ₅ H ₈	[2004-70-8]	<i>trans</i> -1,3-pentadiene				
		FUS	7.14	185.7		[1996DOM/HEA, 1970MES/TOD]
		V (228–256)	30.7	242	A	[1987STE/MAL]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		V	(256–324)	29.5	271	A	[1987STE/MAL]
		V		27.8	298		[1971WIL/ZWO]
		V	(213–242)	31.3	230	IPM	[1969OSB/DOU]
		V	(292–316)	28.3	304	MM	[1950FOR/CAM]
C ₅ H ₈	[591-93-5]	1,4-pentadiene					
	FUS		6.14	124.3			[1996DOM/HEA, 1936PAR/TOD2]
		V	(216–236)	29.1	226	A	[1987STE/MAL]
		V	(236–307)	28.1	251	A	[1987STE/MAL]
		V		25.2	298		[1971WIL/ZWO]
		V	(213–230)	29.3	221	IPM	[1969OSB/DOU]
		V	(288–300)	26.5	293	MM	[1950FOR/CAM]
		V	(194–255)	28.4	240		[1940LAM/ROP]
C ₅ H ₈	[591-96-8]	2,3-pentadiene					
	FUS		6.13	147.5			[1996DOM/HEA, 1970MES/TOD]
		V	(234–258)	32.3	246	A	[1987STE/MAL]
		V	(258–330)	31.1	273	A	[1987STE/MAL]
		V		29.5	298		[1971WIL/ZWO]
		V	(213–247)	33.2	232	IPM	[1969OSB/DOU]
		V	(298–322)	29.6	310	MM	[1950FOR/CAM]
C ₅ H ₈	[627-19-0]	1-pentyne					
		V	(229–315)	31.8	244	A	[1987STE/MAL]
		V		28.4	298		[1971WIL/ZWO]
C ₅ H ₈	[627-21-4]	2-pentyne					
		V	(240–329)	33.1	255	A	[1987STE/MAL]
		V		30.8	298		[1971WIL/ZWO]
C ₅ H ₈ Br ₂	[10230-26-9]	<i>trans</i> -1,2-dibromocyclopentane					
		V	(273–332)	47.9	288	A	[1987STE/MAL, 1941LIS]
C ₅ H ₈ Br ₄	[3229-00-3]	pentaerythritol tetrabromide					
	FUS		27.97	433.5			[1996DOM/HEA, 1965CLE/WON]
		SUB	(384–434)	84.0	399	A	[1987STE/MAL]
		SUB		NA		GSM	[1941NIT/SEK]
		V	(439–466)	61.0	452	A	[1987STE/MAL]
C ₅ H ₈ ClFO ₂	[541-86-6]	3-chloro-4-fluorobutyric acid, methyl ester					
		V	(273–333)	54.5	288	GS	[1987STE/MAL, 1948RED/CHA4, 1972DYK]
C ₅ H ₈ ClF ₃ O	[338-17-0]	2-chloro-1,1,2-trifluoroethyl isopropyl ether					
		V		39.2	298	C	[1984MAJ/UCH]
		V		38.1	313	C	[1984MAJ/UCH]
		V		37.0	324	C	[1984MAJ/UCH]
C ₅ H ₈ ClF ₃ O	[380-43-8]	2-chloro-1,1,2-trifluoroethyl propyl ether					
		V		41.0	298	C	[1984UCH/MAJ]
		V		39.9	313	C	[1984UCH/MAJ]
		V		38.7	328	C	[1984UCH/MAJ]
		V		37.5	343	C	[1984UCH/MAJ]
		V		36.2	358	C	[1984UCH/MAJ]
C ₅ H ₈ Cl ₂ O	[78-71-7]	3,3-bis(chloromethyl)oxetane					
	FUS		16.95	292.2			[1996DOM/HEA, 1962DAI/EVA]
		V		56.0 ± 0.4	298	C	[1971RIN/SUN]
C ₅ H ₈ Cl ₄	[2467-10-9]	1,1,1,5-tetrachloropentane					
		V	(340–432)	61.7	355	A	[1987STE/MAL]
C ₅ H ₈ F ₂ O ₃	[406-15-5]	bis(2-fluoroethyl) carbonate					
		V	(273–333)	61.5	288	GS	[1987STE/MAL, 1948RED/CHA4, 1972DYK]
C ₅ H ₈ F ₄	[338-23-8]	pentaerythritol tetrafluoride					
	TRS		13.21	249.4			

TABLE 8. Phase change enthalpies of C_5 organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		FUS		5.14	367.4		[1996DOM/HEA, 1964TRO/WES]
$C_5H_8F_4N_4O_2$	[298228-65-6]	4,4-bis(difluoroamino)-1-nitropiperidine		50.2	366.2	DSC	[2001OXL/SMI]
		FUS					
$C_5H_8N_2O_2$	[19947-75-2]	5-amino-3,4-dimethylisoxazole		87.9 ± 2.5			[1973HAM/MIT, 1977PED/RYL]
		SUB					
$C_5H_8N_2$	[1739-84-0]	1,3-dimethylimidazole					
		V	(317–369)	56.2	343	GS	[2013ZAI/YER]
		V	(317–369)	58.9 ± 0.2	298	GS	[2013ZAI/YER]
$C_5H_8N_2$	[7098-07-9]	1-ethylimidazole					
		V		57.5 ± 0.9	298	C	[2015VIT/AGA]
		V		57.4 ± 2.0	298	CGC	[2010LIP/PLI]
		V		66.0 ± 3.9	298	C	[1999RIB/RIB]
$C_5H_8N_2$	[1072-62-4]	2-ethylimidazole					
		SUB	(303–321)	89.2 ± 0.4	312	ME	[1992JIM/ROU]
		SUB	(303–321)	89.6 ± 0.4	298	ME	[1992JIM/ROU]
$C_5H_8N_2$	[2817-71-2]	1-ethylpyrazole					
		V		53.3 ± 2.4	298	C	[1999RIB/RIB]
$C_5H_8N_2$	[2721-32-6]	2,3-diazabicyclo[2.2.1]hept-2-ene					
		SUB		43.9 ± 2.1			[1974ENG/WOO, 1977PED/RYL]
		SUB		55.3 ± 0.6	298		[1976ENG/MEL]
$C_5H_8N_2$	[67-51-6]	3,5-dimethylpyrazole					
		SUB		83.4 ± 2.4	298	C	[2001RIB/FER]
		SUB		83.3 ± 0.2	301	ME	[1991ELG/YRA]
$C_5H_8N_2O$	[80-73-9]	1,3-dimethyl-2-imidazolidinone					
		V	(355–498)	54.3	375	EB	[1987KNE/ZON]
		V	(355–498)	48.5	450	EB	[1987KNE/ZON]
$C_5H_8N_2O_2$	[4526-77-6]	3-methyl-2,5-piperazinedione					
		FUS		30.6	543.9	DSC	[1997ABA/PAL]
$C_5H_8N_4O_6$	[298228-66-7]	1,4,4-trinitropiperidine					
		FUS		100.4	389.2	DSC	[2001OXL/SMI]
$C_5H_8N_4O_{12}$	[78-11-5]	pentaerythritol tetranitrate					
		FUS		27.1	402.5	DSC	[2010RAM/FEL]
		SUB	(356–382)	156.9 ± 0.8	369	TE	[2004LAU/HIL]
		SUB	(302–333)	158.2 ± 1.7	325	MS	[2004LAU/HIL]
		SUB		152.3		DSC	[1990HWA/YOS]
		SUB	(328–405)	150.4 ± 1.3	298	ME	[1978CUN/PAL]
		SUB		146 ± 12			[1978CUN/PAL, 1971DIN/STA]
		SUB		U121.3		ME	[1969CRI]
		SUB	(370–411)	151.9 ± 2.1			[1953EDW, 1960JON, 1970COX/PIL]
C_5H_8O	[120-92-3]	cyclopentanone					
		FUS		11.4	221.2	DSC	[1998GON/SZW]
		V	(323–403)	41.5	338	EB	[2006TEO/BAR]
		V		42.1 ± 0.2	298		[1991DIK/KAB]
		V		43.2 ± 0.3		GC	[1989AZA]
		V	(317–427)	40.6	332		[1987AMB/GHI2]
		V	(293–404)	42.6	308	A	[1987STE/MAL]
		V	(296–354)	41.3	315		[1983MAR/SHV]
		V	(360–410)	38.7	375		[1983MAR/SHV]
		V	(338–416)	39.6	353	A, EB	[1987STE/MAL, 1976MEY/HOT]
		V	(283–313)	42.6 ± 0.4	298	VP	[1972WOL]
		V		42.7 ± 0.1	298	C	[1968PLA/WIL]
		V	(273–299)	43.6	286		[1942BEN/KIS]
C_5H_8O	[922-63-4]	2-ethylacrolein					
		V		36.8 ± 0.4	298	C	[1996VAN/YU]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₈ O	[765-43-5]	cyclopropyl methyl ketone				
	V	(361–387)	37.6	374	A	[1987STE/MAL]
	V		39.4			[1984KOZ/TIM]
	V		39.4 ± 0.1	298	C	[1983FUC/HAL]
C ₅ H ₈ O	[765-43-5]		40.5 ± 0.5	298	C	[1981GAT/STR]
	[25512-65-6]	dihydro-2 <i>H</i> -pyran				
	V	(273–288)	32.2	280	A	[1987STE/MAL, 1972DYK, 1958CAS/FLE3]
	[497-03-0]	<i>trans</i> -2-methyl-2-butenal				
C ₅ H ₈ O	V	(248–390)	39.2	263	A	[1987STE/MAL, 1947STU]
	[814-78-8]	3-methyl-3-buten-2-one				
C ₅ H ₈ O	V	(313–371)	26.2	328	A	[1987STE/MAL, 1972DYK]
	[115-19-5]	2-methyl-3-buten-2-ol				
C ₅ H ₈ O	V	(333–377)	41.0	353	A	[1999ZAR/CHA]
	V	(294–380)	43.9	337	A	[1987STE/MAL, 1972DYK]
	V	(294–380)	49.5	309		[1984BOU/FRI, 1950CON/ELV]
C ₅ H ₈ O	[1629-58-9]	1-penten-3-one				
	V	(303–376)	36.7	318	A	[1987STE/MAL]
C ₅ H ₈ OS	[1072-72-6]	tetrahydro-4 <i>H</i> -thiopyran-4-one				
	SUB		73.4 ± 1.4	298	C	[2010FRE/GOM3]
	SUB		71.7 ± 1.7	317	I	[1972GEI/SAW]
	SUB		72.6 ± 1.7	298		[1972GEI/SAW, 1977PED/RYL]
C ₅ H ₈ O ₂	[111-30-8]	glutaraldehyde				
	V	(347–382)	51.4	362		[1998OLS]
	V	(327–436)	56.2	342		[1998OLS]
C ₅ H ₈ O ₂	[2868-37-3]	methyl cyclopropanecarboxylate				
	V	(273–313)	42.6 ± 0.4		GS	[1998VER/KUM]
	V		41.3 ± 0.1	298	C	[1983FUC/HAL]
C ₅ H ₈ O ₂	[123-54-6]	2,4-pentanedione (acetylacetone)				
	V (diketone)		51.2 ± 2.2	298	CGC	[2005TEM/ROU]
	V (enol)		50.8 ± 0.6	298	CGC	[2005TEM/ROU]
	V	(307–414)	39.2	322	EB	[1985RAV/RAO]
	V	(295–313)	40.6	304		[1981INO/ARA]
	V	(378–411)	35.2	393	A, I, EB	[1987STE/MAL, 1972NAK/TOY]
	V	(288–378)	42.7	303	A, EB	[1987STE/MAL]
	V (84% enol)		41.8 ± 0.2	298	C	[1970IRV/WAD]
	V (100% enol)		43.2	298	C	[1970IRV/WAD]
	V	(297–398)	39.4	347		[1969MEL/MER]
C ₅ H ₈ O ₂	[1522-20-9]	acetylacetone enol				
	FUS	(80–300)	14.5	254.8		[1969MEL/MER]
C ₅ H ₈ O ₂	[600-14-6]	2,3-pentanedione				
	FUS		7.84	221.2	DSC	[2006DOM/MOR]
C ₅ H ₈ O ₂	[565-63-9]	<i>cis</i> -2-methyl-2-butenic acid				
	V	(361–458)	61.8	376	A	[1987STE/MAL]
C ₅ H ₈ O ₂	[3586-58-1]	2-ethylpropenoic acid				
	V		52.1 ± 0.4	298	C	[1996VAN/YU]
C ₅ H ₈ O ₂	[3586-58-1]	2-ethylacrylic acid				
	V	(320–453)	62.2	335	A	[1987STE/MAL, 1947STU]
C ₅ H ₈ O ₂	[626-96-0]	4-oxovaleraldehyde (levulinialdehyde)				
	V	(301–460)	48.8	316	A	[1987STE/MAL, 1947STU]
C ₅ H ₈ O ₂	[541-47-9]	3-methylcrotonic acid				
	V	(363–473)	57.7	378	A	[1987STE/MAL]
C ₅ H ₈ O ₂	[140-88-5]	2-ethyl acrylate				
	V	(278–368)	39.5	298		[2013LOM/GIN]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(243–372)	41.4	258		[1947STU]
C ₅ H ₈ O ₂	[140-88-5] V	2-propenoic acid, ethyl ester	39.2			[1975VIL/PER]
C ₅ H ₈ O ₂	[80-62-6] FUS FUS SUB	methyl methacrylate	13.45 14.35	225.5 225.6	AC	[1985KAR/ABD] [1996DOM/HEA, 1971LEB/RAB2]
	V	(194–223)	60.7	205		[1952BYW, 1960JON]
	V	(295–386)	38.8 ± 0.1	300	EB	[2002STE/CHI4]
	V	(295–386)	36.3 ± 0.2	340	EB	[2002STE/CHI4]
	V	(295–386)	33.3 ± 0.4	380	EB	[2002STE/CHI4]
	V	(293–373)	37.9	308	A	[1987STE/MAL]
	V	(318–348)	37.7	333		[1984HUL/LU]
	V	(305–373)	38	320		[1984BOU/FRI]
	V		40.1			[1975VIL/PER]
	V	(312–362)	39	327		[1956VON/JEN]
C ₅ H ₈ O ₂	[591-80-0] V	4-pentenoic acid	65.8 ± 0.4	298	GS	[2008EME/VER]
C ₅ H ₈ O ₂	[80-59-1] V	<i>trans</i> -2-methyl-2-butenoic acid	61.2	365	A	[1987STE/MAL]
C ₅ H ₈ O ₂	[542-28-9] TRS TRS FUS	tetrahydro-2 <i>H</i> -pyran-2-one (δ-valerolactone)	0.46 0.3 10.53	118 135 263	AC	[1991ACR, 1983LEB/YEV]
	V	(278–353)	58.2 ± 0.3	298	GS	[2007EME/KOZ]
	V	(393–428)	52.4 ± 0.2	410	EB	[1991WIB/WAL]
	V	(393–428)	60.2 ± 1.3	298	EB	[1991WIB/WAL]
	V		58.0 ± 0.4	298	C	[1990LEI/PIL2, 1989BRO/CON]
	V	(342–433)	48.6	387		[1930SCH/THO]
C ₅ H ₈ O ₂	[29943-42-8] V	2,3,5,6-tetrahydropyran-4-one	50.7 ± 0.3	298	C	[2009FRE/GOM2]
C ₅ H ₈ O ₂	[108-29-2] V V V	(<i>dl</i>)-γ-valerolactone	53.9 ± 0.2 54.8 ± 0.4 53.5	298 298 325	GS C A	[2008EME/KOZ, 2009EME/VER] [1990LEI/PIL2] [1987STE/MAL, 1947STU]
C ₅ H ₈ O ₂	[105-38-4] V	vinyl propanoate	36.7	336		[2005RES/GON]
C ₅ H ₈ O ₂ S	[6007-71-2] SUB	2,5-dihydro-2-methyl-thiophene-1,1-dioxide	60.7 ± 2.5			[1969MAC/MCN, 1969MAC/MCN2, 1977PED/RYL]
C ₅ H ₈ O ₂ S	[1193-10-8] SUB	2,5-dihydro-3-methyl-thiophene-1,1-dioxide	64.0 ± 2.5			[1969MAC/MCN, 1969MAC/MCN2, 1977PED/RYL]
C ₅ H ₈ O ₃	[123-76-2] V	4-oxopentanoic acid	74.4	390	A	[1987STE/MAL, 1947STU]
C ₅ H ₈ O ₃	[105-45-3] V	methyl acetoacetate	45.4	304	A	[1987STE/MAL]
C ₅ H ₈ O ₃	[123-76-2] FUS	levulinic acid	9.22	306.2		[1991ACR, 1983WEA]
	V	(328–373)	70.3 ± 0.7	298	GS	[2012VER/EME]
C ₅ H ₈ O ₃	[4437-85-8] V V	butylene carbonate	63.2 ± 0.3 63.8 ± 0.1	298 298	GS E	[2008VER/TOK] [2004CHE/CLE, 2008VER/TOK]
C ₅ H ₈ O ₄	[108-59-8]	dimethyl malonate				

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References	
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)				
		V	(278–314)	57.5 ± 0.3	298	GS	[2006VER/KOZ]
		V	(351–460)	52.9 ± 0.2	360	EB	[2002STE/CHI6]
		V	(351–460)	49.5 ± 0.2	400	EB	[2002STE/CHI6]
		V	(351–460)	46.1 ± 0.3	440	EB	[2002STE/CHI6]
		V	(278–308)	61.8 ± 0.8	293	GS	[1992VER/BEC]
		V	(374–620)	50.0	497	EB, HG	[1988ASK/DAU]
		V	(308–454)	53.7	323	A	[1987STE/MAL]
C ₅ H ₈ O ₄	[110-94-1]	glutaric acid					
		FUS		22.04	369	DSC	[2010BOO/BAR]
		FUS		21.53	369.1	DSC	[2010WAN/LAI, 2012WAN/LI]
		TRS		2.34	349.2		
		FUS		21.3	372.3	DSC	[2009HA/HAN]
		FUS		20.7	370.9	DSC	[2009GOO/ROD]
		TRS		2.3	340.5		
		FUS		18.8	363.9	DSC	[2005ROU/TEM]
		TRS		2.4	338		
		FUS		23.0	371	DSC	[2002STE/CHI6]
		TRS		2.46	348.5		
		FUS		20.9	371		[1991ACR, 1974CIN/BER]
		SUB		123 ± 22		ME, MS	[2009BOO/MAR]
		SUB	(313–349)	134 ± 4		TPD	[2007CAP/LOV]
		SUB	(275–294)	132.3		TPTD	[2005CHA/ZIE]
[Note: Values based on TPTD method are not consistent with values determined by other experimental methods.]							
		SUB	(348–363)	117.0 ± 1.2	356	ME	[1999RIB/MON]
		SUB	(348–363)	119.8 ± 1.2	298	ME	[1999RIB/MON]
		SUB	(292–320)	U52.6	306	A	[1947GRA]
		V	(424–503)	101.6	298	GS	[2005ROU/TEM]
		V	(428–576)	98.1	443	A	[1987STE/MAL, 1947STU]
C ₅ H ₈ O ₄	[601-75-2]	ethylmalonic acid					
		SUB	(348–362)	112.8 ± 2.2	298	ME	[2000RIB/MON]
		SUB		105.5 ± 0.5		C	[1983ALT/PIL]
C ₅ H ₈ O ₄	[595-46-0]	dimethylmalonic acid					
		SUB	(347–363)	111.7 ± 2.1	298	ME	[2000RIB/MON]
C ₅ H ₈ O ₄	[498-21-5]	2-methylbutanedioic acid					
		FUS		9.98	383	DSC	[2010BOO/BAR]
		SUB	(343–360)	121.7 ± 2.3	298	ME	[2001RIB/MON2]
C ₅ H ₈ O ₄	[628-51-3]	diacetoxymethane					
		V	(283–318)	56.4 ± 0.3	298	GS	[1996VER/PEN]
		V	(334–443)	50.6	349	A	[1987STE/MAL, 1962JON]
C ₅ H ₈ O ₅	[597-44-4]	2-methyl-2-hydroxysuccinic acid					
		FUS		35.7	379	DSC	[2010BOO/BAR]
C ₅ H ₉ BrO	[815-48-5]	3-bromo-2-pentanone					
		V	(273–333)	45.2	288	A	[1987STE/MAL, 1972DYK, 1948RED/CHA]
C ₅ H ₉ Cl	[930-28-9]	cyclopentyl chloride					
		TRS	(6–300)	7.63	169.4		
		FUS	(6–300)	0.64	180	AC	[1993DIK/KAB]
		V		38.8 ± 0.4	298	C	[1993DIK/KAB]
		V	(322–387)	37.4	337	A, EB	[1987STE/MAL, 1970AND/BRA]
C ₅ H ₉ ClO ₂	[5396-24-7]	propyl chloroacetate					
		TRS	(77–240)	0.36	110		
		TRS	(77–240)	0.69	204		
		TRS	(77–240)	0.17	207		
		FUS	(77–240)	13.0	240	DSC	[1990MID/KAT]
C ₅ H ₉ ClO ₂	[105-48-6]	isopropyl chloroacetate					
		V	(308–425)	44.3	323		[1928NEL2, 1984BOU/FRI]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₉ ClO ₂	[535-13-7] V	2-chloropropionic acid, ethyl ester (279–420)	46.5	294	A	[1987STE/MAL, 1947STU]
C ₅ H ₉ ClO ₂	[623-71-2] V	3-chloropropionic acid, ethyl ester (316–358)	56.0	331	A	[1987STE/MAL]
C ₅ H ₉ ClS	[19155-35-2] V	(2-chloroethyl) allyl sulfide (293–333)	50.2	308	A, GS	[1987STE/MAL, 1949WAD/SMI, 1972DYK, 1999DYK/SVO]
C ₅ H ₉ Cl ₃ O	[1067-09-0] TRS FUS	2-chloromethyl-2-methyl-1,3-dichloropropane	12 2.5	246.6 291.3	DTA, DSC	[1996DOU/FUE]
C ₅ H ₉ Cl ₃ O	[813-99-0] V	3-chloro-2,2-bis(chloromethyl)-1-propanol (404–450)	79.6	419	A	[1987STE/MAL]
C ₅ H ₉ FOS	[63732-24-1] V	4-fluorothiobutyric acid, methyl ester (273–333)	52.4	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1972DYK, 1999DYK/SVO]
C ₅ H ₉ FO ₂	[406-20-2] V	4-fluorobutyric acid, methyl ester (273–333)	47.3	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1972DYK]
C ₅ H ₉ FO ₂	[406-06-4] V	isopropyl fluoroacetate (273–333)	44.3	288	A, GS	[1987STE/MAL, 1948RED/CHA4]
C ₅ H ₉ FO ₃	[25309-12-0] V	3-fluoro-2-hydroxybutyric acid, methyl ester (273–333)	62.3	288	GS	[1987STE/MAL, 1948RED/CHA4, 1972DYK]
C ₅ H ₉ N	[630-18-2] TRS TRS FUS V V V V	2,2-dimethylpropanenitrile (pivalonitrile) (5–350) (5–350) (5–350) (299–365) (313–371) (313–371)	0.23 1.91 9.29 37.0 37.4 ± 0.1 36.5 37.8	213 232.7 292.1 318 298 328 298	AC BG C A, I I	[1996DOM/HEA, 1967WES/RIB] [1971HAL/BAL] [1970HOW/WAD] [1987STE/MAL, 1967WES/RIB] [1967WES/RIB]
C ₅ H ₉ N	[18936-17-9] V	2-methylbutyronitrile (274–313)	42.5 ± 0.3		GS	[1994RAK/VER]
C ₅ H ₉ N	[110-59-8] V V V V V V V V	valeronitrile (313–418) (342–414) (394–439)	42.3 43.6 ± 0.1 44.3 44.2 44.1 ± 0.2 33.4	328 298 298 298 298 402	A C EB MM C	[1987STE/MAL] [1970HOW/WAD] [1969KON/PRO] [1949DRE/SHR, 1949DRE/MAR, 2005EME/VER] [1933HEI, 2005EME/VER] [1901KAH]
C ₅ H ₉ NO	[872-50-4] FUS FUS V V V V V V V V V	<i>N</i> -methyl-2-pyrrolidone 430–474 380–475 352–378 415–475 330–373 340–476 340–476 291–299 333–473 361–477	11.04 18.1 47.4 49.5 61.9 49.1 53.1 53.4 47.7 55.3 49.3 49.2	249 248.5 445 395 298 430 345 350 425 295 403 376	DSC DSC EB EB EB GS EB EB A A	[2005DOM/LAC] [2000LIS/JAM] [2012RED/KUM] [2007PAL/ORAA2] [2004CHY/FRA2] [1997BLA/BEL] [1996LIN/WIC] [1987KNE/ZON] [1987KNE/ZON] [1987STE/MAL] [1979BLU/BAE] [1987STE/MAL, 1972DYK, 1966GAN/SEM]
C ₅ H ₉ NO	[111-36-4] V V	butyl isocyanate (293–388) (273–389)	38.5 46.8	308 288	A	[2004AHM/GIE] [1987STE/MAL, 1974ZHU/MON]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₉ NO	[1873-29-6] V	isobutyl isocyanate (273–376)	44.2	288	A	[1987STE/MAL, 1974ZHU/MON]
C ₅ H ₉ NO	[3887-02-3] V	<i>N</i> -methyl methacrylamide (355–489)	60.9	370	A	[1987STE/MAL]
C ₅ H ₉ NO	[15856-96-9] SUB V	<i>cis</i> -2-pentenoic acid amide (323–333) (343–384)	106.5 74.8	328 358	A A	[1987STE/MAL] [1987STE/MAL]
C ₅ H ₉ NO	[197641-67-1] SUB	<i>trans</i> -2-pentenoic acid amide (353–383)	57.9	368	A	[1987STE/MAL]
C ₅ H ₉ NO	[76474-09-4] V	α -methoxyisobutyronitrile (261–285)	37.4 ± 0.8	298	GS	[1995VER/BEC]
C ₅ H ₉ NO	[14631-45-9] V	2-ethoxypropanenitrile (348–445)	46.7	363	A, EB	[1987STE/MAL, 1976RAO/CHI]
C ₅ H ₉ NO	[675-20-7] FUS SUB SUB V	2-piperidone (δ -valerolactam) (60–350) (293–312) (293–312) (313–343)	10.5 78.7 ± 1.3 74.5 74.5	311.85 298 302 303	 C A	[1990DOM/HEA, 1959KOL/PAU, 1962KOL/PAU] [2006RIB/CAB] [1987STE/MAL] [1953AIH, 1960JON, 1960AIH2]
C ₅ H ₉ NO	[10431-98-8] V	2-ethyl-2-oxazoline (313–343)	70.5 ± 0.4	298	GS	[2012EME/VER]
C ₅ H ₉ NO	[10431-98-8] V	2-ethyl-2-oxazoline (313–343)	44.2 ± 0.4	298	C	[1976HAM/THO]
C ₅ H ₉ NO ₂	[147-85-3] SUB SUB SUB	<i>L</i> -(<i>I</i>)-proline (396–416) (380–420) (323–423)	127.4 ± 1.0 149 ± 4 U50 ± 8	406 400 373	TE, ME C LE	[1979DEK/VOO] [1978SAB/LAF] [1977GAF/PIE]
C ₅ H ₉ NO ₂	[4394-85-8] V V	<i>N</i> -formylmorpholine (375–423)	56.9 52.7	416 399	 TGA	[1989PAR/GME] [1987ALN/ALS]
C ₅ H ₉ NO ₃	[51-35-4] SUB	<i>trans</i> -4-hydroxy- <i>L</i> -proline (461–481)	162.6 ± 2	471	TE, ME	[1979DEK/VOO]
C ₅ H ₉ NO ₃ S	[616-91-1] FUS (I) FUS (II) FUS	<i>N</i> -acetyl- <i>L</i> -cysteine	16.07 20.37 32.10	379.9 374.7 382.0	DSC DSC DSC	[2013KUM/NAN] [2013KUM/NAN] [2013DOS/MOR]
C ₅ H ₉ NO ₄	[56-86-0] SUB	(<i>I</i>)-glutamic acid (353–453)	U121 ± 34	403	LE	[1977GAF/PIE]
C ₅ H ₉ N ₃	[33670-50-7] V	azidocyclopentane (276–333)	41.3 ± 0.4	298	GS	[2011VER/EME2]
C ₅ H ₉ N ₃ O ₆	[16596-48-8] V	1,1,1-trinitropentane	72.0 ± 0.8	298	C	[2011MIR/KON]
C ₅ H ₉ N ₃ O ₇	[26459-85-8] V	2-ethoxy-1,1,1-trinitropropane (293–310)	57.7	301	A	[1987STE/MAL]
C ₅ H ₉ N ₃ O ₉	[3032-55-1] V	2-hydroxymethyl-2-methyl-1,3-propanediol trinitrate (299–345)	88.1	314	A	[1987STE/MAL]
C ₅ H ₉ N ₃ O ₉	[98071-55-7] V	1,2,5-pentanetriol trinitrate (293–313)	41.7 ± 2.1	303	A, GS	[1987STE/MAL, 1957KEM/GOL]
C ₅ H ₁₀	[1630-94-0] V	1,1-dimethylcyclopropane	25.1 ± 0.8	298	EB	[1974GOO/MOO]
C ₅ H ₁₀	[287-92-3] TRS	cyclopentane	5.19	121.9		

TABLE 8. Phase change enthalpies of C_5 organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	Transition	Temp. range (K)					
		TRS		0.36	138.2		
		FUS		0.62	178.2	AC	[1992RAH/GME]
		TRS		4.91	122.4		
		FUS		0.57	179.6		[1952KAA/COO]
		TRS		4.89	122.4		
		TRS		0.34	138.1		
		FUS		0.60	179.7		[1996DOM/HEA, 1947SZA/MOR]
		FUS		0.57	179.7	AC	[1947AST/FIN]
		TRS	(12–300)	4.89	122.4		
		TRS	(12–300)	0.34	138.1		
		FUS	(12–300)	0.61	179.7		[1946DOU/HUF2]
		TRS	(13–293)	4.87	122.4		
		TRS	(13–293)	0.35	138.1		
		FUS	(13–293)	0.60	179.7		[1943AST/FIN]
		TRS		4.75	121.6		
		TRS		0.36	137.1		
		FUS		0.60	179.0		[1934JAC/PAR]
		SUB		42.6	122	B	[1963BON]
		V	(280–331)	29.2	295	A	[1987STE/MAL]
		V	(322–384)	28.0	337	A	[1987STE/MAL]
		V	(381–455)	27.2	396	A	[1987STE/MAL]
		V	(452–511)	27.5	467	A	[1987STE/MAL]
		V		28.5	298		[1971WIL/ZWO]
		V		28.5 ± 0.1	298	C	[1959MCC/PEN]
		V		27.9 ± 0.1	310	C	[1959MCC/PEN]
		V		27.3 ± 0.1	322	C	[1959MCC/PEN]
		V		27.4	323		[1946SPI/PIT]
		V	(289–323)	29.0	304	MM	[1945WIL/TAY]
		V		29.2	298	C	[1943AST/FIN]
C_5H_{10}	[109-67-1]	1-pentene					
		FUS		5.78	108.0	DTA	[1994TAN/SAB3]
		FUS		5.94	108.0		[1990MES/TOD]
		FUS		5.81	107.9		[1991ACR, 1983WEA, 1947TOD/OLI]
		V	(218–311)	29.1	233	A	[1987STE/MAL]
		V	(286–304)	26.7	295	MM	[1950FOR/CAM]
		V		25.5	298		[1971WIL/ZWO]
		V	(273–334)	26.9	288		[1949SCO/WAD]
		V		26.2 ± 0.1	284	C	[1949SCO/WAD]
		V		25.5 ± 0.1	298	C	[1949SCO/WAD]
		V		25.2 ± 0.1	303	C	[1949SCO/WAD]
		V	(273–308)	26.3	290		[1948DAY/NIC]
		V	(313–368)	25.7	341		[1948DAY/NIC]
C_5H_{10}	[627-20-3]	<i>cis</i> -2-pentene					
		FUS		7.11	121.8		[1991ACR, 1983WEA, 1983CHA/HAL, 1947TOD/OLI]
		V	(234–318)	29.8	249	A	[1987STE/MAL]
		V		26.8	298		[1971WIL/ZWO]
		V	(274–341)	28.1	289	EB	[1950SCO/WAD]
C_5H_{10}	[646-04-8]	<i>trans</i> -2-pentene					
		FUS		8.35	133		[1991ACR, 1983WEA, 1983CHA/HAL, 1947TOD/OLI]
		V	(251–341)	28.8	266	A	[1987STE/MAL]
		V		26.7	298		[1971WIL/ZWO]
		V	(274–341)	28	289	EB	[1950SCO/WAD]
C_5H_{10}	[563-46-2]	2-methyl-1-butene					
		FUS		7.91	135.6		[1996DOM/HEA, 1947TOD/OLI]
		V	(240–336)	28.5	255	A	[1987STE/MAL]
		V		25.9	298		[1971WIL/ZWO]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
		V	(274–336)	27.3		[1949SCO/WAD]
		V		25.9 ± 0.1	C	[1949SCO/WAD]
		V		25.5 ± 0.1	C	[1949SCO/WAD]
C ₅ H ₁₀	[563-45-1]	3-methyl-1-butene				
	FUS			5.36		[1996DOM/HEA, 1947TOD/OLI]
		V	(237–324)	26.3	A	[1987STE/MAL]
		V		23.9		[1971WIL/ZWO]
		V	(273–324)	25.4	EB	[1950SCO/WAD]
C ₅ H ₁₀	[513-35-9]	2-methyl-2-butene				
	FUS			7.59		[1996DOM/HEA, 1947TOD/OLI]
		V	(271–343)	28.4	A	[1987STE/MAL]
		V		27.1		[1971WIL/ZWO]
		V	(276–344)	28.3		[1949SCO/WAD]
		V		27.5 ± 0.1	C	[1949SCO/WAD]
		V		27.1 ± 0.1	C	[1949SCO/WAD]
		V		26.3 ± 0.1	C	[1949SCO/WAD]
C ₅ H ₁₀ Br ₂	[13320-56-4]	1,1-dibromopentane				
	V	(360–501)		48.8	A, EST	[1987STE/MAL, 1956MAN, 1972DYK]
C ₅ H ₁₀ Br ₂	[3234-49-9]	1,2-dibromopentane				
	V	(348–465)		46.5	A	[1987STE/MAL]
	V	(350–450)		49		[1975PIS/ROZ, 1991BAS/SVO]
	V			49.2 ± 0.8	EB	[1975PIS/ROZ]
	V	(292–448)		48.8	A	[1987STE/MAL, 1947STU]
C ₅ H ₁₀ Br ₂	[626-87-9]	1,4-dibromopentane				
	V	(377–524)		51.8	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₀ Br ₂	[111-24-0]	1,5-dibromopentane				
	V	(396–549)		54.4	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₀ Br ₂ O ₂	[3296-90-0]	2,2-bis(bromomethyl)-1,3-propanediol				
	FUS			30.1	DTA, DSC	[1996DOU/FUE]
C ₅ H ₁₀ ClNO	[2895-21-8]	2-chloro- <i>N</i> -isopropylacetamide				
	FUS			26.05	DSC	[1990DON/DRE]
C ₅ H ₁₀ Cl ₂	[820-55-3]	1,1-dichloropentane				
	V	(340–410)		44.3	A	[1987VAR/LOS2, 1991BAS/SVO]
	V	(325–457)		42.0	A, EST	[1987STE/MAL, 1956MAN, 1972DYK]
C ₅ H ₁₀ Cl ₂	[1674-33-5]	1,2-dichloropentane				
	V	(330–420)		44.4		[1991BAS/SVO]
	V	(332–418)		41.9	A	[1987STE/MAL]
	V			43.9 ± 0.2	C	[1980VAR/PIS]
	V			43.8 ± 0.7	EB	[1975PIS/ROZ2]
C ₅ H ₁₀ Cl ₂	[626-92-6]	1,4-dichloropentane				
	V	(350–440)		48.9		[1991BAS/SVO]
	V	(348–443)		45.0	A	[1987STE/MAL]
	V			48.1 ± 0.8	EB	[1975PIS/ROZ2]
C ₅ H ₁₀ Cl ₂	[628-76-2]	1,5-dichloropentane				
	V	(360–450)		52.2		[1991BAS/SVO]
	V	(362–453)		47.2	A	[1987STE/MAL]
	V			50.7 ± 0.2	C	[1980VAR/PIS]
	V			51.3 ± 0.8	EB	[1975PIS/ROZ2]
C ₅ H ₁₀ Cl ₂	[29559-55-5]	1,3-dichloro-2,2-dimethylpropane				
	TRS			0.6		
	TRS			3.6		
	FUS			1.6	DTA, DSC	[1999GOT/BUH]
C ₅ H ₁₀ Cl ₂ O	[52250-75-6]	(2-chloroethyl)-(2-chloroisopropyl) ether				
	V	(297–453)		49.7	A	[1987STE/MAL, 1947STU]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₅ H ₁₀ Cl ₂ O	[42434-29-7] V	(2-chloroethyl)-(2-chloropropyl) ether (302–467)	49.3	317	A	[1987STE/MAL, 1947STU]	
C ₅ H ₁₀ Cl ₂ O ₂	[111-91-1] V	bis(2-chloroethoxy) methane (326–488)	54.2	341	A	[1987STE/MAL, 1947STU]	
C ₅ H ₁₀ F ₂	[62127-40-6] V	1,1-difluoropentane (268–378)	34.4	283	A, EST	[1987STE/MAL, 1956MAN, 1972DYK]	
C ₅ H ₁₀ F ₂	[371-65-3] V	2,2-difluoropentane (262–367)	33.7	277	A	[1987STE/MAL, 1972DYK]	
C ₅ H ₁₀ F ₂	[358-03-2] V	3,3-difluoropentane (262–368)	33.8	277	A	[1987STE/MAL, 1972DYK]	
C ₅ H ₁₀ F ₂ O ₂	[373-40-0] V	bis(2-fluoroethoxy) methane (273–333)	52.3	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1972DYK]	
C ₅ H ₁₀ N ₂	[1738-25-6] V	3-(dimethylamino)propionitrile (330–445)	45.9	345	A	[1987STE/MAL]	
	V		(331–407)	52.4	346	A	[1987STE/MAL]
	V		(290–317)	44.1 ± 0.2			[1984LEB/GUT2]
	V			47.3			[1977VAS/KOT]
C ₅ H ₁₀ N ₂ O	[100-75-4] V	1-nitrosopiperidine (333–383)	47.7	348	A	[1987STE/MAL, 1974GOL/PEP]	
C ₅ H ₁₀ N ₂ O ₂	[7606-79-3] FUS	<i>N</i> -acetylglycine, <i>N</i> -methanamide (348–363)	23.64	430.7	DSC	[2014BAD/DEL]	
	SUB		97.8	355.5	A	[1987STE/MAL, 1955AIH]	
C ₅ H ₁₀ N ₂ O ₂	[15962-47-7] FUS	<i>N</i> -acetyl-L-alanine amide (366–410)	23.6	436.4	DSC	[1997ABA/PAL]	
	FUS		21.7	431	DSC	[1996DOM/HEA, 1988FER/DEL]	
	SUB		115.0 ± 1.2	376	C	[1999DEL/BAR]	
	SUB		118.1 ± 1.6	298		[1999DEL/BAR]	
	SUB		115 ± 3	388	TE	[1988FER/DEL, 1986BAR/FER]	
C ₅ H ₁₀ N ₂ O ₂	[95048-77-4] FUS	<i>N</i> -acetylsarcosinamide (366–410)	27.4	412.7	DSC	[1997PUL/DES]	
C ₅ H ₁₀ N ₂ O ₂	[3424-60-0] FUS	glutaramide (366–410)	38.4	453.9	DSC	[2006BAD/DEL]	
C ₅ H ₁₀ N ₂ O ₂	[7119-94-0] V	1-nitropiperidine (366–410)	52.7 ± 0.8	298	C	[2009MIR/KON]	
C ₅ H ₁₀ N ₂ O ₂ S	[16752-77-5] FUS	5-methyl <i>N</i> -(methylcarbamoyloxy)thioacetimidate (366–410)	21.73	352.7	DSC	[1990DON/DRE]	
C ₅ H ₁₀ N ₂ O ₃	[1188-01-8] FUS (decomp)	alanylglycine (366–410)	56.6	508	DSC	[1996DOM/HEA, 1990BAD/KUL]	
C ₅ H ₁₀ N ₂ O ₃	[56-85-9] FUS	L- α -glutamine (366–410)	29.0	455.4	DSC	[2010CON/NEA]	
C ₅ H ₁₀ N ₂ O ₄	[3759-56-6] V	1,1-dinitropentane (366–410)	64.4 ± 0.8	298	C	[2011MIR/KON]	
C ₅ H ₁₀ N ₂ O ₆	[3457-92-9] FUS	1,5-pentanediol dinitrate (293–313)	15.5	256.6	FPM	[1957KEM/GOL]	
	V		78.9 ± 5.9	303	A, GS	[1987STE/MAL, 1957KEM/GOL, 1972DYK]	
C ₅ H ₁₀ N ₂ O ₆	[25385-63-1] FUS	2,4-pentanediol dinitrate (293–313)	24.2	254.7	FPM	[1957KEM/GOL]	
	V		60.6 ± 5.9	303	A, GS	[1987STE/MAL, 1957KEM/GOL, 1972DYK]	
C ₅ H ₁₀ N ₂ O ₆	[67727-92-8] V	1-(methoxymethoxy)-2,2-dinitropropane (293–333)	71.3	308	A	[1987STE/MAL]	

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₁₀ N ₄ O ₄	[5754-90-5]	1,3-dinitro-1,3-diazacycloheptane				
	TRS		21.8	369		
	FUS		2.8	374		[1991PIC/RYL]
C ₅ H ₁₀ O	[557-31-3]	allyl ethyl ether				
	V	(244–401)	34.6	259	A	[1987STE/MAL]
C ₅ H ₁₀ O	[616-25-1]	1-penten-3-ol				
	V		49.9 ± 0.1	313	C	[1996ULB/KLU]
	V		48.4 ± 0.1	328	C	[1996ULB/KLU]
	V		46.8 ± 0.1	343	C	[1996ULB/KLU]
C ₅ H ₁₀ O	[556-82-1]	3,3-dimethyl-2-propen-1-ol				
	V	(348–372)	48.7	360	EB	[1989WAN/YIN]
C ₅ H ₁₀ O	[115-18-4]	2-methyl-3-buten-2-ol				
	TRS	(5–370)	0.17	88.1		
	FUS	(5–370)	5.20	245.0	AC	[2015ZAI/PAU]
	V	(280–320)	48.5 ± 0.1	298	Static	[2015ZAI/PAU]
	V		47.6 ± 1.6	298	C	[2015ZAI/PAU]
	V	(322–370)	42.2 ± 0.4	350	EB	[2003LEI/LI, 2015ZAI/PAU]
	V	(322–370)	47.8 ± 0.5	298	EB	[2003LEI/LI, 2015ZAI/PAU]
	V	(333–370)	40.1 ± 1.4	352	EB	[1999ZAR/CHA2, 2015ZAI/PAU]
	V	(333–370)	46.0 ± 1.4	298	EB	[1999ZAR/CHA2, 2015ZAI/PAU]
	V	(327–364)	42.8 ± 0.6	346	EB	[1992RAA/BRO, 2015ZAI/PAU]
	V	(327–364)	48.0 ± 0.7	298	EB	[1992RAA/BRO, 2015ZAI/PAU]
	V	(290–372)	43.1 ± 0.1	331		[1988BAG/GUR]
	V	(345–390)	40.6	369	Static	[1986PAV/PES, 2015ZAI/PAU]
	V	(345–390)	48.3	298	Static	[1986PAV/PES, 2015ZAI/PAU]
	V	(358–379)	41.6	369	EB	[1974BLA/OGO, 2015ZAI/PAU]
V	(358–379)	49.3	298	EB	[1974BLA/OGO, 2015ZAI/PAU]	
C ₅ H ₁₀ O	[763-32-6]	3-buten-3-methyl-1-ol				
	V	(338–409)	55.6	353	A	[1987STE/MAL]
C ₅ H ₁₀ O		<i>dl</i> -3-buten-3-methyl-2-ol				
	V	(358–379)	41.0	368	A	[1987STE/MAL]
C ₅ H ₁₀ O	[96-41-3]	cyclopentanol				
	TRS	(78–300)	3.71	202.8		
	FUS	(78–300)	1.54	257.4		[1996DOM/HEA, 1956PAR/KEN]
	V	(323–373)	57.1	298	CGC	[1995CHI/HOS]
	V	(346–437)	52.7	361	A, EB	[1987AMB/GHI2]
	V	(283–321)	56.1	298	A	[1987STE/MAL]
	V	(283–323)	56.4	298	A	[1987STE/MAL]
	V	(279–314)	57.1	294		[1975CAB/CON2]
	V		57.5 ± 0.2	298	C	[1968PLA/WIL]
	V		57.5 ± 0.3	298	C	[1966WAD]
C ₅ H ₁₀ O	[142-68-7]	tetrahydropyran				
	V	(286–361)	36	301		[2006ROD/GIN]
	V		38.2 ± 1.1	298	DSC	[2005ROJ/GIN]
	V	(335–412)	33.2	350		[2000ROD/ART]
	V	(273–362)	35.0	288	A	[1987STE/MAL]
	V	(273–288)	35.0	281		[1972DYK, 1958CAS/FLE]
C ₅ H ₁₀ O	[96-47-9]	2-methyltetrahydrofuran				
	V	(283–353)	34.0	298	A	[1987STE/MAL]
	V		33.7	298		[1970MOI/ANT]
C ₅ H ₁₀ O	[563-80-4]	3-methyl-2-butanone				
	FUS		9.34	180		[1996DOM/HEA, 1968AND/COU2]
	V	(311–369)	35.5	326	A	[1987STE/MAL]
	V	(363–415)	33.8	378	A	[1987STE/MAL]
	V	(405–500)	32.6	420	A	[1987STE/MAL]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
			36.8	298	C	[1983UCH/MAJ]
			36.8 ± 0.3	298	C	[1981GAT/STR]
		(328–377)	35.0	343	A	[1987STE/MAL, 1975AMB/ELL]
			36.9	298		[1975AMB/ELL]
			35.0 ± 0.1	327	C	[1967HAL/LEE]
			33.8 ± 0.1	346	C	[1967HAL/LEE]
			32.3 ± 0.1	367	C	[1967HAL/LEE]
C ₅ H ₁₀ O	[107-87-9]	2-pentanone				
	TRS		2.09	110		
	FUS		10.63	196.3		[1991ACR, 1968AND/COU2]
	V	(336–422)	36.1	351	A	[1987STE/MAL]
	V	(416–501)	33.7	431	A	[1987STE/MAL]
	V	(487–561)	33.3	502	A	[1987STE/MAL]
	V		38.4	298	C	[1983UCH/MAJ]
	V	(298–329)	37.8	313		[1983MAR/SHV]
	V		38.5 ± 0.8	298	C	[1981GAT/STR]
	V		38.3 ± 0.3	298	GCC	[1979SAL/PEA]
	V		38.4	298		[1975AMB/ELL]
	V	(268–373)	39.5	283	EB	[1966MEY/WAG]
	V	(329–385)	36.5	344	A, GS, EB	[1987STE/MAL, 1975AMB/ELL, 1965COL/COU, 1972DYK]
	V		36.1 ± 0.1	335	C	[1961NIC/KOB]
	V		34.4 ± 0.1	360	C	[1961NIC/KOB]
	V		33.4 ± 0.1	375	C	[1961NIC/KOB]
	V		32.8 ± 0.1	386	C	[1961NIC/KOB]
	V		32.2 ± 0.1	394	C	[1961NIC/KOB]
C ₅ H ₁₀ O	[96-22-0]	3-pentanone				
	TRS		0.11	118.5		
	TRS		0.01	180		
	FUS		11.59	234.2		[1991ACR, 1968AND/COU2]
	V	(290–375)	35.9 ± 0.2	332		[1988BAG/GUR]
	V	(329–426)	36.6	344	A	[1987STE/MAL]
	V	(421–502)	33.7	436	A	[1987STE/MAL]
	V	(494–561)	33.3	509	A	[1987STE/MAL]
	V		38.5	298	C	[1983UCH/MAJ]
	V		38.6 ± 0.3	298	C	[1981GAT/STR]
	V		38.7 ± 0.3	298	GCC	[1979SAL/PEA]
	V		38.6	298		[1975AMB/ELL]
	V		36.1 ± 0.1	335	C	[1967HAL/LEE]
	V		34.9 ± 0.1	354	C	[1967HAL/LEE]
	V		33.5 ± 0.1	375	C	[1967HAL/LEE]
	V	(329–384)	36.6	344	A, GS, EB	[1987STE/MAL, 1975AMB/ELL, 1965COL/COU, 1972DYK]
	V	(283–323)	36.9	303		[1937RIN/SAY]
C ₅ H ₁₀ O	[110-62-3]	pentanal				
	FUS		15.0	151.6		[1998VAS/LEB]
	V	(307–343)	38.6	298	EB	[2002ANT/FRA, 2003VER/KRA2]
	V	(313–353)	38.3	298	CGC	[1995CHI/HOS]
	V	(290–385)	U50.0	305	A	[1987STE/MAL]
	V		38.1 ± 0.1	298		[1981DYA/KOR]
	V	(305–377)	37.3	320		[1979MAR/SAC]
C ₅ H ₁₀ O	[630-19-3]	pivaldehyde				
	TRS		0.5	158.5		
	TRS		4.81	183.9		
	FUS	(29–298)	2.52	272.1	AC	[1988WHI/PER]
	V	(308–336)	34.2	322		[1989VAR/SOM]
C ₅ H ₁₀ O	[6921-35-3]	3,3-dimethyloxetane				
	V		33.9 ± 0.3	298	C	[1971RIN/SUN]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	Transition	Temp. range (K)					
		V		38.2 ± 0.1	313	C	[1980SVO/UCH]
		V		36.6 ± 0.1	336	C	[1977SVO/VES]
		V		36.0 ± 0.1	344	C	[1977SVO/VES]
		V		35.5 ± 0.1	351	C	[1977SVO/VES]
		V		34.5 ± 0.1	363	C	[1977SVO/VES]
		V		39.1 ± 0.1	298	C	[1972MAN]
		V	(306–372)	38.2	321	A	[1987STE/MAL, 1965MER/POL, 1972DYK]
C ₅ H ₁₀ O ₂	[542-55-2]		isobutyl formate				
		V	(371–507)	36.6	386	A	[1987STE/MAL]
		V	(240–372)	38.6	255	A	[1987STE/MAL, 1947STU]
C ₅ H ₁₀ O ₂	[108-21-4]		isopropyl acetate				
		V	(313–353)	37.0	298	CGC	[1995CHI/HOS]
		V		35.6	323	C	[1973GEI/QUI]
		V		37.2 ± 0.2	298	C	[1966WAD]
		V	(235–362)	38.8	250	A	[1987STE/MAL, 1947STU]
		V	(273–363)	36.3	288	A	[1929HAG/WEI]
C ₅ H ₁₀ O ₂	[623-42-7]		methyl butyrate				
		FUS		11.36	190.1	AC	[2012AGA/VAR]
		V	(354–413)	35.9	370	EB	[2012RIO/ORT]
		V	(316–375)	39.4 ± 0.7	298	EB	[2012AGA/VAR]
		V	(274–303)	40.3 ± 0.5	298	GS	[2008VER/EME]
		V	(317–360)	38.4	332		[2002SWI/MAL]
		V		36.9	350		[2002VAN/VAN]
		V		41.1 ± 0.2	284		[2002VAN/VAN]
		V		40.6 ± 0.2	298		[2002VAN/VAN]
		V	(317–360)	40.6 ± 0.1	298	EB	[2002CON/WIC]
		V	(333–378)	39.3	298	CGC	[1999VER/HEI]
		V	(349–384)	36.4	364		[1990ORT/SUS]
		V		39.0 ± 0.4	298	GC	[1987AZA]
		V	(375–545)	34.2	390	A	[1987STE/MAL]
		V	(345–383)	40.4	298	EB	[1984WIS/TAM, 2008VER/EME]
		V		40.1 ± 0.4	298	C	[1981GAT/STR]
		V		39.8 ± 0.3	298	GCC	[1980FUC/PEA]
		V		39.3 ± 0.2	298	C	[1979SUN/SVE2]
		V	(246–375)	42.8	261	A	[1987STE/MAL, 1947STU]
C ₅ H ₁₀ O ₂	[547-63-7]		methyl isobutyrate				
		V	(366–533)	33.7	381	A	[1987STE/MAL]
		V		37.3	298		[UR/FUC, 1985MAJ/SVO]
		V		38.9 ± 0.4	298	C	[1981GAT/STR]
		V	(239–366)	40.1	254	A	[1987STE/MAL, 1947STU]
C ₅ H ₁₀ O ₂	[109-60-4]		propyl acetate				
		V	(302–503)	38.4	320	EB	[2012SUS/ROD]
		V	(273–363)	39.8	298	Static	[2011NEG/KAC]
		V	(323–359)	35.8	338	Static	[2011FAN/LI]
		V	(332–374)	37.0	347		[2011SAP/UUS]
		V	(313–363)	37.7	298	CGC	[1995CHI/HOS]
		V	(333–372)	37.0	348		[1993FAR/WIC]
		V	(374–542)	34.8	389	A	[1987STE/MAL]
		V	(322–383)	38.1	327	DTA	[1980MEY/AWE]
		V		39.8 ± 0.1	298	C	[1980SVO/UCH]
		V		38.6 ± 0.1	313	C	[1980SVO/UCH]
		V		35.3 ± 0.1	343	C	[1980SVO/UCH]
		V		36.9 ± 0.1	336	C	[1977SVO/VES]
		V		36.4 ± 0.1	344	C	[1977SVO/VES]
		V		35.8 ± 0.1	351	C	[1977SVO/VES]
		V		34.8 ± 0.1	363	C	[1977SVO/VES]
		V		36.9	335		[1976CON/COU]
		V		33.9	375		[1976CON/COU]
		V		36.7	335	C	[1973GEI/QUI]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References	
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)				
		V		39.1 ± 0.2	298	C	[1966WAD]
		V	(312–374)	38.2	327	A	[1987STE/MAL, 1965MER/POL, 1972DYK]
C ₅ H ₁₀ O ₂	[75-98-9]	trimethylacetic acid (pivalic acid)					
		FUS		2.3	308.2	DSC	[2004STU/WIT]
		FUS		2.3	309.1		[2002STE/CHI4]
		TRS		8.18	278.3		
		FUS		2.27	309.1		[1990SIN/GLI]
		SUB		62.3	291	GS	[2000VER2]
		V	(344–472)	57.6 ± 0.2	320	EB	[2002STE/CHI4]
		V	(344–472)	54.4 ± 0.2	360	EB	[2002STE/CHI4]
		V	(344–472)	50.9 ± 0.2	400	EB	[2002STE/CHI4]
	V	(344–472)	47.0 ± 0.4	440	EB	[2002STE/CHI4]	
C ₅ H ₁₀ O ₂	[109-52-4]	valeric acid (pentanoic acid)					
		FUS		14.16	239.5		[1996DOM/HEA, 1965MCD/KIL2]
		V	(283–313)	63.0 ± 9.5	298	GS	[2000VER2]
		V	(353–393)	65.9	298	CGC	[1995CHI/HOS]
		V	(373–465)	57.9	388	EB	[1987AMB/GHI3]
		V	(375–523)	58.0	390	A	[1987STE/MAL]
	V	(243–266)	62.4 ± 3	298	TE	[1979DEK/OON]	
C ₅ H ₁₀ O ₂	[503-74-2]	3-methylbutanoic acid (isovaleric acid)					
		V	(396–448)	53.8	411		[2004CLI/RAM]
		V	(293–323)	60.7 ± 0.3	308	GS	[2000VER2]
		V	(293–323)	61.2 ± 0.3	298	GS	[2000VER2]
		V	(364–464)	55.8	379	A, EB	[1987AMB/GHI3]
		V	(307–448)	56.6	322	A	[1987STE/MAL]
		V	(243–259)	57.5 ± 3	298	TE	[1979DEK/OON]
		V (monomer)		46.9 ± 0.2	298	C	[1970KON/WAD]
	V	(360–377)	45.9	375		[1894KAH]	
C ₅ H ₁₀ O ₃	[105-58-8]	diethyl carbonate					
		FUS		9.24	198.2	DSC	[2004DIN]
		V	(344–398)	42.3	359	EB	[2009XIN/FAN]
		V	(273–315)	44.4 ± 0.2	298	GS	[2008KOZ/EME]
		V	(352–403)	39.7	367		[2002ROD/CAN2]
		V	(308–400)	40.9	323	A	[1987STE/MAL]
		V		43.6 ± 0.2	298	C	[1973COU/LEE]
		V	(308–368)	39.1		MM	[1971CHO/JON]
	V	(263–399)	44.3	278		[1947STU]	
C ₅ H ₁₀ O ₃	[110-49-6]	ethylene glycol methyl ethyl acetate					
		V		50.3 ± 0.1	298	C	[1970KUS/WAD]
	V	(343–417)	44.3	358	A	[1987STE/MAL, 1957DYK/SEP, 1972DYK]	
C ₅ H ₁₀ O ₃	[97-64-3]	<i>(dl)</i> -ethyl lactate					
		V	(397–426)	44.8	402	EB	[2016MAT/INA]
		V	(303–378)	51.8	318		[2014LOM/GIN]
		V	(308–426)	49.2	323	A	[1987STE/MAL]
	V	(324–427)	51.3	339	A	[1987STE/MAL]	
C ₅ H ₁₀ O ₃	[623-72-3]	3-hydroxypropionic acid, ethyl ester					
	V	(338–356)	62.2	347	A	[1987STE/MAL]	
C ₅ H ₁₀ O ₃	[3852-09-3]	3-methoxypropionic acid, methyl ester					
	V	(350–438)	43.4	370	A	[1987STE/MAL]	
C ₅ H ₁₀ O ₃	[1779-19-7]	1,3,6-trioxacyclooctane					
	V		48.8 ± 0.2	298	C	[1982BYS/MAN]	
C ₅ H ₁₀ O ₄	[106-61-6]	glycerol, 1-monoacetate					
		V	(385–458)	74.0	400	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₀ O ₄	[4767-03-7]	2,2-bis-hydroxymethylpropanoic acid					
	TRS		38.5	426			

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₅ H ₁₀ O ₅		FUS	3.59	468	DSC	[1996DOM/HEA, 1970MUR/BRE]	
	[16528-92-0]	1,3,5,7,9-pentoxecane	21.88	334	DSC	[1996DOM/HEA, 1969CLE/MEL3]	
		FUS	87.9 ± 0.5	298	C	[1974MAN2]	
C ₅ H ₁₀ O ₅	[58-86-6]	(<i>d</i>)-xylose					
		FUS	31.7	416.2		[2002JON/COO]	
		SUB	(370–395)	158.0 ± 3.1	382	ME	[1999OJA/SUU]
C ₅ H ₁₀ O ₈ P ₂	[347-28-4]	3,9-dihydroxy-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane-3,9-dioxide	22.46	583.7	DSC	[2010GUO/WAN2]	
C ₅ H ₁₀ S	[5296-62-8]	allyl ethyl sulfide					
		V	(300–327)	38.9	313	A, EB	[1987STE/MAL, 1962MAC/MAY3, 1999DYK/SVO]
		V	(300–327)	39.3	298		[1962MAC/MAY3]
C ₅ H ₁₀ S	[1679-07-8]	cyclopentanethiol					
		FUS	7.83	155.4		[1996DOM/HEA, 1961BER/SCO]	
		V	(354–446)	38.2	369		[1999DYK/SVO]
		V	(348–446)	38.4	363	A, EB	[1987STE/MAL, 1961BER/SCO, 1966OSB/DOU]
		V		37.9 ± 0.1	361	C	[1961BER/SCO]
		V		36.7 ± 0.1	381	C	[1961BER/SCO]
C ₅ H ₁₀ S	[1795-09-1]	2-methyltetrahydrothiophene					
		FUS	8.87	172.4		[1974MES/FIN, 1996DOM/HEA]	
		V	(303–433)	40.6	318		[1999DYK/SVO]
		V		41.8	298		[1971WIL/ZWO]
		V		41.3 ± 0.1	298		[1972GOO, 1966OSB/DOU]
		V	(335–447)	39.0	350	A, EB	[1987STE/MAL, 1966OSB/DOU]
C ₅ H ₁₀ S	[4740-00-5]	3-methyltetrahydrothiophene					
		FUS	10.37	192		[1974MES/FIN, 1996DOM/HEA]	
		V	(307–439)	41.3	322		[1999DYK/SVO]
		V		42.7	298		[1971WIL/ZWO]
		V		42.1 ± 0.1	298		[1972GOO, 1966OSB/DOU]
		V	(340–453)	39.6	355	A, EB	[1987STE/MAL, 1966OSB/DOU]
C ₅ H ₁₀ S	[1613-51-0]	pentamethylene sulfide					
		TRS	(13–342)	1.1	201.4		
		TRS	(13–342)	7.77	240.0		
		FUS	(13–342)	2.45	292.3	AC	[1996DOM/HEA, 1954MCC/FIN]
		V	(310–443)	41.4	325		[1999DYK/SVO]
		V	(338–393)	37.2	345	EB	[1984PAL/CHO]
		V		42.8	298	C	[1971WIL/ZWO]
		V		39.7 ± 0.1	351	C	[1954MCC/FIN]
		V		38.7 ± 0.1	368	C	[1954MCC/FIN]
		V		37.4 ± 0.1	390	C	[1954MCC/FIN]
		V		36.6 ± 0.1	404	C	[1954MCC/FIN]
		V		36.0 ± 0.1	415	C	[1954MCC/FIN]
		V	(347–423)	39.5	362	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₅ H ₁₁ Br	[110-53-2]	1-bromopentane					
		FUS	11.47	185.1		[1950KUS/CRO]	
		FUS	14.37	185.1		[1996DOM/HEA, 1931DEE]	
		V	(323–363)	40.9	298	CGC	[1995CHI/HOS]
		V		41.4 ± 0.1	298	C	[1968WAD]
		V		41.1 ± 0.1	298	C	[1966WAD]
		V	(293–443)	41.0	308	A, EST	[1987STE/MAL, 1961LI/ROS, 1972DYK]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₁₁ Br	[107-81-3] V	(<i>dl</i>)- <i>sec</i> -pentylbromide (2-bromopentane) (303–432)	37.5	318	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Br	[107-81-3] V	2-bromopentane (323–363)	38.5	298	CGC	[1995CHI/HOS]
C ₅ H ₁₁ Br	[1809-10-5] FUS V	3-bromopentane (304–434)	8.4 37.7	167.3 319	A	[1995TAK/YAM] [1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Br	[630-17-1] V	1-bromo-2,2-dimethylpropane (293–420)	35.6	308	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Br	[10422-35-2] V	1-bromo-2-methylbutane (306–436)	37.9	321	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Br	[107-82-4] V V	1-bromo-3-methylbutane (306–436) (253–393)	37.9 41.0	321 268	A	[1987STE/MAL, 1972DYK] [1947STU]
C ₅ H ₁₁ Br	[507-36-8] V	2-bromo-2-methylbutane (295–422)	36.4	310	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Br	[18295-25-5] V	2-bromo-3-methylbutane (301–430)	37.2	316	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Cl	[543-59-9] V V V V V V V V V V	1-chloropentane (313–353)	38.8 38.2 37.3 36.5 35.6 34.6 34.0 38.2 ± 0.1 38.7 36.2	298 298 313 328 343 358 363 298 292 303	CGC C C C C C C C A, EST	[1995CHI/HOS] [1981TEK/MAJ] [1981TEK/MAJ] [1981TEK/MAJ] [1981TEK/MAJ] [1981TEK/MAJ] [1981TEK/MAJ] [1968WAD] [1987STE/MAL, 1961LI/ROS, 1972DYK] [1937RIN/SAY]
C ₅ H ₁₁ Cl	[625-29-6] V V V V V V	2-chloropentane (289–409)	36.0 35.2 34.4 33.5 31.9 36.2	298 313 328 358 368 304	C C C C C A	[1981TEK/MAJ] [1981TEK/MAJ] [1981TEK/MAJ] [1981TEK/MAJ] [1981TEK/MAJ] [1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Cl	[616-20-6] V	3-chloropentane (289–410)	36.5	304	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Cl	[753-89-9] TRS TRS FUS V	1-chloro-2,2-dimethylpropane (279–395)	6.12 0.26 1.81 34.9	172.0 206.3 250.5 294	DSC A	[2006BUH/MIE] [1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Cl	[616-13-7] V	(<i>dl</i>)-1-chloro-2-methylbutane (300–374)	35.4	315	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Cl	[594-36-5] V	2-chloro-2-methylbutane (280–396)	35.0	295	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Cl	[631-65-2] V	2-chloro-3-methylbutane (285–405)	35.9	300	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ Cl	[107-84-6] V V	1-chloro-3-methylbutane (313–353)	38.1 36.2	298 298	CGC C	[1995CHI/HOS] [1981TEK/MAJ]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
			35.4	313	C	[1981TEK/MAJ]
			34.6	328	C	[1981TEK/MAJ]
			33.7	343	C	[1981TEK/MAJ]
			32.8	358	C	[1981TEK/MAJ]
			32.3	368	C	[1981TEK/MAJ]
C ₅ H ₁₁ ClO ₂ S	[6303-18-0]	1-pentanesulfonyl chloride				
		(293–387)	58.5	308		[1999DYK/SVO]
		(387–492)	55.1	402		[1999DYK/SVO]
		(263–293)	60.5	278	A	[1987STE/MAL, 1999DYK/SVO, 1963QUI/NOW]
C ₅ H ₁₁ Cl ₂ N	[51-75-2]	<i>N</i> -methyl-bis(2-chloroethyl)amine				
		(273–333)	54.6	288	A	[1987STE/MAL]
C ₅ H ₁₁ F	[592-50-7]	1-fluoropentane				
		(245–373)	33.7	260	EST	[1987STE/MAL, 1961LI/ROS, 1972DYK]
C ₅ H ₁₁ F	[10086-64-3]	1-fluoro-2-methylbutane				
		(287–329)	30.7	302	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ F	[661-53-0]	2-fluoro-2-methylbutane				
		(249–341)	31.8	264	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ I	[628-17-1]	1-iodopentane				
		(313–353)	44.4	298	CGC	[1995CHI/HOS]
			45.3 ± 0.1	298	C	[1968WAD]
		(312–473)	43.1	327	A, EST	[1987STE/MAL, 1961LI/ROS, 1972DYK]
C ₅ H ₁₁ I	[616-14-8]	1-iodo-2-methylbutane				
		(339–406)	39.8	354	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ I	[541-28-6]	1-iodo-3-methylbutane				
		(258–303)	43.2 ± 0.1	298	Static	[2010FUL/RUZ]
		(313–353)	42.2	298	CGC	[1995CHI/HOS]
		(270–422)	43.5	285	A	[1987STE/MAL, 1947STU]
C ₅ H ₁₁ I	[594-38-7]	2-iodo-2-methylbutane				
		(308–398)	40.4	323	A	[1987STE/MAL, 1972DYK]
C ₅ H ₁₁ N	[1003-03-8]	cyclopentylamine				
		(12–348)	0.48	184.5		
		(12–348)	8.31	190.4	AC	[1996DOM/HEA, 1981FIN/MES]
		(317–419)	38.3	332	EB	[1987STE/MAL, 1975AMB/CON]
		(317–419)	40.2 ± 0.4	298	EB	[1975GOO/MES]
C ₅ H ₁₁ N	[120-94-5]	1-methylpyrrolidine				
			36.6 ± 2.4	298	CGC	[2010LIP/PLI]
		(270–298)	35.0 ± 0.7	284	GS	[1998VER6]
		(270–298)	34.2 ± 0.7	298	GS	[1998VER6]
		(273–315)	33.7	288	A	[1987STE/MAL, 1968CAB/CON]
C ₅ H ₁₁ N	[110-89-4]	piperidine				
		(13–362)	14.85	262.1	AC	[1996DOM/HEA, 1988MES/TOD]
			38.6 ± 2.1	298	CGC	[2014THO/GOB]
			36.6	338		[1988HOS/ARC]
			35.3	357		[1988HOS/ARC]
		(315–417)	37.6	330	A, EB, IPM	[1987STE/MAL, 1968OSB/DOU]
		(283–318)	39.4	298		[1968CAB/CON]
C ₅ H ₁₁ NO	[617-84-5]	<i>N, N</i> -diethylformamide				
			50.3	298		[1985BAR/CAS, 1985MAJ/SVO]
		(303–363)	48.9	318	A	[1987STE/MAL, 1968GOP/RIZ]
C ₅ H ₁₁ NO	[1118-69-0]	<i>N</i> -isopropylacetamide				
			66.4 ± 0.3	298	C	[1984STA/WAD]
C ₅ H ₁₁ NO	[5331-48-6]	<i>N</i> -propylacetamide				
			69.8 ± 0.2	298	C	[1984STA/WAD]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₁₁ NO	[626-97-1]	pentanamide				
	TRS		1.9	211.8		
	TRS		1.2	365		
	FUS		17.9	377.2	DSC	[2008ABA/BAD]
	SUB	(333–374)	89.3 ± 0.4		GS	[1959DAV/JON2, 1970COX/PIL]
	SUB	(353–373)	89.1			[1960JON]
C ₅ H ₁₁ NO	[754-10-9]	2,2-dimethylpropanamide				
	FUS		24.1	425.4	DSC	[2008ABA/BAD]
	SUB	(298–359)	89.0 ± 2.0	298	TE	[2000BRU/DEL]
C ₅ H ₁₁ NO	[758-96-3]	<i>N, N</i> -dimethylpropionamide				
	V	(326–424)	53.5	341	A	[1987STE/MAL]
C ₅ H ₁₁ NO	[2675-88-9]	<i>N</i> -methyl-2-methylpropionamide				
	V		67.1 ± 0.2	298	C	[1984STA/WAD]
C ₅ H ₁₁ NO	[7148-06-3]	methyl 2-(<i>N, N</i> -dimethylamino)propanoate				
	V	(278–308)	43.9 ± 0.4	293	GS	[1992VER/BEC]
C ₅ H ₁₁ NO	[109-02-4]	<i>N</i> -methyImorpholine				
	V	(273–353)	39.5	298	Static	[2009BEL/RAZ]
	V	(273–353)	38.9	313	Static	[2009RAZ/HAJ]
	V	(273–353)	39.8	298	Static	[2009RAZ/HAJ]
	V		38.2 ± 1.1	298	DSC	[2005ROJ/GIN]
	V	(274–304)	40.2 ± 0.3	288	GS	[1998VER2]
	V	(274–304)	39.6 ± 0.3	298	GS	[1998VER2]
	V	(323–363)	33.6	343	TGA	[1987ALN/ALS]
	V	(297–389)	38.4	312	A	[1987STE/MAL]
	V	(276–319)	40.0	291	A	[1987STE/MAL, 1975CAB/CON]
C ₅ H ₁₁ NO	[15364-56-4]	1-(dimethylamino)-2-propanone				
	V	(298–338)	43.6 ± 0.3	298	GS	[1994WEL/VER]
C ₅ H ₁₁ NO	[1188-11-0]	3-pentanone oxime				
	V	(318–425)	55.8	333	A	[1987STE/MAL]
C ₅ H ₁₁ NO ₂	[628-05-7]	1-nitropentane				
	V		51.0 ± 0.4	298	C	[2011MIR/KON]
C ₅ H ₁₁ NO ₂	[543-28-2]	isobutyl carbamate				
	V	(356–479)	58.8	371	A	[1987STE/MAL, 1947STU]
C ₅ H ₁₁ NO ₂	[35123-06-9]	<i>N, N</i> -dimethyl lactamide				
	V	(351–417)	73.7	366	A	[1987STE/MAL]
C ₅ H ₁₁ NO ₂	[760-78-1]	<i>(dl)</i> -2-aminopentanoic acid (DL-norvaline)				
	TRS		0.36	156.3		
	TRS		1.59	197.1	DSC	[2010CHA/PAP]
	SUB	(439–461)	120	450		[1987STE/MAL, 1965SVE/CLY]
	SUB	(439–461)	121.1 ± 0.4	455	ME	[1965SVE/CLY, 1964CLY/SVE]
C ₅ H ₁₁ NO ₂	[592-35-8]	butyl carbamate				
	FUS	(299–453)	17.45	326.2	AC	[2014ZEN/YAN]
	SUB		92.9	298	F + V	[2014ZEN/YAN]
	SUB	(292–316)	94.1 ± 8		ME	[1959DAV/JON]
	V	(372–409)	64.8	390		[2014ZEN/YAN]
	V	(372–409)	76.6	298		[2014ZEN/YAN]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₅ H ₁₁ NO ₂	[465-58-7]	<i>(dl)</i> -2-amino-2-methyl-butanoic acid					
	SUB		134.2 ± 1.0	413	TE, ME	[1979DEK/VOO]	
	SUB	(439–469)	125.8 ± 0.4	454		[1965SVE/CLY, 1964CLY/SVE]	
C ₅ H ₁₁ NO ₂	[516-06-3]	DL-valine					
	SUB	(320–420)	U79.5 ± 8	370	LE	[1977GAF/PIE]	
C ₅ H ₁₁ NO ₂	[72-18-4]	L-valine					
	SUB	(438–456)	162.8 ± 0.8	455	ME	[1965SVE/CLY, 1964CLY/SVE, 1989CHI/GRO]	
C ₅ H ₁₁ NO ₂	[660-88-8]	5-aminopentanoic acid					
	SUB	(384–394)	141.8 ± 0.5	389	C	[1983SKO/SAB]	
	SUB		144 ± 3	298	C	[1983SKO/SAB]	
C ₅ H ₁₁ NO ₂	[7529-22-8]	<i>N</i> -methylmorpholine- <i>N</i> -oxide					
	FUS		18.8	457.4	DSC	[1981NAV/HAU]	
C ₅ H ₁₁ NO ₂ S	[59-51-8]	DL-methionine					
	SUB	(363–463)	U134 ± 8	413	LE	[1977GAF/PIE]	
C ₅ H ₁₁ NO ₂ S	[63-68-3]	L-(<i>d</i>)-methionine					
	TRS		2.3	307.7	DSC	[2012ROU/NOT3]	
	TRS		0.23	394.5			
	TRS		0.10	420.5			
		SUB		140.5	421	C	[1981SAB/MIN]
		SUB		164 ± 4	298	C	[1981SAB/MIN]
		SUB	(463–485)	125	474	A	[1987STE/MAL, 1965SVE/CLY]
		SUB	(463–485)	125.1 ± 0.8	455	ME	[1965SVE/CLY, 1964CLY/SVE]
C ₅ H ₁₁ NO ₃	[543-87-3]	isopentyl nitrate					
	V	(278–421)	47.0	293	A	[1987STE/MAL, 1947STU]	
C ₅ H ₁₁ NO ₃ S	[14357-44-9]	2-methyl-2-(methylsulfonyl)propanal oxime					
	FUS		27.12	382	DSC	[1990DON/DRE]	
C ₅ H ₁₁ N ₅ O ₂	[136516-16-0]	1,5-dimethyl-2-nitriminohexahydro-1,3,5-triazine					
	FUS		21.0	408.1	DSC	[2010HU/CHE]	
C ₅ H ₁₁ O ₂ PS ₂	[77240-15-4]	2-mercapto-4,6-dimethyl-1,3,2-dioxaphosphorinane-2-sulfide					
	V		72.3			[2008SAG/SAF]	
C ₅ H ₁₁ P	[4743-40-2]	phosphorinane					
	SUB	(250–291)	43.3	276	T	[1987STE/MAL, 1966MOR/TAM]	
	V	(294–345)	39.9	309	A, T	[1987STE/MAL, 1966MOR/TAM]	
C ₅ H ₁₂	[109-66-0]	pentane					
	FUS		8.41	143.5	DTA	[1994TAN/SAB3]	
	FUS		8.4	143.5		[1991ACR, 1967MES/GUT]	
	FUS		8.4	143.5		[1991ACR, 1940MES/KEN]	
	FUS		8.4	143.5		[1930PAR/HUF2]	
		SUB		42.0	143	B	[1963BON]
		V	(299–342)	27.1	315	EB	[2014RIO/ORT]
		V	(308–423)	26.7	323		[2002PFO/RIE]
		V		26.4	298		[1994RUZ/MAJ]
		V	(223–352)	29.8	238	A	[1987STE/MAL]
		V	(143–223)	32.3	208	A	[1987STE/MAL]
		V	(350–422)	26.1	365	A	[1987STE/MAL]
		V	(418–470)	26.2	433	A	[1987STE/MAL]
		V		26.6 ± 0.1	298	C	[1982FUC/PEA]
		V		26.4	298	C	[1981HOS/SCO2]
		V		25.5	310		[1977DAS/REE]
		V		23.0	350		[1977DAS/REE]
	V		19.7	390		[1977DAS/REE]	
	V		15.1	430		[1977DAS/REE]	
	V		8.5	460		[1977DAS/REE]	

TABLE 8. Phase change enthalpies of C_5 organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
		V	(216–296)	26.2	298	[1975HOE/HOE]
		V	(269–341)	27.9	284	EB [1987STE/MAL, 1974OSB/DOU]
		V		26.4	298	[1971WIL/ZWO]
		V		26.4	298	C [1947OSB/GIN]
		V	(286–310)	27.4	298	MM [1945WIL/TAY]
		V		26.2	298	[1940MES/KEN]
C_5DH_{11}	[55620-30-9]	1-deuteropentane				
		V	(223–303)	26.2	298	[1975HOE/HOE]
C_5DH_{11}	[55620-31-0]	3-deuteropentane				
		V	(213–294)	26.3	298	[1975HOE/HOE]
C_5D_{12}	[2031-90-5]	pentane-d ₁₂				
		V	(205–298)	26.0	298	[1975HOE/HOE]
C_5H_{12}	[463-82-1]	2,2-dimethylpropane (neopentane)				
		TRS		2.63	140.5	
		FUS		3.10	256.8	[1970CHA/WES, 1969ENO/SHI]
		TRS		2.56	139.0	
		FUS		3.24	253.8	DSC [1970SIL/RUD]
		TRS		2.58	140	
		FUS		3.26	256.5	[1996DOM/HEA, 1936AST/MES]
		SUB	(223–256)	28.2	241	A [1987STE/MAL]
		SUB		33.2		[1933WHI/FLE, 1936AST/MES]
		SUB	(171–249)	23.9	210	A [1947STU]
		V	(268–313)	24.0	283	A [1987STE/MAL]
		V	(312–385)	23.1	327	A [1987STE/MAL]
		V	(382–433)	23.1	397	A [1987STE/MAL]
		V		21.8	298	C [1981HOS/SCO2]
		V		22.2	290	[1977DAS/REE2]
		V		19.5	330	[1977DAS/REE2]
		V		16.2	370	[1977DAS/REE2]
		V		11.1	410	[1977DAS/REE2]
		V	(257–293)	24.3	272	[1975HOE/PAR, 1984BOU/FRI]
		V	(343–433)	22.8	358	[1973DAW/SIL, 1984BOU/FRI]
		V		21.85	298	[1971WIL/ZWO]
		V		22.8 ± 0.1	283	[1936AST/MES]
C_5H_{12}	[78-78-4]	2-methylbutane (isopentane)				
		FUS		5.13	113.4	[1996DOM/HEA, 1942SCH/AST]
		FUS		5.11	112.6	[1996DOM/HEA, 1930PAR/HUF]
		V	(255–323)	26.9	270	[1991EWI/GOO]
		V	(216–323)	28.5	231	A [1987STE/MAL]
		V	(300–460)	25.2	315	A [1987STE/MAL]
		V	(320–391)	25.2	335	A [1987STE/MAL]
		V	(385–416)	24.8	400	A [1987STE/MAL]
		V	(412–460)	25.3	427	A [1987STE/MAL]
		V		24.4	310	[1977DAS/REE3]
		V		21.5	350	[1977DAS/REE3]
		V		18.0	390	[1977DAS/REE3]
		V		12.9	430	[1977DAS/REE3]
		V		24.8	298	[1971WIL/ZWO]
		V	(190–300)	30.2	205	[1947STU]
		V	(289–301)	26.2	295	MM [1945WIL/TAY]
		V		25.0	298	C [1942SCH/AST]
$C_5H_{12}ClF_3N_2OS$	[63265-73-6]	chloro bis(<i>N</i> -methylmethanaminto)oxo(trifluoromethyl)sulfur				
		V		40.2	477	I [1977KIT/SHR2]
$C_5H_{12}ClF_3N_2S$	[63265-71-4]	chloro bis(<i>N</i> -methylmethanamino)(trifluoromethyl) sulfur				
		V		38.1	368	I [1977KIT/SHR2]
$C_5H_{12}NO_3PS_2$	[60-51-5]	phosphorodithioic acid, <i>O,O</i> -dimethyl- <i>S</i> -[2-(methylamino)-2-oxoethyl]ester				
		FUS		20.49	321	DSC [1990DON/DRE]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		V	(283–390)	95.0	298	A	[1987STE/MAL]
C ₅ H ₁₂ N ₂	[4426-46-4]	methyl butyldiazene					
	V		36.4 ± 0.2	298	C	[1978ENG/MON]	
C ₅ H ₁₂ N ₂	[109-01-3]	<i>N</i> -methylpiperazine					
	V	(274–319)	46.7	289	A	[1987STE/MAL, 1975CAB/CON]	
C ₅ H ₁₂ N ₂ O	[632-22-4]	1,1,3,3-tetramethylurea					
	FUS		14.0	272.1		[2001JAM/DOB]	
	FUS	(5–320)	13.4	270.5	AC	[1995KAB/KOZ2, 1996DOM/HEA]	
	FUS		14.1		CR	[1972ZOR/HUR]	
	V	(320–450)	41.7	450	A, EB	[1987KNE/ZON]	
	V	(320–450)	52.2	325	A, EB	[1987KNE/ZON]	
C ₅ H ₁₂ N ₂ O	[634-95-7]	1,1-diethylurea					
	TRS		2.8				
	FUS		14.2		DSC	[1995STR/ARG]	
	TRS	(5–320)	2.07	197.3	AC	[1995KAB/KOZ2]	
	FUS		16.78	342.3		[1991ACR, 1990KAB/MIR2, 1987DEL/FER]	
	SUB	(312–339)	95.7 ± 0.7	298	GS	[2006EME/KAB]	
	SUB	(305–347)	95.5 ± 0.8	324	ME	[2003ZAI/KAB]	
	SUB	(305–347)	94.9 ± 0.8	350	ME	[2003ZAI/KAB]	
	SUB		94.7 ± 0.2	350	C	[2003ZAI/KAB]	
	SUB		95.9 ± 0.2	298		[2003ZAI/KAB]	
C ₅ H ₁₂ N ₂ O	[623-76-7]	1,3-diethylurea					
	TRS		1.87	339.4		[1987DEL/FER]	
	TRS	(5–320)	1.66	340.8	AC	[1995KAB/KOZ2]	
	FUS		12.46	383.4		[1991ACR, 1990KAB/MIR2, 1987DEL/FER]	
	SUB	(343–379)	95.4 ± 0.3	298	GS	[2006EME/KAB]	
	SUB	(323–384)	91.8 ± 0.9	358	ME	[2003ZAI/KAB]	
	SUB	(323–384)	92.3 ± 0.9	350	ME	[2003ZAI/KAB]	
	SUB		95.6 ± 0.6	350	C	[2003ZAI/KAB]	
	SUB		97.6 ± 0.5	298		[2003ZAI/KAB]	
	SUB	(321–379)	96.8 ± 0.9	361	TE	[1990PIA/FER, 1987FER/DEL2]	
	SUB	(384–590)	NA		ME	[1986KRA/KOZ]	
C ₅ H ₁₂ N ₂ O	[592-31-4]	<i>N</i> -butylurea					
	TRS		6.3	310.5			
	TRS		0.7	362.2			
	FUS		10.8	365.4	DSC	[2005HAS/TAJ]	
	TRS		7.0	315			
	TRS		1.0	346			
	FUS		15.7	370	DSC	[1995FER/DEL]	
	TRS	(5–320)	4.05	294	AC	[1995KAB/KOZ2]	
	TRS		7.02	313.1			
	TRS		0.88	344.9			
	FUS		14.55	369.3	DSC	[1991ACR, 1987DEL/FER]	
	SUB	(346–367)	105.8 ± 0.7	298	GS	[2006EME/KAB]	
	SUB	(339–364)	102.7 ± 2.8	354	ME	[2003ZAI/KAB]	
	SUB	(339–364)	103.0 ± 2.8	350	ME	[2003ZAI/KAB]	
	SUB		101.1 ± 0.4	350	C	[2003ZAI/KAB]	
	SUB		104.0 ± 0.4	298		[2003ZAI/KAB]	
	SUB		99 ± 4			[1987FIO/FER]	
C ₅ H ₁₂ N ₂ O	[592-17-6]	<i>N</i> -isobutylurea					
	SUB		101.1 ± 1.1	377	TE	[1990PIA/FER]	
C ₅ H ₁₂ N ₂ O	[689-11-2]	<i>N</i> - <i>sec</i> -butylurea					
	SUB	(345–394)	101.9 ± 0.5	298	GS	[2006EME/KAB]	
	SUB	(338–372)	104.3 ± 0.8	355	ME	[2003ZAI/KAB]	
	SUB	(338–372)	104.5 ± 0.8	350	ME	[2003ZAI/KAB]	
	SUB		104.6 ± 0.4	298		[2003ZAI/KAB]	

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound						
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References		
C ₅ H ₁₂ N ₂ O								
		SUB		102.4 ± 0.5	350	C	[2009RIB/FER7]	
	[1118-12-3]	<i>N</i> - <i>tert</i> -butylurea						
		TRS	(5–320)	0.1	249	AC	[1995KAB/KOZ2]	
		FUS		33.13	449.8	DSC	[1991ACR, 1987DEL/FER]	
		SUB	(335–397)	98.2 ± 0.4	298	GS	[2006EME/KAB]	
		SUB	(333–372)	97.6 ± 0.8	353	ME	[2003ZAI/KAB]	
		SUB	(333–372)	97.7 ± 0.8	350	ME	[2003ZAI/KAB]	
C ₅ H ₁₂ N ₂ O ₂								
	[52330-07-1]	<i>N</i> -methyl- <i>N</i> -nitrobutanamine						
		FUS		37.56	331	DTA	[1987OYU/BRI]	
	C ₅ H ₁₂ N ₂ S	[105-55-5]	1,3-diethylthiourea					
			FUS		17.14	350.5	DSC	[2000DEL/JOZ]
			SUB		121.7 ± 3	298	B	[2000DEL/JOZ]
			SUB		120.2 ± 3.0	298	B	[1994TER/PIA]
	V	(351–384)	101.0 ± 3.0	368	ME, TE	[1994TER/PIA]		
C ₅ H ₁₂ N ₂ S	[2782-91-4]	tetramethylthiourea						
		FUS		22.14	350.4	DSC	[2000DEL/JOZ]	
		FUS		18.2	351	DSC	[1993DEM/BUC]	
		SUB		84.5 ± 3.0	298	ME	[2000DEL/JOZ]	
		SUB		83.0 ± 3.0	333	TE	[1994FER/MAR]	
		SUB		84.0	298		[1994FER/MAR]	
		SUB		83.0 ± 0.5	298	C	[1985MUR/SAK]	
C ₅ H ₁₂ N ₄ O ₂	[16849-81-3]	1,1,3,3-tetramethyl-2-nitroguanidine						
		V		26.8 ± 1.1			[2009AST/DYU]	
C ₅ H ₁₂ N ₄ O ₄	[134273-34-0]	3,5-dinitro-3,5-diazaheptane						
		FUS		31.5	348.2	DSC	[2003SPI/WAN]	
C ₅ H ₁₂ N ₄ O ₄	[168983-73-1]	<i>N</i> -methyl- <i>N</i> , <i>N'</i> -dinitro- <i>N'</i> -propylmethanediamine						
		FUS		21.1	309.2	DSC	[2003SPI/WAN]	
C ₅ H ₁₂ N ₄ O ₄	[503152-72-5]	<i>N</i> -methyl- <i>N'</i> -(1-methylethyl)- <i>N</i> , <i>N'</i> -dinitromethanediamine						
	FUS		20.5	334.7	DSC	[2003SPI/WAN]		
C ₅ H ₁₂ O	[628-28-4]	1-methoxybutane						
		FUS	(12–315)	10.85	157.5	AC	[1996DOM/HEA, 1975AND/MAR]	
		V	(263–333)	32.6	298	Static	[2012HAN/SOL]	
		V	(293–367)	32.5	308	A	[1987STE/MAL]	
		V		32.4	298	C	[1980MAJ/WAG]	
		V		31.5	313	C	[1980MAJ/WAG]	
		V		30.5	328	C	[1980MAJ/WAG]	
		V		29.6	343	C	[1980MAJ/WAG]	
		V		28.6	358	C	[1980MAJ/WAG]	
		V	(265–367)	32.4	298		[1976AMB/ELL]	
		V	(265–367)	29.6	343		[1976AMB/ELL]	
		V		32.5 ± 0.1	298	C	[1975FEN/HAR]	
	V	(296–342)	32.4	311	EB	[1969CID/POL]		
C ₅ H ₁₂ O	[628-32-0]	1-ethoxypropane						
		FUS	(12–316)	8.39	145.7	AC	[1996DOM/HEA, 1975AND/MAR]	
		V	(264–359)	33.0	279	A	[1987STE/MAL, 1976AMB/ELL]	
		V		31.4	298	C	[1980MAJ/WAG]	
		V		30.5	313	C	[1980MAJ/WAG]	
		V		29.5	328	C	[1980MAJ/WAG]	
		V		28.5	343	C	[1980MAJ/WAG]	
	V		27.4	358	C	[1980MAJ/WAG]		

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	Transition	Temp. range (K)					
		V	(264–359)	31.4	298		[1976AMB/ELL]
		V	(264–359)	29.0	336		[1976AMB/ELL]
		V		31.4 ± 0.1	298	C	[1975FEN/HAR]
		V	(293–335)	31.6	308		[1969CID/POL]
C ₅ H ₁₂ O	[625-54-7]	ethyl isopropyl ether					
	V			30.0	298	C	[1980MAJ/WAG]
	V			29.2	313	C	[1980MAJ/WAG]
	V			28.1	328	C	[1980MAJ/WAG]
C ₅ H ₁₂ O	[1634-04-4]	methyl <i>tert</i> -butyl ether					
	FUS	(12–308)	7.6	164.6	AC	[1996DOM/HEA, 1975AND/MAR]	
	V	(263–333)	30.5	298	Static	[2012HAN/SOL]	
	V	(287–327)	30.8	298		[2010CLA/MAR]	
	V	(300–328)	29.9	314		[2002SEG/GAL]	
	V	(315–365)	29.6	330		[1998AUC/LOR]	
	V	(298–322)	30.0	310		[1995BEL/AIT]	
	V	(300–411)	31.2	315	EB	[1994KRA/GME]	
	V	(287–326)	30.4	302		[1991WU/PIV]	
	V		29.8	298	C	[1980MAJ/WAG]	
	V		28.9	313	C	[1980MAJ/WAG]	
	V		28.0	328	C	[1980MAJ/WAG]	
	V		27.0	343	C	[1980MAJ/WAG]	
	V	(287–351)	30.2	302	A	[1987STE/MAL, 1976AMB/ELL]	
	C ₅ H ₁₂ O	[71-41-0]	1-pentanol				
FUS		(85–370)	10.51	195.6		[2004VAN/VAN]	
FUS			10.5	195.6		[1996DOM/HEA, 1968COU/LEE]	
FUS			9.83	194.2		[1933PAR/HUF]	
V		(318–403)	55.4	298		[2006NAS/NEU]	
V			44.4	411		[2000WOR/JAM]	
V			40.1	448		[2000WOR/JAM]	
V			36.1	473		[2000WOR/JAM]	
V			31.7	498		[2000WOR/JAM]	
V			26.4	523		[2000WOR/JAM]	
V			22.0	548		[2000WOR/JAM]	
V			14.1	573		[2000WOR/JAM]	
V			7.1	586		[2000WOR/JAM]	
V			43.5			[1999FAT]	
V		(323–373)	57.8	298	CGC	[1995CHI/HOS]	
V	(323–373)	57.4	298	CGC	[1995CHI/HOS]		
V	(335–410)	51.5	350		[1994AUC/BUR]		
V	(388–420)	47.2	403	A	[1987STE/MAL]		
V	(326–411)	54.3	341	A	[1987STE/MAL]		
V	(408–441)	45.4	423	A	[1987STE/MAL]		
V		55.7 ± 0.2	313	C	[1985MAJ/SVO2]		
V		54.4 ± 0.2	328	C	[1985MAJ/SVO2]		
V		53.0 ± 0.2	343	C	[1985MAJ/SVO2]		
V		51.2 ± 0.2	358	C	[1985MAJ/SVO2]		
V	(343–403)	55.4	298		[1983SCH/STR]		
V	(310–411)	55.0	325		[1973WIL/ZWO]		
V		50.5 ± 0.1	362	C	[1970COU/FEN]		
V		49.2 ± 0.1	374	C	[1970COU/FEN]		
V		47.0 ± 0.1	392	C	[1970COU/FEN]		
V		44.4 ± 0.1	411	C	[1970COU/FEN]		
V	(347–429)	51.6	362	EB	[1987STE/MAL, 1970AMB/SPR]		
V	(307–411)	56.2	322	DTA	[1969KEM/KRE]		
V		56.9 ± 0.2	298	C	[1966WAD]		
V		57.7 ± 1.1	298	EB	[1960GRE, 2001KUL/VER]		

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₅ H ₁₂ O	[6032-29-7]	2-pentanol					
	FUS		8.48	200		[1997LOH/JOH]	
	V	(350–392)	47.2	365	EB	[2010CEN/VRB]	
	V	(324–391)	51.2	339	EB	[2009GIE/KOS]	
	V	(323–373)	53.6	298	CGC	[1995CHI/HOS]	
	V	(274–393)	58.9	289	A	[1987STE/MAL]	
	V		54.2 ± 0.2	298	C	[1985MAJ/SVO2]	
	V		52.7 ± 0.2	313	C	[1985MAJ/SVO2]	
	V		50.9 ± 0.2	328	C	[1985MAJ/SVO2]	
	V		49.0 ± 0.2	343	C	[1985MAJ/SVO2]	
	V		46.9 ± 0.1	358	C	[1985MAJ/SVO2]	
	V		45.4 ± 0.1	368	C	[1985MAJ/SVO2]	
	C ₅ H ₁₂ O	[584-02-1]	3-pentanol				
FUS			9.08	204.2		[1997LOH/JOH]	
V		(342–388)	46.7	357	EB	[2010CEN/VRB]	
V			53.2 ± 0.1	298	EB	[1988PES/SHV, 2001KUL/VER]	
V		(245–390)	59.9	260	A	[1987STE/MAL]	
V		(317–389)	49.6	332		[1984SAC/MAR]	
V		(279–318)	53.6	294		[1975CAB/CON2]	
V		(294–389)	50.2	319		[1973WIL/ZWO]	
V			52.9	298	C	[1963MCC/LAI]	
C ₅ H ₁₂ O		[137-32-6]	2-methyl-1-butanol				
		V	(345–401)	49.9	360	EB	[2010CEN/VRB]
		V	(330–405)	51.2	345		[1994AUC/BUR]
		V	(338–402)	49.8	353	A	[1987STE/MAL]
	V	(317–403)	53.9	332	A	[1987STE/MAL]	
	V	(249–319)	58.5	264	A	[1987STE/MAL, 1979THO/MEA]	
	V	(307–403)	56.1	322		[1973WIL/ZWO]	
	V		54.1	298	C	[1963MCC/LAI]	
	V	(302–410)	43.4	317		[1957EAS/HAR, 1984BOU/FRI]	
C ₅ H ₁₂ O	[75-85-4]	2-methyl-2-butanol					
	TRS	(80–305)	0.93	146.4			
	TRS	(80–305)	1.54	149.9			
	TRS	(80–305)	0.66	214.4			
	FUS	(80–305)	2.24	262.7	AC	[2008TON/TAN]	
	TRS	(84–301)	0.9	145.8			
	FUS	(84–301)	2.0	264.7	AC	[2007STR/RUZ2]	
	TRS		1.96	146			
	TRS		0.17	213			
	FUS		4.46	264		[1996DOM/HEA, 1933PAR/HUF]	
	V	(336–375)	44.0	351		[2012LAA/ZAI]	
	V	(335–375)	44.4	350	EB	[2010CEN/VRB]	
	V	(303–373)	51.2	318	EB	[2009GIE/KOS]	
	V	(274–306)	51.5 ± 0.3	298	GS	[2001KUL/VER]	
	V	(323–373)	50.5	298	CGC	[1995CHI/HOS]	
	V	(308–375)	47.3	323		[1994AUC/BUR]	
	V		50.2 ± 0.3	298	EB	[1988PES/SHV, 2001KUL/VER]	
	V	(280–375)	49.0	295	A	[1987STE/MAL]	
	V	(323–376)	45.8	338	A	[1987STE/MAL]	
	V		50.1 ± 0.2	298	C	[1985MAJ/SVO2]	
	V		48.4 ± 0.2	313	C	[1985MAJ/SVO2]	
	V		46.4 ± 0.2	328	C	[1985MAJ/SVO2]	
	V		44.2 ± 0.1	343	C	[1985MAJ/SVO2]	
V		42.0 ± 0.1	358	C	[1985MAJ/SVO2]		
V		40.3 ± 0.1	368	C	[1985MAJ/SVO2]		

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(298–375)	52.8	313		[1973WIL/ZWO]
	V		49.2	298	C	[1963MCC/LAI]
	V	(298–364)	48.5	313		[1935BUT/RAM]
C ₅ H ₁₂ O	[123-51-3]	3-methyl-1-butanol				
	V	(366–404)	48.3	381	EB	[2010CEN/VRB]
	V	(348–404)	49.8	363		[2008LLA/MON]
	V	(323–373)	55.3	298	CGC	[1995CHI/HOS]
	V	(325–385)	47.2	340		[1994AUC/BUR]
	V	(303–412)	57.1	318	A	[1987STE/MAL]
	V		55.2 ± 0.2	303	C	[1985MAJ/SVO2]
	V		54.2 ± 0.2	313	C	[1985MAJ/SVO2]
	V		52.9 ± 0.2	328	C	[1985MAJ/SVO2]
	V		51.4 ± 0.2	343	C	[1985MAJ/SVO2]
	V		49.7 ± 0.2	358	C	[1985MAJ/SVO2]
	V	(298–426)	56.5	313		[1973WIL/ZWO]
	V		54.3	298	C	[1963MCC/LAI]
C ₅ H ₁₂ O	[598-75-4]	3-methyl-2-butanol				
	V	(352–385)	44.4	367	EB	[2010CEN/VRB]
	V	(280–301)	51.6 ± 0.3	298	GS	[2001KUL/VER]
	V	(280–375)	49.0	295	A	[1987STE/MAL]
	V	(298–384)	52.7	313		[1973WIL/ZWO]
	V		51.7	298	C	[1963MCC/LAI]
C ₅ H ₁₂ O	[598-75-4]	<i>dl</i> -3-methyl-2-butanol				
	V	(293–385)	46.4	308	A	[1987STE/MAL]
C ₅ H ₁₂ O	[75-84-3]	2,2-dimethyl-1-propanol				
	TRS	(10–370)	4.1	233.3		
	FUS	(10–370)	2.9	328.2	AC	[2007STR/RUZ2]
	FUS		3.87	329.8		[2003CEN/RUZ]
	TRS		4.14	235.4		
	FUS		3.73	329.8	DSC	[1999SAL/LOP]
	TRS		4.6	242.1		
	FUS		3.5	328.1	DSC	[1996GRA]
	TRS		4.46	242		
	FUS		4.06	325	DSC	[1970MUR/BRE]
	V	(345–385)	45.5	360	EB	[2010CEN/ROH]
	V	(274–312)	51.8 ± 0.3	298	GS, B	[2001KUL/VER]
	V	(330–387)	47.5	345	A	[1987STE/MAL]
C ₅ H ₁₂ O ₂	[5137-45-1]	1-ethoxy-2-methoxyethane				
	V		39.8 ± 0.1	298	C	[1970KUS/WAD]
C ₅ H ₁₂ O ₂	[77-76-9]	2,2-dimethoxypropane				
	V	(313–348)	34.4	328	EB	[2005YI/WAN, 2003JIA/LI]
	V	(272–301)	37.6 ± 0.4	298	GS	[2002VER]
	V	(272–301)	38.2 ± 0.4		GS	[1998VER/PEN]
	V	(299–348)	35.3	324	EB	[1994WIB/MOR]
	V	(292–357)	33.4 ± 0.2	325		[1988BAG/GUR]
C ₅ H ₁₂ O ₂	[109-59-1]	2-isopropoxyethanol				
	V		50.1 ± 0.1	298	C	[1971MOR]
	V		50.1 ± 0.1	298	C	[1971KUS/WAD]
	V	(341–413)	45.1	356	A	[1987STE/MAL, 1957DYK/SEP, 1972DYK]
C ₅ H ₁₂ O ₂	[2807-30-9]	2-propoxyethanol				
	V		52.1 ± 0.1	298	C	[1971KUS/WAD]
	V	(350–422)	46.3	365	A	[1987STE/MAL, 1957DYK/SEP, 1972DYK]
C ₅ H ₁₂ O ₂	[462-95-3]	formaldehyde diethyl acetal (diethoxymethane)				
	V	(273–361)	36.1	288	A	[1987STE/MAL]
	V		35.7 ± 0.2	298	C	[1969MAN]
C ₅ H ₁₂ O ₂	[684-84-4]	2-methyl-1,3-butanediol				

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(399–561)	62.4	414	A	[1987STE/MAL]
C ₅ H ₁₂ O ₂	[2568-33-4]	3-methyl-1,3-butanediol				
	V	(346–475)	60.3	361	A	[1987STE/MAL]
C ₅ H ₁₂ O ₂	[126-30-7]	2,2-dimethyl-1,3-propanediol				
	TRS		12.33	315.1		
	FUS		4.55	401.2	DSC	[2009SIN/MUR]
	TRS	(78–410)	14.78	314.3		
	FUS	(78–410)	7.52	402.4	AC	[2007TON/TAN]
	TRS		12.24	315.1		
	FUS		4.23	401.6	DSC	[2006DIV/CHE]
	TRS		12.37	315.2		
	FUS		4.95	401.8	DSC	[2004STU/WIT]
	TRS	(15–340)	0.18	60.4		
	TRS	(15–340)	12.5	314.5	AC	[2001KAM/SUE]
	TRS		0.18	60.4		
	TRS		12.43	314.4		
	FUS		4.34	402.8	DSC	[1999SAL/LOP]
	TRS		13.8	315.2		
	TRS		12.52	314.5	AC	[1999SUG]
	TRS		12.8	315.2		
	FUS		4.3	402.5	DSC	[1996GRA]
	TRS		12.41	314.8		
	FUS		4.44	403.3		[1996DOM/HEA, 1988ZHA/ZOU]
	TRS		13.64	314		
	FUS		4.71	398	DSC	[1996DOM/HEA, 1970MUR/BRE]
	FUS		4.6	403.2		[1973FRA/KRZ, 1994LOP/VAN]
	SUB (cryst)	(294–311)	85 ± 2			[1995FON/MUN]
	SUB (plastic)	(319–333)	75 ± 2			[1995FON/MUN]
	SUB (plastic)		75.5 ± 3.8	368	C	[1994FON/MUN2, 1994FON/MUN]
	SUB (cryst)		87.6 ± 4.4	350	C	[1994FON/MUN2, 1994FON/MUN]
	V	(400–480)	79.4	415	A	[1987STE/MAL]
C ₅ H ₁₂ O ₂	[5343-92-0]	1,2-pentanediol				
	V	(289–345)	74.6 ± 0.3	298	GS	[2004VER2]
C ₅ H ₁₂ O ₂	[111-29-5]	1,5-pentanediol				
	FUS		9.7	254.4	DTA	[1990KNA/SAB]
	FUS		15.72	248		[1996DOM/HEA, 1935MIL]
	V		83.0 ± 0.3	298	CGC	[2006UMN/KWE]
	V		86.8 ± 0.5	298	C	[1988KNA/SAB, 1990KNA/SAB2]
	V	(391–479)	78.6	406	A	[1987STE/MAL]
	V	(446–515)	64.9	480	EB	[1972GAR/HUS]
	V	(446–515)	82.4 ± 1.7	298	EB	[1972GAR/HUS]
C ₅ H ₁₂ O ₂	[625-69-4]	2,4-pentanediol				
	V	(297–347)	72.5 ± 0.3	298	GS	[2007VER]
C ₅ H ₁₂ O ₂ S	[14094-12-3]	<i>tert</i> -butyl methyl sulfone				
	FUS		24.69	357.6	FPM	[1961BUS/IVI]
	SUB		82.4 ± 2.5			[UR/MAC, 1970COX/PIL]
C ₅ H ₁₂ O ₃	[17742-78-8]	<i>tert</i> -butyldioxymethanol				
	V	(290–320)	59.6 ± 2.4		ME	[1983VAN/KAC]
C ₅ H ₁₂ O ₃	[111-77-3]	diethylene glycol, methyl ether				
	V	(385–466)	51.9	400	A	[1987STE/MAL, 1957DYK/SEP, 1972DYK]
C ₅ H ₁₂ O ₃	[14642-48-9]	2,3,4-pentanetriol				
	V	(428–600)	78.9	443		[1947STU]
C ₅ H ₁₂ O ₃	[77-85-0]	2-hydroxymethyl-2-methyl-1,3-propanediol				
	TRS		20.94	356.7		
	FUS		4.72	474.4	DSC	[1999SAL/LOP]

TABLE 8. Phase change enthalpies of C_5 organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T_m (K)	Method	References
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
		TRS		23.17		
		FUS		5.38	DSC	[1996DOM/HEA, 1970MUR/BRE]
		TRS		21.1		
		FUS		4.8	DSC	[1996GRA]
		TRS	(18–375)	21.2	AC	
		FUS	(353–483)	4.7	DSC	[1990SUE/MAT]
		SUB (plastic)		84.2 ± 4.2	C	[1994FON/MUN]
		SUB (cryst)		109.2 ± 5.5	C	[1994FON/MUN]
$C_5H_{12}O_4$	[1850-14-2]	tetramethoxymethane				
	V	(304–387)	41.2	319		[1980THO/SMI]
$C_5H_{12}O_4$	[115-77-5]	pentaerythritol				
	TRS		33.3	457.0	DSC	[2014HU/ZHA]
	TRS		41.2	459.7		
	FUS		5.3	532.3	DSC	[1996GRA]
	TRS		40.5	458.3		
	FUS		4.6	513.2	DSC	[1990BAR/DEL]
	TRS		41.38	461.6	AC	[1989ZHA/YAN]
	TRS		43.93	460.4		
	FUS		7.11	538.7		[1996DOM/HEA, 1950NIT/SEK4]
	SUB (cryst)	(441–460)	134 ± 7			[1995FON/MUN]
	SUB (plastic)	(465–477)	96 ± 9			[1995FON/MUN]
	SUB		131.3 ± 6.6	403	C	[1994FON/MUN]
	SUB	(418–455)	161 ± 1.0	437	TE	[1990BAR/DEL]
	SUB		163.0	298		[1990BAR/DEL]
	SUB (tetragonal)	(397–410)	131.4		ME	[1951NIT/SEK2, 1960JON]
	SUB	(379–408)	143.9 ± 0.8		ME	[1953BRA/COT, 1960JON]
$C_5H_{12}O_5$	[488-81-3]	1,2,3,4,5-pentahydroxypentane (adonitol)				
	FUS	(78–400)	36.42	369.1	AC	[2010TON/YU]
	FUS		35.5	375.0	DSC	[2003CAR/DES]
	FUS		37.6	374.7	DSC	[1990BAR/DEL, 1996DOM/HEA]
	SUB		161.0	298	B	[1990BAR/DEL]
	V	(418–465)	111.1 ± 1.5	443	TE	[1990BAR/DEL]
$C_5H_{12}O_5$	[488-82-4]	1,2,3,4,5-pentahydroxypentane (D-arabinitol)				
	FUS		38.8	376.0	DSC	[2003CAR/DES]
	FUS		38.9	379.4	DSC	[1990BAR/DEL, 1990DOM/HEA]
	SUB		160.0	298	B	[1990BAR/DEL]
	V	(414–461)	110.1 ± 1.5	440	TE	[1990BAR/DEL]
$C_5H_{12}O_5$	[7643-75-6]	1,2,3,4,5-pentahydroxypentane (L-arabinitol)				
	FUS (I)		36.5	384.2		
	FUS (II)		28.8	358.2	DSC	[2013CAR/RHA]
	FUS		43.2	374.0	DSC	[2003CAR/DES]
$C_5H_{12}O_5$	[87-99-0]	xylitol				
	FUS		37.8	366.9	DSC	[2009SAL/BED]
	FUS		42.6	366.2	DSC	[2008KAI/MAR]
	FUS	(80–390)	33.26	369.0	AC	[2007TON/TAN2]
	FUS		33.68	367.5	DSC	[2007TON/TAN2]
	FUS		37.7	368.0	DSC	[2003CAR/DES]
	FUS		37.4	365.7	DSC	[1996DOM/HEA, 1990BAR/DEL]
	SUB		161	298	B	[1990BAR/DEL]
	V	(406–460)	111.1 ± 0.8	433	TE	[1990BAR/DEL]
$C_5H_{12}S$	[10359-64-5]	3-methyl-2-thiapentane				
	V	(288–418)	38.5	303		[1999DYK/SVO]
$C_5H_{12}S$	[5008-69-5]	4-methyl-2-thiapentane				
	V	(288–411)	36.9	303		[1999DYK/SVO]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₁₂ S	[628-29-5]	butyl methyl sulfide				
	FUS		12.45	175.6		[1985DEA]
	FUS	(12–358)	12.45	175.3		[1961MCC/FIN]
	V	(297–423)	40.4	312		[1999DYK/SVO]
	V	(301–330)	35.3	315	A	[1987STE/MAL]
	V		40.5	298		[1981SHI/SAI]
	V		41.0	298		[1971WIL/ZWO]
	V		40.9 ± 0.8	298	GC	[1964GUB/FER]
	V	(296–325)	38.1	313	EB	[1962MAC/MAY2]
	V	(343–436)	38.0	358	A, EB	[1987STE/MAL, 1961MCC/FIN, 1966OSB/DOU]
C ₅ H ₁₂ S	[6163-64-0]	methyl <i>tert</i> -butyl sulfide				
	FUS		8.41	190.8		[1996DOM/HEA, 1962SCO/GOO]
	V	(245–352)	34.2	298		[2004SAW/MOK]
	V	(276–397)	36.5	291		[1999DYK/SVO]
	V	(305–411)	35.9	298		[1971WIL/ZWO]
	V		35.1	320	A, EB	[1987STE/MAL, 1962SCO/GOO, 1966OSB/DOU]
C ₅ H ₁₂ S	[5145-99-3]	ethyl isopropyl sulfide				
	V	(284–406)	38.1	299		[1999DYK/SVO]
	V		37.8	298		[1981SHI/SAI]
	V		38.5	298		[1971WIL/ZWO]
	V		37.9 ± 0.8	298	GC	[1964MAC/MCC]
	V	(296–325)	38.1	313	EB	[1962MAC/MAY2]
	V	(319–391)	36.3	334	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₅ H ₁₂ S	[4110-50-3]	ethyl propyl sulfide				
	FUS	(12–366)	10.58	156.1		[1996DOM/HEA, 1961MCC/FIN]
	V	(293–418)	39.8	308		[1999DYK/SVO]
	V		40	298		[1981SHI/SAI]
	V		39.5	298	C	[1981HOS/SCO]
	V	(331–398)	37.8	346	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₅ H ₁₂ S	[110-66-7]	1-pentanethiol				
	FUS		17.53	197.5		[1996DOM/HEA, 1952FIN/SCO]
	V	(300–426)	40.6	315		[1999DYK/SVO]
	V		41.1	298		[1971WIL/ZWO]
	V		37.1 ± 0.1	356	C	[1965FIN/HOS]
	V		36.4 ± 0.1	376	C	[1965FIN/HOS]
	V		34.9 ± 0.1	400	C	[1965FIN/HOS]
	V	(347–440)	38.1	362	A, EB	[1987STE/MAL, 1952FIN/SCO, 1966OSB/DOU]
C ₅ H ₁₂ S	[2084-19-7]	2-pentanethiol				
	V	(287–412)	38.4	302		[1999DYK/SVO]
	V	(347–435)	37.8	361	A	[1987STE/MAL]
C ₅ H ₁₂ S	[616-31-9]	3-pentanethiol				
	V	(288–413)	38.3	303		[1999DYK/SVO]
C ₅ H ₁₂ S	[1878-18-8]	2-methyl-1-butanethiol				
	V	(293–418)	39.2	308		[1999DYK/SVO]
	V		39.9 ± 0.1	298		[1972GOO, 1966OSB/DOU]
	V		39.7	298		[1971WIL/ZWO]
	V	(324–432)	37.6	339	A, EB	[1987STE/MAL, 1966OSB/DOU]
C ₅ H ₁₂ S	[541-31-1]	3-methyl-1-butanethiol				
	FUS		7.41	139.6		[1996DOM/HEA, 1974MES/FIN]
	V	(292–418)	39.3	307		[1999DYK/SVO]
	V		39.7	298		[1971WIL/ZWO]
	V		39.9 ± 0.1	298		[1972GOO, 1966OSB/DOU]
	V	(323–431)	37.7	338	A, EB	[1987STE/MAL, 1966OSB/DOU]
C ₅ H ₁₂ S	[1679-09-0]	2-methyl-2-butanethiol				
	V	(276–398)	36.3	291		[1999DYK/SVO]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
			35.6	298		[1971WIL/ZWO]
		(320–411)	34.3	335	A, EB	[1987STE/MAL, 1962SCO/DOU]
			33.8 ± 0.1	330	C	[1962SCO/DOU]
			32.7 ± 0.1	350	C	[1962SCO/DOU]
			31.4 ± 0.1	372	C	[1962SCO/DOU]
C ₅ H ₁₂ S	[2084-18-6]	3-methyl-2-butanethiol				
	TRS	(12–370)	7.06	144.5		
	FUS	(12–370)	0.61	146.1		[1996DOM/HEA, 1974MES/FIN]
	V	(285–409)	37.7	300		[1999DYK/SVO]
	V		37.5 ± 0.1	298		[1972GOO, 1966OSB/DOU]
	V		37.7	298		[1971WIL/ZWO]
	V	(315–422)	36.2	330	A, EB	[1987STE/MAL, 1966OSB/DOU]
C ₅ H ₁₂ S	[1679-08-9]	2,2-dimethyl-1-propanethiol				
	V	(280–403)	36.9	295		[1999DYK/SVO]
	V		36.4 ± 0.1	298		[1972GOO, 1966OSB/DOU]
	V		36.8	298		[1971WIL/ZWO]
	V	(292–416)	36.2	307	A, EB	[1987STE/MAL, 1966OSB/DOU]
	V	(213–415)	42.1	230	EB, IPM	[1966OSB/DOU]
C ₅ H ₁₂ S ₂	[928-98-3]	1,5-pentanedithiol				
	V	(363–491)	51.6	378	A	[1987STE/MAL, 1999DYK/SVO, 1943HAL/REI]
	V		59.3 ± 0.4	298		[1962MAN/SUN]
C ₅ H ₁₂ S ₂	[5395-75-5]	3,5-dithiaheptane				
	V		50.8 ± 0.2	298	C	[1974MAN4]
C ₅ H ₁₂ S ₂	[53966-36-2]	ethyl isopropyl disulfide				
	V	(369–426)	42.5	384		[1999DYK/SVO]
	V	(363–427)	42.9	378	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₅ H ₁₂ S ₂	[30453-31-7]	ethyl propyl disulfide				
	V	(373–414)	44.0	388	A, EB	[1987STE/MAL, 1952WHI/BAR, 1999DYK/SVO]
C ₅ H ₁₂ S ₄	[6156-25-8]	tetra(methylthia)methane				
	TRS	(13–360)	7.09	296.2		
	TRS	(13–360)	7.29	318.8		
	FUS	(13–360)	3.31	338.9	AC	[1998SOR/KIM]
	TRS		6.11	296.4		
	TRS		7.61	318.7		
	FUS		4.14	338.7		[1996DOM/HEA, 1943BAC/PER]
C ₅ H ₁₃ N	[19961-27-4]	<i>N</i> -ethylisopropylamine				
	V		33.1 ± 0.1	298	C	[1979PET/MAJ]
	V		32.1 ± 0.1	313	C	[1979PET/MAJ]
	V		31.0 ± 0.1	328	C	[1979PET/MAJ]
	V		28.8 ± 0.1	358	C	[1979PET/MAJ]
	V	(303–342)	33.4	318	EB	[1979PET/MAJ]
C ₅ H ₁₃ N	[616-39-7]	<i>N, N</i> -diethylmethylamine				
	V	(283–339)	31.8	298	A	[1987STE/MAL]
C ₅ H ₁₃ N	[110-68-9]	<i>N</i> -methylbutylamine				
	V	(283–313)	38.1	298	A	[1987STE/MAL]
C ₅ H ₁₃ N	[14610-37-8]	<i>tert</i> -butylmethylamine				
	V	(270–288)	32.3 ± 1.4	297		[1997VER]
C ₅ H ₁₃ N	[110-58-7]	pentylamine				
	V	(322–378)	40.9	298	EB	[2004ANT/GAL]
	V	(298–417)	39.0	313	A	[1987STE/MAL, 1972DYK]
	V		40.1 ± 0.1	298	C	[1969WAD]
	V		36.0	368	C	[1901KAH]
C ₅ H ₁₃ N	[996-35-0]	<i>N, N</i> -dimethyl-2-propanamine				
	V	(275–334)	31.9	298	Static	[2013CHI/DER]

TABLE 8. Phase change enthalpies of C₅ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₅ H ₁₃ NO	[110-73-6]	2-(ethylamino)ethanol				
	V	(282–321)	61.0 ± 0.4	298	GS	[2005KAP/SLO]
C ₅ H ₁₃ NO	[3179-63-3]	3-dimethylamino-1-propanol				
	V	(283–373)	57.0	298	Static	[2010BEL/AHM]
C ₅ H ₁₃ NO ₂	[105-59-9]	<i>N</i> -methyl diethanolamine				
	V	(409–435)	71.5	422	EB	[2008KIM/SVE]
	V	(390–520)	73.0	405	A	[1987STE/MAL]
C ₅ H ₁₃ NO ₂ S	[2374-61-0]	<i>N, N</i> -diethyl methanesulfonamide				
	V	(384–528)	52.1	399	A	[1987STE/MAL]
	V	(384–528)	49.5	456		[1978LUK/MAK]
C ₅ H ₁₃ NS	[41881-76-9]	<i>N</i> -methyl- <i>tert</i> -butylsulfenamide				
	V	(329–397)	41.9	364		[1999DYK/SVO, 1939RHE/MOT]
C ₅ H ₁₃ N ₃	[80-70-6]	1,1,3,3-tetramethylguanidine				
	V		50.0 ± 1.2	298	C	[2014VIT/AGA]
	V		46.9			[1967AND/HAM]
C ₅ H ₁₃ O ₃ P	[683-08-9]	diethyl methylphosphonate				
	V	(253–465)	60.6	253	GS	[2009BUT/BUC]
	V	(253–465)	57.2	283	GS	[2009BUT/BUC]
	V	(253–465)	55.9	298	GS	[2009BUT/BUC]
	V	(253–465)	54.7	313	GS	[2009BUT/BUC]
	V	(253–465)	53.4	333	GS	[2009BUT/BUC]
	V	(253–465)	51.2	373	GS	[2009BUT/BUC]
	V	(343–402)	51.8	358	A	[1987STE/MAL, 1972DYK]
			56.5 ± 4.2			[1956NEA/WIL, 1982PIL/SKI]
C ₅ H ₁₄ NP	[91669-45-3]	trimethylphosphine- <i>N</i> -ethylimine				
	V		61.5 ± 4.2			[1960CLA/FOW, 1982PIL/SKI]
C ₅ H ₁₄ N ₂	[109-55-7]	<i>N, N</i> -dimethyl-1,3-propanediamine				
	FUS	(12–300)	12.38	194.4	AC	[1996DOM/HEA, 1982DZH/KAR]
	V	(273–300)	46.0 ± 0.2	298	GS	[2012VER/CHE]
	V		42.2 ± 0.1	298	C	[1992PAP/PIM]
	V	(303–366)	45.7	318	A	[1987STE/MAL]
	V	(303–408)	42.0	318	A	[1987STE/MAL]
	V	(285–310)	44.0 ± 0.2	298		[1984LEB/GUT, 2012VER/CHE]
	V		52.7			[1977VAS/KOT]
		(304–365)	46.7 ± 0.4	298	EB	[1977VAS/PET, 2012VER/CHE]
C ₅ H ₁₄ N ₂	[51-80-9]	bis(dimethylamino)methane				
	V		33.1 ± 0.4	298	C	[1974ROG/RAP]
	V	(273–348)	32.3	310		[1965AYL/PET]
C ₅ H ₁₄ N ₂	[589-37-7]	pentane-1,3-diamine				
	V	(273–451)	48.8	377	Static	[2015BOU/NEG]
	V	(273–451)	54.9	298	Static	[2015BOU/NEG]
C ₅ H ₁₄ N ₂	[462-94-2]	pentane-1,5-diamine				
	FUS		29.82	285	DSC	[2002DAL/DEL]
	V	(288–311)	58.7	298	Static	[2014FUL/RUZ]
	V	(293–343)	56.8	318	GS	[2011POZ/VER]
	V	(293–343)	58.3 ± 0.2	298	GS	[2011POZ/VER]
C ₅ H ₁₄ N ₂	[7328-91-8]	2,2-dimethyl-1,3-diaminopropane				
	TRS		14.7	194.2		
	FUS		1.7	301.7	DTA, DSC	[1996STR/BRA]

TABLE 9. Phase change enthalpies of C₆ organic compounds

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ BrF ₅	[344-04-7]	bromopentafluorobenzene				
	V	(400–522)	38.2	415	A	[1987STE/MAL, 1972DYK]
	V	(283–348)	43.1 ± 0.2	298		[1977KRE/PRI]
	V	(414–522)	38.0	429	EB	[1969WOO/ADI]
C ₆ BrF ₁₅ N ₂ S	[62977-74-6]	bis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]diimidodisulfurylbromide fluoride				
	V		41.0	476	I	[1977KIT/SHR2]
C ₆ Br ₆	[87-82-1]	hexabromobenzene				
	FUS		24.6	598.8	DSC	[2004KUR/MAE2]
	SUB	(363–413)	118	388	GS	[2014KUR/TAK]
C ₆ ClF ₁₅ N ₂ S	[62977-72-4]	bis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]diimidodisulfurylchloride fluoride				
	V		37.2	458	I	[1977KIT/SHR2]
C ₆ ClF ₅	[344-07-0]	chloropentafluorobenzene				
	TRS	(12–395)	3.64	191		
	TRS	(12–395)	0.98	245		
	FUS	(12–395)	8.36	257.5		[1996DOM/HEA, 1968AND/COU]
	V	(290–550)	41.3	298		[1991BAS/SVO]
	V	(348–402)	37.7	363	A	[1987STE/MAL]
	V	(307–417)	40.0	322	A	[1987STE/MAL, 1968AMB]
	V		37.7 ± 0.1	349	C	[1968AND/COU]
	V		36.4 ± 0.1	369	C	[1968AND/COU]
	V		34.8 ± 0.1	391	C	[1968AND/COU]
	V	(403–547)	35.2	418	EB	[1966EVA/TIL]
C ₆ ClF ₁₃ N ₂	[33757-14-1]	1-chloro-1', 2, 2, 2, 2', 2', 2-heptafluoro-1, 1'-bis(trifluoromethyl)azoethane				
	V	(297–355)	33.3	312	A	[1987STE/MAL, 1971SWI/ZAB]
C ₆ ClF ₁₄ P	[756-17-2]	bis(heptafluoropropyl) chlorophosphine				
	V	(283–373)	37.5	328		[1959EME/SMI]
C ₆ Cl ₂ F ₁₂ N ₂ S	[38005-17-3]	bis(2-chlorohexafluoroisopropylimino) sulfur				
	V		43.5	404	I	[1972MET/SHR]
C ₆ Cl ₃ F ₃	[319-88-0]	1,3,5-trichloro-2,4,6-trifluorobenzene				
	FUS		19.83	335		[1991ACR, 1973AND/MAR2, 1969PAU/GLU]
	V	(364–496)	49.2	379	A	[1987STE/MAL]
	V	(364–550)	53.8	298		[1984BOU/FRI, 1991BAS/SVO]
C ₆ Cl ₃ F ₁₄ P	[1764-51-8]	trichloro bis(heptafluoropropyl)phosphorane				
	V	(323–393)	40.1	358		[1959EME/SMI]
C ₆ Cl ₃ N ₃ O ₆	[2631-68-7]	1,3,5-trichloro-2,4,6-trinitrobenzene				
	V	(503–543)	68.9	518	A	[1987STE/MAL, 1968MAK]
	V	(503–543)	43.2	518		[1972DYK]
C ₆ Cl ₄ O ₂	[118-75-2]	2,3,5,6-tetrachloro-1,4-benzoquinone (chloranil)				
	FUS		30.87	567.2	DSC	[1991ACR, 1990DON/DRE]
	SUB	(333–356)	98.7 ± 8.3		QF	[1927COO/COO, 1960JON, 1970COX/PIL]
	V	(343–435)	88.5	358		[1947STU]
C ₆ Cl ₅ NO ₂	[82-68-8]	pentachloronitrobenzene				
	FUS		19.2	418	DSC	[2011KAN/RAI]
	FUS		18.41	418	DSC	[1991ACR, 1972PLA, 1990DON/DRE]
	SUB		96.3 ± 2.1	298	C	[2009RIB/FER6]
	SUB	(317–339)	93.0 ± 0.4	328	ME	[2009RIB/FER6]
	SUB	(317–339)	94.5 ± 0.4	298	ME	[2009RIB/FER6]
C ₆ Cl ₆	[118-74-1]	hexachlorobenzene				
	FUS		25.2	502	DTA	[1991SAB/AN2]
	FUS		23.85	505	DSC	[1991ACR, 1990DON/DRE, 1969PLA/GLA]
	FUS		22.4	501.1	DSC	[1984MIL/GHO]
	SUB	(397–424)	76 ± 4	411		[2010VEC]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		SUB	(358–403)	96.8 ± 0.5	298	GS	[2007VER/EME]
		SUB	(258–313)	105			[1994LIU/DIC]
		SUB	(253–303)	77.4 ± 0.8	278	GS	[1994WAN/SHU]
		SUB		89.6 ± 0.2	337	C	[1991SAB/AN2]
		SUB		90.5 ± 0.2	298	C	[1991SAB/AN2]
		SUB	(461–506)	85.5			[1989LUB/JAN]
		SUB	(387–502)	62.7	402	A	[1987STE/MAL]
		SUB	(314–373)	94.7	344	GS	[1986ROR/SAR, 1997DEL]
		SUB	(288–318)	101.3	303	GS	[1980FAR/YAN]
		SUB	(312–337)	79.5 ± 1.2			[1977STE2]
	Note: In [1977STE2] the sublimation surface was glass and hay						
		SUB	(369–397)	92 ± 8.2		RG	[1949SEA/HOP2, 1970COX/PIL]
		V		74.4 ± 0.7	298	GS	[2001PUR/CHI]
		V	(413–453)	76.8	298	GC	[1994SPI/LUI]
		V	(258–313)	81.3		GC	[1994LIU/DIC]
		V	(343–453)	68.6	398	GC	[1990HIN/BID2]
		V	(502–589)	68.7	517	A	[1987STE/MAL]
		V	(387–582)	60.5	402		[1947STU]
C ₆ D ₁₀ O	[51209-49-5]	cyclohexanone-d ₁₀					
		TRS		7.1	216.8		
		TRS		0.4	219.3		
		FUS		1.19	241.5	DTA	[1997BUS/HAM]
C ₆ F ₅ NO ₂	[880-78-4]	pentafluoronitrobenzene					
		FUS		11.81	250.5		[1996DOM/HEA, 1971PAU]
C ₆ F ₆	[392-56-3]	hexafluorobenzene					
		FUS		11.61	278.2	DTA	[1994TAN/SAB3]
		FUS		11.59	278.3		[1970MES/FIN]
		FUS		11.59	278.3		[1996DOM/HEA, 1965COU/GRE]
		SUB	(215–278)	49.2	263		[1987STE/MAL, 1965DOU/OSB]
		SUB	(238–268)	49.8	253	IPM, A	[1979SCO/OSB]
		SUB		46.0	316	B	[1965COU/GRE]
		V	(288–333)	36.1 ± 0.1	298		[2005DIA/GON]
		V	(318–376)	34.4	333	EB	[1990AMB/EWI]
		V	(403–516)	31.8	425		[1988DAV/EWI]
		V	(278–354)	36.5	293	A	[1987STE/MAL]
		V	(348–389)	33.2	363	A	[1987STE/MAL]
		V	(384–462)	32.2	399	A	[1987STE/MAL]
		V	(458–517)	31.8	473	A	[1987STE/MAL]
		V	(290–510)	35.6	298		[1982INV, 1991BAS/SVO]
		V		35.7	298	C	[1981HOS/SCO]
		V	(293–323)	35.7	308		[1980PAT/TOM]
		V	(281–335)	36.4 ± 0.1	298		[1972KRE/PRI]
		V	(278–321)	36.2	292	MM	[1969FIN]
		V	(363–516)	32.2	378	EB	[1966EVA/TIL]
		V	(275–387)	36.5	293		[1965DOU/OSB]
		V	(293–356)	35.1	308		[1964PAT/PRO, 1984BOU/FRI]
C ₆ F ₇ NOS	[20094-84-2]	<i>N</i> -(pentafluorophenyl)imidodisulfuryl fluoride					
		V	(309–355)	45.3	332		[1968GLE/VON]
C ₆ F ₇ OP	[59646-78-5]	pentafluorophenyldifluorophosphine					
		V	(310–363)	42.4	325		[1976FAL/DES]
C ₆ F ₇ O ₂ P	[59617-42-4]	pentafluorophenyldifluorophosphoryl difluoride					
		V	(323–367)	46.4	338		[1976FAL/DES]
C ₆ F ₈	[5680-05-7]	perfluoro(2-methyl-3-methylenecyclobutene)					
		V	(243–306)	31.0	258	A, I	[1987STE/MAL, 1966BAN/BAR]
C ₆ F ₁₀	[355-75-9]	perfluorocyclohexene					
		V	(277–319)	31.0	298		[1979PRI/SAP]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ F ₁₀ O ₄	[32750-98-4] V	2,2,3,3,4,4,5-heptafluoro-5-oxo-pentaneperoxoic acid, trifluoromethyl ester				
			43.8			[1971BER/HOH]
C ₆ F ₁₁ NO	[52225-58-8] V	2,2,3,3,3-pentafluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]propanamide				
			32.7	338		[1974PET/SHR]
C ₆ F ₁₁ NO ₂ S	[77589-41-4] V	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-[(trifluoroacetyl)imino]thiophene-1-oxide				
			33.9	383		[1981ABE/SHR2]
C ₆ F ₁₂	[1805-22-7] V	perfluoromethylcyclopentane				
			30.68	298	EB	[1998EWI/SAN]
C ₆ F ₁₂	[355-68-0] SUB SUB V V V V	perfluorocyclohexane				
		(252–326)	36.4	267	A	[1987STE/MAL, 1967CRO/TAY]
		(293–333)	36.2	313		[1957ROW/THA]
		(373–457)	28.0	388		[1988DAV/EWI]
		(274–322)	36.0	298		[1979PRI/SAP]
		(350–451)	28.1	365	A	[1987STE/MAL, 1967CRO/TAY]
		(336–394)	29.6	351		[1957MCC/DOU, 1984BOU/FRI]
C ₆ F ₁₂	[2994-71-0] V	perfluoro(1,2-dimethylcyclobutane)				
		(242–318)	32.1	257	A	[1987STE/MAL, 1967CRO/TAY]
C ₆ F ₁₂ N ₂	[19451-96-8] V	<i>N, N, N, N</i> -tetrakis(trifluoromethyl)-1,2-ethynylendiamine				
		(305–328)	32.1	316	A	[1987STE/MAL, 1968FRE/TIP]
C ₆ F ₁₂ N ₂ OS	[34619-84-6] V	1,1,1,3,3,3-hexafluoro-2-isocyanato- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-2-propanamine				
			39.3	375	I	[1972SWI/BAB]
C ₆ F ₁₂ N ₂ O ₂ S	[62609-66-9] V	1,1,1-trifluoro- <i>N'</i> -(trifluoroacetyl)- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]methane-sulfonimidamide				
			32.6	404	I	[1977KIT/SHR]
C ₆ F ₁₂ N ₂ S	[31340-33-7] V	bis[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]sulfoxylic diamide				
			40.6	391	I	[1972SWI/BAB]
C ₆ F ₁₂ N ₂ S ₂	[38005-16-2] V	bis(hexafluoroisopropylidenimino) disulfide				
			46.0	417	I	[1972MET/SHR]
C ₆ F ₁₂ O	[788-40-9] V V	perfluoro(methoxycyclopentane)				
		(246–330)	38.6	261	A	[1957POR/CAD, 1987STE/MAL, 1972DYK]
			30.3	330		[1957POR/CAD]
C ₆ F ₁₂ O ₂	[24165-10-4] V V	trifluoroacetic acid, 2,2,2-trifluoro-1,1-bis(trifluoromethyl) ethyl ester				
		(264–298)	34.3	279	A	[1987STE/MAL, 1975WAL/DES2]
			33.1	329	HG	[1973MAJ/SHR]
C ₆ F ₁₂ O ₄	[55100-93-1] V	carbonoperoxoic acid, <i>O</i> -[2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethyl]- <i>O</i> , <i>O</i> -(trifluoromethyl) ester ester				
		(273–315)	33.5	288	A	[1987STE/MAL, 1975WAL/DES2]
C ₆ F ₁₃ NS	[54120-07-9] V	2,2,2-trifluoro- <i>N</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]ethanimidothioic acid, trifluoromethyl ester				
			35.3	360		[1975PET/SHR]
C ₆ F ₁₄	[355-42-0] FUS TRS FUS FUS V V V V V V V	perfluorohexane				
			9.03	182.5	DSC	[1986STA]
		(4–300)	0.97	103		
		(4–300)	6.84	185	C	[1996DOM/HEA, 1982CAM/REY]
			6.61	191		[1958DUN/MUR]
		(289–333)	32.5 ± 0.1	298		[2005DIA/GON]
		(261–334)	34.4	276	A	[1987STE/MAL]
		(285–340)	31.4	298		[1984BOU/FRI, 1991BAS/SVO]
		(433–449)	33.4	441	A	[1987STE/MAL, 1978MOU]
			28.2	330		[1967CRO/TAY]
		(303–330)	31.5	316		[1958DUN/MUR, 1984BOU/FRI]
		(284–342)	32.4	298		[1952STI/CAD]
C ₆ F ₁₄	[355-04-4] V V	perfluoro-2-methylpentane				
		(280–340)	31.4	298		[1984BOU/FRI, 1991BAS/SVO]
		(253–329)	34.5	268	A	[1987STE/MAL, 1967CRO/TAY, 1984BOU/FRI]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		28.0	331		[1967CRO/TAY]
	V	(277–341)	32.5	292		[1952STI/CAD, 1984BOU/FRI]
C ₆ F ₁₄	[865-71-4]	perfluoro-3-methylpentane				
	V	(282–333)	30.8	297	A	[1987STE/MAL]
	V		28.0	331		[1967CRO/TAY]
C ₆ F ₁₄	[354-96-1]	perfluoro-2,3-dimethylbutane				
	V	(260–340)	31.6	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(262–333)	33.0	277	A	[1987STE/MAL, 1967CRO/TAY, 1984BOU/FRI]
	V		29.0	333		[1967CRO/TAY]
C ₆ F ₁₄ IP	[756-18-3]	bis(heptafluoropropyl) iodophosphine				
	V	(273–353)	41.6	313		[1959EME/SMI]
C ₆ F ₁₄ N ₂ S	[34451-12-2]	bis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl] sulfur diimide				
	V	(325–378)	38.5	340	A	[1987STE/MAL, 1972SWI/SHR]
C ₆ F ₁₄ O	[356-62-7]	perfluorodipropyl ether				
	V	(306–327)	31.2 ± 0.4	298	EB	[1989VAR/PAS]
C ₆ F ₁₅ N	[359-70-6]	perfluorotriethylamine				
	TRS		1.56	146.4		
	FUS	(9–300)	5.56	156.2		[1996DOM/HEA, 1979ZHO/KOS]
	V	(297–343)	34.0 ± 0.4	298	EB	[1995VAR/DRO]
	V		34.2 ± 0.1	298	C	[1995VAR/DRO]
	V	(320–334)	32.8	327	A	[1987STE/MAL]
	V	(317–349)	32.9	332	A	[1987STE/MAL]
	V	(285–343)	33.2	314		[1951HAS]
C ₆ F ₁₅ NO	[54566-82-4]	1,1,1,2,3,3,3,-heptafluoro- <i>N</i> -(pentafluoroethyl)- <i>N</i> -(trifluoromethyl)-2-propanamine				
	V		27.1	338		[1975PET/SHR2]
C ₆ F ₁₆ O ₄ S ₂	[63441-15-6]	2,2,4,4-tetrafluoro-1,1,3,3-tetrahydro-1,1,3,3-tetrakis(trifluoromethoxy)-1,3-dithietane				
	V		37.2	404	I	[1977KIT/SHR3]
C ₆ F ₁₆ N ₂ S	[59617-31-1]	bis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]diimidosulfuryl fluoride				
	V		35.8			[1976STA/MEW]
C ₆ F ₁₆ S	[1423-18-3]	difluorobis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl] sulfur				
	V	(273–383)	36.6	328	A	[1987STE/MAL, 1999DYK/SVO, 1962ROS/MUE]
C ₆ F ₁₈ NP ₃	[2071-50-3]	nitrilotris[bis(trifluoromethyl)phosphine]				
	SUB	(273–309)	68.4	291		[1965BUR/HEN]
C ₆ F ₂₀ N ₃ O ₃ P	[36544-21-5]	phosphorous tris[bis(trifluoromethyl)nitroxide] difluoride				
	V		39.3	421		[1973WAN/SHR]
C ₆ N ₂	[16419-78-6]	dicyanobutadiyne				
	SUB	(294–335)	34.4	309	A	[1987STE/MAL]
	SUB	(295–335)	35.9	315	I	[1957SAG]
	V	(341–369)	30.2	355	A	[1987STE/MAL, 1957SAG]
C ₆ N ₄	[670-54-2]	tetracyanoethylene				
	FUS		24.92	472.2	DSC	[1991RAD/RAD]
	FUS		23.69	475.2	DSC	[1991BER/MAR]
	TRS		3.47	326	DSC	[1985MUK/CHA]
	SUB	(333–371)	81.4	348	A	[1987STE/MAL]
	SUB	(290–312)	84.3	302	TE, ME	[1983DEW/VAN]
	SUB	(333–370)	81.2 ± 5.9	350	MG	[1963BOY, 1970COX/PIL]
	SUB		78.0		GS	[1958LOO/DOW]
C ₆ N ₆ O ₃	[16279-15-5]	benzotrifurazan				
	SUB	(303–333)	95.8 ± 3.8			[1999MAT/PEP]
C ₆ N ₆ O ₃	[155438-13-4]	3, 3'-dicyanofuranylyl ether				
	V	(413–463)	58.2	438	BG	[2016SIN/BUR]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ N ₆ O ₆	[3470-17-5]	benzotrifuroxan				
	SUB	(363–433)	172.0 ± 2.5			[1999MAT/PEP]
C ₆ N ₈ O ₈	[371951-09-6]	3,4-dinitrofurazanfuroxan				
	FUS		93.83	381.9	DSC	[2004GEN/PEI]
	SUB	(323–383)	133.8	353	TGA	[2013LIU/ZHA]
C ₆ HBrF ₁₂ N ₂	[19451-95-7]	<i>trans</i> -1-bromo- <i>N, N, N', N'</i> -tetrakis(trifluoromethyl)vinylenediamine				
	V	(348–371)	32.3	359	A	[1987STE/MAL, 1968FRE/TIP]
C ₆ HBr ₅ O	[608-71-9]	pentabromophenol				
	FUS		27.6	469.8	DSC	[2004KUR/MAE]
	TRS		11.29	441.5		
C ₆ HCIF ₁₁ NO	[52225-62-4]	<i>N</i> -[1-chloro-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-2,2,3,3,3-pentafluoropropanamide				
	V		40.8	381		[1974PET/SHR]
C ₆ HCl ₂ N ₃ O ₆	[1630-09-7]	1,3-dichloro-2,4,6-trinitrobenzene				
	V	(504–563)	46.9	519	A	[1987STE/MAL, 1972DYK]
	V	(504–533)	80.4			[1968MAK]
C ₆ HCl ₃ F ₈ O ₂	[2106-54-9]	octafluoro-3,5,6-trichlorohexanoic acid				
	V	(373–505)	64.2	388	A	[1987STE/MAL, 1972DYK, 1957BAR/SEF]
C ₆ HCl ₃ O ₂	[634-85-5]	trichloro-1,4-benzoquinone				
	SUB	(301–327)	88.7 ± 8.3		QF	[1927COO/COO, 1960JON, 1970COX/PIL]
C ₆ HCl ₄ NO ₂	[117-18-0]	1,2,4,5-tetrachloro-3-nitrobenzene				
	FUS		19.46	373.3	DSC	[1991ACR, 1990DON/DRE]
	SUB		91.3 ± 2.5	298	C	[2009RIB/FER6]
C ₆ HCl ₅	[608-93-5]	pentachlorobenzene				
	FUS		20.6	357.7	DSC	[1991ACR, 1984MIL/GHO]
	SUB		87.1 ± 0.4	298	C	[1991SAB/AN2]
	V		66.0	357		[1999ROH/RUZ]
	V	(413–453)	67.7	298	GC	[1994SPI/LUI]
	V	(371–549)	62.1	386	A	[1987STE/MAL, 1947STU]
C ₆ HCl ₅ O	[87-86-5]	pentachlorophenol				
	TRS		9.15	350.2		
	FUS		15.63	462.6	DSC	[2008MOG/SEP]
	TRS		8.28	341.0		
	FUS		15.17	464.0	DSC	[1995WOJ/TOU]
	FUS		17.15	462.5	DSC	[1991ACR, 1969PLA/GLA]
	SUB	(348–403)	91.6 ± 0.5	298	GS	[2007VER/EME]
	SUB		67.4 ± 2.1			[UR/STU, 1970COX/PIL]
C ₆ HF ₅	[363-72-4]	pentafluorobenzene				
	FUS		10.85	225.8		[1991ACR, 1968COU/HAL2]
	FUS		10.88	225.7		[1996DOM/HEA, 1969PAU/LAV3]
	V	(358–397)	33.5	373	A	[1987STE/MAL]
	V	(393–479)	32.6	408	A	[1987STE/MAL]
	V	(473–531)	32.2	488	A	[1987STE/MAL]
	V	(290–510)	36.2	298		[1982INV, 1991BAS/SVO]
	V	(322–368)	34.8	337	A	[1987STE/MAL, 1968AMB]
	V	(373–530)	32.0	388	EB	[1966EVA/TIL]
	V	(298–356)	35.7	313		[1964PAT/PRO, 1984BOU/FRI]
C ₆ HF ₅ O	[771-61-9]	pentafluorophenol				
	TRS	(13–328)	1.5	245.2		
	FUS	(13–328)	12.8	306.0	AC	[1969PAU/LAV2]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	TRS	(12–377)	1.16	287		
	FUS	(12–377)	16.41	310.6		[1968AND/COU]
	SUB	(273–299)	67.4 ± 1.7		GS	[1969COX/GUN, 1970COX/PIL]
	V	(323–455)	52.2 ± 0.4	298	EB	[1997STE/CHI2]
	V	(323–455)	48.1 ± 0.4	340	EB	[1997STE/CHI2]
	V	(323–455)	44.4 ± 0.3	380	EB	[1997STE/CHI2]
	V	(323–455)	40.6 ± 0.4	420	EB	[1997STE/CHI2]
	V	(378–428)	44.2	393	A	[1987STE/MAL, 1968AMB]
C ₆ HF ₁₂ NO	[52225-64-6]	2,2,3,3,3-pentafluoro- <i>N</i> -[1,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]propanamide				
	V		41.3	368		[1974PET/SHR]
C ₆ HF ₁₂ NOS	[62067-08-7]	2,2,2-trifluoro- <i>N</i> -[(trifluoromethyl)thio]ethanimidic acid, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ether				
	V		33.6	364	I	[1977BUR/SHR2]
C ₆ H ₂ BrCl ₃ O	[85117-86-8]	3-bromo-2,4,6-trichlorophenol				
	V	(385–579)	67.1	400	A	[1987STE/MAL, 1947STU]
C ₆ H ₂ Br ₄	[636-28-2]	1,2,4,5-tetrabromobenzene				
	FUS		24.4	454.5	DSC	[2004KUR/MAE2]
	TRS		0.34	306.8		
	FUS (γ)		27.88	453.1	DTA	[1996DOM/HEA, 1991MON/HOU]
C ₆ H ₂ ClN ₃ O ₆	[88-88-0]	1-chloro-2,4,6-trinitrobenzene				
	SUB		103.8		DSC	[1990HWA/YOS]
	SUB		103.0			[1950NIT/SEK]
	V		85.4		DSC	[1990HWA/YOS]
	V	(473–543)	63.1	488	A	[1987STE/MAL, 1968MAK]
C ₆ H ₂ Cl ₂ O ₂	[697-91-6]	2,6-dichloro-1,4-benzoquinone				
	SUB	(274–315)	69.9 ± 8.3		QF	[1927COO/COO, 1960JON, 1970COX/PIL]
C ₆ H ₂ Cl ₃ F	[36556-33-9]	1-fluoro-2,4,6-trichlorobenzene				
	V	(344–489)	41.1	359	A	[1987STE/MAL]
C ₆ H ₂ Cl ₃ NO ₂	[89-69-0]	2,4,5-trichloro-1-nitrobenzene				
	V	(427–560)	56.7	442	A	[1987STE/MAL]
C ₆ H ₂ Cl ₃ NO ₂	[18708-70-8]	2,4,6-trichloro-1-nitrobenzene				
	SUB		84.3 ± 1.9	298	C	[2009RIB/FER6]
	SUB	(287–303)	86.9 ± 1.1	295	ME	[2009RIB/FER6]
	SUB	(287–303)	86.7 ± 1.1	298	ME	[2009RIB/FER6]
C ₆ H ₂ Cl ₄	[634-66-2]	1,2,3,4-tetrachlorobenzene				
	FUS		17.0	319.7	DTA	[1991SAB/AN2]
	FUS		17.0	320	DSC	[1991ACR, 1984MIL/GHO]
	SUB		78.8 ± 0.2	298	C	[1991SAB/AN2]
	V	(413–453)	60.1	298	GC	[1994SPI/LUI]
	V	(341–527)	56.7	356	A	[1987STE/MAL, 1947STU]
C ₆ H ₂ Cl ₄	[634-90-2]	1,2,3,5-tetrachlorobenzene				
	FUS		19.0	323.9	DSC	[1991ACR, 1984MIL/GHO]
	SUB		79.6 ± 0.3	298	C	[1991SAB/AN2]
	V	(413–453)	60.7	298	GC	[1994SPI/LUI]
	V	(331–519)	51.1	346	A	[1987STE/MAL, 1947STU]
C ₆ H ₂ Cl ₄	[95-94-3]	1,2,4,5-tetrachlorobenzene				
	FUS		27.25	413.3	DSC	[2008MOG/SEP]
	FUS		24.4	410.1	DSC	[2002RAI/PAN]
	FUS		24.9	412.6	DTA	[1991SAB/AN2]
	FUS (β)		26.34	412.8	DTA	[1991MON/HOU]
	FUS		24.1	412.2	DSC	[1991ACR, 1984MIL/GHO]
	SUB		83.2 ± 0.3	298	C	[1991SAB/AN2]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(413–453)	60.7	298	GC	[1994SPI/LUI]
	V	(419–518)	52.0	434	A	[1987STE/MAL, 1947STU]
C ₆ H ₂ Cl ₄ O	[58-90-2]	2,3,4,6-tetrachlorophenol				
	V	(373–548)	64.8	388	A	[1987STE/MAL, 1947STU]
C ₆ H ₂ Cl ₄ O ₂	[1198-55-6]	3,4,5,6-tetrachloro-1,2-benzenediol				
	V	(293–323)	77.9	308	CGC	[1999LEI/WAN2]
C ₆ H ₂ Cl ₄ O ₂	[87-87-6]	tetrachlorohydroquinone				
	SUB	(298–359)	89.0	313	A	[1987STE/MAL]
	SUB	(333–356)	88.7		QF	[1927COO/COO, 1960JON]
C ₆ H ₂ Cl ₅ N	[527-20-8]	pentachloroaniline				
	FUS		18.7	505.8	DSC	[1991ACR, 1990DON/DRE]
C ₆ H ₂ F ₄	[551-62-2]	1,2,3,4-tetrafluorobenzene				
	FUS	(11–353)	10.93	233.3	AC	[1973AND/MAR]
	V	(300–390)	37.5	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(300–392)	36.8	315	A	[1987STE/MAL, 1975AMB/ELL2, 1984BOU/FRI]
	V	(279–323)	37.0	294	MM	[1987STE/MAL, 1969FIN]
C ₆ H ₂ F ₄	[2367-82-0]	1,2,3,5-tetrafluorobenzene				
	FUS	(11–353)	10.67	226.9	AC	[1973AND/MAR]
	V	(385–416)	32.4	400	A	[1987STE/MAL]
	V	(290–380)	36.0	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(287–382)	36.0	302	A	[1987STE/MAL, 1975AMB/ELL2, 1984BOU/FRI]
	V	(279–323)	36.0	294	MM	[1987STE/MAL, 1969FIN]
C ₆ H ₂ F ₄	[327-54-8]	1,2,4,5-tetrafluorobenzene				
	FUS	(11–353)	15.05	277	AC	[1973AND/MAR]
	V	(290–390)	37.2	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(390–488)	33.1	405	A	[1987STE/MAL]
	V	(488–543)	32.6	503	A	[1987STE/MAL]
	V	(293–390)	36.8	308	A	[1987STE/MAL, 1975AMB/ELL2, 1984BOU/FRI]
C ₆ H ₂ F ₅ N	[771-60-8]	pentafluoroaniline				
	FUS		13.85	308.1	DSC	[2007RIB/FER]
	TRS		3.94	287.4		
	FUS		14.27	306.8		[1996DOM/HEA, 1969PAU/LAV]
	SUB		63.7 ± 1.1	298	C	[2007RIB/FER]
C ₆ H ₂ F ₁₂ O	[176310-30-8]	1,1,1,2,2,3,3,-heptafluoro-3-(2,2,3,3,3-pentafluoropropoxy)propane				
	V	(288–344)	34.8	303	I	[2002MUR/YAM]
C ₆ H ₂ F ₁₂ O ₃	[205367-61-9]	1,1'-oxybis[2-(difluoromethoxy)-1,1,2,2-tetrafluoroethane]				
	V	(268–283)	38.5 ± 0.8			[1999MAR/BAS]
C ₆ H ₂ F ₁₂ O ₃ S	[53517-89-8]	bis(1,1,1,3,3,3-hexafluoro-2-propanol) sulfite				
	V		42.4			[1975DEM/KOV]
C ₆ H ₂ F ₁₂ O ₄	[249932-26-1]	1,1,3,3,5,5,7,7,8,8,10,10-dodecafluoro-12,4,6,9-tetraoxadecane				
	V	(263–381)	42.3 ± 0.4			[1999MAR/BAS]
C ₆ H ₂ F ₁₄ NP	[756-19-4]	amino bis(heptafluoropropyl)phosphine				
	V	(293–393)	38.7	343		[1959EME/SMI]
C ₆ H ₂ N ₄	[13481-25-9]	2,3-dicyanopyrazine				
	FUS		19.8	405.1	DSC	[2006MIR/MOR]
	SUB		89.1 ± 2.7	298	C	[2006MIR/MOR]
C ₆ H ₂ N ₄ O ₆	[5128-28-9]	4,6-dinitrobenzofurazan 1-oxide				
	FUS		20.73	452.7		[1983RED/MUR]
C ₆ H ₃ BrCl ₂ O	[4524-77-0]	2-bromo-4,6-dichlorophenol				
	V	(357–541)	58.6	372	A	[1987STE/MAL, 1947STU]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₃ BrCl ₂ O	[1940-42-7]	4-bromo-2,5-dichlorophenol				
	FUS		22.11	343.4	DSC	[1990DON/DRE]
C ₆ H ₃ Br ₃	[615-54-3]	1,2,4-tribromobenzene				
	FUS		17.9	317	DSC	[2004KUR/MAE2]
C ₆ H ₃ Br ₃	[626-39-1]	1,3,5-tribromobenzene				
	FUS	(7–413)	21.72	395	AC	[2005VAN/VAN]
C ₆ H ₃ Br ₃ NO ₂	[3460-18-2]	2,5-dibromonitrobenzene				
	SUB	(302–322)	96.8 ± 0.4	312	ME	[2009RIB/FER8]
			97.0 ± 0.4	298	ME	[2009RIB/FER8]
C ₆ H ₃ Br ₃ O	[118-79-6]	2,4,6-tribromophenol				
	FUS		20.9	367.5	DSC	[2004KUR/MAE]
	FUS		18.52	366.2		[1991ACR, 1983WEA]
			97.6 ± 1.1			[1987ALL/FIN]
C ₆ H ₃ ClN ₂ O ₂	[17348-69-5]	5-chlorobenzofurazan-1-oxide				
	SUB		81.2 ± 1.8	298	C	[1996ACR/BOT]
C ₆ H ₃ ClN ₂ O ₄	[97-00-7]	1-chloro-2,4-dinitrobenzene				
	FUS		20.17	325.2		[1932KUB]
	V	(430–590)	80.5	445	A	[1987STE/MAL]
C ₆ H ₃ ClN ₂ O ₄	[606-21-3]	2,6-dinitrochlorobenzene				
	FUS		18.95	361.2		[1932KUB]
C ₆ H ₃ ClO ₂	[695-99-8]	chlorobenzoquinone				
	SUB	(264–289)	69.0 ± 8.3	276	QF	[1927COO/COO, 1960JON, 1970COX/PIL]
C ₆ H ₃ Cl ₂ NO ₂	[3209-22-1]	2,3-dichloro-1-nitrobenzene				
	FUS		22.31	334.9	DSC	[2014YAO/YAN, 2014XU/ZHA]
	V	(422–530)	61.2	440	EB	[2014YAO/YAN]
C ₆ H ₃ Cl ₂ NO ₂	[611-06-3]	2,4-dichloro-1-nitrobenzene				
	SUB		87.8 ± 1.7	298	C	[2009RIB/FER9]
C ₆ H ₃ Cl ₂ NO ₂	[89-61-2]	2,5-dichloro-1-nitrobenzene				
	SUB		87.4 ± 2.4	298	C	[2009RIB/FER9]
C ₆ H ₃ Cl ₂ NO ₂	[99-54-7]	3,4-dichloro-1-nitrobenzene				
	FUS		17.75	315.4	DSC	[2014YAO/YAN, 2014XU/ZHA]
	FUS		17.95	314.1	DSC	[2003VER/SCH]
	FUS		17.6	316		[1981MAS/OLE]
	SUB		85.8 ± 2.5	298	C	[2009RIB/FER9]
	SUB	(283–311)	83.1 ± 0.6	298	GS	[2003VER/SCH]
	V	(417–528)	59.2	435	EB	[2014YAO/YAN]
	V	(316–346)	65.2 ± 0.2	298	GS	[2003VER/SCH]
	V	(417–515)	55.5	432	A	[1987STE/MAL]
C ₆ H ₃ Cl ₂ NO ₂	[618-62-2]	3,5-dichloro-1-nitrobenzene				
	SUB		83.2 ± 1.5	298	C	[2009RIB/FER9]
C ₆ H ₃ Cl ₃	[120-82-1]	1,2,4-trichlorobenzene				
	FUS		17.96	290.5	DSC	[2002LIP/SCH]
	FUS		13.6	289.4		[1977FEL/PET]
	FUS		18.2	290.9		[1960MUN/KOH]
	SUB	(279–298)	62.3	289	RG	[1949SEA/HOP, 1960JON]
	V		55.8	290		[1999ROH/RUZ]
	V	(391–490)	49.5	406	EB	[1998ROH/RUZ]
	V	(413–453)	57.6	298	GC	[1994SPI/LUI]
	V		55.5 ± 0.1	298	C	[1987YAN/GU]
V	(279–298)	47.0	288	RG	[1949SEA/HOP]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
C ₆ H ₃ Cl ₃	V	(311–486)	49.3	326		[1947STU]	
	[87-61-6]	1,2,3-trichlorobenzene					
	FUS		17.97	325.6	DSC	[2008MOG/SEP]	
	FUS		20.5	326.9	DSC	[1991ACR, 1969PLA/GLA]	
	FUS		17.25	322.9	DSC	[1990DON/DRE]	
	FUS		18.5	325.8	DSC	[1984MIL/GHO]	
	SUB	(258–313)	72.7			[1994LIU/DIC]	
	SUB		75.1 ± 0.75	298		[1985YAN/GU, 1987YAN/GU]	
	SUB	(289–303)	65.7	296	RG	[1949SEA/HOP, 1960JON]	
	V		54.5	325		[1999ROH/RUZ]	
	V	(413–453)	57.2	298	GC	[1994SPI/LUI]	
	V	(258–313)	54.3		GC	[1994LIU/DIC]	
	V	(293–383)	53.5	308	A	[1987STE/MAL]	
V	(313–492)	47.4	328	A	[1987STE/MAL, 1947STU]		
C ₆ H ₃ Cl ₃	[108-70-3]	1,3,5-trichlorobenzene					
	FUS		18.44	335.8	DSC	[2008MOG/SEP]	
	FUS	(7–380)	17.56	335.9	AC	[2005VAN/VAN]	
	FUS		18.2	336.7	DSC	[1991ACR, 1969PLA/GLA]	
	FUS		18.8	336.3	DSC	[1984MIL/GHO]	
	SUB		72.7 ± 0.5	298		[1985YAN/GU, 1987YAN/GU]	
	SUB	(282–301)	56.5	291	RG	[1949SEA/HOP, 1960JON]	
	V	(338–415)	50.3 ± 0.1	375	DM	[2001BLO/VAN]	
	V		51.7	337		[1999ROH/RUZ]	
	V	(413–453)	59.0	298	GC	[1994SPI/LUI]	
	V	(336–482)	48.8	351	A	[1987STE/MAL, 1947STU]	
	C ₆ H ₃ Cl ₃ O	[95-95-4]	2,4,5-trichlorophenol				
		FUS		21.59	340.3	DSC	[1990DON/DRE]
V		(345–525)	54.5	360	A	[1987STE/MAL, 1947STU]	
C ₆ H ₃ Cl ₃ O	[88-06-2]	2,4,6-trichlorophenol					
	SUB	(299–340)	82.3 ± 0.3	298	GS	[2007FRE/OLI]	
	V	(343–375)	62.5	359	GS	[2007VER/EME]	
	V	(343–375)	67.2 ± 0.3	298	GS	[2007VER/EME]	
	V	(344–463)	58.2	404		[1995MOK/PAU, 2007VER/EME]	
	V	(344–463)	66.1 ± 0.4	298		[1995MOK/PAU, 2007VER/EME]	
V	(349–519)	58.8	364	A	[1987STE/MAL, 1947STU]		
C ₆ H ₃ Cl ₃ O ₂	[56961-20-7]	3,4,5-trichloro-1,2-benzenediol					
	V	(293–323)	79.3	308	CGC	[1999LEI/WAN2]	
C ₆ H ₃ Cl ₃ O ₂	[608-94-6]	trichlorohydroquinone					
	SUB	(298–336)	101.5	313	A	[1987STE/MAL]	
	SUB	(314–335)	101.3	324	QF	[1927COO/COO, 1960JON]	
C ₆ H ₃ Cl ₄ N	[3481-20-7]	2,3,5,6-tetrachloroaniline					
	SUB		86.0 ± 2.0	298	C	[2007RIB/AMA3]	
C ₆ H ₃ Cl ₄ N	[69045-78-9]	2-chloro-5-(trichloromethyl)pyridine					
	FUS	(80–345)	14.5	324.7	AC	[2004KON/TAN]	
C ₆ H ₃ Cl ₄ N	[1929-82-4]	2-chloro-6-(trichloromethyl)pyridine					
	FUS	(13–316)	20.3	337.8	AC	[1996DOM/HEA, 1987TAN/YE, 1989TAN/SOR]	
C ₆ H ₃ F ₂ NO ₂	[446-35-5]	2,4-difluoronitrobenzene					
	FUS		13.1	282.6	DSC	[2010RIB/MON2]	
	SUB	(260–275)	73.6 ± 0.2	267	Static	[2010RIB/MON2]	
	SUB	(260–275)	72.8 ± 0.2	298	Static	[2010RIB/MON2]	
	V	(262–355)	57.5 ± 0.1	308	Static	[2010RIB/MON2]	
V	(262–355)	58.5 ± 0.1	298	Static	[2010RIB/MON2]		

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₃ F ₂ NO ₂	[364-74-9]	2,5-difluoronitrobenzene				
	V	(262–353)	57.8 ± 0.1	308	Static	[2010RIB/MON2]
	V	(262–353)	58.7 ± 0.1	298	Static	[2010RIB/MON2]
C ₆ H ₃ F ₂ NO ₂	[369-34-6]	3,4-difluoronitrobenzene				
	FUS		16.4	268.0	DSC	[2010RIB/MON2]
	SUB	(256–265)	74.8 ± 0.2	260	Static	[2010RIB/MON2]
	SUB	(256–265)	73.8 ± 0.4	298	Static	[2010RIB/MON2]
	V	(259–345)	55.2 ± 0.1	302	Static	[2010RIB/MON2]
C ₆ H ₃ F ₃	[372-38-3]	1,3,5-trifluorobenzene				
	V	(280–320)	33.9	298		[1984BOU/FRI, 1991BAS/SVO]
C ₆ H ₃ F ₄ N	[5580-80-3]	2,3,4,5-tetrafluoroaniline				
	FUS		19.01	301.0	DSC	[2007RIB/FER]
C ₆ H ₃ F ₄ N	[363-73-5]	2,3,4,6-tetrafluoroaniline				
	V		50.4 ± 0.6	298	C	[2007RIB/FER]
C ₆ H ₃ F ₄ N	[700-17-4]	2,3,5,6-tetrafluoroaniline				
	FUS		8.19	305.4	DSC	[2007RIB/FER]
C ₆ H ₃ F ₉ O ₂	[42031-16-3]	trifluoroacetic acid, 2,2,2-trifluoro-1-methyl-1-(trifluoromethyl)ethyl ester				
	V		33.5	338	HG	[1973MAJ/SHR]
C ₆ H ₃ F ₉ O ₂	[24165-09-1]	acetic acid, 2,2,2-trifluoro-1,1-bis(trifluoromethyl)ethyl ester				
	V	(273–328)	40.1	288	A	[1987STE/MAL, 1975WAL/DES2]
C ₆ H ₃ F ₁₀ NS	[54120-08-0]	2,2,2-trifluoro- <i>N</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]ethanimidothioic acid, methyl ester				
	V		31.6	383		[1975PET/SHR]
C ₆ H ₃ F ₁₁ O	[176310-29-5]	1,1,1,2,2,3,3,3-heptafluoro-3-(2,2,3,3-tetrafluoropropoxy)propane				
	V	(288–357)	37.2	303	I	[2002MUR/YAM]
C ₆ H ₃ F ₁₁ O	[181214-74-4]	1,1,1,2,2,3,3,4,4,5,5-undecafluoro-5-methoxypentane				
	V	(288–358)	36.6	303	I	[2002MUR/YAM]
C ₆ H ₃ F ₁₁ O	[203783-56-6]	1,1,1,2,3,3,4,4-octafluoro-4-methoxy-2-(trifluoromethyl)butane				
	V	(288–357)	36		I	[2002MUR/YAM]
C ₆ H ₃ F ₁₁ O	[290-28-8]	1,1,1,2,3,3-hexafluoro-3-(2,2,3,3,3-pentafluoropropoxy)propane				
	V	(293–360)	38.4	308	I	[2002MUR/YAM]
C ₆ H ₃ N ₃ O ₂ S	[6583-06-8]	4-nitro-2,1,3-benzothiadiazole				
	FUS		22.6	381.4	DSC	[2012RIB/FRE]
C ₆ H ₃ N ₃ O ₄	[18771-85-2]	4-nitrobenzofurazan-1-oxide				
	SUB		97.3 ± 1.6	298	C	[1996ACR/BOT]
C ₆ H ₃ N ₃ O ₆	[603-13-4]	1,2,3-trinitrobenzene				
	V	(523–573)	60.3	538	A	[1987STE/MAL, 1968MAK, 1972DYK]
C ₆ H ₃ N ₃ O ₆	[610-31-1]	1,2,4-trinitrobenzene				
	V	(523–573)	82.6	538	A	[1987STE/MAL, 1968MAK, 1972DYK]
C ₆ H ₃ N ₃ O ₆	[99-35-4]	1,3,5-trinitrobenzene				
	TRS (I)		1.9	370		
	FUS (I)		14.81	380.3		
	FUS (II)		15.0	398.4	DSC	[1996DOM/HEA, 1980RAD/RAD]
	FUS		22.6	388.5	DSC	[1975CAS/VEC]

Note: Authors of [1975CAS/VEC] give a melting point temperature of 12.1 °C, which is unrealistic. The value of 388.5 was calculated from the published enthalpy and entropy of fusion given in the paper.

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	SUB	(313–395)	107.3 ± 0.6	298	ME	[1978CUN/PAL]
	SUB		99.6 ± 2.1			[1950NIT/SEK, 1970COX/PIL]
	V	(475–585)	70.3	490	A	[1987STE/MAL, 1968MAK, 1972DYK]
C ₆ H ₃ N ₃ O ₇	[88-89-1]	2,4,6-trinitrophenol (picric acid)				
	FUS		17.2	394.4	DSC	[2015SIN/SIN3]
	FUS		17.1	394.1	DSC	[1996DOM/HEA, 1979FAR/SHA]
	SUB		106.3		DSC	[1990HWA/YOS]
	SUB	(314–406)	105.1 ± 1.6	298	ME	[1978CUN/PAL]
	V		87.9		DSC	[1990HWA/YOS]
	V	(468–598)	106.4	483	A	[1987STE/MAL]
Note: The value of 106.4 kJ/mole from [1987STE/MAL] is likely an enthalpy of sublimation						
C ₆ H ₃ N ₃ O ₈	[82-71-3]	2,4,6-trinitroresorcinol (styphnic acid)				
	FUS		33.5	454.8	DSC	[1996DOM/HEA, 1979FAR/SHA]
	SUB		120.1		DSC	[1990HWA/YOS]
	SUB	(325–436)	120.8 ± 1.1	298	ME	[1978CUN/PAL]
	V		92.9		DSC	[1990HWA/YOS]
C ₆ H ₄ BrCl	[694-80-4]	1-bromo-2-chlorobenzene				
	FUS		12.37	260.6		[1996DOM/HEA, 1918NAR]
	V	(281–323)	51.8 ± 0.2	302	GS	[2014VER/EME2]
	V	(281–323)	52.0 ± 0.3	298	GS	[2014VER/EME2]
C ₆ H ₄ BrCl	[108-37-2]	1-bromo-3-chlorobenzene				
	FUS		12.29	252		[1996DOM/HEA, 1918NAR]
	V	(278–320)	51.2 ± 0.3	299	GS	[2014VER/EME2]
	V	(278–320)	51.0 ± 0.4	298	GS	[2014VER/EME2]
	V	(252–469)	52.2	267	A	[1987STE/MAL, 1972DYK]
C ₆ H ₄ BrCl	[106-39-8]	1-bromo-4-chlorobenzene				
	FUS		19.9	338.0	DSC	[2012SHA/RAI]
	FUS	(6–350)	18.4	338.0	AC	[2000TOZ/AKU]
	FUS		18.76	337.8		[1996DOM/HEA, 1918NAR]
	SUB	(280–333)	67.9 ± 0.3	307	GS	[2014VER/EME2]
	SUB	(280–333)	68.1 ± 0.4	298	GS	[2014VER/EME2]
	SUB		69.34 ± 0.11	298	DM	[2000OON/VAN]
	SUB	(250–335)	69.3 ± 0.4	298	TE, ME, DM	[1998OON/VAN]
	SUB		69.1 ± 0.2	298		[1998OON/VAN]
	SUB	(294–337)	67.9 ± 0.8	316		[1961WAL/SMI]
	V	(339–366)	48.6 ± 0.4	352	GS	[2014VER/EME2]
	V	(339–366)	52.3 ± 0.6	298	GS	[2014VER/EME2]
	V	(333–470)	49.1	348	A	[1987STE/MAL]
	V	(305–470)	49.7	320		[1947STU]
C ₆ H ₄ BrF	[1072-85-1]	2-bromo-1-fluorobenzene				
	V	(279–324)	47.0 ± 0.3	298	GS	[2015VER/EME]
C ₆ H ₄ BrF	[1073-06-9]	3-bromo-1-fluorobenzene				
	V	(281–317)	44.3 ± 0.3	298	GS	[2015VER/EME]
C ₆ H ₄ BrF	[460-00-4]	4-bromo-1-fluorobenzene				
	V	(278–316)	44.0 ± 0.4	298	GS	[2015VER/EME]
C ₆ H ₄ I	[583-55-1]	1-bromo-2-iodobenzene				
	FUS		14.42	294.2		[1991ACR, 1983WEA]
	V	(283–328)	59.1 ± 0.2	306	GS	[2014VER/EME2]
	V	(283–328)	59.6 ± 0.3	298	GS	[2014VER/EME2]
C ₆ H ₄ I	[591-18-4]	1-bromo-3-iodobenzene				
	FUS		12.16	282.5		[1991ACR, 1983WEA]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(279–323)	60.7 ± 0.2	301	GS	[2014VER/EME2]
	V	(279–323)	60.8 ± 0.3	298	GS	[2014VER/EME2]
C ₆ H ₄ BrI	[589-87-7]	1,4-bromoiodobenzene				
	FUS	(5–420)	19.38	363.5		[2001VAN/OON]
	FUS		19.13	363.3		[1991ACR, 1983WEA]
	SUB	(299–359)	75.8 ± 0.2	329	GS	[2014VER/EME2]
	SUB	(299–359)	76.7 ± 0.3	298	GS	[2014VER/EME2]
	SUB		78.53 ± 0.16	298	DM	[2000OON/VAN]
	SUB	(279–355)	78.5 ± 0.4	298	ME, TE, DM	[1998OON/VAN]
	V	(367–392)	53.9 ± 0.2	379	GS	[2014VER/EME2]
	V	(367–392)	59.8 ± 0.7	298	GS	[2014VER/EME2]
C ₆ H ₄ BrNO ₂	[577-19-5]	2-bromo-1-nitrobenzene				
	SUB	(275–295)	85.5 ± 0.3	285	ME	[2010RIB/FER4]
	SUB	(275–295)	85.2 ± 0.3	298	ME	[2010RIB/FER4]
C ₆ H ₄ BrNO ₂	[585-79-5]	3-bromo-1-nitrobenzene				
	SUB	(280–295)	87.0 ± 0.5	287	ME	[2010RIB/FER4]
	SUB	(280–295)	86.8 ± 0.5	298	ME	[2010RIB/FER4]
C ₆ H ₄ BrNO ₂	[586-78-7]	4-bromo-1-nitrobenzene				
	SUB	(289–309)	86.6 ± 0.6	299	ME	[2010RIB/FER4]
	SUB	(289–309)	86.6 ± 0.6	298	ME	[2010RIB/FER4]
	SUB	(293–303)	88.3	303	ME	[1987STE/MAL, 1925SWA/MAC]
C ₆ H ₄ Br ₂	[583-53-9]	1,2-dibromobenzene				
	FUS		12.61	275		[1991ACR, 1983WEA]
	V	(290–328)	54.3 ± 0.3	298	GS	[2015SOL/VAR]
	V	(388–568)	50.1	403	A	[1987STE/MAL, 1972DYK]
C ₆ H ₄ Br ₂	[108-36-1]	1,3-dibromobenzene				
	FUS		13.21	266.3		[1991ACR, 1983WEA]
	V	(276–318)	54.9 ± 0.2	298	GS	[2015SOL/VAR]
	V	(417–500)	48.3	432	A	[1987STE/MAL]
C ₆ H ₄ Br ₂	[106-37-6]	1,4-dibromobenzene				
	FUS	(5–380)	20.39	360.5	AC	[2005VAN/VAN]
	FUS		18.6	357.7	DSC	[2004KUR/MAE2]
	FUS		20.3	259.2		[1991ACR, 1983WEA]
	SUB	(297–329)	73.7 ± 0.6	298	GS	[2015SOL/VAR]
	SUB		74.23 ± 0.11	298	ME	[2000OON/VAN]
	SUB	(298–354)	73.2	313	A	[1987STE/MAL]
	SUB	(278–353)	73.3 ± 0.4	326		[1961WAL/SMI]
	SUB	(228–347)	73.8	288		[1959STE/GRE]
	SUB	(248–303)	59.8	298	ME, GS	[1940ZIL, 1960JON]
	V	(373–493)	49.9	388	A	[1987STE/MAL, 1972DYK]
C ₆ H ₄ Br ₂ O	[615-58-7]	2,4-dibromophenol				
	FUS		14.7	310	DSC	[2004KUR/MAE]
	FUS		14.72	313		[1991ACR, 1983WEA]
	FUS		15.0	313		[1996DOM/HEA, 1884WER]
	SUB		81.3 ± 1.5	298	C	[2011FER/RIB]
C ₆ H ₄ Br ₂ O	[608-33-3]	2,6-dibromophenol				
	SUB		83.4 ± 1.5	298	C	[2011FER/RIB]
C ₆ H ₄ Br ₂ O	[626-41-5]	3,5-dibromophenol				
	SUB	(299–317)	94.9 ± 0.6	308	ME	[2011FER/RIB]
	SUB		94.3 ± 1.8	298	C	[2011FER/RIB]
C ₆ H ₄ Br ₃ N	[147-82-0]	2,4,6-tribromoaniline				
	FUS		25.75	393	DSC	[2006RIB/FER]
	SUB		96.7 ± 1.7	298	C	[2006RIB/FER]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
		SUB		101.1 ± 1.1		[1987ALL/FIN]
C ₆ H ₄ ClF	[348-51-6]	1-chloro-2-fluorobenzene				
	V	(278–319)	44.0 ± 0.3	298	GS	[2015VER/EME]
C ₆ H ₄ ClF	[625-98-9]	1-chloro-3-fluorobenzene				
	V	(276–319)	43.0 ± 0.3	298	GS	[2015VER/EME]
	V	(273–403)	37.4	288	A	[1987STE/MAL]
C ₆ H ₄ ClF	[352-33-0]	1-chloro-4-fluorobenzene				
	FUS		13.9	245		[2004CER/PER]
	V	(278–323)	42.8 ± 0.3	298	GS	[2015VER/EME]
C ₆ H ₄ ClI	[615-41-8]	1-chloro-2-iodobenzene				
	V	(293–345)	55.9 ± 0.2	319	GS	[2014VER/EME2]
	V	(293–345)	57.3 ± 0.3	298	GS	[2014VER/EME2]
C ₆ H ₄ ClI	[637-87-6]	1-chloro-4-iodobenzene				
	FUS	(5–360)	16.1	326.7		[2000VAN/OON]
	SUB		71.86 ± 0.21	298	DM	[2000OON/VAN]
	SUB	(259–320)	71.9 ± 0.4	298	ME, TE, DM	[1998OON/VAN]
	SUB	(303–323)	61.1 ± 0.6			[1953EWA, 1960JON]
	V	(333–500)	56.5	348	A	[1987STE/MAL]
C ₆ H ₄ ClNO ₂	[88-73-3]	1-chloro-2-nitrobenzene				
	FUS		18.11	305.8	DSC	[2007STR/RUZ]
	FUS		18.21	305.8	DSC	[2003VER/SCH]
	FUS		19.08	308.2		[1981MAS/OLE]
	SUB		80.9 ± 1.5	298	C	[2009RIB/FER7]
	SUB	(278–305)	80.8 ± 0.3	298	GS	[2003VER/SCH]
	V	(307–334)	60.4 ± 0.3	298	GS	[2003VER/SCH]
	V	(420–516)	52.1	435	EB	[1984PUT/IVA]
C ₆ H ₄ ClNO ₂	[121-73-3]	1-chloro-3-nitrobenzene				
	FUS		19.52	316.9	DSC	[2007STR/RUZ]
	FUS		18.65	318	DSC	[2003VER/SCH]
	FUS		19.37	317.6		[1991ACR, 1983WEA]
	FUS		21.3	316.9		[1908BOG/WIN, 1925KOH]
	FUS		19.3			[1894BRU, 1925KOH]
	SUB		82.5 ± 1.5	298	C	[2009RIB/FER7]
	SUB	(281–314)	81.3 ± 0.3	298	GS	[2003VER/SCH]
	SUB	(275–286)	74.7 ± 1.7			[1935TRI, 1938WOL/WEG]
	V	(319–364)	60.2 ± 0.2	298	GS	[2003VER/SCH]
	V	(414–506)	51.5	429	EB	[1984PUT/IVA]
C ₆ H ₄ ClNO ₂	[100-00-5]	1-chloro-4-nitrobenzene				
	FUS		14.48	359.2	DSC	[2011SIN/RAI]
	FUS		16.37	356.2	DSC	[2008MOG/SEP]
	FUS		15.03	355.1	DSC	[2007STR/RUZ]
	FUS		16.17	356.1	DSC	[2003VER/SCH]
	FUS		18.5	359.2	DSC	[1998RAI/RAI2]
	FUS		11.85	354.6		[1996DOM/HEA, 1978MAR/CIO2]
	FUS		14.1	357		[1981MAS/OLE]
	FUS		14.1			[1894BRU, 1925KOH]
	SUB	(303–339)	74.7 ± 0.1	298	GS	[2003VER/SCH]
	SUB	(283–303)	83.2	293	ME	[1987STE/MAL, 1925SWA/MAC]
	V	(385–515)	51.3	400	A	[1987STE/MAL]
C ₆ H ₄ ClNO ₃	[619-08-9]	2-chloro-4-nitrophenol				
	FUS		20.88	380.7	DSC	[2007MOR/MIR]
	SUB		99.0 ± 2.1	298	C	[2007MOR/MIR]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
C ₆ H ₄ ClNO ₃	[89-64-5]	4-chloro-2-nitrophenol				
	FUS		22.69	360.3	DSC	[2007MOR/MIR]
	SUB		87.6 ± 0.9	298	C	[2007MOR/MIR]
C ₆ H ₄ ClNO ₃	[610-78-6]	4-chloro-3-nitrophenol				
	FUS		25.97	399.4	DSC	[2007MOR/MIR]
	SUB		111.0 ± 3.3	298	C	[2007MOR/MIR]
C ₆ H ₄ ClNO ₃	[54127-63-8]	5-chloro-6-hydroxynicotinic acid				
	SUB	(457–487)	149.1 ± 2.6	472	DSC	[2009SAN/FIG]
	SUB	(457–487)	151.3 ± 2.8	298	DSC	[2009SAN/FIG]
C ₆ H ₄ ClN ₃ O ₄	[3531-19-9]	2-chloro-4,6-dinitroaniline				
	SUB	(358–380)	114.2 ± 0.5	369	ME	[2010RIB/RIB]
	SUB	(358–380)	115.0 ± 0.9	298	ME	[2010RIB/RIB]
C ₆ H ₄ ClN ₃ O ₄	[5388-62-5]	4-chloro-2,6-dinitroaniline				
	SUB	(335–359)	104.7 ± 0.4	347	ME	[2010RIB/RIB]
	SUB	(335–359)	105.2 ± 0.7	298	ME	[2010RIB/RIB]
C ₆ H ₄ ClN ₃ O ₄	[3531-19-9]	2-chloro-4,6-dinitroaniline				
	FUS (I)		21.1	433.2		
	FUS (II)		24.2	435.2	DSC	[2014KRI/RAJ]
C ₆ H ₄ Cl ₂	[95-50-1]	1,2-dichlorobenzene				
	FUS		13.09	255.9	DSC	[2010WEI/WAN]
	FUS		12.4	255.9	DSC	[2009WEI/JIN, 2008WEI]
	FUS		12.93	256.5		[1991ACR, 1983WEA, 1990DON/DRE]
	V		51.2	256		[1999ROH/RUZ]
	V	(363–454)	44.5	376	EB	[1998ROH/RUZ]
	V	(256–287)	50.8	271		[1996POL/GUE]
	V	(413–453)	50.9	298	GC	[1994SPI/LUI]
	V	(258–313)	51.2		GC	[1994LIU/DIC]
	V		48.5 ± 0.1	298	C	[1989AN/ZHE, 1989AN/ZHE2]
	V	(373–453)	44.0	388	A	[1987STE/MAL]
	V	(360–450)	49.9	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(301–343)	50.0	322	GS	[1982GRA/FOS]
C ₆ H ₄ Cl ₂	[541-73-1]	1,3-dichlorobenzene				
	FUS		12.51	248.3	DSC	[2010WEI/WAN]
	FUS		12.60	248.3	DSC	[2009WEI/JIN, 2008WEI]
	FUS		12.64	248.4		[1991ACR, 1983WEA]
	V		50.4	248		[1999ROH/RUZ]
	V	(357–448)	44.1	372	EB	[1998ROH/RUZ]
	V	(250–274)	50.0	262		[1996POL/GUE]
	V	(413–453)	53.9	298	GC	[1994SPI/LUI]
	V	(360–450)	47.0	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(348–513)	44.7	363	A	[1987STE/MAL, 1972DYK]
C ₆ H ₄ Cl ₂	[106-46-7]	1,4-dichlorobenzene				
	FUS		18.08	326.2	DSC	[2010WEI/WAN]
	FUS		18.19	326.2	DSC	[2009WEI/JIN, 2008WEI]
	TRS	(5–380)	1.24	275		
	TRS	(5–380)	0.18	306		
	FUS	(5–380)	17.91	326.2	AC	[2005VAN/VAN]
	TRS	(20–330)	1.26	271.8		
	TRS	(20–330)	0.21	304.4		
	FUS	(20–330)	18.19	326.2	AC	[1976DWO/FIG]
	FUS		18.2		DSC	[1972WAU/GET]
	FUS		17.15	325.9	DSC	[1991ACR, 1983WEA, 1969PLA/GLA]
	FUS		19.0	326.7	DSC	[1984MIL/GHO]
	FUS		18.14	326.1		[1918NAR]
	SUB		64.75 ± 0.15	298	DM	[2000OON/VAN]
SUB	(258–313)	53.1			[1994LIU/DIC]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	SUB		65.2 ± 2.0	298	C	[1989AN/ZHE, 1989AN/ZHE2]
	SUB	(303–423)	65.4	313	GS	[1985ROR]
	SUB		65.7			[1981DEK/VAN]
	SUB	(293–311)	64.8 ± 0.8	303		[1961WAL/SMI, 1970COX/PIL]
	SUB	(311–325)	63 ± 0.4	318		[1961WAL/SMI]
	SUB	(248–303)	56.9	275	ME	[1940DAR/VER, 1960JON]
	V		46.4	326		[1999ROH/RUZ]
	V	(358–448)	44.2	373	EB	[1998ROH/RUZ]
	V	(413–453)	54.8	298	GC	[1994SPI/LUI]
	V	(258–313)	U35.0		GC	[1994LIU/DIC]
	V	(341–448)	45.0	356	A	[1987STE/MAL]
	V	(370–450)	47.8	298		[1984BOU/FRI, 1991BAS/SVO]
	C ₆ H ₄ Cl ₂ N ₂ O ₂	[6627-34-5]	2,5-dichloro-4-nitrobenzamine			
SUB		(352–374)	113.2 ± 0.6	363	ME	[2009RIB/RIB]
SUB		(352–374)	114.3 ± 0.9	298	ME	[2009RIB/RIB]
C ₆ H ₄ Cl ₂ N ₂ O ₂	[99-30-9]	2,6-dichloro-4-nitroaniline				
	FUS		29.48	467.2	DSC	[1991ACR, 1990DON/DRE]
	SUB	(344–366)	108.2 ± 0.6	355	ME	[2009RIB/RIB]
C ₆ H ₄ Cl ₂ N ₂ O ₂	[6641-64-1]	4,5-dichloro-2-nitroaniline				
	SUB	(351–367)	108.4 ± 0.7	359	ME	[2009RIB/RIB2]
	SUB	(351–367)	109.4 ± 0.9	298	ME	[2009RIB/RIB2]
C ₆ H ₄ Cl ₂ O	[576-24-9]	2,3-dichlorophenol				
	FUS		21.36	330	DSC	[1991ACR, 1982POE/FAN]
	SUB	(294–327)	76.9 ± 0.4	298	GS	[2007VER/EME]
	SUB		71.7 ± 2.2	298	C	[1994RIB/FER2]
	V	(331–358)	57.3 ± 0.2	298	GS	[2007VER/EME]
C ₆ H ₄ Cl ₂ O	[120-83-2]	2,4-dichlorophenol				
	FUS		20.09	318	DSC	[1996DOM/HEA, 1991ACR, 1982POE/FAN]
	SUB	(278–315)	78.0 ± 0.3	298	GS	[2007VER/EME]
	SUB		70.1 ± 1.1	298	C	[1994RIB/FER2]
	V	(317–344)	56.6	331	GS	[2007VER/EME]
	V	(317–344)	59.0 ± 0.4	298	GS	[2007VER/EME]
	V	(323–443)	52.3	383		[1995MOK/PAU, 2007VER/EME]
	V	(323–443)	58.1 ± 0.3	298		[1995MOK/PAU, 2007VER/EME]
C ₆ H ₄ Cl ₂ O	[583-78-8]	2,5-dichlorophenol				
	FUS		22.43	331	DSC	[1996DOM/HEA, 1991ACR, 1982POE/FAN]
	SUB	(294–327)	77.3 ± 0.1	298	GS	[2007VER/EME]
	SUB		73.6 ± 2.1	298	C	[1994RIB/FER2]
	V	(333–361)	53.1	347	GS	[2007VER/EME]
	V	(333–361)	56.7 ± 0.1	298	GS	[2007VER/EME]
C ₆ H ₄ Cl ₂ O	[87-65-0]	2,6-dichlorophenol				
	FUS		22.14	340	DSC	[1996DOM/HEA, 1991ACR, 1982POE/FAN]
	SUB	(299–331)	79.3 ± 0.2	298	GS	[2007VER/EME]
	SUB		75.8 ± 1.1	298	C	[1994RIB/FER2]
	V	(341–371)	55.4	356	GS	[2007VER/EME]
	V	(341–371)	59.6 ± 0.3	298	GS	[2007VER/EME]
	V	(343–457)	51.6	400		[1995MOK/PAU, 2007VER/EME]
	V	(343–457)	58.5 ± 0.5	298		[1995MOK/PAU, 2007VER/EME]
C ₆ H ₄ Cl ₂ O	[95-77-2]	3,4-dichlorophenol				
	FUS		20.93	341	DSC	[1996DOM/HEA, 1991ACR, 1982POE/FAN]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	SUB	(291–337)	89.8 ± 0.4	298	GS	[2007VER/EME]
	SUB		81.3 ± 2.3	298	C	[1994RIB/FER2]
	V	(341–368)	66.7	355	GS	[2007VER/EME]
	V	(341–368)	70.8 ± 0.2	298	GS	[2007VER/EME]
C ₆ H ₄ Cl ₂ O	[591-35-5]	3,5-dichlorophenol				
	FUS		20.51	341	DSC	[1996DOM/HEA, 1991ACR, 1982POE/FAN]
	SUB		82.8 ± 1.1	298	C	[1994RIB/FER2]
C ₆ H ₄ Cl ₂ O ₂	[3428-24-8]	4,5-dichloro-1,2-benzenediol				
	V	(293–323)	70.5	308	CGC	[1999LEI/WAN2]
C ₆ H ₄ Cl ₂ O ₂	[20103-10-0]	2,6-dichlorohydroquinone				
	SUB	(324–345)	92.0 ± 8.3		QF	[1927COO/COO, 1960JON, 1970COX/PIL]
C ₆ H ₄ Cl ₂ O ₃	[247097-56-9]	vinyl mucochlorate				
	V	(273–333)	63.9	288	A	[1987STE/MAL, 1948RED/CHA5]
C ₆ H ₄ Cl ₃ N	[634-67-3]	2,3,4-trichloroaniline				
	SUB		92.4 ± 1.7	298	C	[2002RIB/AMA]
C ₆ H ₄ Cl ₃ N	[636-30-6]	2,4,5-trichloroaniline				
	SUB		86.3 ± 2.5	298	C	[2002RIB/AMA]
C ₆ H ₄ Cl ₃ N	[634-93-5]	2,4,6-trichloroaniline				
	SUB		85.3 ± 1.9	298	C	[2002RIB/AMA]
	V	(407–535)	92.9	422	A	[1987STE/MAL, 1947STU]
Note: Enthalpy of vaporization is likely in error						
C ₆ H ₄ Cl ₃ N	[634-91-3]	3,4,5-trichloroaniline				
	SUB		92.9 ± 3.3	298	C	[2002RIB/AMA]
C ₆ H ₄ Cl ₃ NO	[35302-72-8]	2-trichloroacetylpyrrole				
	SUB	(295–317)	90.0 ± 0.3	306	ME	[2010SAN/RIB3]
	SUB	(295–317)	90.4 ± 0.3	298	ME	[2010SAN/RIB3]
C ₆ H ₄ FI	[348-52-7]	2-iodo-1-fluorobenzene				
	V	(283–328)	51.5 ± 0.3	298	GS	[2015VER/EME]
C ₆ H ₄ FI	[1121-86-4]	3-iodo-1-fluorobenzene				
	V	(275–319)	48.6 ± 0.3	298	GS	[2015VER/EME]
C ₆ H ₄ FI	[352-34-1]	4-iodo-1-fluorobenzene				
	V	(277–318)	49.5 ± 0.3	298	GS	[2015VER/EME]
C ₆ H ₄ FNO ₂	[1493-27-2]	2-fluoronitrobenzene				
	SUB	(257–261)	79.3 ± 0.8	259	Static	[2010RIB/MON]
	SUB	(257–261)	78.4 ± 0.8	298	Static	[2010RIB/MON]
	V	(267–359)	57.9 ± 0.1	313	Static	[2010RIB/MON]
	V	(267–359)	59.5 ± 0.1	298	Static	[2010RIB/MON]
C ₆ H ₄ FNO ₂	[402-67-5]	3-fluoronitrobenzene				
	SUB	(255–273)	73.1 ± 0.3	264	Static	[2010RIB/MON]
	SUB	(255–273)	72.3 ± 0.3	298	Static	[2010RIB/MON]
	V	(259–346)	54.4 ± 0.1	302	Static	[2010RIB/MON]
	V	(259–346)	54.8 ± 0.1	298	Static	[2010RIB/MON]
C ₆ H ₄ FNO ₂	[350-46-9]	4-fluoronitrobenzene				
	SUB	(259–291)	71.5 ± 0.3	275	Static	[2010RIB/MON]
	SUB	(259–291)	70.9 ± 0.3	298	Static	[2010RIB/MON]
	V	(272–349)	55.1 ± 0.1	311	Static	[2010RIB/MON]
	V	(272–349)	56.0 ± 0.1	298	Static	[2010RIB/MON]
C ₆ H ₄ F ₂	[367-11-3]	1,2-difluorobenzene				
	FUS		11.05	226.0		[1996DOM/HEA, 1963SCO/MES]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(300–400)	36.2	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(304–403)	35.5	319	EB	[1963SCO/MES, 1984BOU/FRI]
	V		34.6 ± 0.1	327	C	[1963SCO/MES]
	V		33.5 ± 0.1	345	C	[1963SCO/MES]
	V		32.2 ± 0.1	367	C	[1963SCO/MES]
C ₆ H ₄ F ₂	[372-18-9]	1,3-difluorobenzene				
	TRS		0.83	187.8		
	FUS		8.60	204.1	DTA	[1994TAN/SAB3]
	TRS		0.83	186.8		
	FUS		8.58	204		[1996DOM/HEA, 1970MES/FIN]
	V	(310–400)	34.6	298		[1980OSB/SCO, 1991BAS/SVO]
C ₆ H ₄ F ₂	[540-36-3]	1,4-difluorobenzene				
	V	(300–400)	35.8	298		[1980OSB/SCO, 1991BAS/SVO]
C ₆ H ₄ F ₂ O	[6418-38-8]	2,3-difluorophenol				
	SUB		68.2 ± 1.5	298	C	[2010RIB/FER2]
C ₆ H ₄ F ₂ O	[367-27-1]	2,4-difluorophenol				
	V		58.8 ± 0.9	298	C	[2010RIB/FER2]
C ₆ H ₄ F ₂ O	[2713-31-7]	2,5-difluorophenol				
	SUB		68.0 ± 1.4	298	C	[2010RIB/FER2]
C ₆ H ₄ F ₂ O	[28177-48-2]	2,6-difluorophenol				
	SUB		77.8 ± 2.0	298	C	[2010RIB/FER2]
C ₆ H ₄ F ₂ O	[2713-33-9]	3,4-difluorophenol				
	SUB		72.9 ± 1.5	298	C	[2010RIB/FER2]
C ₆ H ₄ F ₂ O	[2713-34-0]	3,5-difluorophenol				
	SUB		72.8 ± 1.5	298	C	[2010RIB/FER2]
C ₆ H ₄ F ₃ N	[3862-73-5]	2,3,4-trifluoroaniline				
	V		53.7 ± 0.5	298	C	[2007RIB/FER]
C ₆ H ₄ F ₃ N	[67815-56-9]	2,3,6-trifluoroaniline				
	V		50.1 ± 0.5	298	C	[2007RIB/FER]
C ₆ H ₄ F ₃ N	[367-34-0]	2,4,5-trifluoroaniline				
	FUS		23.11	332.5	DSC	[2007RIB/FER]
	SUB		73.7 ± 1.2	298	C	[2007RIB/FER]
C ₆ H ₄ F ₃ N	[363-81-5]	2,4,6-trifluoroaniline				
	FUS		16.91	307.5	DSC	[2007RIB/FER]
	SUB		66.0 ± 1.2	298	C	[2007RIB/FER]
C ₆ H ₄ F ₃ N	[163733-96-8]	3,4,5-trifluoroaniline				
	FUS		17.87	335.6	DSC	[2007RIB/FER]
	SUB		74.6 ± 1.3	298	DSC	[2007RIB/FER]
C ₆ H ₄ F ₃ NO	[2557-70-2]	2-trifluoroacetylpyrrole				
	SUB	(263–271)	74.3 ± 1.1	267	ME	[2010SAN/RIB3]
	SUB	(263–271)	72.8 ± 1.1	298	ME	[2010SAN/RIB3]
C ₆ H ₄ F ₁₀ O	[65064-78-0]	1,1,1,2,3,3-hexafluoro-3-(2,2,3,3-tetrafluoropropoxy)propane				
	V	(293–379)	42.3	308	I	[2002MUR/YAM]
	V		43.2 ± 0.2	298	C	[1981VAR/BUL2]
C ₆ H ₄ INO ₂	[609-73-4]	2-iodo-1-nitrobenzene				
	SUB	(287–307)	90.6 ± 0.5	297	ME	[2013FER/RIB]
	SUB	(287–307)	90.6 ± 0.5	298	ME	[2013FER/RIB]
	SUB		89.9 ± 1.6	298	C	[2013FER/RIB]
	V	(433–563)	59.9	448	A	[1987STE/MAL]
C ₆ H ₄ INO ₂	[645-00-1]	3-iodo-1-nitrobenzene				
	SUB	(287–303)	88.9 ± 0.5	295	ME	[2013FER/RIB]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	SUB	(287–303)	88.8 ± 0.5	298	ME	[2013FER/RIB]
	SUB		89.4 ± 1.5	298	C	[2013FER/RIB]
	SUB	(295–306)	83.2 ± 1.2	300		[1935TRI, 1938WOL/WEG, 1960JON]
C ₆ H ₄ INO ₂	[636-98-6]	4-iodo-1-nitrobenzene				
	SUB	(311–333)	93.9 ± 0.5	322	ME	[2013FER/RIB]
	SUB	(311–333)	94.6 ± 0.6	298	ME	[2013FER/RIB]
	SUB		98.2 ± 1.7	298	C	[2013FER/RIB]
C ₆ H ₄ I ₂	[615-42-9]	1,2-diiodobenzene				
	FUS		14.01	296.6		[1991ACR, 1983WEA]
	V	(299–348)	63.8 ± 0.4	323	GS	[2014VER/EME2]
	V	(299–348)	65.6 ± 0.5	298	GS	[2014VER/EME2]
C ₆ H ₄ I ₂	[626-00-6]	1,3-diiodobenzene				
	FUS		15.93	307.4		[1991ACR, 1983WEA]
	SUB	(279–303)	82.9 ± 0.5	291	GS	[2014VER/EME2]
	SUB	(279–303)	82.6 ± 0.6	298	GS	[2014VER/EME2]
	V	(312–351)	63.7 ± 0.3	331	GS	[2014VER/EME2]
C ₆ H ₄ I ₂	[624-38-4]	1,4-diiodobenzene				
	FUS		24.1	405.2	DSC	[2010KAN/RED]
	TRS		0.22	320		
	FUS	(5–420)	22.3	402.4		[2001VAN/OON]
	FUS		22.37	402		[1991ACR, 1983WEA]
	SUB	(298–347)	84.4 ± 0.3	322	GS	[2014VER/EME2]
	SUB	(298–347)	85.4 ± 0.4	298	GS	[2014VER/EME2]
	SUB	(372–401)	63.4	386.5	A	[1987STE/MAL]
	V	(402–560)	52.6	417	A	[1987STE/MAL]
C ₆ H ₄ N ₂	[100-54-9]	nicotinic acid nitrile				
	V	(453–479)	45.0	466	A	[1987STE/MAL, 1972DYK]
C ₆ H ₄ N ₂	[100-70-9]	2-cyanopyridine				
	SUB	(233–323)	76.6	298	ME	[1991AUE/WEB]
						Note: Authors of [1991AUE/WEB] refer to the value as an enthalpy of vaporization. The compound's melting point temperature fall within the range of measured VPs
C ₆ H ₄ N ₂	SUB		70.7 ± 1.2	298	C	[1984BIC/PIL]
	[100-54-9]	3-cyanopyridine				
	SUB	(233–323)	72.1 ± 1.8	298	C	[1984BIC/PIL]
			62.8	298	ME	[1991AUE/WEB]
						Note: Authors of [1991AUE/WEB] refer to the value as an enthalpy of vaporization. The compound's melting point temperature falls at the upper end of the range of measured VPs
C ₆ H ₄ N ₂	SUB		79.0		DSC	[1989SHI/SHI]
	[100-48-1]	4-cyanopyridine				
C ₆ H ₄ N ₂	SUB		73.2 ± 0.6	298	C	[1984BIC/PIL]
	SUB	(233–323)	54.0	298	ME	[1991AUE/WEB]
						Note: Authors of [1991AUE/WEB] refer to the value as an enthalpy of vaporization. The compound's melting point temperature falls above the range of measured VPs
			75.6		DSC	[1989SHI/SHI]
C ₆ H ₄ N ₂ O	[14906-64-0]	3-cyanopyridine <i>N</i> -oxide				
	SUB	(345–392)	101.9 ± 2.0	298	ME	[1998RIB/MAT]
C ₆ H ₄ N ₂ O	[14906-59-3]	4-cyanopyridine <i>N</i> -oxide				
	SUB	(345–392)	104.4 ± 4.3	298	ME	[1998RIB/MAT]
C ₆ H ₄ N ₂ O	[273-09-6]	benzofurazan				
	SUB		64.4 ± 1.6	298	C	[1990LEI/PIL]
	SUB		64.9 ± 1.7	298	ME, GS	[1980ARS]
C ₆ H ₄ N ₂ O ₂	[480-96-6]	benzofurazan <i>N</i> -oxide				
	SUB		79.6 ± 1.7	298	C	[1990LEI/PIL]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₄ N ₂ O ₃	[612-29-3]	1-nitro-2-nitrosobenzene (dimer)				
	SUB	(323–343)	95.5	333	A	[1987STE/MAL, 1974PEP/LEB]
C ₆ H ₄ N ₂ O ₄	[528-29-0]	1,2-dinitrobenzene				
	FUS		22.18	387.7	DSC	[1993ACR, 1990HWA/TAM]
	FUS		22.84	396.1		[1996DOM/HEA, 1926AND/LYN]
	SUB	(323–383)	94.0		TGA	[2011FEL/RAM]
	SUB	(323–353)	95.5 ± 0.9	298	GS	[1997VER3]
	SUB	(323–353)	93.1 ± 0.9	338	GS	[1997VER3]
	SUB	(343–387)	82.9	358	A	[1987STE/MAL]
	SUB	(343–397)	87.9 ± 2.1	298	TE	[1976FER/PIA]
	SUB	(328–338)	86.6 ± 1.2	309		[1935TRI, 1938WOL/WEG, 1960JON]
	V	(454–593)	60.0	469	A	[1987STE/MAL, 1972DYK]
C ₆ H ₄ N ₂ O ₄	[99-65-0]	1,3-dinitrobenzene				
	FUS		18.8	361.85	DSC	[2015SIN/SIN2]
	FUS		16.0	364.0	DSC	[2011RAI/MUD]
	FUS		21.2	364.8	DSC	[2010AGR/GUP]
	FUS		24.2	363.0	DSC	[2004GUP/SIN]
	FUS		13.8	363.0	DSC	[2004SHA/TAN]
	FUS		19.68	360.4	DSC	[2002MUS/RAZ]
	FUS		17.57	360.1	DSC	[1993ACR, 1990HWA/TAM]
	FUS		17.36	363.2		[1991ACR, 1983WEA]
	SUB	(335–356)	76.1	345.5	A	[1987STE/MAL]
	SUB	(332–383)	87.0 ± 0.8	298	TE	[1976FER/PIA]
	SUB	(315–329)	81.1 ± 1.7	323		[1935TRI, 1938WOL/WEG, 1960JON]
	SUB		81.2 ± 1.7			[1950NIT/SEK3, 1970COX/PIL]
V	(336–379)	96.7	351	A	[1987STE/MAL]	
C ₆ H ₄ N ₂ O ₄	[100-25-4]	1,4-dinitrobenzene				
	FUS		17.58	446	DSC	[2002MUS/RAZ]
	FUS		26.36	444.2	DSC	[1993ACR, 1990HWA/TAM]
	FUS		28.12	446.7		[1991ACR, 1983WEA]
	SUB	(323–433)	88.3		TGA	[2011FEL/RAM]
	SUB	(323–353)	91.9 ± 0.7	338	GS	[1997VER3]
	SUB	(323–353)	94.3 ± 0.7	298	GS	[1997VER3]
	SUB	(339–398)	96.2 ± 2.5	298	TE	[1976FER/PIA]
	SUB	(345–368)	89.1 ± 1.7	343		[1935TRI, 1938WOL/WEG, 1960JON]
	V	(445–572)	60.3	460	A	[1987STE/MAL, 1972DYK]
	C ₆ H ₄ N ₂ O ₅	[66-56-8]	2,3-dinitrophenol			
FUS			22.67	419	DSC	[2002MUS/RAZ]
FUS			26.24	417	DSC	[1996DOM/HEA, 1982POE/FAN]
SUB		(303–343)	96.6	323		[1958HOY/PEP]
C ₆ H ₄ N ₂ O ₅	[51-28-5]	2,4-dinitrophenol				
	FUS		25.3	388	DSC	[2004SHA/TAN]
	FUS		26.19	383.2	DSC	[2002MUS/RAZ]
	FUS		24.17	388	DSC	[1996DOM/HEA, 1982POE/FAN]
	SUB	(293–333)	104.6 ± 4.2	313		[1958HOY/PEP, 1970COX/PIL]
C ₆ H ₄ N ₂ O ₅	[329-71-5]	2,5-dinitrophenol				
	FUS		23.73	381.0	DSC	[1996DOM/HEA, 1982POE/FAN]
		(278–333)	93.4	306		[1958HOY/PEP]
C ₆ H ₄ N ₂ O ₅	[573-56-8]	2,6-dinitrophenol				
	FUS		22.91	329	DSC	[2002MUS/RAZ]
	FUS		19.58	336.0	DSC	[1996DOM/HEA, 1982POE/FAN]
		(293–333)	112.1 ± 4.2	313		[1958HOY/PEP, 1970COX/PIL]

Note: Melting point temperature of 363.3 K was given in the experimental section of [2004SHA/TAN] for 2,4-dinitrophenol; however, a much higher was shown in the phase diagrams.

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₄ N ₂ O ₅	[577-71-9]	3,4-dinitrophenol				
	FUS		25.37	407	DSC	[1996DOM/HEA, 1982POE/FAN]
		(328–383)	123.5	383		[1958HOY/PEP]
C ₆ H ₄ N ₂ S	[273-13-2]	2,1,3-benzothiadiazole				
	FUS		16.30	317.0	DSC	[2012MIR/MAT]
			76.0 ± 1.8	298	C	[2012MIR/MAT]
C ₆ H ₄ N ₄	[19485-35-9]	4,5-dicyano-1-methylimidazole				
	FUS		14.8	360.2	DSC	[2012ALM/MON]
		(338–359)	94.8 ± 0.5	360	Static	[2012ALM/MON]
		(338–359)	96.4 ± 0.5	298	Static	[2012ALM/MON]
		(356–404)	80.6 ± 0.8	360	Static	[2012ALM/MON]
		(356–404)	86.9 ± 0.8	298	Static	[2012ALM/MON]
C ₆ H ₄ N ₄ O ₂	[1516-60-5]	4-nitrophenyl azide				
	FUS		21.3	341.4	DSC	[2014EME/ALG]
	FUS		17.1	345.4	DSC	[1997FIN/GAR]
	SUB	(313–340)	93.0 ± 0.6	298	GS	[2014EME/ALG]
		(345–370)	74.5 ± 1.1	298	GS	[2014EME/ALG]
C ₆ H ₄ N ₄ O ₆	[489-98-5]	2,4,6-trinitroaniline				
	SUB		124.7		DSC	[1990HWA/YOS]
	SUB	(328–371)	115.9	343	LE	[1987STE/MAL, 1969ROS/DIC]
	SUB	(326–449)	125.3 ± 0.8	298	ME	[1978CUN/PAL]
			95.8		DSC	[1990HWA/YOS]
C ₆ H ₄ N ₂ S	[273-13-2]	2,1,3-benzothiadiazole				
	SUB		70.73 ± 0.2	298	C	[1998SAB/KUA]
C ₆ H ₄ O ₂	[106-51-4]	1,4-benzoquinone				
	FUS		18.40 ± 0.1	385.1	DSC	[2004ROJ/FOR]
	FUS		18.35 ± 0.3	385.7	HFC	[2004ROJ/FOR]
	FUS		19.6	383.1	DSC	[2004GUP/SIN]
	FUS		18.53	386.1		[1991ACR, 1983WEA]
	SUB		66.7 ± 1.6	298	DSC	[2004ROJ/FOR]
	SUB		68.0 ± 0.5	262	ME, TE	[1981DEK/SMI]
	SUB		62.8 ± 3.3			[1956MAG, 1977PED/RYL]
	SUB		68.5 ± 0.6			[1953SEK/SUZ]
	SUB	(260–278)	62.8	269	QF	[1927COO/COO]
		(388–402)	47.8	395	A	[1987STE/MAL]
(C ₆ H ₄ O ₂)- (C ₆ H ₆ O ₂)	[106-34-3]	quinhydrone (quinone-hydroquinone)				
	SUB	(308–325)	89.3 ± 1	313	TE	[1981DEK/SMI]
	SUB		87.8 ± 1	313	ME	[1981DEK/SMI]
	SUB		U181.2			[1953SEK/SUZ, 1960JON]
			NA		[1951NIT/SEK]	
C ₆ H ₄ O ₅	[3238-40-2]	furan-2,5-dicarboxylic acid				
	SUB	(378–402)	121.3	391	TE, ME	[1983SPE/CLI]
C ₆ H ₄ S ₄	[31366-25-3]	tetrathiafulvene				
	SUB	(331–355)	95.3	343		[1999DYK/SVO]
	SUB		61.0		TGA	[1995YAS/TAK]
	SUB		95.3 ± 1	345	TE, ME	[1980DEK/GOV]
		(341–361)	92 ± 6.3	351	HSA	[1979SAN/EPS]
(C ₆ H ₄ S ₄)- (C ₁₂ H ₄ N ₄)	[40210-84-2]	(tetrathiofulvalene)-(7,7,8,8-tetracyanoquinodimethane) (TTF-TCNQ)				
	SUB		94.2		TGA	[1995YAS/TAK]
			130 ± 2	410	TE, ME	[1980DEK/GOV]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₅ Br	[108-86-1]	bromobenzene				
	FUS	(11–300)	10.7	242.4	AC	[1996DOM/HEA, 1975MAS/SCO]
	FUS		10.6	242.4		[1937STU]
	V	(277–303)	44.3 ± 0.6	298	GS	[2015VER/SAZ]
	V	(330–430)	44.8	298		[1984BOU/FRI, 1991BAS/SVO]
	V		44.0	293	C	[1975MAS/SCO]
	V	(333–463)	42.3	348	A	[1987STE/MAL, 1972DYK]
	V	(321–429)	41.0 ± 0.1	375	Static	[1968SMI/SMI]
	V	(321–429)	44.7 ± 0.5	298	Static	[1968SMI/SMI, 2015VER/SAZ]
	V		44.5 ± 0.1	298	C	[1968WAD]
	V	(329–427)	42.4	344	EB	[1955DRE/MAR]
V	(329–427)	45.0 ± 0.5	298	EB	[1955DRE/MAR, 2015VER/SAZ]	
V		39.7 ± 0.1	428	C	[1926MAT, 2015VER/SAZ]	
V		44.5 ± 1.7	298	C	[1926MAT, 2015VER/SAZ]	
C ₆ H ₅ BrN ₂ O ₂	[875-51-4]	4-bromo-2-nitroaniline				
FUS			17.4	384.2	DSC	[2011RED/GAN, 2012RED/SAT]
C ₆ H ₅ BrO	[95-56-7]	2-bromophenol				
	V		55.5 ± 1.3	298	C	[2009RIB/FER5]
V			50.2			[1986BAL/GNA]
C ₆ H ₅ BrO	[591-20-8]	3-bromophenol				
	V	(410–510)	73.5	425	A	[1987STE/MAL]
V			55.2			[1986BAL/GNA]
C ₆ H ₅ BrO	[106-41-2]	4-bromophenol				
	FUS		16.9	337.8	DSC	[2013ALM/MON3]
	FUS		17.6	338.2	DSC	[2004KUR/MAE]
	FUS		16.57	336		[1996DOM/HEA, 1889EYK]
	FUS		13.0	336.7		[1996DOM/HEA, 1884WER]
	SUB	(286–331)	83.9 ± 0.1	306	Static	[2013ALM/MON3]
	SUB	(286–331)	84.2 ± 0.1	298	Static	[2013ALM/MON3]
	SUB		83.1 ± 1.6	298	C	[2009RIB/FER5]
	SUB	(260–302)	87.3 ± 0.4	298	ME	[1971PAR/ROC]
	V	(303–370)	65.2 ± 0.1	334	Static	[2013ALM/MON3]
	V	(303–370)	68.7 ± 0.1	298	Static	[2013ALM/MON3]
	V	(390–511)	58.8	405	A	[1987STE/MAL]
	V		58.6			[1986BAL/GNA]
C ₆ H ₅ BrS	[6320-02-1]	2-bromobenzenethiol				
V			50.6			[1986BAL/GNA]
C ₆ H ₅ BrS	[6320-01-0]	3-bromobenzenethiol				
V			51.1			[1986BAL/GNA]
C ₆ H ₅ BrS	[106-53-6]	4-bromobenzenethiol				
V			52.3			[1986BAL/GNA]
C ₆ H ₅ Br ₂ N	[615-57-6]	2,4-dibromoaniline				
	FUS		21.37	351.4	DSC	[2006RIB/FER]
SUB		88.0 ± 1.5	298	C	[2006RIB/FER]	
C ₆ H ₅ Br ₂ N	[3638-73-1]	2,5-dibromoaniline				
	FUS		20.47	328.1	DSC	[2006RIB/FER]
SUB		85.7 ± 1.9	298	C	[2006RIB/FER]	
C ₆ H ₅ Br ₂ N	[608-30-0]	2,6-dibromoaniline				
	FUS		21.79	355.5	DSC	[2006RIB/FER]
SUB		80.7 ± 1.4	298	C	[2006RIB/FER]	
C ₆ H ₅ Cl	[108-90-7]	chlorobenzene				
	FUS		9.55	227.9		[1996DOM/HEA, 1937STU]
V	(275–307)	41.2 ± 0.3	298	GS	[2014VER/EME]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(374–405)	41.9 ± 2.0	298	EB	[2001ROL/KRA, 2014VER/EME]
	V	(405–462)	43.8 ± 0.1	298	EB	[1998DEJ/GON, 2014VER/EME]
	V		41.3 ± 0.6	298	EB	[1997DEJ/GON, 2014VER/EME]
	V	(313–353)	40.3	298	CGC	[1995CHI/HOS]
	V	(413–453)	43.9	298	GC	[1994SPI/LUI]
	V	(258–313)	48.1		GC	[1994LIU/DIC]
	V	(353–368)	42.5 ± 2.0	298	EB	[1989VAR/SOM2, 2014VER/EME]
	V		40.6 ± 0.3		GC	[1989AZA]
	V	(405–597)	35.4	420	A	[1987STE/MAL]
	V	(298–398)	40.8 ± 0.4	298	Static	[1985SRI/SMI, 2014VER/EME]
	V	(335–405)	41.0	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(298–398)	41.3 ± 0.7	298	Static	[1983KHU/MUN, 2014VER/EME]
	V	(328–353)	41.7 ± 0.7	298	EB	[1980DIA/CRE, 2014VER/EME]
	V	(293–393)	41.2 ± 0.2	298	Static	[1980MAH/SMI, 2014VER/EME]
	V	(313–393)	41.2 ± 0.1	298	Static	[1979MAH/SMI2, 2014VER/EME]
	V	(372–403)	39.7 ± 0.7	298	EB	[1985FRA/COM, 2014VER/EME]
	V	(335–387)	38.7	350		[1971LET/BAY]
	V		41.0 ± 0.1	298	C	[1968WAD]
	V	(298–318)	41.4 ± 0.3	298	EB	[1967DES/PAN, 2014VER/EME]
	V	(333–405)	38.8	348	A	[1987STE/MAL, 1952BRO, 1984BOU/FRI]
	V	(335–405)	41.6 ± 0.1	298	EB	[1952BRO, 2014VER/EME]
	V	(253–303)	37.3	278	ME	[1940ZIL]
	V	(373–452)	42.4 ± 0.1	298	EB	[1930ZMA, 2014VER/EME]
	V		36.6	403	C	[1926MAT]
	V		41.9 ± 0.1	298	C	[1926MAT, 2014VER/EME]
	V	(238–258)	39.7 ± 0.4	298		[1913MUN, 2014VER/EME]
C ₆ H ₅ ClN ₂ O ₂	[121-87-9]	2-chloro-4-nitroaniline				
	SUB		101.8 ± 1.8	298	C	[2003RIB/LIM]
	SUB	(335–351)	100.3 ± 1.5	343	ME	[2003RIB/LIM]
	SUB	(335–351)	102.6 ± 1.5	298	ME	[2003RIB/LIM]
C ₆ H ₅ ClN ₂ O ₂	[6283-25-6]	2-chloro-5-nitroaniline				
	SUB		100.3 ± 2.2	298	C	[2003RIB/LIM]
	SUB	(325–341)	99.3 ± 1.6	333	ME	[2003RIB/LIM]
	SUB	(325–341)	101.0 ± 1.6	298	ME	[2003RIB/LIM]
C ₆ H ₅ ClO	[95-57-8]	2-chlorophenol				
	TRS		0.09	276		
	FUS		12.52	283	DSC	[1991ACR, 1982POE/FAN]
	V	(288–321)	51.9	305	GS	[2007VER/EME]
	V	(288–321)	52.3 ± 0.2	298	GS	[2007VER/EME]
	V	(337–447)	47.0	352		[1995GAB/MAR]
	V		45.2			[1966GOO/DEP]
	V	(354–448)	47.2	369	A	[1987STE/MAL]
	V	(333–449)	50.1	348	A	[1987STE/MAL, 1974KIV/NAD]
	V	(285–447)	45.2	300		[1947STU]
C ₆ H ₅ ClO	[108-43-0]	3-chlorophenol				
	FUS		13.64	304.2	DSC	[2002LIP/SCH]
	FUS		14.91	305.8	DSC	[1991ACR, 1982POE/FAN]
	SUB	(275–306)	76.9 ± 0.3	298	GS	[2007VER/EME]
	SUB		69.4 ± 1.8	298	C	[1994RIB/FER2]
	SUB		53.1			[1938WOL/WEG, 1960JON, 1970COX/PIL]
	V	(308–335)	61.9	322	GS	[2007VER/EME]
	V	(308–335)	63.5 ± 0.3	298	GS	[2007VER/EME]
	V		52.3			[1986BAL/GNA]
	V	(317–487)	53.1	332	A	[1987STE/MAL, 1947STU]
C ₆ H ₅ ClO	[106-48-9]	4-chlorophenol				
	FUS		14.0	316.9	DSC	[2013ALM/MON3]
	FUS		13.76	315.7	DSC	[2002LIP/SCH]
	FUS		14.07	315.9	DSC	[1991ACR, 1982POE/FAN]
	FUS		14.7			[2002LIP/SCH, 1936LUC/LIK]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		SUB	(274–311)	79.0 ± 0.1	292	Static	[2013ALM/MON3]
		SUB	(274–311)	78.9 ± 0.1	298	Static	[2013ALM/MON3]
		SUB	(283–313)	77.1 ± 0.2	298	GS	[2007VER/EME]
		SUB		69.5 ± 1.6	298	C	[1994RIB/FER2]
		SUB	(252–293)	60.8	278	A	[1987STE/MAL]
		SUB		51.9			[1938WOL/WEG, 1960JON, 1970COX/PIL]
		V	(273–331)	65.5 ± 0.1	302	Static	[2013ALM/MON3]
		V	(273–331)	65.7 ± 0.1	298	Static	[2013ALM/MON3]
		V	(318–351)	61.9	335	GS	[2007VER/EME]
		V	(318–351)	64.4 ± 0.3	298	GS	[2007VER/EME]
		V	(373–493)	60.6	388	A	[1987STE/MAL]
		V		54.0			[1986BAL/GNA]
		V	(323–493)	52.8	338		[1947STU]
C ₆ H ₅ ClS	[6320-03-2]	2-chlorobenzenethiol					
	V		47.7				[1986BAL/GNA]
C ₆ H ₅ ClS	[2037-31-2]	3-chlorobenzenethiol					
	V		48.5				[1986BAL/GNA]
C ₆ H ₅ ClS	[106-54-7]	4-chlorobenzenethiol					
	V		48.5				[1986BAL/GNA]
C ₆ H ₅ ClO ₂	[2138-22-9]	4-chloro-1,2-benzenediol					
	V	(293–323)	70.2	308	CGC		[1999LEI/WAN2]
C ₆ H ₅ ClO ₂	[615-67-8]	chlorohydroquinone					
	SUB	(306–334)	102.9 ± 8.3	320	QF		[1927COO/COO, 1960JON, 1970COX/PIL]
C ₆ H ₅ ClO ₂ S	[98-09-9]	benzenesulfonyl chloride					
	V	(339–524)	54.4	354			[1999DYK/SVO]
	V	(338–525)	57.2	353	A		[1987STE/MAL, 1947STU]
C ₆ H ₅ ClO ₃ S	[98-66-8]	4-chlorobenzene sulfonic acid					
	FUS		10.6	333.2	DSC		[1995MAC/JOY]
C ₆ H ₅ Cl ₂ N	[608-27-5]	2,3-dichloroaniline					
	SUB		82.2 ± 1.0	298	C		[2006RIB/AMA]
C ₆ H ₅ Cl ₂ N	[554-00-7]	2,4-dichloroaniline					
	SUB		84.7 ± 1.3	298	C		[2006RIB/AMA]
C ₆ H ₅ Cl ₂ N	[95-82-9]	2,5-dichloroaniline					
	SUB		83.4 ± 1.3	298	C		[2006RIB/AMA]
C ₆ H ₅ Cl ₂ N	[608-31-1]	2,6-dichloroaniline					
	SUB		74.2 ± 0.9	298	C		[2006RIB/AMA]
C ₆ H ₅ Cl ₂ N	[95-76-1]	3,4-dichloroaniline					
	FUS		21.69	344.5	DSC		[2003VER/SCH]
	SUB		87.5 ± 0.2	298	C		[2006RIB/AMA]
	SUB	(296–343)	88.1 ± 0.1	298	GS		[2003VER/SCH]
	V	(346–373)	70.4 ± 0.3	298	GS		[2003VER/SCH]
	V	(420–545)	58.6	435	A		[1987STE/MAL]
C ₆ H ₅ Cl ₂ N	[626-43-7]	3,5-dichloroaniline					
	SUB		86.7 ± 0.7	298	C		[2006RIB/AMA]
	V	(447–535)	50.1	462	EB		[2013LI/ZHA]
C ₆ H ₅ Cl ₂ OP	[3426-89-9]	phenyl dichlorophosphite					
	V	(363–480)	52.7	378			[2008SHA/WU]
C ₆ H ₅ Cl ₂ O ₂ P	[770-12-7]	phenyl dichlorophosphate					
	V	(339–513)	63.6	354	A		[1987STE/MAL, 1947STU]
C ₆ H ₅ F	[462-06-6]	fluorobenzene					
	FUS		11.31	230.9			[1996DOM/HEA, 1956SCO/MCC2]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	FUS		10.4	231.1		[1937STU]
	V	(274–303)	34.5 ± 0.2	298	GS	[2014VER/EME]
	V	(358–530)	31.9	373	A	[1987STE/MAL]
	V	(373–419)	31.8	388	A	[1987STE/MAL]
	V	(414–501)	31.0	429	A	[1987STE/MAL]
	V	(497–561)	30.9	512	A	[1987STE/MAL]
	V	(255–360)	34.5	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(313–353)	35.2 ± 0.1	298	EB	[1980DIA/CRE, 2014VER/EME]
	V	(312–394)	33.6	327	EB	[1987STE/MAL, 1956SCO/MCC2]
	V		33.5 ± 0.1	318	C	[1956SCO/MCC2]
	V		32.4 ± 0.1	337	C	[1956SCO/MCC2]
	V		31.2 ± 0.1	358	C	[1956SCO/MCC2]
	V		29.7 ± 0.1	382	C	[1956SCO/MCC2]
	V	(255–357)	34.6 ± 0.1	298	Static	[1889YOU, 2014VER/EME]
C ₆ H ₅ FO	[367-12-4]	2-fluorophenol				
	V		52.3 ± 0.8	298	C	[2009RIB/FER]
C ₆ H ₅ FO	[372-20-3]	3-fluorophenol				
	V		60.1 ± 0.9	298	C	[2009RIB/FER]
	V	(373–451)	50.3	388	A	[1987STE/MAL]
C ₆ H ₅ FO	[371-41-5]	4-fluorophenol				
	FUS		14.5	320.4	DSC	[2013ALM/MON3]
	SUB	(265–317)	74.3 ± 0.1	291	Static	[2013ALM/MON3]
	SUB	(265–317)	74.1 ± 0.1	298	Static	[2013ALM/MON3]
	SUB		73.9 ± 1.4	298	C	[2009RIB/FER]
	V	(291–343)	58.7 ± 0.1	317	Static	[2013ALM/MON3]
	V	(291–343)	60.0 ± 0.2	298	Static	[2013ALM/MON3]
	V	(360–460)	48.8	375	A	[1987STE/MAL]
C ₆ H ₅ F ₂ N	[4519-40-8]	2,3-difluoroaniline				
	V		49.3 ± 0.5	298	C	[2007RIB/FER]
C ₆ H ₅ F ₂ N	[367-25-9]	2,4-difluoroaniline				
	V		52.1 ± 0.5	298	C	[2007RIB/FER]
C ₆ H ₅ F ₂ N	[367-30-6]	2,5-difluoroaniline				
	V		52.5 ± 0.5	298	C	[2007RIB/FER]
C ₆ H ₅ F ₂ N	[5509-65-9]	2,6-difluoroaniline				
	V		47.5 ± 0.5	298	C	[2007RIB/FER]
C ₆ H ₅ F ₂ N	[3863-11-4]	3,4-difluoroaniline				
	V		53.3 ± 0.5	298	C	[2007RIB/FER]
C ₆ H ₅ F ₂ N	[372-39-4]	3,5-difluoroaniline				
	FUS		16.49	312.7	DSC	[2007RIB/FER]
	SUB		71.7 ± 1.7	298	C	[2007RIB/FER]
C ₆ H ₅ F ₈ NOS	[77984-30-6]	1-(ethylimino)-2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,4,5-hexahydrothiophene-1-oxide				
	V		31.4	333		[1981ABE/SHR]
C ₆ H ₅ F ₉ O	[163702-05-4]	1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane				
	V	(293–350)	34.2	308	I	[2002MUR/YAM]
C ₆ H ₅ I	[591-50-4]	iodobenzene				
	FUS		9.75	241.8		[1996DOM/HEA, 1937STU]
	V	(284–314)	48.5 ± 0.4	299	GS	[2015VER/SAZ]
	V	(284–314)	48.5 ± 0.6	298	GS	[2015VER/SAZ]
	V	(313–353)	47.4	298	CGC	[1995CHI/HOS]
	V	(462–679)	41.1	477	A	[1987STE/MAL]
	V	(320–460)	48.9	298		[1984BOU/FRI, 1991BAS/SVO]

Note: Authors indicate that this is a liquid to vapor phase transition; however, we believe it to be a solid to vapor transition given the size of the numerical value and that the calorimetric measurement was made below the melting point temperature.

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References	
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)				
		V	(273–358)	51.4	288	A	[1987STE/MAL, 1972DYK]
		V	(358–543)	46.0	373	A	[1987STE/MAL, 1972DYK]
		V	(243–255)	43.1			[1960JON]
		V	(248–303)	40.0	275	ME	[1940ZIL]
		V	(303–461)	46.4 ± 0.7	382		[1889YOU]
		V	(303–461)	49.1 ± 0.8	298		[1889YOU, 2015VER/SAZ]
C ₆ H ₅ IO	[533-58-4]	2-iodophenol					
	SUB		76.1 ± 1.4	298		C	[2011FER/RIB2]
C ₆ H ₅ IO	[626-02-8]	3-iodophenol					
	SUB		88.4 ± 1.6	298		C	[2011FER/RIB2]
C ₆ H ₅ IO	[540-38-5]	4-iodophenol					
	FUS		20.8	365.8		DSC	[2013ALM/MON3]
	SUB	(307–360)	88.9 ± 0.1	334		Static	[2013ALM/MON3]
	SUB	(307–360)	90.2 ± 0.2	298		Static	[2013ALM/MON3]
	SUB		88.7 ± 1.6	298		C	[2011FER/RIB2]
	V	(337–380)	67.4 ± 0.1	359		Static	[2013ALM/MON3]
	V	(337–380)	73.0 ± 0.4	298		Static	[2013ALM/MON3]
C ₆ H ₅ NO	[586-96-9]	nitrosobenzene (dimer)					
	SUB	(297–339)	85.1	312		A	[1987STE/MAL, 1974PEP/LEB]
	SUB		80.8				[1930DRU/FLA]
C ₆ H ₅ NO ₂	[98-95-3]	nitrobenzene					
	FUS		10.82	278.9		DTA	[1967PAC]
	FUS	(90–300)	12.12	278.8			[1996DOM/HEA, 1936PAR/TOD]
	FUS		11.5				[1936LUC/LIK]
	V	(313–353)	54.5	298		CGC	[1995CHI/HOS]
	V	(288–318)	54.3	303			[1985ZAR]
	V	(291–305)	56.1 ± 1.7	298		ME	[1971LEB/KAT]
	V		55.0 ± 0.1	298		C	[1971KUS/WAD2]
	V	(279–296)	54.7	287		A	[1987STE/MAL, 1972DYK, 1960LYN/WIL]
	V	(283–303)	52.5	293		ME	[1958SKL/MAR]
	V	(407–483)	48.5	422			[1952OLI/GRI, 1984BOU/FRI]
	V	(369–481)	48.9	425			[1933TOR/MOL]
C ₆ H ₅ NO ₂	[98-98-6]	2-pyridinecarboxylic acid (picolinic acid)					
	FUS		30.0	411		TG, DTA	[1996DOM/HEA, 1989ALL/GED]
	SUB		91.0 ± 0.5	329		C	[1999SAB/IDE]
	SUB		92.7 ± 0.5	298			[1999SAB/IDE]
	SUB	(345–392)	98.0 ± 2.3	298		ME	[1998RIB/MAT]
C ₆ H ₅ NO ₂	[59-67-6]	3-pyridinecarboxylic acid (nicotinic acid, niacin)					
	FUS		27.5	508.2		DSC	[2016VOL/BLO]
	TRS		1.29	453.6			
	FUS		27.7	507.0		DSC	[2012GON/MIN]
	TRS		0.9	455.0			
	FUS		28.2	509.9		DSC	[2012JOS/BER]
	TRS		0.83	456.1			
	FUS		27.8	509.9		DSC	[2010GON/BER]
	FUS		97.1	509.3		DSC	[2004WAN/WAN]
	TRS		0.81	451.4			
	FUS		27.57	509.1		DSC	[2004WAN/TAN3]
	FUS		24.62			DSC	[2001REH/SHE]
	[Note: [2001REH/SHE] reported a value of 12.4 kJ/mole for a sample having decreased crystallinity]						
	FUS		13.01	509.2			[1999SAB/IDE]
	TRS		0.78	452			
	FUS		26.7	510			[1993ELM/CHA]
	FUS		30.0	510.2		TG, DTA	[1989ALL/GED]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		SUB	(362–387)	111.7 ± 1.2	298	GS	[2016VOL/BLO]
		SUB		112.1 ± 0.5	298	ME	[2010GON/BER]
		SUB	(473–498)	89.3		TG, DTA	[2002MEN/DOL]
		SUB	(352–360)	123.9 ± 3.7	298	ME	[2000RIB/GON]
		SUB		101.1 ± 0.6	362	C	[1999SAB/IDE]
		SUB		105.2 ± 0.6	298		[1999SAB/IDE]
		SUB		123.4 ± 1.2	298	C	[1984BIC/PIL]
C ₆ H ₅ NO ₂	[55-22-1]	4-pyridinecarboxylic acid (isonicotinic acid)					
		FUS		135	593	TG, DTA	[1996DOM/HEA, 1989ALL/GED]
Note: Enthalpy of fusion is much too large, compound likely decomposed							
		SUB		107.7 ± 0.7	362	C	[1999SAB/IDE]
		SUB		111.3 ± 0.6	298		[1999SAB/IDE]
		SUB	(345–392)	113.9 ± 4.7	298	ME	[1998RIB/MAT]
C ₆ H ₅ NO ₃	[88-75-5]	2-nitrophenol					
		FUS		U14.88	319.2	DSC	[2014HAS/JIR]
		FUS		21.77	318.7		[2012SHA/LAL]
		FUS		17.05	316.3	DSC	[2002MUS/RAZ]
		FUS		17.45	318.2	DTA	[1991ACR, 1994SAB/GOU]
		FUS		17.88		DSC	[1992SHA/SHA]
		FUS		17.91	318.6	DSC	[1990DON/DRE]
		SUB		73.3	298	C	[1994SAB/GOU]
		SUB	(273–292)	54.8	282.5	A	[1987STE/MAL]
		SUB	(298–310)	73.2 ± 1.3			[1935TRI, 1938WOL/WEG, 1960JON]
		V	(319–346)	58.4 ± 0.5	298	GS	[2007HEI/KAP]
		V	(366–490)	55.9	381	A	[1987STE/MAL]
		V	(324–347)	U43.3	298	ME	[1958SKL/MAR, 2007HEI/KAP]
		V	(322–357)	54.4	337	A	[1947STU]
C ₆ H ₅ NO ₃	[554-84-7]	3-nitrophenol					
		FUS		18.06	369	DSC	[2002MUS/RAZ]
		FUS		19.2	370	DSC	[1982POE/FAN]
		FUS		19.19	371.2	DTA	[1991ACR, 1994SAB/GOU]
		TRS		0.17	356		
		FUS		19.96	370	DSC	[1996DOM/HEA, 1989WOJ/MAR]
		FUS		21.3	370.0		[1996DOM/HEA, 1972BOO/HAU]
		SUB		91.2 ± 0.5	298	C	[1994SAB/GOU]
		SUB	(316–330)	98.9 ± 0.6	321	ME	[1992RIB/REI]
		SUB	(316–330)	100.2 ± 0.6	298	ME	[1992RIB/REI]
		SUB	(305–334)	76.2	319.5		[1987STE/MAL]
		SUB	(303–328)	91.8		ME	[1974LIO/HOP]
		SUB	(325–336)	91.6 ± 1.7			[1935TRI, 1938WOL/WEG, 1960JON]
C ₆ H ₅ NO ₃	[100-02-7]	4-nitrophenol					
		FUS		16.69	385.2	DSC	[2014HAS/JIR]
		FUS		18.97	388.2	DSC	[2013SIN/PAN]
		FUS		19.22	387.2	DSC	[2012KAN/RAI]
		TRS		5.0			
		FUS		12.0		DSC	[2006WOJ/MOS]
Note: Authors of [2006WOJ/MOS] report that the β-phase to α-phase was very sluggish, and difficult to quantify. The values given were referred to as crude estimates							
		FUS		11.0	386.4	DSC	[2002MUS/RAZ]
		FUS		18.3	388.2	DSC	[1999RAI/RAI]
		FUS		18.25	388.2	DTA	[1996DOM/HEA, 1994SAB/GOU]
		FUS		18.86	386.1	DSC	[1990DON/DRE]
		FUS		U30.12	385.2	DTA	[1986SIN/KUM]
		FUS		19.3			[1972BOO/HAU]
		FUS		21.4	386.2	DTA	[1958VAR]
		SUB		92.4	298	C	[1994SAB/GOU]
		SUB	(303–328)	87.9		ME	[1974LIO/HOP]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	SUB	(305–352)	98.8 ± 1	298	ME	[1971PAR/ROC]
	SUB	(339–351)	91.2 ± 1.7			[1935TRI, 1938WOL/WEG, 1960JON]
C ₆ H ₅ NO ₃	[824-40-8]	pyridine-2-carboxylic acid <i>N</i> -oxide		298	ME	[1998RIB/MAT]
	SUB	(345–392)	94.4 ± 4.0			
C ₆ H ₅ NO ₃	[2398-81-4]	pyridine-3-carboxylic acid <i>N</i> -oxide		298	ME	[1995ACR/TUC, 1995ABB/JIM]
	SUB		152.3 ± 1.9			
C ₆ H ₅ NO ₃	[13602-12-5]	pyridine-4-carboxylic acid <i>N</i> -oxide		298	ME	[1998RIB/MAT]
	SUB	(345–392)	136.1 ± 1.2			
C ₆ H ₅ NO ₃	[84522-17-8]	(2-furyl)oxoacetamide		373.4 367.2	DSC	[2008BAR/BER]
	FUS (I)		22.0			
	FUS (II)		17.8			
C ₆ H ₅ NO ₃	[609-71-2]	2-hydroxynicotinic acid		447 298	ME ME	[2009SAN/FIG] [2009SAN/FIG]
	SUB	(433–461)	125.4 ± 5.0			
	SUB	(433–461)	128.3 ± 5.1			
C ₆ H ₅ NO ₃	[609-70-1]	4-hydroxynicotinic acid		441 298	ME ME	[2009SAN/FIG] [2009SAN/FIG]
	SUB	(425–456)	144.6 ± 3.6			
	SUB	(425–456)	148.1 ± 3.7			
C ₆ H ₅ NO ₃	[27828-71-3]	5-hydroxynicotinic acid		447 298	ME ME	[2009SAN/FIG] [2009SAN/FIG]
	SUB	(436–458)	147.1 ± 7.0			
	SUB	(436–458)	149.8 ± 7.1			
C ₆ H ₅ NO ₃	[5006-66-6]	6-hydroxynicotinic acid		475 298	ME ME	[2009SAN/FIG] [2009SAN/FIG]
	SUB	(461–488)	143.0 ± 4.5			
	SUB	(461–488)	146.4 ± 4.6			
C ₆ H ₅ NO ₃	[699-18-3]	2-(2-nitrovinyl)furan		346.5 320	DSC TGA	[2015RUZ/GON] [2015RUZ/GON]
	FUS		24.1			
	SUB	(308–333)	86.5			
C ₆ H ₅ NO ₃ S	[39565-00-9]	2-acetyl-5-nitrothiophene		319 298	ME ME	[2010RIB/SAN4] [2010RIB/SAN4]
	SUB	(308–330)	100.4 ± 0.4			
	SUB	(308–330)	101.5 ± 0.4			
C ₆ H ₅ NO ₄	[601-89-8]	2-nitro-1,3-dihydroxybenzene		273		[1958HOY/PEP]
	SUB	(253–293)	74.5			
C ₆ H ₅ NO ₄	[3316-09-4]	4-nitrocatechol		450.2 298	DSC C	[2012BOO/BAN] [1986RIB/RIB]
	FUS		28.9			
	SUB		121.1 ± 1.4			
C ₆ H ₅ NO ₅	[1874-23-3]	methyl 5-nitro-2-furancarboxylate				[1980BAL/LEB, 1986PED/NAY]
	SUB		104.2 ± 2.1			
C ₆ H ₅ NS	[20893-30-5]	2-thiopheneacetonitrile		298	C	[2008RIB/SAN]
	V		60.5 ± 1.3			
C ₆ H ₅ NS	[13781-53-8]	3-thiopheneacetonitrile		298	C	[2008RIB/SAN]
	V		61.1 ± 1.3			
C ₆ H ₅ NS	[55406-13-8]	3-methyl-2-thiophenecarbonitrile		298	C	[2008RIB/SAN]
	V		54.4 ± 1.2			
C ₆ H ₅ N ₃	[622-37-7]	phenyl azide		358	A	[1987STE/MAL, 1972DYK]
	V	(348–368)	45.2			
C ₆ H ₅ N ₃	[95-14-7]	1- <i>H</i> -benzotriazole		369.9 298 298 298		[1999SAB/PER] [1999SAB/PER] [1989JIM/ROU] [1961ZIM/GEI]
	FUS		7.7			
	SUB		98.2 ± 0.7			
	SUB		99.0 ± 0.5			
	SUB		97.9			
C ₆ H ₅ N ₃	[274-79-3]	imidazo[1,2- <i>a</i>]pyrazine				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	FUS		15.3	359.2	DSC	[2016MOR/RAT]
	SUB		82.1 ± 1.9	298	F+ V	[2016MOR/RAT]
	V	(370–393)	70.7 ± 1.0	298	GS	[2016MOR/RAT]
	V		67.9 ± 1.4	298	CGC	[2016MOR/RAT]
C ₆ H ₅ N ₅ O ₆	[28930-29-2]	1,3-diamino-2,4,6-trinitrobenzene				
	SUB		146.9		DSC	[1990HWA/YOS]
	SUB	(335–382)	140.0	350	LE	[1987STE/MAL, 1969ROS/DIC]
	SUB		143.5	298		[1978CUN/PAL]
	V		110.9		DSC	[1990HWA/YOS]
C ₆ H ₆	[71-43-2]	benzene				
	FUS		10.7	278	DSC	[1999WAT/IIY]
	FUS		9.94	278.6		[1948TSC]
	FUS		9.87	278.7		[1948OLI/EAT]
	FUS		9.92	278.7	C	[1996DOM/HEA, 1942ZIE/AND]
	FUS	(92–300)	9.80	278.6	C	[1996DOM/HEA, 1930HUF/PAR2]
	FUS		9.87	278.7	C	[1996DOM/HEA, 1926AND/LYN]
	FUS		10.00	278.6		[1925MAA/WAL]
	FUS		9.78	279.0		[1924STR/PAR]
	SUB	(258–273)	41.7			[1994LIU/DIC]
	SUB	(223–279)	45.2	264	A	[1987STE/MAL, 1976HA/MOR]
	SUB		45.1	278		[1984HES/WIS]
	SUB	(183–197)	44.4	298	TE, ME	[1980DEK]
	SUB	(183–197)	53.9 ± 0.8	193	TE	[1977DEK/VAN]
	SUB	(183–197)	49.4 ± 0.4	193	ME	[1977DEK/VAN]
	SUB	(221–268)	45.6	279	MM	[1974JAC]
	SUB		44.1	261		[1960JON]
	SUB		43.1	229		[1960JON]
	SUB	(195–273)	44.6	279	MG	[1956MIL]
	SUB	(263–270)	46.6	282	A	[1947STU]
	SUB		44.6	273		[1936DEB, 1974JAC]
	SUB	(184–200)	U33.2	192		[1933DEI]
	SUB	(214–238)	43.3	226	A	[1913MUN]
	V	(305–345)	33.2	320		[2002LUB/BAN]
	V	(258–313)	35.6		GC	[1994LIU/DIC]
	V	(296–377)	33.5	311	EB	[1990AMB/EWI]
	V		33.9 ± 0.2		GC	[1989AZA]
	V		33.4	307	C	[1988DON/LIN]
	V		33.1	314	C	[1988DON/LIN]
	V		32.4	324	C	[1988DON/LIN]
	V		31.9	332	C	[1988DON/LIN]
	V		31.4	344	C	[1988DON/LIN]
	V		30.6	353	C	[1988DON/LIN]
	V	(279–377)	34.4	294	A	[1987STE/MAL]
	V	(353–422)	31.5	368	A	[1987STE/MAL]
	V	(420–502)	30.2	435	A	[1987STE/MAL]
	V	(501–562)	30.3	516	A	[1987STE/MAL]
	V		30.8	352		[1983NAT/VIS]
	V		30.5	361		[1983NAT/VIS]
	V		30.2	366		[1983NAT/VIS]
	V	(313–373)	35.3	343		[1983TSO/WIL]
	V		31.0	350		[1977RAO/VIU]
	V		33.8 ± 0.1	298	C	[1973SVO/VES]
	V		33.0 ± 0.1	313	C	[1973SVO/VES]
	V		32.2 ± 0.1	328	C	[1973SVO/VES]
	V		31.8 ± 0.1	333	C	[1973SVO/VES]
	V		31.4 ± 0.1	343	C	[1973SVO/VES]
	V		30.9 ± 0.1	353	C	[1973SVO/VES]
	V		32.6 ± 0.4	313	DSC	[1971MIT/IMA]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		32.5 ± 0.5	328	DSC	[1971MIT/IMA]
	V		33.9	298		[1971WIL/ZWO]
	V		31.6 ± 0.4	345	DSC	[1971MIT/IMA]
	V	(325–353)	32.4	340		[1971LET/BAY]
	V		34.1	293		[1949YAR/FED]
	V	(284–354)	34.1	299		[1949FOR/NOR]
	V		33.8	298	C	[1947OSB/GIN]
	V		32.9	315	C	[1947SCO/WAD]
	V		32.4	323	C	[1947SCO/WAD]
	V		31.8	334	C	[1947SCO/WAD]
	V		30.7	353	C	[1947SCO/WAD]
	V	(282–354)	34.1	297		[1946THO]
	V	(288–354)	34.1	303	MM	[1945WIL/TAY]
	V	(298–373)	33.4	313	EB	[1941SMI]
	V	(273–348)	34.5	288		[1940STU/SAY]
	V		32.5	323	C	[1931FIO/GIN]
	V		30.8	353	C	[1931FIO/GIN]
	V		34.0	298		[1927NAG]
	V		30.3	360		[1927SUT/LAY]
	V		29.2	378		[1927SUT/LAY]
	V		28.0	398		[1927SUT/LAY]
	V		33.9	293		[1896GRI/MAR]
	V		32.4	323		[1896GRI/MAR]
C ₆ D ₆	[1076-43-3] FUS	benzene - d ₆	9.79	279.9	C	[1942ZIE/AND]
	V	(283–352)	34.2	298		[1953DAV/SCH]
C ₆ H ₆	[821-08-9] V	1,5-hexadien-3-yne (223–357)	40.4	238	A	[1987STE/MAL]
C ₆ H ₆	[10420-90-3] V	1,3-hexadien-5-yne (223–303)	44.0	238	A	[1987STE/MAL, 1954GEO/CAV]
C ₆ H ₆	[2809-69-0] TRS	2,4-hexadiyne (3–300)	1.0	117.9		[1982BAL/MRA]
	SUB	(282–333)	47 ± 2	307	MM	[1982BAL/MRA]
	V	(364–408)	42.5	298	EB	[1986MEY/MEY]
C ₆ H ₆ BrN	[615-36-1] FUS FUS	2-bromoaniline	16.14 20.04	304.1 305	DSC	[2006RIB/FER] [1983KHA/KHE]
	SUB		75.0 ± 1.4	298	C	[2006RIB/FER]
C ₆ H ₆ BrN	[591-19-5] FUS	3-bromoaniline	14.68	291		[1983KHA/KHE]
	V		63.4 ± 1.5	298	C	[2006RIB/FER]
C ₆ H ₆ BrN	[106-40-1] FUS FUS	4-bromoaniline	16.75 13.36	336 336	DSC	[2006RIB/FER] [1983KHA/KHE]
	SUB		79.4 ± 1.7	298	C	[2006RIB/FER]
C ₆ H ₆ ClN	[95-51-2] FUS FUS FUS	2-chloroaniline	12.38 8.81 11.89	269.2 271 271.1	DSC FPM	[2007STR/RUZ] [1983KHA/KHE] [1921SID/RUB]
	V		56.4 ± 1.6	298	C	[2005RIB/GOM]
	V	(288–327)	57.1 ± 0.5	298	GS	[2003VER/SCH]
	V	(397–482)	50.7	412	A	[1987STE/MAL]
	V	(287–336)	58.2 ± 1.4	311	TE, ME	[1985PIA/SCA]
	V	(294–330)	57.1 ± 1.0	312	TE, ME	[1985PIA/SCA]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₅ Cl	[108-42-9]	3-chloroaniline				
	FUS		12.0	263		[1983KHA/KHE]
	FUS		11.64	262.8	FPM	[1921SID/RUB]
	V		61.1 ± 2.8	298	C	[2005RIB/GOM]
	V	(291–340)	60.2 ± 0.1	298	GS	[2003VER/SCH]
	V	(398–573)	53.6	413	A	[1987STE/MAL, 1972DYK]
	V	(292–346)	60.3 ± 0.6	319	TE, ME	[1985PIA/SCA]
C ₆ H ₅ Cl	[106-47-8]	4-chloroaniline				
	FUS		20.47	342.8	DSC	[2007STR/RUZ]
	FUS		21.06	343.5	DSC	[2003VER/SCH]
	FUS		16.9	344		[1983KHA/KHE]
	FUS		20.1	343.7	FPM	[1921SID/RUB]
	SUB	(291–337)	80.5 ± 0.3	298	GS	[2003VER/SCH]
	SUB	(283–303)	90.7	293	ME	[1987STE/MAL, 1925SWA/MAC]
C ₆ H ₅ Cl	V	(346–374)	62.3 ± 0.5	298	GS	[2003VER/SCH]
	V	(363–505)	52.2	378	A	[1987STE/MAL]
C ₆ H ₄ Cl ₄	[41992-55-6]	α -3,4,5,6-tetrachlorocyclohexane				
	V	(353–399)	58.0	368	A	[1987STE/MAL]
C ₆ H ₄ Cl ₆	[319-84-6]	(1 α ,2 α ,3 β ,4 α ,5 β ,6 β)-1,2,3,4,5,6-hexachlorocyclohexane (α -hexachlorocyclohexane)				
	SUB	(313–363)	95.7	328	A	[1987STE/MAL, 1960JON]
	SUB	(324–344)	92.9	334	TE	[1947BAL]
	V	(343–453)	68.5	398	GC	[1990HIN/BID2]
C ₆ H ₄ Cl ₆	[319-85-7]	β -hexachlorocyclohexane (mp 314 °C)				
	SUB	(506–551)	103.7			[1989LUB/JAN]
	SUB	(313–363)	107	328	A	[1987STE/MAL, 1960JON]
	SUB	(368–390)	102.9	379	TE	[1947BAL]
C ₆ H ₄ Cl ₆	[58-89-9]	γ -hexachlorocyclohexane (lindane)				
	FUS		25.9	386.4	DSC	[1991SAB/AN]
	FUS		22.13	386.8	DSC	[1990DON/DRE]
	FUS		15.9	388.9	DSC	[1969PLA/GLA]
	SUB	(347–384)	89 ± 3	366		[2010VEC]
	SUB	(310–384)	92.4 ± 4.0	298	ME, TE	[1998GIU/BRU]
	SUB	(292–326)	97.7 ± 0.6	308	ME	[1996BOE/MAR]
	SUB	(243–303)	106.6 ± 0.9	273	GS	[1994WAN/SHU]
	SUB		90.1 ± 0.7	338	C	[1991SAB/AN]
	SUB		90.8 ± 0.7	298	C	[1991SAB/AN]
	SUB	(313–363)	99.2	328	A	[1987STE/MAL, 1960JON]
	SUB	(293–313)	88.9	303	GS	[1983SPE/CLI, 1970SPE/CLI]
	SUB	(293–313)	101.2	303		[1970SPE/CLI]
	SUB	(313–343)	89.7	328		[1960SCH/LEG]
	SUB	(333–365)	115.5		TE	[1947BAL]
C ₆ H ₄ Cl ₆	V	(387–428)	72 ± 2	408		[2010VEC]
	V	(343–453)	70.5	398	GC	[1990HIN/BID2]
C ₆ H ₄ Cl ₆	[319-86-8]	δ -hexachlorocyclohexane (mp 142 °C)				
	SUB	(313–363)	97.3	328	A	[1987STE/MAL, 1960JON]
	SUB	(328–358)	97.5			[1947BAL]
C ₆ H ₄ FN	[348-54-9]	2-fluoroaniline				
	V		52.0 ± 0.6	298	C	[2007RIB/FER]
C ₆ H ₄ FN	[372-19-0]	3-fluoroaniline				
	V		54.7 ± 0.6	298	C	[2007RIB/FER]
C ₆ H ₄ FN	[371-40-4]	4-fluoroaniline				
	V		54.8 ± 0.8	298	C	[2007RIB/FER]
C ₆ H ₄ F ₈ O	[77527-96-9]	1,1,2,2,3,3,4,4-octafluoro-5-methoxypentane				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(293–396)	44.8	308	I	[2002MUR/YAM]
C ₆ H ₆ F ₈ O ₂	[355-74-8] SUB	2,2,3,3,4,4,5,5-octafluoro-1,6-hexanediol	89.2 ± 8.4			[1974COX, 1977PED/RYL]
C ₆ H ₆ F ₈ O ₃	[485399-46-0] V	1,1'-oxybis[1,1,2,2-tetrafluoro-2-methoxyethane]	33.4			[2005MAR/AVA]
C ₆ H ₆ F ₉ N ₃ S	[63265-76-9] V	<i>N</i> -[<i>N</i> , <i>N</i> '-dimethyl- <i>S</i> -(trifluoromethyl)sulfonodiimidoyl]-1,1,1,3,3,3-hexafluoro-2-propanimine	32.6	426	I	[1977KIT/SHR2]
C ₆ H ₆ IN	[615-43-0] FUS FUS SUB	2-iodoaniline	19.38 13.95 81.3 ± 1.4	329.6 333 298	DSC DSC C	[2006RIB/FER2] [1983KHA/KHE] [2006RIB/FER2]
C ₆ H ₆ IN	[626-01-7] FUS FUS V	3-iodoaniline	14.0 14.5 67.5 ± 1.4	295.7 298 298	DSC DSC C	[1992BAB/HWA] [1983KHA/KHE] [2006RIB/FER2]
C ₆ H ₆ IN	[540-37-4] FUS FUS SUB	4-iodoaniline	16.94 15.1 84.8 ± 1.4	336 334 298	DSC DSC C	[2006RIB/FER2] [1983KHA/KHE] [2006RIB/FER2]
C ₆ H ₆ N ₂	[1119-85-3] V	3-hexenedinitrile (353–448)	49.4	368	A	[1987STE/MAL]
C ₆ H ₆ N ₂ O	[1452-77-3] FUS FUS SUB SUB	2-pyridinecarboxamide	19.1 16.82 93.1 ± 3.3 93.1	379.3 381 298 338	DSC DSC C ME	[2011CAS/RIB] [1960NEG/MIK2] [2001RIB/GON] [1987STE/MAL, 1960NEG/MIK, 1959HAR]
C ₆ H ₆ N ₂ O	[98-92-0] FUS FUS FUS FUS FUS FUS (I) FUS (II)	3-pyridinecarboxamide (nicotinamide)	23.7 22.58 20.5 25.4 23.2 26.5 20.1	401.2 401.7 401.6 401.2 401.4 397.8 379.0	DSC DSC DSC DTA DSC DSC DSC	[2015ALM/OLI] [2015SUN/YIN] [2014WU/DAN] [2013KAN] [2011CAS/RIB] [2011LI/BOU2] [2011LI/BOU2]
	FUS		23.8	403.8	DSC	[2009GOO/ROD]
	FUS		25.5	401.6	DSC	[2008NIC/BEL]
	FUS		26.94	402		[1960NEG/MIK2]
	SUB	(341–363)	110.7 ± 0.2	352	ME	[2015ALM/OLI]
	SUB	(341–363)	112.0 ± 0.2	298	ME	[2015ALM/OLI]
	SUB	(356–398)	111.4 ± 0.1	377	DM	[2015ALM/OLI]
	SUB	(356–398)	113.2 ± 0.1	298	DM	[2015ALM/OLI]
	SUB		121.2 ± 3.3	298	C	[2001RIB/GON]
	SUB	(363–393)	111.8	378	ME	[1987STE/MAL, 1960NEG/MIK, 1959HAR]
	V	(396–433)	84.5 ± 0.1	415	DM	[2015ALM/OLI]
	V	(396–433)	93.9 ± 1.9	298	DM	[2015ALM/OLI]
C ₆ H ₆ N ₂ O	[1453-82-3] FUS FUS FUS SUB SUB SUB	4-pyridinecarboxamide	23.6 24.5 26.81 117.0 ± 1.0 116.1 ± 1.5 99.9	429.8 428.6 431 298 298 397.5	DSC DSC DSC GS C ME	[2016VOL/BLO] [2011CAS/RIB] [1960NEG/MIK2] [2016VOL/BLO] [2001RIB/GON] [1987STE/MAL, 1960NEG/MIK, 1959HAR]

Note: Authors report a large uncertainty for form (I) corresponding to ± 3.7 kJ/mole

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₆ N ₂ O	[873-69-8]	2-pyridinealdoxime				
	FUS		19.98	388	DSC	[2007SHI/TAN3]
C ₆ H ₆ N ₂ O ₂	[88-74-4]	2-nitroaniline				
	FUS		19.25	342.8	DSC	[2015SIN/SIN]
	FUS		19.3	345.7	DSC	[1989OZA/MAT]
	FUS		16.11	344.4		[1996DOM/HEA, 1926AND/LYN]
	FUS		15.5	342.5	C	[1925KOH]
	SUB	(303–338)	87.8		TGA	[2011FEL/RAM]
	SUB	(313–342)	89.0 ± 0.7	298	GS	[1997VER3]
	SUB	(313–342)	87.2 ± 0.7	328	GS	[1997VER3]
	SUB		90 ± 3.0		ME, TE	[1985FER/PIA]
	SUB		82.4 ± 2	313		[1938WOL/WEG, 1960JON, 1935TRI]
	SUB		90 ± 4.2			[1958HOY/PEP, 1970COX/PIL]
	SUB	(310–319)	79.9 ± 1.7			[1934WOL/TRI]
	V	(423–553)	59.3	438	A	[1987STE/MAL]
	V	(377–558)	64.8	392		[1947STU]
C ₆ H ₆ N ₂ O ₂	[99-09-2]	3-nitroaniline				
	FUS		23.10	384.6	DSC	[2014TU/CHE]
	FUS		23.68	387.2	DSC	[1996DOM/HEA, 1990SIN/GUP]
	FUS		22.8	385.0	DSC	[1989OZA/MAT]
	FUS		23.68	385.0		[1926AND/LYN]
	FUS		23.4	385.0	C	[1925KOH]
	SUB	(323–383)	93.6		TGA	[2011FEL/RAM]
	SUB		108.3 ± 3		ME, TE	[1985FER/PIA]
	SUB	(320–384)	93.6 ± 0.7	351	ME	[1973MAL/GIG2]
	SUB	(320–384)	94.6 ± 0.3	351	C	[1973MAL/GIG2]
	SUB		96.5 ± 0.3	298	C	[1973MAL/GIG2]
	SUB	(288–343)	97.6	316	ME	[1958HOY/PEP, 1970COX/PIL]
	SUB	(332–341)	88.3 ± 1.7		TE	[1934WOL/TRI]
	SUB	(332–341)	88.7 ± 2.5			[1938WOL/WEG, 1960JON, 1935TRI]
V	(443–578)	64.9	458	A	[1985FER/PIA]	
C ₆ H ₆ N ₂ O ₂	[100-01-6]	4-nitroaniline				
	FUS		24.0	422.0	DSC	[1989OZA/MAT]
	FUS		21.09	420.2		[1996DOM/HEA, 1926AND/LYN]
	FUS		21.3	420.7	C	[1925KOH]
	SUB		98.0		TGA	[2011FEL/RAM]
	SUB	(298–318)	98.3	308	GC	[2002SAW/SHI]
	SUB		101.4 ± 1.3	298	ME	[1990RIB/RIB]
	SUB		101.5 ± 1.7	298	TE	[1990RIB/RIB]
	SUB		94.6		GS	[1987SHI/OHK, 1991HOR]
	SUB		107 ± 3		ME, TE	[1985FER/PIA]
	SUB		100.4 ± 2.1	298	ME	[1977FRA, 1990RIB/RIB]
	SUB		100.9 ± 0.6	298	ME	[1973MAL/GIG2]
	SUB		101.3 ± 0.7	298	C	[1973MAL/GIG2]
	SUB	(303–363)	109.3	333	ME	[1958HOY/PEP, 1970COX/PIL]
	SUB		99.3 ± 1.7	298	ME	[1956MAJ]
	SUB	(346–366)	97.5 ± 1.7	356	ME	[1956MAJ]
	SUB		100.7 ± 2.5	298	TE	[1938WOL/WEG]
	SUB		98.7 ± 2.5	361	TE	[1938WOL/WEG, 1960JON]
	SUB	(357–367)	103.3 ± 1.7	362		[1934WOL/TRI]
	V	(473–538)	77.9	488	A	[1987STE/MAL]
	V	(415–609)	70.0	430		[1947STU]
C ₆ H ₆ N ₂ O ₂	[1986-81-8]	3-pyridinecarboxamide <i>N</i> -oxide				
	SUB		119.2 ± 2.3	298	ME	[2001RIB/GON]
C ₆ H ₆ N ₂ O ₂	[38557-82-3]	4-pyridinecarboxamide <i>N</i> -oxide				
	SUB		125.3 ± 1.8	298	ME	[2001RIB/GON]
C ₆ H ₆ N ₂ O ₂	[5521-55-1]	2-methyl-5-pyrazine carboxylic acid				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₆ N ₂ O ₂		SUB	100.9 ± 1.5	298	C	[1997ACR/POW]
	[1445-69-8]	phthalhydrazide				
		SUB (428–450)	132.7 ± 0.7	439	ME	[2008RIB/CAB2]
		SUB (428–450)	139.8 ± 0.7	298	ME	[2008RIB/CAB2]
C ₆ H ₆ N ₂ O ₃	[1074-98-2]	3-methyl-4-nitropyridine <i>N</i> -oxide				
		SUB (345–392)	106.7 ± 2.0	298	ME	[1998RIB/MAT]
C ₆ H ₆ N ₂ S	[5346-38-3]	2-pyridinecarbothioamide				
		FUS	25.3	407.0	DSC	[2015BLO/SHA2]
		SUB (334–355)	86.3 ± 1.1	344	GS	[2015BLO/SHA2]
		SUB (334–355)	87.3 ± 1.1	298	GS	[2015BLO/SHA2]
C ₆ H ₆ N ₂ S	[2196-13-6]	4-pyridinecarbothioamide				
		SUB (373–394)	116.6 ± 1.4	383	GS	[2015BLO/SHA]
		SUB (373–394)	118.8 ± 1.4	298	GS	[2015BLO/SHA]
C ₆ H ₆ N ₄ O	[1006-08-2]	7-methylhypoxanthine				
		SUB	100.4 ± 13			[1978NOW/SZC]
C ₆ H ₆ N ₄ O	[875-31-0]	9-methylhypoxanthine				
		SUB (500–552)	84.0		HSA	[1965CLA/PES]
C ₆ H ₆ N ₄ O ₄	[119-26-6]	(2,4-dinitrophenyl)hydrazine				
		FUS	18.89	474.1	DSC	[2002MUS/RAZ]
C ₆ H ₆ N ₆ O ₆	[3058-38-6]	2,4,6-trinitro-1,3,5-benzenetriamine				
		SUB	182.4		DSC	[1990HWA/YOS]
		SUB	168	423		[2008RAI/BHA, 1979GAR/LAW]
		SUB (402–451)	168.2	417	LE	[1987STE/MAL, 1969ROS/DIC]
C ₆ H ₆ N ₆ O ₁₄	[866-65-9]	2,2,2-trinitroethyl 4,4,4-trinitrobutyrate				
		TRS	25.94	362.7		
		FUS	6.69	366.5	DSC	[1971ROS/HOL]
C ₆ H ₆ N ₁₂ O ₁₂	[135285-90-4]	hexanitrohexaazaisowurtzitane				
		TRS	1.97	428.2		
		TRS	5.91	435.2		
		FUS	Not reported		DSC, TGA	[2005TUR/VAC]
		TRS	7.25	442.2		
		FUS	Not reported		DSC	[1998LOB/BOH]
		SUB	226.8 ± 4.6	298	C	[2009MIR/KON]
C ₆ H ₆ O	[108-95-2]	phenol				
		FUS	10.54	314.2	DSC	[2014HAS/JIR]
		FUS	11.49	314.1	DSC	[1991WYR/PAL]
		FUS	11.51	314		[1972INO/LIA, 1996DOM/HEA]
		FUS (13–335)	11.5	314.06	AC	[1963AND/COU2]
		FUS	11.3		RC	[1927STE/JOH]
		FUS	11.4		AC	[1922STR/PAR, 1927STE/JOH]
		FUS	11.8			[1915BRI, 1927STE/JOH]
		SUB (263–298)	65.3 ± 3.3	280	HSA	[1975CHI]
		SUB (230–273)	69.7 ± 0.9	298	ME	[1971PAR/ROC]
		SUB (282–313)	68.7 ± 0.5		GS	[1960AND/BID, 1970COX/PIL]
		SUB (283–303)	68.2	293	ME	[1958SKL/MAR]
		SUB (273–310)	64.8	292		[1958BID/MAR]
		SUB (270–313)	68.1	292		[1948NIT/SEK2]
		SUB (278–305)	67.8		TE	[1947BAL, 1960JON]
		V (363–391)	53.2	378	EB	[2001CHY/FRA]
		V (393–433)	58.8	298	CGC	[1995CHI/HOS]
		V (455–655)	49.5	470	A	[1987STE/MAL]

Note: Authors of [2009MIR/KON] tabulate the experimental value as an enthalpy of vaporization; however, they report that the compound is crystalline and use the value to calculate the standard molar enthalpy of formation. Given the crystalline state and how the value was used, we have tabulated the value as an enthalpy of sublimation.

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(314–395)	57.4	329	A	[1987STE/MAL]
	V	(387–456)	50.9	402	A	[1987STE/MAL]
	V	(449–526)	46.8	464	A	[1987STE/MAL]
	V	(520–625)	43.8	535	A	[1987STE/MAL]
	V		51.1			[1986BAL/GNA]
	V	(383–473)	51.3	398	EB, GS	[1987STE/MAL, 1960AND/BID, 1972DYK, 1958BID/MAR]
	V	(380–455)	51.4	395		[1949DRE/SHR, 1949DRE/MAR, 1984BOU/FRI]
	V	(414–454)	48.1	434		[1947GOL/MAR]
	V	(278–305)	67.8	291		[1947BAL2]
C ₆ H ₆ O	[1192-62-7]	2-acetylfuran				
	FUS		15.5	301.6	DSC	[2009FLO/CAM]
	V		53.0 ± 0.6	298	C	[2009RIB/AMA]
C ₆ H ₆ OS	[88-15-3]	2-acetylthiophene				
	V		58.8 ± 1.2	298	C	[2007ROU/TEM]
	V		55.4 ± 5.4	298	CGC	[2007ROU/TEM]
C ₆ H ₆ OS	[1468-83-3]	3-acetylthiophene				
	FUS		18.9	333.6	DSC	[2006TEM/ROU]
	SUB	(268–284)	74.6 ± 1.1	298	ME	[2007ROU/TEM]
	V		55.2	298	CGC	[2007ROU/TEM]
C ₆ H ₆ OS	[13679-70-4]	5-methyl-2-thiophenecarboxyaldehyde				
	V		57.7 ± 1.3	298	C	[2008RIB/SAN2]
C ₆ H ₆ OS	[5834-16-2]	3-methyl-2-thiophenecarboxyaldehyde				
	V		56.2 ± 1.2	298	C	[2008RIB/SAN2]
C ₆ H ₆ O ₂	[620-02-0]	5-methyl-2-furaldehyde				
	V	(303–443)	49.7	373		[2014LOM/GIN2]
	V		59.4 ± 0.2	298	C	[2010RIB/AMA]
C ₆ H ₆ O ₂	[120-80-9]	1,2-dihydroxybenzene (catechol)				
	FUS		22.87	377.6	DSC	[2008VER/KOZ]
	FUS		18.55	377.6		[2000VER/SCH]
	FUS		22.54	377.7	DSC	[1997LEE/CHA]
	FUS		22.74	377.7	DTA	[1992MAN]
	FUS		22.01	376.9	DSC	[1989BRE/LIC]
	FUS		22.8	375.2	DTA	[1958VAR]
	FUS		22.76	377.5	C	[1926AND/LYN]
	SUB		88.3 ± 0.3	298	C	[2014GON/AGA]
	SUB		87.5 ± 0.3	332	C	[2014GON/AGA]
	SUB	(295–310)	80.0 ± 0.5	302	ME	[2006CHE/OJA]
	SUB		87.5 ± 0.3	298	C	[1991SAB/BUL]
	SUB		86.6 ± 1.6	298	C	[1984CAR]
	SUB		80.8			[1938WOL/WEG, 1960JON, 1935TRI]
	V	(378–389)	71.9 ± 0.8	298	GS	[2008VER/KOZ]
	V	(395–519)	63.1	410	A	[1987STE/MAL]
	V	(378–439)	61.2	393	GC	[1975KUN/LIL]
C ₆ H ₆ O ₂	[108-46-3]	1,3-dihydroxybenzene (resorcinol)				
	FUS		27.93	383.9	DSC	[2015OSS/JUS]
	FUS		19.28	382.3	DSC	[2015SIN/SIN3]
	FUS		21.68	383.2	DTA	[1992MAN]
	TRS		1.2	366.8		
	FUS		18.9	382.6	DSC	[1989BRE/LIC]
	TRS		1.37	369.0		
	FUS		20.89	382.7	DSC	[1987EBI/ASK]
	FUS		21.3	382.9	C	[1926AND/LYN]
	SUB		99.7 ± 0.4	298	C	[2014GON/AGA]
	SUB		99.3 ± 0.4	328	C	[2014GON/AGA]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
			85.3 ± 0.5	334	C	[1991SAB/BUL]
			87.5 ± 0.5	298	C	[1991SAB/BUL]
		(328–379)	92.3	353	GS	[1983BEN/BIE]
		(324–335)	93.3 ± 2.1			[1968DES/WIL]
		(283–323)	93.4	303		[1958HOY/PEP]
			95.4 ± 1.7			[1938WOL/WEG, 1960JON, 1935TRI]
		V	78.4 ± 1.3	298		[2008VER/KOZ]
		(419–550)	74.3	434	A	[1987STE/MAL]
		(392–463)	74.3	407	GC	[1987STE/MAL, 1975KUN/LIL]
C ₆ H ₆ O ₂	[123-31-9]	1,4-dihydroxybenzene (hydroquinone)				
	FUS		27.23	445.1	DSC	[2008VER/KOZ]
	FUS		27.2		DSC	[1999VER7]
	FUS		26.48	453	DSC	[1989BRE/LIC]
	FUS		27.11	445.1	C	[1926AND/LYN]
			102.0 ± 0.9	298	C	[2014GON/AGA]
			101.6 ± 0.9	328	C	[2014GON/AGA]
		(325–339)	100.6 ± 1.3	332	ME	[2006CHE/OJA]
			94.1 ± 0.5	298	C	[1991SAB/BUL]
			93.7 ± 0.5	334	C	[1991SAB/BUL]
		(341–400)	101.3		GS	[1983BEN/BIE]
			103.9 ± 1	342	ME, TE	[1981DEK/SMI]
		(298–346)	103.8	313		[1956MAG]
			90.1 ± 0.8			[1953SEK/SUZ]
		(326–345)	103.8		QF	[1927COO/COO]
		V	84.4 ± 0.7	298		[2008VER/KOZ]
		(448–559)	70.5	463	A	[1987STE/MAL]
(C ₆ H ₆ O ₂)- (C ₁₀ H ₈ O ₂)	[60706-28-7]	1,4-hydroquinone-1,4-naphthoquinone				
	SUB		98.7 ± 1	324	TE, ME	[1981DEK/SMI]
C ₆ H ₆ O ₂ S	[1918-77-0]	2-thiopheneacetic acid				
	FUS	(78–343)	16.26	335.7	AC	[2010GAO/SHI]
	FUS		14.0	337.4	DSC	[2006TEM/ROU]
		(292–307)	97.5 ± 1.4	298	ME	[2008TEM/ROU2]
C ₆ H ₆ O ₂ S	[6964-21-2]	3-thiopheneacetic acid				
	FUS		18.8	353.3	DSC	[2006TEM/ROU]
		(294–312)	100.9 ± 1.9	298	ME	[2008TEM/ROU2]
C ₆ H ₆ O ₂ S	[5380-42-7]	methyl 2-thiophenecarboxylate				
	V		57.6 ± 1.2	298	C	[2009RIB/SAN2]
C ₆ H ₆ O ₂ S	[23806-24-8]	methyl 2-thiophenecarboxylate				
	SUB	(312–334)	96.7 ± 0.4	323.2	ME	[2008RIB/SAN5]
	SUB	(312–334)	98.0 ± 0.4	298	ME	[2008RIB/SAN5]
C ₆ H ₆ O ₂ S	[1918-79-2]	5-methyl-2-thiophenecarboxylic acid				
	SUB	(316–338)	100.4 ± 0.3	327.2	ME	[2008RIB/SAN5]
	SUB	(316–338)	101.9 ± 0.3	298	ME	[2008RIB/SAN5]
C ₆ H ₆ O ₃	[87-66-1]	1,2,3-trihydroxybenzene (pyrogallol)				
	FUS		23.9	406.2	DSC	[2012SHA/RED]
	FUS		25.9	405.6	DSC	[2004VER/SCH]
	FUS		18.55	407.2	DSC	[1992RAJ/GEO]
		(326–370)	104	298	GS	[2004VER/SCH]
			116.9 ± 0.6	298	C	[1986RIB/RIB]
		(377–398)	89.1	387		[1934HIR]
		(425–582)	69.5	440	A	[1987STE/MAL, 1955VON/GEB]
C ₆ H ₆ O ₃	[533-73-3]	1,2,4-trihydroxybenzene				
	FUS		28.8	413.2	DSC	[2004VER/SCH]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		SUB	(341–382)	124.2 ± 0.6	298	GS	[2004VER/SCH]
		SUB		119.8 ± 1.6	298	C	[1986RIB/RIB]
C ₆ H ₆ O ₃	[108-73-6]	1,3,5-trihydroxybenzene					
		FUS		34.5	491.8	DSC	[2004VER/SCH]
		SUB	(355–382)	135.5 ± 1.3	298	GS	[2004VER/SCH]
		SUB		131.7 ± 1.0	298	C	[1986RIB/RIB]
C ₆ H ₆ O ₃		SUB	(383–406)	127.9		TE, ME	[1983DEW/BOW]
	[67-47-0]	5-hydroxymethylfurfural					
		FUS		19.8	308.5	DSC	[2009VER/EME]
C ₆ H ₆ O ₄		V	(314–368)	83.4 ± 0.2	298	GS	[2009VER/EME]
	[762-42-5]	butynedioic acid, dimethyl ester					
		V	(273–460)	56.3	288	A	[1987STE/MAL, 1972DYK, 1948RED/CHA5]
C ₆ H ₆ S	[108-98-5]	benzenethiol (thiophenol)					
		FUS		11.48	258.2		[1996DOM/HEA, 1936PAR/TOD]
		V	(333–471)	45.9	348		[1999DYK/SVO]
		V		43.5			[1986BAL/GNA]
		V	(385–486)	43.1	400	A, EB	[1987STE/MAL, 1966OSB/DOU, 1956SCO/MCC]
		V		43.8 ± 0.1	375	C	[1956SCO/MCC]
		V		42.6 ± 0.1	395	C	[1956SCO/MCC]
		V		41.8 ± 0.1	407	C	[1956SCO/MCC]
		V		41.3 ± 0.1	417	C	[1956SCO/MCC]
		V		47.5 ± 0.1	298	C	[1963MOR/SUN]
	V	(324–440)	44.3	339		[1955VON/GEB, 1984BOU/FRI]	
C ₆ H ₇ Cl ₂ N	[137-04-2]	2-chloroaniline hydrochloride					
		SUB	(373–473)	77.6	388	A	[1987STE/MAL, 1975KON/SEL]
C ₆ H ₇ BrN ₂ O ₂	[7033-39-8]	1,3-dimethyl-5-bromouracil					
		SUB	(293–333)	114.4 ± 0.7	314	ME	[2015BRU/IRR]
		SUB	(293–333)	114.9	298	ME	[2015BRU/IRR]
		SUB	(328–360)	110.3 ± 0.5	344	ME	[2015BRU/IRR]
		SUB	(328–360)	111.9	298	ME	[2015BRU/IRR]
C ₆ H ₇ Cl ₂ N	[141-85-5]	3-chloroaniline hydrochloride					
		SUB	(383–473)	71.3	398	A	[1987STE/MAL, 1975KON/SEL]
C ₆ H ₇ Cl ₂ N	[20265-96-7]	4-chloroaniline hydrochloride					
		SUB	(373–483)	77.8	388	A	[1987STE/MAL, 1975KON/SEL]
C ₆ H ₇ Cl ₃ OS	[76619-93-7]	2,3,3-trichloro-2-propenethioic acid, <i>O</i> -propyl ester					
		V	(383–433)	69.4		GC	[1980PIT/KIS]
C ₆ H ₇ FN ₂ O ₂	[3013-92-1]	1,3-dimethyl-5-fluorouracil					
		SUB	(288–326)	98.4 ± 0.7	305	ME	[2015BRU/IRR]
		SUB	(288–326)	98.6	298	ME	[2015BRU/IRR]
		SUB	(315–355)	96.5 ± 0.5	335	ME	[2015BRU/IRR]
		SUB	(315–355)	97.6	298	ME	[2015BRU/IRR]
		SUB	(317–339)	95.9 ± 0.6	328	ME	[2014AMA/SZT]
		SUB	(317–339)	96.8 ± 0.6	298	ME	[2014AMA/SZT]
		SUB	(338–373)	119 ± 4		TE	[2002BRU/POR]
C ₆ H ₇ F ₃ N ₂ O ₄	[400-58-8]	<i>N</i> -[<i>N</i> -(trifluoroacetyl)glycyl]glycine					
		SUB	(273–423)	67.0	288	A	[1987STE/MAL, 1960WEY/KLI]
C ₆ H ₇ IN ₂ O ₂	[40738-83-8]	1,3-dimethyl-5-iodouracil					
		SUB	(323–367)	116.2 ± 0.9	345	ME	[2015BRU/IRR]
		SUB	(323–367)	117.8	298	ME	[2015BRU/IRR]
		SUB	(354–392)	116.7 ± 0.7	373	ME	[2015BRU/IRR]
		SUB	(354–392)	119.3	298	ME	[2015BRU/IRR]
C ₆ H ₇ N	[15760-35-7]	3-methylenecyclobutanecarbonitrile					
		V	(348–435)	45.9	366	BG	[1971HAL/BAL]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₇ N	[31357-71-8]	bicyclo[2.1.0]pentane-1-carbonitrile				
	V	(332–390)	41.8	343	BG	[1971HAL/BAL]
C ₆ H ₇ N	[62-53-3]	aniline				
	FUS		9.16	265	DSC	[1972AHM/EAD2]
	FUS	(14–313)	10.54	267.1		[1962HAT/HIL, 1996DOM/HEA]
	FUS		10.92	267.3	C	[1942ZIE/AND]
	FUS		10.56	266.8		[1933PAR/HUF]
	V	(350–499)	51.0 ± 0.2	360	EB	[2002STE/CHI]
	V	(350–499)	48.0 ± 0.2	400	EB	[2002STE/CHI]
	V	(350–499)	45.2 ± 0.2	440	EB	[2002STE/CHI]
	V	(350–499)	42.2 ± 0.4	480	EB	[2002STE/CHI]
	V	(421–591)	45.8	444		[1992LEE/CHE]
	V	(273–338)	52.2	288	A	[1987STE/MAL]
	V	(304–485)	53.6	319	A	[1987STE/MAL]
	V	(373–458)	48.6	388	A	[1987STE/MAL]
	V	(455–523)	46.3	470	A	[1987STE/MAL]
	V	(313–386)	51.4	350		[1979MAH/SMI]
	V		55.8 ± 0.1	298	C	[1971KUS/WAD2]
	V	(288–298)	52.9	293		[1968RAV/DAN]
	V	(304–457)	54.0	319		[1962HAT/HIL]
	V		53.0	333	C	[1962HAT/HIL]
	V		40.4	456	C	[1923AWB/GRI]
C ₆ H ₇ N	[109-06-8]	2-methylpyridine				
	FUS		9.72	206.5		[1996DOM/HEA, 1963SCO/HUB]
	V	(308–441)	41.2 ± 0.1	320	EB	[1999CHI/KN1]
	V	(308–441)	38.8 ± 0.1	360	EB	[1999CHI/KN1]
	V	(308–441)	36.4 ± 0.1	400	EB	[1999CHI/KN1]
	V	(308–441)	33.7 ± 0.3	440	EB	[1999CHI/KN1]
	V	(323–373)	43.6	298	CGC	[1995CHI/HOS]
	V	(292–403)	42.0	307	EB	[1990LEN]
	V	(209–245)	46.9	230	A	[1987STE/MAL]
	V	(429–537)	36.5	444	A	[1987STE/MAL]
	V	(521–621)	35.4	536	A	[1987STE/MAL]
	V		42.5 ± 0.1	298	C	[1984MAJ/SVO2]
	V		41.6 ± 0.1	313	C	[1984MAJ/SVO2]
	V		40.7 ± 0.1	328	C	[1984MAJ/SVO2]
	V		39.8 ± 0.1	343	C	[1984MAJ/SVO2]
	V		38.3 ± 0.1	368	C	[1984MAJ/SVO2]
	V	(352–445)	39.1	367	EB, IPM	[1987STE/MAL, 1968OSB/DOU]
	V	(352–442)	39.1	367	EB	[1987STE/MAL, 1963SCO/HUB]
	V		38.8 ± 0.1	359	C	[1963SCO/HUB]
	V		37.7 ± 0.1	379	C	[1963SCO/HUB]
V		36.2 ± 0.1	402	C	[1963SCO/HUB]	
V	(337–403)	39.8	352	MG	[1953HER/MAR]	
V		35.4	402	C	[1901KAH]	
C ₆ H ₇ N	[108-99-6]	3-methylpyridine				
	FUS		14.18	255		[1996DOM/HEA, 1963SCO/GOO]
	SUB	(225–255)	62.2	240	A	[1987STE/MAL]
	V	(342–373)	44.5 ± 2.0	298	CGC	[2009LIP/CHI2]
	V	(314–457)	43.2 ± 0.1	320	EB	[1999CHI/KN1]
	V	(314–457)	40.9 ± 0.1	360	EB	[1999CHI/KN1]
	V	(314–457)	38.6 ± 0.1	400	EB	[1999CHI/KN1]
	V	(314–457)	36.1 ± 0.2	440	EB	[1999CHI/KN1]
	V	(374–458)	40.1	389	A	[1987STE/MAL]
	V	(450–570)	37.7	465	A	[1987STE/MAL]
	V	(561–645)	36.8	576	A	[1987STE/MAL]
	V		44.6 ± 0.1	298	C	[1984MAJ/SVO2]
	V		43.6 ± 0.1	313	C	[1984MAJ/SVO2]
	V		42.7 ± 0.1	328	C	[1984MAJ/SVO2]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		42.0 ± 0.1	343	C	[1984MAJ/SVO2]
	V		40.4 ± 0.1	368	C	[1984MAJ/SVO2]
	V	(347–458)	41.3	362	EB, IPM	[1987STE/MAL, 1968OSB/DOU]
	V	(347–458)	41.3	362	EB	[1987STE/MAL, 1963SCO/GOO]
	V		40.2 ± 0.1	372	C	[1963SCO/GOO]
	V		38.9 ± 0.1	393	C	[1963SCO/GOO]
	V		37.4 ± 0.1	417	C	[1963SCO/GOO]
	V	(354–418)	41.0	369	MG	[1953HER/MAR]
C ₆ H ₇ N	[108-89-4]	4-methylpyridine				
	SUB	(213–239)	62.7	226	A	[1987STE/MAL]
	V	(328–459)	43.4 ± 0.1	320	EB	[1999CHI/KNI]
	V	(328–459)	41.1 ± 0.1	360	EB	[1999CHI/KNI]
	V	(328–459)	38.8 ± 0.1	400	EB	[1999CHI/KNI]
	V	(328–459)	36.2 ± 0.2	440	EB	[1999CHI/KNI]
	V	(323–373)	44.7	298	CGC	[1995CHI/HOS]
	V	(348–460)	41.4	363	A	[1987STE/MAL]
	V	(348–367)	42.1	347	A	[1987STE/MAL]
	V	(381–460)	40.0	396	A	[1987STE/MAL]
	V	(452–573)	37.9	467	A	[1987STE/MAL]
	V	(564–646)	37.2	579	A	[1987STE/MAL]
	V		44.9 ± 0.1	298	C	[1984MAJ/SVO2]
	V		43.9 ± 0.1	313	C	[1984MAJ/SVO2]
	V		42.9 ± 0.1	328	C	[1984MAJ/SVO2]
	V		42.1 ± 0.1	343	C	[1984MAJ/SVO2]
	V		44.8 ± 0.1	298	C	[1981HOS/SCO]
	V	(283–298)	45.5	298		[1979ARN/CHA]
	V	(348–459)	41.4	363	EB, IPM	[1987STE/MAL, 1968OSB/DOU]
	V	(350–418)	41.3	365	MG	[1953HER/MAR]
C ₆ H ₇ N	[26555-56-6]	2-cyclopentene-1-carbonitrile				
	V		44.9 ± 0.1	298	C	[1970PRO/KRE]
(C ₆ H ₇ N)-(SO ₂)		aniline-sulfur dioxide complex				
	SUB	(277–323)	82.1	300		[1931HIL]
C ₆ H ₇ NO	[95-55-6]	2-aminophenol				
	FUS		26.74	448.7	DSC	[2011MEL/PIN]
	FUS		21.72	447.6		[2003HUA, 2005HUA/TAN]
	FUS		31.4	443.2	DSC	[2001ROT/GLA]
	FUS		25.4	449.2	DSC	[1996SAB/GOU]
	FUS		34.0	447.4	DSC	[1996DOM/HEA, 1989BRE/LIC]
	SUB		93.5 ± 0.8	332	C	[1996SAB/GOU]
	SUB		95.3 ± 0.7	337	C	[1996SAB/GOU]
	SUB		96.9 ± 0.6	298	C	[1996SAB/GOU]
	SUB		103.9 ± 0.9	298	C	[1986NUN/BAR]
C ₆ H ₇ NO	[591-27-5]	3-aminophenol				
	FUS		27.6	395.0	DSC	[2012SHA/RAI]
	FUS		21.95	396.8		[2003HUA, 2005HUA/TAN]
	FUS		23.9	390.7	DSC	[2001ROT/GLA]
	FUS		19.6	394.8	DSC	[1996SAB/GOU]
	FUS		22.98	399		[1991RAI/GEO]
	FUS		24.7	394.2	DSC	[1989BRE/LIC]
	SUB		98.8 ± 0.9	335	C	[1996SAB/GOU]
	SUB		101.6 ± 0.9	298	C	[1996SAB/GOU]
	SUB		104.7 ± 1.2	298	C	[1986NUN/BAR]
C ₆ H ₇ NO	[123-30-8]	4-aminophenol				
	FUS		29.26	463.5	DSC	[2002FAR/KAD]
	FUS		23.8	455.2	DSC	[2001ROT/GLA]
	FUS		26.0	462.5		[1996SAB/GOU]
	FUS		31.2	459.4	DSC	[1989BRE/LIC, 1996DOM/HEA]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	SUB		101.1 ± 0.7	335	C	[1996SAB/GOU]
	SUB		103.6 ± 0.7	298	C	[1996SAB/GOU]
	SUB	(423–459)	111.0	438	A	[1987STE/MAL]
	SUB		109.1 ± 1.4	298	C	[1986NUN/BAR]
	SUB	(403–430)	92.1	417	I	[1954DUN, 1960JON]
C ₆ H ₇ NO	[1121-25-1]	2-methyl-3-hydroxypyridine				
	SUB		89.3 ± 1.3	298	C	[1982SUR/SAI, 1986PED/NAY]
C ₆ H ₇ NO	[18615-86-6]	2-methyl-4-hydroxypyridine				
	SUB		113.0 ± 1.3	298		[1982SUR/SAI, 1986PED/NAY]
C ₆ H ₇ NO	[1121-78-4]	2-methyl-5-hydroxypyridine				
	SUB		96.2 ± 2.1	298	C	[1982SUR/SAI, 1986PED/NAY]
C ₆ H ₇ NO	[3279-76-3]	2-methyl-6-hydroxypyridine				
	SUB		92.0 ± 1.3	298	C	[1982SUR/SAI, 1986PED/NAY]
C ₆ H ₇ NO	[931-19-1]	2-methylpyridine <i>N</i> -oxide				
	SUB		92.9 ± 1.9	298	C	[2010CAB/MON]
	SUB		78.2 ± 2.2	298	C	[1995ACR/TUC]
	V	(329–355)	53.3 ± 0.5	298		[2010CAB/MON]
C ₆ H ₇ NO	[1003-73-2]	3-methylpyridine <i>N</i> -oxide				
	SUB		82.2 ± 2.4	298	C	[1995ACR/TUC]
C ₆ H ₇ NO	[1003-67-4]	4-methylpyridine <i>N</i> -oxide				
	SUB	(345–392)	85.3 ± 2.6	298	ME	[1998RIB/MAT]
	SUB	(316–341)	79.1 ± 1.3			[1995LEB/CHI]
C ₆ H ₇ NO	[1628-89-3]	2-methoxypyridine				
	V		45.1 ± 1.3	298	C	[2012AMA/RIB]
	V	(233–323)	41.8	298	ME	[1991AUE/WEB]
	V	(304–338)	40.5	319	A	[1987STE/MAL, 1974BEA/MUE]
C ₆ H ₇ NO	[620-08-6]	4-methoxypyridine				
	V		57.4 ± 1.3	298	C	[2012AMA/RIB]
	V	(233–323)	52.7	298	ME	[1991AUE/WEB]
Note: Authors of [1991AUE/WEB] refer to the value as an enthalpy of vaporization. The compound's melting point temperature falls within the temperature range of the measured VPs.						
C ₆ H ₇ NO	[694-85-9]	1-methyl-2(1 <i>H</i>)-pyridone				
	V	(353–399)	60.2	368	A	[1987STE/MAL, 1974BEA/MUE]
C ₆ H ₇ NO	[586-95-8]	4-pyridinemethanol				
	FUS	(79–380)	11.78	325.2	AC	[2005WAN/TAN]
C ₆ H ₇ NO	[1072-83-9]	2-acetylpyrrole				
	FUS		14.08	363	DSC	[2009FLO/CAM]
	SUB	(277–293)	81.3 ± 1.0	285	ME	[2009SAN/GOM]
	SUB	(277–293)	81.2 ± 1.0	298	ME	[2009SAN/GOM]
C ₆ H ₇ NO	[1072-82-8]	3-acetylpyrrole				
	SUB	(316–338)	93.2 ± 0.5	327	ME	[2009SAN/GOM]
	SUB	(316–338)	94.7 ± 0.5	298	ME	[2009SAN/GOM]
C ₆ H ₇ NO ₂	[7085-85-0]	ethyl α -cyanoacrylate				
	FUS	(13–330)	12.86	243.2	AC	[1991BYK/KIP]
C ₆ H ₇ NO ₂	[6973-60-0]	1-methyl-2-pyrrolicarboxylic acid				
	SUB	(305–327)	95.3 ± 0.7	316	ME	[2009SAN/RIB]
	SUB	(305–327)	96.2 ± 0.7	298	ME	[2009SAN/RIB]
C ₆ H ₇ NO ₂	[4277-63-8]	methyl 1-pyrrolicarboxylate				
	V		52.6 ± 1.1	298	C	[2013SAN/RIB4]
C ₆ H ₇ NO ₂	[1193-62-0]	methyl 2-pyrrolicarboxylate				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₇ NO ₂ S			85.4 ± 1.6	298	C	[2013SAN/RIB4]
	[98-10-2]	benzenesulfonamide	25.17	425.8	DSC	[2005MAT/MIR]
			115.3 ± 1.7	298	C	[2005MAT/MIR]
C ₆ H ₇ NO ₃ S	[121-57-3]	sulfanilic acid (4-aminobenzene sulfonic acid)				
			66.9			[1938WOL/WEG, 1960JON]
C ₆ H ₇ NS	[22581-72-2]	4-(methylthio)pyridine				
			17.57			[1974BEA/MUE]
		(347–383)	75.3 ± 3.8	365	B	[1974BEA/MUE]
C ₆ H ₇ NS		(346–383)	55.8	361	A	[1987STE/MAL, 1974BEA/MUE]
	[6887-59-8]	1-methyl-4-thiopyridone				
C ₆ H ₇ N ₃ O			15.90			[1974BEA/MUE]
		(440–465)	188.3 ± 9.2	452	B	[1974BEA/MUE]
	[54-85-3]	4-pyridinecarbonylhydrazine				
C ₆ H ₇ N ₃ O ₂			31.1	446.2	DSC	[2015BLO/SHA]
			27.91	445.8	DSC	[2012FOR/MEL, 2013MEL/BOG]
			28.39	445.1	DSC	[2009FRE/ARA]
		(358–382)	101.0 ± 1.1	298	GS	[2015BLO/SHA]
C ₆ H ₇ N ₃ O ₂	[3034-19-3]	2-hydrazino-1-nitrobenzene				
			124.7		DSC	[1990HWA/YOS]
			99.6		DSC	[1990HWA/YOS]
C ₆ H ₇ N ₅	[5142-22-3]	1-methyladenine				
		(443–465)	139.4 ± 5.1	454	ME	[2000ZIE]
		(446–484)	136.9 ± 2.8	465	ME	[2000ZIE]
C ₆ H ₇ N ₅	[1445-08-5]	2-methyladenine				
		(412–437)	120.6 ± 1.3	424	ME	[2000ZIE]
		(421–437)	122.8 ± 1.2	429	ME	[2000ZIE]
C ₆ H ₇ N ₅	[5142-23-4]	3-methyladenine				
		(392–412)	117.3 ± 1.1	402	ME	[2000ZIE]
		(395–411)	117.6 ± 3.1	403	ME	[2000ZIE]
			83.7 ± 9		HSA	[1978NOW/SZC]
C ₆ H ₇ N ₅	[443-72-1]	<i>N</i> -methyladenine				
		(395–425)	123.4 ± 2.1		ME	[1984ZIE/ZIE]
C ₆ H ₇ N ₅	[22387-37-7]	8-methyladenine				
		(424–455)	103.2 ± 2.4	439	ME	[2000ZIE]
C ₆ H ₇ N ₅	[700-00-5]	9-methyladenine				
		(381–411)	121.3 ± 4.6		ME	[1984ZIE/ZIE]
		(413–458)	121.7	428	HSA	[1987STE/MAL, 1965CLA/PES]
C ₆ H ₇ NO			92 ± 8		HSA	[1978NOW/SZC]
	[1192-58-1]	1-methyl-2-pyrrolicarboxaldehyde				
			55.8 ± 1.2	298	C	[2011SAN/RIB3]
C ₆ H ₈		<i>cis, anti, cis</i> -tricyclo[3.1.0.0 ^{2,4}]hexane				
		(273–329)	30.6	293		[1979LET/ORC]
		(273–329)	29.7	313		[1979LET/ORC]
C ₆ H ₈	[592-57-4]	1,3-cyclohexadiene				
		(10–300)	4.20	161		[1996DOM/HEA, 1976GEI/WOL]
		(307–364)	32.6	322	A, EB	[1987STE/MAL, 1973MEY/HOT]
		(304–322)	32.4	308	Static, MM	[1974LET/MAR]
C ₆ H ₈	[628-41-1]	1,4-cyclohexadiene				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	TRS	(10–300)	0.82	192		
	FUS	(10–300)	5.72	224		[1996DOM/HEA, 1976GEI/WOL]
	V	(304–360)	34.0	319	A	[1987STE/MAL]
	V	(304–322)	33.9	308	Static, MM	[1974LET/MAR]
C ₆ H ₈	[2612-46-6]	<i>cis</i> -1,3,5-hexatriene				
	V	(306–323)	33.3	314	A, MM	[1987STE/MAL, 1974LET/MAR]
C ₆ H ₈ ClN	[142-04-1]	aniline hydrochloride				
	SUB	(383–471)	87.5	398	A	[1987STE/MAL, 1975KON/SEL]
	V	(475–527)	75	501		[2016HU/WU]
C ₆ H ₈ ClN	[14401-92-4]	3-methylpyridine hydrochloride				
	V	(420–471)	68.7	435	A	[1987STE/MAL]
C ₆ H ₈ ClN	[14401-93-5]	4-methylpyridine hydrochloride				
	V	(437–473)	64.7	452	A	[1987STE/MAL]
C ₆ H ₈ Cl ₂ O ₄	[6941-69-1]	ethylene glycol, bischloroacetate				
	V	(385–557)	73.9	400	A	[1987STE/MAL, 1947STU]
C ₆ H ₈ F ₈ N ₄	[18273-26-2]	1,1,4,4-tetrakis(difluoroamino)cyclohexane				
	FUS		46.02	382.2	DSC	[2001OXL/SMI]
C ₆ H ₈ N ₂	[5910-89-4]	2,3-dimethylpyrazine				
	V		52.6 ± 1.7	298	C	[2003MOR/MIR]
C ₆ H ₈ N ₂	[123-32-0]	2,5-dimethylpyrazine				
	V		47.6 ± 2.7	298	CGC	[2010LIP/PLI]
	V	(342–373)	47.2 ± 2.2	298	CGC	[2009LIP/CHI2]
	V	(303–411)	44.5	357		[1995SAK/UEO]
C ₆ H ₈ N ₂	[111-69-3]	adiponitrile				
	FUS		18.0	275	DSC	[2007BAD/BLA]
	V	(348–523)	58.7	363	A	[1987STE/MAL]
	V	(296–314)	70.8	305		[1960WOO/MUR]
C ₆ H ₈ N ₂	[4597-87-9]	2-methylaminopyridine				
	V	(308–323)	49.0	316	A	[1987STE/MAL]
C ₆ H ₈ N ₂	[18364-47-1]	3-methylaminopyridine				
	V	(313–343)	57.2	326	A	[1987STE/MAL]
C ₆ H ₈ N ₂	[1121-58-0]	4-methylaminopyridine				
	V	(313–343)	54.1	328	A	[1987STE/MAL]
C ₆ H ₈ N ₂	[95-54-5]	1,2-diaminobenzene				
	FUS		18.6	374.7		[1997SAB/PER]
	FUS		23.1	373.9	DSC	[1997LEE/CHA, 1989BRE/LIC]
	SUB	(292–314)	89.7 ± 0.4	303	ME	[2011SAN/RIB]
	SUB	(292–314)	89.8 ± 0.4	298	ME	[2011SAN/RIB]
	SUB		85.5 ± 0.3	298	C	[1997SAB/PER]
C ₆ H ₈ N ₂	[108-45-2]	1,3-diaminobenzene				
	FUS		12.03	336.3		[1997SAB/PER]
	FUS		15.4	335.5	DSC	[1996DOM/HEA, 1989BRE/LIC]
	SUB	(301–323)	95.1 ± 0.4	312	ME	[2011SAN/RIB]
	SUB	(301–323)	95.5 ± 0.4	298	ME	[2011SAN/RIB]
	SUB		90.4 ± 0.4	298	C	[1997SAB/PER]
	V	(372–559)	63.7	387	A	[1987STE/MAL, 1947STU]
C ₆ H ₈ N ₂	[106-50-3]	1,4-diaminobenzene				
	FUS		20.12	414.3		[1997SAB/PER]
	FUS		24.86	416	DTA	[1992MAN]
	FUS		21.7	412.3	DSC	[1996DOM/HEA, 1989BRE/LIC]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		SUB	(310–332)	96.3 ± 0.4	321	ME	[2011SAN/RIB]
		SUB	(310–332)	96.8 ± 0.4	298	ME	[2011SAN/RIB]
		SUB		92.2 ± 0.2	298	C	[1997SAB/PER]
C ₆ H ₈ N ₂	[100-63-0]	phenyl hydrazine					
		FUS		16.43	292.8		[1996DOM/HEA, 1991ACR, 1911LOU/DUP]
		V	(413–518)	57.3	428	A	[1987STE/MAL, 1972DYK]
		V	(345–517)	59.2	360		[1947STU]
		V	(378–465)	57.2	393	T	[1942WIL/GIL]
C ₆ H ₈ N ₂	[13925-00-3]	ethylpyrazine					
		V		48.8 ± 1.9	298	C	[2003MOR/MIR]
C ₆ H ₈ N ₂ O ₂	[874-14-6]	1,3-dimethyluracil					
		FUS (I)		14.6	399		
		FUS (II)		18.4	395.2	DSC	[1996DOM/HEA, 1989SAK/IMA]
		FUS		23.1	392.5	DSC	[1984ZIE/ZIE2]
		SUB	(293–337)	96.3 ± 0.5	317	ME	[2015BRU/IRR]
		SUB	(293–337)	96.8	298	ME	[2015BRU/IRR]
		SUB	(293–337)	95.9 ± 0.9	348	ME	[2015BRU/IRR]
		SUB	(335–360)	97.4	298	ME	[2015BRU/IRR]
		SUB	(311–367)	115.8 ± 3.0	338	TE	[2000BRU/PIA]
		SUB	(340–368)	96.9 ± 1.2	298	C	[1989IMA/TAK]
		SUB		96.4 ± 1.4	298	C	[1985MUR/SAK]
		SUB	(313–363)	101.7 ± 2.1	338	QR	[1980TEP/YAN]
		SUB	(344–370)	92		HSA	[1965CLA/PES]
	V	(400–454)	46 ± 4.2	426	HSA	[1978NOW/SZC]	
C ₆ H ₈ N ₂ O ₂	[26305-13-5]	5,6-dimethyluracil					
		SUB	(416–457)	132.4 ± 1.4	298	GS	[2013NOT/EME]
C ₆ H ₈ N ₂ O ₂	[4160-72-9]	1-methylthymine					
		SUB	(378–428)	124.4 ± 1.3	398	QR	[1980TEP/YAN]
C ₆ H ₈ N ₂ O ₂	[4538-37-8]	1,4-diisocyanatobutane					
		FUS	(8–360)	20.76	231.2	AC	[2006SMI/KAN]
C ₆ H ₈ N ₂ O ₂	[4562-27-0]	2,4-dimethoxypyrimidine					
		FUS		16.64	279.6	DSC	[2014GAL/RIB]
		V		60.3 ± 1.3	298	C	[2014GAL/RIB]
C ₆ H ₈ N ₂ O ₂ S	[63-74-1]	4-aminobenzene sulphonamide (sulfanilamide)					
		FUS		23.3	435.4	DSC	[2002MAR/GOM, 2001MAR/GOM]
		TRS		1.63	407		
		FUS		24.02	439.3		[1996CIO/MEL]
		FUS		23.0	438.7		[1985OHM/LIP]
C ₆ H ₈ N ₂ O ₃	[769-42-6]	1,3-dimethylbarbituric acid					
		FUS		17.7	396.1	DSC	[2011TEM/ROU]
	SUB	(340–390)	92.3 ± 0.6	298	GS	[2011ROU/NOT]	
C ₆ H ₈ N ₂ O ₃	[24448-94-0]	5,5-dimethylbarbituric acid					
		FUS		37.9	549.3	DSC	[2011TEM/ROU]
		FUS		34.8	548.7	DSC	[2010ROU/NOT]
		SUB	(400–458)	115.8 ± 0.5	298	GS	[2010ROU/NOT]
C ₆ H ₈ N ₂ O ₈	[551-43-9]	1,4:3,6-dianhydromannitol dinitrate (isomannide dinitrate)					
		FUS		20.5	337.2	DSC	[1998HAT/SUZ]
C ₆ H ₈ N ₂ O ₈	[87-33-2]	1,4:3,6-dianhydro-(<i>d</i>)-glucitol dinitrate (isosorbide dinitrate)					
		FUS		27.63	341.7	DSC	[1998HAT/SUZ]
C ₆ H ₈ N ₂ O ₈	[38777-20-7]	1,4:3,6-dianhydroiditol dinitrate (isoidide dinitrate)					
		FUS		12.81	325.9	DSC	[1998HAT/SUZ]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₈ N ₄ O ₂	[4164-33-4] FUS	bis(2-cyanoethyl)- <i>N</i> -nitroamine		44.99	327	DTA [1987OYU/BRI]
C ₆ H ₈ N ₄ O ₈	[146028-82-2] FUS	1,1,4,4-tetranitrocyclohexane		108.8	489.2	DSC [2001OXL/SMI]
Note: Experimental enthalpy is abnormally large—compound may be decomposing						
C ₆ H ₈ N ₆ O ₈	[211108-51-9] FUS	1,3-dinitro-3(1',3'-dinitroazetid-3'-yl)azetidene		25.52	387.5	[1998MCK/FLO]
C ₆ H ₈ O	[930-68-7] V V	2-cyclohexen-1-one		45.0	366	EB [2006PAL/ORA]
		(351–445)	49.5 ± 0.4	298	EB [1997STE/CHI3]	
C ₆ H ₈ O	[625-86-5] V V V	2,5-dimethylfuran		30.4	345	[2012MEJ/SEG]
		(331–366)	32.3 ± 0.3	290	GS [1998VER/WEL]	
		(271–308)	31.8 ± 0.3	298	GS [1998VER/WEL]	
C ₆ H ₈ O ₂	[4935-01-7] V	methyl bicyclo[1.1.0]butane-1-carboxylate		37.3	318	BG [1971HAL/BAL]
C ₆ H ₈ O ₂	[504-02-9] SUB	1,3-cyclohexanedione		89.8 ± 1.1	298	C [1993PIL/PAR]
C ₆ H ₈ O ₂	[637-88-7] TRS TRS FUS TRS TRS FUS SUB SUB SUB	1,4-cyclohexanedione		6.20	319.9	AC [1983DEW/DEK]
		(80–370)	1.18	338.8		
		(80–370)	11.26	351.5		
		(80–370)	6.15	322.2		
		(80–370)	0.96	339.2		
		(80–370)	10.04	348.2	[1972ALV/BOR]	
			75.0 ± 1.0	298	C [1993PIL/PAR]	
			84.4	289	TE, ME [1983DEW/VAN]	
	84.2	298	[1983DEW/VAN]			
C ₆ H ₈ O ₂	[110-44-1] FUS	<i>(E, E)</i> -hexa-2,4-dienoic acid (sorbic acid)		18.76	405.3	DSC [2015FAN/ZHA]
C ₆ H ₈ O ₃	[17347-61-4] V	2,2-dimethylsuccinic acid anhydride		57.3	349	A [1987STE/MAL, 1947STU]
C ₆ H ₈ O ₃	[31468-33-4] V	2-methylglutaric acid anhydride		60.7	381	A [1987STE/MAL, 1947STU]
C ₆ H ₈ O ₃	[3658-77-3] FUS FUS	4-hydroxy-2,5-dimethyl-3(2 <i>H</i>)-furanone		18.70	355.2	DSC [2016XU/WAN]
			19.3	353.9	DSC [2015WAN/LI, 2015ZHU/WAN]	
C ₆ H ₈ O ₄	[624-49-7] FUS FUS SUB SUB SUB V	dimethyl fumarate		32.4	375.3	DSC [2003MAT/MIR3]
			35.15	375	[1996DOM/HEA, 1930WAS]	
			88.4 ± 1.6	298	C [2003MAT/MIR3]	
			NA		[1972LEB/KAT]	
			84.5 ± 1.7		[1934WOL/TRI]	
			(361–466)	53.8	376	A [1987STE/MAL]
C ₆ H ₈ O ₄	[624-48-6] FUS SUB SUB	dimethyl maleate		14.64	254	[1996DOM/HEA, 1930WAS]
			44.8		[1938WOL/WEG, 1960JON, 1935TRI]	
		(317–341)	41.8 ± 4.2		[1934WOL/TRI]	
			64.4 ± 1.6	298	[2003MAT/MIR3]	
	(385–421)	52.0	400	A [1987STE/MAL]		
	(318–478)	53.9	334	[1947STU]		

Note: There is a problem with the sublimation data—the temperature range is above the melting point temperature in [1930WAS]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₈ O ₄	[5445-51-2]	cyclobutane-1,1-dicarboxylic acid				
	FUS		15.8	433.2	DSC	[2011BOO/MON]
	SUB	(298–318)	84	308	ME	[2011BOO/MON]
	SUB		112.2 ± 0.7		C	[1983ALT/PIL]
C ₆ H ₈ O ₄	[3396-14-3]	cyclobutane-1,2-dicarboxylic acid				
	SUB		120.0 ± 0.9		C	[1983ALT/PIL]
C ₆ H ₈ O ₄	[95-96-5]	<i>(dl)</i> -3,6-dimethyl-1,4-dioxane-2,5-dione ((<i>DL</i>)-lactide)				
	FUS		24.7	397.5		[1996DOM/HEA, 1982KUL/LEB]
	SUB	(329–384)	91.6 ± 0.4	298	GS	[2009EME/VER2]
C ₆ H ₈ O ₄	[4511-42-6]	<i>(l)</i> 3,6-dimethyl-1,4-dioxane-2,5-dione ((<i>L</i>)-lactide)				
	FUS		16.21	370.4	DSC	[2013CHE/XIE]
	FUS		16.94	366.6		[1999LEB/KUL]
	SUB	(324–362)	86.2 ± 0.4	298	GS	[2009EME/VER2]
C ₆ H ₈ O ₄	[13076-17-0]	<i>(d)</i> -3,6-dimethyl-1,4-dioxane-2,5-dione ((<i>D</i>)-lactide)				
	FUS		16.21	371.0	DSC	[2013CHE/XIE]
C ₆ H ₈ O ₅	[3184-35-8]	2-oxohexanedioic acid				
	SUB	(281–301)	127.0		TPTD	[2005CHA/ZIE]
Note: Values based on TPTD method are not consistent with values determined by other experimental methods						
C ₆ H ₈ O ₅	[689-31-6]	3-oxohexanedioic acid				
	SUB	(307–329)	151		TPTD	[2005CHA/ZIE]
Note: Values based on TPTD method are not consistent with values determined by other experimental methods						
C ₆ H ₈ O ₆	[50-81-7]	<i>(l)</i> -ascorbic acid (vitamin C)				
	FUS		45.2	467.4	DSC	[2014SHA/SRE]
	FUS		37.0	464.0	DSC	[2012KLI/LEI]
	FUS		48.6	466.8	DSC	[2010PAR/LEE]
	FUS		45.6	466.7	DSC	[2003TAN]
Note: Author of [2003TAN] noted that melting point temperature and enthalpy of fusion were dependent on scan rate, suggesting that the compound exhibited some decomposition. The value of 45.6 kJ/mole was for the largest scan rate studied.						
	FUS		37.04	466.2	DSC	[1998MUR/BET]
C ₆ H ₈ O ₆	[32765-69-8]	glycerol triformate				
	V	(307–333)	78.5 ± 0.9	298	GS	[2010MAS/KRA]
C ₆ H ₈ O ₇	[77-92-9]	2-hydroxy-1,2,3-propanetricarboxylic acid (citric acid)				
	FUS		U83.3	431.7	DSC	[2014SHA/SRE]
	FUS		41.8	428.6	DSC	[2012KLI/LEI]
	FUS		40.32	427.8	DSC	[2012MEL/PIN]
	FUS		43.46	427	DSC	[2010BOO/BAR]
	FUS		45.86	430.5	DSC	[2010PAR/LEE]
	FUS		40.15	433.9	DSC	[2011WYR/HEB]
	FUS		40.34	428.8	DSC	[2001FOR/HEM]
C ₆ H ₈ S	[632-16-6]	2,3-dimethylthiophene				
	V	(353–473)	39.4	368	A	[1987STE/MAL, 1972DYK]
C ₆ H ₈ S	[638-00-6]	2,4-dimethylthiophene				
	V	(323–493)	41.4	338	A	[1987STE/MAL, 1972DYK, 1999DYK/SVO]
C ₆ H ₈ S	[638-02-8]	2,5-dimethylthiophene				
	FUS	(5–305)	8.19	210.6	AC	[1996DOM/HEA, 1965CAR/WES2]
	V		40.2 ± 0.9	298	C	[2008RIB/SAN3]
	V	(333–374)	39.7	348	I, A	[1987STE/MAL, 1971EON/POM, 1999DYK/SVO]
C ₆ H ₈ S	[632-15-5]	3,4-dimethylthiophene				
	V	(328–478)	41.1	343	A	[1987STE/MAL, 1972DYK, 1999DYK/SVO]
C ₆ H ₈ S	[872-55-9]	2-ethylthiophene				
	V		39.7 ± 0.9	298	C	[2007RIB/SAN]
	V	(333–374)	39.7	348	I, A	[1987STE/MAL, 1971EON/POM, 1999DYK/SVO]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₈ S	[1795-01-3] V	3-ethylthiophene (318–473)	40.7	333	A	[1987STE/MAL, 1972DYK]
C ₆ H ₉ ClO ₂	[1888-94-4] FUS	2-chloroethyl methacrylate	17.0	235.1	AC	[1985KAR/ABD, 1996DOM/HEA]
C ₆ H ₉ F ₃ O ₂	[367-64-6] V	butyl trifluoroacetate (343–377)	37.8	358	A, EB	[1987STE/MAL, 1969SHE/LAN]
C ₆ H ₉ F ₁₂ N ₂ O ₅ P	[30295-37-5] V	<i>O, O'</i> -(trimethoxyphosphoranylidene)bis[<i>N, N</i> -bis(trifluoromethyl)hydroxyamine]	42.1			[1970ELN/EME]
C ₆ H ₉ N	[4254-02-8] V	cyclopentanecarbonitrile (340–418)	48.1 ± 0.1	298	C	[1983FUC/HAL]
	V		43.4 ± 0.1	298		[1973KON]
	V		40.9	359	BG	[1971HAL/BAL]
	V		43.5 ± 0.1	298	C	[1970PRO/KRE]
C ₆ H ₉ N	[625-82-1] FUS	2,4-dimethylpyrrole (12–441)	9.6	268.5	AC	[1994CHI/HOS2]
C ₆ H ₉ N	[625-84-3] FUS	2,5-dimethylpyrrole (12–383)	9.3	280.9	AC	[1996DOM/HEA, 1988MES/TOD]
	V		(373–443)	49.5	388	A, IPM, EB
C ₆ H ₉ NO	[88-12-0] FUS	<i>N</i> -vinylpyrrolidone	15.28	286.2		[1997KUL/LEB2]
C ₆ H ₉ NO ₂	[1572-99-2] V	ethyl 2-cyanopropionate (283–323)	58.6 ± 0.3	298	GS	[1995VER/BEC]
C ₆ H ₉ NO ₆	[35993-37-4] FUS	isomannide mononitrate	20.64	344.8	DSC	[1998HAT/SUZ]
C ₆ H ₉ NO ₆	[16106-20-0] FUS	isosorbide-2-mononitrate	26.38	328	DSC	[1998HAT/SUZ]
C ₆ H ₉ NO ₆	[16051-77-7] FUS	isosorbide-5-mononitrate	22.36	364	DSC	[1998HAT/SUZ]
C ₆ H ₉ NS	[13623-11-5] FUS	2,4,5-trimethylthiazole	9.0	240.7		[1966MEY/MET]
C ₆ H ₉ N ₃	[443-48-1] FUS	2-methyl-5-nitro-1 <i>H</i> -imidazole-1-ethanol (metronidazole)	36.1	432.7	DSC	[2014AGA/MOS]
	FUS		32.7	434.0	DSC	[2010BUS/MEU]
C ₆ H ₉ N ₃	[767-15-7] SUB	2-amino-4,6-dimethylpyrimidine (290–312)	89.5 ± 0.5	301	ME	[2013GAL/RIB]
	SUB		(290–312)	89.5 ± 0.5	298	ME
C ₆ H ₉ N ₃	[461-98-3] SUB	4-amino-2,6-dimethylpyrimidine (309–337)	99.1 ± 0.6	323	ME	[2013GAL/RIB]
	SUB		(309–337)	99.6 ± 0.6	298	ME
C ₆ H ₉ N ₃ O	[7171-70-2] SUB	1,3,5-trimethyl-4-nitrosopyrazole	88.0 ± 2.0	298	C	[2001RIB/FER]
C ₆ H ₉ N ₃ O	[17634-60-5] SUB	1,5-dimethylcytosine (390–437)	132.8 ± 0.6		GS	[1998ZIE/WSZ]
C ₆ H ₉ N ₃ O	[6220-49-1] SUB	1, <i>N</i> -dimethylcytosine (401–426)	122.2 ± 0.3		GS	[1998ZIE/WSZ]
C ₆ H ₉ N ₃ O ₂	[71-00-1] SUB	<i>L</i> -histidine (392–492)	142 ± 8	442	LE	[1977GAF/PIE]
C ₆ H ₉ N ₃ O ₂	[20555-80-0] SUB	1-methyl- <i>N</i> 4-methoxycytosine (316–325)	107.6 ± 0.3		ME	[1999ZIE/PER]
	SUB		(320–357)	106.9 ± 0.4		GS

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References	
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)				
C ₆ H ₉ N ₃ O ₂		SUB	106.4 ± 0.8			[1998ZIE/WSZ]	
	[6220-53-7]	SUB	1,5-dimethyl- <i>N</i> -hydroxycytosine (357–394)	115.2 ± 0.6	GS	[1998ZIE/WSZ]	
C ₆ H ₉ N ₃ O ₂	[36315-01-2]	FUS	2-amino-4,6-dimethoxypyrimidine	29.85		[2003SUN/SON]	
C ₆ H ₉ N ₃ O ₂	[6642-31-5]	SUB	6-amino-1,3-dimethyluracil (409–426)	146.4 ± 4.6	ME	[2003ZIE/SZT]	
		SUB	(402–418)	144.3 ± 4.1	ME	[2003ZIE/SZT]	
		SUB		148.7	ME	[2003ZIE/SZT]	
C ₆ H ₉ N ₃ O ₃	[877-89-4]	FUS (β)	2,4,6-trimethoxy-1,3,5-triazine	18.1		[2004FRI/KAP]	
		FUS (γ)		11.4		[2004FRI/KAP]	
		TRS	(298–523)	3.9	340.2	DSC	
		FUS	(298–523)	18.1	395.2	DSC	
C ₆ H ₉ N ₃ O ₃		SUB		90.3 ± 1.0	298	C	[1989IMA/TAK, 1985MUR/SAK]
		FUS	6-methoxy-3,5-dimethyl-tetrahydrotriazine-2,4-dione	12.7	363.2		[2000HAN/BOT, 2004FRI/KAP]
[Note: Compound rearranges shortly after melting]							
C ₆ H ₉ N ₃ O ₃	[827-16-7]	SUB	trimethyl isocyanurate (330–346)	86.6 ± 1.3	338	C	[1988IMA/MUR]
		SUB		88.2 ± 1.3	298	C	[1988IMA/MUR]
		SUB		88.2 ± 1.3	298	C	[1989IMA/TAK, 1985MUR/SAK]
C ₆ H ₉ N ₃ O ₃	[1422829-45-5]	V	3-butyl-4-nitrofurazan	60.0 ± 0.7	298	C	[2012KON/MAT]
C ₆ H ₉ P	[3746-01-8]	V	trivinylphosphine (313–341)	37.2	327		[1959KAE/STO]
		V	(289–334)	33.7	304		[1957MAI/SEY, 1984BOU/FRI]
C ₆ H ₁₀	[285-58-5]	V	<i>cis</i> -bicyclo[3.1.0]hexane (273–300)	33.7	286	A	[1987STE/MAL]
		V		33.5 ± 0.4	298	EB	[1970CHA/MCN]
C ₆ H ₁₀	[5685-46-1]	V	bicyclopropyl	31.7 ± 0.5	298	C	[2007PAS/KUZ]
C ₆ H ₁₀	[3664-56-0]	V	1,2,2-trimethylcyclopropene	27.9 ± 1.4	298	C	[2007PAS/KUZ]
		V		26.8 ± 1.7	298		[1986PIM/DOM, 2007PAS/KUZ]
C ₆ H ₁₀	[110-83-8]	TRS	cyclohexene	4.23	138.7		
		FUS	(12–300)	3.28	169.7	AC	[1996DOM/HEA, 1977HAI/SUG]
		TRS		4.25	138.7		
		FUS		3.29	169.7		[1996DOM/HEA, 1948HUF/EAT]
		TRS		4.08	138.7		
		FUS		3.29	169.0		[1996DOM/HEA, 1930PAR/HUF2]
		V	(315–356)	32.8	330		[2009MAR/AUC]
		V	(310–356)	32.9	325		[2004STE/SUN]
		V	(312–356)	32.6	327		[2001SEG/LAM]
		V	(285–357)	33.5 ± 0.5	298	EB	[1996STE/CHI3]
		V	(285–357)	32.3 ± 0.5	320	EB	[1996STE/CHI3]
		V	(285–357)	30.2 ± 0.5	360	EB	[1996STE/CHI3]
		V	(309–365)	32.7	324	A, EB	[1987STE/MAL, 1973MEY/HOT]
		V	(305–322)	33.1	308	Static, MM	[1974LET/MAR]
		V		32.7 ± 0.1	313	C	[1973SVO/VES]
		V		32.2 ± 0.1	323	C	[1973SVO/VES]
	V		31.7 ± 0.1	333	C	[1973SVO/VES]	
	V		31.2 ± 0.1	343	C	[1973SVO/VES]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		30.7 ± 0.1	353	C	[1973SVO/VES]
	V	(285–357)	33.7	300	MM	[1950FOR/CAM]
	V	(229–292)	32.6	300		[1941LIS]
C ₆ H ₁₀	[693-89-0]	1-methylcyclopentene				
	V		32.6 ± 0.2	298	GCC	[1979FUC/PEA]
	V	(268–403)	33.4	283	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₀	[1120-62-3]	3-methylcyclopentene				
	V		31.0 ± 0.2	298	GCC	[1979FUC/PEA]
	V	(263–392)	32.1	278	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₀	[1759-81-5]	4-methylcyclopentene				
	V	(271–403)	33.2	286	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₀	[1489-61-8]	1,3-dimethylcyclobutene				
	V	(269–296)	31.3	282	A	[1987STE/MAL, 1965FRE/MAR]
C ₆ H ₁₀	[513-81-5]	2,3-dimethyl-1,3-butadiene				
	V	(273–342)	32.2	288	A	[1987STE/MAL, 1955CUM/MCL]
C ₆ H ₁₀	[592-48-3]	<i>trans</i> -1,3-hexadiene				
	V	(299–319)	32.1	309	A, MM	[1987STE/MAL, 1974LET/MAR]
C ₆ H ₁₀	[7319-00-8]	<i>trans</i> -1,4-hexadiene				
	V	(304–323)	30.2	313	A, MM	[1987STE/MAL, 1974LET/MAR]
C ₆ H ₁₀	[592-42-7]	1,5-hexadiene				
	V	(299–333)	29.4	314	A	[1987STE/MAL]
	V	(300–323)	28.6	312	Static, MM	[1974LET/MAR]
	V	(273–333)	30.5	288	A	[1987STE/MAL, 1955CUM/MCL, 1972DYK]
C ₆ H ₁₀	[5194-51-4]	<i>trans trans</i> -2,4-hexadiene				
	V	(304–354)	33.2	319	A	[1987STE/MAL]
	V	(305–323)	33.2	308	Static, MM	[1974LET/MAR]
C ₆ H ₁₀	[693-02-7]	1-hexyne				
	V	(273–363)	33.6	298	Static	[2011NEG/KAC]
	V	(250–290)	33.5	270	MM	[1981CHI/HYM]
	V	(237–287)	34.2	262	HSA	[1981CHI/HYM]
	V	(265–391)	33.4	280	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₀	[764-35-2]	2-hexyne				
	V	(273–363)	35.9	298	Static	[2011NEG/KAC]
	V	(283–313)	35.8	298	Static	[2007BOU/BEL]
	V	(283–313)	35.9	298	Static	[2006BOU/BEL]
C ₆ H ₁₀	[764-35-2]	3-hexyne				
	V	(273–363)	36.0	298	Static	[2011NEG/KAC]
	V	(253–354)	30.5	268	A	[1987STE/MAL]
	V	(253–298)	31.6	275	T	[1965RON/HAR]
C ₆ H ₁₀ Br ₂	[7429-37-0]	<i>trans</i> -1,2-dibromocyclohexane				
	V	(350–416)	53.3	365	A	[1987STE/MAL, 1969AND/BRA]
C ₆ H ₁₀ ClFO ₂	V	3-fluorobutyric acid, 2-chloroethyl ester				
		(273–333)	60.4	288	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₀ ClF ₃ O	[358-36-1]	2-chloro-1,1,2-trifluoroethyl butyl ether				
	V		45.1 ± 0.1	298	C	[1984MAJ/UCH]
	V		43.9 ± 0.1	313	C	[1984MAJ/UCH]
	V		42.8 ± 0.1	328	C	[1984MAJ/UCH]
	V		41.6 ± 0.1	343	C	[1984MAJ/UCH]
C ₆ H ₁₀ Cl ₂	[2108-92-1]	1,1-dichlorocyclohexane				
	TRS		9.16	225		
	FUS		1.47	236		[1999KAB/KOZ]
	V	(335–444)	43.5	350	A	[1987STE/MAL, 1951CAR/KUB]
C ₆ H ₁₀ Cl ₂	[10498-35-8]	<i>cis</i> -1,2-dichlorocyclohexane				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(364–480)	45.8	379	A	[1987STE/MAL, 1951CAR/KUB]
C ₆ H ₁₀ Cl ₂	[822-86-6]	<i>trans</i> -1,2-dichlorocyclohexane				
	V	(344–462)	45.8	359	A	[1987STE/MAL, 1951CAR/KUB]
C ₆ H ₁₀ Cl ₂	[19398-57-3]	1,4-dichlorocyclohexane				
	V	(353–406)	47.8	368	A	[1987STE/MAL]
C ₆ H ₁₀ Cl ₂ O ₂	[37079-08-6]	isobutyl dichloroacetate				
	V	(301–456)	51.4	316	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₀ F ₂ O ₂		3-fluorobutyric acid, 2-fluoroethyl ester				
	V	(273–333)	54.8	288	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₀ N ₂	[35203-44-2]	1-propylimidazole				
	V	(279–341)	61.1 ± 0.2	298	GS	[2011EME/POR]
C ₆ H ₁₀ N ₂	[4532-96-1]	<i>N</i> -isopropylimidazole				
	V	(284–323)	58.4 ± 0.3	298	GS	[2015VER/ZAI3]
C ₆ H ₁₀ N ₂	[21202-52-8]	1-ethyl-2-methylimidazole				
	V	(294–363)	60.4 ± 0.3	298	GS	[2011EME/POR2]
C ₆ H ₁₀ N ₂ O	[25926-96-9]	2,3-diazabicyclo[2.2.2]oct-2-ene <i>N</i> -oxide				
	TRS		5.02	359.3		
	TRS		8.05	399.3		
	FUS		3.84	438	DSC	[1980BYS]
C ₆ H ₁₀ N ₂ O	[2304-58-7]	5-cyanopentamide				
	FUS		30.1			[1971PRY/EFR]
C ₆ H ₁₀ N ₂ O ₂	[7491-74-9]	2-oxo-1-pyrrolidineacetamide (piracetam)				
	FUS (I)		26.6	424.5		
	FUS (III)		30.4	412.3	DSC	[2016TOS/CEO]
	TRS (II to I)		3.4	391.2		
	FUS (I)		25.4	427.2		
	TRS (III to I)		3.6	398.2		
	FUS (I)		25.5	427.2	DSC	[2012MAH/SEA]
	TRS (II to I)		3.37	393.3		
	TRS (III to I)		3.76	398.4	DSC	[2012MAH/RAS]
	TRS (II to I)		3.23	387.9		
	FUS (I)		25.0	425.9	DSC	[2011PIC/DIO]
	TRS (III to I)		3.73	425.9		
	FUS (I)		26.0	425.9	DSC	[2011PIC/DIO]
	FUS (I)		25.59	426		
	FUS (III)		29.85	412	DSC	[1996CEO/AGA]
	FUS (I)		25.7	426.0		
	FUS (III)		29.3	412.0		[1994KUH/BUR, 2016TOS/CEO]
	SUB (II)		120.8 ± 1.8	365	C	[2011PIC/DIO]
	SUB (II)		123.8 ± 1.8	298	C	[2011PIC/DIO]
	SUB (II)		122.5 ± 1.4	298	ME	[2011PIC/DIO]
C ₆ H ₁₀ N ₂ O ₂	[5076-82-4]	1,4-dimethyl-2,5-piperazinedione (sarcosine anhydride)				
	FUS		22.04	418.2	DSC	[1997ABA/PAL]
	SUB	(329–351)	102.5 ± 0.5	340	ME	[2013AMA/SAN]
	SUB	(329–351)	103.6 ± 0.5	298	ME	[2013AMA/SAN]
C ₆ H ₁₀ N ₂ O ₂	[5625-46-7]	3,6-dimethyl-2,5-piperazinedione				
	FUS		30.6	556.1	DSC	[1997ABA/PAL]
	SUB	(388–410)	126.4 ± 1.0	399	ME	[2013SAN/AMA]
	SUB	(388–410)	130.4 ± 1.0	298	ME	[2013SAN/AMA]
C ₆ H ₁₀ N ₂ O ₂	[62613-82-5]	4-hydroxy-2-oxo-1-pyrrolidine amide				
	FUS		34.69	445.3	DSC	[2016LI/DU]
C ₆ H ₁₀ N ₆ O ₉	[28464-26-8]	<i>N</i> -(2,2-dinitropropyl)-2,2-dinitro- <i>N</i> -nitroso-1-propanamine				
	SUB	(323–336)	110.9 ± 8		ME	[1973PEP/GAF, 1977PED/RYL]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₀ N ₆ O ₁₀	[28464-24-6] SUB	<i>N</i> -(2,2-dinitropropyl)-2,2-dinitro- <i>N</i> -nitro-1-propanamine (398–423)	99.2 ± 0.8		ME	[1973PEP/GAF]
C ₆ H ₁₀ O	[279-49-2] TRS TRS FUS	7-oxabicyclo[2.2.1]heptane	4.86 0.98 0.71	180.5 218.5 244	DSC	[1998PAR/GIL]
C ₆ H ₁₀ O	[1462-03-9] FUS	1-methylcyclopentanol	8.41	310.2		[1985WIB/WAS]
	SUB (cryst III)	(253–281)	73.7 ± 0.4	267	ME	[1997BLO/KAB]
	SUB (cryst III)		67.0 ± 0.2	298		[1997BLO/KAB]
	SUB (cryst III)		67.4 ± 0.2	291	C	[1997BLO/KAB]
	V	(354–407)	45.7	369	A	[1987STE/MAL]
C ₆ H ₁₀ O	V V	cyclopentenyl methyl ether (274–313) (274–313)	42.3 ± 0.8 42.1 ± 0.8	294 298	GS GS	[1998VER/WEL] [1998VER/WEL]
C ₆ H ₁₀ O	[2270-61-3] V	2,3-dihydro-4-methyl-2 <i>H</i> -pyran (304–392)	38.1	319	A	[1987STE/MAL, 1968KAC/NEM, 1984BOU/FRI]
C ₆ H ₁₀ O	[35656-02-1] V	methylenetetrahydro-2 <i>H</i> -pyran (339–382)	36.8	354	A	[1987STE/MAL, 1971LES/KHR]
C ₆ H ₁₀ O	[108-94-1] TRS FUS TRS FUS	cyclohexanone (14–178) (14–178)	8.66 1.33	220.8 245.2	AC	[1980NAK/SUG]
	TRS		8.74	220.6		
	FUS		1.36	244.6		[1974VAN/OON]
	SUB	(243–265)	49.3	254		[1948NIT/SEK2]
	V	(343–427)	43.1	358	EB	[2006TEO/BAR]
	V	(343–383)	46.6 ± 0.4	298	CGC	[1995CHI/HOS]
	V	(318–428)	44.0	333		[1993AUC/MON]
	V		44.4 ± 0.1	308	C	[1992SVO/KUB]
	V		44.0 ± 0.1	313	C	[1992SVO/KUB]
	V		43.4 ± 0.1	323	C	[1992SVO/KUB]
	V		43.1 ± 0.1	328	C	[1992SVO/KUB]
	V		42.2 ± 0.1	338	C	[1992SVO/KUB]
	V		41.8 ± 0.1	343	C	[1992SVO/KUB]
	V		41.4 ± 0.1	348	C	[1992SVO/KUB]
	V		42.3 ± 0.2		GC	[1989AZA]
	V	(345–458)	42.2	360	EB	[1987AMB/GHI2]
	V	(395–426)	40.4	410		[1984CAS/FRA2]
	V	(296–368)	43.8	330		[1983MAR/SHV]
	V	(381–446)	40.5	400		[1983MAR/SHV]
	V	(362–439)	41.5	377	A, EB	[1987STE/MAL, 1973MEY/HOT]
	V	(293–353)	44.9 ± 0.6	298	VP	[1972WOL]
	V		45.1 ± 0.1	298	C	[1968PLA/WIL]
	V	(273–298)	40.3	286		[1938RAD/ALE]
C ₆ H ₁₀ O	[109-49-9] V V V V	5-hexen-2-one (317–440) (317–440) (317–440) (317–440)	42.1 ± 0.1 39.4 ± 0.2 36.6 ± 0.3 33.5 ± 0.6	320 360 400 440	EB EB EB EB	[2002STE/CHI5] [2002STE/CHI5] [2002STE/CHI5] [2002STE/CHI5]
	V	(449–561)	34.6	464	A	[1987STE/MAL]
C ₆ H ₁₀ O	[141-79-7] V	mesityl oxide	35.2	401		[1898LOU, 1997STE/CHI]
[Note: May be a mixture of 2-methyl-1-penten-4-one and 4-methyl-3-penten-2-one]						
C ₆ H ₁₀ O	[3744-02-3] V	2-methyl-1-penten-4-one (389–461)	36.9	404	A	[1987STE/MAL]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(286–461)	41.9	298		[1975AMB/ELL]
	V	(306–398)	41.1	321	MM	[1987STE/MAL, 1947STR/MON, 1972DYK]
C ₆ H ₁₀ O	[141-79-7]	4-methyl-3-penten-2-one				
	V	(303–442)	42.7 ± 0.3	298	EB	[1997STE/CHI]
	V	(303–442)	41.4 ± 0.3	320	EB	[1997STE/CHI]
	V	(303–442)	39.1 ± 0.3	360	EB	[1997STE/CHI]
	V	(303–442)	36.5 ± 0.3	400	EB	[1997STE/CHI]
	V	(303–442)	33.5 ± 0.6	440	EB	[1997STE/CHI]
	V	(343–383)	44.8	298	CGC	[1995CHI/HOS]
	V	(399–471)	37.8	414	A	[1987STE/MAL]
	V	(292–471)	43.3	298		[1975AMB/ELL]
	V	(313–405)	41.5	328	MM	[1987STE/MAL, 1947STR/MON, 1972DYK]
C ₆ H ₁₀ O	[6728-26-3]	<i>(E)</i> -2-hexenal				
	V	(374–446)	38.6	390		[2014MEN/BEJ]
C ₆ H ₁₀ O	[286-20-4]	cyclohexene oxide (1,2-epoxycyclohexane)				
	TRS	(10–300)	9.54	193.1		
	FUS	(10–300)	1.06	238.1	AC	[1980NAK/SUG]
C ₆ H ₁₀ O ₂	[765-85-5]	methyl cyclobutanecarboxylate				
	V		44.2 ± 0.2		GS	[1998VER/KUM]
	V		44.7 ± 0.1	298	C	[1983FUC/HAL]
	V	(319–378)	41.4	340	BG	[1971HAL/BAL]
C ₆ H ₁₀ O ₂	[4606-07-9]	cyclopropanecarboxylic acid ethyl ester				
	V	(278–308)	44.0 ± 0.5		GS	[1998VER/KUM]
C ₆ H ₁₀ O ₂	[106-92-3]	allyl glycidyl ether				
	V	(323–420)	47.0	338	A	[1987STE/MAL]
C ₆ H ₁₀ O ₂	[123-20-6]	butyric acid, vinyl ester				
	V	(365–387)	39.3	376	A	[1987STE/MAL]
C ₆ H ₁₀ O ₂	[1072-96-4]	4-vinyl-1,3-dioxane				
	V	(306–416)	54.5	321	A	[1987STE/MAL, 1972LES/CHE]
C ₆ H ₁₀ O ₂	[502-44-3]	ϵ -caprolactone				
	FUS	(14–328)	13.82	272	AC	[1991ACR, 1983LEB/YEV]
	V	(283–353)	60.5 ± 0.8	298	GS	[2010EME/VER]
	V	(283–343)	U38.2	298		[2008BIA/CEZ]
	V	(395–436)	54.0 ± 0.2	415	EB	[1991WIB/WAL]
	V	(395–436)	62.0 ± 1.3	298	EB	[1991WIB/WAL]
C ₆ H ₁₀ O ₂	[823-22-3]	δ -hexanolactone				
	V	(283–343)	58.1	298		[2008BIA/CEZ]
	V	(283–353)	60.9 ± 0.1	298	GS	[2007EME/KOZ]
C ₆ H ₁₀ O ₂	[695-06-7]	γ -caprolactone				
	V		57.4 ± 3.7	298	CGC	[2014KOZ/GOB]
	V	(283–353)	57.2 ± 0.3	298	GS	[2008EME/KOZ, 2009EME/VER]
	V	(243–298)	55.3 ± 0.6	298		[2004COV/MOK, 2008EME/KOZ]
C ₆ H ₁₀ O ₂	[924-50-5]	methyl 3-methylbut-2-enoate				
	V	(274–304)	46.9 ± 0.2	298	GS	[2008EME/TOK]
C ₆ H ₁₀ O ₂	[10544-63-5]	ethyl crotonate				
	V	(329–420)	47.1	344	A	[1987STE/MAL]
C ₆ H ₁₀ O ₂	[97-63-2]	ethyl methacrylate				
	V	(285–390)	38.3	300	A	[1987STE/MAL]
C ₆ H ₁₀ O ₂	[3123-97-5]	5,5-dimethyldihydro-2(3 <i>H</i>)-furanone				
	V	(311–480)	52.7	326	A	[1987STE/MAL]
C ₆ H ₁₀ O ₂	[925-60-0]	propyl acrylate				
	V	(287–395)	37.9	302	A	[1987STE/MAL]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₀ O ₂	[110-13-4] V	2,5-hexanedione (386–474)	50.1	401	A	[1987STE/MAL]
C ₆ H ₁₀ O ₃	V	<i>cis/trans</i> -2,5-dimethoxy-2,5-dihydrofuran	44.2 ± 0.3	298	CGC	[2000NIC/ORF]
C ₆ H ₁₀ O ₃	[284-22-0] V V	cyclohexene ozonide (276–311) (353–403)	74.2 58.6	291 378	A	[1987STE/MAL] [1977BOL/MAK]
C ₆ H ₁₀ O ₃	[141-97-9] V	ethyl acetoacetate (301–454)	52.5	316	A	[1987STE/MAL]
C ₆ H ₁₀ O ₃	[624-45-3] V V V	methyl levulinate (333–453) (312–471)	56.3 50.4 51.1	348 327 410	A	[2013LOM/LAF] [1987STE/MAL, 1947STU] [1931SCH/COW]
C ₆ H ₁₀ O ₃	[123-62-6] V V	propionic anhydride (293–440) (341–440)	48.2 52.2	308 356	A	[1987STE/MAL] [1883KAH]
C ₆ H ₁₀ O ₃	[141-97-9] V V	ethyl 3-oxobutanoate	54.2 ± 1.0 55.0	298	C	[1995RIB/FER] [1975VIL/PER]
C ₆ H ₁₀ O ₃	[766-32-5] FUS SUB	4-methyl-2,6,7-trioxabicyclo[2.2.2]octane	10.4 67.4	369.2 298		[1995RAK/VER2] [1995RAK/VER2]
C ₆ H ₁₀ O ₃	[3592-12-9] TRS FUS	2,2-dimethyltrimethylene carbonate	10.3 5.62	324.1 387.2		[1995LEB/KUL2]
C ₆ H ₁₀ O ₄	[75096-35-4] FUS SUB	<i>cis</i> -1,3,5,7-tetraoxadecalin	28.62 94.9	450.2 298	DSC	[1998LIN/BEC] [1998LIN/BEC]
C ₆ H ₁₀ O ₄	[54933-94-7] FUS SUB	<i>trans</i> -1,3,5,7-tetraoxadecalin	23.14 81.5	374.5 298	DSC	[1998LIN/BEC] [1998LIN/BEC]
C ₆ H ₁₀ O ₄	[542-10-9] V V	1,1-diacetoxyethane (283–318) (343–438)	59.0 ± 0.5 49.7	298 358	GS A	[1996VER/PEN] [1987STE/MAL]
C ₆ H ₁₀ O ₄	[6284-75-9] V	2-acetoxypropionic acid, methyl ester (337–445)	52.9	352	A	[1987STE/MAL, 1950REH/DIX]
C ₆ H ₁₀ O ₄	[38003-42-8] V	3-acetoxypropionic acid, methyl ester (343–358)	68.0	350	A	[1987STE/MAL, 1948FEI/FIS]
C ₆ H ₁₀ O ₄	[95-92-1] V V V V V V V V V V	diethyl oxalate (284–334) (284–334) (343–457) (343–457) (320–459) (339–392) (339–392) (320–459) (304–448) (304–448)	57.1 57.8 ± 0.4 53.9 61.9 62.3 54.1 59.3 65.2 49.5 55.3	309 298 358 298 335 366 298 298 376 298	GS GS A A A A A A A A	[2011LIP/KRA] [2011LIP/KRA] [1987STE/MAL] [1987STE/MAL, 2011LIP/KRA] [1987STE/MAL] [1970MAT/TAN, 2011LIP/KRA] [1970MAT/TAN, 2011LIP/KRA] [1947STU, 2011LIP/KRA] [1940HEI/REI, 2011LIP/KRA] [1940HEI/REI, 2011LIP/KRA]
C ₆ H ₁₀ O ₄	[106-65-0] V V V	dimethyl succinate (286–340) (342–468) (340–470)	61.0 ± 0.3 61.7 ± 0.4 49.3	298 298 364	GS GS A	[2006VER/KOZ] [1992KAT, 2006VER/KOZ] [1987STE/MAL]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(367–460)	60.9 ± 0.4	298	EB	[1987DAU/JAL, 2006VER/KOZ]
	V	(398–468)	62.4	298	EB	[1963VLA/GRA, 2006VER/KOZ]
C ₆ H ₁₀ O ₄	[111-55-7]	ethylene glycol diacetate				
	V	(295–325)	60.2 ± 1.1		GS	[2011MAS/KRA]
	V	(291–334)	61.4 ± 0.2	298	GS	[2009VER/EME2]
	V	(311–464)	55.2	326	A	[1987STE/MAL]
	V		61.4 ± 0.2	298	C	[1986NIL/WAD]
	V		61.0 ± 0.1	298	C	[1970KUS/WAD]
	V	(373–463)	57.6	388		[1926TAY/RIN, 1984BOU/FRI]
C ₆ H ₁₀ O ₄	[609-02-9]	dimethyl methylmalonate				
	V	(278–308)	57.8 ± 0.8	293	GS	[1992VER/BEC]
C ₆ H ₁₀ O ₄	[597-43-3]	2,2-dimethylbutanedioic acid (2,2-dimethylsuccinic acid)				
	FUS		38.1	411.0	DSC	[2012WAN/LI]
	SUB	(350–365)	122.7 ± 2.7	298	ME	[2001RIB/MON2]
C ₆ H ₁₀ O ₄	[617-62-9]	2-methylglutaric acid				
	FUS		30.26	349	DSC	[2010BOO/BAR]
	SUB	(338–348)	126.5 ± 2.1	298	ME	[2001RIB/MON2]
C ₆ H ₁₀ O ₄	[626-51-7]	3-methylpentanedioic acid				
	FUS		31.0	358.6	DSC	[2012WAN/DEN, 2012WAN/LI]
	FUS		27.4	356	DSC	[2010BOO/BAR]
C ₆ H ₁₀ O ₄	[13545-04-5]	2,3-dimethylbutanedioic acid				
	FUS		16.9	392.5	DSC	[2012WAN/DEN, 2012WAN/LI]
C ₆ H ₁₀ O ₄	[124-04-9]	adipic acid				
	FUS		32.0		DSC	[2014HAS/JIR]
	FUS		35.89	423	DSC	[2010BOO/BAR]
	FUS		35.20	426.3	DSC	[2010WAN/LAI, 2012WAN/LI]
	FUS		33.7	419	DSC	[2005ROU/TEM]
	FUS		34.34	420.9	DSC	[1984CHO/GO]
	FUS		37.32	424.5	DSC	[1982VAN/MUL]
	FUS		34.85	426.4	DSC	[1991ACR, 1974CIN/BER]
	SUB		125 ± 40		ME, MS	[2009BOO/MAR]
	SUB	(353–373)	124.7 ± 20		ME	[2009TAU/SIT]
	SUB	(328–368)	145 ± 4		TPD	[2007CAP/LOV]
	SUB	(285–307)	146.2		TPTD	[2005CHA/ZIE]
	SUB		NA			[2001ALB]
	SUB	(295–318)	140		TPTD	[2001CHA/TOB]
		SUB		133.6 ± 1.3	298	ME
	SUB	(359–406)	129.3 ± 2.5	383	ME	[1960DAV/THO, 1960JON, 1970COX/PIL]
	SUB	(292–320)	U37.2	306	A	[1947GRA]
	V	(424–503)	105.2	298	CGC	[2005ROU/TEM]
	V	(432–611)	92.0	447	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₀ O ₄	[1070-34-4]	ethyl succinate				
	V	(418–468)	118.3	433	EB	[2011ORJ/YAN]
C ₆ H ₁₀ O ₅	[498-07-7]	1,6-anhydro-β-(D)-glucose (levoglucosan)				
	TRS		25.0	384		
	FUS		2.9	454	DSC	[2015KAB/PAU]
	TRS		23.2	384.9		
	FUS		3.3	455.4	DSC	[2013ROC/GAL]
	TRS		U13.2	385.7		
	FUS		3.2	455.3	DSC	[2011BOO/MON]
	TRS		24.95	385		
	FUS		3.4	455	DSC	[1970SHA/MCG]
	SUB	(353–383)	125.7 ± 1.6	372	ME	[2015KAB/PAU]
SUB	(353–383)	126.6 ± 1.6	298	ME	[2015KAB/PAU]	

Note: Values based on TPTD method are not consistent with values determined by other experimental methods

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		SUB	(361–379)	131.0 ± 1.7	370	ME	[2013ROC/GAL]
		SUB	(361–379)	134.6 ± 1.7	298	ME	[2013ROC/GAL]
		SUB	(298–318)	U68	308	ME	[2011BOO/MON]
		SUB	(344–386)	125.1 ± 1.0	365	ME	[1999OJA/SUU]
		SUB	(386–405)	100.3 ± 5.9	395	ME	[1999OJA/SUU]
		V	(468–528)	92.2	483	A	[1987STE/MAL, 1964EPS/DUR, 1972DYK]
C ₆ H ₁₀ O ₅	[617-55-0]	<i>(l)</i> malic acid, dimethyl ester					
		V	(348–516)	58.7	363	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₀ O ₅	[6288-11-5]	methyl[1-(methoxycarbonyl)ethyl]carbonate					
		V	(358–483)	55.9	373	A	[1987STE/MAL]
C ₆ H ₁₀ O ₆	[608-68-4]	<i>(d)</i> -dimethyl tartrate					
		FUS		17.36	322.2	DTA	[1981CHI/GAR, 1991CHI/BRA]
		SUB	(310–320)	77.4 ± 8	315	HSA	[1981CHI/GAR]
		SUB	(308–317)	U113	312		[1954CRO/JON, 1977PED/RYL]
		SUB		88.3			[1938WOL/WEG, 1960JON]
		SUB		85.8			[1937DUN/WOL]
		V	(322–365)	76.4	337	A, ME	[1987STE/MAL, 1954BOW/JON]
		V	(375–553)	66.0	390		[1947STU]
C ₆ H ₁₀ O ₆	[608-69-5]	<i>(dl)</i> -dimethyl tartrate					
		FUS		26.94	360.2	DTA	[1981CHI/GAR, 1991CHI/BRA]
		SUB	(314–339)	112 ± 5.6	326	HSA	[1981CHI/GAR]
		SUB	(315–358)	113.8	336	ME	[1954CRO/JON, 1977PED/RYL]
		SUB		U95.0			[1938WOL/WEG, 1960JON]
		SUB		U92.5			[1937DUN/WOL]
		V	(373–555)	62.5	388	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₀ O ₆	[5057-96-5]	<i>meso</i> -dimethyl tartrate					
		SUB		98.3			[1938WOL/WEG, 1960JON]
		SUB		95.8			[1937DUN/WOL]
C ₆ H ₁₀ O ₆	[2782-07-2]	<i>(D)</i> -galactono-1,4-lactone					
		FUS		35.77	410.3	DSC	[2004FLO/AMA]
C ₆ H ₁₀ O ₆	[1668-08-2]	<i>(L)</i> -galactono-1,4-lactone					
		FUS		35.98	409.8	DSC	[2004FLO/AMA]
C ₆ H ₁₀ O ₆	[6322-07-2]	<i>(D)</i> -gulono-1,4-lactone					
		FUS		40.13	459.3	DSC	[2004FLO/AMA]
C ₆ H ₁₀ O ₆	[1128-23-0]	<i>(L)</i> -gulono-1,4-lactone					
		FUS		41.5	459	DSC	[2004FLO/AMA]
C ₆ H ₁₀ O ₆	[22430-23-5]	<i>(L)</i> -mannono-1,4-lactone					
		FUS		36.13	426.5	DSC	[2004FLO/AMA]
C ₆ H ₁₀ S	[592-88-1]	diallyl sulfide					
		V	(263–411)	46.6	278		[1999DYK/SVO]
		V	(263–412)	43.2	278	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₁ Br	[108-85-0]	bromocyclohexane					
		FUS	(8–303)	10.79	216.9	AC	[1995KOB/OGU]
		V	(264–368)	45.3	298	Static	[2008SAR/MOK]
		V	(347–439)	42.8	362		[1997ART/LAF]
C ₆ H ₁₁ BrO ₂	[600-00-0]	ethyl 2-bromo-2-methylpropionate					
		V	(283–437)	45.4	298	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₁ Cl	[542-18-7]	chlorocyclohexane					
		TRS		7.88	221.1		
		FUS		1.67	228.7	DSC	[2008SIN/MUR]
		TRS	(8–301)	8.11	220.2		

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	FUS	(8–301)	2.02	228.0	AC	[1995KOB/OGU]
	TRS	(5–304)	0.05	120.0		
	TRS	(5–304)	8.01	220.4		
	FUS	(5–304)	2.04	229.3	AC	[1994DIK/KAB]
	V	(264–368)	42.1	298	Static	[2008SAR/MOK]
	V	(313–353)	41.8	298	CGC	[1995CHI/HOS]
	V		40.7 ± 0.1	298	C	[1995XUW/DAJ]
	V		42.9 ± 0.6	298	C	[1994DIK/KAB]
	V	(350–416)	39.3	365	A	[1987STE/MAL, 1969AND/BRA]
C ₆ H ₁₁ Cl	[6196-85-6]	1-chloro-1-methylcyclopentane				
	V	(239–263)	42.1 ± 0.1	251	ME	[1997BLO/KAB]
	V		39.7 ± 0.1	297	C	[1997BLO/KAB]
C ₆ H ₁₁ ClO	[2736-40-5]	diethylacetyl chloride				
	V	(313–412)	39.4	328	A	[1987STE/MAL]
C ₆ H ₁₁ ClO	[2177-22-2]	3-ethyl-3-(chloromethyl)oxetane				
	V		49.7 ± 0.2	298	C	[1971RIN/SUN]
C ₆ H ₁₁ ClO ₂	[17696-64-9]	chloroacetic acid, <i>sec</i> -butyl ester				
	V	(290–441)	49.6	305	A	[1987STE/MAL]
C ₆ H ₁₁ ClO ₂	[13361-35-8]	chloroacetic acid, isobutyl ester				
	V	(293–323)	43.9	308	A	[1987STE/MAL]
C ₆ H ₁₁ F	[372-46-3]	fluorocyclohexane				
	TRS		7.82	186.7	DSC	[1986GON/SZW]
	FUS		2.58	285.3		
	V	(271–301)	37.5 ± 0.3	298		
	V	(316–373)	35.0	331	A	[1987STE/MAL]
C ₆ H ₁₁ FO ₂	[1578-57-0]	2-fluorohexanoic acid				
	V	(387–411)	80.9	399	A	[1987STE/MAL]
C ₆ H ₁₁ FO ₅	[29702-43-0]	2-deoxy-2-fluoro-(D)-glucopyranose				
	FUS		38.2	427.2	DSC	[1996SCH]
C ₆ H ₁₁ FO ₅	[34168-77-9]	6-deoxy-6-fluoro-(D)-glucopyranose				
	FUS		27.2	412.2	DSC	[1996SCH]
C ₆ H ₁₁ FO ₅	[31001-26-0]	3-deoxy-3-fluoro-(D)-glucopyranose				
	FUS		18.3	378.2	DSC	[1996SCH]
C ₆ H ₁₁ F ₃ N ₂	[31330-22-0]	<i>N, N, N</i> -trifluorohexaneamidine				
	V		46.5			[1971CAR/ZIM]
C ₆ H ₁₁ I	[626-62-0]	iodocyclohexane				
	V	(258–308)	49.6 ± 0.1	298	Static	[2010FUL/RUZ]
	V	(313–353)	48.3	298	CGC	[1995CHI/HOS]
	V	(358–408)	43.0	383	A, I	[1987STE/MAL, 1956BRE/UBB]
C ₆ H ₁₁ N	[628-73-9]	hexanenitrile				
	V	(371–442)	43.3	386	A, EB	[1987STE/MAL, 1973MEY/HOT]
	V	(344–441)	44.6	359	EB	[1971MEY/REN]
	V		47.9 ± 0.1	298	C	[1970HOW/WAD]
	V	(365–437)	49.1	298	EB	[1949DRE/SHR, 1949DRE/MAR, 2005EME/VER]
	V	(293–452)	47.7 ± 0.1	298	MM	[1933HEI, 2005EME/VER]
C ₆ H ₁₁ N	[542-54-1]	4-methylvaleronitrile				
	V	(332–430)	35.7	347	A	[1987STE/MAL]
C ₆ H ₁₁ NO	[100-64-1]	cyclohexanone oxime				
	FUS	(5–370)	12.45	362.2	AC	[2008ZAI/PAU]
	FUS		12.7	362.5		[2002STE/CHI6]
	TRS		0.01	240.8	AC, THBC	[1992KOZ/KAB]
	TRS		0.09	273.4		
	FUS	(6–450)	12.7	362.6		

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
	SUB	(288–323)	77.6 ± 1.4	310	ME	[2008ZAI/PAU]	
	SUB		76.5 ± 1.0	378		[2002STE/CHI6]	
	SUB		79.0 ± 2.0	298		[2002STE/CHI6]	
	SUB		74.0 ± 0.3	354	C	[1992KOZ/KAB]	
	SUB	(288–348)	79.9 ± 0.7	317	ME	[1992KOZ/KAB]	
	V	(370–385)	63.1 ± 1.0	298		[2002STE/CHI6]	
	V		58.7 ± 0.6	368	C	[1992KOZ/KAB]	
	V	(371–446)	59.5 ± 0.5			[1992KOZ/KAB]	
	C ₆ H ₁₁ NO	[105-60-2]	ε-caprolactam				
		FUS	(260–370)	16.16	342.2	AC	[2007SHE/ZAI]
FUS			16.2	342.3	DSC	[2002STE/CHI3]	
FUS		(340–520)	16.1	342.3	THBC	[1992KAB/KOZ, 1996DOM/HEA]	
FUS		(60–350)	16.1	342.3		[1962KOL/PAU, 1996DOM/HEA]	
FUS			16.1	342.4	AC	[1957MAS]	
SUB		(293–338)	86.3	316	ME	[2006ZAI/PAU]	
SUB		(302–339)	86.9	320	GS	[2006ZAI/PAU]	
SUB		(330–340)	89.3 ± 0.8	335	ME	[1992KAB/KOZ]	
SUB			86.3 ± 0.2	338	C	[1992KAB/KOZ]	
SUB			87.3 ± 0.2	298		[1992KAB/KOZ]	
SUB		(258–308)	77.5	273	A	[1987STE/MAL]	
SUB		(294–314)	83.3 ± 0.8			[1953AIH, 1960JON, 1970COX/PIL, 1960AIH2]	
V		(350–568)	69.2 ± 0.3	360	EB	[2002STE/CHI3]	
V		(350–568)	65.7 ± 0.3	400	EB	[2002STE/CHI3]	
V		(350–568)	62.3 ± 0.2	440	EB	[2002STE/CHI3]	
V		(350–568)	59.0 ± 0.2	480	EB	[2002STE/CHI3]	
V		(350–568)	55.7 ± 0.3	520	EB	[2002STE/CHI3]	
V		(350–568)	52.4 ± 0.5	560	EB	[2002STE/CHI3]	
V		(373–543)	62.3	388	A	[1987STE/MAL]	
C ₆ H ₁₁ NO	[820-99-5]	<i>cis</i> -2-hexenoic acid amide					
	SUB	(323–333)	80.0	328	A	[1987STE/MAL]	
	V	(343–383)	61.7	358	A	[1987STE/MAL]	
C ₆ H ₁₁ NO	[197841-69-3]	<i>trans</i> -2-hexenoic acid amide					
	SUB	(353–393)	55.8	368	A	[1987STE/MAL]	
C ₆ H ₁₁ NO	[931-20-4]	1-methyl-2-piperidone					
	V		60.3 ± 0.9	298	C	[2006RIB/CAB]	
	V	(341–385)	55.4	356	A	[1987STE/MAL, 1974BEA/MUE]	
C ₆ H ₁₁ NO	[1445-73-4]	1-methyl-4-piperidone					
	V		54.2 ± 1.0	298	C	[2006RIB/CAB]	
C ₆ H ₁₁ NO	[5693-62-9]	2,3,4,5-tetrahydro-6-methoxypyridine					
	V	(292–338)	42.8	307	A	[1987STE/MAL, 1974BEA/MUE]	
C ₆ H ₁₁ NO	[334-25-8]	6-amino-6-oxo-hexanoic acid					
	FUS		40.2			[1971PRY/EFR]	
C ₆ H ₁₁ NO ₂	[1122-60-7]	nitrocyclohexane					
	V	(298–318)	54.7 ± 0.6	298	GS	[1997VER3]	
C ₆ H ₁₁ NO ₂	[52-52-8]	1-aminocyclopentanecarboxylic acid (cycloleucine)					
	SUB	(443–468)	123.4 ± 4	455	ME	[1965SVE/CLY, 1964CLY/SVE, 1987STE/MAL]	
C ₆ H ₁₁ NO ₂	[6280-16-6]	lactic acid <i>N</i> -allyl amide					
	V	(359–419)	78.2	374	A	[1987STE/MAL, 1950RAT/FIS]	
C ₆ H ₁₁ NO ₂	[54953-79-6]	5,5-dimethylperhydro-1,3-oxazine-2-one					
	FUS	(5–500)	28.5	399	AC	[1996LEB/SMI]	
C ₆ H ₁₁ NO ₃	[1906-82-7]	ethyl acetamidoacetate					
	V	(383–466)	69.4	398	A, EB	[1987STE/MAL, 1972DYK, 1953MEL/VIO]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₁ NO ₃	[1596-84-5] FUS	N-dimethylaminosuccinamic acid		431.4	DSC	[1990DON/DRE]
C ₆ H ₁₁ NS	[13070-07-0] FUS	2-piperidinethione		366		[1974BEA/MUE]
	SUB	(363–370)	81.2 ± 2.9	366	B	[1974BEA/MUE]
	V	(363–370)	63.3	366	A	[1987STE/MAL, 1974BEA/MUE]
C ₆ H ₁₁ NS	[19766-29-1] V	2,3,4,5-tetrahydro-(methylthio)pyridine		328	A	[1987STE/MAL, 1974BEA/MUE]
C ₆ H ₁₁ N ₂ O ₃ PS ₂	[950-37-8] FUS	S-2,3-dihydro-5-methoxy-2-oxo-1,3,4-thiadiazol-3-ylmethyl O, O-dimethyl phosphorodithioate		315.1	DSC	[1990DON/DRE]
C ₆ H ₁₁ N ₃	[19573-22-9] V	azidocyclohexane		298	GS	[2011VER/EME2]
C ₆ H ₁₁ N ₃ O ₆	[62154-78-3] SUB	2,3,3-trinitro-2-methylpentane		298	C	[2011MIR/KON]
	SUB		92.0 ± 0.8	298		[1999MIR/VOR]
C ₆ H ₁₁ N ₅ O ₈	[1924-47-6] SUB	N-(2,2-dinitropropyl)-2,2-dinitro-1-propanamine		105.4 ± 4.2		[1973DEK/OON, 1977PED/RYL]
C ₆ H ₁₂	[4806-61-5] V	ethylcyclobutane		298	C	[1983FUC/HAL]
	V		31.2 ± 0.2	298	EB	[1974GOO/MOO]
C ₆ H ₁₂	[110-82-7] FUS	cyclohexane		279.8	DSC	[2005HUA/SIM]
	TRS		6.69	186.1		
	FUS	(78–350)	2.63	279.7	AC	[2004NAN/TAN]
	TRS		6.79	186.2		
	FUS		2.68	279.8	DTA	[1994TAN/SAB3]
	TRS		6.73	186.0		[1984DOM/EVA]
	TRS		6.99	186.1		
	FUS		2.62	279.9		[1952KAA/COO]
	TRS		6.69	186.1		
	FUS		2.63	279.8		[1943AST/SZA]
	TRS		6.74	186.1		
	FUS		2.68	279.8		[1996DOM/HEA, 1943RUE/HUF]
	TRS		6.82	186.4		
	FUS		2.73	279.4	C	[1942ZIE/AND]
	TRS		6.23	185.9		
	FUS		2.42	279.3		[1930PAR/HUF]
	SUB	(223–280)	27.6	265	A	[1987STE/MAL]
	SUB	(223–278)	36.4 ± 0.7		B	[1974JAC]
	SUB		46.6	186	B	[1963BON]
SUB	(268–278)	37.2	273		[1960JON]	
SUB	(228–268)	37.7	248	A	[1947STU]	
SUB	(269–279)	36.5	274	A	[1934ROT/NAG]	
V	(296–353)	33.1	315	EB	[2009GIE/KOS]	
V	(300–345)	32.7	315		[2002LUB/BAN]	
V	(360–470)	32.2	375		[1993LEE/HOL]	
V	(313–336)	31.9	324	EB	[1995DIO/SAN]	
V	(313–336)	33.1	298	EB	[1995DIO/SAN]	
V		32.3	314	C	[1988DON/LIN]	
V		31.1	332	C	[1988DON/LIN]	
V		30.3	345	C	[1988DON/LIN]	
V		30.0	355	C	[1988DON/LIN]	
V	(353–414)	30.9	368	A	[1987STE/MAL]	

Note: The Antoine coefficients given in [1987STE/MAL] for solid cyclohexane likely came from [1974JAC]—there is likely a typographical error in the C coefficient

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(412–491)	29.6	427	A	[1987STE/MAL]
	V	(489–553)	29.6	504	A	[1987STE/MAL]
	V	(300–352)	32.6	315	EB	[1983PAL/CHO]
	V		33.0 ± 0.1	298	C	[1982FUR/SAK]
	V		33.0	298		[1981SHI/SAI]
	V		33.0 ± 0.1	298	C	[1979MAJ/SVO]
	V		32.3 ± 0.1	313	C	[1979MAJ/SVO]
	V		31.2 ± 0.1	333	C	[1979MAJ/SVO]
	V		31.0 ± 0.1	338	C	[1979MAJ/SVO]
	V		30.4 ± 0.1	348	C	[1979MAJ/SVO]
	V		30.1 ± 0.1	353	C	[1979MAJ/SVO]
	V		32.2 ± 0.1	313	C	[1973SVO/VES]
	V		31.9 ± 0.1	323	C	[1973SVO/VES]
	V		31.1 ± 0.1	333	C	[1973SVO/VES]
	V		30.6 ± 0.1	343	C	[1973SVO/VES]
	V		30.1 ± 0.1	354	C	[1973SVO/VES]
	V		32.9 ± 0.3	298	ME	[1972SAB/CHA]
	V		32.9	298		[1971MOR]
	V		33.0	298		[1971WIL/ZWO]
	V	(303–343)	32.5	318		[1968GAW/SWI]
	V	(298–348)	32.9	313		[1967CRU/CUT]
	V	(316–354)	32.8	331		[1965MAR/SUS]
	V		33.0 ± 0.1	298	C	[1960WAD]
	V		31.4 ± 0.1	324	C	[1951MCC/PER]
	V		30.4 ± 0.1	346	C	[1951MCC/PER]
	V		33.0	298	C	[1947OSB/GIN]
	V		30.1	354		[1946SPI/PIT]
	V	(293–355)	32.9	308	A, MM	[1987STE/MAL, 1945WIL/TAY]
	V		33.3 ± 0.1	298	C	[1943AST/SZA]
	V		33.5	298		[1927NAG]
C ₆ D ₁₂	[1735-17-7]	cyclohexane-d ₁₂				
	V	(283–353)	33.1	298		[1953DAV/SCH]
C ₆ H ₁₂	[96-37-7]	methylcyclopentane				
	FUS	(13–307)	6.93	130.7		[1996DOM/HEA, 1946DOU/HUF2]
	FUS		6.88	130.1	C	[1931HUF/PAR]
	V	(300–345)	31.4	315		[2010SAP/UUS]
	V		31.6	298		[1971WIL/ZWO]
	V		31.3 ± 0.1	304	C	[1959MCC/PEN]
	V		30.2 ± 0.1	326	C	[1959MCC/PEN]
	V		29.1 ± 0.1	345	C	[1959MCC/PEN]
	V		31.6 ± 0.1	298	C	[1947OSB/GIN]
	V	(288–346)	31.9	303	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₆ H ₁₂	[592-41-6]	1-hexene				
	FUS	(11–308)	9.35	133.4	C	[1996DOM/HEA, 1957MCC/FIN]
	V	(298–336)	30.4	313		[2009MAR/AUC]
	V	(300–337)	30.6	315		[2001SEG/LAM]
	V	(273–343)	31.6	288	A	[1987STE/MAL]
	V		30.6	298		[1971WIL/ZWO]
	V	(289–337)	30.6	298		[1956CAM/ROS]
	V	(289–337)	31.0	304	MM	[1950FOR/CAM]
C ₆ H ₁₂	[7688-21-3]	cis-2-hexene				
	FUS		8.88	132		[1990MES/TOD]
	V	(278–343)	32.2	293	A	[1987STE/MAL]
	V		31.5	298		[1971WIL/ZWO]
	V	(298–342)	31.5	298		[1956CAM/ROS]
C ₆ H ₁₂	[4050-45-7]	trans-2-hexene				
	V	(283–342)	32.2	298	A	[1987STE/MAL]
	V		31.6	298		[1971WIL/ZWO]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(292–341)	31.5	298		[1956CAM/ROS]
C ₆ H ₁₂	[7642-09-3]	<i>cis</i> -3-hexene				
	V	(276–348)	32.1	291	A	[1987STE/MAL]
	V		31.3	298		[1971WIL/ZWO]
	V	(185–340)	31.3	298		[1956PEN/SCO]
C ₆ H ₁₂	[13269-52-8]	<i>trans</i> -3-hexene				
	V	(278–341)	32.3	293	A	[1987STE/MAL]
	V		31.6	298		[1971WIL/ZWO]
C ₆ H ₁₂	[763-29-1]	2-methyl-1-pentene				
	V	(272–341)	31.6	287	A	[1987STE/MAL]
	V		30.5	298		[1971WIL/ZWO]
C ₆ H ₁₂	[760-20-3]	3-methyl-1-pentene				
	V	(265–333)	30.0	280	A	[1987STE/MAL]
	V		28.6	298		[1971WIL/ZWO]
C ₆ H ₁₂	[691-37-2]	4-methyl-1-pentene				
	FUS		4.93	118.9		[1994LEB/SMI3]
	V	(310–360)	28.6 ± 0.2	298	EB	[1997STE/CHI]
	V	(310–360)	27.4 ± 0.3	320	EB	[1997STE/CHI]
	V	(310–360)	26.2 ± 0.4	340	EB	[1997STE/CHI]
	V	(310–360)	24.9 ± 0.5	360	EB	[1997STE/CHI]
	V	(265–333)	30.1	280	A	[1987STE/MAL]
	V		28.7	298		[1971WIL/ZWO]
C ₆ H ₁₂	[625-27-4]	2-methyl-2-pentene				
	V	(277–346)	32.4	292	A	[1987STE/MAL]
	V		31.6	298		[1971WIL/ZWO]
C ₆ H ₁₂	[922-62-3]	<i>cis</i> -3-methyl-2-pentene				
	V	(277–347)	32.2	292	A	[1987STE/MAL]
	V		31.3	298		[1971WIL/ZWO]
C ₆ H ₁₂	[616-12-6]	<i>trans</i> -3-methyl-2-pentene				
	V	(280–349)	32.8	295	A	[1987STE/MAL]
	V		32.1	298		[1971WIL/ZWO]
C ₆ H ₁₂	[691-38-3]	<i>cis</i> -4-methyl-2-pentene				
	V	(267–330)	30.8	282	A	[1987STE/MAL]
	V		29.5	298		[1971WIL/ZWO]
C ₆ H ₁₂	[674-76-0]	<i>trans</i> -4-methyl-2-pentene				
	V	(269–337)	31.2	284	A	[1987STE/MAL]
	V		30.0	298		[1971WIL/ZWO]
C ₆ H ₁₂	[563-78-0]	2,3-dimethyl-1-butene				
	V	(267–335)	30.5	282	A	[1987STE/MAL]
	V		29.2	298		[1971WIL/ZWO]
C ₆ H ₁₂	[558-37-2]	3,3-dimethyl-1-butene				
	TRS		4.35	124.9		
	FUS		1.09	158.4		[1996DOM/HEA, 1938KEN/SHO]
	V	(254–316)	28.6	269	A	[1987STE/MAL]
	V		26.6	298		[1971WIL/ZWO]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(264–314)	27.4	298		[1971BAG/MAL]
	V	(281–315)	26.6	298		[1956CAM/ROS]
C ₆ H ₁₂	[563-79-1]	2,3-dimethyl-2-butene				
	TRS		3.53	196.8		
	FUS		6.44	198.9		[1996DOM/HEA, 1955SCO/FIN]
	TRS		4.58	196.6		
	FUS		5.46	198.5		[1936PAR/TOD2]
	V	(337–388)	31.1	352		[2011FEN/DON]
	V	(313–346)	32.1	328		[2004UUS/POK]
	V	(289–347)	32.6	298		[1956CAM/ROS]
	V		32.5	298		[1971WIL/ZWO]
	V	(289–347)	32.7	304		[1971BAG/MAL]
	V	(282–348)	33.1	297	A	[1987STE/MAL, 1955CUM/MCL]
	V		32.9 ± 0.1	292	C	[1955SCO/FIN]
	V		32.0 ± 0.1	308	C	[1955SCO/FIN]
V		30.9 ± 0.1	326	C	[1955SCO/FIN]	
V		29.7 ± 0.1	346	C	[1955SCO/FIN]	
C ₆ H ₁₂	[760-21-4]	2-ethyl-1-butene				
	V	(289–338)	31.0	298		[1956CAM/ROS]
C ₆ H ₁₂ Br ₂	[58133-26-9]	1,1-dibromohexane				
	V	(378–526)	51.6	393	A, EST	[1987STE/MAL, 1956MAN, 1972DYK]
C ₆ H ₁₂ Br ₂	[624-20-4]	1,2-dibromohexane				
	V	(363–450)	56.5 ± 2.0	298		[1993VAR/PUC]
C ₆ H ₁₂ ClNO	[3240-94-6]	4-(2-chloroethyl)morpholine				
	V	(273–333)	53.8	288	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₂ Cl ₂	[62017-16-7]	1,1-dichlorohexane				
	V	(330–440)	48.7	298		[1987VAR/LOS2, 1991BAS/SVO]
	V	(345–484)	45.1	360	A, EST	[1987STE/MAL, 1956MAN, 1972DYK]
C ₆ H ₁₂ Cl ₂	[2162-92-7]	<i>(dl)</i> -1,2-dichlorohexane				
	V	(350–440)	48.8	298		[1991BAS/SVO]
	V	(352–442)	44.9	367	A	[1987STE/MAL]
	V		48.2 ± 0.2	298	C	[1980VAR/PIS]
V		47.9 ± 0.7	298	EB	[1975PIS/ROZ2]	
C ₆ H ₁₂ Cl ₂	[2163-00-0]	1,6-dichlorohexane				
	V	(380–480)	56.3	298		[1988VAR/LOS, 1991BAS/SVO]
C ₆ H ₁₂ Cl ₂ O	[108-60-1]	bis(2-chloro-1-methylethyl) ether				
	V	(302–456)	53.6	317	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₂ Cl ₂ O ₂	[14689-97-5]	bis(2-chloroethyl)acetaldehyde acetal				
	V	(329–486)	59.4	344	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₂ Cl ₃ N	[555-77-1]	bis(2-chloroethyl)acetaldehyde acetal				
	V	(273–333)	65.0	288	A, GS	[1987STE/MAL, 1948RED/CHA3, 1972DYK]
C ₆ H ₁₂ Cl ₃ O ₄ P	[115-96-8]	tris(2-chloroethyl)phosphate				
	V	(333–363)	82.0	348	GC-RT	[2014BRO/JAN]
	V	(293–445)	36.7	308	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₂ F ₂	[62127-41-7]	1,1-difluorohexane				
	V	(290–407)	37.7	305	A, EST	[1987STE/MAL, 1956MAN, 1972DYK]
C ₆ H ₁₂ F ₃ OP	[26348-85-6]	methyl (trifluoromethyl)phosphinous acid, <i>tert</i> -butyl ester				
	V	(273–329)	39.7	296		[1970BUR/KAN]
C ₆ H ₁₂ F ₃ PS	[26348-87-8]	methyl (trifluoromethyl)phosphinothious acid, <i>tert</i> -butyl ester				
	V	(296–337)	43.2	312		[1970BUR/KAN]
C ₆ H ₁₂ F ₆ N ₃ OP	[30295-34-2]	bis(dimethylamino)bis(trifluoromethyl)nitroxy phosphine				
	V	(307–371)	42.7	339		[1970ELN/EME]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₂ F ₄ N ₂	[16096-76-7] V	<i>N, N, N', N'</i> -tetrafluoro-2-methyl-1,2-pentanediamine (253–293)	42.8	278	A, IPM	[1987STE/MAL, 1963GOO/DOU, 1962GOO/DOU]
C ₆ H ₁₂ N ₂	[3010-02-4] V	(diethylamino)acetonitrile (283–318)	49.9 ± 0.3		GS	[1997WEL/VER]
C ₆ H ₁₂ N ₂	[280-57-9] TRS FUS SUB SUB SUB	1,4-diazabicyclo[2.2.2]octane (300–450) (324–351) (353–369) (323–373)	10.54 7.45 61.9 ± 3.3 52.3 ± 3.3 54.4	351.1 433 338 361 348	AC	[1996DOM/HEA, 1963TRO/WES] [1960WAD/KIS, 1970COX/PIL] [1960WAD/KIS, 1970COX/PIL] [1963BON]
C ₆ H ₁₂ N ₂	SUB	3,3,4,4-tetramethyl-Δ1-1,2-diazetene 62.3 ± 1.0		298	C	[1978MON/ENG]
C ₆ H ₁₂ N ₂ O	[7226-23-5] V	1,3-dimethyl-3,4,5,6-tetrahydro-2(1 <i>H</i>)pyrimidinone (370–520)	58.0	400	EB	[1987KNE/ZON]
C ₆ H ₁₂ N ₂ O	[18503-52-1] TRS FUS	1,4-diazabicyclo[2.2.2]octane <i>N</i> -oxide 3.4 0.45		418 493	DSC	[1990MIH/BAS, 1987MIH/BAS]
C ₆ H ₁₂ N ₂ O	[2158-03-4] SUB	1-piperidinecarboxamide 100.2 ± 1.2		298	C	[2007RIB/CAB2]
C ₆ H ₁₂ N ₂ O	[4138-26-5] SUB	3-piperidinecarboxamide 112.5 ± 1.3		298	C	[2007RIB/CAB2]
C ₆ H ₁₂ N ₂ O	[39546-32-2] SUB	4-piperidinecarboxamide 123.6 ± 1.3		298	C	[2007RIB/CAB2]
C ₆ H ₁₂ N ₂ OS	[62528-85-2] FUS V	tetramethyl monothiooxamide 17.0 59.0		350.2 508	DSC TGA, DSC	[2003CLO/JAN] [2003CLO/JAN]
C ₆ H ₁₂ N ₂ O ₂	[1608-14-6] FUS V	<i>N, N, N', N'</i> -tetramethyloxamide 18.0 52.5		352.2 460		[2003CLO/JAN] [2003CLO/JAN]
C ₆ H ₁₂ N ₂ O ₂	[628-94-4] TRS FUS FUS	adipamide 1.59 52.72 47.8		458.4 499.1	DSC	[2006BAD/DEL] [1971PRY/EFR]
C ₆ H ₁₂ N ₂ O ₂	[19701-83-8] TRS FUS	<i>N</i> -acetyl-L-alanine- <i>N'</i> -methylamide 5.59 24.86		395.1 454.8	DSC	[2014BAD/DEL]
C ₆ H ₁₂ N ₂ O ₂	[34276-27-2] TRS FUS	<i>N</i> -acetyl-DL-alanine- <i>N'</i> -methylamide 7.69 15.91		368.4 411.9	DSC	[2014BAD/DEL]
Note: Authors of [2014BAD/DEL] noted that the melting point differed considerably from the literature value.						
C ₆ H ₁₂ N ₂ O ₃	[2140-53-6] FUS	β-alanyl-β-alanine 58.3		480.1	DSC	[1996DOM/HEA, 1990BAD/KUL]
C ₆ H ₁₂ N ₂ O ₃	[2867-20-1] FUS	α-alanyl-α-alanine (DL) 33.2		483.2	DSC	[1996DOM/HEA, 1990BAD/KUL]
C ₆ H ₁₂ N ₂ O ₃	[1948-31-8] SUB	L-α-alanyl-L-α-alanine (438–481) 118 ± 8			ME, MS	[2012BAD/TYU]
C ₆ H ₁₂ N ₂ O ₄	[3964-18-9] TRS TRS FUS	2,3-dinitro-2,3-dimethylbutane 1.0 18.0 8.8		322 389 473	DSC	[1995JON/AUG, 2002JON/LIG]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		TRS	0.6	318			
		TRS	23	388	DTA	[1994SMI/MAT, 2002JON/LIG]	
		SUB	75.3 ± 0.8	298	C	[2011MIR/KON]	
		SUB	74 ± 5		TGA	[2002JON/LIG]	
		SUB	79.5 ± 0.8	298		[1999MIR/VOR]	
		SUB	(303–330)	85 ± 2	ME	[1994SMI/MAT, 2002JON/LIG]	
		SUB	(253–323)	94	GC	[1991ELI, 2002JON/LIG]	
C ₆ H ₁₂ N ₂ O ₆	[99115-63-6]	2,5-hexanediol dinitrate					
		SUB	(293–313)	119	303	A	[1987STE/MAL, 1957KEM/GOL, 1972DYK]
		V	(293–313)	54.4	303	B, GS	[1957KEM/GOL, 1972DYK]
C ₆ H ₁₂ N ₂ O ₈	[111-22-8]	triethylene glycol dinitrate					
		V	(303–348)	88.3	318	A	[1987STE/MAL, 1972DYK, 1963WOO/ADI]
C ₆ H ₁₂ N ₂ S ₂	[35840-78-9]	tetramethyl dithiooxamide					
		FUS		21.0	409.2	DSC	[2003CLO/JAN]
		V		60.5	533	TGA, DSC	[2003CLO/JAN]
C ₆ H ₁₂ N ₄	[100-97-0]	1,3,5,7-tetraazatricyclo[3.3.1.1 ^{3,7}]decane					
		SUB	(339–378)	77.7 ± 0.4	359	GS	[2002VER2]
		SUB	(339–378)	79.6 ± 0.4	298	GS	[2002VER2]
		SUB	(298–453)	76.8	313	A	[1987STE/MAL]
		SUB	(302–328)	78.8	316	TE, ME	[1983DEW/VAN]
		SUB		74.9 ± 2.9	298		[1960WAD/KIS, 1970MAN/RAP]
		SUB	(281–298)	74.1 ± 0.8	289	TE	[1960BUD]
		SUB	(293–553)	75.4	423		[1958KLI/STR, 2002VER2, 1957STR/KLI]
		SUB	(293–553)	79.4	298		[1958KLI/STR, 2002VER2]
C ₆ H ₁₂ O	[1003-38-9]	<i>dl</i> -2,5-dimethyltetrahydrofuran					
		V	(278–370)	35.4	293	A	[1987STE/MAL]
C ₆ H ₁₂ O	[1436-34-6]	1,2-epoxyhexane					
		V	(300–390)	43.1	315	A	[1987STE/MAL, 1969VOJ/CIH, 1984BOU/FRI]
C ₆ H ₁₂ O	[1192-22-9]	2-methyl-2,3-epoxypentane					
		V	(306–369)	40.6	321	A	[1987STE/MAL, 1974LOG/FRO]
C ₆ H ₁₂ O	[6140-80-3]	allyl isopropyl ether					
		V	(253–415)	36.1	268	A	[1987STE/MAL]
		V	(229–353)	36.8	244	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₂ O	[1471-03-0]	allyl propyl ether					
		V	(261–428)	37.5	276	A	[1987STE/MAL]
		V	(234–364)	36.4	249	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₂ O	[111-34-2]	butyl vinyl ether					
		V	(311–403)	36.7 ± 0.2	298	EB	[1996STE/CHI2]
		V	(311–403)	35.2 ± 0.2	320	EB	[1996STE/CHI2]
		V	(311–403)	32.5 ± 0.2	360	EB	[1996STE/CHI2]
		V	(311–403)	29.6 ± 0.2	400	EB	[1996STE/CHI2]
		V	(353–393)	36.5	298	CGC	[1995CHI/HOS]
		V	(269–368)	36.1	284	A	[1987STE/MAL]
C ₆ H ₁₂ O	[109-53-5]	isobutyl vinyl ether					
		V	(266–357)	37.4	281	A	[1987STE/MAL]
C ₆ H ₁₂ O	[108-93-0]	cyclohexanol					
		TRS		8.7	245.2		
		FUS		1.73	298.2	DSC	[2009SIN/MUR]
		TRS	(170–320)	8.66	264.9		
		FUS	(170–320)	1.81	297.9	AC	[1990MAY/RAC]
		TRS		8.21	263.5		
		FUS		1.7	297		[1984PIN/POS, 1968ADA/SUG, 1996DOM/HEA]

Note: Authors of [1990MAY/RAC] give the transition at 264.9 K as a II→I transition. The paper also gives values of 8.62 kJ/mole and 244.5 K for a III→I transition

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
		TRS	(16–298)	8.21		
		FUS	(16–298)	1.7		[1929KEL5]
		FUS		1.87	CR	[1912DEF]
		SUB	(272–298)	60.7	A	[1987STE/MAL, 1948NIT/SEK2]
		V	(322–433)	60.1		[2004STE/SUN]
		V	(395–426)	49.1	EB	[2002SII/KIR2]
		V	(390–430)	49.8		[2002SWI/MAL]
		V		62.0 ± 0.3	C	[1999COS/EUS]
		V	(288–328)	61.2 ± 0.6	GS	[1998VER3]
		V	(288–328)	61.8 ± 0.6	GS	[1998VER3]
		V	(341–471)	54.8 ± 0.5	EB	[1997STE/CHI3]
		V	(341–471)	49.3 ± 0.4	EB	[1997STE/CHI3]
		V	(341–471)	46.6 ± 0.4	EB	[1997STE/CHI3]
		V	(341–471)	40.9 ± 0.6	EB	[1997STE/CHI3]
		V	(341–471)	63.5 ± 0.7	EB	[1997STE/CHI3]
		V	(323–373)	61.3	CGC	[1995CHI/HOS]
		V	(350–456)	55.0	EB	[1987AMB/GHI2]
		V	(318–434)	59.9	A	[1987STE/MAL]
		V	(300–434)	62.7	A	[1987STE/MAL]
		V	(404–432)	49.3		[1984CAS/FRA2]
		V	(303–373)	58.4		[1984SIP/WIE]
		V	(299–319)	60.4		[1975CAB/CON2]
		V		62.0 ± 0.9		[1975CAB/CON2]
		V		62.0 ± 0.2	C	[1968PLA/WIL]
		V		62.0 ± 0.3		[1966WAD]
		V		62.0 ± 0.2	C	[1962SEL/SUN]
		V		45.4		[1962HEN/WEB, 1997STE/CHI3]
		V		46.9		[1962HEN/WEB, 1997STE/CHI3]
		V		53.9		[1962HEN/WEB, 1997STE/CHI3]
		V	(367–433)	52.6		[1960NOV/MAT2, 1960NOV/MAT]
		V		42.4		[1957GLA/RUL, 1997STE/CHI3]
		V	(307–422)	54.8		[1946THO]
		V		45.5 ± 0.1		[1931MAT/FEH, 1997STE/CHI3]
		V		48.9		[1912DEF, 1997STE/CHI3]
C ₆ H ₁₂ O	[4798-44-1]	1-hexen-3-ol				
		V	(238–308)	55.2 ± 0.1	298	Static [2015STE/FUL]
C ₆ H ₁₂ O	[928-96-1]	<i>cis</i> -3-hexen-1-ol				
		V	(238–308)	58.3 ± 0.1	298	Static [2015STE/FUL]
C ₆ H ₁₂ O	[928-95-0]	<i>trans</i> -2-hexen-1-ol				
		V	(238–308)	59.6 ± 0.1	298	Static [2015STE/FUL]
C ₆ H ₁₂ O	[821-41-0]	5-hexen-1-ol				
		V		60.2 ± 0.1	298	C [1996ULB/KLU]
		V		58.0 ± 0.1	343	C [1996ULB/KLU]
		V		55.7 ± 0.1	358	C [1996ULB/KLU]
C ₆ H ₁₂ O	[565-61-7]	(<i>dl</i>)-3-methyl-2-pentanone				
		V	(286–400)	39.8	301	A [1987STE/MAL]
		V	(283–395)	41.5	298	A [1987STE/MAL]
		V	(385–455)	36.5	400	A [1987STE/MAL]
		V	(283–457)	41.2	298	[1975AMB/ELL]
C ₆ H ₁₂ O	[591-78-6]	2-hexanone				
		FUS	(12–382)	14.9	217.7	AC [1996DOM/HEA, 1970AND/COU]
		V	(359–401)	39.0	374	EB [2002SII/KIR]
		V		43.1 ± 0.1	298	C [1992SVO/KUB]
		V		42.5 ± 0.1	308	C [1992SVO/KUB]
		V		41.6 ± 0.1	323	C [1992SVO/KUB]
		V		40.7 ± 0.1	338	C [1992SVO/KUB]
		V		40.1 ± 0.1	348	C [1992SVO/KUB]
		V		39.5 ± 0.1	358	C [1992SVO/KUB]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(293–411)	40.8	308	A	[1987STE/MAL]
	V	(279–423)	43.8	294	A	[1987STE/MAL]
	V	(310–427)	41.5	325	A	[1987STE/MAL]
	V	(421–523)	36.7	436	A	[1987STE/MAL]
	V	(513–587)	36.1	528	A	[1987STE/MAL]
	V	(297–334)	42.2	315		[1983MAR/SHV]
	V		43.1 ± 0.1	298	C	[1983UCH/MAJ]
	V		42.3 ± 0.5	298	C	[1981GAT/STR]
	V		43.0 ± 0.3	298	GCC	[1979SAL/PEA]
	V	(307–482)	42.9	298		[1975AMB/ELL]
	V		42.2 ± 0.1	298	C	[1970HAR/HEA]
	V	(280–400)	53.8	295		[1947STU]
	C ₆ H ₁₂ O	[589-38-8]	3-hexanone			
TRS		(12–321)	0.68	145		
FUS		(12–321)	13.47	217.7	AC	[1996DOM/HEA, 1970AND/COU]
V		(408–517)	36.5	423	A	[1987STE/MAL]
V		(511–583)	35.4	526	A	[1987STE/MAL]
V			40.6 ± 0.1	298	C	[1983UCH/MAJ]
V			42.3 ± 0.3	298	GCC	[1979SAL/PEA]
V		(348–413)	38.9	363	A	[1987STE/MAL, 1975AMB/ELL]
V			42.3	298		[1975AMB/ELL]
V		(292–406)	42.2	307	A	[1987STE/MAL, 1972DYK]
V			41.9 ± 0.2	298	C	[1970HAR/HEA]
V			38.4 ± 0.1	354	C	[1967HAL/LEE]
V			37.0 ± 0.1	374	C	[1967HAL/LEE]
V		35.4 ± 0.1	396	C	[1967HAL/LEE]	
V	(349–406)	38.8	364	GS, EB	[1965COL/COU]	
C ₆ H ₁₂ O	[75-97-8]	3,3-dimethyl-2-butanone (pinacolone)				
	FUS	(12–362)	11.34	221.7	AC	[1996DOM/HEA, 1970AND/COU]
	V		37.8 ± 0.1	308	C	[1992SVO/KUB]
	V		37.5 ± 0.1	313	C	[1992SVO/KUB]
	V		36.9 ± 0.1	323	C	[1992SVO/KUB]
	V		36.7 ± 0.1	328	C	[1992SVO/KUB]
	V		35.8 ± 0.1	338	C	[1992SVO/KUB]
	V		35.4 ± 0.1	343	C	[1992SVO/KUB]
	V		35.0 ± 0.1	348	C	[1992SVO/KUB]
	V	(311–381)	36.9	326	A	[1987STE/MAL]
	V	(363–400)	34.9	378	A	[1987STE/MAL]
	V	(396–509)	33.8	411	A	[1987STE/MAL]
	V	(491–567)	33.1	506	A	[1987STE/MAL]
	V		40.4 ± 0.4	298	C	[1981GAT/STR]
	V	(289–402)	38.3	304	A	[1987STE/MAL, 1975AMB/ELL]
V		38.3	298		[1975AMB/ELL]	
V		36.1	338	C	[1973GEI/QUI]	
V		37.9 ± 0.1	298	C	[1970HAR/HEA]	
C ₆ H ₁₂ O	[108-10-1]	4-methyl-2-pentanone (methyl isobutyl ketone)				
	V	(332–392)	38.0	348		[2014NEG/MOK]
	V	(340–389)	37.6	355		[2012LAA/ZAI]
	V	(321–397)	38.7	336		[2009MAR/LLA]
	V		40.1 ± 0.1	308	C	[1992SVO/KUB]
	V		39.0 ± 0.1	323	C	[1992SVO/KUB]
	V		38.0 ± 0.1	338	C	[1992SVO/KUB]
	V		37.4 ± 0.1	348	C	[1992SVO/KUB]
	V	(309–416)	39.2	324		[1988AMB/GHI3]
	V	(281–400)	42.5	296	A	[1987STE/MAL]
	V	(349–389)	37.0	365	EB	[1985RED/RAO]
	V		42.5 ± 0.1	298	C	[1983UCH/MAJ]
	V	(282–456)	41.0	298		[1975AMB/ELL]
V		37.6	347	C	[1973GEI/QUI]	
V	(294–390)	41.2	309	A	[1987STE/MAL, 1952FUG/BOW]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₂ O	[565-69-5]	2-methyl-3-pentanone				
	V	(280–387)	41.0	295	A	[1987STE/MAL]
	V	(377–450)	36.2	392	A	[1987STE/MAL]
	V	(280–452)	40.5	298		[1975AMB/ELL]
	V	(300–387)	43.4	315	A	[1987STE/MAL, 1974LOG/FRO]
	V		39.8 ± 0.2	298	C	[1970SEL2]
C ₆ H ₁₂ O	[66-25-1]	hexanal				
	FUS		13.3	214.9		
	TRS (liq anomaly)		0.34	243.2	AC	[1993LEB/VAS, 1991VAS/BYK]
	V	(358–425)	38.6	375		[2014MEN/BEJ]
	V	(322–402)	40.8	337	EB	[2006PAL/ORAL]
	V	(287–309)	42.5 ± 0.4	298	GS	[2003VER/KRA2]
	V		42.3 ± 0.1	298		[1981DYA/KOR]
	V	(315–402)	41.0	330		[1979MAR/SAC]
C ₆ H ₁₂ OS	[999-90-6]	<i>S</i> -butyl thiolacetate				
	V		48.1 ± 0.2	298	C	[1966WAD]
C ₆ H ₁₂ OS	[999-90-6]	<i>S</i> - <i>tert</i> -butyl thiolacetate				
	V		42.9 ± 0.2	298	C	[1966WAD]
C ₆ H ₁₂ O ₂	[1792-81-0]	<i>cis</i> -1,2-cyclohexanediol				
	TRS	(173–368)	19.9	360.4		
	FUS	(173–368)	3.3	371.6	DSC	[2008MAR/EUS]
	FUS		20.27	373.2	DSC	[2002ZHO/PEN, 2003ZHO/ZHA]
	TRS		19.89	360.4		
	FUS		3.32	371.6	DSC	[1995MAR/COS]
	SUB	(298–353)	91.3 ± 0.5	298	GS	[2015EME/VER3]
	SUB		89.0 ± 3.0	298	C	[1999COS/EUS]
	SUB (cryst. I)		70.0 ± 3.0	366	C	[1995MAR/COS]
	SUB (cryst. III)		88.0 ± 1.9	343	C	[1995MAR/COS]
	SUB	(289–320)	43.7	304	ME	[1987STE/MAL, 1940ZIL]
C ₆ H ₁₂ O ₂	[1460-57-7]	<i>trans</i> -1,2-cyclohexanediol				
	FUS	(173–373)	21.0	382.6	DSC	[2008MAR/EUS]
	FUS		16.37	375.7	DSC	[2002ZHO/PEN, 2003ZHO/ZHA]
	FUS		18.51	372.3	DSC	[1995MAR/COS]
	SUB	(296–350)	90.4 ± 0.4	298	GS	[2015EME/VER3]
	SUB		85.9 ± 1.4	343	C	[1995MAR/COS]
	SUB	(289–320)	42.5	304	ME	[1987STE/MAL, 1940ZIL]
C ₆ H ₁₂ O ₂	[931-71-5]	<i>cis</i> -1,4-cyclohexanediol				
	TRS		14.1	374.3		
	FUS		1.9	381.7	DSC	[2014BEB/ROS]
C ₆ H ₁₂ O ₂	[126-39-6]	2-ethyl-2-methyl-1,3-dioxolane				
	V	(274–313)	44.8 ± 0.3	298	GS	[2002VER]
	V	(274–313)	43.1 ± 0.3		GS	[1998VER/PEN]
C ₆ H ₁₂ O ₂	[3390-13-4]	2-propyl-1,3-dioxolane				
	V	(278–313)	45.3 ± 0.3	298	GS	[1998VER/PEN, 2002VER]
C ₆ H ₁₂ O ₂	[1121-61-5]	4-ethyl-1,3-dioxane				
	V	(362–412)	39.3	377	A	[1987STE/MAL]
C ₆ H ₁₂ O ₂	[766-20-1]	2,4-dimethyl-1,3-dioxane				
	V	(274–313)	44.9 ± 0.6	298	GS	[2002VER]
C ₆ H ₁₂ O ₂	[141-79-7]	2,2-dimethyl-1,3-dioxane				
	FUS		12.1	229.6		[1975BOR]
C ₆ H ₁₂ O ₂	[766-15-4]	4,4-dimethyl-1,3-dioxane				
	V	(333–407)	37.1	348	A	[1987STE/MAL, 1968KAC/NEM]
	V	(363–406)	38.8	378		[1969LES/MOR]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		39.8 ± 0.1	298	C	[1966WAD]
	V	(249–393)	44.1	264	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₂ O ₂	[105-46-4]	2-butyl acetate				
	V		40.7	298		[2012ZHA/DU, 2014WIS/PER]
C ₆ H ₁₂ O ₂	[110-19-0]	isobutyl acetate				
	V	(300–516)	40.3	320	EB	[2012SUS/ROD]
	V	(308–391)	39.9	323		[2005MON/MUN]
	V	(325–393)	39.2	340		[1996BUR/MON]
	V	(252–391)	39.8	267	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₂ O ₂	[540-88-5]	<i>tert</i> -butyl acetate				
	V	(308–372)	36.7	323		[2005MON/MUN]
	V		38.0 ± 0.2	298	C	[1966WAD, 1996VER/BEC]
C ₆ H ₁₂ O ₂	[598-98-1]	methyl 2,2-dimethylpropanoate				
	V	(313–363)	37.7	298	CGC	[1995CHI/HOS]
	V		39.0 ± 0.5	298	GC	[1987AZA]
	V		38.8	298		[UR/FUC, 1985MAJ/SVO]
	V		39.7 ± 0.3	298	GCC	[1980FUC/PEA]
	V	(299–356)	35.2	319	BG	[1971HAL/BAL]
C ₆ H ₁₂ O ₂	[638-49-3]	pentyl formate				
	V	(274–313)	45.6	294	GS	[2012SAM/NAZ]
	V	(274–313)	45.2 ± 0.1	298	GS	[2012SAM/NAZ]
C ₆ H ₁₂ O ₂	[110-45-2]	isopentyl formate				
	V	(255–397)	38.9	270	A	[1987STE/MAL]
C ₆ H ₁₂ O ₂	[556-24-1]	methyl isovalerate				
	V	(254–390)	41.2	269	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₂ O ₂	[624-24-8]	methyl valerate				
	V	(275–311)	43.7 ± 0.3	298	GS	[2008VER/EME]
	V	(350–415)	44.1 ± 0.1		EB	[2007CAM/MOL]
	V	(281–547)	44.4	296		[2006CAM/MAR, 2006CAM]
	V	(364–417)	39.2	379		[2003ORT/ESP2]
	V		41.3	350		[2002VAN/VAN]
	V		43.7 ± 0.2	298		[2002VAN/VAN]
	V	(297–411)	42.5	312	A	[1987STE/MAL]
	V		43.3 ± 0.5	298	GC	[1987AZA]
	V		44.3 ± 0.5	298	C	[1981GAT/STR]
	V		46.1 ± 0.3	298	GCC	[1980FUC/PEA]
	V		44.1 ± 0.1	298	GCC	[1980FUC/PEA]
	V		43.1 ± 0.1	298	C	[1977MAN/SEL]
C ₆ H ₁₂ O ₂	[106-36-5]	propyl propanoate				
	V	(366–408)	38.3 ± 0.1	387	EB	[1999GON/ORT, 2012SAM/NAZ]
	V	(366–408)	44.6 ± 0.1	298	EB	[1999GON/ORT, 2012SAM/NAZ]
	V	(378–406)	37.6	392		[1994ORT/GAL]
	V	(336–394)	39.9	351		[1993FAR/WIC]
	V	(259–396)	43.1	274	A	[1987STE/MAL, 1947STU]
	V		42.1 ± 0.1	313	C	[1980SVO/UCH]
	V		43.2	298	C	[1980SVO/UCH, 2012SAM/NAZ]
	V		41.1 ± 0.1	328	C	[1980SVO/UCH]
	V		40.0 ± 0.1	343	C	[1980SVO/UCH]
	V		38.8 ± 0.1	358	C	[1980SVO/UCH]
	V		42.2	298		[1953WAL, 2012SAM/NAZ]
C ₆ H ₁₂ O ₂	[142-62-1]	hexanoic acid				
	V	(297–328)	68.4 ± 0.9	313	GS	[2000VER2]
	V	(297–328)	69.2 ± 0.9	298	GS	[2000VER2]
	V	(353–393)	71.3	298	CGC	[1995CHI/HOS]
	V		70.9	271		[1982DEK/SCH]
	V	(270–280)	73.2 ± 2.0	298	TE	[1979DEK/OON]
	V	(335–487)	65.9	350	A	[1987STE/MAL, 1972DYK]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(371–452)	66.6	386		[1957ROS/ACC, 1984BOU/FRI]
	V		64.6	367	I	[1943CRA]
C ₆ H ₁₂ O ₂	[88-09-5]	2-ethyl butyric acid				
	V	(373–466)	58.2	388	A	[1987STE/MAL]
C ₆ H ₁₂ O ₂	[646-07-1]	4-methylvaleric acid				
	V	(339–481)	91.7	354	A	[1987STE/MAL]
C ₆ H ₁₂ O ₂	[595-37-9]	2,2-dimethylbutanoic acid				
	V	(364–498)	59.4 ± 0.3	370	EB	[2002STE/CHI]
	V	(364–498)	54.6 ± 0.3	410	EB	[2002STE/CHI]
	V	(364–498)	50.0 ± 0.4	450	EB	[2002STE/CHI]
	V	(364–498)	46.0 ± 0.7	490	EB	[2002STE/CHI]
C ₆ H ₁₂ O ₂	[1070-83-3]	3,3-dimethylbutanoic acid				
	V	(283–325)	63.6 ± 0.9	304	GS	[2000VER2]
	V	(283–325)	64.0 ± 0.9	298	GS	[2000VER2]
C ₆ H ₁₂ O ₃	[767-09-9]	1-hexene ozonide				
	V	(353–373)	43.9	363	MM	[1977BOL/MAK]
C ₆ H ₁₂ O ₃	[37160-61-5]	sec-butyl glycolate				
	V	(301–451)	52.3	316	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₂ O ₃	[123-63-7]	2,4,6-trimethyl-1,3,5-trioxane (paraldehyde)				
	TRS	(80–310)	0.26	142.7		
	TRS	(80–310)	0.77	147.5		
	FUS	(80–310)	13.52	285.7	AC	[1996DOM/HEA, 1969CLE/MEL]
	FUS		13.83	285.8		[1911LOU/DUP]
	V	(323–396)	41.5	338	A	[1987STE/MAL]
	V		41.4 ± 0.4			[1959FLE/MOR]
C ₆ H ₁₂ O ₃	[123-34-2]	glycerol 1-monoallyl ether				
	V	(323–383)	74.7	338	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₂ O ₃	[817-95-8]	2-ethoxyacetic acid, ethyl ester				
	V	(330–430)	46.1	345	A	[1987STE/MAL]
C ₆ H ₁₂ O ₃	[14144-33-3]	3-ethoxypropionic acid, methyl ester				
	V	(320–432)	44.3	335	A	[1987STE/MAL, 1972DYK, 1948DIX/REH]
C ₆ H ₁₂ O ₃	[111-15-9]	2-ethoxyethanol acetate				
	V	(408–429)	43.6	418	EB	[2012RAN/BHA]
	V	(322–430)	50.9	337	A	[1987STE/MAL]
	V		52.7 ± 0.1	298	C	[1970KUS/WAD]
	V	(330–468)	52.6 ± 0.4	298	EB	[1966BOT/ADL]
C ₆ H ₁₂ O ₃	[4897-95-4]	3-hydroxypropionic acid, propyl ester				
	V	(350–375)	60.9	362	A	[1987STE/MAL]
C ₆ H ₁₂ O ₃	[10606-42-5]	3-methoxypropionic acid, ethyl ester				
	V	(313–432)	44.6	328	A	[1987STE/MAL]
C ₆ H ₁₂ O ₃	[616-09-1]	propyl lactate				
	V	(334–442)	52.1	349	A	[1987STE/MAL, 1950REH/DIX]
C ₆ H ₁₂ O ₃	[617-51-6]	isopropyl lactate				
	V	(356–430)	44.5	371		[2005PEN/MUR]
C ₆ H ₁₂ O ₃	[54078-53-4]	ethoxymethyl propionate				
	V		49.9 ± 0.1	298	C	[1974MAN]
C ₆ H ₁₂ O ₃	[5405-41-4]	ethyl 3-hydroxybutyrate				
	V	(363–393)	55.9 ± 0.6	298	CGC	[2005TEM/CHI]
C ₆ H ₁₂ O ₄	[624-47-5]	(dl)-glycerol 1-propionate				
	V	(388–456)	75.8	403	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₂ O ₄	[1073-91-2]	diacetone diperoxide				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₂ O ₅	SUB	(288–328)	81.9	308	HSA	[2009OXL/SMI]
	FUS	1-deoxy-(d)-glucopyranose	27.4	403.2	DSC	[1996SCH]
C ₆ H ₁₂ O ₅	FUS	2-deoxy-(b)-glucopyranose	34.5	398.7	DSC	[1996SCH]
	FUS	3-deoxy-(b)-glucopyranose	32.6	387.2	DSC	[1996SCH]
C ₆ H ₁₂ O ₅	FUS	6-deoxy-(d)-glucopyranose	22.7	409.2	DSC	[1996SCH]
	[87-89-8]	<i>myo</i> -inositol				
C ₆ H ₁₂ O ₆	FUS		46.2	500.8	DSC	[2006ZHO/LI]
	FUS		47.9	496.9	DSC	[1996DOM/HEA, 1990BAR/DEL]
	SUB	(438–458)	174.0 ± 2.6	448	ME	[2006CHE/OJA]
	SUB		181.0 ± 2.0	298	C	[1999COS/EUS]
	SUB		154.7 ± 1.4	477	TE	[1990BAR/DEL]
	SUB		161	298		[1990BAR/DEL]
	SUB		178	298	B	[1990BAR/DEL]
	SUB	(454–472)	168			[1983DEW/BOW]
	V	(497–524)	119.0 ± 1.4	519	TE	[1990BAR/DEL]
	C ₆ H ₁₂ O ₆	[492-62-6]	α -D-glucose			
FUS (0.05 K/min)			31.6	415.1	DSC	
FUS (0.5 K/min)			33.5	421.8	DSC	
FUS (5 K/min)			36.1	431.3	DSC	
FUS (10 K/min)			36.6	435.2	DSC	
FUS (20 K/min)			36.9	438.7	DSC	[2011MAG/PYD]
FUS			34.3	423.2		[1996SCH]
C ₆ H ₁₂ O ₆	FUS		31.42	414		[1996DOM/HEA, 1934PAR/THO]
	FUS	D-(+)-glucose	33.35	427.3	DSC	[2011LEE/THO]
C ₆ H ₁₂ O ₆	[50-99-7]	glucose				
	FUS		32.11	433.5	DSC	[2012BIT/MEN]
C ₆ H ₁₂ O ₆	[57-48-7]	D-(-)-fructose				
	FUS		31.15	390.1	DSC	[2011LEE/THO]
C ₆ H ₁₂ O ₆	FUS	(b)-mannopyranose	24.7	391.2		[1996SCH]
	[59-23-4]	(d)-galactose	43.8	436.2		[2002JON/COO]
C ₆ H ₁₂ S	[7133-36-0]	cyclopentyl methyl sulfide				
	TRS		0.9	165		
	FUS		9.2	169.9		[1974MES/FIN]
	V		45.1 ± 0.1	298		[1972GOO, 1966OSB/DOU]
C ₆ H ₁₂ S	V	(354–473)	41.7	369	A, EB	[1987STE/MAL, 1966OSB/DOU]
	[5161-13-7]	<i>cis</i> -2,5-dimethyltetrahydrothiophene				
C ₆ H ₁₂ S	V	(311–444)	41.7	326		[1999DYK/SVO]
	V	(349–427)	39.7	364	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₂ S	[5161-14-8]	<i>trans</i> -2,5-dimethyltetrahydrothiophene				
	V	(348–396)	39.3	363	EB	[1987STE/MAL, 1952WHI/BAR, 1999DYK/SVO]
C ₆ H ₁₂ S	[1551-32-2]	2-ethyltetrahydrothiophene				
	V	(333–488)	42.6	348	A	[1987STE/MAL, 1972DYK, 1999DYK/SVO]
C ₆ H ₁₂ S	[62184-67-2]	3-ethyltetrahydrothiophene				

Note: The authors performed measurements as a function of heating rate, and the above values correspond to a heating rate of 2° C/min.

Note: The authors performed measurements as a function of heating rate, and the above values correspond to a heating rate of 2° C/min.

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(343–503)	43.1	358	A	[1987STE/MAL, 1972DYK, 1999DYK/SVO]
C ₆ H ₁₂ S	[5161-16-0]	2-methyltetrahydro-2 <i>H</i> -thiopyrane				
	V	(317–455)	42.1	332		[1999DYK/SVO]
	V	(356–438)	40.2	371	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₂ S	[5258-50-4]	3-methyltetrahydro-2 <i>H</i> -thiopyrane				
	V	(321–460)	42.5	336		[1999DYK/SVO]
	V	(361–435)	40.7	376	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₂ S	[5161-17-1]	4-methyltetrahydro-2 <i>H</i> -thiopyrane				
	V	(321–461)	42.8	336		[1999DYK/SVO]
	V	(361–441)	40.8	376	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₂ S	[1569-69-3]	cyclohexanethiol				
	FUS	(12–370)	10.0	189.6	AC	[1996DOM/HEA, 1967MES/GUT]
	V		44.9	298	C	[1981HOS/SCO]
	V		44.6 ± 0.1	298		[1972GOO, 1966OSB/DOU]
	V	(355–476)	41.2	370	A, EB	[1987STE/MAL, 1966OSB/DOU, 1999DYK/SVO]
C ₆ H ₁₂ S ₃	[6573-11-1]	1,4,7-trithiacyclononane				
	FUS		29.0	354.2	DSC	[2002ROC/GRI]
C ₆ H ₁₃ Br	[111-25-1]	1-bromohexane				
	FUS		18.05	188.1		[1996DOM/HEA, 1931DEE]
	V	(323–363)	45.5	298	CGC	[1995CHI/HOS]
	V		46.1 ± 0.1	298	C	[1968WAD]
	V		45.6 ± 0.1	298	C	[1966WAD]
	V	(333–456)	43.2	348	A, EST	[1987STE/MAL, 1961LI/ROS, 1972DYK]
C ₆ H ₁₃ Br	[3377-86-4]	(<i>dl</i>)-2-bromohexane				
	V	(303–416)	43.8	318	A	[1987STE/MAL]
C ₆ H ₁₃ Br	[30310-22-6]	2-bromo-4-methylpentane				
	V	(315–448)	29.3	330	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₃ Br	[26356-06-9]	2-bromo-3,3-dimethylbutane				
	V	(315–449)	39.5	330	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₃ Cl	[544-10-5]	1-chlorohexane				
	V	(319–376)	41.1	334		[1988PAU/KRU]
	V	(290–410)	42.0	298		[1984BOU/FRI, 1991BAS/SVO]
	V		42.8 ± 0.1	298	C	[1981TEK/MAJ]
	V		40.5 ± 0.1	328	C	[1981TEK/MAJ]
	V		40.0 ± 0.1	343	C	[1981TEK/MAJ]
	V		39.0 ± 0.1	358	C	[1981TEK/MAJ]
	V		38.4 ± 0.1	368	C	[1981TEK/MAJ]
	V	(288–409)	43.5	303	A, DTA	[1987STE/MAL, 1969KEM/KRE, 1972DYK]
	V		42.8 ± 0.1	298	C	[1968WAD]
C ₆ H ₁₃ Cl	[638-28-8]	(<i>dl</i>)-2-chlorohexane				
	V	(300–399)	40.9	315	A	[1987STE/MAL]
C ₆ H ₁₃ Cl	[594-57-0]	2-chloro-2,3-dimethylbutane				
	V	(301–426)	38.0	316	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₃ Cl	[5750-00-5]	(<i>dl</i>)-2-chloro-3,3-dimethylbutane				
	V	(300–425)	38.0	315	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₃ ClO ₂ S	[14532-24-2]	1-hexanesulfonyl chloride				
	V	(273–304)	60.7	288		[1999DYK/SVO, 1963QUI/NOW]
	V	(303–400)	61.7	318		[1999DYK/SVO]
	V	(400–507)	57.2	415		[1999DYK/SVO]
C ₆ H ₁₃ Cl ₂ N	[13426-57-8]	<i>N</i> -ethyl-bis(2-chloroethyl)amine				
	V	(273–333)	54.9	288	A, GS	[1987STE/MAL, 1948RED/CHA3, 1972DYK]
C ₆ H ₁₃ F	[373-14-8]	1-fluorohexane				
	V	(273–388)	36.9	288	A, EST	[1987STE/MAL, 1961LI/ROS, 1972DYK]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₃ F	[52688-75-2]	3-fluorohexane				
	V	(281–393)	36.8	296	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₃ I	[638-45-9]	1-iodohexane				
	V	(258–308)	49.9 ± 0.1	298	Static	[2010FUL/RUZ]
	V	(331–485)	49.8 ± 0.1	298	C	[1968WAD]
C ₆ H ₁₃ N		cyclohexylamine				
	[108-91-8]					
	TRS		1.0	258.2		
	FUS		16.5	255.1	DTA	[1999HAM/WUR]
	FUS		14.92	255.4		[1939VAN, 1999KAB/KOZ]
	V	(283–308)	44.1 ± 0.4	295	GS	[2015VER/EME3]
	V	(283–308)	43.9 ± 0.5	298	GS	[2015VER/EME3]
	V	(274–364)	43.7	298		[2012AHM/NEG]
	V	(333–363)	41.1 ± 0.2	348	EB	[2005GRE/KLA, 2015VER/EME3]
	V	(333–363)	44.1 ± 0.5	298	EB	[2005GRE/KLA, 2015VER/EME3]
	V	(363–407)	40.6	378		[1987STE/MAL]
	V	(363–398)	39.0 ± 2.0	380	EB	[1985SHE/SAN, 2015VER/EME3]
	V	(363–398)	44.0 ± 2.1	298	EB	[1985SHE/SAN, 2015VER/EME3]
	V		42.7 ± 0.1	313	C	[1979MAJ/SVO2]
	V		40.7 ± 0.1	343	C	[1979MAJ/SVO2]
	V		39.6 ± 0.1	358	C	[1979MAJ/SVO2]
	V		42.8 ± 0.1	298	C	[1975BER/OLO]
	V	(383–403)	38.2 ± 1.0	393	EB	[1973MOR/KAU, 2015VER/EME3]
V	(383–403)	44.0 ± 1.3	298	EB	[1973MOR/KAU, 2015VER/EME3]	
V	(333–408)	40.8	348	A	[1987STE/MAL, 1972DYK]	
V	(334–401)	40.8	349		[1960NOV/MAT2, 1984BOU/FRI, 1960NOV/MAT]	
V	(304–408)	39.3 ± 0.2	356		[1937CAR/MOR, 2015VER/EME3]	
V	(304–408)	42.5 ± 1.5	298		[1937CAR/MOR, 2015VER/EME3]	
C ₆ H ₁₃ N	[111-49-9]	hexahydro-1 <i>H</i> -azepine				
	V		46.7 ± 0.6	298	C	[2014FRE/LEI]
	V	(348–423)	37.7	363	A	[1987STE/MAL]
	V	(312–411)	40.4	327	A	[1987STE/MAL, 1972DYK]
V	(273–313)	44.2	298		[1968CAB/CON]	
C ₆ H ₁₃ N	[109-05-7]	(<i>dl</i>)-2-methylpiperidine				
	FUS	(14–370)	18.58	269.4	AC	[1996DOM/HEA, 1988MES/TOD]
V	(323–431)	38.2	338	EB, IPM	[1987STE/MAL, 1968OSB/DOU]	
C ₆ H ₁₃ N	[626-56-2]	3-methylpiperidine				
	V		44.4 ± 0.7	298	C	[2006RIB/CAB5]
C ₆ H ₁₃ N	[626-58-4]	4-methylpiperidine				
	V		40.6 ± 0.9	298	C	[2006RIB/CAB5]
C ₆ H ₁₃ N	[626-67-5]	<i>N</i> -methylpiperidine				
	V		36.8 ± 0.6	298	C	[2006RIB/CAB5]
	V	(298–343)	36.5	313		[1995BEL/AIT]
	V	(273–380)	37.3	288	A	[1987STE/MAL]
	V		36.7 ± 0.1	298		[1979BER/ANG, 1998EWI/SAN]
V	(273–313)	35.9	298		[1968CAB/CON]	
C ₆ H ₁₃ NO	[100-74-3]	<i>N</i> -ethylmorpholine				
	V	(284–364)	42.2	300	Static	[2013CHI/DER]
	V	(274–313)	42.3 ± 0.3	294	GS	[1998VER2]
V	(274–313)	42.1 ± 0.3	298	GS	[1998VER2]	
C ₆ H ₁₃ NO		methyl 2-(<i>N</i> , <i>N</i> -dimethylamino)propanoate				
V		(278–306)	46.1 ± 1.1	290	GS	[1992VER/BEC]
C ₆ H ₁₃ NO		ethyl 2-(<i>N</i> , <i>N</i> -dimethylamino)ethanoate				
V		(278–308)	47.6 ± 0.8	293	GS	[1992VER/BEC]
C ₆ H ₁₃ NO	[127-19-5]	<i>N</i> , <i>N</i> -diethylacetamide				
	V	(463–513)	53.7 ± 0.4	298	CGC	[2009PAN/ANT]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		54.1	298	A	[1985BAR/CAS, 1985MAJ/SVO]
C ₆ H ₁₃ NO	[10601-63-5]	<i>N</i> -isopropylpropionamide				
	TRS		5.05	283.2		
	FUS		7.79	324.2	DSC	[2010MEE/GEU]
C ₆ H ₁₃ NO	[1119-49-9]	<i>N</i> -butylacetamide				
	V		75.0 ± 0.3	298	C	[1984STA/WAD]
	V		76.1 ± 1.2	298	C	[1965WAD]
C ₆ H ₁₃ NO	[760-79-2]	<i>N, N</i> -dimethyl butyramide				
	V	(251–432)	50.8	366	A	[1987STE/MAL]
	V		55.2			[1977VAS/KOT]
C ₆ H ₁₃ NO	[762-84-5]	<i>tert</i> -butylacetamide				
	SUB		78.0 ± 0.3	298	C	[1984STA/WAD]
	SUB	(278–295)	78.3 ± 0.3	287	ME	[1983ZIE/ZIE]
	SUB	(278–295)	77.9 ± 0.4	298	ME	[1983ZIE/ZIE]
C ₆ H ₁₃ NO	[628-02-4]	hexanamide				
	TRS		51.1	306.1		
	FUS		16.8	372.4	DSC	[2013GUT/RAT]
	TRS		7.9	305.1		
	FUS		16.7	373	DSC	[2008ABA/BAD]
	FUS		25.1	374		[1973LEB/KAT2]
	SUB	(301–371)	85 ± 4.0	298	TE	[2000BRU/DEL]
	SUB	(293–303)	98.7 ± 1.7	298		[1973LEB/KAT2, 1977PED/RYL]
	SUB	(338–368)	95.1 ± 4	353	GS	[1959DAV/JON2, 1970COX/PIL, 1987STE/MAL]
	V		79.5 ± 3.3	298	CGC	[2013GUT/RAT]
C ₆ H ₁₃ NO	[3554-74-3]	1-methyl-3-piperidinol				
	V		63.7 ± 1.0	298	C	[2006RIB/CAB2]
C ₆ H ₁₃ NO	[106-52-5]	1-methyl-4-piperidinol				
	V		71.5 ± 0.7	298	C	[2006RIB/CAB2]
C ₆ H ₁₃ NO	[3433-37-2]	2-piperidinemethanol				
	SUB		93.0 ± 0.5	298	C	[2006RIB/CAB3]
C ₆ H ₁₃ NO	[4606-65-9]	3-piperidinemethanol				
	SUB		95.9 ± 1.4	298	C	[2006RIB/CAB3]
C ₆ H ₁₃ NO	[6457-49-4]	4-piperidinemethanol				
	SUB		98.3 ± 0.7	298	C	[2006RIB/CAB3]
C ₆ H ₁₃ NO ₂	[6280-17-7]	<i>N</i> -isopropyl lactamide				
	V	(369–407)	69.9	384	A	[1987STE/MAL, 1950RAT/FIS]
C ₆ H ₁₃ NO ₂	[74421-70-8]	<i>N</i> -propyl lactamide				
	V	(373–423)	74.0	388	A	[1987STE/MAL, 1950RAT]
C ₆ H ₁₃ NO ₂	[616-06-8]	<i>dl</i> -2-aminohexanoic acid				
	TRS (α-to-γ)		4.8	392	DSC	[2015SME/BRU]
	SUB	(435–469)	114.5 ± 0.4	450	ME	[1965SVE/CLY, 1964CLY/SVE, 1987STE/MAL]
C ₆ H ₁₃ NO ₂	[73-32-5]	2-amino-3-methylpentanoic acid (isoleucine)				
	SUB	(442–461)	120.1 ± 0.8	455	ME	[1965SVE/CLY, 1964CLY/SVE]
C ₆ H ₁₃ NO ₂	[328-38-1]	<i>L</i> -(<i>d</i>)-2-amino-4-methylpentanoic acid (<i>L</i> -(<i>d</i>)-leucine)				
	SUB	(323–423)	U83.7 ± 4	373	LE	[1977GAF/PIE]
C ₆ H ₁₃ NO ₂	[61-90-5]	<i>D</i> -(<i>l</i>)-leucine				
	SUB	(401–517)	148.7 ± 6.5		TGA	[2009LAH/RAU]
	SUB	(446–464)	150.6 ± 0.8	455	ME	[1965SVE/CLY, 1970COX/PIL, 1964CLY/SVE]
C ₆ H ₁₃ NO ₂	[60-32-2]	6-aminohexanoic acid				
	SUB	(388–407)	153.3 ± 0.8	398	C	[1983SKO/SAB]
	SUB		155 ± 3	298	C	[1983SKO/SAB]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₄	[110-54-3]	hexane				
	FUS		13.03	177.8	DTA	[1994TAN/SAB3]
	FUS		13.08	177.8		[1996DOM/HEA, 1946DOU/HUF]
	FUS		12.34	177.9		[1937STU]
	FUS		13.03	177.9	C	[1931HUF/PAR]
	FUS		12.58	178.6		[1996DOM/HEA, 1930PAR/HUF]
	SUB		50.8	178	B	[1963BON]
	V	(302–339)	27.1 ± 0.4		I	[2010GER/PEL]
	V		31.4 ± 0.2	298	C	[2007PAS/KUZ]
	V		31.5 ± 0.1	298	C	[1996VAR/PAS]
	V		31.5	298		[1994RUZ/MAJ]
	V	(283–323)	32.1	298		[1992GRA/SAN]
	V		31.3 ± 0.3		GC	[1989AZA]
	V	(238–298)	34.9	253	A	[1987STE/MAL]
	V	(189–259)	35.7	244	A	[1987STE/MAL]
	V	(298–343)	31.5	313	A	[1987STE/MAL]
	V	(341–377)	30.1	356	A	[1987STE/MAL]
	V	(374–451)	29.3	389	A	[1987STE/MAL]
	V	(445–508)	29.4	460	A	[1987STE/MAL]
	V		26.6	373	C	[1985WOR/YER]
	V		22.5	423	C	[1985WOR/YER]
	V		15.7	473	C	[1985WOR/YER]
	V		8.9	498	C	[1985WOR/YER]
	V		31.6	298		[UR/FUC, 1985MAJ/SVO]
	V	(298–338)	30.9	313		[1984MIC/JOS]
	V		31.6 ± 0.1	298	C	[1979MAJ/SVO]
	V		30.7 ± 0.1	313	C	[1979MAJ/SVO]
	V		29.5 ± 0.1	333	C	[1979MAJ/SVO]
	V		28.2 ± 0.1	353	C	[1979MAJ/SVO]
	V	(300–321)	31.6	310	Static, MM	[1974LET/MAR, 1984BOU/FRI]
	V	(178–265)	32.5	250		[1973CAR/KOB]
	V		31.55	298		[1971WIL/ZWO]
V		30.9 ± 0.1	309	C	[1947WAD/DOU]	
V		29.8 ± 0.1	328	C	[1947WAD/DOU]	
V		31.5 ± 0.1	298	C	[1947OSB/GIN]	
V	(286–343)	32.0	301	A, MM	[1987STE/MAL, 1945WIL/TAY]	
V		31.0 ± 0.2	298	C	[1943LEM/FEL]	
V		30.5 ± 0.2	313	C	[1943LEM/FEL]	
V		29.0 ± 0.2	333	C	[1943LEM/FEL]	
V		28.2 ± 0.2	353	C	[1943LEM/FEL]	
C ₆ H ₁₄	[107-83-5]	2-methylpentane				
	FUS		6.27	119.6		[1996DOM/HEA, 1946DOU/HUF]
	V	(290–333)	30.2	305		[2010SAP/UUS]
	V	(301–333)	30.0	316		[2002POK/UUS]
	V	(310–359)	29.7	325		[1998AUC/LOR]
	V	(293–335)	30.5	308	A	[1987STE/MAL]
	V		29.9	298		[1971WIL/ZWO]
	V		29.9 ± 0.1	298	C	[1949WAD/SMI]
	V		28.7 ± 0.1	318	C	[1949WAD/SMI]
	V		27.8 ± 0.1	333	C	[1949WAD/SMI]
	V		29.9 ± 0.1	298	C	[1947OSB/GIN]
	V	(286–334)	30.4	301	MM	[1945WIL/TAY]
	V		29.8 ± 0.2	293	C	[1943LEM/FEL]
	V		29.0 ± 0.2	313	C	[1943LEM/FEL]
V		27.6 ± 0.2	333	C	[1943LEM/FEL]	
V		26.9 ± 0.2	353	C	[1943LEM/FEL]	
C ₆ H ₁₄	[96-14-0]	3-methylpentane				
	FUS		5.31	110.3		[1996DOM/HEA, 1973FIN/MES]
	V	(316–361)	29.9	331		[1999LOR/AUC]
V	(293–338)	30.5	308	A	[1987STE/MAL]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		30.3 ± 0.1	298	C	[1979MAJ/SVO]
	V		29.5 ± 0.1	313	C	[1979MAJ/SVO]
	V		28.3 ± 0.1	333	C	[1979MAJ/SVO]
	V		27.0 ± 0.1	353	C	[1979MAJ/SVO]
	V		30.3	298		[1971WIL/ZWO]
	V		30.0 ± 0.1	303	C	[1949WAD/SMI]
	V		28.8 ± 0.1	324	C	[1949WAD/SMI]
	V		28.1 ± 0.1	336	C	[1949WAD/SMI]
	V		30.3 ± 0.1	298	C	[1947OSB/GIN]
	V	(288–337)	30.2	303	MM	[1945WIL/TAY]
C ₆ H ₁₄	[79-29-8]	2,3-dimethylbutane				
	TRS		2.37	107		
	TRS		6.43	136.1		
	FUS		0.79	145.2		[1996DOM/HEA, 1971ADA/SUG]
	TRS		6.49	136.1		
	FUS		0.80	145.2		[1946DOU/HUF]
	V		29.1	298		[1971WIL/ZWO]
	V		29.2 ± 0.1	296	C	[1949WAD/SMI]
	V		28.9 ± 0.1	303	C	[1949WAD/SMI]
	V		28.3 ± 0.1	313	C	[1949WAD/SMI]
	V		27.3 ± 0.1	331	C	[1949WAD/SMI]
	V	(287–332)	29.6	302	MM	[1945WIL/TAY]
	V		29.2 ± 0.1	293	C	[1943LEM/FEL]
	V		28.2 ± 0.1	313	C	[1943LEM/FEL]
	V		27.0 ± 0.1	333	C	[1943LEM/FEL]
	V		26.1 ± 0.1	353	C	[1943LEM/FEL]
C ₆ H ₁₄	[75-83-2]	2,2-dimethylbutane				
	TRS		5.4	126.8		
	TRS		0.28	140.8		
	FUS		0.58	174.3		[1996DOM/HEA, 1946DOU/HUF]
	TRS		5.4	126.8		
	TRS		0.28	140.9		
	FUS		0.58	174.7		[1946KIL/PIT]
	TRS		4.58	127.1		
	FUS		0.46	172.1		[1937STU]
	V		27.7	298		[1971WIL/ZWO]
	V	(273–318)	28.7	288		[1949NIC/LAF, 1984BOU/FRI]
	V		27.8 ± 0.1	296	C	[1947WAD/DOU]
	V		26.3 ± 0.1	323	C	[1947WAD/DOU]
	V	(211–289)	29.2	274		[1946KIL/PIT]
	V	(288–323)	28.3	303	MM	[1945WIL/TAY]
C ₆ H ₁₄ FO ₃ P	[55-91-4]	fluorophosphoric acid, diisopropyl ester				
	V	(273–348)	29.4	288	A	[1987STE/MAL]
C ₆ H ₁₄ N ₂	[821-67-0]	dipropyldiazene				
	V		39.9 ± 0.4	298	C	[1976ENG/MEL]
	V	(295–305)	39.5	300	UV	[1974ENG/WOO]
	V		41.1			[1968BAC/NOV, 1974ENG/WOO]
C ₆ H ₁₄ N ₂	[3880-49-7]	diisopropyldiazene				
	V		35.9 ± 0.4	298	C	[1976ENG/MEL]
	V	(296–308)	36.1	302	UV	[1974ENG/WOO]
	V		37.7		I	[1974ENG/WOO]
	V		34.9			[1968GEI/HOF, 1974ENG/WOO]
C ₆ H ₁₄ N ₂	[3114-70-3]	1,4-diaminocyclohexane				
	V	(383–473)	48.2	398	A	[1987STE/MAL]
C ₆ H ₁₄ N ₂	[1436-59-5]	<i>cis</i> -1,2-cyclohexanediamine				
	V		62.2 ± 1.0	298	ME	[2007TOM/ROS]
C ₆ H ₁₄ N ₂	[2615-25-0]	<i>trans</i> -cyclohexyl-1,4-diamine				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		FUS		27.0	342.1	DSC	[2007TOM/ROS]
C ₆ H ₁₄ N ₂		SUB		105.0 ± 0.8	298	C	[2007TOM/ROS]
	[106-58-1]	1,4-dimethylpiperazine					
	V	(268–311)	41.2 ± 0.4	298	GS	[2010EFI/EME]	
	V	(270–309)	44.3 ± 0.3	289	GS	[1998VER2]	
	V	(270–309)	43.8 ± 0.3	298	GS	[1998VER2]	
C ₆ H ₁₄ N ₂		V	(276–319)	41.6	291	A	[1987STE/MAL, 1975CAB/CON]
	[106-55-8]	2,5-dimethylpiperazine					
		V	(437–609)	48.4	452	A	[1987STE/MAL]
C ₆ H ₁₄ N ₂		V	(288–318)	44.0	300		[1980LEB/NAZ]
	[7423-00-9]	propylhydrazone acetone					
C ₆ H ₁₄ N ₂		V	(288–323)	44.6	303		[1980LEB/NAZ]
	[7423-01-0]	isopropylhydrazone acetone					
C ₆ H ₁₄ N ₂ O		V	(308–343)	77.3 ± 0.7	326	GS	[2002VER2]
		V	(308–343)	78.8 ± 0.7	298	GS	[2002VER2]
	[103-76-4]	<i>N</i> -(hydroxyethyl)piperazine					
C ₆ H ₁₄ N ₂ O		V		51.7 ± 0.1	298	C	[1981BYS]
	[17697-55-1]	dipropyldiazene <i>N</i> -oxide					
C ₆ H ₁₄ N ₂ O		TRS		2.5	355.1		
		FUS		21.0	375.2	DSC	[2005HAS/TAJ]
	[38869-91-9]	1-pentyl urea					
C ₆ H ₁₄ N ₂ O ₂		SUB	(397–497)	U88 ± 8	447	LE	[1977GAF/PIE]
	[56-87-1]	(<i>l</i>)-lysine					
C ₆ H ₁₄ N ₂ O ₂		FUS (I)		30.7	385.4	DSC	[2011HER/LEY]
		FUS (II)		31.0	392.4	DSC	[2011HER/LEY]
	[33996-58-6]	α -ethyl-2-oxo-1-pyrrolidineacetamide (etiracetam)					
C ₆ H ₁₄ N ₄ O ₂		SUB	(441–541)	U134 ± 8	491	LE	[1977GAF/PIE]
	[74-79-3]	(<i>l</i>)-arginine					
C ₆ H ₁₄ N ₄ O ₂		V		57.3 ± 0.8	298	C	[2009MIR/KON]
	[4164-29-8]	<i>N</i> -nitrodipropylamine					
C ₆ H ₁₄ N ₈ O ₈		FUS		68.09	488.1	DSC	[1997ZEM]
	[13405-40-8]	2,4,7,9-tetranitro-2,4,7,9-tetraazadecane					
C ₆ H ₁₄ O		V		36.3 ± 0.1	298	C	[1980MAJ/WAG]
		V		35.3	313	C	[1980MAJ/WAG]
		V		34.3	328	C	[1980MAJ/WAG]
		V		33.3	343	C	[1980MAJ/WAG]
		V		32.1	358	C	[1980MAJ/WAG]
		V	(311–365)	36.5	298		[1976AMB/ELL]
		V	(311–365)	32.1	365		[1976AMB/ELL]
		V	(311–365)	35.2	326	A, EB	[1987STE/MAL, 1976AMB/ELL, 1969CID/POL, 1972DYK]
		V		33.3	330		[2011MEJ/SEG]
		V	(314–360)	35.3 ± 0.4	298		[UR/VER, 2002VER, 2003VER/KRA]
C ₆ H ₁₄ O		V	(309–396)	36.6 ± 0.1	320	EB	[2002STE/CHI2]
		V	(309–396)	34.5 ± 0.2	360	EB	[2002STE/CHI2]
		V	(309–396)	32.1 ± 0.5	400	EB	[2002STE/CHI2]
		V		34.8	298	EB	[1999HEI/FIS, 2003VER/KRA]
		V	(314–362)	33.4	329		[1998AUC/LOR]
		V	(283–308)	35.7 ± 1.0	295	GS	[1998VER/WEL]
		V	(283–308)	35.5 ± 1.0	298	GS	[1998VER/WEL]
		V		35.2	298	EB	[1996TOG/TOG, 2003VER/KRA]
		V		35.0	298	EB	[1994ANT/SAN, 2003VER/KRA]
		V	(306–359)	33.8	321	EB	[1994KRA/GME]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		35.8	298	C	[1991ROZ/SAF]
	V	(294–359)	33.5	298	EB	[1991ROZ/SAF, 1984CER/BOU, 2003VER/KRA]
	V	(294–359)	34.3	309	EB	[1984CER/BOU]
	V	(309–358)	33.7	324	EB	[1984PAL/CHO]
C ₆ H ₁₄ O	[637-92-3]	<i>tert</i> -butyl ethyl ether				
	V	(303–345)	33.1 ± 0.4	298	EB	[2007EFI/PAS]
	V	(313–346)	32.1	328		[2007SAP/ZAY]
	V	(313–345)	31.9	328		[2004KIM/KES]
	V	(307–346)	32.1	322		[2000REI/CAR]
	V	(278–346)	33.4	298		[1999RAR/HOR]
	V	(306–345)	32.2	321	EB	[1994KRA/GME]
	V	(284–346)	33.5	299	A	[1987STE/MAL]
	V	(248–350)	35.3	263	A	[1987STE/MAL]
C ₆ H ₁₄ O	[111-43-3]	dipropyl ether				
	TRS (metastable)		9.54	149.4		
	FUS (stable)	(15–460)	10.77	158.4	AC	[1996DOM/HEA, 1975AND/COU]
	V	(308–338)	34.8	323	EB	[2002ANT/FRA]
	V	(385–467)	32.2	400	A	[1987STE/MAL]
	V	(465–530)	32.4	480	A	[1987STE/MAL]
	V		35.7 ± 0.1	298	C	[1980MAJ/WAG]
	V		34.7	313	C	[1980MAJ/WAG]
	V		33.8	328	C	[1980MAJ/WAG]
	V		32.8	343	C	[1980MAJ/WAG]
	V		31.7	358	C	[1980MAJ/WAG]
	V	(292–389)	35.6	307	A	[1987STE/MAL, 1976AMB/ELL]
	V		31.4	363		[1976AMB/ELL]
	V		34	324	C	[1975AND/COU]
	V		32.8	342	C	[1975AND/COU]
	V		31.3	363	C	[1975AND/COU]
	V	(312–371)	34.6	327	A, EB	[1987STE/MAL, 1973MEY/HOT]
V	(300–362)	35.1	315	EB	[1969CID/POL]	
V	(340–379)	34.5	360		[1968LAP/NIS]	
C ₆ H ₁₄ O	[108-20-3]	diisopropyl ether				
	FUS		12.05	187.8		[1974AND/COU]
	FUS		11.03	186.3		[1933PAR/HUF]
	V	(308–341)	31.2	325		[2013MEJ/OLI]
	V	(305–338)	31.7	320		[2013RED/BEN]
	V	(285–365)	32.7 ± 0.5	298	EB	[2007EFI/PAS]
	V	(278–323)	33.0	293		[1999GAR/AND]
	V	(307–349)	31.1	322		[1999MON/DEL]
	V	(360–440)	29.9	375	A	[1987STE/MAL]
	V	(436–500)	29.5	451	A	[1987STE/MAL]
	V		32.1 ± 0.1	298	C	[1980MAJ/WAG]
	V		31.1	313	C	[1980MAJ/WAG]
	V		30.1	328	C	[1980MAJ/WAG]
	V		29.0	343	C	[1980MAJ/WAG]
	V		27.8	358	C	[1980MAJ/WAG]
	V	(284–365)	32.6	299	A	[1987STE/MAL, 1976AMB/ELL]
V	(284–365)	29.2	341		[1976AMB/ELL]	
V	(296–342)	32.1	311	A, EB	[1987STE/MAL, 1969CID/POL]	
V	(321–350)	30.1	336		[1965NIS/LAP2, 1972DYK]	
V	(273–333)	33.2	288		[1949NIC/LAF, 1984BOU/FRI]	
C ₆ H ₁₄ O	[111-27-3]	1-hexanol				
	FUS	(5–399)	16.73	226.7		[2003VAN/GAB]
	FUS		15.38	225.8		[1996DOM/HEA, 1929KEL4]
	V	(238–308)	61.8 ± 0.1	298	Static	[2015STE/FUL]
	V	(313–393)	59.6 ± 0.1	298		[2012ZAI/NEG]
V	(366–433)	53.2	381	EB	[2010CEN/ROH]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(344–384)	59.7	359	EB	[2009GIE/KOS]
	V	(328–423)	59.9	298		[2006NAS/NEU]
	V	(265–363)	61.7 ± 0.3	298	GS	[2005ROG/PIS]
	V	(370–416)	51.4	385	EB	[2004TAN/LI]
	V	(265–328)	62.0	288	GS	[2001KUL/VER2]
	V	(265–328)	61.1	298	GS	[2001KUL/VER2]
	V	(268–333)	61.9 ± 0.2	301	GS	[1998VER3]
	V	(268–333)	62.1 ± 0.2	298	GS	[1998VER3]
	V	(373–423)	61.5	298	CGC	[1995CHI/HOS]
	V	(323–373)	61.6	298	CGC	[1995CHI/HOS]
	V	(253–338)	61.2	296		[1992NGU/KAS]
	V	(298–343)	57.7	313	A	[1987STE/MAL]
	V	(380–417)	47.9	395	EB	[1985RED/RAO]
	V		58.5 ± 0.2	328	C	[1985MAJ/SVO3]
	V		57.6 ± 0.2	343	C	[1985MAJ/SVO3]
	V		55.2 ± 0.2	358	C	[1985MAJ/SVO3]
	V		53.8 ± 0.2	368	C	[1985MAJ/SVO3]
	V	(243–303)	59.1	298		[1983SCH/STR]
	V		60.8 ± 0.2	298	C	[1977MAN/SEL]
	V	(308–430)	57.9	323		[1973WIL/ZWO]
	V	(325–431)	58.5	340	DTA	[1987STE/MAL, 1969KEM/KRE]
	V					[1972DYK]
	V		61.6 ± 0.2	298	C	[1966WAD]
	V	(334–381)	56.0	349		[1961ROS/SUP]
	V	(308–428)	U55.8	323	I	[1938HOV/LAN]
	V	(333–425)	57.9	348		[1935BUT/RAM, 1984BOU/FRI]
C ₆ H ₁₄ O	[626-93-7]	(dl)-2-hexanol				
	V	(274–309)	57.0 ± 0.2	298	GS	[2005ROG/PIS]
	V	(274–309)	58.3 ± 0.3	298	GS	[2001KUL/VER]
	V	(224–323)	61.8	239		[1999NGU/BER]
	V	(360–415)	48.7	375	A	[1987STE/MAL]
	V		56.8 ± 0.2	313	C	[1985MAJ/SVO2]
	V		55.0 ± 0.2	328	C	[1985MAJ/SVO2]
	V		53.0 ± 0.2	343	C	[1985MAJ/SVO2]
	V		50.7 ± 0.2	358	C	[1985MAJ/SVO2]
	V		49.2 ± 0.2	368	C	[1985MAJ/SVO2]
	V	(337–413)	52.4	352		[1984SAC/MAR]
	V	(351–412)	47.8	366	A	[1987STE/MAL, 1975BRA/AND]
	V	(301–415)	53.1	316		[1973WIL/ZWO]
	V	(298–413)	49.7	356	I	[1938HOV/LAN]
C ₆ H ₁₄ O	[623-37-0]	(dl)-3-hexanol				
	V	(278–311)	58.6 ± 0.4	298	GS	[2001KUL/VER]
	V	(244–318)	U50.7	259		[1999NGU/BER]
	V	(354–410)	46.1	369	A	[1987STE/MAL]
	V	(280–320)	57.5	295	A	[1987STE/MAL]
	V	(333–409)	51.5	348		[1984SAC/MAR]
	V	(280–316)	57.4	295		[1975CAB/CON2]
	V	(298–408)	46.4	353	I	[1938HOV/LAN]
C ₆ H ₁₄ O	[105-30-6]	(dl)-2-methyl-1-pentanol				
	V	(275–313)	59.4 ± 0.3	298	GS	[2001KUL/VER]
	V	(367–423)	49.3	382	A	[1987STE/MAL]
	V	(261–294)	64.9	279	A	[1987STE/MAL, 1979THO/MEA]
	V		57.4 ± 0.2	328	C	[1985MAJ/SVO2]
	V		55.7 ± 0.2	343	C	[1985MAJ/SVO2]
	V		53.9 ± 0.2	358	C	[1985MAJ/SVO2]
	V		52.7 ± 0.2	368	C	[1985MAJ/SVO2]
	V	(298–423)	54.2	313		[1973WIL/ZWO]
	V	(298–413)	50.2	356	I	[1938HOV/LAN]
C ₆ H ₁₄ O	[589-35-5]	(dl)-3-methyl-1-pentanol				
	V	(280–316)	61.7 ± 0.3	298	GS	[2001KUL/VER]
	V	(328–427)	54.8	343	A	[1987STE/MAL]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
		V	(298–427)	59.7	313	[1973WIL/ZWO]
		V	(298–423)	47.2	360	I [1940HOV/LAN2]
C ₆ H ₁₄ O	[626-89-1]	4-methyl-1-pentanol				
		V	(357–427)	53.0	372	A [1987STE/MAL]
		V	(371–427)	51.1	386	A [1987STE/MAL]
		V	(298–427)	63.9	313	[1973WIL/ZWO]
		V	(298–423)	46.5	360	I [1940HOV/LAN2]
C ₆ H ₁₄ O	[590-36-3]	2-methyl-2-pentanol				
		V	(341–396)	44.2	356	A [1987STE/MAL]
		V	(330–397)	48.9	345	A [1987STE/MAL]
		V		54.7 ± 0.2	298	C [1985MAJ/SVO2]
		V		52.8 ± 0.2	313	C [1985MAJ/SVO2]
		V		50.7 ± 0.2	328	C [1985MAJ/SVO2]
		V		48.5 ± 0.2	343	C [1985MAJ/SVO2]
		V		46.1 ± 0.2	358	C [1985MAJ/SVO2]
		V		44.4 ± 0.2	368	C [1985MAJ/SVO2]
		V	(288–396)	58.3	303	[1973WIL/ZWO]
		V	(268–394)	49.1	283	[1947STU]
	V	(288–396)	51.3	303	I [1933HOR/LAN]	
C ₆ H ₁₄ O	[565-60-6]	<i>(dl)</i> -3-methyl-2-pentanol				
		V	(275–310)	58.2 ± 0.3	298	GS [2001KUL/VER]
		V	(314–409)	54.4	329	A [1987STE/MAL]
		V	(255–295)	60.4	280	A [1987STE/MAL, 1979THO/MEA]
	V	(296–408)	54.8	311	[1973WIL/ZWO]	
C ₆ H ₁₄ O	[108-11-2]	<i>(dl)</i> -4-methyl-2-pentanol				
		V	(274–301)	57.3 ± 0.3	298	GS [2001KUL/VER]
		V	(240–295)	59.6	280	A [1987STE/MAL]
		V	(293–406)	49.6	308	[1973WIL/ZWO]
		V	(353–404)	47.3	368	A, EB [1987STE/MAL, 1970AND/BRA]
	V	(298–403)	45.6	350	I [1938HOV/LAN]	
C ₆ H ₁₄ O	[565-67-3]	<i>(dl)</i> -2-methyl-3-pentanol				
		V	(275–307)	56.0 ± 0.5	298	GS [2001KUL/VER]
		V	(307–401)	52.2	322	A [1987STE/MAL]
		V	(342–400)	45.4	357	A [1987STE/MAL, 1975BRA/AND]
		V	(298–401)	52.0	313	[1973WIL/ZWO]
	V	(298–399)	44.4	349	I [1940HOV/LAN]	
C ₆ H ₁₄ O	[77-74-7]	3-methyl-3-pentanol				
		V	(275–301)	55.7 ± 0.3	298	GS [2001KUL/VER]
		V		56.7 ± 0.8	298	EB [1991WIB/HAO]
		V	(322–397)	40.1	337	A [1987STE/MAL]
		V	(338–396)	46.4	353	[1973WIL/ZWO]
	V	(298–393)	42.1	346	I [1940HOV/LAN]	
C ₆ H ₁₄ O	[1185-33-7]	2,2-dimethyl-1-butanol				
		TRS		5.77	194.5	
		TRS		2.69	209.2	
		FUS		4.42	233.6	AC [2013JUS/ZIE]
		V	(356–415)	47.2	371	A [1987STE/MAL]
		V	(298–415)	53.7	313	[1973WIL/ZWO]
	V	(298–408)	52.1	313	I [1940HOV/LAN3]	
C ₆ H ₁₄ O	[19550-30-2]	<i>(dl)</i> -2,3-dimethyl-1-butanol				
		V	(324–431)	51.4	339	A [1987STE/MAL]
	V	(373–422)	49.6	388	[1973WIL/ZWO]	
C ₆ H ₁₄ O	[624-95-3]	3,3-dimethyl-1-butanol				
		FUS	(13–302)	9.54	235.7	AC [2004MAS/NAK]
		V	(276–312)	58.0 ± 0.2	298	GS [2001KUL/VER]
		V		58.6 ± 0.1	328	C [1996ULB/KLU]
	V		55.4 ± 0.1	343	C [1996ULB/KLU]	

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		52.4 ± 0.1	358	C	[1996ULB/KLU]
	V	(319–424)	50.8	334	A	[1987STE/MAL]
	V	(353–417)	49.4	368		[1973WIL/ZWO]
C ₆ H ₁₄ O	[594-60-5]	2,3-dimethyl-2-butanol				
	V	(303–340)	54.0 ± 0.8	298	EB	[1991WIB/HAO]
	V	(299–400)	48.8	314	A	[1987STE/MAL]
	V	(298–393)	49.1	313		[1973WIL/ZWO]
C ₆ H ₁₄ O	[464-07-3]	<i>(dl)</i> -3,3-dimethyl-2-butanol				
	V	(280–315)	53.8 ± 0.3	298	GS	[2001KUL/VER]
	V	(302–401)	48.3	317	A	[1987STE/MAL]
	V	(338–393)	46.8	353		[1973WIL/ZWO]
C ₆ H ₁₄ O	[97-95-0]	2-ethyl-1-butanol				
	V	(275–313)	60.3 ± 0.3	298	GS	[2001KUL/VER]
	V	(321–426)	53.1	336	A	[1987STE/MAL]
	V	(262–295)	65.4	280	A	[1987STE/MAL, 1979THO/MEA]
	V	(298–426)	59.6	313		[1973WIL/ZWO]
	V	(298–418)	U45.5	313	I	[1940HOV/LAN3]
C ₆ H ₁₄ OS	[4253-91-2]	dipropyl sulfoxide				
	V	(303–323)	61.4 ± 3.1	313	OM	[2013GRI/MAR]
C ₆ H ₁₄ O ₂	[111-76-2]	2-butoxyethanol				
	FUS	(13–300)	11.8	199.5	AC	[2000ATA/KAW]
	V	(407–442)	51.2	422	EB	[2012RED/KUM]
	V	(363–382)	51.2	373	MM	[1999ESC/SAN]
	V	(336–443)	49.5	351	A	[1987STE/MAL, 1972DYK]
	V		56.6 ± 0.1	298	C	[1971KUS/WAD]
	V	(336–443)	52.6	351		[1957DYK/SEP, 1984BOU/FRI]
C ₆ H ₁₄ O ₂	[4461-87-4]	1,1-dimethoxybutane				
	V	(304–329)	41.2	317	EB	[1994WIB/MOR]
C ₆ H ₁₄ O ₂	[3453-99-4]	2,2-dimethoxybutane				
	FUS		9.32	174	TCC	[2003TEO/WIL]
C ₆ H ₁₄ O ₂	[105-57-7]	1,1-diethoxyethane				
	FUS		10.95	167	TCC	[2003TEO/WIL]
	V	(275–308)	39.6 ± 0.3	298	GS	[1998VER/PEN, 2002VER]
	V	(281–384)	41.6	296	A	[1987STE/MAL, 1972DYK]
	V	(273–343)	39.8	288		[1949NIC/LAF, 1984BOU/FRI]
	V	(239–392)	36.2	255		[1947STU]
C ₆ H ₁₄ O ₂	[629-14-1]	1,2-diethoxyethane				
	V	(339–382)	39.3	361		[1987TRE/LU]
	V	(239–393)	37.9	254	A	[1987STE/MAL]
	V		43.2 ± 0.1	298	C	[1970KUS/WAD]
C ₆ H ₁₄ O ₂	[77078-18-3]	1-methoxy-2-propoxyethane				
	V		43.7 ± 0.1	298	C	[1970KUS/WAD]
C ₆ H ₁₄ O ₂	[4439-24-1]	2-isobutoxyethanol				
	V	(344–432)	48.1	359	A	[1987STE/MAL, 1972DYK, 1957DYK/SEP, 1984BOU/FRI]
C ₆ H ₁₄ O ₂	[7580-85-0]	2- <i>tert</i> -butoxyethanol				
	FUS	(13–300)	11.4	223.1	AC	[2000ATA/KAW]
C ₆ H ₁₄ O ₂	[6920-22-5]	1,2-hexanediol				
	V	(294–348)	78.7 ± 0.3	298	GS	[2004VER2]
C ₆ H ₁₄ O ₂	[629-11-8]	1,6-hexanediol				
	FUS		26.4	314.7	DSC	[2014BAD/NOW]
	FUS		25.5	316		[2005SMI/KAN]
	FUS		23.8	312	DSC	[2004STU/WIT]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	FUS		22.2	314.6	DTA	[1990KNA/SAB]
	FUS		25.52	320.6	DSC	[1996DOM/HEA, 1972GAR/HUS]
	FUS		24.3	315.2	C	[1969COR/GOO]
	SUB		112.0 ± 0.4	298	C	[1990KNA/SAB]
	SUB		108.8		F+ V	[1972GAR/HUS, 1977PED/RYL]
	V		90.2 ± 0.3	298	CGC	[2006UMN/KWE]
	V	(355–559)	98.5 ± 1.8	298	EB, IPM	[1996STE/CHI2]
	V	(355–559)	87.8 ± 1.1	360	EB, IPM	[1996STE/CHI2]
	V	(355–559)	80.8 ± 0.9	400	EB, IPM	[1996STE/CHI2]
	V	(355–559)	73.9 ± 0.7	440	EB, IPM	[1996STE/CHI2]
	V	(355–559)	67.0 ± 0.6	480	EB, IPM	[1996STE/CHI2]
	V		87.0	342		[1993PIA/FER, 2006UMN/KWE]
	V		90.9 ± 4.1	298		[1993PIA/FER, 2006UMN/KWE]
	V		90.7 ± 1.1	298	C	[1990KNA/SAB]
	V	(451–525)	83.3 ± 1.7	298	EB	[1972GAR/HUS, 1977PED/RYL]
C ₆ H ₁₄ O ₂	[4457-71-0]	3-methyl-1,5-pentanediol				
	V	(402–485)	76.9	417	A	[1987STE/MAL]
C ₆ H ₁₄ O ₂	[107-41-5]	<i>(dl)</i> -2-methyl-2,4-pentanediol				
	V	(285–329)	68.9 ± 0.4	298	GS	[2007VER]
	V	(370–547)	68.6 ± 0.4	298	EB	[1990DAU/HUT, 2007VER]
	V	(373–473)	58.1	388	A	[1987STE/MAL]
C ₆ H ₁₄ O ₂	[76-09-5]	2,3-dimethyl-2,3-butanediol (pinacol)				
	FUS		14.7	316.2	DSC	[1983PRI/WOO]
	V	(346–448)	59.1	361	A	[1987STE/MAL]
C ₆ H ₁₄ O ₂	[76050-97-0]	1-(methoxymethoxy)butane				
	V	(322–392)	38.6	340		[2015SON/LI]
C ₆ H ₁₄ O ₂ S	[34008-94-1]	<i>tert</i> -butyl ethyl sulfone				
	SUB		86.6 ± 2.5			[UR/MAC, 1970COX/PIL]
C ₆ H ₁₄ O ₃	[111-96-6]	diethylene glycol, dimethyl ether				
	FUS		17.78	209.1		[1996DOM/HEA, 1966BEA/CLE]
	V	(371–434)	45.4		EB	[2009LI/FAN]
	V		48.0 ± 0.6	298	CGC	[2000NIC/ORF]
	V	(286–433)	47.4	301	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₄ O ₃	[5648-29-3]	3,5,7-trioxanonane				
	V		44.7 ± 0.2	298	C	[1969MAN]
C ₆ H ₁₄ O ₃	[15476-85-4]	<i>tert</i> -butyl 2-hydroxyethyl peroxide				
	V	(290–320)	66.4 ± 1.9		ME	[1983VAN/KAC]
C ₆ H ₁₄ O ₃	[111-90-0]	diethylene glycol, monoethyl ether				
	V	(318–475)	52.1	333	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₄ O ₃	[25265-71-8]	dipropylene glycol				
	V	(423–505)	61.2	438	A	[1987STE/MAL]
C ₆ H ₁₄ O ₃	[77-99-6]	2-ethyl-2-hydroxymethyl-1,3-propanediol				
	FUS		20.38	332.6	DSC	[2004STU/WIT]
	TRS		16.36	327.8		
	FUS		0.9	332.7	DSC	[2002CHA/MAN]
	FUS	(270–354)	21.45	333.4	AC	[1989ZHA/YAN]
	V	(433–570)	81.4	448	A	[1987STE/MAL]
C ₆ H ₁₄ O ₃	[106-69-4]	1,2,6-trihydroxyhexane				
	V	(393–433)	97.2	408	A	[1987STE/MAL]
C ₆ H ₁₄ O ₃ S		2-methyl-2-propanesulfonic acid, ethyl ester				
	V	(337–343)	U14.0	340	A	[1987STE/MAL]

Note: The temperature range covered is too small to get a very accurate estimate of the enthalpy of vaporization.

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₄ O ₃ S	[623-98-3]	dipropyl sulfite				
	V		58.6 ± 1.7	298	BP	[1969MAC/STE2]
C ₆ H ₁₄ O ₄	[2517-44-4]	1,1,2,2-tetramethoxyethane				
	V	(351–432)	42.9	366	A	[1987STE/MAL]
C ₆ H ₁₄ O ₄	[112-27-6]	triethylene glycol				
	V	(442–562)	72.2 ± 0.3	440	EB	[2002STE/CHI3]
	V	(442–562)	68.5 ± 0.3	480	EB	[2002STE/CHI3]
	V	(442–562)	64.6 ± 0.3	520	EB	[2002STE/CHI3]
	V	(442–562)	60.8 ± 0.5	560	EB	[2002STE/CHI3]
	V	(278–323)	77.0	300		[1972MCF/SOM]
	V	(288–303)	67.7	295	A	[1987STE/MAL, 1955ISH/MAT]
	V	(293–303)	60.5	298		[1950WIS/PUC]
C ₆ H ₁₄ O ₄ S	[598-05-0]	dipropyl sulfate				
	V		66.9 ± 1.7	298	BP	[1969MAC/STE2]
C ₆ H ₁₄ O ₆	[608-66-2]	dulcitol				
	FUS		64.5	459.7	DSC	[2015PAU/SHI]
	FUS		65.1	460.3	DSC	[1996DOM/HEA, 1990BAR/DEL]
	SUB		205	298	B	[1990BAR/DEL]
	V	(464–496)	133.8 ± 1.4	482	TE	[1990BAR/DEL]
C ₆ H ₁₄ O ₆	[69-65-8]	D-mannitol				
	FUS (β)		44.8	440.2		
	FUS (δ)		44.3	430.2	DSC	[2013BAR/GIL]
	FUS		59.5	441.0	DSC	[2011KUM/VEI]
	FUS		54.78	439.2	DSC	[2011LEE/THO]
	FUS		54.69	437.3	DSC	[2010TON/LIU]
	FUS		62.1	438.2	DSC	[2008KAI/MAR]
	FUS		61.57	438.2	DSC	[2003GOM/SZA]
	FUS		56.1	439.1	DSC	[1996DOM/HEA, 1990BAR/DEL]
	SUB		202	298	B	[1990BAR/DEL]
C ₆ H ₁₄ O ₆	[50-70-4]	(D)-sorbitol				
	FUS		35.9	372.0	DSC	[2012JEG/PRA]
	FUS		24.67	367.3	DSC	[2012BIT/MEN]
	FUS (α)		29.8	359.1	DSC	[2009NEZ/AER]
	FUS (β)		31.7	371.2	DSC	[2009NEZ/AER]
	FUS	(80–390)	30.35	369.2	AC	[2008TON/TAN2]
	FUS		U20.0	370.2	DSC	[2008KAI/MAR]
	FUS		39.53	370	DSC	[2003GOM/SZA]
	FUS		30.2	366.5	DSC	[1996DOM/HEA, 1990BAR/DEL]
	SUB		186	298	B	[1990BAR/DEL]
C ₆ H ₁₄ O ₆	[50-70-4]	(L)-iditol				
	FUS		30.9	352.8		[1993SIN/CAR]
C ₆ H ₁₄ S	[1741-83-9]	methyl pentyl sulfide				
	V	(321–349)	44.2	336		[1999DYK/SVO]
	V		45.2	298		[1981SHI/SAI]
	V		44.6 ± 0.8	298	GC	[1964MAC/MCC]
	V	(321–350)	42.6	308	EB	[1961NIC/KOB]
C ₆ H ₁₄ S	[638-46-0]	butyl ethyl sulfide				
	FUS		12.39	178.1		[1985DEA]
	V	(314–445)	43.7	319		[1999DYK/SVO]
	V		44.5	298		[1981SHI/SAI]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V		44.9	298		[1971WIL/ZWO]
	V		44.6 ± 0.8	298	GC	[1964MAC/MCC]
	V	(316–348)	43.5	333	EB	[1962MAC/MAY2]
	V	(354–424)	40.7	369	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₄ S	[5008-72-0]	<i>sec</i> -butyl ethyl sulfide				
	V	(304–434)	41.2	319		[1999DYK/SVO]
	V	(345–409)	39.0	360	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₄ S	[14290-92-7]	<i>tert</i> -butyl ethyl sulfide				
	V	(293–420)	39.2	308		[1999DYK/SVO]
	V		39.3	298		[1971WIL/ZWO]
	V	(332–400)	37.1	347	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₄ S	[625-80-9]	diisopropyl sulfide				
	FUS	(12–380)	10.42	195.1	AC	[1996DOM/HEA, 1967MES/TOD]
	V	(293–420)	39.4	308		[1999DYK/SVO]
	V		39.6 ± 0.1	298		[1972GOO, 1966OSB/DOU]
	V	(324–433)	37.7	339	A, EB	[1987STE/MAL, 1966OSB/DOU]
	V		39.6 ± 0.8	298	GC	[1964MAC/MCC]
	V	(303–328)	38.5	318	EB	[1962MAC/MAY2]
	V	(330–400)	37.4	345	EB	[1952WHI/BAR]
C ₆ H ₁₄ S	[111-47-7]	dipropyl sulfide				
	FUS	(13–315)	12.13	170.4		[1996DOM/HEA, 1961MCC/FIN]
	V	(313–411)	42.9	328		[1999DYK/SVO]
	V		44.2	298		[1981SHI/SAI]
	V		44.5	298		[1971WIL/ZWO]
	V		39.5	298		[1971WIL/ZWO]
	V		44.7 ± 0.8	298	GC	[1964MAC/MCC]
	V	(353–427)	40.6	368	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₄ S	[5008-73-1]	isopropyl propyl sulfide				
	V	(303–432)	41.1	318		[1999DYK/SVO]
	V		41.8	298		[1981SHI/SAI]
	V	(343–416)	39.0	358	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₄ S	[1613-45-2]	ethyl isobutyl sulfide				
	V	(305–401)	41.3	320		[1999DYK/SVO]
	V	(345–414)	39.2	360	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₆ H ₁₄ S	[111-31-9]	1-hexanethiol				
	FUS		18.03	192.6		[1996DOM/HEA, 1970FIN/MCC]
	V	(320–454)	43.9	335		[1999DYK/SVO]
	V		44.8 ± 0.2	298		[1966GOO/DEP, 1966OSB/DOU]
	V	(352–468)	42.4	367	A, EB	[1987STE/MAL, 1966OSB/DOU]
C ₆ H ₁₄ S	[1679-06-7]	2-hexanethiol				
	V	(310–440)	42.7	325		[1999DYK/SVO]
	V	(328–423)	41.4	343	A	[1987STE/MAL]
C ₆ H ₁₄ S	[1639-01-6]	2,3-dimethyl-2-butanethiol				
	V	(285–318)	39.3	300		[1999DYK/SVO]
	V	(318–441)	37.8	333		[1999DYK/SVO]
	V		39.3 ± 0.1	298		[1972GOO, 1966OSB/DOU]
	V	(328–441)	37.4	343	A, EB	[1987STE/MAL, 1966OSB/DOU]
C ₆ H ₁₄ S	[1633-97-2]	2-methyl-2-pentanethiol				
	V		40.0 ± 0.1	298		[1972GOO, 1966OSB/DOU]
	V	(327–439)	38.0	342	A, EB	[1987STE/MAL, 1966OSB/DOU, 1999DYK/SVO]
C ₆ H ₁₄ S ₂	[4253-89-8]	diisopropyl disulfide				
	V	(383–423)	49.3	298	CGC	[1995CHI/HOS]
	V		39.6	298		[1981SHI/SAI]
	V	(377–447)	43.8	392	A, EB	[1987STE/MAL, 1952WHI/BAR, 1999DYK/SVO]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₄ S ₂	[629-19-6]	dipropyl disulfide				
	FUS		13.81	187.7		[1996DOM/HEA, 1958HUB/DOU]
	V	(354-499)	47.8	369		[1999DYK/SVO]
	V		53.8 ± 0.1	298	C	[1985KUS]
	V		53.8	298		[1981SHI/SAI]
	V		52.5 ± 0.1	298	C	[1963MOR/SUN]
	V	(389-447)	47.0	404	A, EB	[1987STE/MAL, 1958HUB/DOU, 1966OSB/DOU]
V	(395-456)	46.6	410	EB	[1952WHI/BAR]	
C ₆ H ₁₄ S ₂	[4151-69-3]	ethyl (1,1-dimethylethyl) disulfide				
V	(373-461)		43.4	388	A, EB	[1987STE/MAL, 1952WHI/BAR, 1999DYK/SVO]
C ₆ H ₁₄ S ₂	[33672-51-4]	isopropyl propyl disulfide				
V	(383-433)		45.4	398	A	[1987STE/MAL, 1999DYK/SVO]
C ₆ H ₁₄ S ₂	[1191-43-1]	1,6-hexanedithiol				
V	(379-511)		55.7	394	A	[1987STE/MAL, 1999DYK/SVO]
C ₆ H ₁₄ S ₂	[5395-75-5]	3,6-dithiooctane				
V			59.5 ± 0.1	298	C	[1974MAN4]
C ₆ H ₁₄ S ₃	[37460-04-1]	2,5,8-trithianonane (trithiodiethylene glycol, dimethyl ether)				
	V	(391-533)	116.4	406		[1999DYK/SVO]
	V	(391-418)	103.7	404	A	[1987STE/MAL]
C ₆ H ₁₅ N	[111-26-2]	hexylamine				
	FUS		25.04	252.2	DSC	[2005DOM/MAR]
	V	(323-373)	45.0	298	CGC	[1995CHI/HOS]
	V	(303-406)	42.2	318	A	[1987STE/MAL]
V		45.1 ± 0.1	298	C	[1969WAD]	
C ₆ H ₁₅ N	[21035-44-9]	(<i>dl</i>)- <i>sec</i> -butyl ethyl amine				
V	(283-372)		37.9	298	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₅ N	[108-18-9]	diisopropylamine				
	V	(260-412)	35.4	275	A	[1987STE/MAL]
	V	(273-367)	35.6	288	A	[1987STE/MAL]
	V		34.6 ± 0.1	298	C	[1979PET/MAJ]
	V		33.7 ± 0.1	313	C	[1979PET/MAJ]
	V		32.6 ± 0.1	328	C	[1979PET/MAJ]
	V		31.5 ± 0.1	343	C	[1979PET/MAJ]
	V		30.2 ± 0.1	358	C	[1979PET/MAJ]
	V	(300-356)	34.4	315	EB	[1979PET/MAJ]
	V	(291-305)	34.6	298		[1971LEB/KAT2]
	V		34.5 ± 0.1	298	C	[1969WAD]
V	(273-333)	33.8 ± 0.2	298	I	[1969FRA/WAT]	
C ₆ H ₁₅ N	[21968-17-2]	<i>N</i> -isopropyl propylamine				
	V		37.3 ± 0.1	298	C	[1979PET/MAJ]
	V		36.2 ± 0.1	313	C	[1979PET/MAJ]
	V		35.2 ± 0.1	328	C	[1979PET/MAJ]
	V		34.1 ± 0.1	343	C	[1979PET/MAJ]
	V		33.0 ± 0.1	358	C	[1979PET/MAJ]
	V	(312-369)	36.2	327	EB	[1979PET/MAJ]
C ₆ H ₁₅ N	[13360-63-9]	<i>N</i> -butylethylamine				
	V		40.2 ± 0.1	298	C	[1979PET/MAJ]
	V		39.1 ± 0.1	313	C	[1979PET/MAJ]
	V		38.0 ± 0.1	328	C	[1979PET/MAJ]
	V		36.9 ± 0.1	343	C	[1979PET/MAJ]
	V		35.8 ± 0.1	358	C	[1979PET/MAJ]
	V	(313-375)	39.9	328	EB	[1979PET/MAJ]
	V	(283-382)	41.4	298	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₅ N	[142-84-7]	dipropylamine				
	V	(321-382)	40.0	336		[2000RES/GON]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References	
		V	(302–422)	39.8	317	A	[1987STE/MAL, 1972DYK]
		V	(291–305)	41.5	298		[1971LEB/KAT2]
		V		40.0 ± 0.1	298	C	[1969WAD]
		V	(273–333)	40.2 ± 0.3	298	I	[1969FRA/WAT]
		V		32.0	381	C	[1901KAH]
C ₆ H ₁₅ N	[121-44-8]	triethylamine					
		V	(273–353)	33.4 ± 0.2	313		[2009MOK/RAZ]
		V	(273–353)	35.4 ± 0.2	298		[2009MOK/RAZ]
		V	(310–362)	33.9	325	EB	[2006WAN/FAN]
		V	(231–319)	35.2 ± 0.9	275		[2001BAE]
		V	(302–338)	34.1	317	EB	[1990DUT/KAH]
		V	(298–324)	34.6	311	A	[1987STE/MAL]
		V	(283–363)	35.5	298	A	[1987STE/MAL]
		V		34.8 ± 0.2	298	C	[1979MAJ/SVO2]
		V		33.9 ± 0.1	313	C	[1979MAJ/SVO2]
		V		33.0 ± 0.2	328	C	[1979MAJ/SVO2]
		V		32.2 ± 0.1	343	C	[1979MAJ/SVO2]
		V		31.3 ± 0.2	358	C	[1979MAJ/SVO2]
		V	(303–361)	34.8	318	EB	[1979MAJ/SVO2]
		V	(283–313)	35.1	298		[1975CHU/DRU]
		V	(324–357)	33.3	339		[1971LET/BAY]
		V		34.9 ± 0.1	298	C	[1969WAD]
		V	(298–363)	U25.3	313	I	[1953COP/EVE]
		V	(285–337)	33.0	311		[1936THO/LIN]
		V		35.2			[1933MEH]
C ₆ H ₁₅ N	[927-62-8]	<i>N, N</i> -dimethyl-1-butanamine					
		V	(331–367)	34.0	349	EB	[2012ROZ/BRU]
C ₆ H ₁₅ N	[918-02-5]	<i>N, N</i> -dimethyl <i>tert</i> -butyl amine					
		V	(283–318)	34.8	298	A	[1987STE/MAL, 1969DAV/SMI]
C ₆ H ₁₅ NO	[5888-29-9]	<i>N</i> -(methoxymethyl)diethylamine					
		V	(293–318)	38.0	305	A	[1987STE/MAL]
C ₆ H ₁₅ NO	[100-37-8]	<i>N, N</i> -diethylethanolamine					
		V	(278–318)	52.5 ± 0.2	298	GS	[2005KAP/SLO]
		V	(332–475)	48.5 ± 0.2	340	EB	[2002STE/CHI5]
		V	(332–475)	45.0 ± 0.2	380	EB	[2002STE/CHI5]
		V	(332–475)	41.6 ± 0.4	420	EB	[2002STE/CHI5]
		V	(332–475)	37.8 ± 0.7	460	EB	[2002STE/CHI5]
		V	(328–433)	48.5	343	A	[1987STE/MAL]
		V	(283–318)	58.5 ± 1.3	298		[1977LEB/NAZ, 2005KAP/SLO]
C ₆ H ₁₅ NO ₂	[110-97-4]	diisopropanolamine					
		FUS		22.74	250.0	DSC	[2010DEL/UUS]
		V	(390–520)	78.5	405		[2013UUS/DEL]
		V	(390–521)	68.0	405	A	[1987STE/MAL, 1972DYK]
C ₆ H ₁₅ NO ₂	[1704-62-7]	2-[2-(dimethylamino)ethoxy]ethanol					
		V	(293–353)	61.9	323	GS	[2011VER/TON]
		V	(293–353)	63.8 ± 0.2	298	GS	[2011VER/TON]
		V	(283–373)	56.6	328		[2011BEL/MOK, 2011VER/TON]
		V	(283–373)	58.7 ± 0.1	298		[2011BEL/MOK, 2011VER/TON]
		V	(333–423)	62.5	298	EB	[1970QUI/HOF, 2011VER/TON]
		V	(412–452)	54.4	427	A	[1987STE/MAL]
C ₆ H ₁₅ NO ₂ S	[33718-39-7]	<i>N, N</i> -diethyl ethanesulfonamide					
		V	(392–526)	55.4	407	A	[1987STE/MAL, 1978LUK/MAK]
C ₆ H ₁₅ NO ₃	[102-71-6]	triethanolamine					
		V		105.9 ± 2.2	298		[1982MIN/SAB]
		V	(523–579)	79.3	538	A	[1987STE/MAL, 1959MCD/SHR, 1984BOU/FRI]
C ₆ H ₁₅ NS	[64037-64-5]	<i>N, N</i> -dimethyl- <i>S-tert</i> -butylthiohydroxylamine					
		V	(328–334)	28.3	331	A	[1987STE/MAL, 1999DYK/SVO]

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
C ₆ H ₁₅ NS	[100-38-9]	2-diethylaminoethanethiol				
	V	(278–402)	47.5	293	DSC,GS	[2013WIL/HUL]
	V	(278–402)	45.3	323	DSC,GS	[2013WIL/HUL]
	V	(278–402)	43.5	353	DSC,GS	[2013WIL/HUL]
C ₆ H ₁₅ N ₃	[108-74-7]	1,3,5-trimethylhexahydro- <i>s</i> -triazine				
	V	(284–328)	50.8 ± 0.8	306	GS	[2002VER2]
	V	(284–328)	51.2 ± 0.8	298	GS	[2002VER2]
	[140-31-8]	1-(2-aminoethyl)piperazine				
V	(296–338)	68.7 ± 0.3	298	GS	[2010EFI/EME]	
C ₆ H ₁₅ O ₂ PS ₃	[640-15-3]	<i>O, O</i> -dimethyl- <i>S</i> -[2-(ethylthio)ethyl]dithiophosphate				
	V	(283–394)	76.8	298	A	[1987STE/MAL, 1999DYK/SVO]
C ₆ H ₁₅ O ₃ P	[1809-21-8]	phosphonic acid, dipropyl ester				
	V	(318–467)	38.1	333	A	[1987STE/MAL, 1972DYK, 1958PAG/PUR]
C ₆ H ₁₅ O ₃ P	[122-52-1]	triethylphosphite				
	V		53.0	298		[2008SAG/SAF]
C ₆ H ₁₅ O ₃ PS	[126-68-1]	<i>O, O, O</i> -triethylthiophosphate				
	V	(305–335)	87.5	320	A	[1987STE/MAL, 1999DYK/SVO, 1950BRI/CUT]
C ₆ H ₁₅ O ₃ PS	[1186-09-0]	<i>O, O, S</i> -triethylthiophosphate				
	V	(312–352)	76.3	327	A	[1987STE/MAL, 1999DYK/SVO, 1950BRI/CUT]
C ₆ H ₁₅ O ₃ PS ₂	[867-27-6]	phosphorothioic acid, <i>O</i> -[2-(ethylthio)ethyl]- <i>O, O</i> -dimethyl ester				
	V	(283–379)	71	298	A	[1987STE/MAL, 1999DYK/SVO]
C ₆ H ₁₅ O ₃ PS ₂	[919-86-8]	phosphorothioic acid, <i>S</i> -[2-(ethylthio)ethyl]- <i>O, O</i> -dimethyl ester				
	V	(283–407)	78.8	298	A	[1987STE/MAL, 1999DYK/SVO]
C ₆ H ₁₅ O ₄ P	[78-40-0]	triethylphosphate				
	V	(271–480)	64.6	273	ME,DTA	[2014BRO/BUC]
	V	(271–480)	62.1	298	ME,DTA	[2014BRO/BUC]
	V	(271–480)	60.2	323	ME,DTA	[2014BRO/BUC]
	V	(271–480)	58.3	353	ME,DTA	[2014BRO/BUC]
	V	(271–480)	56.3	393	ME,DTA	[2014BRO/BUC]
	V	(271–480)	54.8	433	ME,DTA	[2014BRO/BUC]
	V	(271–480)	53.6	473	ME,DTA	[2014BRO/BUC]
	V	(413–453)	55.7	298	CGC	[2007PAN/ANT2]
	V	(312–484)	46.3	327	A	[1987STE/MAL, 1947STU]
C ₆ H ₁₅ P	[554-70-1]	triethylphosphine				
	FUS	(6–300)	10.73	188.2	AC	[1999SHE/KAM]
	V	(291–402)	38.3	306	A	[1987STE/MAL, 1972DYK]
	V	(315–353)	39.5	334		[1959KAE/STO]
C ₆ H ₁₆ FN ₂ OP	[371-86-8]	<i>N, N'</i> -diisopropyl phosphorodiamidic fluoride				
	V	(278–398)	58.1	293	A	[1987STE/MAL]
C ₆ H ₁₆ N ₂	[124-09-4]	1,6-hexanediamine				
	FUS		39.38	311.6	DSC	[2006KHI/DAH2]
	FUS		44.0	314.1	AC	[2004MON/VAN, 2014FUL/RUZ]
	FUS		40.21	312.3	DSC	[2002DAL/DEL]
	SUB	(279–314)	104.3	298	Static	[2014FUL/RUZ]
	V	(318–356)	59.9	337	GS	[2011POZ/VER]
	V		63.1 ± 0.2	298	GS	[2011POZ/VER]
	V	(348–474)	49.3	363	A	[1987STE/MAL]
	V	(348–474)	58.8	298	A	[1987STE/MAL, 2011POZ/VER]
	V	(338–473)	51.3	353	A	[1987STE/MAL]
V	(338–473)	60.2	298	A	[1987STE/MAL, 2011POZ/VER]	
C ₆ H ₁₆ N ₂	[15520-10-2]	1,5-diamino-2-methylpentane				

TABLE 9. Phase change enthalpies of C₆ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	References
	V	(283–452)	54.3	387	Static	[2015BOU/NEG]
	V	(283–452)	60.9	298	Static	[2015BOU/NEG]
C ₆ H ₁₆ N ₂	[110-18-9]	1,2-bis(dimethylamino)ethane				
	V	(273–363)	41.4	298	Static	[2015BOU/NEG2]
	V	(295–365)	39.8	330	Static	[2009RAZ/HAJ]
	V	(295–365)	42.2	298	Static	[2009RAZ/HAJ]
C ₆ H ₁₆ N ₂	[100-36-7]	2-diethylaminoethylamine				
	V	(273–363)	45.8	298		[2011KHI/DJE]
C ₆ H ₁₆ N ₂ O ₂	[4439-20-7]	<i>N, N</i> -bis(2-hydroxyethyl)ethylenediamine				
	FUS		49.7	373.2		[1997STE/CHI4]
	SUB		142.7	373	B	[1997STE/CHI4]
	V	(399–500)	106.4 ± 6.4	298	EB,IPM	[1997STE/CHI2, 1997STE/CHI4]
	V	(399–500)	91.2 ± 0.2	400	EB,IPM	[1997STE/CHI2, 1997STE/CHI4]
	V	(399–500)	87.7 ± 0.2	440	EB,IPM	[1997STE/CHI2, 1997STE/CHI4]
C ₆ H ₁₆ N ₂ O ₂	[929-59-9]	1,2-bis(2-aminoethoxy)ethane				
	V	(293–353)	56.2	323	Static	[2009RAZ/HAJ]
	V	(293–353)	58.8	298	Static	[2009RAZ/HAJ]
C ₆ H ₁₆ N ₂ O ₂	[3129-93-9]	diisopropyl ammonium nitrite				
	SUB	(288–299)	39.0	293.5	A	[1987STE/MAL, 1965MAR]
C ₆ H ₁₇ N ₃	[56-18-8]	dipropylenetriamine				
	V	(293–442)	70.2	298	Static	[2016BOU/DER]
C ₆ H ₁₈ N ₃ P	[1608-26-0]	tris(dimethylamino)phosphine				
	V		41.5 ± 0.6	298	STG	[1995ALM/FIN2]
	V	(298–333)	63.2	313		[1984MIC/JOS]
C ₆ H ₁₈ N ₄	[112-24-3]	triethylenetetramine				
	V	(338–373)	84.7 ± 0.3	298	GS	[2010EFI/EME]
	V	(294–325)	75.6	298	TGA	[1988AFZ/BUT, 2010EFI/EME]
	V	(431–550)	59.8	446	A	[1987STE/MAL, 1972DYK]
	V	(431–492)	71.0 ± 2.6	298	I	[1967SIV/MAT, 2010EFI/EME]

TABLE 10. Phase change enthalpies of C₇ organic compounds

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ ClF ₁₇ N ₂ S	V	CF ₃ SCI[=NCF(CF ₃) ₂] ₂	38.9	467	I	[1977KIT/SHR2]
[Note: This is the structure and molecular formula given in paper. A search of <i>Chemical Abstracts</i> by molecular formula failed to turn up any hits with this formula.]						
C ₇ Cl ₅ F ₁₁ O	[61136-58-1] V	1,1,5-trichloro-1-(2,2-dichloro-1,1,2-trifluoroethoxy)-2,2,3,3,4,4,5,5-octafluoropentane (364-476)	59.2 ± 0.8	298	EB	[1981VAR/BUL2]
C ₇ D ₈	[2037-26-5] TRS FUS	perdeuterotoluene	3.51 6.02	136 178	DSC DSC	[1972AHM/EAD]
C ₇ F ₆ O ₂	[59483-82-8] V	carbonofluoridic acid pentafluorophenyl ester	42.3			[1976FAL/DES2]
C ₇ F ₈	[434-64-0] FUS FUS V V V V V V	perfluorotoluene (13-300) (10-365) (288-334) (291-378) (285-376) (290-400) (291-402) (285-334)	11.58 11.49 40.5 ± 0.2 40.0 40.9 40.4 40.0 41.6 ± 0.2	207.6 207.7 298 306 300 298 306 298	AC A EB	[1991ACR, 1975PAU, 1996DOM/HEA] [1996DOM/HEA, 1974AND/MAR] [2005DIA/GON] [1999DYK/SVO] [1987STE/MAL] [1984BOU/FRI, 1991BAS/SVO] [1981AMB/ELL2] [1973KRE/PRI]
C ₇ F ₁₀	[14451-74-2] V	3,3-difluoro-1,2-bis(trifluoromethyl)-4-(difluoroethylene)cyclobutene (272-316)	31.5	287	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ F ₁₂ O ₂ S ₄	[58936-62-2] V	pentanebis(dithioperoxyic) acid, hexafluoro-bis(trifluoromethyl) ester	33.6	370	I	[1976BUR/SHR]
C ₇ F ₁₂ O ₆	[32751-20-5] V V	hexafluoroperoxyglutaric acid, bis(trifluoromethyl) ester (200-390)	47.3 47.3	215	A	[1987STE/MAL, 1999DYK/SVO] [1971BER/HOH]
C ₇ F ₁₄	[355-02-2] SUB V V V V V V V V V	perfluoromethylcyclohexane	51.6 36.6 ± 2.2 33.1 30.2 34.0 34.1 ± 0.3 33.4 33.3 33.8 33.3 32.8	234 298 320 428 298 298 320 321 313 310 319	B CGC A I	[1963BON, 1957ROW/THA] [2012HAS/DRA] [1999DYK/SVO] [1999DYK/SVO] [1984BOU/FRI, 1991BAS/SVO] [1981VAR/BUL] [1987STE/MAL, 1970DYK/VAN, 1973DYK/REP] [1959GOO/DOU, 1984BOU/FRI] [1957ROW/THA, 1984BOU/FRI] [1956GLE/REE, 1970DYK/VAN] [1947FOW/HAM]
C ₇ F ₁₅ NS	[77984-26-0] V	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-[[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]imino]thiophene	33.9	371		[1981ABE/SHR]
C ₇ F ₁₆	[335-57-9] TRS FUS SUB V V V V V V V V V V V V	perfluoroheptane	6.67 6.95 57.7 32.6 34.4 ± 0.3 32.5 ± 0.4 30.4 ± 0.6 28.1 ± 0.8 36.3 ± 0.3 35.9 40.4 33.3 26.5 19.7	180.4 221.9 378 320 340 360 380 298 298 343 373 403 433	DSC B EB EB EB EB EB	[1996DOM/HEA, 1986STA] [1963BON, 1951OLI/GRI] [1999DYK/SVO] [1997STE/CHI3] [1997STE/CHI3] [1997STE/CHI3] [1997STE/CHI3] [1997STE/CHI3] [1984BOU/FRI, 1991BAS/SVO] [1969ERM/SKR, 1997STE/CHI3] [1969ERM/SKR, 1997STE/CHI3] [1969ERM/SKR, 1997STE/CHI3] [1969ERM/SKR, 1997STE/CHI3]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		12.8	463		[1969ERM/SKR, 1997STE/CHI3]
	V	(336–355)	33.1	346		[1959YEN/REE]
	V	(293–355)	34.9	324		[1956GLE/REE]
	V	(271–379)	37.7	286	A	[1987STE/MAL, 1951OLI/GRI, 1970DYK/VAN]
	V		36.3	298		[1951OLI/GRI, 1997STE/CHI3]
	V		31.6	356		[1951OLI/GRI, 1997STE/CHI3]
	V	(275–366)	34.5	320	I	[1947FOW/HAM]
C ₇ F ₁₆ N ₂ OS	[62609-64-7]	1,1,1-trifluoro- <i>N'</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]methanesulfonimidamide				
	V		33.5	451		[1977KIT/SHR]
C ₇ F ₁₇ N	[338-81-8]	perfluoro- <i>N, N</i> -diethylpropylamine				
	V	(283–366)	39.2	325		[1999DYK/SVO]
C ₇ HF ₅ O ₂	[602-94-8]	pentafluorobenzoic acid				
	SUB	(335–359)	91.6 ± 4.2		GS	[1969COX/GUN, 1970COX/PIL]
C ₇ HF ₁₃ O ₂	[375-85-9]	tridecafluoroheptanoic acid				
	V	(359–485)	61.4 ± 0.3	370	EB	[2002STE/CHI]
	V	(359–485)	55.5 ± 0.3	410	EB	[2002STE/CHI]
	V	(359–485)	48.7 ± 0.7	450	EB	[2002STE/CHI]
C ₇ HF ₁₅	[375-83-7]	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7-pentafluoroheptane				
	V	(365–369)	30.7	367		[1966CAR/STE]
	V	(292–322)	37.7	298		[1956MCL/SCO]
	V	(292–370)	37.1	307	A	[1987STE/MAL, 1953KAR/SAY, 1973DYK/REP, 1999DYK/SVO]
C ₇ H ₂ F ₁₃ NO	[54181-88-3]	<i>(E)</i> -1,1,1,2,3,3,3-heptafluoro- <i>N</i> -[2,2,2-trifluoro-1-(2,2,2-trifluoroethoxy)ethylidene]-2-propanamine				
	V		35.7	369		[1975PET/SHR]
C ₇ H ₃ Br ₂ NO	[1689-84-5]	3,5-dibromo-4-hydroxybenzotrile				
	FUS		32.03	464	DSC	[1990DON/DRE]
C ₇ H ₃ ClF ₃ NO ₂	[777-37-7]	1-(trifluoromethyl)-2-chloro-5-nitrobenzene				
	V	(364–508)	58.1	379	A	[1987STE/MAL, 1953KAR/SAY, 1973DYK/REP, 1999DYK/SVO]
C ₇ H ₃ ClF ₃ NO ₂	[121-17-5]	1-(trifluoromethyl)-4-chloro-3-nitrobenzene				
	V	(358–495)	57.6	373	A	[1987STE/MAL, 1973DYK/REP, 1999DYK/SVO]
C ₇ H ₃ Cl ₂ F ₃	[328-84-7]	1-(trifluoromethyl)-3,4-dichlorobenzene				
	V	(353–453)	44.1	368	A	[1987STE/MAL]
	V	(284–446)	41.8	299		[1947STU]
	V	(298–453)	43.1	446		[1935BOO/ELS]
C ₇ H ₃ Cl ₂ N	[1194-65-6]	2,6-dichlorobenzotrile				
	FUS		24.56	421.2	DSC	[2000ROD/VEC]
	FUS		26.17	417.2	DSC	[1991ACR, 1990DON/DRE]
	FUS		25.94	416.7	DSC	[1972PLA]
C ₇ H ₃ Cl ₂ NO	[102-36-3]	3,4-dichlorophenylisocyanate				
	V	(373–473)	47.4	388	A	[1987STE/MAL]
	V	(333–463)	48.1	398		[1967KON/ZHU]
C ₇ H ₃ Cl ₃ O ₂	[50-31-7]	2,3,6-trichlorobenzoic acid				
	FUS		23.85	402.7	DSC	[1991ACR, 1972PLA]
C ₇ H ₃ Cl ₅	[13014-24-9]	1-(trichloromethyl)-3,4-dichlorobenzene				
	V	(438–663)	59.3	453	A	[1987STE/MAL, 1970DYK/VAN, 1973DYK/REP, 1999DYK/SVO]
C ₇ H ₃ F ₅	[771-56-2]	2,3,4,5,6-pentafluorotoluene				
	FUS		13.28	243.7		[1996DOM/HEA, 1971PAU2]
	TRS	(10–376)	0.21	70.3		
	FUS	(10–376)	12.99	243.3		[1996DOM/HEA, 1968COU/HAL]
	V	(403–523)	36.1	418		[1999DYK/SVO]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(493–564)	34.9	508		[1999DYK/SVO]
	V	(310–410)	41.2	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(312–416)	39.9	327	A	[1987STE/MAL, 1968AMB, 1973DYK/REP, 1999DYK/SVO]
C ₇ H ₃ I ₂ NO	[1689-83-4] FUS	4-hydroxy-3,5-diiodobenzonitrile	33.63	482.9	DSC	[1990DON/DRE]
C ₇ H ₃ I ₃ O ₂	[88-82-4] FUS	2,3,5-triiodobenzoic acid	32.23	503.8	DSC	[1991ACR, 1972PLA]
C ₇ H ₄ BrN	[2042-37-7] SUB SUB	2-bromobenzonitrile	82.1 ± 0.5 81.8 ± 0.5	281 298	ME ME	[2013ROC/GAL] [2013ROC/GAL]
C ₇ H ₄ BrN	[6952-59-6] SUB SUB	3-bromobenzonitrile	78.3 ± 0.5 77.9 ± 0.5	276 298	ME ME	[2013ROC/GAL] [2013ROC/GAL]
C ₇ H ₄ BrN	[623-00-7] SUB SUB	4-bromobenzonitrile	81.0 ± 0.5 80.8 ± 0.5	288 298	ME ME	[2013ROC/GAL] [2013ROC/GAL]
C ₇ H ₄ Br ₂ O ₂	[610-71-9] FUS	2,5-dibromobenzoic acid	35.8	428	DSC	[2013VEC/BRU]
	SUB	(347–377)	131.7 ± 1.0	362	TE	[2013VEC/BRU]
	SUB	(347–377)	133.6 ± 1.0	298	TE	[2013VEC/BRU]
	V	(440–468)	90.5 ± 0.8	455	TGA	[2013VEC/BRU]
C ₇ H ₄ Br ₂ O ₂	[618-58.6] FUS	3,5-dibromobenzoic acid	30.1	491	DSC	[2013VEC/BRU]
	SUB	(355–396)	118.0 ± 0.8	376	TE	[2013VEC/BRU]
	SUB	(355–396)	120.3 ± 0.8	298	TE	[2013VEC/BRU]
	V	(500–530)	82.7 ± 1.2	514	TGA	[2013VEC/BRU]
C ₇ H ₄ ClF ₃	[88-16-4] FUS	1-(trifluoromethyl)-2-chlorobenzene	11.6	264	DSC	[1972AHM/EAD]
	V	(310–426)	44.6	325	A	[1987STE/MAL, 1951POT/SAY, 1970DYK/VAN, 1973DYK/REP]
	V	(293–431)	39.5	426		[1935BOO/ELS]
C ₇ H ₄ ClF ₃	[98-15-7] V	1-(trifluoromethyl)-3-chlorobenzene	(302–411) 43.0	317	A	[1987STE/MAL, 1951POT/SAY, 1970DYK/VAN, 1973DYK/REP]
	V	(294–415)	38.3	411		[1935BOO/ELS]
C ₇ H ₄ ClF ₃	[98-56-6] V	1-(trifluoromethyl)-4-chlorobenzene	(302–412) 42.2	317	A	[1987STE/MAL, 1951POT/SAY, 1970DYK/VAN, 1973DYK/REP]
	V	(293–416)	37.6	412		[1935BOO/ELS]
C ₇ H ₄ ClF ₁₁ O	[65064-84-8] V	5-(2-chloro-1,1,2-trifluoroethoxy)-1,1,2,2,3,3,4,4-octafluoropentane	54.1 ± 0.2	298	C	[1981VAR/BUL2]
C ₇ H ₄ ClN	[873-32-5] FUS	2-chlorobenzonitrile	17.6	327.5	DSC	[2014ROC/GAL]
	SUB		72.9 ± 0.8	273	ME	[2014ROC/GAL]
	SUB		72.3 ± 0.8	298	ME	[2014ROC/GAL]
	V	(378–486)	53.5	393	EB	[1994AIM2]
C ₇ H ₄ ClN	[766-84-7] FUS	3-chlorobenzonitrile	18.7	314.1	DSC	[2014ROC/GAL]
	SUB		77.4 ± 0.5	268	ME	[2014ROC/GAL]
	SUB		76.7 ± 0.5	298	ME	[2014ROC/GAL]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₄ ClN	[623-03-0]	4-chlorobenzonitrile				
	FUS		18.5	363.5	DSC	[2014ROC/GAL]
	SUB		77.4 ± 0.4	271	ME	[2014ROC/GAL]
	SUB		76.7 ± 0.4	298	ME	[2014ROC/GAL]
	V	(389–483)	51.9	404	EB	[1994AIM2]
C ₇ H ₄ ClNO	[2909-38-8]	3-chlorophenyl isocyanate				
	V	(344–432)	53.1	359	A	[1987STE/MAL, 1964GOL/GOR]
C ₇ H ₄ ClNO	[104-12-1]	4-chlorophenyl isocyanate				
	V	(363–443)	48.9	378	A	[1987STE/MAL]
	V	(323–433)	47.1	338		[1967KON/ZHU]
C ₇ H ₄ ClNO	[615-18-9]	2-chlorobenzoxazole				
	V		56.3 ± 1.6	298	C	[2013SIL/CIM]
C ₇ H ₄ ClNO ₂	[95-25-0]	5-chloro-3 <i>H</i> -benzoxazol-2-one (chloroxazone)				
	FUS		25.65	464	DSC	[2010BAI/VAN]
C ₇ H ₄ ClNO ₃	[121-90-4]	3-nitrobenzoyl chloride				
	V	(428–551)	62.4	443	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₄ ClNO ₄	[99-60-5]	2-chloro-4-nitrobenzoic acid				
	FUS (I)		19	414.2		
	FUS (II)		18.7	401.2	DSC	[2008BAR/BER2]
C ₇ H ₄ Cl ₂ O	[609-65-4]	2-chlorobenzoyl chloride				
	V	(374–395)	53.4	384	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₄ Cl ₂ O	[618-46-2]	3-chlorobenzoyl chloride				
	V	(367–391)	49.4	382	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₄ Cl ₂ O	[122-01-0]	4-chlorobenzoyl chloride				
	V	(370–392)	55.7	381	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₄ Cl ₂ O	[874-42-0]	2,4-dichlorobenzaldehyde				
	FUS	(79–371)	20.47	347.2	AC	[2004WAN/TAN4]
C ₇ H ₄ Cl ₂ O ₂	[51-36-5]	3,5-dichlorobenzoic acid				
	FUS		22.97	459.3	DSC	[1991ACR, 1990DON/DRE]
C ₇ H ₄ Cl ₃ NO ₃	[55335-06-3]	3,5,6-trichloro-2-pyridinyloxyacetic acid				
	FUS		31.17	423.3	DSC	[1990DON/DRE]
C ₇ H ₄ Cl ₄	[2136-89-2]	1-(trichloromethyl)-2-chlorobenzene				
	V	(423–588)	55.0	438	A	[1987STE/MAL, 1970DYK/VAN]
C ₇ H ₄ Cl ₄	[1006-31-1]	2,3,5,6-tetrachlorotoluene				
	V	(399–548)	52.6	414	A	[1987STE/MAL, 1973FEL/SAV, 1999DYK/SVO]
C ₇ H ₄ FN	[394-47-8]	2-fluorobenzonitrile				
	V	(287–297)	52.0 ± 0.1	292	Static	[2012RIB/MON]
	V	(287–297)	51.6 ± 0.1	298	Static	[2012RIB/MON]
	V		55.1 ± 0.1	298	C	[2012RIB/MON]
C ₇ H ₄ FN	[403-54-3]	3-fluorobenzonitrile				
	SUB	(255–288)	66.1 ± 0.3	272	Static	[2012RIB/MON]
	SUB	(255–288)	65.4 ± 0.3	298	Static	[2012RIB/MON]
	V	(291–297)	50.1 ± 1.2	294	Static	[2012RIB/MON]
	V	(291–297)	49.8 ± 1.2	298	Static	[2012RIB/MON]
	V		53.6 ± 0.6	298	C	[2012RIB/MON]
C ₇ H ₄ FN	[1194-02-1]	4-fluorobenzonitrile				
	SUB	(261–300)	68.2 ± 0.1	281	Static	[2012RIB/MON]
	SUB	(261–300)	67.7 ± 0.1	298	Static	[2012RIB/MON]
	SUB		67.6 ± 0.6	298	C	[2012RIB/MON]
	V	(303–339)	50.5 ± 0.1	321	Static	[2012RIB/MON]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(303–339)	51.8 ± 0.1	298	Static	[2012RIB/MON]
C ₇ H ₄ F ₃ NO ₂	[98-46-4] V	1-(trifluoromethyl)-3-nitrobenzene (341–475)	53.8	356	A	[1987STE/MAL, 1953KAR/SAY, 1999DYK/SVO]
C ₇ H ₄ F ₄	[5230-78-4] TRS FUS	1,2,4,5-tetrafluoro-3-methylbenzene	3.64 5.84	218 233	DSC	[1972AHM/EAD]
C ₇ H ₄ F ₄	[392-85-8] FUS	1-(trifluoromethyl)-2-fluorobenzene	10.7	222	DSC	[1972AHM/EAD]
	V	(310–410)	38.1	298		[1984BOU/FRI, 1991BAS/SVO]
C ₇ H ₄ F ₄	[401-80-9] V V	1-(trifluoromethyl)-3-fluorobenzene (313–410) (273–379)	36.8 34.5	328 374	A	[1987STE/MAL, 1970DYK/VAN] [1935BOO/ELS]
C ₇ H ₄ F ₄	[402-44-8] V V	1-(trifluoromethyl)-4-fluorobenzene (286–381) (287–380)	35.8 35.3	301 376	A	[1987STE/MAL, 1970DYK/VAN] [1935BOO/ELS]
C ₇ H ₄ F ₁₂ O	[335-99-9] V	2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoro-1-heptanol (355–446)	53.4	370	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₄ N ₂ O ₂	[612-24-8] TRS FUS	2-nitrobenzotrile	1.57 15.72	338.1 382.7	DSC	[2002JIM/ROU2]
	SUB SUB	(297–311) (297–311)	87.9 ± 1.4 88.1 ± 1.4	304 298	ME ME	[2003ROU/JIM] [2003ROU/JIM]
C ₇ H ₄ N ₂ O ₂	[619-24-9] FUS	3-nitrobenzotrile	20.49	389.7	DSC	[2002JIM/ROU2]
	SUB SUB	(306–324) (306–324)	92.2 ± 0.3 92.8 ± 0.3	316 298	ME ME	[2003RIB/SAN] [2003ROU/JIM]
C ₇ H ₄ N ₂ O ₂	[619-72-7] TRS TRS FUS	4-nitrobenzotrile	0.45 1.01 17.73	349 386 420.6	DSC	[2002JIM/ROU2]
	SUB SUB	(305–322) (305–322)	90.5 ± 1.3 91.1 ± 1.3	313 298	ME ME	[2003ROU/JIM] [2003ROU/JIM]
C ₇ H ₄ N ₂ O ₅	[528-75-6] FUS	2,4-dinitrobenzaldehyde (78–368)	21.18	344.9	AC	[2005WAN/TAN3]
C ₇ H ₄ N ₂ O ₆	[610-30-0] FUS	2,4-dinitrobenzoic acid	30.6	455.8	DSC	[2009VEC/BRU]
	SUB SUB	(364–402) (364–402)	132 ± 2 135 ± 2	383 298	TE TE	[2009VEC/BRU] [2009VEC/BRU]
	V V	(503–544) (494–539)	92 ± 3 91 ± 1	522 517	TGA TGA	[2009VEC/BRU] [2009VEC/BRU]
C ₇ H ₄ N ₂ O ₆	[528-45-0] FUS	3,4-dinitrobenzoic acid	24.6	438.2	DSC	[2009VEC/BRU]
	SUB SUB	(366–399) (366–399)	126 ± 2 129 ± 2	386 298	TE TE	[2009VEC/BRU] [2009VEC/BRU]
	V V	(518–540) (506–536)	91 ± 3 91 ± 1	529 521	TGA TGA	[2009VEC/BRU] [2009VEC/BRU]
C ₇ H ₄ N ₂ O ₆	[99-34-3] FUS FUS FUS	3,5-dinitrobenzoic acid	32.13 33.9 22.8	479.2 481.7 480.4	DSC DSC	[2015SIN/RAI] [1993BEC/QUA] [1971LEB/RVA]
C ₇ H ₄ S ₃	[3354-42-5]	4,5-benzo-1,2-dithiole-3-thione				

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(350–361)	102.6 ± 0.4	355		[1972GEI/RAU]
	SUB		107 ± 0.4	298		[1972GEI/RAU]
C ₇ H ₄ S ₃	[934-36-1]	4,5-benzo-1,3-dithiole-2-thione				
	SUB		118.8 ± 0.4	298		[1973RAU/GEI, 1977PED/RYL]
C ₇ H ₅ BrO	[618-32-6]	benzoyl bromide				
	V	(320–492)	52.3	335	A	[1987STE/MAL, 1947STU]
C ₇ H ₅ BrO	[1122-91-4]	4-bromobenzaldehyde				
	FUS		22.6	334.2	DSC	[2008FAV/FRE]
C ₇ H ₅ BrO ₂	[88-65-3]	2-bromobenzoic acid				
	FUS		24.83	421.6	DSC	[2005RIB/FON]
	FUS		23.0		DSC	[1983HOL]
	SUB	(328–347)	106.8 ± 0.4	338	ME	[2005RIB/FON]
	SUB	(328–347)	108.5 ± 0.6	298	ME	[2005RIB/FON]
	SUB		95.9 ± 0.4	298	C	[1994TAN/SAB]
	SUB		110.9 ± 1.1	298	C	[1987FER/PIL]
	SUB		83.3 ± 0.4		DSC	[1983HOL]
C ₇ H ₅ BrO ₂	[585-76-2]	3-bromobenzoic acid				
	FUS		24.91	430.1	DSC	[2005RIB/FON]
	SUB	(328–347)	104.2 ± 0.5	338	ME	[2005RIB/FON]
	SUB	(328–347)	105.9 ± 0.7	298	ME	[2005RIB/FON]
	SUB		99.2 ± 0.2	298	C	[1994TAN/SAB]
	SUB		105.0 ± 1.1	298	C	[1987FER/PIL]
C ₇ H ₅ BrO ₂	[586-76-5]	4-bromobenzoic acid				
	FUS		30.87	526.3	DSC	[2005RIB/FON]
	SUB	(349–366)	107.4 ± 0.5	358	ME	[2005RIB/FON]
	SUB	(349–366)	110.1 ± 0.8	298	ME	[2005RIB/FON]
	SUB		103.1 ± 0.6	298	C	[1994TAN/SAB]
	SUB		107.6 ± 1.1	298	C	[1987FER/PIL]
C ₇ H ₅ ClO	[98-88-4]	benzoyl chloride				
	V	(305–470)	49.6	320	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]
C ₇ H ₅ ClO	[89-98-5]	2-chlorobenzaldehyde				
	V	(382–563)	49.8	397	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₅ ClO ₂	[118-91-2]	2-chlorobenzoic acid				
	FUS		24.67	417.5	DSC	[2009MEL/PIN]
	FUS		27.53	414.2	DSC	[2009DAS/SIN]
	FUS		25.25	414	DSC	[2005RIB/FON]
	FUS		25.73	413.4		[1991ACR, 1983WEA]
	FUS		26.3	414		[1991SAB/HIR]
	FUS		25.52		DSC	[1983HOL]
	SUB	(338–402)	99.9 ± 0.4	370	GS	[2005EME/STR]
	SUB	(338–402)	101.4 ± 0.4	298	GS	[2005EME/STR]
	SUB	(320–339)	105.0 ± 0.4	330	ME	[2005RIB/FON]
	SUB	(320–339)	106.3 ± 0.5	298	ME	[2005RIB/FON]
	SUB		100.9 ± 0.5	298	C	[1995SAB/AGU]
	SUB		116.2 ± 0.6		DSC	[1983HOL]
	SUB		79.5 ± 3.3			[1938WOL/WEG, 1960JON, 1970COX/PIL]
C ₇ H ₅ ClO ₂	[535-80-8]	3-chlorobenzoic acid				
	FUS		23.67	427.9	DSC	[2005RIB/FON]
	FUS		23.85	427.4		[1991ACR, 1983WEA]
	FUS		22.0	427.8		[1991SAB/HIR]
	SUB	(348–404)	98.9 ± 0.8	376	GS	[2005EME/STR]
	SUB	(348–404)	100.6 ± 0.8	298	GS	[2005EME/STR]
	SUB	(320–340)	101.2 ± 0.4	330	ME	[2005RIB/FON]
	SUB	(320–340)	102.5 ± 0.5	298	ME	[2004RIB/SAN3]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		101.4 ± 0.4	298	C	[1995SAB/AGU]
	SUB		99.6	413	C	[1975ADE/BRO]
	SUB		105.8	298	C	[1975ADE/BRO]
	SUB		80.8 ± 3.3			[1938WOL/WEG, 1960JON, 1970COX/PIL]
C ₇ H ₅ ClO ₂	[74-11-3]	4-chlorobenzoic acid				
	FUS		32.0	513.4	DSC	[2013ALM/MON]
	FUS		30.91	512.5	DSC	[2005RIB/FON]
	FUS	(80–580)	13.5	512.3	AC	[2002TAN/SUN]
[Note: This value is considerably lower than the other three reported enthalpies of fusion. This value is likely in error.]						
	FUS		32.26	512.9		[1991ACR, 1983WEA]
	FUS		34.26	513.5		[1991SAB/HIR]
	SUB	(358–398)	105.7 ± 0.8	378	GS	[2005EME/STR]
	SUB	(358–398)	107.9 ± 0.8	298	GS	[2005EME/STR]
	SUB	(333–356)	103.3 ± 0.5	344	ME	[2005RIB/FON]
	SUB	(333–356)	105.2 ± 0.7	298	ME	[2005RIB/FON]
	SUB		102.5 ± 0.4	298	C	[1995SAB/AGU]
	SUB		101.9	413	C	[1975ADE/BRO]
	SUB		107.9	298	C	[1975ADE/BRO]
	SUB		87.9 ± 3.3			[1938WOL/WEG, 1960JON, 1970COX/PIL]
C ₇ H ₅ Cl ₂ N	[622-44-6]	phenylcarbonimidic dichloride				
	V	(273–333)	54.0	288	A	[1987STE/MAL, 1973DYK/REP, 1999DYK/SVO, 1948RED/CHA5]
C ₇ H ₅ Cl ₂ NO ₂	[133-90-4]	3-amino-2,5-dichlorobenzoic acid				
	FUS		37.42	475.6	DSC	[1991ACR, 1990DON/DRE]
C ₇ H ₅ Cl ₃	[94-99-5]	1-(chloromethyl)-2,4-dichlorobenzene				
	V	(413–578)	54.6	428	A	[1987STE/MAL, 1970DYK/VAN, 1973DYK/REP]
C ₇ H ₅ Cl ₃	[98-07-7]	(trichloromethyl)benzene				
	FUS		13.95	236		[1996DOM/HEA, 1987GOA/BOE]
	FUS		10.6	270	DSC	[1972AHM/EAD]
[Note: There is a large discrepancy in the two melting points. The 270 K value is correct.]						
	V		57.6			[1995PAP/PIM]
	V	(318–487)	52.0	333	A	[1987STE/MAL, 1947STU]
C ₇ H ₅ Cl ₃	[2077-46-5]	2,3,6-trichlorotoluene				
	V	(384–509)	62.2	399	A	[1987STE/MAL, 1973FEL/SAV]
C ₇ H ₅ Cl ₃ N ₂ O ₂		methyl 4-amino-3,5,6-trichloro-2-picolinate				
	FUS		26.78	394.3	DSC	[1969PLA/GLA]
C ₇ H ₅ FN ₂ O ₄	[17003-70-2]	(fluorodinitromethyl)benzene				
	V	(328–363)	52.8	343	A	[1987STE/MAL]
C ₇ H ₅ FO ₂	[445-29-4]	2-fluorobenzoic acid				
	FUS		20.1	397.4	DSC	[2012UMN/HAS]
[Note: The above value includes a solid-solid phase transition enthalpy of 0.42 kJ/mole.]						
	SUB	(334–367)	94.8 ± 0.4	350	GS	[2016ZHE/SVE]
	SUB	(334–367)	96.1 ± 0.8	298	GS	[2016ZHE/SVE]
	SUB	(309–323)	93.9 ± 0.5	316	ME	[2000MON/HIL]
	SUB	(309–323)	94.4 ± 0.8	298	ME	[2000MON/HIL]
C ₇ H ₅ FO ₂	[455-38-9]	3-fluorobenzoic acid				
	SUB	(332–363)	92.0 ± 0.5	347	GS	[2016ZHE/SVE]
	SUB	(332–363)	93.3 ± 0.9	298	GS	[2016ZHE/SVE]
	SUB	(303–317)	93.3 ± 0.5	310	ME	[2000MON/HIL]
	SUB	(303–317)	93.6 ± 0.6	298	ME	[2000MON/HIL]
C ₇ H ₅ FO ₂	[456-22-4]	4-fluorobenzoic acid				
	FUS		20.9	451.2	DSC	[2000KAN/SAM]
	SUB	(343–386)	92.2 ± 0.4	364	GS	[2016ZHE/SVE]
	SUB	(343–386)	93.8 ± 0.7	298	GS	[2016ZHE/SVE]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(358–382)	91.2 ± 1.3	370	GS	[1969COX/GUN, 1970COX/PIL, 1987STE/MAL]
	SUB		93.1 ± 3.8	298		[1969COX/GUN, 2000MON/HIL]
C ₇ H ₅ F ₃	[98-08-8]	(trifluoromethyl)benzene				
	FUS		11.99	242	DSC	[1972AHM/EAD]
	FUS		13.77	244		[1996DOM/HEA, 1959SCO/DOU]
	SUB	(222–233)	54.4	227	MG	[1948SEA/HOP]
	V	(468–532)	31.6	483	I	[1999DYK/SVO]
	V	(323–384)	35.9	338		[1992JAD/FRA]
	V	(460–530)	32.4	475		[1985MOU]
	V	(330–410)	37.1	298		[1984BOU/FRI, 1991BAS/SVO]
	V		35.4 ± 0.1	334	C	[1959SCO/DOU]
	V		34.1 ± 0.1	353	C	[1959SCO/DOU]
	V		32.6 ± 0.1	375	C	[1959SCO/DOU]
	V	(328–413)	35.7	343	A, EB	[1987STE/MAL, 1951POT/SAY, 1970DYK/VAN, 1959SCO/DOU, 1999DYK/SVO]
V	(241–375)	39.1	256		[1947STU]	
V	(275–353)	38.5	290		[1946FIE/SAY]	
V	(273–380)	33.9	375		[1935BOO/ELS]	
C ₇ H ₅ F ₄ NO ₂	[27827-91-4]	1,1,3-trihydrotetrafluoropropyl α -cyanoacrylate				
	TRS		0.3	154		
	FUS		19.95	287.4		[1995LEB/BYK2]
C ₇ H ₅ F ₁₀ NS	[54120-09-1]	2,2,2-trifluoro- <i>N</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]ethanimidothioic acid, ethyl ester				
	V		30.1	394		[1975PET/SHR]
C ₇ H ₅ F ₁₁ O	[181214-75-5]	1-ethoxy-1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane				
	V	(288–373)	39.0	303	I	[2002MUR/YAM]
C ₇ H ₅ F ₁₁ O	[203783-57-7]	1-ethoxy-1,1,2,2,3,4,4,4-octafluoro-3-(trifluoromethyl)butane				
	V	(288–373)	38.3	303	I	[2002MUR/YAM]
C ₇ H ₅ IO ₂	[88-67-5]	2-iodobenzoic acid				
	FUS		21.38	435.1	DTA	[1994TAN/SAB2, 1994TAN/SAB4]
	FUS		26.23		DSC	[1983HOL]
	SUB	(362–411)	109.2 ± 0.5	386	GS	[2016ZHE/SVE]
	SUB	(362–411)	111.4 ± 0.8	298	GS	[2016ZHE/SVE]
	SUB	(345–359)	111.4 ± 0.8	352	ME	[2000MON/HIL]
	SUB	(345–359)	112.8 ± 2.0	298	ME	[2000MON/HIL]
	SUB		92.6 ± 0.2	298	C	[1995SAB/AGU, 1994TAN/SAB2, 1994TAN/SAB4]
	SUB		103.0 ± 0.4	298	DSC	[1983HOL]
C ₇ H ₅ IO ₂	[618-51-9]	3-iodobenzoic acid				
	FUS		28.7	460.4	DTA	[1994TAN/SAB2, 1994TAN/SAB4]
	SUB	(367–422)	106.6 ± 0.4	394	GS	[2016ZHE/SVE]
	SUB	(367–422)	109.1 ± 0.8	298	GS	[2016ZHE/SVE]
	SUB	(347–363)	109.6 ± 0.5	355	ME	[2000MON/HIL]
	SUB	(347–363)	111.1 ± 1.9	298	ME	[2000MON/HIL]
	SUB		96.4 ± 0.3	298	C	[1995SAB/AGU, 1994TAN/SAB2, 1994TAN/SAB4]
C ₇ H ₅ IO ₂	[619-58-9]	4-iodobenzoic acid				
	FUS		35.24	543.8	DTA	[1994TAN/SAB2, 1994TAN/SAB4]
	SUB	(389–433)	108.3 ± 0.5	411	GS	[2016ZHE/SVE]
	SUB	(389–433)	111.2 ± 1.0	298	GS	[2016ZHE/SVE]
	SUB	(363–379)	111.0 ± 0.4	372	ME	[2000MON/HIL]
	SUB	(363–379)	112.9 ± 2.5	298	ME	[2000MON/HIL]
	SUB		99.3 ± 0.4	298	C	[1995SAB/AGU, 1994TAN/SAB2, 1994TAN/SAB4]
C ₇ H ₅ N	[100-47-0]	benzonitrile				
	FUS		10.98	260.3		[1985LEB/BYK]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(301–464)	49.1	316	A	[1987STE/MAL, 1947STU]
	V		37.8	462	C	[1901KAH2]
C ₇ H ₅ N	[931-54-4]	phenyl isocyanide (285–438)	46.2	300	A	[1987STE/MAL, 1947STU]
C ₇ H ₅ NO	[273-53-0]	benzoxazole				
	FUS		15.92	302.9	DTA	[1998SAB/HEV]
	TRS		0.02	247		
	FUS		16.78	302.5		[1996DOM/HEA, 1992STE/CHI2]
	SUB		69.2 ± 0.8	298	C	[2013SIL/CIM]
	SUB		69.5 ± 0.4	298	C	[1998SAB/HEV]
	V	(280–500)	51.2	320	EB, IPM	[1992STE/CHI2]
	V	(280–500)	48.6	360	EB, IPM	[1992STE/CHI2]
	V	(280–500)	46.1	400	EB, IPM	[1992STE/CHI2]
	V	(280–500)	43.5	440	EB, IPM	[1992STE/CHI2]
C ₇ H ₅ NO	[103-71-9]	phenyl isocyanate				
	V	(329–445)	46.5 ± 0.3	298	EB	[1996STE/CHI3]
	V	(329–445)	44.4 ± 0.3	340	EB	[1996STE/CHI3]
	V	(329–445)	42.5 ± 0.3	380	EB	[1996STE/CHI3]
	V	(329–445)	40.4 ± 0.3	420	EB	[1996STE/CHI3]
V	(283–439)	45.0	298	A	[1987STE/MAL, 1947STU]	
C ₇ H ₅ NO	[7187-01-1]	2-furanacrylonitrile				
	V		65.2 ± 0.6	298	C	[2009RIB/AMA2]
C ₇ H ₅ NO	[271-58-9]	benz[a]isoxazole (anthranil)				
	V		55.3 ± 0.3	298	C	[2004MAT/MIR3]
C ₇ H ₅ NO	[873-62-1]	3-cyanophenol				
	SUB	(303–328)	92.8		ME	[1974LIO/HOP]
C ₇ H ₅ NO	[767-00-0]	4-cyanophenol				
	SUB	(303–328)	93.3		ME	[1974LIO/HOP]
C ₇ H ₅ NOS	[2382-96-9]	2-mercaptobenzoxazole (its tautomeric name is 3 <i>H</i> -1,3-benzoxazole-2-thione)				
	FUS		25.0	470	DSC	[2008TEM/ROU3]
	FUS		22.6 ± 0.9	468.3	DSC	[2008MEN/FLO]
	SUB	(355–371)	105.4 ± 1.8	363	ME	[2010ROU/TEM]
	SUB	(355–371)	107.5 ± 1.8	298	ME	[2010ROU/TEM]
C ₇ H ₅ NOS	[2634-33-5]	1,2-benzisothiazol-3(2 <i>H</i>)-one				
	FUS		20.87	428.8	DSC	[2011MIR/MAT2]
	SUB		112.4 ± 2.5	298	C	[2011MIR/MAT2]
C ₇ H ₅ NOS	[934-34-9]	2-benzothiazolinone				
	FUS		19.6	410.8	DSC	[2014SIL/MOR]
	SUB		101.2 ± 2.7	298	C	[2014SIL/MOR]
C ₇ H ₅ NO ₂	[59-49-4]	2-benzoxazolinone				
	SUB		97.6 ± 2.2	298	C	[2006MOR/MIR2]
C ₇ H ₅ NO ₃	[552-89-6]	2-nitrobenzaldehyde				
	V	(390–547)	58.7	405	A	[1987STE/MAL]
	V	(359–547)	59.5	373		[1947STU]
C ₇ H ₅ NO ₃	[99-61-6]	3-nitrobenzaldehyde				
	V	(401–552)	62.0	416	A	[1987STE/MAL]
C ₇ H ₅ NO ₃ S	[81-07-2]	1,1-dioxo-1,2-benzisothiazol-3(2 <i>H</i>)-one (saccharin)				
	FUS		32.1	502.9	DSC	[2009GOO/ROD]
	FUS		26.77	502.7	DSC	[2008BAS/BOS]
	FUS		29.89	500.7	DSC	[2005MAT/MIR]
	SUB		112.6 ± 4.2	298	C	[2005MAT/MIR]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₅ NO ₄	[552-16-9]	2-nitrobenzoic acid				
	FUS		27.99	419		[1996DOM/HEA, 1926AND/LYN]
	SUB	(346–356)	115.8 ± 0.5	356	ME	[1999RIB/MAT]
	SUB	(346–356)	118.7 ± 0.5	298	ME	[1999RIB/MAT]
C ₇ H ₅ NO ₄	[121-92-6]	3-nitrobenzoic acid				
	FUS		15.9	408.7	DSC	[2004GUP/SIN]
	FUS		19.33	414.3		[1996DOM/HEA, 1926AND/LYN]
	SUB	(347–361)	107.2 ± 0.4	354	ME	[1999RIB/MAT]
	SUB	(347–361)	110.0 ± 0.4	298	ME	[1999RIB/MAT]
C ₇ H ₅ NO ₄	[62-23-7]	4-nitrobenzoic acid				
	FUS		36.9	512.4		[1996DOM/HEA, 1926AND/LYN]
	SUB	(367–381)	115.4 ± 0.6	374	ME	[1999RIB/MAT]
	SUB	(367–381)	119.7 ± 0.6	298	ME	[1999RIB/MAT]
C ₇ H ₅ NO ₄	[100-26-5]	pyridine-2,5-dicarboxylic acid				
	SUB		163.6 ± 2.7	298	C	[2005MAT/MOR]
C ₇ H ₅ NO ₄	[499-83-2]	pyridine-2,6-dicarboxylic acid				
	SUB		137.1 ± 5.7	298	C	[2005MAT/MOR]
C ₇ H ₅ NO ₄	[1874-22-2]	3-(5-nitro-2-furyl)-2-propenal				
	SUB		97.9 ± 2.1			[1980BAL/LEB, 1986PED/NAY]
C ₇ H ₅ NO ₄	[2620-44-2]	5-nitro-1,3-benzodioxole				
	FUS		28.2	420.2	DSC	[2007MAT/SOU]
	SUB		97.4 ± 2.2	298	C	[2007MAT/SOU]
C ₇ H ₅ NS	[95-16-9]	benzothiazole				
	FUS		11.95	275.5	DTA	[1998SAB/HEV]
	TRS		0.04	245		
	FUS		12.59	275.65		[1996DOM/HEA, 1992STE/CHI2]
	FUS	(6–320)	12.8	275.6	AC	[1996DOM/HEA, 1969GOU/WES]
	FUS		13.3	276.0	CR	[1963MEY, 1969GOU/WES]
	SUB		72.9 ± 0.6	298	B	[1998SAB/HEV]
	V		58.8 ± 1.3	298	C	[2014SIL/CIM]
	V		60.9 ± 0.5	298	C	[1998SAB/HEV]
	V	(305–555)	58.7	320	EB, IPM	[1992STE/CHI2]
	V	(305–555)	56.0	360	EB, IPM	[1992STE/CHI2]
	V	(305–555)	53.5	400	EB, IPM	[1992STE/CHI2]
	V	(305–555)	50.9	440	EB, IPM	[1992STE/CHI2]
V	(305–555)	48.4	480	EB, IPM	[1992STE/CHI2]	
V	(305–555)	45.7	520	EB, IPM	[1992STE/CHI2]	
C ₇ H ₅ NS	[103-72-0]	phenyl isothiocyanate				
	V	(320–492)	52.6	335	A	[1987STE/MAL, 1947STU]
C ₇ H ₅ NS ₂	[149-30-4]	2-mercaptobenzothiazole (its tautomeric name is 3 <i>H</i> -1,3-benzothiazole-2-thione)				
	FUS		22.3 ± 0.2	455.9	DSC	[2008TEM/ROU3]
	FUS		20.56	453.5	DSC	[2008MEN/FLO]
	SUB	(376–390)	108.7 ± 2.4	383	ME	[2010ROU/TEM]
	SUB	(376–390)	111.0 ± 2.4	298	ME	[2010ROU/TEM]
C ₇ H ₅ N ₃ O	[90-16-4]	1,2,3-benzotriazin-4(3 <i>H</i>)-one				
	SUB		111.3 ± 3.4	298	C	[2011MIR/MAT3]
C ₇ H ₅ N ₃ O ₂	[5401-94-5]	5-nitroindazole				
	SUB	(377–399)	116.7 ± 0.9	388	ME	[2010RIB/CAB]
	SUB	(377–399)	121.2 ± 0.9	298	ME	[2010RIB/CAB]
C ₇ H ₅ N ₃ O ₂	[7597-18-4]	6-nitroindazole				
	SUB	(359–381)	113.4 ± 0.6	370	ME	[2010RIB/CAB]
	SUB	(359–381)	117.0 ± 0.6	298	ME	[2010RIB/CAB]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₅ N ₃ O ₆	[610-25-3]	2,4,5-trinitrotoluene				
	FUS		24.7	376.2		[1996DOM/HEA, 1971CHI/THO]
C ₇ H ₅ N ₃ O ₆	[118-96-7]	2,4,6-trinitrotoluene				
	FUS		22.0	354.0	DSC	[2010RAM/FEL]
	FUS		23.43	352.2	DSC	[1993ACR, 1990HWA/TAM]
	FUS		22.36	354.1		[1962CAD/ROD, 1969MAY/THO]
	SUB	(323–353)	144.5	338	TGA	[2013LIU/ZHA]
	SUB		99.6 ± 5		UV/Vis	[2012HIK/WEE]
	SUB	(313–338)	106.8		TGA	[2011FEL/RAM]
	SUB	(288–328)	91	308	HSA	[2009OXL/SMI]
	SUB		104.2		DSC	[1990HWA/YOS]
	SUB	(293–353)	112.4	308	A	[1987STE/MAL]
	SUB		81			[1985DOB/CRA, 2009OXL/SMI]
	SUB	(301–349)	113.2 ± 1.5	298	ME	[1979KUD/KUD2]
	SUB	(297–330)	99.2 ± 2		GS	[1976PEL, 1977PEL]
	SUB		104.6 ± 1.7	298	ME	[1971LEN/VEL]
	SUB	(327–349)	103.3 ± 2.5	338		[1970LEN/VEL]
	SUB		U112-132		TGA	[1970MAY/VEN, 1978CUN/PAL]
	SUB	(323–353)	118.4 ± 4.2		ME	[1950EDW, 1960JON, 1970COX/PIL]
	SUB		102.2			[1950NIT/SEK]
	C ₇ H ₅ N ₃ O ₇	[606-35-9]	2,4,6-trinitroanisole			
SUB		(334–342)	132.4	338	A	[1987STE/MAL]
SUB			133.1 ± 2.1			[1950NIT/SEK, 1970COX/PIL]
V		(342–363)	91.9	352	A	[1987STE/MAL]
C ₇ H ₅ N ₃ O ₇		[602-99-3]	3-hydroxy-2,4,6-trinitrotoluene			
	SUB	(310–365)	111.2 ± 2.1	298		[1978CUN/PAL]
	SUB	(325–350)	103.3	337		[1970LEN/VEL]
	SUB		104.6	298		[1970LEN/VEL]
C ₇ H ₅ N ₅ O ₈	[479-45-8]	2,4,6- <i>N</i> -tetranitro- <i>N</i> -methylaniline				
	FUS		22.93	402.6		[1973KRI/LIC]
	FUS		25.86	402.6		[1996DOM/HEA, 1971HAL]
	SUB		133.1		DSC	[1990HWA/YOS]
	SUB	(335–416)	133.8 ± 1.6	298	ME	[1978CUN/PAL]
	V		108.4		DSC	[1990HWA/YOS]
C ₇ H ₆ ClF	[443-83-4]	1-chloro-3-fluoro-2-methylbenzene				
	FUS		12.6	246	DSC	[1972AHM/EAD]
C ₇ H ₆ ClNO ₂	[612-23-7]	1-(chloromethyl)-2-nitrobenzene				
	SUB		96.2 ± 3.5		ME	[2006HOS/NAG]
C ₇ H ₆ Cl ₂	[98-87-3]	(dichloromethyl)benzene				
	V	(308–487)	49.5	323	A	[1987STE/MAL, 1947STU]
C ₇ H ₆ Cl ₂	[95-73-8]	2,4-dichlorotoluene				
	V	(346–475)	50.6	361	A	[1987STE/MAL, 1973FEL/SAV, 1999DYK/SVO]
C ₇ H ₆ Cl ₂	[118-69-4]	2,6-dichlorotoluene				
	FUS		10.7	272	DSC	[1972AHM/EAD]
	V	(275–305)	51.6 ± 0.3	298	GS	[2014VER/EME]
C ₇ H ₆ Cl ₂	[95-75-0]	3,4-dichlorotoluene				
	V	(378–543)	49.4	393	A	[1987STE/MAL, 1970DYK/VAN, 1999DYK/SVO]
C ₇ H ₆ Cl ₂ O	[1984-59-4]	2,3-dichloroanisole				
	FUS		22.04	304.1	DSC	[2008RIB/FER]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
		Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₆ Cl ₂ O	[33719-74-3]	SUB		83.6 ± 1.5	298	C	[2008RIB/FER]
		FUS	3,5-dichloroanisole	23.68	310.5	DSC	[2008RIB/FER]
C ₇ H ₆ Cl ₃ NO ₂	[77765-42-5]	SUB		79.0 ± 1.5	298	C	[2008RIB/FER]
		V	2,2,4-trichloro-5-(dimethylamino)-4-cyclopentene-1,3-dione (453–483)	70.9	468	GC	[1980SHA/SAD]
C ₇ H ₆ FNO	[445-28-3]	FUS	2-fluorobenzamide	23.8	388.5	DSC	[2010ALM/MON2]
		SUB	(303–325)	95.0 ± 0.3	314	ME	[2010ALM/MON2]
		SUB	(303–325)	95.4 ± 0.3	298	ME	[2010ALM/MON2]
		SUB	(317–377)	93.0 ± 0.1	348	Static	[2010ALM/MON2]
		V	(358–412)	73.6 ± 0.1	298	Static	[2010ALM/MON2]
C ₇ H ₆ FNO	[455-37-8]	FUS	3-fluorobenzamide	24.6	401.6	DSC	[2010ALM/MON2]
		SUB	(323–345)	103.1 ± 0.5	334	ME	[2010ALM/MON2]
		SUB	(323–345)	104.1 ± 0.5	298	ME	[2010ALM/MON2]
		SUB	(337–396)	102.9 ± 0.1	369	Static	[2010ALM/MON2]
		V	(383–432)	83.2 ± 0.2	298	Static	[2010ALM/MON2]
C ₇ H ₆ FNO	[824-75-9]	FUS	4-fluorobenzamide	24.9	429.2	DSC	[2010ALM/MON2]
		SUB	(345–425)	102.8 ± 0.1	298	Static	[2010ALM/MON2]
		V	(410–438)	83.3 ± 0.1	298	Static	[2010ALM/MON2]
C ₇ H ₆ F ₃ N	[98-16-8]	V	1-(trifluoromethyl)-3-aminobenzene (334–464)	53.1	349	A	[1987STE/MAL, 1953KAR/SAY, 1999DYK/SVO]
		V	<i>N</i> -(trifluoromethyl)thioaniline (333–413)	47.0	348	A	[1987STE/MAL]
C ₇ H ₆ F ₆ O ₄	[1513-62-8]	V	dimethylperfluoroglutarate	52.3	298	EB	[1976KOL/SLA]
C ₇ H ₆ F ₈ O ₃	[1422-70-4]	FUS	bis-(tetrafluoropropyl)carbonate	41.05	253.4		[1996DOM/HEA, 1980LEB/DOB]
		V	(283–313)	66.5 ± 0.9	298		[1980LEB/DOB]
C ₇ H ₆ INO ₂	[6277-17-4]	FUS	2-iodo-3-nitrotoluene (79–373)	20.68	339.3	AC	[2000DI/LI]
C ₇ H ₆ N ₂	[51-17-2]	FUS	benzimidazole	22.7	444	DSC	[2007DRA/JAN]
		TRS		0.71	384.4		
		FUS		20.47	445.5	DSC	[2002DOM/KOZ]
		FUS		19.25	443.2		[1984DOM/EVA]
		SUB		90.2 ± 0.6	363	C	[1998SAB/HEV2]
		SUB		94.3 ± 0.6	298		[1998SAB/HEV2]
		SUB	(340–359)	101.8 ± 0.4	350	ME	[1987JIM/ROU]
		SUB	(340–359)	102.2 ± 0.4	298	ME	[1987JIM/ROU]
		SUB		98.9 ± 0.4	298		[1986JIM/ROU]
		C ₇ H ₆ N ₂	[271-44-3]	SUB	indazole (308–317)	90.9 ± 0.2	318
SUB	(308–317)			91.1 ± 0.2	298	ME	[1987JIM/ROU, 1986JIM/ROU]
SUB				87.7 ± 0.9			[1985SKI/PIL]
SUB				97.1			[1961ZIM/GEI]
C ₇ H ₆ N ₂	[274-76-0]	V	imidazo[1,2- <i>a</i>]pyridine	67.4 ± 0.2	298	GS	[2011LIP/RAT]
		V		67.1 ± 4.6	298	CGC	[2011LIP/RAT]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References	
		Transition	Temp. range (K)				$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)
		V		60.5 ± 2.6	298	CGC	[2011LIP/RAT]
C ₇ H ₆ N ₂ O	[615-16-7]	1,3-dihydro-2 <i>H</i> -benzimidazol-2-one		126.4 ± 2.4	298	C	[2006MOR/MIR2]
C ₇ H ₆ N ₂ O	[7364-25-2]	1,2-dihydro-3 <i>H</i> -indazol-3-one		127.6 ± 1.5	298	C	[2006MOR/MIR2]
C ₇ H ₆ N ₂ O ₂	[4413-48-3]	5-methoxybenzofurazan		89.2 ± 0.7	298	C	[1996ACR/BOT]
C ₇ H ₆ N ₂ O ₂	[19164-41-1]	5-methylbenzofurazan-1-oxide		92.2 ± 1.2	298	C	[1996ACR/BOT]
C ₇ H ₆ N ₂ O ₃	[7791-49-3]	5-methoxybenzofurazan-1-oxide		96.0 ± 1.6	298	C	[1996ACR/BOT]
C ₇ H ₆ N ₂ O ₃	[6635-41-2]	2-nitrobenzaloxime		U26.4 ± 1.7		MS	[1983MAJ/AZZ]
		SUB (anti)		U40.2 ± 1.7		MS	[1983MAJ/AZZ]
C ₇ H ₆ N ₂ O ₃	[3431-62-7]	3-nitrobenzaloxime		U41.0 ± 1.7		MS	[1983MAJ/AZZ]
		SUB (anti)		U42.7 ± 1.7		MS	[1983MAJ/AZZ]
C ₇ H ₆ N ₂ O ₃	[1129-37-9]	4-nitrobenzaloxime		U56.4 ± 1.7		MS	[1983MAJ/AZZ]
C ₇ H ₆ N ₂ O ₃	[610-15-1]	2-nitrobenzamide		27.7	446.9	DSC	[2014XIM/FLO]
		SUB		117.9 ± 2.4	298	V + F	[2014XIM/FLO]
		V		84.7 ± 2.4	510	TGA	[2014XIM/FLO]
		V		98.3 ± 2.4	298	TGA	[2014XIM/FLO]
C ₇ H ₆ N ₂ O ₃	[645-09-0]	3-nitrobenzamide		24.6	414.7	DSC	[2014XIM/FLO]
		SUB		108.8 ± 1.6	298	V + F	[2014XIM/FLO]
		V		76.9 ± 1.5	510	TGA	[2014XIM/FLO]
		V		90.5 ± 1.5	298	TGA	[2014XIM/FLO]
C ₇ H ₆ N ₂ O ₃	[619-80-7]	4-nitrobenzamide		30.1	473.5	DSC	[2014XIM/FLO]
		SUB		114.2 ± 1.5	298	V + F	[2014XIM/FLO]
		V		80.1 ± 1.5	510	TGA	[2014XIM/FLO]
		V		93.7 ± 1.5	298	TGA	[2014XIM/FLO]
C ₇ H ₆ N ₂ O ₄	[25321-14-6]	1,1-dinitrophenylmethane		76.1 ± 0.8		ME	[1972PEP/MAT]
		SUB (312–323)					
C ₇ H ₆ N ₂ O ₄	[602-01-7]	2,3-dinitrotoluene		17.57	329.8	DSC	[1993ACR, 1990HWA/TAM]
		SUB (270–315)		97.0 ± 2.1	293	ME, QCM	[2008FRE/KEB]
C ₇ H ₆ N ₂ O ₄	[121-14-2]	2,4-dinitrotoluene		22.62	343.4	DSC	[2010RAM/FEL]
		FUS		20.47		DSC	[2004WOL/KSI]
		FUS		22.18	340.8	DSC	[1993ACR, 1990HWA/TAM]
		FUS		20.12	343.3	DSC	[1991ACR, 1983WEA]
		FUS		20.9		DTA	[1964DAV]
		SUB (313–338)		96.2		TGA	[2011FEL/RAM]
		SUB (270–315)		94.7 ± 2.3	293	ME, QCM	[2008FRE/KEB]
		SUB		94.2 ± 2.5		GS	[2008FRE/KEB, 2001RIT]
		SUB (332–342)		98.3 ± 2.5	337	ME	[1977PED/RYL, 1970LEN/VEL]
		SUB		99.6 ± 2.5	298		[1977PED/RYL, 1970LEN/VEL]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(277–344)	95.8 ± 1.25	310	GS	[1976PEL, 1977PEL]
	SUB		99.6 ± 1.3		ME	[1970COX/PIL, 1971LEN/VEL]
	V	(344–572)	76.9	359	A	[1987STE/MAL]
	V	(473–572)	58.2	488	A	[1987STE/MAL, 1968MAK, 1973DYK/REP]
	V	(354–439)	70.2			[1977PEL, 1958MOL]
C ₇ H ₆ N ₂ O ₄	[606-20-2]	2,6-dinitrotoluene				
	FUS		23.85	327.5	DSC	[1993ACR, 1990HWA/TAM]
	FUS (α)		19.28	324.3		
	FUS (β)		16.07	339.2	DSC	[1990FIN/PAY]
	SUB	(275–325)	99.6 ± 2.3	293	ME, QCM	[2008FRE/KEB]
	SUB	(277–323)	98.3 ± 0.8	300	GS	[1976PEL, 1977PEL]
	V	(330–533)	77.8	345	A	[1987STE/MAL]
	V	(423–553)	56.9	438	A	[1987STE/MAL, 1968MAK]
	V	(344–427)	68.7			[1977PEL, 1958MOL]
C ₇ H ₆ N ₂ O ₄	[610-39-9]	3,4-dinitrotoluene				
	FUS		18.83	329.5	DSC	[1993ACR, 1990HWA/TAM]
	SUB	(270–315)	99.6 ± 1.9	293	ME, QCM	[2008FRE/KEB]
C ₇ H ₆ N ₂ O ₄	[618-85-9]	3,5-dinitrotoluene				
	V	(493–543)	62.6	508	A	[1987STE/MAL, 1968MAK]
C ₇ H ₆ N ₂ O ₄	[611-38-1]	(dinitromethyl)benzene				
	SUB	(312–323)	76.1	317.5	A	[1987STE/MAL]
C ₇ H ₆ N ₂ O ₅	[497-56-3]	3,5-dinitro- <i>o</i> -cresol				
	SUB	(290–324)	103.3		TE	[1947BAL, 1960JON]
C ₇ H ₆ N ₂ O ₅	[534-52-1]	2-methyl-4,6-dinitrophenol				
	FUS		19.41	359.3	DSC	[1991ACR, 1990DON/DRE]
C ₇ H ₆ N ₂ O ₅	[119-27-7]	2,4-dinitroanisole				
	FUS		20.23	369.4	DSC	[2012XIN/ZHA]
	SUB	(328–363)	U248	345	TGA	[2014CUD/POD]
	SUB	(323–363)	124.0	343	TGA	[2013LIU/ZHA]
	V	(373–423)	95.9	398	TGA	[2013LIU/ZHA]
C ₇ H ₆ N ₂ S	[583-39-1]	2-mercaptobenzimidazole				
	FUS		24.11	589.4	DSC	[2008MEN/FLO]
C ₇ H ₆ N ₂ S	[136-95-8]	2-aminobenzothiazole				
	FUS		18.14	402.3	DSC	[2014CAM/MEN]
	FUS		19.63	402.2	DSC	[2012SHA/SHA]
	SUB	(333–354)	103.5 ± 0.2	343	ME	[2014SIL/MON]
	SUB	(333–354)	104.7 ± 0.4	298	ME	[2014SIL/MON]
	SUB		102.1 ± 1.8	298	C	[2014SIL/MON]
C ₇ H ₆ O	[100-52-7]	benzaldehyde				
	FUS	(13–360)	9.33	216	AC	[1996DOM/HEA, 1975AMB/CON]
	V	(278–313)	49.0 ± 0.7	298	GS	[2007EME/DAB]
	V	(313–353)	49.1	298	CGC	[1995CHI/HOS]
	V	(348–452)	49.5	363	A	[1987STE/MAL]
	V	(409–481)	43.8	424	A	[1987STE/MAL]
	V	(311–376)	48.6	326	A	[1987STE/MAL]
	V	(370–475)	45.5	385	A	[1987STE/MAL]
	V	(465–541)	41.9	480	A	[1987STE/MAL]
	V	(529–599)	40.6	544	A	[1987STE/MAL]
	V	(311–404)	50.3	298	EB	[1975AMB/CON]
	V	(311–404)	42.5	452	EB	[1975AMB/CON]
	V	(273–373)	47.0	288	A, BG	[1987STE/MAL, 1973DEM/LEH]
V	(299–452)	54.4	314		[1947STU]	

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₆ O	[539-80-0] V	2,4,6-cycloheptatrienone (troponone) (273–323)	54.2	288	A	[1987STE/MAL, 1971JAC/HUN]
C ₇ H ₆ O ₂	[65-85-0]	benzoic acid				
	FUS		U12.46	394.2	DSC	[2014HAS/JIR]
	FUS		17.91	395.4	CVC	[2014FON/GUS]
	FUS		17.06	395.0	DSC	[2013BOU/TEY]
	FUS		18.6	396.0	DSC	[2012MAH/AND]
	FUS		18.0	395.5	DSC	[2012CHA/LAY]
	FUS		16.82	394.9	DSC	[2012YAN/THA]
	FUS		18.7	396.1	DSC	[2012WAN/DEN]
	FUS		18.71	396.1	DSC	[2010WAN/LAI]
	FUS		18.5	394.5		[2009SHA/TAN]
	FUS		18.65	394.6	DSC	[2009DAS/SIN, 2008SIN/DAS2]
	FUS		16.99	396.9	DSC	[2009BRI2]
	FUS		15.3	395.6	DSC	[2008GHI/BEA]
	FUS		15.37	396.2	DSC	[2004STU/WIT]
	FUS		17.3	394.4	DSC	[2003SHA/KAN, 2004SHA/JAM]
	FUS		17.1	395.4	DSC	[2002ROY/RIG]
	FUS		17.3		DSC	[1992SHA/SHA]
	FUS		18.06	395.5		[1980AND/CON]
	FUS		17.32	395.0		[1967PAC]
	FUS		17.4		DTA	[1964DAV]
	FUS		17.8		AC	[1960SKL/STR, 1980AND/CON]
	FUS		17.99	395.5		[1984DOM/EVA, 1953GIN/FUR]
	FUS		18.00	395.2	AC	[1951FUR/MCC, 1980AND/CON]
	FUS		17.32	395.0		[1926AND/LYN]
	SUB		86.1 ± 0.6		UV/Vis	[2015HIK/WEE]
	SUB	(316–367)	88.9 ± 0.2	341	GS	[2015VER/ZAI]
	SUB	(316–367)	89.8 ± 0.4	298	GS	[2015VER/ZAI]
	SUB	(298–339)	89.3 ± 0.1	318	Static	[2015VER/ZAI]
	SUB	(298–339)	89.8 ± 0.3	298	Static	[2015VER/ZAI]
	SUB		89.9 ± 0.2	298	ME	[2014FON/GUS]
	SUB	(353–373)	89.8 ± 0.1	363	UV/Vis	[2013HIK/WEE]
	SUB	(303–343)	89.9		TGA	[2011FEL/RAM]
	SUB	(340–410)	90.9 ± 2.0		TG-TS	[2009SEL/RAG]
	SUB		93.3 ± 1.2	298	ME, QCM	[2008FRE/KEB]
	SUB	(299–317)	90.0 ± 0.5	307	ME	[2006RIB/MON]
	SUB	(299–317)	90.4 ± 0.5	298	ME	[2006RIB/MON]
	SUB		91.7 ± 3.4		ME	[2006HOS/NAG]
	SUB	(299–323)	89.7 ± 0.8	311	ME	[2002LI/SHI]
	SUB		88.5 ± 0.5	298	DSC	[2001ROJ/ORO]
	SUB		88.3 ± 0.5	298	C	[2001KIY/MIN]
	SUB	(323–394)	90.5 ± 0.3		GS	[1999ZIE/PER]
	SUB		89 ± 6		TGA	[1999PRI/BAS]
	SUB		87.5 ± 0.4			[1998PRI/HAW]
	SUB	(313–343)	86.7		TGA	[1997ELD]
	SUB	(307–314)	88.7 ± 0.9	311	ME	[1990RIB/MON]
	SUB		89.3 ± 0.9	298		[1990RIB/MON]
	SUB		87.5 ± 0.3	335	C	[1988TOR/BAR]
	SUB		89.2 ± 1.0	298		[1988TOR/BAR]
	SUB		91.0 ± 2.0		C	[1987ELS]
	SUB		95.1 ± 1.8	294		[1985KAI/HAD]
	SUB	(293–319)	90.8 ± 0.6	306	QR	[1985GLU/ARK]
	SUB	(368–428)	87.8		GS	[1985MAT/KUW2]
	SUB		89.5 ± 0.4		DSC	[1983HOL]
	SUB	(320–370)	89.1 ± 0.2		C	[1982MUR/SAK]
	SUB	(316–391)	89.5 ± .05	353	DM	[1982DEK/BLO]
	SUB	(293–313)	90.6 ± 2.0		ME	[1982COL/JIM]
	SUB		93.45 ± 1		GS	[1981BRO/MCE]
	SUB	(344–395)	85 ± 2	369	SG	[1980SAC/HIL]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(281–323)	88.3 ± 2.9		LE	[1978NOW/SZC]
	SUB		88.5 ± 0.8		C	[1976MIR/LEB]
	SUB	(294–331)	92.5 ± 4.0		ME	[1975VAN/DEK]
	SUB	(293–318)	88.5 ± 1.6		TE	[1975DEK/VAN]
	SUB	(273–318)	92.9 ± 0.2	296	ME	[1974ARS]
	SUB	(293–311)	88.1 ± 0.2		TCM	[1973DEK/OON]
	SUB	(338–383)	89.0 ± 0.4		ME	[1973MAL/GIG]
	SUB	(338–383)	89.3 ± 0.4		C	[1973MAL/GIG]
	SUB	(290–315)	86.6 ± 1.3		ME, C	[1972WIE]
	SUB	(293–308)	90.0 ± 0.3		ME	[1972COL/MON]
	SUB		89.5 ± 0.2	298	C	[1972MOR, 1971BEE/LIN]
	SUB	(299–329)	89.1	314		[1971ASH]
	SUB	(290–315)	86.6 ± 1.7	303	ME	[1970WIE/WAU, 1999ZIE/PER]
	SUB	(324–392)	90.4 ± 0.8	367	HSA	[1970MEL/MER]
	SUB		89.7 ± 0.6	298	C	[1969CHA/STE]
	SUB	(348–378)	88.9 ± 0.5	363	GS	[1968MER]
	SUB	(291–307)	90.9	299	ME	[1965DAV/KYB]
	SUB	(243–387)	91.5 ± 0.5	298	GS	[1954DAV/JON, 1970COX/PIL, 1960JON]
	SUB		84.2 ± 0.8	318	TE	[1938WOL/WEG]
	SUB	(333–389)	85.8	383	T	[1934HIR]
	SUB	(377–394)	84.5 ± 0.5	364	I	[1927KLO/WOO]
	V	(401–416)	63.3 ± 0.6			[2003PEN/RIB]
	V	(353–393)	78.9	298	CGC	[1995CHI/HOS]
	V	(368–428)	67.8		GS	[1985MAT/KUW2]
	V	(405–523)	66.3	420	A	[1987STE/MAL]
	V		65.4	428	I	[1943CRA]
	V	(401–520)	67.7	416	MM, A	[1927KLO/WOO]
C ₇ H ₆ O ₂	[90-02-8]	2-hydroxybenzaldehyde				
	FUS		13.3	278.7	DSC	[2008BER/MIN]
[Note: The authors noted in the paper that their melting point temperature differed significantly from the published literature values.]						
	V		53.3 ± 0.3	298	C	[2008BER/MIN]
	V		50.4 ± 1.3	298	C	[2007RIB/ARA]
	V	(383–470)	30.6	398	A	[1987STE/MAL]
	V		47.7			[1986BAL/GNA]
	V	(306–470)	49.6	321		[1947STU]
C ₇ H ₆ O ₂	[100-83-4]	3-hydroxybenzaldehyde				
	FUS		24.1	376.0	DSC	[2012SHA/RAI]
	SUB	(312–330)	99.7 ± 0.6	321	ME	[2010RIB/GON]
	SUB	(312–330)	100.1 ± 0.6	298	ME	[2010RIB/GON]
	SUB	(303–328)	93.6		ME	[1974LIO/HOP]
C ₇ H ₆ O ₂	[123-08-0]	4-hydroxybenzaldehyde				
	FUS (I)	(298–400)	22.2	391.1	DSC	[2013SIM/BER2]
	FUS		20.3	390.8	DSC	[2008BER/MIN]
	FUS		21.6	390.8	DSC	[2008TEM/ROU]
	SUB	(324–341)	101.8 ± 0.5	333	ME	[2010RIB/GON]
	SUB	(324–341)	102.5 ± 0.5	298	ME	[2010RIB/GON]
	SUB		99.7 ± 0.4	298	C	[2008BER/MIN]
	SUB	(303–336)	98.2 ± 1.3	298	ME	[1987STE/MAL, 1971PAR/ROC]
	SUB	(303–328)	94.4		ME	[1974LIO/HOP]
	SUB	(312–336)	91.2	324		[1960AIH]
	V	(394–583)	72.3	409	A	[1987STE/MAL, 1947STU]
C ₇ H ₆ O ₂	[1864-94-4]	phenylformate				
	V	(287–305)	52.9 ± 0.6	298	BG	[1976ANT/CAR, 1975ANT/CAR]
C ₇ H ₆ O ₂	[274-09-9]	1,3-benzodioxole				
	V		41.4			[1958CAS/FLE2]
C ₇ H ₆ O ₂	[533-75-5]	2-hydroxy-2,4,6-cycloheptatrien-1-one (tropolone)				

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(273–333)	84.1 ± 0.4	303	ME	[1971JAC/HUN]
	SUB		83.7 ± 0.8	298		[1951NIC, 1970COX/PIL]
C ₇ H ₆ O ₂	[623-30-3]	3-(2-furyl)-2-propenal				
	SUB		76.1 ± 2.1			[1980BAL/LEB, 1986PED/NAY]
C ₇ H ₆ O ₃	[539-47-9]	2-furanacrylic acid				
	FUS		22.9	413.2	DTA	[2014SOB/VAN, 2015SOB/VAN]
	SUB	(348–378)	102.2 ± 4.8	360	ME	[2014SOB/VAN]
	SUB	(322–338)	101.7 ± 0.5	330	ME	[2009RIB/AMA2]
	SUB	(322–338)	103.3 ± 0.5	298	ME	[2009RIB/AMA2]
	SUB		103.0 ± 0.7	298	C	[2009RIB/AMA2]
C ₇ H ₆ O ₃	[81311-95-7]	3-furanacrylic acid				
	SUB	(327–343)	105.0 ± 0.5	335	ME	[2009RIB/AMA2]
	SUB	(327–343)	106.8 ± 0.5	298	ME	[2009RIB/AMA2]
	SUB	(327–343)	104.9 ± 1.1	298	C	[2009RIB/AMA2]
C ₇ H ₆ O ₃	[69-72-7]	2-hydroxybenzoic acid (salicylic acid)				
	FUS		25.27	431.4	DSC	[2013BOU/TEY]
	FUS		24.6	431.8	DSC	[2013LIM/JAN]
	FUS		12.8	433.5	DSC	[2010CAM/MIC]
[Note: The experimental value reported in [2010CAM/MIC] is not in agreement with other independently measured values.]						
	FUS		24.62	431.0		[2009SHA/TAN]
	FUS		27.1	434.1	DSC	[2009GOO/ROD]
	FUS		23.05	432.5	DSC	[2009PEN/ESC]
	FUS		23.52	436.5	DSC	[2009MEL/PIN]
	FUS		28.82	432.4	DSC	[2008MOG/SEP]
	FUS		24.45	431.1	DSC	[2008MOT/QUE]
	FUS	(298–435)	26.1	432.4	DSC	[2005PIN/DIO]
	FUS		24.6		DSC	[2003SHA/KAN]
	FUS		24.6	431.8		[1996DOM/HEA, 1993SAB/LE]
	SUB		94.4 ± 0.4	298	C	[2005PIN/DIO]
	SUB		95.1 ± 0.5	333	C	[1993SAB/LE]
	SUB		96.3 ± 0.5	298		[1993SAB/LE]
	SUB	(307–324)	95.7 ± 0.8	315	ME	[1980COL/JIM, 1981COL/JIM]
	SUB	(312–332)	94.9 ± 0.4	322	TE	[1977DEK/VAN]
	SUB	(312–332)	93.22 ± 0.8	322	ME	[1977DEK/VAN]
	SUB	(298–328)	99.2 ± 2	313	ME	[1974ARS]
	SUB	(368–408)	94.8 ± 0.4			[1973MAL/GIG]
	SUB	(368–408)	95.1 ± 0.4		GS	[1954DAV/JON, 1970COX/PIL, 1960JON]
	V	(445–504)	79.4	460	A	[1987STE/MAL]
C ₇ H ₆ O ₃	[99-06-9]	3-hydroxybenzoic acid				
	FUS (I)		35.83	474.3	DSC	
	FUS (II)		32.68	467.5	DSC	[2013SVA/RAS]
	FUS	(298–480)	36.5	476.4	DSC	[2005PIN/DIO]
	FUS		26.2	475.1		[1996DOM/HEA, 1993SAB/LE]
	SUB		118.3 ± 1.1	298	C	[2005PIN/DIO]
	SUB		123.5 ± 0.7	363	C	[1993SAB/LE]
	SUB		125.0 ± 0.7	298		[1993SAB/LE]
C ₇ H ₆ O ₃	[99-96-7]	4-hydroxybenzoic acid				
	FUS		30.3	492.5	DSC	[2012MAH/AND]
	FUS		32.5	489.4	DSC	[2010MON/SAN]
	FUS		30.85	489	DSC	[2006NOR/RAS2]
	FUS		31.4	487.2	DSC	[2002GRA/RAS]
	FUS		32.0	488	DSC	[1992HEA/SIN]
	FUS		30.9	488.1		[1979ARM/JAM]
	SUB	(365–387)	119.0 ± 0.4	316	ME	[2010MON/SAN]
	SUB	(365–387)	121.1 ± 0.4	298	ME	[2010MON/SAN]
	SUB		117.0 ± 0.5	298	C	[2005PIN/DIO]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		112.4 ± 0.7	363	C	[1993SAB/LE]
	SUB		114.1 ± 0.7	298		[1993SAB/LE]
	SUB	(398–433)	116.3		GS	[1954DAV/JON, 1960JON]
C ₇ H ₆ O ₃	[533-31-3]	5-hydroxy-1,3-benzodioxole (sesamol)				
	FUS		16.96	337.7	DSC	[2004MAT/MON]
	SUB	(293–309)	92.1 ± 0.6	301	ME	[2004MAT/MON]
	SUB	(293–309)	92.2 ± 0.6	298	ME	[2004MAT/MON]
C ₇ H ₆ O ₃ S	[4066-41-5]	5-acetyl-2-thiophenecarboxylic acid				
	SUB	(364–387)	119.6 ± 0.6	375.2	ME	[2008RIB/SAN5]
	SUB	(364–387)	123.5 ± 0.6	298	ME	[2008RIB/SAN5]
C ₇ H ₆ O ₄	[303-38-8]	2,3-dihydroxybenzoic acid				
	FUS (triclinic)		29.69	481.3	DSC	[2010SAR/SAN]
	FUS (monoclinic)		21.63	481.7	DSC	[2010SAR/SAN]
	FUS		31.9	476.6	DSC	[2010MON/GON]
	SUB	(345–363)	109.1 ± 0.8	354	ME	[2010MON/GON]
	SUB	(345–363)	110.7 ± 0.8	298	ME	[2010MON/GON]
	SUB		116 ± 4		TGA	[1999PRI/BAS]
	SUB		119.8 ± 4.8	298	TGA	[1999PRI/BAS, 2015PRI]
C ₇ H ₆ O ₄	[89-86-1]	2,4-dihydroxybenzoic acid				
	FUS		31.0	501.7	DSC	[2011VEC/BRU]
	SUB	(364–390)	122 ± 2	298	TE	[2011VEC/BRU]
	SUB		117 ± 7	298	TGA	[2011VEC/BRU]
	SUB	(376–392)	124.0 ± 0.8	384	ME	[2010MON/GON]
	SUB	(376–392)	126.4 ± 0.8	298	ME	[2010MON/GON]
	SUB		126 ± 6		TGA	[1999PRI/BAS]
	SUB		127.9 ± 6.2	298	TGA	[1999PRI/BAS, 2015PRI]
	V	(511–534)	79 ± 4	523	TGA	[2011VEC/BRU]
	C ₇ H ₆ O ₄	[490-79-9]	2,5-dihydroxybenzoic acid			
FUS			20.8	476.2	DSC	[2010MON/GON]
SUB		(372–389)	128.1 ± 1.4	380	ME	[2010MON/GON]
SUB		(372–389)	130.4 ± 1.3	298	ME	[2010MON/GON]
SUB		(362–379)	117.9 ± 1.4	370	ME	[2006CHE/OJA]
SUB			109 ± 3	452	TGA	[1999PRI/BAS]
C ₇ H ₆ O ₄	[303-07-1]	2,6-dihydroxybenzoic acid				
	FUS		25.0	443.7	DSC	[2011VEC/BRU]
	SUB	(346–369)	111 ± 2	298	TE	[2011VEC/BRU]
	SUB		113 ± 5	298	TGA	[2011VEC/BRU]
	SUB	(347–365)	107.5 ± 1.0	356	ME	[2010MON/GON]
	SUB	(347–365)	109.1 ± 1.0	298	ME	[2010MON/GON]
	SUB		111 ± 7		TGA	[1999PRI/BAS]
	SUB		109.6 ± 2.6	298	TGA	[1999PRI/BAS, 2015PRI]
	V	(454–477)	82 ± 3	465	TGA	[2011VEC/BRU]
	C ₇ H ₆ O ₄	[99-50-3]	3,4-dihydroxybenzoic acid			
FUS			33.5	474.8	DSC	[2013VEC]
FUS			34.0	474.9	DSC	[2011VEC/BRU]
FUS (triclinic)			30.91	474.7	DSC	[2010SAR/SAN]
FUS			31.2	472.3	DSC	[2009QUE/MOT]
SUB		(382–409)	139 ± 2	298	TE	[2011VEC/BRU]
SUB			146 ± 7	298	TGA	[2011VEC/BRU]
SUB		(387–403)	132.3 ± 1.2	395	ME	[2010MON/GON]
SUB		(387–403)	135.1 ± 1.2	298	ME	[2010MON/GON]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		153 ± 9	450	TGA	[1999PRI/BAS]
	SUB		157.8 ± 10.3	298	TGA	[1999PRI/BAS] [2015PRI]
	V	(485–505)	105 ± 4	495	TGA	[2011VEC/BRU]
C ₇ H ₆ O ₄	[99-10-5]	3,5-dihydroxybenzoic acid				
	FUS		39.4	511.7	DSC	[2010SAR/SAN]
	FUS		38.3	508.3	DSC	[2010MON/GON]
	SUB	(345–363)	139.8 ± 1.8	416	ME	[2010MON/GON]
	SUB	(345–363)	143.2 ± 1.8	298	ME	[2010MON/GON]
	SUB		135 ± 6		TGA	[1999PRI/BAS]
	SUB		144.4 ± 8.4	298	TGA	[1999PRI/BAS, 2015PRI]
C ₇ H ₆ O ₅	[149-91-7]	3,4,5-trihydroxybenzoic acid				
	TRS		19.28	351.3		
	FUS		62.38	524.2	DSC	[2010BOG/GON]
	SUB	(391–421)	75.1	406		[1934HIR]
C ₇ H ₇ Br	[100-39-0]	benzylbromide				
	FUS		13.2	271.8		[1976ASH]
	V	(284–306)	53.3 ± 0.7	298	GS	[2002KRA/VAS]
	V		53.7	298	CGC	[2002KRA/VAS]
	V	(340–409)	48.1	355	I, A	[1976ASH, 1987STE/MAL]
	V		50.5 ± 0.5	298		[1976ASH]
	V	(305–472)	46.9	320	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]
C ₇ H ₇ Br	[95-46-5]	2-bromotoluene				
	V	(281–313)	47.7 ± 0.2	297	GS	[2015VER/SAZ]
	V	(281–313)	47.7 ± 0.5	298	GS	[2015VER/SAZ]
	V	(322–455)	47.2	337		[1999DYK/SVO]
	V	(353–518)	45.3	368	A	[1987STE/MAL, 1970DYK/VAN, 1973DYK/REP]
	V	(297–455)	52.6	312		[1947STU]
	V	(273–348)	48.8	288		[1940STU/SAY]
C ₇ H ₇ Br	[591-17-3]	3-bromotoluene				
	V	(274–308)	48.8 ± 0.2	291	GS	[2015VER/SAZ]
	V	(274–308)	48.4 ± 0.5	298	GS	[2015VER/SAZ]
	V	(351–457)	47.7	366		[1999DYK/SVO]
	V	(287–457)	48.3	302	A	[1987STE/MAL, 1947STU]
	V	(273–348)	49.4	288		[1940STU/SAY]
C ₇ H ₇ Br	[106-38-7]	4-bromotoluene				
	FUS	(150–320)	15.13	301.2	AC	[1996VAN/ALV]
	FUS		15.3	299.7		[1911LOU/DUP]
	SUB	(275–301)	62.6 ± 0.3	288	GS	[2015VER/SAZ]
	SUB	(275–301)	62.4 ± 0.6	298	GS	[2015VER/SAZ]
	V	(302–335)	46.2 ± 0.3	318	GS	[2015VER/SAZ]
	V	(302–335)	47.3 ± 0.6	298	GS	[2015VER/SAZ]
	V	(320–458)	47.1	335		[1999DYK/SVO]
	V	(273–472)	55.3	288		[1999DYK/SVO]
	V	(358–523)	45.8	373	A	[1987STE/MAL, 1970DYK/VAN, 1973DYK/REP]
C ₇ H ₇ BrO	[578-57-4]	2-bromoanisole				
	V		61.8 ± 1.3	298	C	[2009RIB/FER3]
	V		52.3			[1986BAL/GNA]
C ₇ H ₇ BrO	[2398-37-0]	3-bromoanisole				
	V		58.0 ± 1.2	298	C	[2009RIB/FER3]
	V		50.2			[1986BAL/GNA]
C ₇ H ₇ BrO	[104-92-7]	4-bromoanisole				
	V		58.3 ± 1.2	298	C	[2009RIB/FER3]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		50.6			[1986BAL/GNA]
	V	(318–496)	48.9	333		[1947STU]
C ₇ H ₇ BrS	[19614-16-5]	2-bromothioanisole				
	V		56.5			[1986BAL/GNA]
C ₇ H ₇ BrS	[33733-73-2]	3-bromothioanisole				
	V		54.4			[1986BAL/GNA]
C ₇ H ₇ BrS	[104-95-0]	4-bromothioanisole				
	V		55.7			[1986BAL/GNA]
C ₇ H ₇ Cl	[100-44-7]	benzyl chloride				
	FUS		8.74	230	DSC	[1972AHM/EAD]
	V	(276–309)	50.1 ± 0.3	298	GS	[2002KRA/VAS]
	V	392	49.9	298	CGC	[2002KRA/VAS]
	V	(320–390)	48.6	335	A, I	[1987STE/MAL, 1976ASH]
	V		50.1 ± 0.5	298		[1976ASH, 1999DYK/SVO]
	V	(295–453)	48.6	310		[1987STE/MAL, 1947STU]
C ₇ H ₇ Cl	[95-49-8]	2-chlorotoluene				
	FUS		10.3	237	DSC	[1972AHM/EAD]
	V	(274–306)	46.4 ± 0.4	298	GS	[2014VER/EME]
	V	(370–432)	41.6	385		[1999DYK/SVO]
	V	(345–430)	45.3	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(345–430)	42.5	361		[1984BOU/FRI]
	V	(338–493)	42.8	353	A	[1987STE/MAL, 1973DYK/REP, 1970DYK/VAN]
	V	(278–432)	44.8	293		[1947STU]
	V	(273–348)	45.8	288	Static	[1940STU/SAY]
	V	(273–348)	45.5 ± 2.0	298	Static	[1940STU/SAY, 2014VER/EME]
	V		46.1 ± 0.1	298	C	[1926MAT, 2014VER/EME]
C ₇ H ₇ Cl	[108-41-8]	3-chlorotoluene				
	V	(274–309)	46.8 ± 0.4	298	GS	[2014VER/EME]
	V	(373–435)	41.9	388		[1999DYK/SVO]
	V	(277–436)	43.7	292	A	[1987STE/MAL, 1947STU]
	V	(273–348)	46.2	288	Static	[1940STU/SAY]
	V	(273–348)	46.1 ± 2.0	298	Static	[1940STU/SAY, 2014VER/EME]
C ₇ H ₇ Cl	[106-43-4]	4-chlorotoluene				
	FUS		13.6	280.6	DSC	[1999MIK/MAR]
	FUS	(150–310)	13.55	280.7	AC	[1996VAN/ALV]
	V	(274–309)	46.5 ± 0.5	298	GS	[2014VER/EME]
	V	(362–435)	41.8	375		[1999DYK/SVO]
	V	(304–436)	41.7	319	A	[1987STE/MAL]
	V	(340–430)	46.0	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(338–433)	43.5	353		[1984BOU/FRI]
	V	(279–435)	44.1	293		[1947STU]
	V	(277–348)	45.3	313	Static	[1940STU/SAY]
	V	(277–348)	46.0 ± 2.0	298	Static	[1940STU/SAY, 2014VER/EME]
	V		46.4 ± 0.1	298	C	[1926MAT, 2014VER/EME]
C ₇ H ₇ ClN ₂ O	[5814-05-1]	2-chlorobenzoic acid hydrazide				
	FUS		25.6	392.2	DSC	[2003CHI/ACR]
C ₇ H ₇ ClN ₂ O	[536-40-3]	4-chlorobenzoic acid hydrazide				
	FUS		32.9	437.2	DSC	[2003CHI/ACR]
C ₇ H ₇ ClN ₂ O ₂	[23042-32-2]	<i>N</i> -methyl- <i>N</i> -(4-chlorophenyl)nitramine				
	FUS		19.5	323.4	DSC	[2002DAS/ZAL]
C ₇ H ₇ ClN ₂ S	[5344-82-1]	1-(<i>o</i> -chlorophenyl)thiourea				
	FUS		22.29	413.5	DSC	[1990DON/DRE]
C ₇ H ₇ ClO	[766-51-8]	2-chloroanisole				
	V		55.0 ± 0.8	298	C	[2008RIB/FER2]
	V		49.4			[1986BAL/GNA]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₇ ClO	V	(388–460)	48.3	403	A	[1987STE/MAL, 1973DYK/REP, 1999DYK/SVO]
	[2845-89-8]	3-chloroanisole	53.6 ± 0.8	298	C	[2008RIB/FER2]
C ₇ H ₇ ClO	V		48.1			[1986BAL/GNA]
	[623-12-1]	4-chloroanisole	54.8 ± 0.8	298	C	[2008RIB/FER2]
C ₇ H ₇ ClO	V		47.7			[1986BAL/GNA]
	[17733-22-1]	2-chlorothioanisole	53.6			[1986BAL/GNA]
C ₇ H ₇ ClO	V		51.9			[1986BAL/GNA]
	[123-09-1]	4-chlorothioanisole	53.1			[1986BAL/GNA]
C ₇ H ₇ Cl ₃ NO ₃ PS	V	<i>O, O</i> -dimethyl- <i>O</i> -3,5,6-trichloro-2-pyridyl phosphorothioate (chlorpyrifos methyl)	73.0	388	GC	[2007GOE/MCC]
	[350-50-5]	benzyl fluoride				
C ₇ H ₇ F	V	(278–318)	46.2 ± 0.3	298	GS	[2002KRA/VAS]
	V	392	46.5	298	CGC	[2002KRA/VAS]
	V	(278–318)	46.3 ± 0.3	298	GS	[1997SCH/VER]
	V	(297–410)	43.7	312	A	[1987STE/MAL]
	V	(298–356)	44.3	312	I	[1976ASH]
	V		44.5 ± 0.4	298		[1976ASH]
C ₇ H ₇ F	[95-52-3]	2-fluorotoluene				
	FUS		9.8	210.7	C	[1996DOM/HEA, 1990MEV/LIC]
	FUS		9.8	204	DSC	[1972AHM/EAD]
	V	(248–388)	42.0	263		[1999DYK/SVO]
	V	(452–531)	31.5	465		[1999DYK/SVO]
	V	(453–530)	32.3	468		[1984MOU]
	V	(308–348)	38.0	323	Static	[1974MOZ/KOL, 1984BOU/FRI]
	V	(295–388)	38.7	310	A	[1987STE/MAL, 1951POT/SAY]
C ₇ H ₇ F	[352-70-5]	3-fluorotoluene				
	FUS		8.3	184	C	[1996DOM/HEA, 1990MEV/LIC]
	FUS		6.31	185	DSC	[1972AHM/EAD]
	V	(250–390)	41.6	265		[1999DYK/SVO]
	V	(308–343)	39.0 ± 0.3	296	Static	[1974MOZ/KOL, 2014VER/EME]
	V	(293–390)	39.2	308	A	[1987STE/MAL, 1951POT/SAY]
C ₇ H ₇ F	[352-32-9]	4-fluorotoluene				
	FUS		9.35	216.5	C	[1996DOM/HEA, 1962SCO/MES]
	FUS		8.8	215.6	C	[1990MEV/LIC]
	FUS		7.65	213	DSC	[1972AHM/EAD]
	V	(340–430)	39.5	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(308–343)	37.8 ± 0.3	298	Static	[1974MOZ/KOL, 2014VER/EME]
	V	(341–428)	36.7	365	EB	[1962SCO/MES]
	V		36.7	347	C	[1962SCO/MES]
	V		35.5	367	C	[1962SCO/MES]
	V		34.1	389	C	[1962SCO/MES]
	V	(340–429)	37.0	355	A	[1987STE/MAL, 1951POT/SAY, 1999DYK/SVO]
C ₇ H ₇ FO	[321-28-8]	2-fluoroanisole				
	V		52.1 ± 1.1	298	C	[2009RIB/FER2]
C ₇ H ₇ FO	[456-49-5]	3-fluoroanisole				
	V		48.1 ± 1.1	298	C	[2009RIB/FER2]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₇ FO	[459-60-9] V	4-fluoroanisole	48.7 ± 1.2	298	C	[2009RIB/FER2]
C ₇ H ₇ F ₂ N	[23162-99-4] V	<i>N, N</i> -difluorobenzylamine (313–333)	77.8	323	A	[1987STE/MAL]
C ₇ H ₇ F ₉ O	[72372-80-6] V	1,1,1,2,2,3,3,4,4-nonafluoro-4-propoxybutane (288–369)	37.9	303	I	[2002MUR/YAM]
C ₇ H ₇ F ₉ O	[83310-97-8] V V V V V	3-(perfluorobutyl)-1-propanol (254–309) (254–309) (254–309) (254–309) (254–309)	75.8 69.6 66.9 64.1 60.7	256 273 282 293 309	GS GS GS GS GS	[2013SCH/BUC] [2013SCH/BUC] [2013SCH/BUC] [2013SCH/BUC] [2013SCH/BUC]
C ₇ H ₇ I	[620-05-3] FUS V V V V	benzyl iodide (301–337) 392 (360–400)	13.2 57.4 ± 0.3 57.7 46.8 50.6 ± 1.4	299.5 298 298 375 298	 GS CGC I, A	[1976ASH] [2002KRA/VAS] [2002KRA/VAS] [1987STE/MAL, 1976ASH] [1976ASH]
C ₇ H ₇ I	[615-37-2] V V V	2-iodotoluene (283–325) (283–325) (310–484)	52.0 ± 0.1 52.3 ± 0.4 49.7	304 298 325	GS GS A	[2015VER/SAZ] [2015VER/SAZ] [1987STE/MAL, 1947STU]
C ₇ H ₇ I	[625-95-6] V V	3-iodotoluene (279–318) (279–318)	53.0 ± 0.4 52.9 ± 0.6	297 298	GS GS	[2015VER/SAZ] [2015VER/SAZ]
C ₇ H ₇ I	[624-31-7] FUS SUB SUB V V	4-iodotoluene (150–320) (280–303) (280–303) (308–333) (308–333)	14.96 68.2 ± 0.7 68.0 ± 0.9 51.2 ± 0.7 52.5 ± 0.7	306.7 292 298 321 298	AC GS GS GS GS	[1996VAN/ALV] [2015VER/SAZ] [2015VER/SAZ] [2015VER/SAZ] [2015VER/SAZ]
C ₇ H ₇ IO	[529-28-2] V	2-iodoanisole	65.3 ± 1.4	298	C	[2012FER/RIB]
C ₇ H ₇ IO	[766-85-8] V	3-iodoanisole	62.5 ± 1.3	298	C	[2012FER/RIB]
C ₇ H ₇ IO	[696-62-8] SUB SUB V V	4-iodoanisole (401–520) (401–479)	82.4 ± 0.8 82.6 ± 1.5 54.4 53.1 ± 0.4	298 298 416 440	ME C A I	[2012FER/RIB] [2012FER/RIB] [1987STE/MAL, 1999DYK/SVO] [1956BRE/UBB]
C ₇ H ₇ NO	[6264-93-3] SUB	2-aminotropone (273–333)	71.13 ± 0.4	303	ME	[1971JAC/HUN]
C ₇ H ₇ NO	[55-21-0] FUS FUS FUS FUS FUS FUS FUS SUB SUB SUB	benzamide (324–346) (324–346) (325–342)	19.5 22.80 21.69 23.18 19.15 23.14 18.49 102.2 ± 0.4 103.1 ± 0.4 96.9	400.2 400 400 401.3 402.1 402.3 335 298 333.5	DTA DSC DSC DSC DSC DSC DSC ME ME	[2013KAN] [2012BUT/MAR] [2010BAI/VAN] [2010ALM/MON] [2009BRI] [2008SIN/DAS2] [1991ACR, 1984SHA/BAS] [2010ALM/MON] [2010ALM/MON] [1987STE/MAL, 1960AIH2]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(323–349)	101.7 ± 1	298	C	[1982TOR/SAB2]
	V	(380–438)	75.8 ± 1.2	409	Static	[2010ALM/MON]
	V	(380–438)	86.5 ± 0.1	298	Static	[2010ALM/MON]
[Note: VP measurements in [2010ALM/MON] include those for the subcooled liquid.]						
C ₇ H ₇ NO	[103-70-8]	formanilide				
	SUB	(298–318)	77.8	308	A	[1987STE/MAL, 1960AIH2]
C ₇ H ₇ NO	[1122-62-9]	2-acetylpyridine				
	V		60.5 ± 0.3	298	C	[2007FRE/OLI]
C ₇ H ₇ NO	[350-03-8]	3-acetylpyridine				
	V		66.1 ± 0.8	298	C	[2007FRE/OLI]
C ₇ H ₇ NO	[1122-54-9]	4-acetylpyridine				
	V		66.5 ± 0.9	298	C	[2007FRE/OLI]
C ₇ H ₇ NO ₂	[622-42-4]	(nitromethyl)benzene				
	V	(363–413)	53.8	378	A	[1987STE/MAL]
C ₇ H ₇ NO ₂	[88-72-2]	2-nitrotoluene				
	V	(283–313)	59.6 ± 1.6	298	GS	[2010WID/BRU2]
	V	(274–323)	59.0 ± 0.3	299	GS	[2000VER/HEI]
	V	(274–323)	59.1 ± 0.3	298	GS	[2000VER/HEI]
	V	(388–448)	52.0	403	EB	[1994AIM]
	V	(402–496)	51.0	417	A	[1987STE/MAL]
	V	(387–493)	52.2	402		[1938LEV/SHT, 1994AIM]
	V	(323–490)	48.1	406		[1926BER/MAY]
C ₇ H ₇ NO ₂	[99-08-1]	3-nitrotoluene				
	V	(293–313)	56.6 ± 2.5	303	GS	[2010WID/BRU2]
	V	(397–452)	52.8	413	EB	[1994AIM]
	V	(353–505)	49.8	368	A	[1987STE/MAL]
	V	(323–500)	50.1	410		[1926BER/MAY]
C ₇ H ₇ NO ₂	[99-99-0]	4-nitrotoluene				
	FUS		16.81	324.8	AC	[1991ACR, 1980AMB/GUN, 1980AND/CON]
	FUS		16.7	324.7	DSC	[1979RIC/SAV]
	FUS		13.31		C	[1963RAS/NIG]
	SUB	(303–321)	81.3		TGA	[2011FEL/RAM]
	SUB	(283–313)	74.8 ± 1.0	298	GS	[2010WID/BRU2]
	SUB		79.1 ± 2.5	298	ME	[1971LEN/VEL]
	SUB	(298–310)	79.1	298		[1970LEN/VEL]
	V	(407–457)	52.8	422	EB	[1994AIM]
	V	(423–512)	49.8	438	A	[1987STE/MAL]
	V	(417–512)	42.2	435	EB	[1980AMB/GUN]
	V	(387–493)	54.2	402		[1938LEV/SHT, 1994AIM]
	V	(353–505)	50.0	430		[1926BER/MAY]
C ₇ H ₇ NO ₂	[118-92-3]	2-aminobenzoic acid (anthranilic acid)				
	FUS (I)		20.4	422.2		
	FUS (II)		20.5	421.8	DSC	[2012BAG/RED]
	FUS		22.86	420	DSC	[2010BAI/VAN]
	FUS (I)		21.6	419.3		
	FUS (II)		18.3	419.4		
	FUS (III)		20.1	419.3	DSC	[2010JIA/JAN]
	FUS		20.5	417.8		[1991ACR, 1974SAB/CHA, 1926AND/LYN]
	SUB		100 ± 1	338	TE, ME	[1979DEK/VOO]
	SUB		99.6 ± 0.5	378	C	[1974SAB/CHA]
	SUB		104.9 ± 1.0	298	C	[1974SAB/CHA]
	SUB		111.6 ± 1.7	298		[1972ARN/JON]
C ₇ H ₇ NO ₂	[99-05-8]	3-aminobenzoic acid				
	FUS (I)		35.5	445.2		
	FUS (II)		26.7	451.2	DSC	[2010SVA/NOR]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		33.7	445.7	DSC	[2001ROT/GLA]
	FUS		21.84	452.9		[1991ACR, 1974SAB/CHA, 1926AND/LYN]
	SUB		122 ± 1	374.8	TE	[1979DEK/VOO]
	SUB	(367–389)	122.3 ± 3		C	[1974SAB/CHA]
	SUB		128.0 ± 3.2	298	C	[1974SAB/CHA, 1977NAB/SAB]
C ₇ H ₇ NO ₂	[150-13-0]	4-aminobenzoic acid				
	FUS		25.4	460.4	DSC	[2016VOL/BLO]
	FUS		27.2	461.2	DSC	[2012MAH/AND]
	TRS		2.06	355.2		
	FUS		22.62	458.7	DSC	[2004GRA/RAS]
	FUS		24.5	459.2	DSC	[2001ROT/GLA]
	FUS		20.92	461.4		[1991ACR, 1974SAB/CHA, 1926AND/LYN]
	SUB	(347–392)	118.0 ± 1.0	298	GS	[2016VOL/BLO]
	SUB		112.3 ± 1	373	TE	[1979DEK/VOO]
	SUB	(367–389)	114 ± 3.5		C	[1974SAB/CHA]
	SUB		116 ± 3.7	298	C	[1974SAB/CHA, 1977NAB/SAB]
	SUB		U142			[1938WOL/WEG, 1960JON]
C ₇ H ₇ NO ₂	[94-67-7]	2-hydroxybenzaloxime				
	SUB (mp 330 K)	(423–513)	96.7 ± 9.4	468	DSC	[1984BUR/MOR]
	SUB		105.2 ± 10	298		[1984BUR/MOR]
	SUB (anti)		U51 ± 1.7		MS	[1983MAJ/AZZ]
	SUB (syn)		U65.3 ± 1.7		MS	[1983MAJ/AZZ]
C ₇ H ₇ NO ₂	[22241-18-5]	3-hydroxybenzaloxime				
	SUB (anti)		U52.7 ± 1.7		MS	[1983MAJ/AZZ]
	SUB (syn)		U57.3 ± 1.7		MS	[1983MAJ/AZZ]
C ₇ H ₇ NO ₂	[699-06-9]	4-hydroxybenzaloxime				
	SUB (anti)		U54.4 ± 1.7		MS	[1983MAJ/AZZ]
C ₇ H ₇ NO ₂	[65-45-2]	2-hydroxybenzamide (salicylamide)				
	FUS		25.59	413.2	DSC	[2013SIN/PAN, 2015SIN/RAI]
	FUS		27.4	438.0	DSC	[2013MAN/VOR]
[Note: Melting point temperature differs significantly from that given by other research groups, see below.]						
	FUS		27.1	414.9	DSC	[2008BER/MIN]
	FUS		29.0	411.9	DSC	[2006NOR/RAS]
	SUB	(320–345)	106.1 ± 1.0	333	GS	[2013MAN/VOR]
	SUB	(320–345)	106.6 ± 1.0	298	GS	[2013MAN/VOR]
	SUB		101.9 ± 0.4	298	C	[2008BER/MIN]
	SUB		99.3 ± 1.3	298	C	[2007RIB/ARA]
C ₇ H ₇ NO ₂	[618-49-5]	3-hydroxybenzamide				
	FUS		28.8	440.7	DSC	[2013MAN/VOR]
	SUB	(368–396)	119.0 ± 1.0	382	GS	[2013MAN/VOR]
	SUB	(368–396)	122.0 ± 1.0	298	GS	[2013MAN/VOR]
C ₇ H ₇ NO ₂	[619-57-8]	4-hydroxybenzamide				
	FUS		25.4	433.8	DSC	[2008BER/MIN]
	FUS		25.2	433.2	DSC	[2007PER/HAN, 2013MAN/VOR]
	SUB		129.7 ± 1.9	298	C	[2008BER/MIN]
	SUB	(360–420)	115.6 ± 0.6	390	GS	[2007PER/HAN, 2013MAN/VOR]
	SUB	(360–420)	117.8 ± 0.6	298	GS	[2007PER/HAN, 2013MAN/VOR]
C ₇ H ₇ NO ₂	[622-46-8]	phenyl carbamate				
	FUS (I)		15.42	414.9	DSC	
	FUS (II)		22.12	417.6	DSC	[2008WIS/BER]
C ₇ H ₇ NO ₂	[2459-07-6]	methyl picolinate				
	FUS		16.8	289.2	DSC	[2007RIB/FRE]
	SUB	(278–318)	81.8 ± 0.1	298	Static	[2007RIB/FRE]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		67.0 ± 1.8	298	C	[2007RIB/FRE]
	V	(273–340)	64.1 ± 0.1	298	Static	[2007RIB/FRE]
C ₇ H ₇ NO ₂	[93-60-7]	methyl nicotinate				
	FUS		19.3	312.6	DSC	[2007RIB/FRE]
	SUB	(273–310)	80.1 ± 0.1	298	Static	[2007RIB/FRE]
C ₇ H ₇ NO ₂	V	(298–324)	61.2 ± 0.2	298	Static	[2007RIB/FRE]
	[2459-09-8]	methyl isonicotinate				
	FUS		14.6	283.4	DSSC	[2007RIB/FRE]
	SUB		75.1 ± 0.3	298	V + F	[2007RIB/FRE]
C ₇ H ₇ NO ₂	V		65.4 ± 1.4	298	C	[2007RIB/FRE]
	V	(298–320)	59.4 ± 0.1	298	Static	[2007RIB/FRE]
	[5399-68-8]	2,4-dihydroxybenzaloxime				
C ₇ H ₇ NO ₃	SUB (anti)		U76.2 ± 1.7		MS	[1983MAJ/AZZ]
	SUB (syn)		U93.7 ± 1.7		MS	[1983MAJ/AZZ]
C ₇ H ₇ NO ₃	[91-23-6]	2-nitroanisole				
	V	(424–545)	58.6	439	A	[1987STE/MAL]
C ₇ H ₇ NO ₃	[100-17-4]	4-nitroanisole				
	SUB	(303–321)	91.3		TGA	[2011FEL/RAM]
C ₇ H ₇ NO ₃	[2581-34-2]	4-nitro-5-methylphenol				
	FUS		27.4	401		[1991ACR, 1975BUC/JOD]
C ₇ H ₇ NO ₃	[700-38-9]	2-nitro-5-methylphenol				
	FUS		20.79	302.8		[1991ACR, 1975BUC/DOM]
	V	(331–358)	62.8 ± 0.5	298	GS	[2007HEI/KAP]
C ₇ H ₇ NO ₃	[2581-34-2]	3-methyl-4-nitrophenol				
	V		85.8	298	B	[2007HEI/KAP]
C ₇ H ₇ NO ₃	[554-84-7]	2-methyl-5-nitrophenol				
	V		85.9	298	B	[2007HEI/KAP]
C ₇ H ₇ NO ₃	[65-49-6]	4-aminosalicylic acid				
	FUS		47.9	406.2	DSC	[2001ROT/GLA]
C ₇ H ₇ NO ₃	[89-57-6]	5-aminosalicylic acid				
	FUS		67.2	543.2	DSC	[2001ROT/GLA]
	SUB	(483–543)	135		DSC	[2001ROT/GLA]
C ₇ H ₇ NO ₃	[619-73-8]	4-nitrobenzyl alcohol				
	FUS	(78–396)	20.97	336.4	AC	[2009MEN/TAN]
C ₇ H ₇ NO ₄	[3251-56-7]	2-methoxy-4-nitrophenol				
	FUS		21.69	374.4	DSC	[2004MIR/MOR]
C ₇ H ₇ NO ₄	SUB		99.4 ± 2.0	298	C	[2004MIR/MOR]
	[636-93-1]	2-methoxy-5-nitrophenol				
C ₇ H ₇ NO ₄	FUS		21.43	377.6	DSC	[2004MIR/MOR]
	SUB		106.2 ± 2.2	298	C	[2004MIR/MOR]
C ₇ H ₇ NO ₄	[1568-70-3]	4-methoxy-2-nitrophenol				
	FUS		22.42	352.3	DSC	[2004MIR/MOR]
C ₇ H ₇ NO ₄	SUB		90.8 ± 1.7	298	C	[2004MIR/MOR]
	[2227-79-4]	thiobenzamide				
C ₇ H ₇ NS	SUB		103.4 ± 2.2	298	C	[1989RIB/SOU]
	SUB		97.2 ± 0.6	298	C	[1982SAB/TOR]
C ₇ H ₇ N ₃	[622-79-7]	(azidomethyl)benzene				
	V	(333–363)	48.0	348	A	[1987STE/MAL]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₇ N ₃	[19335-11-6]	5-aminoindazole				
	SUB	(358–380)	114.8 ± 0.3	369	ME	[2010RIB/CAB2]
	SUB	(358–380)	118.4 ± 0.7	298	ME	[2010RIB/CAB2]
C ₇ H ₇ N ₃	[6967-12-0]	6-aminoindazole				
	SUB	(366–388)	118.0 ± 0.6	377	ME	[2010RIB/CAB2]
	SUB	(366–388)	122.0 ± 0.6	298	ME	[2010RIB/CAB2]
C ₇ H ₇ N ₃ O ₂	[135742-53-9]	<i>N</i> -acetyl-pyrazinamide				
	FUS		23.6	366.7	DSC	[1991LIU/GUO]
[Note: Authors of [1991LIU/GUO] give the name and molecular formula for <i>N</i> -acetyl-pyrazineamide; however, they draw the structure for <i>N</i> -(1-oxopropyl)pyrazinecarboxamide.]						
C ₇ H ₇ N ₃ O ₄	[16698-03-6]	<i>N</i> -methyl- <i>N</i> -(4-nitrophenyl)nitramine				
	FUS		25.0	416.9	DSC	[2002DAS/ZAL]
C ₇ H ₇ N ₃ O ₄	[55739-03-2]	<i>N</i> -methyl- <i>N</i> -(3-nitrophenyl)nitramine				
	FUS		25.3	350.5	DSC	[2002DAS/ZAL]
C ₇ H ₈	[121-46-0]	bicyclo[2.2.1]hepta-2,5-diene (norbornadiene)				
	TRS	(8–350)	8.2	202		
	FUS	(8–350)	1.91	255.6	AC	[2004BYK/SMI]
	TRS		8.93	202		
	FUS		Fusion values not reported			[1974CLA/MCK]
	V		34.8 ± 0.1	298	C	[1993AN/XIE]
	V	(300–364)	33.6	315	A	[1987STE/MAL]
	V		34.7 ± 0.1	298	C	[1985KUS]
	V		33.8 ± 0.9	298		[1978STE2]
	V	(300–353)	32.9 ± 0.8	298	BG	[1973HAL/SMI]
C ₇ H ₈	[544-25-2]	1,3,5-cycloheptatriene				
	TRS		2.35	154		
	FUS		1.16	198		[1996DOM/HEA, 1956FIN/SCO]
	V	(273–338)	40.8	288	A	[1987STE/MAL, 1973DYK/REP]
	V	(273–416)	39.4	288	A, EB	[1987STE/MAL, 1956FIN/SCO]
	V		38.7 ± 0.2	298		[1956FIN/SCO]
C ₇ H ₈	[278-06-8]	tetracyclo[3.2.0.0 ^{2,7} .0 ^{4,6}]heptane (quadricyclane)				
	TRS		7.2	180		
	FUS		1.09	228	DSC	[1996DOM/HEA, 1992KAW/GIL]
	V		37.9 ± 0.1	298	C	[1993AN/XIE]
	V		37.9 ± 0.1	298	C	[1985KUS]
	V		37.0 ± 0.8	298		[1978STE2]
	V	(302–372)	37.3 ± 0.8	317	BG	[1987STE/MAL, 1973HAL/SMI]
C ₇ H ₈	[108-88-3]	toluene				
	FUS		6.55	178	C	[1942ZIE/AND]
	FUS		6.61	178		[1996DOM/HEA, 1930SOU/AND, 1929KEL]
	SUB		43.1	298	B	[1970LEN/VEL]
	V	(331–496)	35.7	346		[1993LEE/HOL]
	V	(210–279)	40.6	264	A	[1987STE/MAL]
	V	(383–445)	34.4	398	A	[1987STE/MAL]
	V	(440–531)	33.2	455	A	[1987STE/MAL]
	V	(530–592)	33.3	545	A	[1987STE/MAL]
	V	(273–295)	38.9	284	A	[1987STE/MAL]
	V		33.5 ± 0.1	380	C	[1985NAT/VIS]
	V		32.1 ± 0.1	403	C	[1985NAT/VIS]
	V		29.4 ± 0.1	441	C	[1985NAT/VIS]
	V		27.1 ± 0.1	470	C	[1985NAT/VIS]
V		24.0 ± 0.1	505	C	[1985NAT/VIS]	
V		35.4	333		[1984EUB/CED]	
V		33.4	373		[1984EUB/CED]	

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		31.4	413		[1984EUB/CED]
	V		28.4	453		[1984EUB/CED]
	V		24.0	493		[1984EUB/CED]
	V	(343–383)	35.4	360		[1975RIV]
	V		38.0	298		[1971WIL/ZWO]
	V	(303–343)	37.3	318		[1968GAW/SWI2]
	V	(288–348)	36.9	303		[1967VAN/SOC]
	V	(210–293)	37.8	278		[1956MIL]
	V	(308–386)	37.0	323		[1987STE/MAL, 1949FOR/NOR]
	V		38.0	298	C	[1947OSB/GIN]
	V	(286–362)	37.8	301		[1946THO]
	V	(308–384)	37.0	323	MM	[1945WIL/TAY]
	V	(273–323)	38.8	288		[1943PIT/SCO]
	V	(273–323)	38.1 ± 0.2	298		[1943PIT/SCO]
C ₇ H ₈ ClN ₃ O ₄ S ₂	[58-93-5]	6-chloro-3,4-dihydro-2 <i>H</i> -1,2,4-benzothiadiazine-7-sulfonamide-1,1-dioxide (hydrochlorothiazide)				
	FUS		37.6	539.4	DSC	[2010MUR/PIK2]
	FUS		33.6	540.8	DSC	[2006WAS/HOL]
	FUS		29.2	546	DSC	[2006ACE/AGA]
	FUS		30.96	547.2		[2000HAN/PAR]
C ₇ H ₈ FN	[452-80-2]	2-fluoro-4-methylaniline				
	V		56.6 ± 0.6	298	C	[2007RIB/FER2]
C ₇ H ₈ FN	[452-84-6]	2-fluoro-5-methylaniline				
	V		56.9 ± 0.5	298	C	[2007RIB/FER2]
C ₇ H ₈ FN	[443-86-7]	3-fluoro-2-methylaniline				
	V		57.8 ± 0.6	298	C	[2007RIB/FER2]
C ₇ H ₈ FN	[452-71-1]	4-fluoro-2-methylaniline				
	V		59.8 ± 0.8	298	C	[2007RIB/FER2]
C ₇ H ₈ N ₂	[33496-46-7]	1-amino-7-imino-1,3,5-cycloheptatriene				
	SUB	(273–333)	49.4 ± 0.4	303	ME	[1971JAC/HUN]
C ₇ H ₈ N ₂	[56341-36-7]	1,5-dimethyl-2-pyrrolicarbonitrile				
	SUB		78.3 ± 1.6	298	C	[2012SAN/RIB]
C ₇ H ₈ N ₂ O	[64-10-8]	monophenylurea				
	FUS		23.8		DSC	[1995STR/ARG]
	FUS		23.68	420.6	DSC	[1991ACR, 1987FER/DEL]
	SUB	(392–412)	136 ± 6	406	TE	[1987FER/DEL]
C ₇ H ₈ N ₂ O	[3398-07-0]	2-aminobenzaldoxime				
	SUB (anti)		U33.9 ± 1.7		MS	[1983MAJ/AZZ]
	SUB (syn)		U63.6 ± 1.7		MS	[1983MAJ/AZZ]
C ₇ H ₈ N ₂ O	[88-68-6]	2-aminobenzamide				
	FUS		20.9	384.4	DSC	[2013ALM/MON2]
	SUB	(335–357)	105.7 ± 0.3	346	ME	[2013ALM/MON2]
	SUB	(335–357)	106.8 ± 0.2	298	ME	[2013ALM/MON2]
C ₇ H ₈ N ₂ O	[3544-24-9]	3-aminobenzamide				
	TRS		3.3	352.4		
	FUS		20.3	387.5	DSC	[2013ALM/MON2]
	SUB	(358–380)	123.4 ± 0.3	369	ME	[2013ALM/MON2]
	SUB	(358–380)	125.3 ± 0.3	298	ME	[2013ALM/MON2]
C ₇ H ₈ N ₂ O	[2835-68-9]	4-aminobenzamide				
	FUS		30.4	455.5	DSC	[2016VOL/BLO]
	FUS		30.0	457.6	DSC	[2013ALM/MON2]
	SUB	(373–403)	131.2 ± 1.2	298	GS	[2016VOL/BLO]
	SUB	(389–411)	128.5 ± 0.4	400	ME	[2013ALM/MON2]
	SUB	(389–411)	131.0 ± 0.4	298	ME	[2013ALM/MON2]
C ₇ H ₈ N ₂ O	[5231-96-9]	(2-pyridyl)acetamide				

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		16.0	343	DSC	[1979GON/CHA]
	SUB		103.8	298	B, E	[1979GON/CHA]
	V		37.7	520	DSC	[1979GON/CHA]
C ₇ H ₈ N ₂ O	[613-94-5]	benzoic acid hydrazide				
	FUS		25.7	388.2	DSC	[2003CHI/ACR]
C ₇ H ₈ N ₂ O	[114-33-0]	<i>N</i> -methylnicotinamide				
	FUS		22.0	379.1	DSC	[2015ALM/OLI]
	SUB	(329–349)	106.2 ± 0.4	339	ME	[2015ALM/OLI]
	SUB	(329–349)	107.4 ± 0.4	298	ME	[2015ALM/OLI]
	SUB	(347–377)	105.3 ± 0.2	362	DM	[2015ALM/OLI]
	SUB	(347–377)	107.1 ± 0.2	298	DM	[2015ALM/OLI]
	V	(375–426)	80.5 ± 0.1	401	DM	[2015ALM/OLI]
	V	(375–426)	88.2 ± 0.7	298	DM	[2015ALM/OLI]
C ₇ H ₈ N ₂ O ₂	[3569-99-1]	<i>N</i> -(hydroxymethyl)-3-pyridinecarboxamide				
	FUS		32.9	426.2	DSC	[2013AGA/MOS]
C ₇ H ₈ N ₄	[13753-57-6]	4,4'-dipyrazolylmethane				
	FUS		27.92	472	DSC	[2009KEN/FLO]
C ₇ H ₈ N ₄ O	[31010-51-2]	9-ethylhypoxanthine				
	SUB		108.8 ± 13		HSA	[1978NOW/SZC]
	SUB		U83.7		HSA	[1965CLA/PES]
C ₇ H ₈ N ₄ O	[20535-82-4]	1,9-dimethylhypoxanthine				
	SUB		75.3 ± 13		HSA	[1978NOW/SZC]
C ₇ H ₈ N ₄ O ₂	[58-55-9]	1,3-dimethylxanthine (theophylline)				
	FUS		30.23	544.5	DSC	[2014POB/DOM]
	FUS		29.61	545	DSC	[2010BAI/VAN]
	FUS (form I)		29.6	547.2	DSC	[2010SET/KHA]
	FUS (form II, orthorhombic)		30.8	548.3	DSC	[2010SET/KHA]
	FUS (form IV)		31.9	547.3	DSC	[2010SET/KHA]
	FUS (form I)		28.02	547.9	DSC	[2010SZT/LEG, 2009SZT]
	FUS (form II)		30.1	543.9	DSC	[2010SZT/LEG, 2009SZT]
	FUS		19.0	546.8	DSC	[2009GOO/ROD]
	FUS		28.2	544		[1989GON/KRA]
	FUS		28.2	542.3		[1989SUZ/SHI]
	FUS		30.9	544.4	DSC	[1984BRU/REI]
	FUS		31.2	543.7	DSC	[1983FOK/VAN]
	SUB (form I)	(413–453)	132.0 ± 0.3	433	T	[1999GRI/SZE]
	SUB (form I)	(413–453)	142	298	T	[1999GRI/SZE]
	SUB (form II)	(413–453)	134.2 ± 0.3	433	T	[1999GRI/SZE]
	SUB (form II)	(413–453)	144	298	T	[1999GRI/SZE]
	SUB		126	421	ME, TE	[1983FOK/VAN]
	SUB		135	298		[1983FOK/VAN, 1999GRI/SZE]
C ₇ H ₈ O	[100-66-3]	anisole				
	FUS		11.66	237		[1994LEE/LIE]
	FUS		12.89	236		[1996DOM/HEA, 1987GOA/BOE]
	FUS		17.03	U293.2		[1996DOM/HEA, 1889EYK]
	V		46.4 ± 0.3	298	C	[2014SIM/AGA]
	V	(278–312)	46.6 ± 0.2	298	GS	[2005VAS/VER]
	V	(363–463)	44.3	298	GC	[2005HOS/GRY]
	V	(353–393)	45.3	298	CGC	[1995CHI/HOS]
	V	(382–429)	41.8	397		[1993REI/SAN]
	V		41.0			[1986BAL/GNA]
	V	(382–437)	41.9	397	A	[1987STE/MAL, 1976AMB/ELL]
	V	(382–437)	46.9	298		[1976AMB/ELL]
	V	(282–437)	39.0	426		[1976AMB/ELL]
	V		46.8 ± 0.2	298	C	[1975FEN/HAR]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(363–383)	38.2 ± 0.4	298		[1972LEB/KAT2, 2005VAS/VER]
	V		42.9 ± 0.1	367	C	[1967HAL/LEE]
	V		42.0 ± 0.1	382	C	[1967HAL/LEE]
	V		40.5 ± 0.1	402	C	[1967HAL/LEE]
	V		38.9 ± 0.1	427	C	[1967HAL/LEE]
	V		39.4	298		[1957MCC/DOU, 2005VAS/VER]
	V	(382–437)	41.9	397		[1955VON/GEB, 1965COL/COU]
C ₇ H ₈ O	[100-51-6]	benzyl alcohol				
	FUS		8.79	257.6		[1991ACR, 1983WEA]
	V	(282–323)	65.5 ± 0.4	298	GS	[2005VAS/VER]
	V	(283–321)	65.9 ± 0.3	298	GS	[2004VER/VAS]
	V	(277–381)	64.8 ± 0.6	298	GS	[1999VER4]
	V	(323–373)	69.5	298	CGC	[1995CHI/HOS]
	V		60.5			[1995PAP/PIM]
	V	(404–507)	62.5 ± 0.3	298	EB	[1990AMB/GHI, 2005VAS/VER]
	V	(303–333)	66.2	318	GS	[1982GRA/FOS]
	V	(385–573)	54.6	400	A	[1987STE/MAL, 1973DYK/REP]
	V	(293–313)	61.5	303	A, ME	[1987STE/MAL, 1957SER/VOI, 1973DYK/REP]
	V	(396–478)	62.1 ± 0.3	298	EB	[1949DRE/SHR, 1949DRE/MAR, 2005VAS/VER]
V	(312–348)	63.0 ± 2.2	298	EB	[1937GAR/BRE, 2005VAS/VER]	
V		60.3 ± 0.4	298	EB	[1926MAT, 2005VAS/VER]	
C ₇ H ₈ O	[95-48-7]	2-hydroxytoluene				
	FUS		14.8	305.4	DSC	[2007RIC/BER]
	FUS		15.9	304.1	DSC	[1998JAM/PAL]
	FUS		15.82	304.2	AC	[1996DOM/HEA, 1967AND/COU]
	FUS		14.8	304.1	C	[1990MEV/LIC]
	SUB		73.7 ± 0.5	298	C	[2007RIC/BER]
	SUB	(273–303)	74.8	288	A	[1987STE/MAL]
	SUB	(273–303)	76.0 ± 0.8	288		[1960AND/BID, 1970COX/PIL]
	V	(304–409)	58.5	319	A	[1987STE/MAL]
	V	(399–470)	50.1	414	A	[1987STE/MAL]
	V	(463–526)	46.2	478	A	[1987STE/MAL]
	V	(517–630)	44.0	532	A	[1987STE/MAL]
	V		50.2			[1986BAL/GNA]
	V	(383–473)	51.3	398	GS, EB	[1987STE/MAL, 1960AND/BID, 1958BID/MAR, 1973DYK/REP]
	V	(415–462)	48.2	438		[1947GOL/MAR]
	C ₇ H ₈ O	[108-39-4]	3-hydroxytoluene			
FUS			8.9	282.3	DSC	[2007RIC/BER]
FUS			10.67	285.3	DSC	[1998JAM/PAL]
FUS			10.71	285.4	AC	[1996DOM/HEA, 1967AND/COU]
FUS			9.1	280.8	C	[1990MEV/LIC]
SUB		(273–285)	56.1	279		[1987STE/MAL]
SUB		(284–313)	61.7 ± 1.0		GS	[1960AND/BID, 1958BID/MAR]
V			65.0 ± 0.7	298	C	[2007RIC/BER]
V		(393–433)	62.5	298	CGC	[1995CHI/HOS]
V		(284–313)	61.7	298	A	[1987STE/MAL]
V		(285–416)	63.1	300	A	[1987STE/MAL]
V		(410–477)	52.7	425	A	[1987STE/MAL]
V		(471–531)	47.6	486	A	[1987STE/MAL]
V		(523–633)	43.8	538	A	[1987STE/MAL]
V		(383–473)	55.0	398	GS, EB	[1987STE/MAL, 1960AND/BID, 1958BID/MAR]
V		(388–429)	60.6	409	GS	[1980NAS/HWA, 1973DYK/REP]
V			61.7	298		[1958BID/MAR]
V	(359–473)	58.8	374		[1955VON/GEB, 1984BOU/FRI]	
V	(422–474)	50.7	448		[1947GOL/MAR]	
C ₇ H ₈ O	[106-44-5]	4-hydroxytoluene				

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		12.6	308.8	DSC	[2007RIC/BER]
	FUS		8.58	307.6	DSC	[1998JAM/PAL]
	FUS		12.72	307.9	AC	[1996DOM/HEA, 1967AND/COU]
	FUS		11.8	307.4	C	[1990MEV/LIC]
	FUS		12.25	309		[1996DOM/HEA, 1889EYK]
	SUB		73.1 ± 0.6	298	C	[2007RIC/BER]
	SUB	(273–307)	73.9 ± 1.5	290		[1960AND/BID, 1970COX/PIL, 1958BID/MAR]
	V	(308–393)	62.0	323	A	[1987STE/MAL]
	V	(385–477)	55.4	400	A	[1987STE/MAL]
	V	(463–533)	49.2	478	A	[1987STE/MAL]
	V	(523–635)	46.0	538	A	[1987STE/MAL]
	V		54.0			[1986BAL/GNA]
	V	(383–473)	55.6	398	A, GS, EB	[1987STE/MAL, 1960AND/BID, 1973DYK/REP, 1958BID/MAR]
	V	(419–474)	51.3	446		[1947GOL/MAR]
C ₇ H ₈ OS	[106-53-6]	4-methoxybenzenethiol				
	V		52.3			[1986BAL/GNA]
C ₇ H ₈ OS	[13679-73-7]	2-acetyl-4-methylthiophene				
	V		63.0 ± 2.6	298	C	[2008RIB/SAN4]
C ₇ H ₈ OS	[13679-72-6]	2-acetyl-3-methylthiophene				
	V		57.1 ± 2.4	298	C	[2008RIB/SAN4]
C ₇ H ₈ OS	[13679-74-8]	2-acetyl-5-methylthiophene				
	V		62.0 ± 2.6	298	C	[2008RIB/SAN4]
C ₇ H ₈ OS	[36880-33-8]	5-ethyl-2-thiophenecarboxaldehyde				
	V		62.2 ± 1.3	298	C	[2008RIB/SAN2]
C ₇ H ₈ O ₂	[488-17-5]	3-methyl-1,2-dihydroxybenzene				
	SUB		93.2 ± 1.0	298	C	[1984CAR]
C ₇ H ₈ O ₂	[496-73-1]	2,4-dihydroxytoluene				
	SUB	(317–333)	106.8 ± 0.9	325	ME	[2009RIB/FER4]
	SUB	(317–333)	107.3 ± 3.0	298	ME	[2009RIB/FER4]
	V	(391–459)	72.2	406	A, GC	[1987STE/MAL, 1975KUN/LIL]
C ₇ H ₈ O ₂	[608-25-3]	2,6-dihydroxytoluene				
	SUB	(309–329)	98.8 ± 0.5	319	ME	[2009RIB/FER4]
	SUB	(309–329)	99.2 ± 2.3	298	ME	[2009RIB/FER4]
	V	(398–434)	66.9	413	A, GC	[1987STE/MAL, 1975KUN/LIL]
C ₇ H ₈ O ₂	[452-86-8]	3,4-dihydroxytoluene				
	SUB		94.9 ± 1.0	298	C	[1984CAR]
	V	(387–415)	90.0	401	A	[1987STE/MAL]
C ₇ H ₈ O ₂	[504-15-4]	3,5-dihydroxytoluene				
	SUB	(322–338)	102.3 ± 0.7	330	ME	[2009RIB/FER4]
	SUB	(322–338)	102.9 ± 3.5	298	ME	[2009RIB/FER4]
	V	(402–468)	76.6	417	A, GC	[1987STE/MAL, 1975KUN/LIL]
C ₇ H ₈ O ₂	[95-71-6]	2-methyl-1,4-dihydroxybenzene (2-methylhydroquinone)				
	FUS		27.6	404.2	DSC	[1999VER7]
	SUB	(325–341)	107.8 ± 1.1	333	ME	[2009RIB/FER4]
	SUB	(325–341)	108.4 ± 3.9	298	ME	[2009RIB/FER4]
	SUB	(333–368)	97.2 ± 1.4	351	GS	[1999VER7]
	SUB	(333–368)	100.4 ± 1.4	298	GS	[1999VER7]
C ₇ H ₈ O ₂	[90-05-1]	2-methoxyphenol				
	FUS		12.0	301.2	DSC	[2003LEE/CHO]
	V	(286–341)	61.4 ± 0.3	298	GS	[2010VAR/ABA]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(373–463)	52.7	388	EB	[2005LEE/SU]
	V	(373–463)	59.2 ± 0.4	298	EB	[2005LEE/SU, 2010VAR/ABA]
	V		62.6 ± 0.5	298	C	[2003MAT/MIR]
	V	(378–479)	52.7	393	A	[1987STE/MAL, 1973DYK/REP]
	V	(355–478)	52.7	370	EB	[1955VON/GEB]
	V	(355–478)	58.9 ± 0.3	298	EB	[1955VON/GEB, 2010VAR/ABA]
C ₇ H ₈ O ₂	[150-19-6]	3-methoxyphenol				
	V	(303–354)	74.4 ± 0.2	298	GS	[2010VAR/ABA]
	V		75.9 ± 1.2	298	C	[2003MAT/MIR]
	V	(413–518)	64.8	428	A	[1987STE/MAL, 1973DYK/REP]
	V	(413–518)	73.2	298	A	[1987STE/MAL, 1973DYK/REP, 2010VAR/ABA]
C ₇ H ₈ O ₂	[150-76-5]	4-methoxyphenol				
	FUS		18.2	328.3	DSC	[2010VAR/ABA]
	FUS		18.3	328.4	DSC	[1997LEE/CHA]
	SUB	(289–327)	89.8 ± 0.3	298	GS	[2010VAR/ABA]
	SUB		94.4 ± 1.2	298	C	[2003MAT/MIR]
	SUB	(278–300)	88.7	289	A	[1987STE/MAL, 1960AIH]
	SUB	(278–300)	88.4	298	A	[1987STE/MAL, 1960AIH, 2010VAR/ABA]
	V	(330–357)	73.7 ± 0.7	298	GS	[2010VAR/ABA]
	V		58.6			[1986BAL/GNA]
	V	(418–518)	61.4	433	A	[1987STE/MAL, 1973DYK/REP]
	V	(418–518)	72.1	298	A	[1987STE/MAL, 1973DYK/REP, 2010VAR/ABA]
C ₇ H ₈ O ₂	[90-01-7]	2-hydroxybenzyl alcohol				
	FUS		21.5	358.3	DSC	[2008PIN/DIO]
	SUB	(304–320)	98.8 ± 0.8	312	ME	[2010RIB/FER5]
	SUB	(304–320)	99.5 ± 1.5	298	ME	[2010RIB/FER5]
C ₇ H ₈ O ₂	[620-24-6]	3-hydroxybenzyl alcohol				
	SUB	(324–340)	114.3 ± 0.6	332	ME	[2010RIB/FER5]
	SUB	(324–340)	116.0 ± 3.7	298	ME	[2010RIB/FER5]
C ₇ H ₈ O ₂	[623-05-2]	4-hydroxybenzyl alcohol				
	SUB	(333–349)	127.1 ± 1.2	341	ME	[2010RIB/FER5]
	SUB	(333–349)	129.3 ± 4.7	298	ME	[2010RIB/FER5]
C ₇ H ₈ O ₂	[63233-31-8]	2,3-dimethyl-2 <i>H</i> -pyran-2-one				
	V	(352–518)	64.9	367	A	[1987STE/MAL, 1947STU]
C ₇ H ₈ O ₂	[1004-36-0]	2,6-dimethyl-4-pyrone				
	SUB		86.8 ± 1.5	298	C	[2011SOU/MAT]
C ₇ H ₈ O ₂	[1193-79-9]	5-methyl-2-acetyl-furan				
	V		61.7 ± 0.2	298	C	[2010RIB/AMA]
C ₇ H ₈ O ₂	[52480-43-0]	4,5-dimethyl-2-furaldehyde				
	V		57.7 ± 0.6	298	C	[2011RIB/AMA]
C ₇ H ₈ O ₂ S	[52911-98-5]	6-methyl-4-methoxy-2 <i>H</i> -pyran-2-thione				
	FUS		21.34			[1974BEA/MUE]
	SUB	(402–415)	130.5 ± 5.9	408	B	[1974BEA/MUE]
	V	(401–415)	108.9	408	A	[1987STE/MAL, 1999DYK/SVO, 1974BEA/MUE]
C ₇ H ₈ O ₂ S	[52911-99-6]	2-methyl-6-(methylthio)-4 <i>H</i> -pyran-4-one				
	FUS		25.10			[1974BEA/MUE]
	SUB	(388–433)	87.4 ± 3.8	410	B	[1974BEA/MUE]
	V	(387–432)	62.7	402	A	[1987STE/MAL, 1999DYK/SVO, 1974BEA/MUE]
C ₇ H ₈ O ₂ S	[3112-85-4]	methyl phenyl sulfone				
	SUB		92 ± 2.9			[UR/MAC, 1970COX/PIL]
C ₇ H ₈ O ₂ S	[19432-68-9]	methyl 2-thiopheneacetate				

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References	
		Transition	Temp. range (K)				$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)
		V		61.9 ± 1.4	298	C	[2007ROU/TEM3]
C ₇ H ₈ O ₂ S	[58414-52-1]	methyl 3-thiopheneacetate					
		V		60.9 ± 1.3	298	C	[2007ROU/TEM3]
C ₇ H ₈ O ₂ S	[2810-04-0]	ethyl 2-thiophenecarboxylate					
		V		61.2 ± 1.4	298	C	[2013SAN/RIB2]
		V		56.6 ± 1.3	298	C	[2009RIB/SAN2]
C ₇ H ₈ O ₃	[614-99-3]	2-furancarboxylic acid, ethyl ester					
		V	(354–389)	51.2	369	A	[1987STE/MAL]
		V	(310–468)	52.6	325		[1947STU]
C ₇ H ₈ O ₃	[636-44-2]	2,5-dimethyl-3-furancarboxylic acid					
		SUB		99.0 ± 1.7	298	C	[2011RIB/AMA]
		SUB		100.9 ± 0.5	298	ME	[2011RIB/AMA]
C ₇ H ₈ O ₃	[4225-42-7]	2-methoxy-6-methyl-4 <i>H</i> -pyran-4-one					
		V	(370–384)	72.8	377	A	[1987STE/MAL]
		V		71.1			[1974BEA/MUE]
C ₇ H ₈ O ₃	[672-89-9]	4-methoxy-6-methyl-2 <i>H</i> -pyran-2-one					
		V	(385–434)	57.4	400	A	[1987STE/MAL]
		V		58.2			[1974BEA/MUE]
C ₇ H ₈ O ₃	[4940-11-8]	2-ethyl-3-hydroxy-4-pyrone					
		SUB		91.4 ± 2.0	298	C	[2011SOU/MAT]
C ₇ H ₈ O ₃	[934-00-9]	3-methoxycatechol					
		V		91.7 ± 0.8	298	C	[1986RIB/RIB]
C ₇ H ₈ S	[100-53-8]	benzenemethanethiol					
		V	(394–436)	47.5	409		[1999DYK/SVO]
		V		56.6 ± 0.1	298		[1972GOO]
C ₇ H ₈ S	[137-06-4]	2-methylbenzenethiol					
		V	(351–498)	48.1	366		[1999DYK/SVO]
		V	(370–470)	46.6	394	A	[1987STE/MAL]
		V		46.0			[1986BAL/GNA]
C ₇ H ₈ S	[108-40-7]	3-methylbenzenethiol					
		V	(353–498)	48.7	368		[1999DYK/SVO]
		V	(380–471)	47.1	395	A	[1987STE/MAL]
C ₇ H ₈ S	[106-45-6]	4-methylbenzenethiol					
		V	(351–499)	48.1	366		[1999DYK/SVO]
		V	(379–471)	46.5	394	A	[1987STE/MAL]
		V		46.4			[1986BAL/GNA]
C ₇ H ₈ S	[100-68-5]	methyl phenyl sulfide					
		FUS		14.85	256.4		[1974MES/FIN]
		V		47.7			[1986BAL/GNA]
		V		54.3 ± 0.1	298		[1972GOO, 1966OSB/DOU]
		V	(389–475)	47.5	404	A, EB	[1987STE/MAL, 1966OSB/DOU, 1999DYK/SVO]
		V	(323–353)	50.6 ± 2.1	298		[1962MAC/MAY]
C ₇ H ₈ S ₃	[698-42-0]	4,5-tetramethylene-1,3-dithiole-2-thione					
		SUB	(340–352)	98.3	346		[1967GEI/SCH, 1970COX/PIL]
		SUB		102.1 ± 2.9			[1967GEI/SCH, 1970COX/PIL]
C ₇ H ₈ S ₃	[14085-34-8]	4,5-tetramethylene-1,2-dithiole-3-thione					
		SUB	(335–350)	101.6	342		[1972GEI/RAU]
		SUB		105.3	298		[1972GEI/RAU]
C ₇ H ₉ Cl ₃ NO ₃ PS	[5598-13-0]	<i>O</i> , <i>O</i> -dimethyl- <i>O</i> -(3,5,6-trichloro-2-pyridyl)phosphorothioate					
		FUS		25.92	318.7	DSC	[1990DON/DRE]
C ₇ H ₉ Cl ₃ OS	[79886-21-8]	2,3,3-trichloro-2-propenethioic acid, <i>O</i> -butyl ester					

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(383–433)		73.3	GC	[1980PIT/KIS]
C ₇ H ₉ F ₃ N ₂ O ₄	[433-33-0]	glycine, <i>N</i> -[<i>N</i> -(trifluoroacetyl)glycyl]methyl ester				
	SUB	(323–419)	127.9	338	A	[1987STE/MAL, 1960WEY/KLI]
	V	(420–443)	93.8	431	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₉ F ₃ O ₂	[680-28-4]	pentafluoropropionic acid, butyl ester				
	V	(354–389)	38.6	369	A, EB	[1987STE/MAL, 1969SHE/LAN, 1999DYK/SVO]
C ₇ H ₉ N	[100-46-9]	benzylamine				
	V		54.2 ± 1.6	298	CGC	[2013GOB/RAT]
	V	(276–313)	54.3 ± 0.3	298	GS	[2013THO/CHI]
	V	(277–316)	54.4 ± 0.3	298	GS	[2013THO/CHI]
	V		54.1 ± 2.1	298	CGC	[2013THO/CHI]
	V	(293–362)	52.7 ± 0.3	328	DM	[2009MOK/RAZ]
	V	(293–362)	54.6 ± 0.3	298	DM	[2009MOK/RAZ]
	V	(283–300)	52.1 ± 0.6	298	GS	[1999VER4, 2013THO/CHI]
	V		U60.2	298		[1976KUS/SAI, 2013THO/CHI]
	V	(302–458)	51.8	317	A	[1987STE/MAL, 1977CAR/LAY, 1947BEE/JUN]
C ₇ H ₉ N	[583-61-9]	2,3-dimethylpyridine				
	FUS	(12–441)	13.48	258.6	AC	[1994CHI/HOS]
	V	(283–313)	52.0 ± 0.6	298	GS	[1999VER4]
	V	(328–476)	45.2	340	EB	[1995STE/CHI2]
	V	(328–476)	42.7	380	EB	[1995STE/CHI2]
	V	(328–476)	40.2	420	EB	[1995STE/CHI2]
	V	(328–476)	37.4	460	EB	[1995STE/CHI2]
	V	(323–373)	47.6	298	CGC	[1995CHI/HOS]
	V		46.9	313	C	[1985MAJ/SVO2]
	V		45.0	343	C	[1985MAJ/SVO2]
	V		43.5	368	C	[1985MAJ/SVO2]
	V		47.7	298		[1985MAJ/SVO2]
	V	(372–436)	43.0	387	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₉ N	[108-47-4]	2,4-dimethylpyridine				
	FUS	(11–440)	8.82	209.4	AC	[1994CHI/HOS]
	V	(323–373)	47.5	298	CGC	[1995CHI/HOS]
	V	(288–373)	45.5	330		[1995SAK/UEO]
	V	(331–473)	44.8	340	EB	[1995STE/CHI2]
	V	(331–473)	42.3	380	EB	[1995STE/CHI2]
	V	(331–473)	39.8	420	EB	[1995STE/CHI2]
	V	(331–473)	37.0	460	EB	[1995STE/CHI2]
	V	(298–431)	47.1	313	EB	[1990LEN]
	V	(267–358)	47.5	282	MM	[1986WIS/LEN]
	V		46.5	313	C	[1985MAJ/SVO2]
	V		44.6	343	C	[1985MAJ/SVO2]
	V		43.9	368	C	[1985MAJ/SVO2]
	V		47.5	298		[1985MAJ/SVO2]
	V	(349–433)	43.5	364	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₉ N	[589-93-5]	2,5-dimethylpyridine				
	FUS	(12–441)	14.64	259.1	AC	[1994CHI/HOS]
	V	(330–471)	44.4	340	EB	[1995STE/CHI2]
	V	(330–471)	41.9	380	EB	[1995STE/CHI2]
	V	(330–471)	39.4	420	EB	[1995STE/CHI2]
	V	(330–471)	36.5	460	EB	[1995STE/CHI2]
	V	(358–431)	42.8	373	A, MG	[1987STE/MAL, 1953HER/MAR, 1973DYK/REP]
C ₇ H ₉ N	[108-48-5]	2,6-dimethylpyridine				
	FUS	(11–435)	13.04	267.1	AC	[1994CHI/HOS]
	V	(283–353)	45.3	298	Static	[2014BEN/AIT]
	V	(342–373)	45.9 ± 2.4	298	CGC	[2009LIP/CHI2]
	V	(263–353)	45.3	298		[2005BEN/AIT]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(323–373)	46.4	298	CGC	[1995CHI/HOS]
	V	(288–373)	43.7	330		[1995SAK/UEO]
	V	(315–457)	43.9	320	EB	[1995STE/CHI2]
	V	(315–457)	41.4	360	EB	[1995STE/CHI2]
	V	(315–457)	38.8	400	EB	[1995STE/CHI2]
	V	(315–457)	36.0	440	EB	[1995STE/CHI2]
	V	(295–417)	45.0	310	EB	[1990LEN]
	V	(267–358)	46.1	282	MM	[1986WIS/LEN]
	V		44.4	313	C	[1985MAJ/SVO2]
	V		42.5	343	C	[1985MAJ/SVO2]
	V		40.8	368	C	[1985MAJ/SVO2]
	V		45.4	298		[1985MAJ/SVO2]
	V	(352–418)	41.6	367	A, MG	[1987STE/MAL, 1953HER/MAR]
C ₇ H ₉ N	[583-58-4]	3,4-dimethylpyridine				
	FUS	(13–440)	14.7	262.7	AC	[1994CHI/HOS]
	V	(341–495)	46.6	360	EB	[1995STE/CHI2]
	V	(341–495)	44.2	400	EB	[1995STE/CHI2]
	V	(341–495)	41.7	440	EB	[1995STE/CHI2]
	V	(341–495)	39.0	480	EB	[1995STE/CHI2]
	V	(288–422)	47.6	355		[1995SAK/UEO]
	V		48.8	328	C	[1985MAJ/SVO2]
	V		47.6	343	C	[1985MAJ/SVO2]
	V		45.9	368	C	[1985MAJ/SVO2]
	V		50.5	298		[1985MAJ/SVO]
	V	(385–454)	44.8	400	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₉ N	[591-22-0]	3,5-dimethylpyridine				
	FUS	(13–444)	13.11	266.9	AC	[1994CHI/HOS]
	V	(273–353)	48.5	298	Static	[2005BEN/AIT, 2014BEN/AIT]
	V	(323–373)	48.7	298	CGC	[1995CHI/HOS]
	V	(288–392)	47.0	340		[1995SAK/UEO]
	V	(335–487)	46.7	340	EB	[1995STE/CHI2]
	V	(335–487)	44.3	380	EB	[1995STE/CHI2]
	V	(335–487)	41.8	420	EB	[1995STE/CHI2]
	V	(335–487)	39.2	460	EB	[1995STE/CHI2]
	V	(273–358)	49.1	288	MM	[1986WIS/LEN]
	V		49.6	313	C	[1985MAJ/SVO2]
	V		46.5	343	C	[1985MAJ/SVO2]
	V		44.8	368	C	[1985MAJ/SVO2]
	V		49.5	298		[1985MAJ/SVO2]
	V	(373–446)	44.3	388	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₉ N	[100-71-0]	2-ethylpyridine				
	V		44.7 ± 0.8	298	C	[2003MOR/MIR]
	V	(323–373)	43.7	338	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₉ N	[536-78-7]	3-ethylpyridine				
	V	(334–373)	44.6	349	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₉ N	[536-75-4]	4-ethylpyridine				
	V		46.3 ± 0.7	298	C	[2003MOR/MIR]
	V	(333–372)	45.3	348	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₉ N	[100-61-8]	<i>N</i> -methylaniline				
	V	(284–320)	55.0 ± 0.2	298	GS	[2015EME/PIM]
	V	(353–467)	48.1	410	Static	[1993XIE/CHE]
	V	(353–467)	56.7 ± 0.2	298	Static	[1993XIE/CHE, 2015EME/PIM]
	V	(309–469)	53.6	324	A	[1987STE/MAL]
	V		45.4	467	C	[1931MAT/FEH]
	V		58.6 ± 1.0	298	C	[1931MAT/FEH, 2015EME/PIM]
	V	(323–473)	47.9	398	Static	[1925NEL/WAL]
	V	(323–473)	55.5 ± 0.4	298	Static	[1925NEL/WAL, 2015EME/PIM]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₉ N	[95-53-4]	<i>o</i> -toluidine				
	FUS	(5–441)	11.66	287.6	AC, DSC	[1994STE/CHI]
	V	(282–313)	57.3 ± 0.2	298	GS	[2005EME/VER2]
	V	(290–517)	57.8	300	EB, IPM	[1994STE/CHI]
	V	(290–517)	54.5	340	EB, IPM	[1994STE/CHI]
	V	(290–517)	51.5	380	EB, IPM	[1994STE/CHI]
	V	(290–517)	48.6	420	EB, IPM	[1994STE/CHI]
	V	(290–517)	45.7	460	EB, IPM	[1994STE/CHI]
	V	(290–517)	42.7	500	EB, IPM	[1994STE/CHI]
	V	(473–690)	62.7 ± 0.5	298		[1990CHA/GAD, 2005EME/VER2]
V	(391–474)	63.1	298		[1957GLA/RUL, 2005EME/VER2]	
V	(313–473)	50.0	406	A	[1987STE/MAL, 1949DRE/SHR, 1984BOU/FRI]	
V	(313–473)	56.2	298	EB	[1927BER/MAY, 2005EME/VER2]	
C ₇ H ₉ N	[108-44-1]	<i>m</i> -toluidine				
	FUS		8.8	241.7	C	[1991ACR, 1990MEV/LIC]
	V	(282–313)	58.3 ± 0.4	298	GS	[2005EME/VER2]
	V		62.7 ± 0.5	298		[1990CHA/GAD, 2005EME/VER2]
	V	(420–439)	59.6 ± 0.3	298	EB	[1990CAB/BEL, 2005EME/VER2]
	V	(476–704)	64.1	298		[1957GLA/RUL, 2005EME/VER2]
	V	(394–477)	51.1	409	A	[1987STE/MAL, 1949DRE/SHR, 1984BOU/FRI]
V	(313–473)	56.4	298	EB	[1927BER/MAY, 2005EME/VER2]	
C ₇ H ₉ N	[106-49-0]	<i>p</i> -toluidine				
	FUS		17.19	317		[2001CEN/LIP]
	FUS		17.89	316.5		[1991ACR, 1983WEA]
	FUS		17.3	316.6	C	[1990MEV/LIC]
	FUS		18.12	318	DSC	[1989RAI/MAN]
	FUS		18.3			[1985SIN]
	FUS		18.9	316.9	C	[1963RAS/NIG]
	FUS		17.28	315.6		[1889EYK]
	SUB	(284–313)	76.2 ± 0.3	298	GS	[2005EME/VER2]
	SUB		78.8 ± 0.5	298		[1990CHA/GAD]
	V	(319–345)	57.8 ± 0.3	298	GS	[2005EME/VER2]
	V	(393–474)	51.1	408	A	[1987STE/MAL]
	V	(474–641)	62.1	298		[1957GLA/RUL, 2005EME/VER2]
	V	(315–473)	54.9	330		[1947STU]
	V	(313–473)	55.9	298	EB	[1927BER/MAY, 2005EME/VER2]
C ₇ H ₉ N	[1855-63-6]	1-cyclohexene-1-carbonitrile				
	V		53.6 ± 0.1	298	C	[1970PRO/KRE]
C ₇ H ₉ N	[31357-72-9]	bicyclo[3.1.0]hexane-1-carbonitrile				
	V	(366–444)	U43.2	382	BG	[1971HAL/BAL]
C ₇ H ₉ NO	[90-04-0]	2-methoxyaniline				
	V	(334–492)	57.5	349	A	[1987STE/MAL, 1947STU]
C ₇ H ₉ NO	[104-94-9]	4-methoxyaniline				
	FUS		18.53		DSC	[2008SIN/DAS]
C ₇ H ₉ NO	[3718-65-8]	3,5-dimethylpyridine <i>N</i> -oxide				
	SUB		100.9 ± 2.3	298	C	[2010CAB/MON]
C ₇ H ₉ NO ₂	[6231-18-1]	2,6-dimethoxypyridine				
	V		53.9 ± 1.0	298	C	[2012AMA/RIB]
C ₇ H ₉ NO ₂	[2199-43-1]	ethyl 2-pyrrolecarboxylate				
	SUB		88.0 ± 1.6	298	C	[2013SAN/RIB4]
C ₇ H ₉ NO ₂	[37619-24-2]	methyl 1-methyl-2-pyrrolecarboxylate				
	V		59.2 ± 1.2	298	C	[2013SAN/RIB5]
C ₇ H ₉ N ₅	[87578-82-3]	8,9-dimethyladenine				
	SUB	(369–374)	105.8 ± 0.8	361	ME	[1987KAM/ZIE]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₉ N ₅	[76470-20-7] SUB	2,9-dimethyladenine (359–364)	123.5	371		[1992KAM]
C ₇ H ₉ N ₅	[938-55-6] SUB	<i>N, N</i> -dimethyladenine (379–409)	115.5 ± 2.1		ME	[1984ZIE/ZIE]
C ₇ H ₉ N ₅	[2009-52-1] SUB	<i>N, 9</i> -dimethyladenine (336–369)	115.5 ± 1.7		ME	[1984ZIE/ZIE]
C ₇ H ₉ N ₅ O ₁₂	[34001-49-5] TRS FUS	2,2,2-trinitroethyl-4,4-dinitropentanoate	20.08 6.69	363.8 366.7		DSC [1971ROS/HOL]
C ₇ H ₉ N ₅ O ₁₂	[2555-56-8] TRS TRS FUS	2,2-dinitropropyl-4,4,4-trinitrobutyrate	25.94 20.92 6.69	284.2 335.5 368.2		DSC [1971ROS/HOL]
C ₇ H ₉ O ₃ P	[61451-78-3] FUS	<i>P</i> -(hydroxymethyl)- <i>P</i> -phenylphosphinic acid	27.16	413.4		DSC [2010GUO/WAN2]
C ₇ H ₁₀	[498-66-8] TRS FUS SUB SUB SUB V V V V V	bicyclo[2.2.1]hept-2-ene (norbornene)	4.37 3.48 37.8 ± 0.14 37.7 ± 0.9 38.7 ± 0.5 35.1 ± 0.2 33.0 ± 0.2 30.8 ± 0.3 34.3 33.6 ± 0.08	130.3 319.5 298 298 298 298 340 380 316 298		[1992LEB/SMI, 1992SMI/LEB] C [1982JOC/DEK] BG [1978STE2] C [1976KOZ/BYC] EB [1996STE/CHI2] EB [1996STE/CHI2] EB [1996STE/CHI2] A [1987STE/MAL] BG [1973HAL/SMI]
C ₇ H ₁₀	[16554-83-9] V V	bicyclo[4.1.0]hept-3-ene (333–384)	36.7 38.4 ± 0.6	348 298		A [1987STE/MAL] EB [1974VAR/DRU]
C ₇ H ₁₀	[279-19-6] SUB SUB V V	tricyclo[2.2.1.0 ^{2,6}]heptane (nortricyclene)	38.7 ± 0.7 39.2 ± 1.1 38.5 38.3	298 298 298 317		BG [1978STE2] C [1976KOZ/BYC] [2008OSM/CAT] A [1987STE/MAL]
C ₇ H ₁₀	[187-26-8] V	tricyclo[4.1.0.0 ^{2,4}]heptane	36.5 ± 0.5	298		EB [1974VAR/DRU]
C ₇ H ₁₀	V	tricyclo[4.1.0.0 ^{2,6}]heptane (322–373)	35.3	337		A [1987STE/MAL]
C ₇ H ₁₀	[33475-22-8] V	dispiro[2.0.2.1]heptane	35.1 ± 0.5	298		[2008OSM/CAT]
C ₇ H ₁₀ ClN ₃ O ₃	[16773-42-5] FUS	1-(2-hydroxy-3-chloropropyl)-2-methyl-5-nitroimidazole (ornidazole)	21.38	358.6		[2004WAN/TAN2]
C ₇ H ₁₀ N ₂	[14667-55-1] V	2,3,5-trimethylpyrazine	53.9 ± 1.6	298		C [1996RIB/MOR]
C ₇ H ₁₀ N ₂	[538-08-9] V	dialcycyanamide (369–495)	52.3	384		A [1987STE/MAL]
C ₇ H ₁₀ N ₂	[95-80-7] V	2,4-diaminotoluene (379–553)	67.7	394		A [1987STE/MAL, 1947STU]
C ₇ H ₁₀ N ₂	[539-44-6] V	4-tolyhydrazine (355–515)	65.4	370		A [1987STE/MAL, 1947STU]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no. Transition	Compound		T _m (K)	Method	References
		Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
C ₇ H ₁₀ N ₂	[4210-60-0] SUB	α - <i>tert</i> -butylmalononitrile (293–323)	59.8 ± 0.7	298		[1990BEC/DOG]
C ₇ H ₁₀ N ₂	[646-20-8] FUS	pimelonitrile	15.0	241.7	DSC	[2007BAD/BLA]
	V	(306–331)	74.5	318	A	[1987STE/MAL, 1960WOO/MUR]
C ₇ H ₁₀ N ₂	[5683-33-0] V	2- <i>N</i> , <i>N</i> -dimethylaminopyridine (288–348)	55.2 ± 0.1	298	GS	[2011LIP/RAT]
	V		54.6 ± 2.1	298	CGC	[2011LIP/RAT]
	V	(233–323)	54.0	298	ME	[1991AUE/WEB]
C ₇ H ₁₀ N ₂	[18437-57-5] V	3- <i>N</i> , <i>N</i> -dimethylaminopyridine (233–323)	70.7	298	ME	[1991AUE/WEB]
C ₇ H ₁₀ N ₂	[1122-58-3] FUS	4- <i>N</i> , <i>N</i> -dimethylaminopyridine (80–402)	21.63	387.1	AC	[2007SHI/TAN]
	SUB	(323–368)	87.0 ± 0.2	298	GS	[2011LIP/RAT]
	SUB	(233–323)	81.6	298	ME	[1991AUE/WEB]
	V		61.3 ± 2.5	298	CGC	[2011LIP/RAT]
C ₇ H ₁₀ N ₂	[717908-74-2] V	<i>N</i> -cyclopropylmethylimidazole (303–343)	59.8 ± 0.3	298	GS	[2015VER/ZAI3]
C ₇ H ₁₀ N ₂ O	[25926-99-2] TRS	6,7-diazatricyclo[3.2.2.0 ^{2,4}]non-6-ene- <i>N</i> -oxide	15.8	372.6		
	FUS		2.6	411.4	DSC	[1980BYS]
C ₇ H ₁₀ N ₂ OS	[51-52-5] SUB	6-propyl-2-thiouracil (401–423)	136.0 ± 0.9	412	ME	[2014SZT/GAL]
	SUB	(401–423)	139.7 ± 0.9	298	ME	[2014SZT/GAL]
C ₇ H ₁₀ N ₂ O ₂	[4401-71-2] FUS	1,3-dimethylthymine	23.6	426.5	DSC	[1984ZIE/ZIE2]
	SUB	(313–363)	109.2 ± 2.1	338	QR	[1980TEP/YAN]
C ₇ H ₁₀ N ₂ O ₂	[4401-71-2] FUS	1,3,5-trimethyluracil	16.1	428.7	DSC	[1996KAM/ZIE]
	SUB	(348–391)	94.9 ± 0.6	298	GS	[2013NOT/EME]
	SUB	(321–331)	103.5 ± 1.5	326	ME	[1996KAM/ZIE]
C ₇ H ₁₀ N ₂ O ₂	[13509-52-9] FUS	1,3,6-trimethyluracil	21.2	384.5	DSC	[1996DOM/HEA, 1984ZIE/ZIE2]
	SUB	(300–340)	106.7 ± 2.5	320	QR	[1980TEP/YAN]
C ₇ H ₁₀ N ₂ O ₂	[1709-52-0] FUS	4-amino- <i>N</i> -methylbenzene sulfonamide	17.1	382.2	DSC	[2014PER/KAZ]
C ₇ H ₁₀ N ₂ O ₃	[7358-61-4] FUS	1,3,5-trimethylbarbituric acid	13.7	362.6	DSC	[2011TEM/ROU]
	SUB	(322–358)	96.1 ± 0.8	298	GS	[2014NOT/ROU]
C ₇ H ₁₀ N ₂ O ₃	[702-47-6] FUS	1,5,5-trimethylbarbituric acid	30.2	434.5	DSC	[2011TEM/ROU]
	SUB	(360–428)	106.2 ± 0.4	298	GS	[2014NOT/ROU]
C ₇ H ₁₀ N ₂ O ₃	[7391-69-7] SUB	5-isopropylbarbituric acid	125.0 ± 3.8	298	C	[2016SZT/GAL]
	SUB	(369–391)	120.8 ± 0.6	380	ME	[2016SZT/GAL]
	SUB	(369–391)	123.6 ± 0.6	298	ME	[2016SZT/GAL]
C ₇ H ₁₀ O	[17356-19-3] V	1-ethynyl-1-cyclopentanol (323–373)	62.1	298	CGC	[1995CHI/HOS]

[Note: Authors of [1991AUE/WEB] refer to the value as an enthalpy of vaporization. The compound's melting point temperature is above the temperature range of the measured VPs.]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₀ O	[10218-02-7]	7-norbornanone				
	SUB	(300–340)	47.3 ± 2.2	298	BG	[1978STE]
	V	(322–348)	47.9	335	EB	[1994WIB/MOR]
C ₇ H ₁₀ O	[497-38-1]	2-norbornanone				
	FUS		3.39	368.7	DSC	[1993ACR, 1991CHI/BRA]
	SUB	(300–340)	49.0 ± 1.7	298	BG	[1978STE]
	V		50.0	298	GC	[2002VAN/PAR]
	V	(343–383)	51.5	298	CGC	[1995CHI/HOS]
	V	(343–383)	49.6	298	CGC	[1995CHI/HOS]
C ₇ H ₁₀ O	[1121-37-5]	dicyclopropyl ketone				
	V		53.7 ± 0.9	298	C	[1981GAT/STR]
C ₇ H ₁₀ O ₂	[20583-46-4]	5-methyl-5-hexene-2,4-dione				
	V	(323–363)	26.4	338	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₀ O ₂	[4350-84-9]	2-oxabicyclo[2.2.2]octan-3-one				
	TRS		1.1	299.0		
	TRS		1.7	322.5		
	TRS		7.0	356.5		
	FUS		3.8	400.0	DSC	[1980AND/PIL]
	SUB		69.6 ± 2.1		C	[1980AND/PIL]
C ₇ H ₁₀ O ₃	[815-68-9]	3-acetyl-2,4-pentanedione				
	V	(369–477)	54.9	384	A	[1987STE/MAL]
C ₇ H ₁₀ O ₃	[106-91-2]	glycidyl methacrylate				
	V		61.2 ± 0.4	298	A	[1987VAN/KAC]
	V		60.6 ± 0.9	298	C	[1986YER/WOR2]
C ₇ H ₁₀ O ₃	[281-32-3]	2,4,10-trioxaadamantane				
	SUB		74.4 ± 0.4	298	C	[1974MAN2]
C ₇ H ₁₀ O ₃	[4160-82-1]	3,3-dimethylpentanedioic anhydride				
	FUS		17.99	396.2		[1974BOR]
C ₇ H ₁₀ O ₃	[35046-67-4]	trimethylsuccinic anhydride				
	SUB		74.1 ± 4.2			[1954JOR, 1970COX/PIL]
	V	(326–504)	52.9	341	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₀ O ₄	[50483-99-3]	1,2-cyclopentanedicarboxylic acid				
	FUS		19.1	428.6	DSC	[2011BOO/MON]
	SUB	(298–318)	66	308	ME	[2011BOO/MON]
C ₇ H ₁₀ O ₄	[617-54-9]	dimethyl citraconate				
	V	(324–484)	55.8	339	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₀ O ₄	[617-52-7]	dimethyl itaconate				
	V	(342–481)	67.0	357	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₀ O ₄	[617-53-8]	dimethyl mesaconate				
	V	(319–479)	55.2	334	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₀ O ₆	[1186-73-8]	tris(methoxycarbonyl)methane				
	FUS		18.2	301.2		[1995RAK/VER]
	V	(308–348)	74.4 ± 0.6		GS	[1995RAK/VER]
C ₇ H ₁₀ S	[1551-27-5]	2-propylthiophene				
	V		43.7 ± 1.0	298	C	[2007RIB/SAN]
	V	(243–303)	46.0	273		[1981EDW/PRA, 1999DYK/SVO]
C ₇ H ₁₀ S	[4095-22-1]	2-isopropylthiophene				
	V	(352–468)	41.5	367		[1999DYK/SVO]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₀ S ₃	[2164-87-6]	4,5-tetramethylene-1,3-dithiolan-2-thione				
	SUB	(353–369)	99.0	360		[1967GEI/SCH, 1970COX/PIL]
	SUB		103.9 ± 2.9	298		[1967GEI/SCH, 1970COX/PIL]
C ₇ H ₁₁ BrO ₂	[26918-14-9]	4-bromo-3-methylcrotonic acid, ethyl ester				
	V	(346–381)	43.1	361	A	[1987STE/MAL]
C ₇ H ₁₁ ClO ₅		(2-chloroethyl)[(1-methoxycarbonyl)ethyl] carbonate				
	V	(365–525)	66.8	380	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₁₁ Cl ₃ O ₂	[57392-56-0]	trichloroacetic acid, neopentyl ester				
	V	(378–473)	57.7	393	A	[1987STE/MAL, 1999DYK/SVO, 1940QUA/NOR]
C ₇ H ₁₁ N	[766-05-2]	cyclohexanecarbonitrile				
	TRS		7.43	215		
	FUS		3.64	285.1		[1996DOM/HEA, 1991KIS/PIN]
	V	(333–427)	39.4	351	BG	[1971HAL/BAL]
	V		51.9 ± 0.1	298	C	[1970PRO/KRE]
C ₇ H ₁₁ N	[931-53-3]	isocyanocyclohexane				
	FUS		3.98	277.7	DSC	[2008SIN/MUR2]
	TRS		6.18	192.6		
	FUS		4.23	279.6		[1996DOM/HEA, 1991KIS/PIN]
C ₇ H ₁₁ N	[930-87-0]	1,2,5-trimethylpyrrole				
	V		50.7 ± 1.3	298	C	[2014SAN/RIB]
C ₇ H ₁₁ NO ₂		2-methyl-2-acetoxybutyronitrile				
	V	(315–469)	58.1	330	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₁ NO ₂	[7149-65-7]	5-oxo-2-pyrrolidinecarboxylic acid, ethyl ester				
	V	(418–511)	73.7	433	A, EB	[1987STE/MAL, 1953MEL/VIO]
C ₇ H ₁₁ N ₃ O	[2228-27-5]	1, <i>N</i> , <i>N</i> -trimethylcytosine				
	SUB		110.9 ± 1.7			[1998ZIE/WSZ]
C ₇ H ₁₁ N ₃ O	[25307-94-2]	1,5, <i>N</i> -trimethylcytosine				
	SUB	(396–431)	108.0 ± 2.0		GS	[1998ZIE/WSZ]
C ₇ H ₁₁ N ₃ O ₂	[38691-19-9]	1,5-dimethyl- <i>N</i> -methoxycytosine				
	SUB	(327–365)	95.6 ± 0.7		GS	[1998ZIE/WSZ]
C ₇ H ₁₁ N ₃ O ₃	[1077-93-6]	3-(2-methyl-5-nitroimidazol-1-yl)propan-1-ol (ternidazole)				
	FUS		25.65	333	DSC	[2011MAH/PER]
C ₇ H ₁₁ N ₅ O ₁₀	[242800-94-8]	1,1,1,4,4-pentanitro-2,2-dimethylpentane				
	SUB		114.2 ± 1.2	298	C	[2011MIR/KON]
	SUB		103.8	298		[1999MIR/VOR]
C ₇ H ₁₂	[279-23-2]	bicyclo[2.2.1]heptane (norbornane)				
	FUS		4.45	360.8	DSC	[2004VER/EME]
	SUB	(278–308)	40.3 ± 0.4	293	GS	[2004VER/EME]
	SUB	(278–308)	40.1 ± 0.4	298	GS	[2004VER/EME]
	SUB		40.0 ± 0.1	298	C	[1987AN/ZHU]
	SUB		40.3 ± 0.32	298	C	[1982JOC/DEK]
	SUB		40.4 ± 0.8	298	BG	[1978STE2]
	SUB	(284–326)	40.0 ± 0.8	305	TSGC	[1975CLA/KNO]
	SUB	(300–363)	39.33 ± 0.13		BG	[1973HAL/SMI]
	SUB	(284–326)	40.1 ± 0.8		BG	[1971BOY/SAN, 1977PED/RYL]
C ₇ H ₁₂	[286-08-8]	<i>cis</i> -bicyclo[4.1.0]heptane				
	V		40.6 ± 0.2	298		[2008OSM/CAT]
	V	(298–385)	38.0 ± 0.8	313	A, EB	[1987STE/MAL, 1970CHA/MCN]
C ₇ H ₁₂	[286-08-8]	<i>dl</i> -bicyclo[4.1.0]heptane				
	V	(333–385)	36.5	348	A	[1987STE/MAL]
C ₇ H ₁₂	[4625-24-5]	1-methylbicyclo[3.1.0]hexane				
	V	(312–362)	34.0	327	A	[1987STE/MAL]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₂	[628-92-2]	cycloheptene				
	TRS	(14–305)	7.1	154.3		
	TRS	(14–305)	0.73	208.3		
	FUS	(14–305)	0.88	217.8		[1994LEB/SMI]
	TRS		5.28	154		
	TRS		0.71	210		
	FUS		0.97	217	DSC	[1996DOM/HEA, 1990HAI/GIL2]
C ₇ H ₁₂	[765-47-9]	1,2-dimethylcyclopentene				
	V	(294–431)	36.4	309	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₂	[62184-82-1]	(<i>dl</i>)-1,3-dimethylcyclopentene				
	V	(283–410)	35.0	298	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₂	[57426-81-0]	(<i>dl</i>)-1,4-dimethylcyclopentene				
	V	(273–413)	35.1	288	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₂	[16491-15-9]	(<i>dl</i>)-1,5-dimethylcyclopentene				
	V	(273–423)	37.1	288	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₂	[2146-37-4]	ethylidenecyclopentane				
	V		38.6 ± 0.2	298	GCC	[1979FUC/PEA]
C ₇ H ₁₂	[2146-38-5]	1-ethylcyclopentene				
	V		38.5 ± 0.3	298	GCC	[1979FUC/PEA]
	V	(293–433)	36.5	308	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₂	[694-35-9]	3-ethylcyclopentene				
	V	(288–435)	36.5	303	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₂	[3742-38-9]	4-ethylcyclopentene				
	V	(288–435)	36.5	303	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₂	[591-49-1]	1-methyl-1-cyclohexene				
	V	(275–313)	37.7 ± 0.2	294	GS	[2000VER/WAN]
	V	(275–313)	37.5 ± 0.2	298	GS	[2000VER/WAN]
	V	(333–384)	35.7	348	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
	V	(309–384)	36.7	324	MM	[1960CAM/ROS]
C ₇ H ₁₂	[591-48-0]	(<i>dl</i>)-3-methyl-1-cyclohexene				
	V	(335–376)	34.8	350	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
C ₇ H ₁₂	[591-47-9]	(<i>dl</i>)-4-methyl-1-cyclohexene				
	FUS		6.63	153.6		[1994LEB/SMI]
	V	(275–296)	37.0 ± 0.6	286	GS	[2000VER/WAN]
	V	(275–296)	36.3 ± 0.6	298	GS	[2000VER/WAN]
	V	(292–429)	36.3	307	A	[1987STE/MAL]
C ₇ H ₁₂	[1192-37-6]	methylenecyclohexane				
	V		36.1 ± 0.3	298	GCC	[1979FUC/PEA]
	V	(331–387)	34.4	346	A, EB	[1987STE/MAL, 1973MEY/HOT]
C ₇ H ₁₂	[628-71-7]	1-heptyne				
	V	(336–373)	37.9	351	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
C ₇ H ₁₂	[1119-65-9]	2-heptyne				
	V	(346–385)	38.6	361	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
C ₇ H ₁₂	[2586-89-2]	3-heptyne				
	V	(343–380)	39.1	358	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
C ₇ H ₁₂ Br ₂	[29974-68-3]	1,2-dibromocycloheptane				
	V	(292–353)	50.3	307	A	[1987STE/MAL, 1941LIS, 1973DYK/REP]
C ₇ H ₁₂ ClNO	[13654-91-6]	6-chlorohexylisocyanate				
	V	(363–453)	52.5	378	A	[1987STE/MAL, 1968ZHU/KON, 1973DYK/REP]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₂ ClN ₅	[122-34-9]	2-chloro-4,6-bis(ethylamino)-s-triazine (Simazin)				
	FUS		47.35	502.5	DSC	[1990DON/DRE]
	FUS		48.2		DSC	[1971GET/WAR]
	SUB	(323–403)	130.8	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
C ₇ H ₁₂ Cl ₂ O ₂	[860540-85-8]	dichloroacetic acid, neopentyl ester				
	V	(368–463)	57.4	383	A	[1987STE/MAL, 1999DYK/SVO, 1940QUA/NOR]
C ₇ H ₁₂ Cl ₂ S	[743438-46-2]	(2-chloroethyl)(2-chlorocyclopentyl) sulfide				
	V	(273–333)	65.9	303	A, GS	[1987STE/MAL, 1948RED/CHA, 1999DYK/SVO]
C ₇ H ₁₂ Cl ₄	[3922-36-9]	1,1,1,7-tetrachloroheptane				
	V	(342–455)	71.7	357		[1999DYK/SVO]
	V	(370–454)	69.9	385	A	[1987STE/MAL]
C ₇ H ₁₂ N ₂	[3010-03-5]	1-piperidinoacetonitrile				
	FUS		17.57	293.2		[1997WEL/VER]
	V	(303–338)	56.0 ± 0.5		GS	[1997WEL/VER]
C ₇ H ₁₂ N ₂	[3001-72-7]	1,5-diazabicyclo[4.3.0]non-5-ene				
	V		56.8	392	DP-LPD	[2016OST/UUS]
	V		62.6 ± 1.3	298	DP-LPD	[2016OST/UUS]
	V		61.9 ± 0.2	298	GS	[2011LIP/RAT]
	V		61.1 ± 2.4	298	CGC	[2011LIP/RAT]
C ₇ H ₁₂ N ₂	[33214-18-5]	1-propyl-2-methylimidazole				
	V	(289–343)	63.7 ± 0.2	298	GS	[2011EME/POR2]
C ₇ H ₁₂ N ₂	[4316-42-1]	1-butylimidazole				
	V		63.9 ± 0.5	298	C	[2015VIT/AGA]
C ₇ H ₁₂ N ₂	[16245-89-9]	<i>N</i> -isobutylimidazole				
	V	(290–326)	62.2 ± 0.3	298	GS	[2015VER/ZAI3]
C ₇ H ₁₂ N ₂	[20075-29-0]	<i>N</i> -sec-butylimidazole				
	V	(296–330)	64.6 ± 0.3	298	GS	[2015VER/ZAI3]
C ₇ H ₁₂ N ₂	[45676-04-8]	<i>N</i> -tert-butylimidazole				
	V	(297–343)	61.9 ± 0.4	298	GS	[2015VER/ZAI3]
C ₇ H ₁₂ N ₂ O ₂	[16395-58-7]	<i>N</i> -acetyl-L-prolinamide				
	FUS		29.3	417.5	DSC	[1997ABA/PAL]
C ₇ H ₁₂ N ₄ O ₁₀	[5917-61-3]	bis(2,4-dinitropropyl)formal				
	V	(333–383)	84.8 ± 0.9	358		[2007RAU/BEH]
C ₇ H ₁₂ O	[497-37-0]	<i>exo</i> -norborneol				
	V		52.5	298	GC	[2002VAN/PAR]
C ₇ H ₁₂ O	[931-57-7]	1-methoxycyclohexene				
	V	(274–313)	44.0 ± 0.2	294	GS	[1998VER/WEL]
	V	(274–313)	43.7 ± 0.2	298	GS	[1998VER/WEL]
C ₇ H ₁₂ O	[502-42-1]	cycloheptanone				
	TRS		12.4	227		
	TRS		0.43	232.6		
	FUS		1.39	259.3	DSC	[1998GON/SZW]
	V	(343–383)	50.6	298	CGC	[1995CHI/HOS]
	V	(343–383)	51.9	298	CGC	[1995CHI/HOS]
	V	(343–383)	50.7	298	CGC	[1995CHI/HOS]
	V	(313–453)	48.5	328	A	[1987STE/MAL]
	V	(373–465)	44.8	388	A, EB	[1987STE/MAL, 1976MEY/HOT]
	V	(313–383)	49.5 ± 0.6	298	VP	[1972WOL]
C ₇ H ₁₂ O	[583-60-8]	2-methylcyclohexanone				
	V	(339–437)	44.0	298	EB	[2006PAL/OR]
	V	(331–437)	45.0	346		[1993BRU/MON]
C ₇ H ₁₂ O	[591-24-2]	3-methylcyclohexanone				

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(334–441)	44.9	349		[1993AUC/BUR]
C ₇ H ₁₂ O	[589-92-4]	4-methylcyclohexanone				
	V	(339–444)	45.3	354		[1993AUC/BUR]
C ₇ H ₁₂ O ₂	[14924-53-9]	cyclobutanecarboxylic acid ethyl ester				
	V	(274–308)	44.9 ± 0.4		GS	[1998VER/KUM]
C ₇ H ₁₂ O ₂	[176-32-9]	1,4-dioxaspiro[4.4]nonane				
	V	(278–313)	47.6 ± 0.5	298	GS	[1998VER/PEN, 2002VER]
C ₇ H ₁₂ O ₂	[141-32-2]	butyl acrylate				
	FUS		17.31	209.5	AC	[1996DOM/HEA, 1985KAR/ABD]
	V	(278–418)	52.0 U	298		[2013LOM/GIN]
	V	(318–419)	47.3 ± 0.3	298	EB	[1996STE/CHI2]
	V	(318–419)	45.7 ± 0.3	320	EB	[1996STE/CHI2]
	V	(318–419)	42.8 ± 0.3	360	EB	[1996STE/CHI2]
	V	(318–419)	40.0 ± 0.3	400	EB	[1996STE/CHI2]
	V	(272–421)	44.8	287	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₂ O ₂	[106-63-8]	isobutyl acrylate				
	V	(330–410)	43.8	345	A	[1987STE/MAL]
C ₇ H ₁₂ O ₂	[539-87-7]	heptanolactone				
	V	(368–390)	48.2 ± 0.3	379	MM	[1991WIB/WAL]
	V	(369–390)	53.3 ± 1.3	298	MM	[1991WIB/WAL]
C ₇ H ₁₂ O ₂	[105-21-5]	γ-heptalactone				
	V	(298–363)	62.3 ± 0.3	298	GS	[2008EME/KOZ]
C ₇ H ₁₂ O ₂	[2210-28-8]	propyl methacrylate				
	V	(304–413)	41.6	319	A	[1987STE/MAL]
C ₇ H ₁₂ O ₂	[98-89-5]	cyclohexanecarboxylic acid				
	FUS		9.2	301.9	DSC	[2008DOM/MOR]
C ₇ H ₁₂ O ₂	[4351-54-6]	cyclohexyl formate				
	FUS	(5–320)	10.49	201.3	AC	[1999KAB/KOZ, 2001KOZ/BLO]
	V	(307–434)	47.1	322		[2005STE/SUN]
	V		49.3 ± 0.2	298	C	[2004PAU/ZAI, 2003ZAI/VER]
	V	(243–273)	52.0 ± 1.3	298	ME	[2003ZAI/VER]
	V	(243–273)	49.5 ± 1.2	298	ME	[2003ZAI/VER]
C ₇ H ₁₂ O ₂	[638-10-8]	ethyl 3-methylbut-2-enoate				
	V	(274–319)	49.3 ± 0.2	298	GS	[2008EME/TOK]
C ₇ H ₁₂ O ₂	[1191-16-8]	3-methyl-2-butenyl acetate				
	V		47.8 ± 1.4	298	CGC	[2015KOZ/GOB]
C ₇ H ₁₂ O ₃	[2461-40-7]	glycidyl butyrate				
	V		58.7 ± 0.4	298		[1987VAN/KAC]
	V		58.0 ± 0.4	298	C	[1986YER/WOR2]
C ₇ H ₁₂ O ₃	[10235-71-9]	2-acetoxy-2-methyl-3-butanone				
	V	(337–368)	54.8	352	A	[1987STE/MAL]
C ₇ H ₁₂ O ₃	[539-88-8]	ethyl levulinate				
	V	(320–480)	58.3	335	A	[1987STE/MAL, 1947STU]
	V		51.6	420		[1931SCH/COW]
C ₇ H ₁₂ O ₃	[27761-61-1]	1,4-dimethyl-2,6,7-trioxabicyclo[2.2.2]octane				
	FUS		18.0	370.2		[1995RAK/VER2]
	SUB		74.9	298		[1995RAK/VER2]
C ₇ H ₁₂ O ₄	[2985-28-6]	2-acetoxypropionic acid, ethyl ester				
	V	(313–454)	57.9	328	A	[1987STE/MAL, 1950REH/DIX]
C ₇ H ₁₂ O ₄	[40326-37-2]	3-acetoxypropionic acid, ethyl ester				
	V	(350–367)	72.1	358	A	[1987STE/MAL, 1973DYK/REP, 1948FEI/FIS]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₂ O ₄	[623-84-7] V	1,2-propylene glycol diacetate (318–367)	54.9	323		[2001HOR/GAR]
C ₇ H ₁₂ O ₄	[105-53-3] V V V V V V V V V V	diethyl malonate (265–288) (336–471) (336–471) (336–471) (336–471) (336–471) (284–316) (284–316) (288–318) (288–318)	60.8 56.3 54.7 53 51.7 51.3 61.1 61.7 ± 0.3 58.4 ± 0.6 64.7 ± 0.2 65.1 ± 0.2	283 343 373 413 453 469 300 298 298 293 298	ME DTA DTA DTA DTA DTA GS GS GC GS GS	[2014BRO/BUC] [2014BRO/BUC] [2014BRO/BUC] [2014BRO/BUC] [2014BRO/BUC] [2014BRO/BUC] [2011LIP/KRA] [2011LIP/KRA] [1992KAT, 2011LIP/KRA] [1992VER/BEC] [1992VER/BEC, 2011LIP/KRA]
	V V V V V V V V V	(293–318) (384–468) (313–472) (365–491) (365–491) (314–472) (314–472) (315–464) (315–464)	63.3 59.9 51.2 56.9 67.2 ± 0.5 51.2 60.5 51.2 58.7 ± 0.2	305 399 328 428 298 393 298 390 298	A A A EB EB A A A A	[1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1978SMI/ZEL, 2011LIP/KRA] [1978SMI/ZEL, 2011LIP/KRA] [1947STU, 2011LIP/KRA] [1947STU, 2011LIP/KRA] [1940HEI/REI, 2011LIP/KRA] [1940HEI/REI, 2011LIP/KRA]
C ₇ H ₁₂ O ₄	[6065-54-9] V	dimethyl dimethylmalonate (278–307)	55.6 ± 0.8	293	GS	[1992VER/BEC]
C ₇ H ₁₂ O ₄	[1119-40-0] V V V	glutaric acid, dimethyl ester (283–348) (366–483) (388–483)	65.7 ± 0.4 54.7 66.1	298 381 298	GS A EB	[2006VER/KOZ] [1987STE/MAL] [1963VLA/GRA, 2006VER/KOZ]
C ₇ H ₁₂ O ₄	[627-91-8] V	methyl adipate (453–503)	82.9	468	A	[1987STE/MAL]
C ₇ H ₁₂ O ₄	[111-16-0] FUS FUS TRS FUS FUS FUS SUB SUB SUB SUB	heptanedioic acid (pimelic acid) (328–363) (283–300) (318–336) (288–308)	28.8 31.78 1.5 30.3 23.7 27.62 153 ± 4 124 80.8 178	377.4 378.0 337.7 377.5 368.2 377.5	DSC DSC DSC DSC DSC DSC TPD TPTD TPTD TPTD	[2012WAN/DEN, 2012WAN/LI] [2010COO/DAV] [2002STE/CHI6] [2005ROU/TEM] [1991ACR, 1974CIN/BER] [2007CAP/LOV] [2005CHA/ZIE] [2005CHA/ZIE] [2001CHA/TOB]
	SUB SUB V V	(358–371) (358–371) (424–503) (436–615)	136.6 ± 1.0 139.9 ± 1.0 112.0 ± 0.8 88.6	365 298 298 451	ME ME CGC A	[1999RIB/MON] [1999RIB/MON] [2005ROU/TEM] [1987STE/MAL, 1947STU]
C ₇ H ₁₂ O ₄	[126-54-5] V	2,4,8,10-tetraoxaspiro[5.5]undecane (56.0)	56.0			[1959FLE/MOR]
C ₇ H ₁₂ O ₄	[32786-47-3] V	2,2-diacetoxypropane (283–318)	53.6 ± 0.4	298	GS	[1996VER/PEN]
C ₇ H ₁₂ O ₄	[534-59-8] SUB	butylmalonic acid (348–362)	124.6 ± 2.3	298	ME	[2000RIB/MON]

[Note: Steele and coworkers in reference [2002STE/CHI6] refer to a personal communication with one of the authors of [1992VER/BEC]—stating that it was established that the compound studied was not diethyl malonate. In a subsequent paper [2011LIP/KRA] co-authored by one of the authors of [1992VER/BEC] the data are still taken to be diethyl malonate.]

[Note: Values based on the TPTD method are not consistent with values determined by other experimental methods.]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₂ O ₄	[681-57-2] SUB	2,2-dimethylglutaric acid (342–353)	126.8 ± 2.1	298	ME	[2001RIB/MON2]
C ₇ H ₁₂ O ₄ S ₂	FUS	(<i>dl</i>)-methylenebisthiopropionic acid	39.33	429	DSC	[1976LEC/COL]
C ₇ H ₁₂ O ₄ S ₂	FUS	(<i>d</i>)-methylenebisthiopropionic acid	22.59	355	DSC	[1976LEC/COL]
C ₇ H ₁₂ O ₅	V	ethyl[(1-methoxycarbonyl)ethyl]carbonate (343–473)	60.0	358	A	[1987STE/MAL]
C ₇ H ₁₂ O ₅	V	2-(lactyloxy)propionic acid, methyl ester (317–384)	72.0	332	A	[1987STE/MAL, 1952REH/DIX]
C ₇ H ₁₃ Cl	[931-78-2] TRS FUS	1-chloro-1-methylcyclohexane (5–320) (5–320)	9.38 1.63	214.4 234.5	AC	[1998KAB/BLO]
C ₇ H ₁₃ ClO	[2528-61-2] V	heptanoyl chloride (307–418)	63.7	322	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₃ ClO ₂	[126176-76-9] V	2-chloroacetic acid, neopentyl ester (378–448)	55.6	393	A	[1987STE/MAL, 1999DYK/SVO, 1940QUA/NOR]
C ₇ H ₁₃ F ₃ O ₃	[2339-51-7] V	tris(2-fluoroethyl)orthoformate (273–333)	59.7	288	A	[1987STE/MAL, 1999DYK/SVO, 1948RED/CHA4]
C ₇ H ₁₃ N	[20654-47-1] V	2,2-dimethylpentanenitrile (274–303)	46.9 ± 0.4		GS	[1994RAK/VER]
C ₇ H ₁₃ N	[629-08-3] V V V V V V	heptanenitrile (280–307) (313–473) (294–457) (313–473) (314–472)	51.9 ± 0.3 46.0 51.9 ± 0.8 46.4 49.1 51.3 ± 0.3	298 328 298 309 298 298	GS A EB EB MM	[2005EME/VER] [1987STE/MAL] [1973LEB/KAT, 2005EME/VER] [1947STU] [1941RAL/SEL, 2005EME/VER] [1933HEI, 2005EME/VER]
C ₇ H ₁₃ N	[100-76-5] TRS FUS SUB SUB SUB	1-azabicyclooctane (6–438) (6–438) (273–362)	5.23 5.86 50.8 ± 0.4 50.8 ± 0.2 50.8 ± 0.2	196 430 298 298	ME	[1996DOM/HEA, 1970WES/WON] [1971WON/WES, 1977PED/RYL] [1970WES/WON] [1948BRO/SUJ, 1970COX/PIL, 1960JON]
C ₇ H ₁₃ NO	[2556-73-2] V V	<i>N</i> -methylcaprolactam (403–510) (340–400)	53.6 49.4	418 370	EB	[2007PAL/OR2] [1984SHC/KAP]
C ₇ H ₁₃ NO	[102074-41-9] V	2-butoxypropionitrile (373–423)	46.7	388	A, I	[1987STE/MAL, 1973DYK/REP, 1933HEN/MUR]
C ₇ H ₁₃ NO	[162047-91-8] V	2-methoxy-3,3-dimethylbutanenitrile (295–324)	58.8 ± 1.1	298	GS	[1995VER/BEC]
C ₇ H ₁₃ NO	[162047-90-7] V	2-methoxy-2-methylpentanenitrile (278–308)	48.5 ± 0.6	298	GS	[1995VER/BEC]
C ₇ H ₁₃ NO	SUB	<i>trans</i> -6-heptenoic acid amide (362–393)	97.2	377	A	[1987STE/MAL]
C ₇ H ₁₃ NO	[3612-18-8] V	1-ethyl-4-piperidone 56.7 ± 0.6		298	C	[2006RIB/CAB]
C ₇ H ₁₃ NO	[673-66-5] FUS FUS	azacyclooctan-2-one (60–350)	12.4 13.78	313.2 310.3	DSC	[2012EME/VER] [1996DOM/HEA, 1962KOL/PAU]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		89.6 ± 0.6	298	F + V	[2012EME/VER]
	V	(306–373)	77.9 ± 0.5	298	GS	[2012EME/VER]
C ₇ H ₁₃ NO	[107-58-4]	<i>N</i> - <i>tert</i> -butylacrylamide				
	FUS		21.57	401.65	DSC	[2015GAO/XUE]
C ₇ H ₁₃ NO ₂	[5468-39-3]	lactic acid <i>N</i> -(methallyl) amide				
	V	(360–428)	81.8	375	A	[1987STE/MAL, 1950RAT/FIS]
C ₇ H ₁₃ NO ₂	[27097-66-1]	<i>N</i> -lactylmorpholine				
	V	(371–423)	62.7	386	A	[1987STE/MAL, 1950RAT/FIS]
C ₇ H ₁₃ NO ₃	[5143-72-6]	<i>dl</i>)- <i>N</i> -acetylalanine ethyl ester				
	V	(372–460)	65.2	387	A, EB	[1987STE/MAL, 1973DYK/REP, 1953MEL/VIO]
C ₇ H ₁₃ N ₃ O ₃ S	[23135-22-0]	<i>N</i> , <i>N</i> -dimethyl-2-methylcarbamoyloxyimino-2-(methylthio)acetamide				
	FUS		30.17	372.2	DSC	[1990DON/DRE]
C ₇ H ₁₃ O ₆ P	[7786-34-7]	2-methoxycarbonyl-1-methylvinyl dimethyl phosphate (mevinphos)				
	V	(293–383)	68.1	308	A	[1987STE/MAL]
C ₇ H ₁₄	[291-64-5]	cycloheptane				
	TRS		4.98	134.8		
	TRS		0.29	198.2		
	TRS		0.45	212.4		
	FUS		1.88	265.1		[1996DOM/HEA, 1956FIN/SCO]
	FUS		1.9	265.2		[1952KAA/COO]
	SUB		53.5	134		[1963BON]
	V	(282–333)	38.6	297	A	[1987STE/MAL]
	V	(476–604)	31.7	491	A	[1987STE/MAL]
	V	(333–398)	36.4	348	A, EB	[1987STE/MAL, 1976MEY/HOT]
	V	(283–323)	38.5	298		[1975ANA/GRO]
	V	(341–433)	36.1	356	A, EB	[1987STE/MAL, 1956FIN/SCO]
	V		38.5 ± 0.2	298		[1956FIN/SCO]
C ₇ H ₁₄	[108-87-2]	methylcyclohexane				
	FUS	(12–285)	6.75	146.6		[1996DOM/HEA, 1946DOU/HUF]
	FUS		6.67	146.2		[1930PAR/HUF2]
	V	(321–374)	34.1	336	EB	[2011XIN/YAN]
	V	(325–374)	33.8	340		[2010SAP/UUS]
	V	(295–333)	36.2	310		[1991WU/PIV]
	V		35.1 ± 0.4	298	GC	[1987AZA]
	V	(373–511)	32.3	388	A	[1987STE/MAL]
	V	(501–573)	31.2	516	A	[1987STE/MAL]
	V		32.2	353		[1984EUB/CED]
	V		29.9	393		[1984EUB/CED]
	V		26.9	433		[1984EUB/CED]
	V		23.4	473		[1984EUB/CED]
	V	(315–373)	34.2	330	EB	[1983PAL/CHO]
	V		35.4 ± 0.1	298	C	[1979MAJ/SVO]
	V		34.6 ± 0.1	313	C	[1979MAJ/SVO]
	V		33.5 ± 0.1	333	C	[1979MAJ/SVO]
	V		32.5 ± 0.1	353	C	[1979MAJ/SVO]
	V		35.4	298	GCC	[1978FUC/PEA]
	V		35.3	298		[1975KUS/SAI]
	V	(308–368)	34.6	323	A	[1987STE/MAL, 1970VAL/KIL, 1984BOU/FRI]
	V		31.8	374		[1946SPI/PIT]
	V	(299–375)	34.9	314	MM	[1945WIL/TAY]
	V	(273–348)	36.1	288		[1940STU/SAY]
C ₇ H ₁₄	[1638-26-2]	1,1-dimethylcyclopentane				
	TRS		6.49	146.8		
	FUS		1.09	203.7		[1996DOM/HEA, 1953GRO/OLI]
	V	(284–363)	34.0	299	A	[1987STE/MAL]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		33.8	298		[1971WIL/ZWO]
	V	(289–362)	33.8	304		[1949FOR/NOR]
C ₇ H ₁₄	[1192-18-3]	<i>cis</i> -1,2-dimethylcyclopentane				
	TRS	(12–302)	6.65	141.5		
	FUS	(12–302)	1.66	219.4		[1996DOM/HEA, 1953GRO/OLI]
	V	(293–375)	35.5	308	A	[1987STE/MAL]
	V		35.8	298		[1971WIL/ZWO]
	V	(298–373)	35.2	313		[1949FOR/NOR]
C ₇ H ₁₄	[822-50-4]	<i>dl</i> - <i>trans</i> -1,2-dimethylcyclopentane				
	V	(295–367)	34.2	310	A	[1987STE/MAL]
	V		34.6	298		[1971WIL/ZWO]
C ₇ H ₁₄	[2532-58-3]	<i>cis</i> -1,3-dimethylcyclopentane				
	V	(295–366)	34.2	310	A	[1987STE/MAL]
	V		34.3	298		[1971WIL/ZWO]
	V		32.8 ± 0.1	323	C	[1959MCC/PEN]
	V		31.7 ± 0.1	342	C	[1959MCC/PEN]
	V	(299–366)	30.4 ± 0.1	364	C	[1959MCC/PEN]
C ₇ H ₁₄	[1759-58-6]	<i>dl</i> - <i>trans</i> -1,3-dimethylcyclopentane				
	FUS	(13–304)	7.41	139.5		[1996DOM/HEA, 1953GRO/OLI]
	V	(295–367)	34.0	310	A	[1987STE/MAL]
	V		34.5	298		[1971WIL/ZWO]
	V	(291–365)	34.2	306		[1949FOR/NOR]
	C ₇ H ₁₄	[1640-89-7]	ethylcyclopentane			
FUS		(12–302)	6.86	134.7		[1996DOM/HEA, 1953GRO/OLI]
V		(308–387)	35.5	323	A	[1987STE/MAL]
V		(386–507)	32.9	401	A	[1987STE/MAL]
V		(499–569)	31.9	514	A	[1987STE/MAL]
V			35.6 ± 0.1	313	C	[1981SVO/CHA]
V			34.8 ± 0.1	328	C	[1981SVO/CHA]
V			33.9 ± 0.1	343	C	[1981SVO/CHA]
V			33.0 ± 0.1	358	C	[1981SVO/CHA]
V			32.5 ± 0.1	368	C	[1981SVO/CHA]
V			36.5	298		[1971WIL/ZWO]
C ₇ H ₁₄	[592-76-7]	1-heptene				
	FUS (I)	(11–299)	12.40	154.3		
	FUS (II)	(11–299)	12.64	153.9	C	[1957MCC/FIN]
	FUS		12.64	153.4		[1996DOM/HEA, 1936PAR/TOD2]
	V	(311–368)	34.6	326	A	[1987STE/MAL]
	V	(327–367)	33.9	342		[1970EIS/ORA, 1984BOU/FRI]
	V		35.7	298		[1971WIL/ZWO]
	V	(295–318)	35.3	310	MM	[1950FOR/CAM]
	V	(255–312)	35.9	300		[1941LIS]
	V	(273–362)	34.5	288		[1936BEN/CUT]
	C ₇ H ₁₄	[6443-92-1]	<i>cis</i> -2-heptene			
V		(276–304)	39.0 ± 0.3	290	GS	[2000VER/WAN]
V		(276–304)	38.6	298	GS	[2000VER/WAN]
V		(315–372)	35.3	330	A	[1987STE/MAL]
V		(332–371)	34.6	347		[1970EIS/ORA, 1984BOU/FRI]
C ₇ H ₁₄	[14686-13-6]	<i>trans</i> -2-heptene				
	V	(314–373)	35.3	329	A	[1987STE/MAL]
	V		36.0	298		[1971WIL/ZWO]
	V	(331–370)	34.6	346		[1970EIS/ORA]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₄	[7642-10-6]	<i>cis</i> -3-heptene				
	V	(312–369)	35.0	327	A	[1987STE/MAL]
	V		35.6	298		[1971WIL/ZWO]
C ₇ H ₁₄	[14686-14-7]	<i>trans</i> -3-heptene				
	V	(312–368)	34.6	327	A	[1987STE/MAL]
	V		35.6	298		[1971WIL/ZWO]
C ₇ H ₁₄	[6094-02-6]	2-methyl-1-hexene				
	V	(318–390)	33.9	333	A	[1987STE/MAL, 1973DYK/REP]
	V		35.1	298		[1971WIL/ZWO]
C ₇ H ₁₄	[3404-61-3]	(<i>dl</i>)-3-methyl-1-hexene				
	V	(311–381)	33.4	326	A	[1987STE/MAL, 1973DYK/REP]
	V		34.3	298		[1971WIL/ZWO]
C ₇ H ₁₄	[3769-23-1]	(<i>dl</i>)-4-methyl-1-hexene				
	V	(313–384)	33.6	328	A	[1987STE/MAL, 1973DYK/REP]
	V		34.7	298		[1971WIL/ZWO]
C ₇ H ₁₄	[3524-73-0]	5-methyl-1-hexene				
	V	(313–393)	33.5	328	A	[1987STE/MAL, 1973DYK/REP]
	V		34.3	298		[1971WIL/ZWO]
C ₇ H ₁₄	[2738-19-4]	2-methyl-2-hexene				
	V	(322–394)	34.0	337	A	[1987STE/MAL, 1973DYK/REP]
	V		35.6	298		[1971WIL/ZWO]
C ₇ H ₁₄	[10574-36-4]	<i>cis</i> -3-methyl-2-hexene				
	V	(322–396)	34.2	337	A	[1987STE/MAL, 1973DYK/REP]
	V		35.6	298		[1971WIL/ZWO]
C ₇ H ₁₄	[20710-38-7]	<i>trans</i> -3-methyl-2-hexene				
	V	(321–394)	34.1	336	A	[1987STE/MAL, 1973DYK/REP]
	V		35.6	298		[1971WIL/ZWO]
C ₇ H ₁₄	[3683-19-0]	<i>cis</i> -4-methyl-2-hexene				
	V	(313–384)	33.5	328	A	[1987STE/MAL, 1973DYK/REP]
	V		34.7	298		[1971WIL/ZWO]
C ₇ H ₁₄	[3683-22-5]	<i>trans</i> -4-methyl-2-hexene				
	V	(314–385)	33.6	329	A	[1987STE/MAL, 1973DYK/REP]
	V		34.7	298		[1971WIL/ZWO]
C ₇ H ₁₄	[13151-17-2]	<i>cis</i> -5-methyl-2-hexene				
	V	(354–372)	32.6	363	A	[1987STE/MAL, 1973DYK/REP]
	V		34.7	298		[1971WIL/ZWO]
C ₇ H ₁₄	[3683-22-5]	<i>trans</i> -5-methyl-2-hexene				
	V	(315–386)	33.6	330	A	[1987STE/MAL, 1973DYK/REP]
	V		34.7	298		[1971WIL/ZWO]
C ₇ H ₁₄	[15840-60-5]	<i>cis</i> -2-methyl-3-hexene				
	V	(262–383)	36.1	277	A	[1987STE/MAL, 1973DYK/REP]
	V		34.3	298		[1971WIL/ZWO]
C ₇ H ₁₄	[692-24-0]	<i>trans</i> -2-methyl-3-hexene				
	V	(313–383)	33.5	328	A	[1987STE/MAL, 1973DYK/REP]
	V		34.3	298		[1971WIL/ZWO]
C ₇ H ₁₄	[4914-89-0]	<i>cis</i> -3-methyl-3-hexene				
	V	(307–375)	35.4	322	A	[1987STE/MAL]
	V		36.4	298		[1971WIL/ZWO]
C ₇ H ₁₄	[3899-36-3]	<i>trans</i> -3-methyl-3-hexene				
	V	(310–368)	34.8	325	A	[1987STE/MAL]
	V		35.8	298		[1971WIL/ZWO]
		(300–367)	35.3	315	MM	[1960CAM/ROS]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T_{m} (K)	Method	References
C ₇ H ₁₄	[3404-72-6]	(dl)-2,3-dimethylpent-1-ene				
	V	(311–382)	33.4	326	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₄	[10574-37-5]	2,3-dimethylpent-2-ene				
	V		34.3	298		[1971WIL/ZWO]
C ₇ H ₁₄	[2213-32-3]	2,4-dimethylpent-1-ene				
	V	(311–361)	32.3	326	A	[1987STE/MAL]
	V		33.1	298		[1971WIL/ZWO]
C ₇ H ₁₄		(289–355)	33.2	304	MM	[1960CAM/ROS]
	[3404-73-7]	3,3-dimethylpent-1-ene				
	V	(306–374)	33.0	321	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₄			33.5	298		[1971WIL/ZWO]
	[7385-78-6]	(dl)-3,4-dimethylpent-1-ene				
C ₇ H ₁₄	V	(309–378)	33.2	324	A	[1987STE/MAL, 1973DYK/REP]
	V		33.9	298		[1971WIL/ZWO]
C ₇ H ₁₄	[762-62-9]	4,4-dimethylpent-1-ene				
	V	(299–347)	31.0	314	A	[1987STE/MAL]
	V		31.2	298		[1971WIL/ZWO]
C ₇ H ₁₄		(290–346)	31.0	315	MM	[1960CAM/ROS]
	[10574-37-5]	2,3-dimethylpent-2-ene				
	V	(322–396)	34.2	337	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₄			35.6	298		[1971WIL/ZWO]
	[625-65-0]	2,4-dimethylpent-2-ene				
	V	(276–297)	35.2 ± 1.5	286	GS	[2000VER/WAN]
	V	(276–297)	34.5 ± 1.5	298	GS	[2000VER/WAN]
	V	(286–363)	34.5	301	A	[1987STE/MAL]
C ₇ H ₁₄			34.3	298		[1971WIL/ZWO]
		(292–357)	34.2	307	MM	[1960CAM/ROS]
	[4914-91-4]	<i>cis</i> -3,4-dimethylpent-2-ene				
	V	(316–387)	33.7	331	A	[1987STE/MAL, 1973DYK/REP]
	V		34.7	298		[1971WIL/ZWO]
C ₇ H ₁₄	[4914-92-5]	<i>trans</i> -3,4-dimethylpent-2-ene				
	V	(317–390)	33.9	332	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₄			35.1	298		[1971WIL/ZWO]
	[762-63-0]	<i>cis</i> -4,4-dimethylpent-2-ene				
	V	(303–355)	32.2	318	A	[1987STE/MAL]
C ₇ H ₁₄			32.6	298		[1971WIL/ZWO]
		(291–354)	32.6	306	MM	[1960CAM/ROS]
	[690-08-4]	<i>trans</i> -4,4-dimethylpent-2-ene				
C ₇ H ₁₄	V	(295–352)	32.8	310	A	[1987STE/MAL]
	V		32.8	298		[1971WIL/ZWO]
	V	(289–350)	33.0	304	MM	[1960CAM/ROS]
C ₇ H ₁₄	[7357-93-9]	2-ethyl-3-methyl-1-butene				
	V	(303–381)	33.8	318	A	[1987STE/MAL]
	V		34.3	298		[1971WIL/ZWO]
C ₇ H ₁₄		(290–360)	34.4	305	MM	[1960CAM/ROS]
	[3404-71-5]	2-ethyl-1-pentene				
	V	(267–392)	36.6	282	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₄			35.1	298		[1971WIL/ZWO]
	[4038-04-4]	3-ethyl-1-pentene				
C ₇ H ₁₄	V	(311–382)	33.4	326	A	[1987STE/MAL, 1973DYK/REP]
	V		34.3	298		[1971WIL/ZWO]
C ₇ H ₁₄	[816-79-5]	3-ethyl-2-pentene				
	V	(321–395)	34.1	336	A	[1987STE/MAL, 1973DYK/REP]
	V		35.6	298		[1971WIL/ZWO]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₄	[594-56-9]	2,3,3-trimethyl-1-butene				
	V	(288–353)	32.4	303	A	[1987STE/MAL]
	V		34.3	298		[1971WIL/ZWO]
	V	(288–351)	32.1	303	MM	[1960CAM/ROS]
C ₇ H ₁₄ Br ₂	[59104-79-9]	1,1-dibromoheptane				
	V	(395–548)	54.4	410	A, E	[1987STE/MAL, 1956MAN, 1970DYK/VAN]
C ₇ H ₁₄ Br ₂	[42474-21-5]	<i>dl</i> -1,2-dibromoheptane				
	V	(295–553)	52.9	310	A	[1987STE/MAL, 1973DYK/REP, 1999DYK/SVO]
	V	(295–355)	54.4	300		[1941LIS]
C ₇ H ₁₄ Cl ₂	[821-25-0]	1,1-dichloroheptane				
	V	(375–460)	53.5	298		[1987VAR/LOS2, 1991BAS/SVO]
	V	(364–510)	48.4	379	A, E	[1987STE/MAL, 1956MAN, 1970DYK/VAN]
C ₇ H ₁₄ Cl ₂	[10575-87-8]	1,2-dichloroheptane				
	V	(353–466)	49.0	368		[1999DYK/SVO]
	V	(350–470)	53.2	298		[1982VAR/PUC, 1991BAS/SVO]
C ₇ H ₁₄ Cl ₂	[821-76-1]	1,7-dichloroheptane				
	V	(406–491)	52.3	421		[1999DYK/SVO]
	V	(410–490)	61.2	298		[1988VAR/LOS, 1991BAS/SVO]
C ₇ H ₁₄ F ₂	[407-96-5]	1,1-difluoroheptane				
	V	(311–424)	41.1	326	A, E	[1987STE/MAL, 1956MAN, 1970DYK/VAN]
C ₇ H ₁₄ NO ₅ P	[6923-22-4] FUS	dimethyl (<i>E</i>)-1-methyl-2-methylcarbamoylvinyl phosphate				
			22.36	326.9	DSC	[1990DON/DRE]
C ₇ H ₁₄ N ₂	[5351-04-2]	3-(diethylamino)propionitrile				
	V	(338–470)	53.7	353	A	[1987STE/MAL]
C ₇ H ₁₄ N ₂	[82215-74-5]	2-(diethylamino)propionitrile				
	V	(278–315)	50.8 ± 0.3		GS	[1997WEL/VER]
C ₇ H ₁₄ N ₂	[2721-31-5]	3,3,5,5-tetramethyl-1-pyrazoline				
	SUB		61.6 ± 0.2	298		[1976ENG/MEL]
C ₇ H ₁₄ N ₂ O ₂	[37933-88-3]	<i>N</i> -acetyl L-valinamide				
	FUS		39.1	509	DSC	[1997ABA/PAL]
	FUS		41.3	509.0	DSC	[1990PUL/MAT]
	SUB		129.8 ± 1.9	376	C	[1999DEL/BAR]
	SUB		133.1 ± 2.2	298		[1999DEL/BAR]
	SUB	(391–425)	126 ± 2.0	418	TE	[1990PUL/MAT]
C ₇ H ₁₄ N ₂ O ₂	FUS	<i>N</i> -acetyl-DL- α -aminobutyric acid- <i>N'</i> -methylamide				
			24.71	434.8	DSC	[2014BAD/DEL]
C ₇ H ₁₄ N ₂ O ₂	[1740-56-3]	pimelamide				
	FUS		44.56	446.8	DSC	[2006BAD/DEL]
C ₇ H ₁₄ N ₂ O ₂ S	[116-06-3]	2-methyl-2(methylthio)propanal, <i>O</i> -[(methylamino)carbonyl]oxime				
	FUS		22.71	374	DSC	[1990DON/DRE]
	SUB	(298–323)	80.0	310	ME	[1987STE/MAL]
C ₇ H ₁₄ O	[5063-65-0]	1,2-epoxyheptane				
	V	(305–414)	45.5	320	A	[1987STE/MAL, 1970VOJ/CIH]
C ₇ H ₁₄ O	[502-41-0]	cycloheptanol				
	TRS		0.45	227.9		
	TRS		0.78	250.4		
	FUS		1.51	278.3	MDSC	[2003RUT/SAL]
	TRS		2.93	172.2		
	TRS		0.55	227.3		
	TRS		0.88	258.4		
	FUS		1.6	280.3		[1996DOM/HEA, 1972ADA/SUG]
	V	(284–323)	64.7	299	A	[1987STE/MAL]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(284–321)	67.4	299		[1975CAB/CON2]
C ₇ H ₁₄ O	[590-67-0]	1-methylcyclohexanol				
	FUS	(5–320)	14.32	299.4	AC	[1998KAB/BLO]
	FUS		10.87	299.2		[1985WIB/WAS]
	SUB		75.9 ± 0.4	291	C	[1998KAB/BLO]
	V	(340–430)	49.1	355	A	[1987STE/MAL]
C ₇ H ₁₄ O	[583-59-5]	2-methylcyclohexanol				
	V	(361–439)	51.7	376	EB	[2007PAL/ORO]
	V	(323–373)	63.3	298	CGC	[1995CHI/HOS]
C ₇ H ₁₄ O	[7443-70-1]	<i>cis</i> -2-methylcyclohexanol				
	V		61.8			[1975VIL/PER]
C ₇ H ₁₄ O	[591-23-1]	3-methylcyclohexanol				
	V	(323–373)	65.5	298	CGC	[1995CHI/HOS]
C ₇ H ₁₄ O	[24965-90-0]	(<i>dl</i>)- <i>cis</i> -3-methylcyclohexanol				
	V	(340–450)	54.3	355	A	[1987STE/MAL]
C ₇ H ₁₄ O	[23068-71-5]	(<i>dl</i>)- <i>trans</i> -3-methylcyclohexanol				
	V	(350–450)	50.0	365	A	[1987STE/MAL]
C ₇ H ₁₄ O	[589-91-3]	4-methylcyclohexanol				
	V	(323–373)	65.9	298	CGC	[1995CHI/HOS]
C ₇ H ₁₄ O	[7731-28-4]	<i>cis</i> -4-methylcyclohexanol				
	V	(340–450)	49.9	355	A	[1987STE/MAL]
C ₇ H ₁₄ O	[7731-29-5]	<i>trans</i> -4-methylcyclohexanol				
	V	(340–350)	52.1	355	A	[1987STE/MAL]
C ₇ H ₁₄ O	[1462-96-0]	1-ethyl-1-cyclopentanol				
	V	(347–426)	58.4	362	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₄ O	[110-43-0]	2-heptanone				
	FUS		19.71	237.7	TCC	[1996FIE/JOH]
	V	(343–383)	46.1	298	CGC	[1995CHI/HOS]
	V	(343–383)	48.5	298	CGC	[1995CHI/HOS]
	V	(303–424)	47.5	318	A	[1987STE/MAL]
	V	(449–480)	39.1	464	A	[1987STE/MAL]
	V		46.1 ± 0.7	298	C	[1981GAT/STR]
	V		47.4 ± 0.3	298	GCC	[1979SAL/PEA]
	V		47.2 ± 0.1	298	C	[1979SUN/SVE2]
	V	(327–457)	44.7	342	A	[1987STE/MAL, 1975AMB/ELL]
V		48.0	298		[1975AMB/ELL]	
C ₇ H ₁₄ O	[123-19-3]	3-heptanone				
	FUS		17.53	236	TCC	[1996FIE/JOH]
C ₇ H ₁₄ O	[123-19-3]	4-heptanone				
	FUS		16.16	240.2	TCC	[1996FIE/JOH]
	V	(343–383)	47.8	298	CGC	[1995CHI/HOS]
	V		46.2 ± 0.4	298	GCC	[1979SAL/PEA]
	V	(304–490)	45.5	319	A	[1987STE/MAL, 1975AMB/ELL]
	V		46.7	298		[1975AMB/ELL]
	V	(296–417)	57.5	311	A	[1987STE/MAL, 1947STU]
	V	(283–323)	40.7	303		[1937RIN/SAY]
C ₇ H ₁₄ O	[7379-12-6]	2-methyl-3-hexanone				
	V	(296–406)	41.3	311	A	[1987STE/MAL]
C ₇ H ₁₄ O	[564-04-5]	2,2-dimethyl-3-pentanone				
	V		42.3 ± 0.1	298	C	[1970SEL2]
	V		42.3 ± 0.1	298	C	[1966WAD]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₄ O	[565-80-0]	2,4-dimethyl-3-pentanone				
	FUS	(11–319)	11.2	204.8	AC	[1996DOM/HEA, 1970AND/COU]
	V		43.4 ± 0.5	298	C	[1981GAT/STR]
	V	(321–399)	39.4	336	A	[1987STE/MAL, 1973DYK/REP]
	V		41.6 ± 0.1	298	C	[1970SEL2]
	V		41.5 ± 0.1	298	C	[1966WAD]
C ₇ H ₁₄ O	[111-71-7]	heptanal				
	FUS		22.89	229.3		[1980DYA/VAS]
	V	(313–353)	48.7	298	CGC	[1995CHI/HOS]
	V		47.3 ± 0.1	298		[1981DYA/KOR]
	V		48.0 ± 1.3	298	EB	[1960NIC, 2003VER/KRA2]
	V	(285–428)	62.0	300		[1947STU]
C ₇ H ₁₄ O	[19269-28-4]	3-methylhexanal				
V	(314–417)	42.8	329	EB	[1987MIL/FEN]	
C ₇ H ₁₄ O	[19353-21-0]	3,4-dimethylpentanal				
V	(319–417)	42.4	334	EB	[1987MIL/FEN]	
C ₇ H ₁₄ O ₂	[931-94-2]	1,1-dimethoxycyclopentane				
	V	(278–318)	44.5 ± 0.3	298	GS	[1998VER/PEN, 2002VER]
	V	(307–343)	46.1	325	EB	[1994WIB/MOR]
C ₇ H ₁₄ O ₂	[629-33-4]	hexyl formate				
	V	(275–313)	50.3	294	GS	[2012SAM/NAZ]
	V	(275–313)	50.0 ± 0.3	298	GS	[2012SAM/NAZ]
C ₇ H ₁₄ O ₂	[106-70-7]	methyl hexanoate				
	V		47.4 ± 1.6	298	CGC	[2015KOZ/GOB]
	V	(281–331)	48.4 ± 0.2	298	GS	[2008VER/EME]
	V		45.2	350		[2002VAN/VAN]
	V		46.4 ± 0.1	325		[2002VAN/VAN]
	V		47.7 ± 0.1	298		[2002VAN/VAN]
	V	(313–363)	47.9	298	CGC	[1995CHI/HOS]
	V	(313–353)	48.2	298	CGC	[1995CHI/HOS]
	V		47.8 ± 0.5	298	GC	[1987AZA]
	V		48.7 ± 0.3	298	GCC	[1980FUC/PEA]
	V		48.0 ± 0.1	298	C	[1977MAN/SEL]
	V	(315–383)	45.3	330	A	[1987STE/MAL, 1963ROS/SCH]
C ₇ H ₁₄ O ₂	[590-01-2]	butyl propanoate				
	V	(382–425)	40.3	400		[2005ORT/ESP]
	V	(350–450)	40.9	375	EB	[1995GON/ORT]
	V	(305–417)	49.1	320	A	[1987STE/MAL]
	V	(305–365)	47.4	320	EB	[1959USA/DEM2, 1984BOU/FRI]
	V	(305–365)	50.4 ± 0.2	298	EB	[1959USA/DEM2, 2012SAM/NAZ]
	V		39.1 ± 0.4	418	C	[1926MAT]
	V		48.5 ± 0.4	298	C	[1926MAT, 2012SAM/NAZ]
C ₇ H ₁₄ O ₂	[3938-95-2]	ethyl pivalate				
	V	(308–429)	39.8 ± 0.1	320	EB	[2002STE/CHI4]
	V	(308–429)	36.9 ± 0.2	360	EB	[2002STE/CHI4]
	V	(308–429)	33.8 ± 0.6	400	EB	[2002STE/CHI4]
	V		41.3 ± 0.1	298	C	[1966WAD]
C ₇ H ₁₄ O ₂	[539-82-2]	ethyl valerate				
	FUS	(5–370)	12.97	181.3	AC	[2011AGA/VAR]
	V		48.2 ± 0.7	298	EB	[2011AGA/VAR]
	V		47.0 ± 0.1	298	C	[1986NIL/WAD]
C ₇ H ₁₄ O ₂	[108-64-5]	ethyl isovalerate				
	V	(301–418)	42.8	316	A	[1987STE/MAL]
	V	(267–407)	44.5	282		[1947STU]
C ₇ H ₁₄ O ₂	[540-42-1]	isobutyl propionate				

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(271–410)	44.9	286	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₄ O ₂	[123-92-2]	isopentyl acetate				
	V	(226–442)	46.4	300		[1999DIA/GUE]
	V	(278–305)	46.8 ± 0.2	292	GS	[1999VER/HEI]
	V	(278–305)	46.4 ± 0.2	298	GS	[1999VER/HEI]
	V	(308–424)	44.3	323	A	[1987STE/MAL]
	V	(313–368)	45.1	328		[1959TER/BRI, 1984BOU/FRI]
C ₇ H ₁₄ O ₂	[617-50-5]	isopropyl isobutyrate				
	V	(257–394)	43.3	272	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₄ O ₂	[107-70-0]	4-methoxy-4-methyl-2-pentanone				
	V	(343–423)	45.0	358	A	[1987STE/MAL]
C ₇ H ₁₄ O ₂	[10250-48-3]	methyl <i>tert</i> -butylacetate				
	V	(274–313)	43.9 ± 0.2	298	GS	[2008VER/EME]
	V	(274–313)	44.4 ± 0.2	298	GS	[1996VER/BEC]
C ₇ H ₁₄ O ₂	[926-41-0]	neopentyl acetate				
	V	(301–400)	49.1	316	A	[1987STE/MAL, 1940QUA/NOR]
C ₇ H ₁₄ O ₂	[625-16-1]	<i>tert</i> -pentyl acetate				
	V	(274–308)	40.3	298	GS	[2008VER/EME]
	V		42.8	298	CGC	[1999VER/HEI]
	V	(274–308)	42.8 ± 0.3	298	GS	[1996VER/BEC]
C ₇ H ₁₄ O ₂	[628-63-7]	pentyl acetate				
	V	(274–328)	48.5	301	GS	[2012SAM/NAZ]
	V	(274–328)	48.0 ± 0.2	298	GS	[2012SAM/NAZ]
	V	(321–462)	48.6 ± 0.4	298	EB	[1996STE/CHI]
	V	(329–423)	43.2	344	A	[1987STE/MAL]
	V	(330–380)	45.0	355	DTA	[1941DAV, 2012SAM/NAZ]
	V	(330–380)	49.3	298	DTA	[1941DAV, 2012SAM/NAZ]
C ₇ H ₁₄ O ₂	[105-66-8]	propyl butyrate				
	V	(390–430)	39.6	405		[1995ORT/GAL]
	V	(355–416)	42.0	370		[1993FAR/WIC]
	V	(271–416)	44.3	286	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₄ O ₂	[644-49-5]	propyl isobutyrate				
	V	(267–407)	50.5	282	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₄ O ₂	[7452-79-1]	ethyl 2-methylbutanoate				
	V	(362–430)	40.1	380		[2014MEN/BEJ]
	V	(288–308)	44.7 ± 0.3	298	GS	[1992VER/BEC]
C ₇ H ₁₄ O ₂	[2426-08-6]	butyl glycidyl ether				
	V		53.3 ± 0.4			[1987VAN/KAC]
C ₇ H ₁₄ O ₂	[7665-72-7]	<i>tert</i> -butyl glycidyl ether				
	V		50.2 ± 0.4			[1987VAN/KAC]
C ₇ H ₁₄ O ₂	[696-79-7]	2,2,4-trimethyl-1,3-dioxane				
	V		41.9 ± 1.2	298		[1967PIH/HEI]
C ₇ H ₁₄ O ₂	[4352-98-1]	2-methyl-2-propyl-1,3-dioxolane				
	V	(278–313)	46.3 ± 0.3	298	GS	[1998VER/PEN, 2002VER]
C ₇ H ₁₄ O ₂	[4405-16-7]	2-methyl-2-isopropyl-1,3-dioxolane				
	V	(274–303)	43.9 ± 0.2	298	GS	[2002VER]
	V	(273–303)	44.6 ± 0.2	298	GS	[1998VER/PEN]
C ₇ H ₁₄ O ₂	[3814-55-9]	[(1-methylpropoxy)methyl]oxirane				
	V		45.2 ± 1.8			[1987VAN/KAC]
C ₇ H ₁₄ O ₂	[111-14-8]	heptanoic acid				
	TRS		2.16	220		
	FUS		15.13	266		[1996DOM/HEA, 1991LAB/WES]
	TRS	(105–305)	2.04	224.8		

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS	(105–305)	15.44	265.8	AC	[1996DOM/HEA, 1982SCH/VAN2]
	V	(413–453)	69.0	428		[2004CLI/RAM]
	V	(283–328)	72.5 ± 0.8	306	GS	[2000VER2]
	V	(283–328)	72.9 ± 0.8	298	GS	[2000VER2]
	V	(353–393)	75.7	298	CGC	[1995CHI/HOS]
	V		76.0	266		[1982DEK/SCH]
	V	(271–291)	72.0 ± 1.5	298	TE	[1979DEK/OON]
	V	(351–495)	68.3	366	A	[1987STE/MAL, 1947STU]
C ₇ H ₁₄ O ₃	[33415-52-0]	<i>tert</i> -butylperoxymethyloxirane				
	V		53.9 ± 0.4			[1987VAN/KAC]
C ₇ H ₁₄ O ₃	[20706-25-6]	2-propoxyethylacetate				
	V		55.6 ± 0.1	298	C	[1970KUS/WAD]
C ₇ H ₁₄ O ₃	[138-22-7]	<i>dl</i> -butyl lactate				
	V	(303–378)	53.2	318		[2014LOM/GIN]
	V	(391–460)	49.9	406		[2005PEN/MUR]
	V	(339–456)	58.7	354	A	[1987STE/MAL, 1950REH/DIX]
C ₇ H ₁₄ O ₃	[763-69-9]	3-ethoxypropionic acid, ethyl ester				
	V	(312–446)	45.5	327	A	[1987STE/MAL, 1948DIX/REH]
C ₇ H ₁₄ O ₃		1-heptene ozonide				
	V	(353–373)	44.4	363	A	[1987STE/MAL, 1977BOL/MAK]
C ₇ H ₁₄ O ₃	[2018-45-3]	4-(2-hydroxyethyl)-4-methyl-1,3-dioxane				
	V	(329–455)	51.7	344	A	[1987STE/MAL]
C ₇ H ₁₄ O ₃	[34451-19-9]	3-hydroxypropionic acid, butyl ester				
	V	(361–382)	60.3	371	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₄ O ₃	[5349-56-4]	3-methoxypropionic acid, propyl ester				
	V	(323–433)	47.0	338	A	[1987STE/MAL]
C ₇ H ₁₄ O ₃	[14144-39-9]	3-propoxypropionic acid, methyl ester				
	V	(323–453)	46.6	338	A	[1987STE/MAL]
C ₇ H ₁₄ O ₃	[557-25-5]	<i>dl</i> -butyric acid, 2,3-dihydroxypropyl ester				
	V	(392–449)	80.4	407	A	[1987STE/MAL]
C ₇ H ₁₄ O ₃	[14620-87-2]	2-butoxypropionic acid				
	V	(373–473)	52.8	388	A	[1987STE/MAL, 1973DYK/REP]
C ₇ H ₁₄ O ₃	[623-96-1]	dipropyl carbonate				
	V	(274–318)	53.2 ± 0.3	298	GS	[2008KOZ/EME]
C ₇ H ₁₄ O ₆	[13224-94-7]	3-methoxy- α -(D)-glucopyranoside				
	FUS		41.3	425.6	DSC	[1996SCH]
C ₇ H ₁₄ O ₆	[617-04-9]	methyl α -(D)-mannopyranoside				
	FUS		44.7	455.2	DSC	[1996SCH]
C ₇ H ₁₄ O ₆	[97-30-3]	methyl- α -(D)-glucopyranoside				
	FUS		28.04	442.3	DSC	[2016YAN/WAN]
	FUS		35.11	436	DSC	[2000AGU/GUA]
	FUS		37.6	424.2	DSC	[1996SCH]
C ₇ H ₁₄ O ₆	[709-50-2]	methyl- β -(D)-glucopyranoside				
	FUS		27.03	384.9	DSC	[2000AGU/GUA]
C ₇ H ₁₄ O ₆	[3396-99-4]	methyl- α -(D)-galactopyranoside				
	FUS		27.95	397.6	DSC	[2000AGU/GUA]
C ₇ H ₁₄ O ₆	[1824-94-8]	methyl- β -(D)-galactopyranoside				
	FUS		33.18	450.9	DSC	[2000AGU/GUA]
C ₇ H ₁₄ S	[37850-75-2]	allyl <i>tert</i> -butyl sulfide				
	V	(319–339)	41.9	332		[1999DYK/SVO]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(319–339)	43.1	329	A, EB	[1987STE/MAL, 1962MAC/MAY3]
	V	(319–339)	44.8	298	EB	[1962MAC/MAY3]
C ₇ H ₁₅ Br	[629-04-9]	1-bromoheptane				
	FUS		21.76	214.4		[1950CRO/SMY]
	V	(341–481)	47.0	356		[1999DYK/SVO]
	V	(323–363)	50.2	298	CGC	[1995CHI/HOS]
	V		50.8 ± 0.1	298	C	[1968WAD]
	V		50.4 ± 0.2	298	C	[1966WAD]
C ₇ H ₁₅ Br	[1974-04-5]	(<i>dl</i>)-2-bromoheptane				
	V	(333–440)	45.0	348	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₁₅ Cl	[629-06-1]	1-chloroheptane				
	V	(326–462)	45.1	341		[1999DYK/SVO]
	V	(313–353)	47.9	298	CGC	[1995CHI/HOS]
	V	(300–430)	47.0	298		[1984BOU/FRI, 1991BAS/SVO]
	V	(307–434)	46.9	322	A, DTA	[1987STE/MAL, 1969KEM/KRE]
C ₇ H ₁₅ Cl	[1001-89-4]	(<i>dl</i>)-2-chloroheptane				
	V	(313–424)	44.8	328	A	[1987STE/MAL, 1999DYK/SVO]
C ₇ H ₁₅ Cl ₂ N	[52802-03-6]	<i>N</i> -methyl-bis(2-chloropropyl)amine				
	V	(273–333)	54.6	288	A, GS	[1987STE/MAL, 1948RED/CHA3, 1973DYK/REP]
C ₇ H ₁₅ Cl ₂ N	[621-68-1]	<i>N</i> -propyl-bis(2-chloroethyl)amine				
	V	(273–369)	56.8	288	A, GS	[1987STE/MAL, 1948RED/CHA3, 1973DYK/REP]
C ₇ H ₁₅ Cl ₂ N ₂ O ₂ P	[50-18-0]	2-[bis(2-chloroethyl)amino]tetrahydro-2 <i>H</i> -1,3,2-oxazophosphorine-2-oxide				
	FUS		33.13	322.6	DSC	[1990DON/DRE]
C ₇ H ₁₅ F	[661-11-0]	1-fluoroheptane				
	V	(294–416)	40.3	309		[1999VER2]
	V	(287–417)	40.8	302	A, E	[1987STE/MAL, 1961LI/ROS]
C ₇ H ₁₅ I	[4282-40-0]	1-iodoheptane				
	V	(373–513)	55.0	298		[2006BOL/NER, 1961LI/ROS]
	V	(373–513)	47.8	388	A, E	[1987STE/MAL, 1961LI/ROS, 1970DYK/VAN]
C ₇ H ₁₅ N	[100-60-7]	<i>N</i> -methylcyclohexylamine				
	V	(275–314)	46.6 ± 0.2	295	EB	[2015VER/EME3]
	V	(275–314)	46.4 ± 0.3	298	EB	[2015VER/EME3]
C ₇ H ₁₅ N	[766-09-6]	<i>N</i> -ethylpiperidine				
	V	(274–313)	41.1 ± 0.6	294	GS	[1998VER6]
	V	(274–313)	40.8 ± 0.6	298	GS	[1998VER6]
C ₇ H ₁₅ N	[766-09-6]	1-ethylpiperidine				
	V		39.4 ± 0.7	298	C	[2006RIB/CAB6]
C ₇ H ₁₅ N	[1484-80-6]	2-ethylpiperidine				
	V		42.2 ± 0.9	298	C	[2006RIB/CAB6]
C ₇ H ₁₅ N	[766-17-6]	<i>cis</i> -2,6-dimethylpiperidine				
	V		43.1 ± 2.1	298	CGC	[2014THO/GOB]
	V	(295–365)	39.7 ± 0.1	330		[2009MOK/RAZ]
	V	(295–365)	41.3 ± 0.1	298		[2009MOK/RAZ]
	V		42.4 ± 0.6	298	C	[2006RIB/CAB5]
C ₇ H ₁₅ N	[35794-11-7]	3,5-dimethylpiperidine				
	V		49.1 ± 0.6	298	C	[2006RIB/CAB5]
C ₇ H ₁₅ N	[1121-92-2]	octahydroazocine				

[Note: The authors indicate that the compound is *cis*-2,6-dimethylpiperidine; however they give the CAS registry number of 504-03-0 (which does not specify *cis*- or *trans*-isomer).]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(273–313)	46.5	288	A	[1987STE/MAL]
C ₇ H ₁₅ NO	[3040-44-6]	1-piperidineethanol				
	V		64.2 ± 0.8	298	C	[2006RIB/CAB4]
C ₇ H ₁₅ NO	[1484-84-0]	2-piperidineethanol				
	V		75.2 ± 0.5	298	C	[2006RIB/CAB4]
C ₇ H ₁₅ NO	[20845-34-5]	1-methyl-2-piperidinemethanol				
	V		68.2 ± 0.7	298	C	[2006RIB/CAB4]
C ₇ H ₁₅ NO	[13444-24-1]	1-ethyl-3-piperidinol				
	V		68.5 ± 0.8	298	C	[2006RIB/CAB2]
C ₇ H ₁₅ NO	[24331-71-3]	<i>N, N</i> -dimethyl- <i>tert</i> -butylcarboxamide				
	V		55.1 ± 0.4	298	ME	[1995ABB/JIM, 1993ABB/JIM]
C ₇ H ₁₅ NO	[1620-14-0]	1-(diethylamino)-2-propanone				
	V	(278–318)	47.7 ± 0.3	298	GS	[1994WEL/VER]
C ₇ H ₁₅ NO	[628-62-6]	heptanamide (enanthamide)				
	TRS		7.5	319.0		
	TRS		3.4	356.1		
	FUS		16.2	368.6	DSC	[2013GUT/RAT]
	SUB	(345–365)	99.6			[1954SER/VOI, 1960JON, 1987STE/MAL]
	V		82.3 ± 5.4	298	CGC	[2013GUT/RAT]
C ₇ H ₁₅ NO	[140653-59-4]	methyl 2-(<i>N, N</i> -dimethylamino)-2-methylpropanoate				
	V	(278–308)	49.2 ± 1.0	293	GS	[1992VER/BEC]
C ₇ H ₁₅ NO ₂	[3328-88-9]	lactic acid <i>N</i> -butylamide				
	V	(365–433)	77.4	380	A	[1987STE/MAL, 1950RAT]
C ₇ H ₁₅ NO ₂	[5422-35-5]	lactic acid <i>N-sec</i> -butylamide				
	V	(368–418)	74.6	383	A	[1987STE/MAL, 1950RAT/FIS]
C ₇ H ₁₅ NO ₂	[5422-36-6]	lactic acid <i>N</i> -isobutylamide				
	V	(388–418)	73.5	403	A	[1987STE/MAL, 1950RAT/FIS]
C ₇ H ₁₅ NO ₂	[2666-93-5]	(<i>l</i>) leucine methyl ester				
	V	(320–353)	39.4	366	A	[1987STE/MAL]
C ₇ H ₁₅ NO ₂	[2114-20-7]	hexyl carbamate				
	SUB	(291–314)	96.2 ± 0.8		ME	[1959DAV/JON]
C ₇ H ₁₅ NO ₄	[69567-10-8]	<i>N</i> -methyl-5-amino-1,5-dideoxy-(α)-glycopyranose				
	FUS		27.5	425.7	DSC	[1994BLU/PRA]
C ₇ H ₁₆	[142-82-5]	heptane				
	FUS	(5–350)	14.05	182.5	AC	[2011BIS/GOG]
	FUS		13.99	182.6	AC	[1987VAN/VAN]
	FUS		14.05	182.6	AC	[1979SCH/OFF]
	FUS		14.06	182.7		[1977MEI/BLO]
	FUS	(155–270)	14.06	182.56	AC	[1972VAN]
	FUS		14.03	182.6		[1963OET]
	FUS		14.04	182.6		[1996DOM/HEA, 1961HUF/GRO, 1961MCC/MES]
	FUS		14.06	182.6	C	[1955TUN/STO]
	FUS	(20–370)	14.02	182.6	AC	[1954DOU/FUR]
	FUS		14.04	182.5		[1940PIT]
	FUS		14.16	182.2		[1930PAR/HUF]
	SUB		57.9	183	B	[1963BON]
	V	(319–371)	35.4	325		[2011MEJ/SEG]
	V	(330–371)	34.7	345		[2002SEG/WIS]
	V	(328–393)	35.2	343		[2001ORT/GON]
	V		36.6	298		[1994RUZ/MAJ]
	V	(298–363)	36.1	313		[1984SIP/WIE]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(298–338)	36.1	313		[1984MIC/JOS]
	V	(316–371)	35.3	331	EB	[1983PAL/CHO]
	V		36.6 ± 0.1	298	C	[1979MAJ/SVO]
	V		35.6 ± 0.1	313	C	[1979MAJ/SVO]
	V		34.4 ± 0.1	333	C	[1979MAJ/SVO]
	V		33.1 ± 0.1	353	C	[1979MAJ/SVO]
	V	(278–353)	36.9	298		[1979JAK/TZI]
	V		36.55	298		[1971WIL/ZWO]
	V	(333–371)	34.5	350		[1971LET/BAY]
	V	(288–348)	36.4	303		[1967VAN/SOC]
	V	(297–375)	36.1	312	A	[1987STE/MAL, 1949FOR/NOR]
	V		34.5 ± 0.1	331	C	[1947WAD/TOD]
	V		33.2 ± 0.1	350	C	[1947WAD/TOD]
	V	(313–398)	35.4	328		[1946THO]
	V	(299–372)	36.0	314	MM	[1945WIL/TAY]
	V		32.0	371	C	[1940PIT]
	V	(310–397)	35.5	325	EB	[1940SMI]
C ₇ H ₁₆	[591-76-4] FUS	2-methylhexane	9.18	154.9		[1996DOM/HEA, 1961HUF/GRO]
	V	(296–365)	34.6	311	A	[1987STE/MAL]
	V		34.9 ± 0.1	298	C	[1979MAJ/SVO]
	V		33.9 ± 0.1	313	C	[1979MAJ/SVO]
	V		32.7 ± 0.1	333	C	[1979MAJ/SVO]
	V		31.3 ± 0.1	353	C	[1979MAJ/SVO]
	V		34.8	298		[1971WIL/ZWO]
	V	(273–318)	34.8	298		[1961HUF/GRO]
	V	(291–364)	34.8	306		[1949FOR/NOR]
C ₇ H ₁₆	[589-34-4]	(<i>dl</i>)-3-methylhexane				
	V	(289–366)	35.1	304	A	[1987STE/MAL]
	V		35.1 ± 0.1	298	C	[1979MAJ/SVO]
	V		34.2 ± 0.1	313	C	[1979MAJ/SVO]
	V		32.9 ± 0.1	333	C	[1979MAJ/SVO]
	V		31.7 ± 0.1	353	C	[1979MAJ/SVO]
	V		35.1	298		[1971WIL/ZWO]
	V	(293–366)	34.9	308		[1949FOR/NOR]
C ₇ H ₁₆	[590-35-2] FUS FUS	2,2-dimethylpentane	5.82 5.86	149.4 148.1		[1961HUF/GRO] [1991ACR, 1983WEA, 1930HUF/PAR]
	V		32.4 ± 0.1	298	C	[1998SVO/HYN]
	V		31.8 ± 0.1	308	C	[1998SVO/HYN]
	V		31.4 ± 0.1	315	C	[1998SVO/HYN]
	V		31.0 ± 0.1	323	C	[1998SVO/HYN]
	V		30.5 ± 0.1	330	C	[1998SVO/HYN]
	V		30.1 ± 0.1	338	C	[1998SVO/HYN]
	V		29.4 ± 0.1	348	C	[1998SVO/HYN]
	V		28.8 ± 0.1	358	C	[1998SVO/HYN]
	V		28.1 ± 0.1	368	C	[1998SVO/HYN]
	V	(277–354)	33.2	292	A	[1987STE/MAL]
	V	(353–483)	30.1	368	A	[1987STE/MAL]
	V	(285–353)	32.8	300		[1949FOR/NOR]
	V		32.4 ± 0.1	298	C	[1947OSB/GIN]
	V		32.2 ± 0.1	298	C	[1947OSB/GIN]
	V	(288–353)	32.6	303	MM	[1945WIL/TAY]
C ₇ H ₁₆	[565-59-3]	(<i>dl</i>)-2,3-dimethylpentane				
	V	(309–371)	33.0	324		[1999MON/DEL]
	V	(208–286)	35.9	271	A	[1987STE/MAL]
	V		34.3 ± 0.1	298	C	[1979MAJ/SVO]
	V		33.4 ± 0.1	313	C	[1979MAJ/SVO]
	V		32.2 ± 0.1	333	C	[1979MAJ/SVO]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		31.1 ± 0.1	353	C	[1979MAJ/SVO]
	V	(286–365)	34.5	301		[1987STE/MAL, 1973DYK/REP]
	V	(291–364)	34.4	306		[1949FOR/NOR]
	V		34.2 ± 0.1	298	C	[1947OSB/GIN]
C ₇ H ₁₆	[108-08-7]	2,4-dimethylpentane				
	FUS		6.85	154.0		[1996DOM/HEA, 1961HUF/GRO]
	FUS		6.69	152.2		[1996DOM/HEA, 1930HUF/PAR]
	V		32.7 ± 0.1	298	C	[1998SVO/HYN]
	V		32.3 ± 0.1	308	C	[1998SVO/HYN]
	V		31.9 ± 0.1	315	C	[1998SVO/HYN]
	V		31.5 ± 0.1	323	C	[1998SVO/HYN]
	V		31.0 ± 0.1	330	C	[1998SVO/HYN]
	V		30.6 ± 0.1	338	C	[1998SVO/HYN]
	V		30.0 ± 0.1	348	C	[1998SVO/HYN]
	V	(284–355)	33.3	299	A	[1987STE/MAL, 1973DYK/REP]
V	(287–354)	33.2	302		[1949FOR/NOR]	
V		32.9 ± 0.1	298	C	[1947OSB/GIN]	
C ₇ H ₁₆	[562-49-2]	3,3-dimethylpentane				
	FUS (I)		7.64	138.2		
	FUS (II)		6.85	138.8	AC	[1996DOM/HEA, 1976FIN/MES]
	FUS		7.07	138.2		[1930HUF/PAR]
	V	(213–281)	34.8	266		[1987STE/MAL]
	V	(280–360)	33.6	295		[1987STE/MAL]
	V		33.0 ± 0.1	298	C	[1981HOS/SCO2]
	V		33.0	298		[1971WIL/ZWO]
	V	(287–360)	33.2	302		[1949FOR/NOR]
	V		33.0 ± 0.1	298	C	[1947OSB/GIN]
	V	(285–360)	33.3	300	MM	[1987STE/MAL, 1945WIL/TAY]
C ₇ H ₁₆	[617-78-7]	3-ethylpentane				
	FUS		9.55	154.6		[1996DOM/HEA, 1961HUF/GRO]
	FUS		9.46	154.3		[1996DOM/HEA, 1930HUF/PAR]
	V		35.1 ± 0.1	298	C	[1998SVO/HYN]
	V		34.5 ± 0.1	308	C	[1998SVO/HYN]
	V		34.1 ± 0.1	315	C	[1998SVO/HYN]
	V		33.7 ± 0.1	232	C	[1998SVO/HYN]
	V		33.3 ± 0.1	330	C	[1998SVO/HYN]
	V		32.7 ± 0.1	338	C	[1998SVO/HYN]
	V		32.2 ± 0.1	348	C	[1998SVO/HYN]
	V	(291–368)	35.2	306	A	[1987STE/MAL]
	V		35.2	298		[1971WIL/ZWO]
	V		35.2 ± 0.1	298	C	[1947OSB/GIN]
V	(294–367)	35.0	309		[1945WIL/TAY]	
V	(308–391)	34.4	323	EB	[1941SMI, 1984BOU/FRI]	
C ₇ H ₁₆	[464-06-2]	2,2,3-trimethylbutane				
	TRS		2.38	121		
	FUS		2.2	247.7		[1996DOM/HEA, 1930HUF/PAR]
	V	(284–355)	32.4	299	A	[1987STE/MAL]
	V	(353–483)	29.9	368	A	[1987STE/MAL]
	V		32	298		[1971WIL/ZWO]
	V	(286–355)	32.3	301		[1949FOR/NOR]
	V		31.2 ± 0.1	314	C	[1947WAD/TOD]
V	(296–378)	31.9	311	EB	[1941SMI]	
C ₇ H ₁₆ N ₂ O	[2158-11-4]	1-hexyl urea				
	FUS		22.4	383	DSC	[2005HAS/TAJ]
	FUS		26.5	380.2	DSC	[1999WEL/DRU]
C ₇ H ₁₆ N ₂ S	[26536-60-7]	1,3-propylthiourea				
FUS		22.9	342.6	DSC	[2000DEL/JOZ]	

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
		SUB	134.9 ± 3.0	298	B	[2000DEL/JOZ]
		SUB	132.5 ± 3.0	298	C	[1994TER/PIA]
		V	(346–394)	107.0 ± 3.0	370	ME, TE
C ₇ H ₁₆ N ₄ O ₄	[503152-73-6]	<i>N,N'</i> -bis(1-methylethyl)- <i>N,N'</i> -dinitromethanediamine				
	FUS		27.96	358.3	DSC	[2003SPI/WAN]
C ₇ H ₁₆ O	[919-94-8]	<i>tert</i> -amyl ethyl ether				
	V		39.2 ± 0.4	298	GS	[UR/VER, 2002VER, 2003VER/KRA]
	V		38.2 ± 0.2	298	C	[2002VAR/PAS]
	V	(318–374)	35.7	333	EB	[2002VAR/PAS]
	V	(320–374)	35.6	335	EB	[1994KRA/GME]
C ₇ H ₁₆ O	[29072-93-3]	propyl <i>tert</i> -butyl ether				
	FUS		9.87	179.6		[2001VAR/DRU, 2004DOR/YAN]
	V		38.3	298	CGC	[UR/VER, 2002VER, 2003VER/KRA]
	V	(315–370)	37.2 ± 0.6	298	EB	[2002VAR/PAS2]
	V		36.6 ± 0.2	298	C	[2002VAR/PAS2, 2004DOR/YAN]
C ₇ H ₁₆ O	[17348-59-3]	isopropyl <i>tert</i> -butyl ether				
	FUS		8.46	184.8		[2001VAR/DRU, 2004DOR/YAN]
	V		36.2	298	CGC	[UR/VER, 2002VER, 2003VER/KRA]
	V	(305–360)	34.4 ± 0.6	298	EB	[2002VAR/PAS2]
	V		34.5 ± 0.2	298	C	[2002VAR/PAS2, 2004DOR/YAN]
	V	(307–360)	34.0	322	EB	[1994KRA/GME]
C ₇ H ₁₆ O	[111-70-6]	1-heptanol				
	FUS	(5–370)	18.35	239.9		[2003VAN/GAB]
	FUS	(78–300)	18.16	240.4		[1996DOM/HEA, 1956PAR/KEN]
	V	(382–453)	55.1	397	EB	[2010CEN/ROH]
	V	(348–443)	67.1	298		[2006NAS/NEU]
	V	(283–323)	66.9 ± 0.4	298	GS	[2005ROG/PIS]
	V	(323–373)	66.5	298	CGC	[1995CHI/HOS]
	V	(373–423)	66.4	298	CGC	[1995CHI/HOS]
	V	(258–363)	65.2	310		[1992NGU/KAS]
	V	(335–450)	62.5	350	A	[1987STE/MAL]
	V		66.8 ± 0.2	298	C	[1977MAN/SEL]
	V	(333–449)	65.2	348		[1973WIL/ZWO]
	V	(336–450)	62.6	351	DTA	[1987STE/MAL, 1969KEM/KRE]
	V	(333–425)	62.9	348		[1935BUT/RAM, 1984BOU/FRI]
C ₇ H ₁₆ O	[543-49-7]	<i>(dl)</i> -2-heptanol				
	V	(275–312)	62.1 ± 0.4	298	GS	[2007VER/SCH]
	V	(244–338)	66.1	259		[1999NGU/BER]
	V	(351–433)	54.4	366		[1984SAC/MAR]
	V	(357–431)	51.6	372	A	[1987STE/MAL, 1975BRA/AND]
	V	(323–433)	59.8	338		[1973WIL/ZWO]
C ₇ H ₁₆ O	[589-82-2]	<i>(dl)</i> -3-heptanol				
	V	(244–333)	67.0	259		[1999NGU/BER]
	V	(325–430)	60.3	340	A	[1987STE/MAL]
	V	(263–295)	64.7	280	A	[1987STE/MAL, 1979THO/MEA]
	V	(349–430)	53.1	364		[1984SAC/MAR]
	V	(328–429)	59.2	343		[1973WIL/ZWO]
C ₇ H ₁₆ O	[589-55-9]	4-heptanol				
	V		62.4 ± 0.3	298		[2007VER/SCH]
	V	(320–428)	58.2	335	A	[1987STE/MAL]
	V	(349–428)	53.1	364		[1984SAC/MAR]
	V	(282–320)	63.1	297	A	[1987STE/MAL, 1975CAB/CON2]
	V	(320–428)	56.9	335		[1973WIL/ZWO]
C ₇ H ₁₆ O	[624-22-6]	2-methyl-1-hexanol				
	V	(343–438)	53.5	390		[1973WIL/ZWO]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₆ O	[13231-81-7] V	3-methyl-1-hexanol (353–445)	57.4	399		[1973WIL/ZWO]
C ₇ H ₁₆ O	[818-49-5] V	4-methyl-1-hexanol (348–448)	62.6	363		[1973WIL/ZWO]
C ₇ H ₁₆ O	[625-23-0] V V	2-methyl-2-hexanol (274–306) (311–415)	58.6 ± 0.4 54.5	298 326	GS A	[2005ROG/PIS] [1987STE/MAL, 1973WIL/ZWO]
C ₇ H ₁₆ O	[627-59-8] V	5-methyl-2-hexanol (348–428)	49.4	388		[1973WIL/ZWO]
C ₇ H ₁₆ O	[617-29-8] V	2-methyl-3-hexanol (323–420)	55.7	338		[1973WIL/ZWO]
C ₇ H ₁₆ O	[597-96-6] V	3-methyl-3-hexanol (323–416)	53.6	338		[1973WIL/ZWO]
C ₇ H ₁₆ O	[623-55-2] V	5-methyl-3-hexanol (275–311)	59.8 ± 0.3	298	GS	[2005ROG/PIS]
C ₇ H ₁₆ O	[6570-87-2] V	3,4-dimethyl-1-pentanol (393–438)	50.3	388		[1973WIL/ZWO]
C ₇ H ₁₆ O	[625-06-9] V	2,4-dimethyl-2-pentanol (328–408)	49.7	343		[1973WIL/ZWO]
C ₇ H ₁₆ O	[3970-62-5] V	2,2-dimethyl-3-pentanol (318–411)	51.4	333		[1973WIL/ZWO]
C ₇ H ₁₆ O	[595-41-5] V	2,3-dimethyl-3-pentanol (318–413)	53.2	333		[1973WIL/ZWO]
C ₇ H ₁₆ O	[600-36-2] V V V V	2,4-dimethyl-3-pentanol (307–412)	51.8 48.8 45.7 53.6	328 343 358 322	C C C A	[1996WEB/DEF2] [1996WEB/DEF2] [1996WEB/DEF2] [1987STE/MAL, 1973WIL/ZWO]
C ₇ H ₁₆ O	[597-49-9] V V V	3-ethyl-3-pentanol (275–311) (317–408) (308–416)	57.3 ± 0.2 51.3 55.2	298 332 323	GS A	[2005ROG/PIS] [1987STE/MAL, 1973DYK/REP] [1973WIL/ZWO]
C ₇ H ₁₆ O	[18371-13-6] V	2-methyl-2-ethyl-1-butanol (358–428)	55.7	373		[1973WIL/ZWO]
C ₇ H ₁₆ O	[594-83-2] V	2,3,3-trimethyl-2-butanol (298–363)	48.7	313	MM	[1985WIE/SIP]
C ₇ H ₁₆ O ₂	[13343-98-1] V	1-butoxy-2-methoxyethane 	47.8 ± 0.1	298	C	[1970KUS/WAD]
C ₇ H ₁₆ O ₂	[18854-31-4] V	1-propoxy-2-ethoxyethane 	46.8 ± 0.1	298	C	[1970KUS/WAD]
C ₇ H ₁₆ O ₂	[3459-83-4] V	1,3-diethoxypropane 	45.9 ± 0.2	298	C	[1972MAN2]
C ₇ H ₁₆ O ₂	[126-84-1] V V V	2,2-diethoxypropane (273–308) (273–308) (286–304)	43.2 ± 0.4 43.9 U28.2	298 298 295	GS GS A, I	[2002VER] [1998VER/PEN] [1987STE/MAL, 1962STE/DOR]
C ₇ H ₁₆ O ₂	[57018-52-7] V	1- <i>tert</i> -butoxy-2-propanol (346–420)	45.4	361	EB	[2001BER/WIC]
C ₇ H ₁₆ O ₂	[141-73-1] V	4-methyl-4-methoxy-2-pentanol (343–423)	46.6	358	A	[1987STE/MAL, 1973DYK/REP]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T_{m} (K)	Method	References
C ₇ H ₁₆ O ₂	[629-30-1]	1,7-heptanediol				
	FUS		26.3	290.5	DSC	[2014BAD/NOW]
	FUS		21.3	295.0	DTA	[1991ACR, 1990KNA/SAB]
	V		97.9 ± 0.5	298	CGC	[2006UMN/KWE]
	V		92.4	341	TE	[1994PIA/FER, 2006UMN/KWE]
	V		96.5 ± 3.2	298	TE	[1994PIA/FER, 2006UMN/KWE]
	V		93.8	323	C	[1990KNA/SAB, 2006UMN/KWE]
C ₇ H ₁₆ O ₂	[115-76-4]	2,2-diethyl-1,3-propanediol				
	V	(343–380)	80.2 ± 0.2	298	GS	[2007VER]
C ₇ H ₁₆ O ₃	[6881-94-3]	diethylene glycol monopropyl ether				
	V	(369–404)	65.3	384	A	[1987STE/MAL]
C ₇ H ₁₆ O ₃	[6881-94-3]	2-(2-propoxyethoxy)ethanol				
	V	(378–495)	65.7 ± 0.8	298	EB	[1996STE/CHI]
C ₇ H ₁₆ O ₃	[122-51-0]	triethoxymethane (triethyl orthoformate)				
	V	(293–323)	49.0	308	A	[1987STE/MAL]
	V		47.8 ± 0.1	298	C	[1985MAR/MAN]
	V		46.0 ± 0.8	298		[1971PIH/TUO]
C ₇ H ₁₆ O ₃	[4431-82-7]	3,5,7,9-tetraoxaundecane				
	V		53.6 ± 0.7	298	C	[1969MAN]
C ₇ H ₁₆ O ₃	[51452-08-5]	<i>tert</i> -pentylperoxyethanol				
	V	(290–320)	70.1 ± 2.5		ME	[1983VAN/KAC]
C ₇ H ₁₆ O ₄	[38578-50-6]	3- <i>tert</i> -butyldioxy-1,2-propanediol				
	V	(290–320)	88.0 ± 2.6		ME	[1983VAN/KAC]
C ₇ H ₁₆ S	[1639-09-4]	1-heptanethiol				
	FUS		25.4	229.9		[1996DOM/HEA, 1970FIN/MCC]
	V	(273–345)	49.5	288		[1999DYK/SVO]
	V		50.6 ± 0.2	298		[1966GOO/DEP, 1966OSB/DOU]
C ₇ H ₁₆ S	[628-00-2]	2-heptanethiol				
	V	(343–437)	44.1	358		[1999DYK/SVO]
C ₇ H ₁₆ S ₂	[62224-02-6]	1,7-heptanedithiol				
	V	(392–526)	59.0	407	A	[1987STE/MAL, 1973DYK/REP, 1999DYK/SVO]
C ₇ H ₁₇ N	[7515-80-2]	<i>tert</i> -butylisopropylamine				
	V	(275–299)	35.7 ± 1.0	287		[1997VER]
C ₇ H ₁₇ N	[39099-23-5]	<i>N</i> -butyl isopropylamine				
	V		42.1 ± 0.1	298	C	[1979PET/MAJ]
	V		40.9 ± 0.1	313	C	[1979PET/MAJ]
	V		39.9 ± 0.1	328	C	[1979PET/MAJ]
	V		38.7 ± 0.1	343	C	[1979PET/MAJ]
	V		37.6 ± 0.1	358	C	[1979PET/MAJ]
C ₇ H ₁₇ N	[111-68-2]	heptylamine				
	V		51.0 ± 2.1	298		[2013GOB/RAT]
C ₇ H ₁₇ N	V	(280–306)	50.2 ± 0.4	293	GS	[2013THO/CHI]
	V	(280–306)	49.8 ± 0.4	298	GS	[2013THO/CHI]
	V		49.7 ± 5.8	298	CGC	[2013THO/CHI]
	V	(323–373)	49.9	298	CGC	[1995CHI/HOS]
	V	(326–430)	46.5	341	A	[1987STE/MAL]
	V		50.0 ± 0.1	298	C	[1969WAD]
	V	(327–430)	43.4 ± 0.6	379	BP	[1940RAL/SEL, 2013THO/CHI]
	V	(327–430)	50.2 ± 1.4	298	BP	[1940RAL/SEL, 2013THO/CHI]

TABLE 10. Phase change enthalpies of C₇ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₇ H ₁₇ NO	[7352-03-6] V	<i>N</i> -(ethoxymethyl)diethylamine (285–400)	39.6	300	A	[1987STE/MAL]
C ₇ H ₁₇ N ₃	[934-98-5] V	1-(2-aminoethyl)-4-methylpiperazine (298–332)	64.0 ± 0.2	298	GS	[2010EFI/EME]
C ₇ H ₁₇ O ₂ PS ₃	[298-02-2] V	<i>O, O</i> -diethyl- <i>S</i> -[(ethylthio)methyl]dithiophosphate (283–387)	70.8	298	A	[1987STE/MAL, 1973DYK/REP, 1999DYK/SVO]
C ₇ H ₁₇ O ₃ P	[1445-75-6] V V V V V V	diisopropyl methylphosphonate (253–468) (253–468) (253–468) (253–468) (253–468) (253–468)	62.1 58.9 57.6 56.5 54.2 52.4	253 283 298 313 353 393	GS GS GS GS GS GS	[2009BUT/BUC] [2009BUT/BUC] [2009BUT/BUC] [2009BUT/BUC] [2009BUT/BUC] [2009BUT/BUC]
C ₇ H ₁₈ N ₂	[646-19-5] FUS FUS SUB V V V	1,7-heptanediamine (274–300) (305–358) (305–358) (273–313)	43.5 36.95 105.3 63.9 67.1 ± 0.2 U46.5	301.5 298.5 298 331 298 288	AC DSC Static GS GS A	[2004MON/VAN, 2014FUL/RUZ] [2002DAL/DEL] [2014FUL/RUZ] [2011POZ/VER] [2011POZ/VER] [1987STE/MAL]
C ₇ H ₁₈ N ₂	[104-78-9] V V V V V V	<i>N, N</i> -diethyl-1,3-propanediamine (277–305) (273–363) (273–363) (303–343) (303–343) (329–443)	52.4 ± 0.5 49.3 51.3 ± 0.6 49.0 51.0 ± 0.3 46.4	298 318 298 323 298 344	GS GS GS GS GS A	[2012VER/CHE] [2010KHI/DAH] [2010KHI/DAH, 2012VER/CHE] [2008KHI/DAH] [2008KHI/DAH, 2012VER/CHE] [1987STE/MAL]
C ₇ H ₁₈ N ₂	[110-95-2] V V	<i>N, N, N', N'</i> -tetramethyl-1,3-propanediamine (273–363) (274–323)	44.1 45.3 ± 0.2	298 298	Static GS	[2015BOU/NEG2] [2012VER/CHE]
C ₇ H ₁₈ N ₂ O	[5966-51-8] V	1,3-bis(dimethylamino)-2-propanol (355–450)	50.3	370	A	[1987STE/MAL]
C ₇ H ₁₈ N ₂ O	[2212-32-0] V V	2-(2- <i>N, N</i> -dimethylaminoethyl)- <i>N</i> -methylaminoethanol (293–353) (293–353)	63.2 65.2 ± 0.2	323 298	GS GS	[2011VER/TON] [2011VER/TON]
C ₇ H ₁₉ N ₃	[67727-91-7] V	<i>N, N</i> -diethyl-2-(1-methylhydrazino)ethanamine (283–313)	61.8	298	A	[1987STE/MAL]
C ₇ H ₂₀ N ₄	[4741-99-5] V	1,4,8,11-tetraazaundecane (332–348)	98.3 ± 1.3	340	TE	[1983CLA/COR]

TABLE 11. Phase change enthalpies of C₈ organic compounds

Molecular formula	CAS reg. no. Transition	Compound		T _m (K)	Method	References
		Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)			
C ₈ BrF ₁₇	[423-55-2]	1-bromoperfluorooctane				
	TRS		1.6	146.4		
	FUS		12.13	278.9		[1997VAR/DRU]
	V	(288–332)	45.6 ± 0.4	298		[2005DIA/GON]
C ₈ Cl ₄ N ₂	[1897-45-6]	2,4,5,6-tetrachloro-1,3-benzenedicarbonitrile				
	TRS		4.03	423.7		
	FUS		Not reported		DSC	[2005RON/GU]
	FUS		30.0	526.2	DSC	[1990DON/DRE]
	FUS		31.4	526.2	DSC	[1972PLA]
	SUB	(363–418)	109.1	378	ME, GS	[1987STE/MAL, 1980DEP]
C ₈ D ₁₀	[56004-61-6]	<i>o</i> -xylene-d ₁₀				
	V		43.0	298	CGC	[2008ZHA/UNH]
C ₈ D ₁₀	[41051-88-1]	<i>p</i> -xylene-d ₁₀				
	V		42.4	298	CGC	[2008ZHA/UNH]
C ₈ D ₁₈	[17252-77-6]	octane-d ₁₈				
	V		41.4	298	CGC	[2008ZHA/UNH]
C ₈ F ₈ O ₂	[14533-84-7]	trifluoroacetic acid, pentafluorophenyl ester				
	V		42.1			[1976HOP/DES]
C ₈ F ₈ O ₄	[59483-83-9]	carbonoperoxoic acid, <i>O</i> -(pentafluorophenyl) <i>O</i> , <i>O</i> -(trifluoromethyl) ester				
	V		51.8			[1976FAL/DES2]
C ₈ F ₁₆	[335-21-7]	perfluoroethylcyclohexane				
	V	(308–512)	37.2	323		[1999DYK/SVO]
	V	(310–400)	38.6	298		[1984BOU/FRI, 1991BAS/SVO]
	V		38.7 ± 0.4	298		[1981VAR/BUL]
	V	(311–411)	37.1	326	A	[1987STE/MAL, 1970DYK/VAN, 1959GOO/DOU, 1999DYK/SVO]
C ₈ F ₁₆	[335-27-3]	perfluoro-1,3-dimethylcyclohexane				
	V	(308–375)	37.4	323		[1999DYK/SVO]
C ₈ F ₁₆		<i>cis/trans</i> -perfluoro-1,3-dimethylcyclohexane				
	V		38.6 ± 0.1	298	C	[1996VAR/DRU]
C ₈ F ₁₆ N ₂	[57682-63-0]	2,2,2-trifluoro- <i>N</i> '-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]ethanimidamide				
	V		32.8			[1975PET/SHR3]
C ₈ F ₁₆ O	[335-36-4]	perfluoro-2-butyltetrahydrofuran				
	V	(383–433)	34.7	408	EST	[1960YAR/KAY]
C ₈ F ₁₈	[307-34-6]	perfluorooctane				
	TRS		3.14	176.5		
	FUS		9.58	254.2	DSC	[1986STA]
	TRS		7.22	195		
	FUS		10.74	250	C	[1982CAM/REY]
	V	(289–333)	39.9	298		[2004DIA/CAC]
	V	(437–503)	32	452		[1999DYK/SVO]
	V	(309–378)	41.2 ± 0.8	298	EB	[1981VAR/BUL]
	V		41.1 ± 0.1	298	C	[1981VAR/BUL]
	V	(310–379)	39.5	325	A	[1987STE/MAL, 1962KRE, 1970DYK/VAN]
C ₈ F ₁₈ N ₂ OS	[66632-47-1]	bis(1,1,1,3,3,3-hexafluoro-2-propanaminato)oxobis(trifluoromethyl)sulfur				
	V	(273–333)	39.6	288	A	[1987STE/MAL, 1978KIT/SHR, 1999DYK/SVO]
C ₈ F ₁₈ N ₂ S	[37826-45-2]	<i>S</i> , <i>S</i> -bis(trifluoromethyl)- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)-1-[(2,2,2-trifluoro-1-trifluoromethyl)ethylidene]amino]ethyl sulfilimine				
	V	(329–373)	41.1	344	A	[1987STE/MAL, 1972SWI/SHR]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ F ₁₈ O	[308-48-5]	bis(nonafluorobutyl) ether				
	V	(315–374)	40.3 ± 0.8	298	EB	[1989VAR/PAS]
	V		40.7 ± 0.1	298	C	[1989VAR/PAS]
	V	(343–375)	36.6	358	A	[1987STE/MAL]
	V	(288–313)	42.2	300	A	[1987STE/MAL]
V	(374–413)	56.3	389	A	[1987STE/MAL, 1999DYK/SVO]	
C ₈ F ₁₈ O ₂	[647-40-5]	dodecafluoro-1,6-bis(trifluoromethoxy)hexane				
	V	(293–353)	33.6	323		[1999DYK/SVO, 1964ROB]
C ₈ F ₁₈ O ₃ S	[53517-90-1]	bis(1,1,1,3,3,3-hexafluoro-2-(trifluoromethyl)-2-propanol) sulfite				
	V		38.7			[1975DEM/KOV]
C ₈ F ₂₀ N ₂ S	[65844-11-3]	difluoro[1,1,1,3,3,3-hexafluoro- <i>N</i> -[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene-2,2-propanediaminato(2-)- <i>N</i>]-bis(trifluoromethyl) sulfur				
	V		39.3	390	I	[1978KIT/SHR]
C ₈ HCl ₄ F ₁₁ O ₂	[2923-68-4]	3,5,7,8-tetrachloro-2,2,3,4,4,5,6,6,7,8,8-undecafluorooctanoic acid				
	V	(373–553)	70.6	388	A	[1987STE/MAL, 1957BAR/SEF, 1999DYK/SVO]
C ₈ HF ₁₅ O ₂	[335-67-1]	perfluorooctanoic acid				
	SUB	(298–318)	88.9		GS	[2008BAR/BOT]
C ₈ HF ₁₆ NO	[54181-87-2]	1,1,1,2,3,3,3-heptafluoro- <i>N</i> -[2,2,2-trifluoro-1-[2,2,2-trifluoro-1-(trifluoromethyl)ethoxy]ethylidene]-2-propanamine				
	V		36.0	364		[1975PET/SHR]
C ₈ HF ₁₇	[335-65-9]	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-heptafluorooctane				
	V	(288–332)	43.4 ± 0.2	298		[2005DIA/GON]
C ₈ H ₂ Cl ₄ N ₂	[25983-14-6]	2,3,6,7-tetrachloroquinoxaline				
	FUS		29.6	446	DSC	[2000MON/HIL2]
	SUB		105.9 ± 2.2	298	ME	[2004MOR/MIR]
	SUB	(347–361)	106.2 ± 0.3	354	ME	[2000MON/HIL2]
SUB		108.2 ± 1.9	298	ME	[2000MON/HIL2]	
C ₈ H ₂ F ₁₆	[307-99-3]	1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-hexadecafluorooctane				
	V	(298–323)	41.1	310	A	[1987STE/MAL, 1999DYK/SVO, 1956MCL/SCO]
C ₈ H ₃ ClF ₆	[327-76-4]	4-chloro-1,3-bis(trifluoromethyl)benzene				
	V	(275–353)	48.0	290	A	[1987STE/MAL, 1946FIE/SAY, 1970DYK/VAN, 1999DYK/SVO]
C ₈ H ₃ ClF ₆	[328-72-3]	5-chloro-1,3-bis(trifluoromethyl)benzene				
	V	(275–353)	46.2	290	A	[1987STE/MAL, 1946FIE/SAY, 1970DYK/VAN, 1999DYK/SVO]
C ₈ H ₃ ClO ₃	[117-21-5]	4-chloroisobenzofuran-1,3-dione				
	FUS		18.65	398.8	DSC	[2015WAN/WAN]
	FUS		13.35	398.0	DSC	[2010JI/MEN]
C ₈ H ₃ ClO ₃	[118-45-6]	5-chloroisobenzofuran-1,3-dione				
	FUS		21.45	367.3	DSC	[2015WAN/WAN]
	FUS		33.06	367.4	DSC	[2010JI/MEN]
	V	(447–560)	64.3	470	EB	[2015LI/DU]
C ₈ H ₃ Cl ₄ F ₃	[328-82-5]	1,1,1-trifluoro-2,2-dichloro-2-(3,4-dichlorophenyl)ethane				
	V	(417–461)	56.9	432	A	[1987STE/MAL, 1999DYK/SVO, 1951PAR/BRO]
C ₈ H ₃ FO ₃	[319-03-9]	4-fluorophthalic acid				
	V		60.1	450	EB	[2015LI/DU]
C ₈ H ₃ F ₅ O ₂	[19220-93-0]	acidic acid, pentafluorophenyl ester				
	V	(283–322)	48.1	298	A	[1987STE/MAL, 1999DYK/SVO]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		42.1	406		[1976FAL/DES2]
C ₈ H ₃ F ₁₅ O	[307-30-2]	2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-octanol				
	V	(350–437)	53.3	365	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₃ NO ₅	[641-70-3]	3-nitrophthalic anhydride				
	FUS		20.3	434.4	DSC	[2014GAR/AMA]
	FUS		18.4	436.2	DSC	[1977CAS/VEC]
	SUB		100.4 ± 3.5	298	ME	[2014GAR/AMA]
C ₈ H ₃ NO ₅	[5466-84-2]	4-nitrophthalic anhydride				
	FUS		22.74	389.8	DSC	[2014GAR/AMA]
	FUS		17.14	388.2	DSC	[1977CAS/VEC]
	SUB		103.6 ± 5.9	298	ME	[2014GAR/AMA]
C ₈ H ₄ ClF ₃ O	[321-31-3]	trifluoromethyl 3-chlorophenyl ketone				
	V	(366–405)	52.7	386	A	[1987STE/MAL, 1999DYK/SVO, 1951PAR/BRO]
C ₈ H ₄ Cl ₂ N ₂	[2213-63-0]	2,3-dichloroquinoxaline				
	FUS		24.36	424.4	DSC	[2000MON/HIL2]
	SUB		91.8 ± 1.1	298	ME	[2004MOR/MIR]
	SUB	(313–329)	92.4 ± 0.4	321	ME	[2000MON/HIL2]
	SUB		93.1 ± 0.9	298	ME	[2000MON/HIL2]
C ₈ H ₄ Cl ₂ O ₂	[99-63-8]	isophthaloyl chloride				
	V	(443–550)	61.5	458	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₄ Cl ₂ O ₂	[88-95-9]	phthaloyl chloride				
	V	(391–549)	58.0	406	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]
C ₈ H ₄ Cl ₂ O ₂	[100-20-9]	terephthaloyl chloride				
	TRS		2.34	337.3		
	FUS		21.1	356.1		[1996DOM/HEA, 1982KAR/SHV2]
	V	(454–473)	56.2	463	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₄ Cl ₃ F ₃	[309-12-6]	1,1,1-trifluoro-2,2-dichloro-(3-chlorophenyl)ethane				
	V	(387–475)	49.6	431		[1999DYK/SVO, 1951PAR/BRO]
	V	(387–474)	50.4	402	A	[1987STE/MAL, 1951PAR/BRO]
C ₈ H ₄ FNO ₂	[443-69-6]	5-fluoroindole-2,3-dione (5-fluoroisatin)				
	FUS		29.6	498	DSC	[2007DRA/JAN]
C ₈ H ₄ F ₆	[402-31-3]	1,3-bis(trifluoromethyl)benzene				
	V	(275–353)	42.4	290	A	[1987STE/MAL, 1951POT/SAY, 1970DYK/VAN, 1999DYK/SVO]
C ₈ H ₄ F ₆	[433-19-2]	1,4-bis(trifluoromethyl)benzene				
	V	(287–390)	41.8	302	A	[1987STE/MAL, 1951POT/SAY, 1999DYK/SVO]
C ₈ H ₄ F ₁₄ O	[65064-81-5]	1,1,2,2,3,3,4,4-octafluoro-5-(1,1,2,3,3,3-hexafluoropropoxy)pentane				
	V		53.3 ± 0.1	298	C	[1981VAR/BUL2]
C ₈ H ₄ N ₂	[91-15-6]	1,2-dicyanobenzene				
	FUS		20.0	414.1		[1982KAR/SHV]
	SUB		86.9 ± 1.5	298	GS	[1980SAT/SAK]
C ₈ H ₄ N ₂	[626-17-5]	1,3-dicyanobenzene				
	SUB		90.1 ± 1.5	298	GS	[1980SAT/SAK]
C ₈ H ₄ N ₂	[623-26-7]	1,4-dicyanobenzene				
	SUB		89.7 ± 1.8	298	ME	[1992ACR/TUC]
	SUB		88.8 ± 1.5	298	GS	[1980SAT/SAK]
C ₈ H ₄ N ₂ O ₂	[3729-34-8]	1,4-dicyanobenzene di- <i>N</i> -oxide				
	SUB		73.0 ± 2.0	298	ME	[1992ACR/TUC]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₄ N ₂ O ₄	[603-62-3] FUS	3-nitrophthalimide	34.0	487	DSC	[2007DRA/JAN]
C ₈ H ₄ O ₂	[6383-11-5] SUB	benzocyclobutenedione (304–367)	U89.5	336		[1989ROR/RUT]
C ₈ H ₄ O ₃	[85-44-9] FUS FUS SUB SUB SUB SUB SUB V V V V V	phthalic anhydride	23.09 22.1 87.9 ± 4.7 87.9 84.4 ± 1.2 81 ± 1 88.4 ± 1.2 52.1 63.9 ± 2.5 63.1 65.3 ± 0.8 54.1	403.3 404.5 298 348 388 318 422 422	DSC DSC C A GS C A GS I	[1991ACR, 1990DON/DRE] [1979DAS/DHA] [2016FRE/SAN] [1987STE/MAL, 1972AMI/VAK] [1979DAS/DHA] [1971BEE/LIN] [1946CRO/FEE, 1970COX/PIL, 1960JON] [1987STE/MAL] [1979DAS/DHA] [1952GOT/NIK] [1946CRO/FEE, 1979DAS/DHA] [1920MON]
C ₈ H ₅ Br ₃	[24162-65-0] FUS	2,4,5-tribromostyrene	25.1	340.3		[1993OIS/HOR]
C ₈ H ₅ Cl ₂ F ₃	[309-10-4] V	1,1,1-trifluoro-2,2-dichloro-2-phenylethane (365–446)	47.2	380	A	[1987STE/MAL, 1999DYK/SVO, 1951PAR/BRO]
C ₈ H ₅ Cl ₂ N	[40626-45-7] V	α , α -dichlorophenylacetonitrile (329–497)	57.2	344	A	[1987STE/MAL, 1947STU]
C ₈ H ₅ Cl ₃ O ₂	[85-34-7] FUS	2,3,6-trichlorophenylacetic acid	22.43	432.3	DSC	[1991ACR, 1990DON/DRE]
C ₈ H ₅ Cl ₃ O ₃	[93-76-5] FUS	(2,4,5-trichlorophenoxy)acetic acid	38.0	428.7	DSC	[1991ACR, 1990DON/DRE]
C ₈ H ₅ Cl ₅	[606-07-5] V	pentachloroethylbenzene (369–572)	58.8	384	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]
C ₈ H ₅ F ₃ OS ₂	[4552-64-1] SUB	1,1,1-trifluoro-4-(2-thienyl)-4-mercapto-3-buten-2-one	95.1 ± 3.7	298	C	[1997RIB/SAN]
C ₈ H ₅ F ₃ O ₂ S	[15788-02-0] SUB SUB SUB	1,1,1-trifluoro-4-(2-thienyl)-4-hydroxy-3-buten-2-one	86.2 ± 0.6 86.9 ± 0.6 86.2 ± 0.6	298 285 298	C ME ME	[1997RIB/SAN] [1992RIB/MON] [1992RIB/MON]
C ₈ H ₅ F ₃ O ₃	[326-90-9] SUB	4,4,4-trifluoro-1-(2-furanyl)-butane-1,3-dione	70 ± 10	298		[1997RIB/GON]
C ₈ H ₅ F ₃ O	[434-45-7] V	2,2,2-trifluoroacetophenone (342–425)	43.1	357	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₅ F ₁₄ OP	[647-72-3] V	ethyl bis(heptafluoropropyl)phosphinite (303–393)	41.9	348		[1959EME/SMI]
C ₈ H ₅ NO	[613-90-1] SUB V	benzoylnitrile (292–304) (318–481)	78.7 ± 4.2 52.0	298 333		[1969LEB/DNE, 1977PED/RYL, 1987STE/MAL] [1987STE/MAL, 1947STU]
C ₈ H ₅ NO ₂	[85-41-6] FUS SUB SUB SUB	phthalimide	28.6 104.0 ± 0.4 106.3 ± 1.3 82.8	507.2 356 298 393	DSC ME ME RG	[1978CAN] [2006RIB/SAN] [2006RIB/SAN] [1987STE/MAL, 1956KLO]
C ₈ H ₅ NO ₂	[91-56-5] FUS	1 <i>H</i> -indole-2,3-dione (isatin)	27.82	475.7	DSC	[2003MAT/MIR2]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₅ NO ₂	[4421-09-4]	5-cyano-1,3-benzodioxole				
	SUB		118.8 ± 5.1	298	C	[2003MAT/MIR2]
C ₈ H ₅ NO ₂	[4421-09-4]	5-cyano-1,3-benzodioxole				
	FUS		20.79	366.3	DSC	[2007MAT/SOU]
C ₈ H ₅ NO ₂	[3839-22-3]	2-cyanobenzoic acid				
	SUB		90.9 ± 0.9	298	C	[2007MAT/SOU]
C ₈ H ₅ NO ₂	[3839-22-3]	2-cyanobenzoic acid				
	SUB		114.6 ± 1.3	298	C	[2008RIB/AMA2]
C ₈ H ₅ NO ₂	[1877-72-1]	3-cyanobenzoic acid				
	SUB		116.6 ± 0.9	298	C	[2008RIB/AMA2]
C ₈ H ₅ NO ₂	[619-65-8]	4-cyanobenzoic acid				
	FUS		31.8	495.4	DSC	[2010MON/SAN]
	SUB		109.4 ± 0.4	364	ME	[2010MON/SAN]
	SUB		111.2 ± 0.4	298	ME	[2010MON/SAN]
C ₈ H ₅ NO ₃	[118-48-9]	isatoic anhydride				
	SUB		115.6 ± 2.8	298	C	[2004MAT/MIR]
	SUB		82.7 ± 2.8	298	C	[2003MAT/MIR2]
[Note: In [2004MAT/MIR] the authors state that an error was made in [2003MAT/MIR2] in converting the enthalpy of sublimation measured at a higher temperature back to 298 K.]						
C ₈ H ₅ NO ₃	[2037-95-8]	2 <i>H</i> -1,3-benzoxazine-2,4(3 <i>H</i>)-dione				
	FUS		28.63	500.5	DSC	[2004MAT/MIR]
	SUB		114.2 ± 2.7	298	C	[2004MAT/MIR]
C ₈ H ₅ N ₃	[27032-01-5]	pyridinium dicyanomethylide				
	SUB	(403–433)	125.4	418	A	[1987STE/MAL]
	SUB	(403–406)	125.5 ± 1.3		ME	[1967BOY/GUH, 1970COX/PIL]
C ₈ H ₆	[536-74-3]	phenylacetylene				
	FUS	(14–480)	9.46	228		[1982LEB/BYK]
	V	(313–416)	42.6 ± 0.1	320	EB	[2002STE/CHI3]
	V	(313–416)	40.4 ± 0.1	360	EB	[2002STE/CHI3]
	V	(313–416)	38.0 ± 0.2	400	EB	[2002STE/CHI3]
	V	(265–291)	43.9	278	MM	[1981CHI/HYM]
C ₈ H ₆ BrN	[5798-79-8]	(<i>dl</i>)- α -bromophenylacetoneitrile				
	V	(293–515)	64.7	308	A	[1987STE/MAL]
	V	(358–432)	60.7			[1947GOU/HOL]
C ₈ H ₆ ClN	[612-13-5]	2-(chloromethyl)benzotrile				
	FUS	(300–372)	20.53	344.2	AC	[2007XU/ZEN]
C ₈ H ₆ ClNO ₃	[22751-23-1]	2-nitrobenzeneacetyl chloride				
	SUB	(296–327)	103.6	311	TE	[1987STE/MAL, 1947BAL, 1960JON]
C ₈ H ₆ ClNO ₃	[99-47-8]	3-nitrobenzeneacetyl chloride				
	SUB	(299–343)	109.1	314	TE	[1987STE/MAL, 1947BAL, 1960JON]
C ₈ H ₆ CINS ₂	[28908-00-1]	2-(chloromethylthio)benzothiazole				
	FUS	(80–350)	17.02	351.1	AC	[2005WAN/TAN2]
C ₈ H ₆ Cl ₂	[2123-28-6]	2,3-dichlorostyrene				
	V	(334–508)	55.4	349		[1999DYK/SVO]
	V	(334–508)	54.3	349	A	[1987STE/MAL, 1947STU]
C ₈ H ₆ Cl ₂	[2123-27-5]	2,4-dichlorostyrene				
	V	(327–498)	55.0	342	A	[1987STE/MAL, 1970DYK/VAN]
C ₈ H ₆ Cl ₂	[1123-84-8]	2,5-dichlorostyrene				
	V	(328–500)	54.3	343	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₆ Cl ₂	[28469-92-3]	2,6-dichlorostyrene				
	V		53.8 ± 1.5	298	GS	[2001PUR/CHI]
	V	(321–490)	50.4	336	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₈ H ₆ Cl ₂	[2039-83-0]	3,4-dichlorostyrene				
	V	(330–503)	53.3	345	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₈ H ₆ Cl ₂	[2155-42-2]	3,5-dichlorostyrene				
	V	(326–498)	55.1	341	A	[1987STE/MAL, 1970DYK/VAN]
C ₈ H ₆ Cl ₂ O	[63024-77-1]	3-(chloromethyl)benzoyl chloride				
	V	(424–464)	54.7	439	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₆ Cl ₂ O	[876-08-4]	4-(chloromethyl)benzoyl chloride				
	V	(440–466)	68.3	453	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₆ Cl ₂ O	[937-20-2]	2,4'-dichloroacetophenone				
	SUB	(301–323)	97.4 ± 0.5	312	ME	[2014AMA/RIB]
	SUB	(301–323)	97.8 ± 0.5	298	ME	[2014AMA/RIB]
C ₈ H ₆ Cl ₂ O	[2234-16-4]	2',4'-dichloroacetophenone				
	V		63.6 ± 1.4	298	C	[2011RIB/AMA2]
C ₈ H ₆ Cl ₂ O	[2476-37-1]	2',5'-dichloroacetophenone				
	V		66.3 ± 1.5	298	C	[2011RIB/AMA2]
C ₈ H ₆ Cl ₂ O	[2642-63-9]	3',4'-dichloroacetophenone				
	SUB		90.8 ± 1.6	298	C	[2011RIB/AMA2]
	SUB	(293–309)	92.1 ± 0.5	301	ME	[2011RIB/AMA2]
	SUB	(293–309)	92.2 ± 0.5	298	ME	[2011RIB/AMA2]
C ₈ H ₆ Cl ₂ O ₃	[94-75-7]	(2,4-dichlorophenoxy)acetic acid				
	FUS		35.3	412.1	DSC	[2013WAN/LV]
	FUS		32.0	416.2	DSC	[2005VEC/BRU]
	FUS		35.33	412.5	DSC	[1990DON/DRE]
	SUB		115 ± 6	298	DSC	[2005VEC/BRU]
	SUB	(346–387)	123 ± 2	361	TE	[2005VEC/BRU]
	SUB	(346–387)	125 ± 3	298	TE	[2005VEC/BRU]
C ₈ H ₆ Cl ₂ O ₃	[1918-00-9]	3,6-dichloro-2-methoxybenzoic acid				
	FUS		22.9	386.7	DSC	[1991ACR, 1990DON/DRE]
C ₈ H ₆ Cl ₂ O ₄	[7600-50-2]	3,6-dichloro-5-hydroxy-2-methoxybenzoic acid				
	FUS		28.98	409.8	DSC	[1991ACR, 1990DON/DRE]
C ₈ H ₆ Cl ₄	[107533-18-6]	2,3,4,6-tetrachloro-1-ethylbenzene				
	V	(350–543)	53.6	365	A	[1987STE/MAL, 1947STU]
C ₈ H ₆ Cl ₄	[877-08-7]	3,4,5,6-tetrachloro-1,2-dimethylbenzene				
	FUS		21.46	359.2		[1991ACR, 1983WEA]
	V	(367–547)	63.6	382	A	[1987STE/MAL, 1970DYK/VAN]
C ₈ H ₆ Cl ₄	[877-10-1]	2,3,5,6-tetrachloro-1,4-dimethylbenzene (tetrachloro- <i>p</i> -xylene)				
	FUS		22.59	368.2		[1991ACR, 1983WEA]
C ₈ H ₆ F ₁₂ O ₃ S	[53602-64-5]	bis(1,1,1,3,3,3-hexafluoro-2-methyl-2-propanol) sulfite				
	V		46.5			[1975DEM/KOV]
C ₈ H ₆ F ₁₂ O ₄	[485399-48-2]	3,3,4,4,6,6,7,7,9,9,10,10-dodecafluoro-2,5,8,11-tetraoxododecane				
	TRS		22.07	239		
	FUS		1.14	251	DSC	[2005MAR/AVA]
	V	(300–410)	36.7			[2005MAR/AVA]
C ₈ H ₆ ClNO	[19219-99-9]	5-chloro-2-methylbenzoxazole				
	FUS		20.2	328.8	DSC	[2013SIL/CIM]
	SUB		82.4 ± 2.2	298	C	[2013SIL/CIM]
C ₈ H ₆ ClNO	[41014-43-1]	2-chloromethylbenzoxazole				

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₆ N ₂	V	(348–424)	84.1	363		[2006HUO/ZEN]
	[253-52-1] FUS	phthalazine	13.32	364.5		[1993SAB/PEM]
	SUB		82.3 ± 2.3	298	C	[1995RIB/MAT4]
	SUB		81.1 ± 0.4	298	C	[1998SAB/TAB, 1993SAB/PEM]
	SUB		96.7		ME	[1972MIL]
C ₈ H ₆ N ₂	V		72.7 ± 3.0	298	CGC	[2010LIP/PLI]
	V		67.3 ± 2.2	298	CGC	[2010LIP/CHI]
	[91-19-0] FUS	quinoxaline	11.8	305.7		[1993SAB/PEM]
	SUB		66.6 ± 2.0	298	C	[1995RIB/MAT4]
	SUB		69.4 ± 0.6	298	C	[1993SAB/PEM]
C ₈ H ₆ N ₂	V		58.7 ± 1.9	298	CGC	[2010LIP/CHI]
	[253-82-7] FUS	quinazoline	16.95	320.9		[1993SAB/PEM]
	SUB		77.6 ± 0.5	298	C	[1998SAB/TAB, 1993SAB/PEM]
	SUB		76.6 ± 1.4	298	C	[1995RIB/MAT4]
	V		59.6 ± 1.9	298	CGC	[2010LIP/CHI]
C ₈ H ₆ N ₂ O	V		58.9 ± 2.0	298	CGC	[2009LIP/HAN]
	[1196-57-2] FUS	2-hydroxyquinoxaline	32.5	542.5	DSC	[2000MON/HIL2]
	SUB	(383–399)	116.1 ± 0.6	391	ME	[2000MON/HIL2]
	SUB	(383–399)	118.5 ± 3.1	298	ME	[2000MON/HIL2]
	SUB		125.8 ± 4.0	298	C	[2000RIB/MAT]
C ₈ H ₆ N ₂ O	[119-39-1] SUB	1-(2 <i>H</i>)-phthalazinone				
	SUB	(348–368)	104.4 ± 0.5	358	ME	[2008RIB/CAB2]
	SUB	(348–368)	107.4 ± 0.5	298	ME	[2008RIB/CAB2]
C ₈ H ₆ N ₂ OS ₂	[2439-01-2] FUS	6-methyl-1,3-dithiolo[4,5- <i>b</i>]quinoxalin-2-one	29.92	443.2	DSC	[1990DON/DRE]
C ₈ H ₆ N ₂ O ₂	[15804-19-0] SUB	2,3-dihydroxyquinoxaline	156.3 ± 5.5	298	C	[2000RIB/MAT]
C ₈ H ₆ N ₂ O ₂	[2423-66-7] SUB	quinoxaline-1,4-dioxide	112.0 ± 1.9	298	C	[1997ACR/POW]
C ₈ H ₆ N ₂ O ₂	[2518-24-3] SUB	3-aminophthalimide	108.3	401	A	[1987STE/MAL, 1956KLO]
C ₈ H ₆ N ₂ O ₂	[3676-85-5] SUB	4-aminophthalimide	135.3	459	A	[1987STE/MAL]
C ₈ H ₆ N ₂ O ₂	[6146-52-7] SUB	5-nitroindole	110.5 ± 1.0	298	ME	[2009RIB/CAB]
C ₈ H ₆ N ₂ O ₂	[86-96-4] SUB	quinazoline-2,4(1 <i>H</i> ,3 <i>H</i>)-dione	128.3 ± 2.2	298	C	[2011MIR/MAT4]
C ₈ H ₆ N ₄	SUB	monobenzo-1,3 α ,4,6 α -tetraazapentalene	74.9 ± 2.9	348		[1967CHI/SIM]
C ₈ H ₆ N ₄	SUB	monobenzo-1,3 α ,6,6 α -tetraazapentalene	63.6 ± 2.9	350		[1967CHI/SIM]
C ₈ H ₆ O	[271-89-6] V	2,3-benzofuran	48.8 ± 0.3	298	GS	[2011VER/EME3]
	V	(279–313)	46.2	338	A	[1987STE/MAL]
C ₈ H ₆ O	[5101-44-0]	2-ethynylphenol				

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(300–373)	33.5	315	A	[1987STE/MAL]
C ₈ H ₆ O ₂	[1074-12-0]	phenyl glyoxal				
	V	(348–467)	59.7	363	A	[1987STE/MAL, 1947STU]
C ₈ H ₆ O ₂	[87-41-2]	phthalide				
	SUB		88.4 ± 4.4	298	C	[2016FRE/SAN]
	V	(368–563)	59.3	383	A	[1987STE/MAL, 1947STU]
C ₈ H ₆ O ₂	[553-86-6]	2-coumaranone				
	SUB		78.7 ± 1.7	298	C	[2013SOU/MAT]
C ₈ H ₆ O ₂	[7169-34-8]	3-coumaranone				
	SUB		85.8 ± 1.7	298	C	[2013SOU/MAT]
C ₈ H ₆ O ₃	[120-57-0]	piperonal				
	SUB	(293–353)	90.8	323	A	[1953SER/VOI, 1960JON, 1987STE/MAL]
	V	(310–353)	65.7	331		[1953SER/VOI]
	V	(360–536)	60.6	375	A	[1987STE/MAL, 1947STU]
C ₈ H ₆ O ₃	[619-66-9]	4-formylbenzoic acid				
	FUS		21.3	452.2		[2004CHE/MA]
C ₈ H ₆ O ₄	[88-99-3]	phthalic acid				
	FUS		38.1	479.9	DSC	[2012BOO/BAN]
	FUS		36.5	463.5		[1999SAB/PER2]
	SUB		129.8 ± 0.6	298	C	[1999SAB/PER2]
C ₈ H ₆ O ₄	[121-91-5]	isophthalic acid				
	FUS		33.1	618.4	DSC	[2012BOO/BAN]
	FUS		43.2	617.4	DTA	[1999SAB/PER2]
	SUB	(424–476)	134.6 ± 1.6	450	ME	[2000KOZ/MAK]
	SUB		142.0 ± 0.7	298	C	[1999SAB/PER2]
	SUB	(532–643)	126.9			[1994SIR/MAM]
	SUB	(493–563)	114.2	508	A	[1987STE/MAL, 1962KRA/BER]
	SUB	(493–563)	106.7 ± 2.2	523	GS	[1962KRA/BER, 1970COX/PIL]
C ₈ H ₆ O ₄	[100-21-0]	terephthalic acid				
	FUS		53.57	698.2	DSC	[1999HAN/ZHU]
	SUB	(442–500)	142.2 ± 1.5	471	ME	[2000KOZ/MAK]
	SUB		146.6 ± 0.5	298	C	[1999SAB/PER2]
	SUB	(568–675)	139.3 ± 3.8		DTA	[1968LUC/LEW]
	SUB	(523–633)	139.2	538	A	[1987STE/MAL, 1962KRA/BER]
	SUB	(523–633)	131	573	GS	[1962KRA/BER]
	SUB	(392–425)	U98.24 ± 2.5	408		[1934HIR, 1970COX/PIL]
C ₈ H ₆ O ₄	[94-53-1]	1,3-benzodioxole-5-carboxylic acid (piperonylic acid)				
	FUS		30.5	501.6	DSC	[2004MAT/MON]
	SUB	(363–377)	113.6 ± 1.1	370	ME	[2004MAT/MON]
	SUB	(363–377)	117.2 ± 1.8	298	ME	[2004MAT/MON]
C ₈ H ₆ S	[95-15-8]	benzo[b]thiophene				
	FUS	(278–498)	11.82	304.5	AC	[1991CHI/KN12]
	FUS		11.84	304.5	AC	[1996DOM/HEA, 1954FIN/GRO]
	SUB		65.7 ± 0.2	298	C	[1979SAB]
	V	(434–494)	47.5	450		[2011SAP/POK]
	V	(349–424)	52.1	364		[1999DYK/SVO]
	V	(424–498)	47.9	439		[1999DYK/SVO]
	V	(498–631)	45.0	513		[1999DYK/SVO]
	V	(310–542)	54.3	320	EB, IPM	[1991CHI/KN12]
	V	(310–542)	52.0	360	EB, IPM	[1991CHI/KN12]
	V	(310–542)	49.7	400	EB, IPM	[1991CHI/KN12]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(310–542)	46.2	460	EB, IPM	[1991CHI/KN12]
	V	(310–542)	43.8	500	EB, IPM	[1991CHI/KN12]
	V	(310–542)	41.2	540	EB, IPM	[1991CHI/KN12]
	V	(424–630)	47.2	425		[1981WIE/KOB, 1980WIE/KOB]
	V	(424–630)	42.8	505		[1981WIE/KOB, 1980WIE/KOB]
	V	(424–630)	36.1	605		[1981WIE/KOB, 1980WIE/KOB]
	V	(306–346)	53.8	326		[1981EDW/PRA, 1999DYK/SVO]
C ₈ H ₆ S ₂	[492-97-7]	2,2'-bithiophene				
	FUS		16.5	304.2	DSC	[2006TEM/ROU]
	SUB	(275–291)	86.0 ± 0.4	283	ME	[2009RIB/SAN]
	SUB	(275–291)	85.2 ± 0.4	298	ME	[2009RIB/SAN]
C ₈ H ₆ S ₂	[3172-56-3]	3,3'-biothiophene				
	FUS		21.3	406.2	DSC	[2011COS/LIM]
	SUB	(301–317)	88.6 ± 0.3	309	ME	[2009RIB/SAN]
	SUB	(301–317)	89.2 ± 0.3	298	ME	[2009RIB/SAN]
C ₈ H ₇ Br	[2039-88-5]	2-bromostyrene				
	V	(378–543)	48.7	393	A	[1987STE/MAL, 1970DYK/VAN]
C ₈ H ₇ Br	[2039-82-9]	4-bromostyrene				
	V	(393–420)	48.5	406		[1999DYK/SVO]
	V	(383–543)	49.9	398	A	[1987STE/MAL, 1970DYK/VAN]
C ₈ H ₇ Br	[70-11-1]	2-bromoacetophenone				
	SUB		90.9 ± 1.1	298	C	[2014AMA/RIB2]
C ₈ H ₇ Br	[2142-69-0]	2'-bromoacetophenone				
	V		64.9 ± 1.3	298	C	[2014AMA/RIB2]
C ₈ H ₇ Br	[2142-63-4]	3'-bromoacetophenone				
	V		66.6 ± 1.0	298	C	[2014AMA/RIB2]
C ₈ H ₇ Br	[99-90-1]	4'-bromoacetophenone				
	FUS				DSC	[2016ALM/MON]
	SUB	(295–319)	83.1 ± 0.3	307	Static	[2016ALM/MON]
	SUB	(295–319)	83.3 ± 0.3	298	Static	[2016ALM/MON]
	SUB		84.5 ± 1.0	298	C	[2014AMA/RIB2]
	V	(305–378)	63.3 ± 0.1	342	Static	[2016ALM/MON]
	V	(305–378)	66.4 ± 0.1	298	Static	[2016ALM/MON]
C ₈ H ₇ BrO ₂	[619-42-1]	methyl 4-bromobenzoate				
	FUS		25.8	351.2	DSC	[2013ALM/MON]
	SUB	(293–349)	88.7 ± 0.1	321	Static	[2013ALM/MON]
	SUB	(293–349)	89.3 ± 0.2	298	Static	[2013ALM/MON]
	V	(355–378)	60.6 ± 0.2	367	Static	[2013ALM/MON]
	V	(355–378)	66.1 ± 0.4	298	Static	[2013ALM/MON]
C ₈ H ₇ Cl	[2039-87-4]	2-chlorostyrene				
	V	(363–523)	46.0	378	A	[1987STE/MAL, 1970DYK/VAN]
C ₈ H ₇ Cl	[2039-85-2]	3-chlorostyrene				
	V	(298–463)	46.1	313	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₈ H ₇ Cl	[1073-67-2]	4-chlorostyrene				
	V	(363–523)	48.1	378	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₈ H ₇ ClN ₂ O ₂	[14722-82-8]	<i>N</i> -(2-chlorophenyl)-2-(hydroxyimino)acetamide				
	FUS		29.7	432.7	DTA	[1982CUE/SOL]
C ₈ H ₇ ClN ₂ O ₂ S	[364-98-7]	7-chloro-3-methyl-2 <i>H</i> -1,2,4-benzothiadiazine 1,1-dioxide (diazoxide)				
	FUS		34.1	600.4	DSC	[2006WAS/HOL]
C ₈ H ₇ ClO	[532-27-4]	2-chloroacetophenone				

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		87.7 ± 1.7	298	C	[2014AMA/RIB]
	SUB	(278–323)	90.7	293	TE	[1987STE/MAL, 1947BAL, 1960JON]
C ₈ H ₇ ClO	[2142-68-9]	2'-chloroacetophenone				
	V		60.1 ± 1.3	298	C	[2010RIB/AMA2]
C ₈ H ₇ ClO	[99-02-5]	3'-chloroacetophenone				
	V		64.0 ± 1.7	298	C	[2010RIB/AMA2]
C ₈ H ₇ ClO	[99-91-2]	4'-chloroacetophenone				
	FUS		15.3	290.3	DSC	[2016ALM/MON]
	V	(272–335)	61.9 ± 0.1	303	Static	[2016ALM/MON]
	V	(272–335)	62.2 ± 0.1	298	Static	[2016ALM/MON]
	V		63.1 ± 1.7	298	C	[2010RIB/AMA2]
	V	(404–623)	54.0	419	A	[1987STE/MAL, 1999DYK/SVO]
	V	(395–485)	50.7	410		[1949DRE/SHR, 1949DRE/MAR, 1984BOU/FRI]
C ₈ H ₇ ClO	[103-80-0]	phenylacetyl chloride				
	V	(321–483)	56.5	336	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]
C ₈ H ₇ ClO ₂	[501-53-1]	benzyl chloroformate				
	V	(293–303)	38.5 ± 0.1	298	BG	[1990DAV/FIN]
C ₈ H ₇ ClO ₂	[2444-36-2]	(2-chlorophenyl)acetic acid				
	FUS		24.33	367.4	DSC	[2008RIB/FER3]
C ₈ H ₇ ClO ₂	[1878-65-5]	(3-chlorophenyl)acetic acid				
	FUS		22.6	349.8	DSC	[2008RIB/FER3]
C ₈ H ₇ ClO ₂	[1878-66-6]	(4-chlorophenyl)acetic acid				
	FUS		23.57	377.9	DSC	[2008RIB/FER3]
C ₈ H ₇ ClO ₂	[1126-46-1]	methyl 4-chlorobenzoate				
	FUS		21.3	315.1	DSC	[2013ALM/MON]
	SUB	(277–312)	83.5 ± 0.1	295	Static	[2013ALM/MON]
	SUB	(277–312)	83.4 ± 0.1	298	Static	[2013ALM/MON]
	V	(285–334)	61.6 ± 0.1	310	Static	[2013ALM/MON]
	V	(285–334)	62.4 ± 0.1	298	Static	[2013ALM/MON]
C ₈ H ₇ ClO ₃	[10421-85-9]	2-chloromandelic acid				
	FUS (α)		23.2	363.4	DSC	[2011LOR/VON]
	FUS (α)		23.1	363.1	DSC	[2010HE/ROH]
	FUS		23.1	363.5	DSC	[2009HE/ZHU]
	FUS		20.08	358.5		[1991CHI/BRA]
C ₈ H ₇ ClO ₃	[52950-18-2]	(<i>R</i>)-2-chloromandelic acid				
	FUS		24.3	392.4	DSC	[2011LOR/VON]
	FUS		24.9	391.3	DSC	[2009HE/ZHU, 2010HE/ROH]
	FUS		24.69	392.5		[1991CHI/BRA]
C ₈ H ₇ ClO ₃	[61008-98-8]	(<i>R</i>)-3-chloromandelic acid				
	FUS		22.55	376.4	DSC	[2010MIN/VON]
	FUS		26.24	378.8	DSC	[2009ZHA/RAY]
C ₈ H ₇ ClO ₃	[16273-37-3]	(<i>R, S</i>)-3-chloromandelic acid				
	FUS		27.92	391.2	DSC	[2010MIN/VON]
	FUS		27.98	290.4	DSC	[2009ZHA/RAY]
C ₈ H ₇ ClO ₃	[492-86-4]	(<i>dl</i>)- <i>p</i> -chloromandelic acid				
	FUS		27.2	394		[1991CHI/BRA]
C ₈ H ₇ ClO ₃	[32189-36-9]	(<i>d</i>)- <i>p</i> -chloromandelic acid				
	FUS		23.01	394		[1991CHI/BRA]
C ₈ H ₇ ClO ₃	[122-88-3]	4-chlorophenoxyacetic acid				
	FUS		36.27	429.6	DSC	[1990DON/DRE]
C ₈ H ₇ ClO ₃	[19463-48-0]	5-chloro-4-hydroxy-3-methoxybenzaldehyde				

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		39.4	442.6	DSC	[2000LAR/LER]
C ₈ H ₇ Cl ₂ NO	[1918-18-9]	methyl-3,4-dichlorophenylcarbamate				
	FUS		23.19	381.4	DSC	[1990DON/DRE]
C ₈ H ₇ Cl ₃ O ₃	[2539-26-6]	3,4,5-trichloro-2,6-dimethoxyphenol				
	V	(293–323)	77.4	308	CGC	[1999LEI/WAN2]
C ₈ H ₇ FO	[450-95-3]	2-fluoroacetophenone				
	V	(273–333)	62	288	A, GS	[1987STE/MAL, 1948RED/CHA4, 1999DYK/SVO]
C ₈ H ₇ FO	[403-42-9]	4'-fluoroacetophenone				
	FUS		14.2	269.0	DSC	[2016ALM/MON]
	V	(255–310)	57.4 ± 0.1	283	Static	[2016ALM/MON]
	V	(255–310)	56.5 ± 0.1	298	Static	[2016ALM/MON]
C ₈ H ₇ FO ₂	[403-33-8]	methyl 4-fluorobenzoate				
	FUS		15.5	273.7	DSC	[2013ALM/MON]
	V	(269–344)	55.4 ± 0.1	307	Static	[2013ALM/MON]
	V	(269–344)	56.0 ± 0.1	298	Static	[2013ALM/MON]
C ₈ H ₇ FO ₃	[395-05-1]	(<i>dl</i>)- <i>m</i> -fluoromandelic acid				
	FUS		24.69	370		[1991CHI/BRA, 1994LAR/MAR]
C ₈ H ₇ FO ₃		(<i>d</i>)- <i>m</i> -fluoromandelic acid				
	FUS		24.27	394		[1991CHI/BRA]
C ₈ H ₇ FO ₃	[389-31-1]	(<i>dl</i>)- <i>o</i> -fluoromandelic acid				
	FUS		30.12	390		[1991CHI/BRA, 1994LAR/MAR]
C ₈ H ₇ FO ₃	[32222-48-3]	(<i>d</i>)- <i>o</i> -fluoromandelic acid				
	FUS		20.92	363		[1991CHI/BRA]
C ₈ H ₇ FO ₃	[395-33-5]	(<i>dl</i>)- <i>p</i> -fluoromandelic acid				
	FUS		29.29	403		[1991CHI/BRA, 1994LAR/MAR]
C ₈ H ₇ FO ₃		(<i>d</i>)- <i>p</i> -fluoromandelic acid				
	FUS		30.54	426		[1991CHI/BRA]
C ₈ H ₇ F ₃	[21249-93-4]	1,1,1-trifluoro-2-phenylethane				
	V	(273–313)	46.1 ± 0.3	298	GS	[1997SCH/VER]
C ₈ H ₇ IO	[13329-40-3]	4'-iodoacetophenone				
	FUS		23.5	357.6	DSC	[2016ALM/MON]
	SUB	(313–352)	91.8 ± 0.1	333	Static	[2016ALM/MON]
	SUB	(313–352)	92.8 ± 0.1	298	Static	[2016ALM/MON]
	V	(349–402)	65.4 ± 0.1	375	Static	[2016ALM/MON]
	V	(349–402)	71.0 ± 0.6	298	Static	[2016ALM/MON]
C ₈ H ₇ IO ₂	[619-44-3]	methyl 4-iodobenzoate				
	FUS		29.7	386.7	DSC	[2013ALM/MON]
	SUB	(313–380)	95.2 ± 0.1	347	Static	[2013ALM/MON]
	SUB	(313–380)	97.0 ± 0.4	298	Static	[2013ALM/MON]
	V	(386–496)	62.6 ± 0.3	396	Static	[2013ALM/MON]
	V	(386–496)	65.2 ± 0.5	298	Static	[2013ALM/MON]
C ₈ H ₇ N	[140-29-4]	benzylcyanide				
	V	(283–328)	60.1 ± 0.7	306	GS	[2000VER]
	V	(283–328)	60.5 ± 0.7	298	GS	[2000VER]
	V	(333–507)	54.8	348	A	[1987STE/MAL, 1947STU]
C ₈ H ₇ N	[529-19-1]	2-tolunitrile				
	V	(287–324)	54.8 ± 0.3	298	GS	[2015ZAI/EME]
	V	(309–479)	50.8	324	A	[1987STE/MAL, 1947STU]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₇ N	[620-22-4] V	3-tolunitrile (280–414)	57.5 ± 0.4	298	GS	[2015ZAI/EME]
C ₈ H ₇ N	[104-85-8] FUS	4-tolunitrile	16.1	299.3	DSC	[2015ZAI/EME]
	V	(302–335)	55.9 ± 0.4	298	GS	[2015ZAI/EME]
	V	(315–491)	48.0	330	A	[1987STE/MAL, 1947STU]
C ₈ H ₇ N	[10468-64-1] V	2-tolylisocyanide (298–457)	48.5	313	A	[1987STE/MAL, 1947STU]
C ₈ H ₇ N	[120-72-9] FUS	indole	10.6	325.9	DSC	[2011VER/EME3]
	SUB	(290–325)	73.9 ± 0.4	298	GS	[2011VER/EME3]
	SUB	(275–291)	78.4 ± 1.4	283	ME	[2008RIB/CAB3]
	SUB	(275–291)	77.6 ± 1.1	298	ME	[2008RIB/CAB3]
	SUB	(291–319)	75.0	305	A	[1987STE/MAL]
	SUB	(275–303)	77.8 ± 1.6	289	ME	[1974ARS]
	SUB	(283–301)	70.0	292		[1955AIH2]
	SUB	(283–328)	74.9	305		[1954SER/VOI, 1960JON]
	V	(328–355)	65.3 ± 0.6	298	GS	[2011VER/EME3]
	V		57.3		GC	[1996GOV/RUT]
C ₈ H ₇ NO	[3173-56-6] V	benzyl isocyanate (333–393)	42.3	348	A	[1987STE/MAL]
C ₈ H ₇ NO	[59-48-3] FUS	oxindole	18.74	398.9	DSC	[2010MIR/MAT]
	SUB		99.7 ± 2.5	298	C	[2010MIR/MAT]
C ₈ H ₇ NO	[95-21-6] FUS	2-methylbenzoxazole	11.5	280.1	DSC	[2013FLO/MEN]
	V		57.1 ± 1.3	298	C	[2013SIL/CIM3]
C ₈ H ₇ NOS	[5325-20-2] FUS	1,4-benzothiazin-3(2 <i>H</i> ,4 <i>H</i>)-one	25.29	451.4	DSC	[2011MIR/MAT2]
	SUB		117.9 ± 3.8	298	C	[2011MIR/MAT2]
C ₈ H ₇ NO ₂	[5466-88-6] FUS	2 <i>H</i> -1,4-benzoxazin-3(4 <i>H</i>)-one	22.8	445.6	DSC	[2006MAT/MIR]
	SUB		106.4 ± 3.0	298	C	[2006MAT/MIR]
C ₈ H ₇ NO ₃	[577-59-3] V	2'-nitroacetophenone (293–333)	103.6	308	A	[1987STE/MAL]
C ₈ H ₇ NO ₃	[121-89-1] SUB	3'-nitroacetophenone (300–322)	98.6 ± 0.4	311	ME	[2011RIB/AMA4]
	SUB	(300–322)	99.1 ± 0.4	298	ME	[2011RIB/AMA4]
	SUB	(293–343)	110	308	A	[1987STE/MAL]
C ₈ H ₇ NO ₃	[100-19-6] SUB	4'-nitroacetophenone (302–322)	96.5 ± 0.5	312	ME	[2011RIB/AMA4]
	SUB	(302–322)	97.0 ± 0.5	298	ME	[2011RIB/AMA4]
C ₈ H ₇ NO ₄	[16498-20-7] FUS	2,3-dihydro-6-nitro-1,4-benzodioxin	24.27	394	DSC	[2008MAT/SOU2]
	SUB		100.6 ± 1.2	298	C	[2008MAT/SOU2]
C ₈ H ₇ NO ₄	[606-27-9] V	2-nitrobenzoic acid, methyl ester (423–453)	56.1	438	A	[1987STE/MAL]
C ₈ H ₇ NO ₄	[610-69-5] V	(2-nitrophenyl) acetate (373–526)	71.1	388	A	[1987STE/MAL, 1947STU]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₇ NO ₄	[1975-50-4] SUB	2-methyl-3-nitrobenzoic acid	119.5 ± 2.3	298	ME	[2001MON/HIL3]
C ₈ H ₇ NO ₄	[13506-76-8] SUB	2-methyl-6-nitrobenzoic acid	120.0 ± 2.2	298	ME	[2001MON/HIL3]
C ₈ H ₇ NO ₄	[5437-38-7] SUB	3-methyl-2-nitrobenzoic acid	124.4 ± 2.7	298	ME	[2001MON/HIL3]
C ₈ H ₇ NO ₄	[3113-71-1] SUB	3-methyl-4-nitrobenzoic acid	119.3 ± 2.5	298	ME	[2001MON/HIL3]
C ₈ H ₇ NO ₄	[96-98-0] SUB	4-methyl-3-nitrobenzoic acid	118.6 ± 2.5	298	ME	[2001MON/HIL3]
C ₈ H ₇ NO ₄	[3113-72-2] SUB	2-methyl-3-nitrobenzoic acid	118.7 ± 2.2	298	ME	[2001MON/HIL3]
C ₈ H ₇ NO ₅	[4920-80-3] SUB	3-methoxy-2-nitrobenzoic acid	136.6 ± 1.3	404	ME	[1999RIB/MAT]
	SUB	(398–410)	141.9 ± 1.3	298	ME	[1999RIB/MAT]
C ₈ H ₇ NO ₅	[89-41-8] SUB	4-methoxy-3-nitrobenzoic acid	126.5 ± 0.8	394	ME	[1999RIB/MAT]
	SUB	(387–401)	131.2 ± 0.8	298	ME	[1999RIB/MAT]
C ₈ H ₇ NO ₅	[5081-36-7] SUB	3-methoxy-4-nitrobenzoic acid	126.1 ± 1.1	395	ME	[1999RIB/MAT]
	SUB	(388–402)	131.0 ± 1.1	298	ME	[1999RIB/MAT]
C ₈ H ₇ NS	[622-78-6] V	benzyl isothiocyanate	62.2	367	A	[1987STE/MAL, 1947STU]
C ₈ H ₇ NS	[120-75-2] FUS	2-methylbenzothiazole	13.1	287.1	DSC	[2013FLO/MEN]
	V		61.7 ± 1.4	298	C	[2014SIL/CIM]
	V	(343–499)	61.3	358	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]
C ₈ H ₇ N ₃ O ₂	[1660-15-7] SUB	3,6-diaminophthalimide	98.5	476	A	[1987STE/MAL, 1956KLO]
C ₈ H ₇ N ₃ O ₆	[38677-56-4] SUB	2,2,2-trinitro-1-phenylethane	84.1 ± 0.4	301	ME	[1972PEP/MAT, 1977PED/RYL, 1987STE/MAL]
C ₈ H ₇ N ₃ O ₆	[632-92-8] FUS	3-methyl-2,4,6-trinitrotoluene	38.49	455.4		[1919BEL/SAW]
	SUB		122.6		DSC	[1990HWA/YOS]
	SUB	(319–411)	129.8 ± 1.1	365	ME	[1987STE/MAL, 1978CUN/PAL]
	V		87.9		DSC	[1990HWA/YOS]
C ₈ H ₇ N ₃ O ₇	[4732-14-3] SUB	2,4,6-trinitrophenetole	79.0	358	A	[1987STE/MAL]
	SUB	(352–364)	120.5 ± 2.1			[1950NIT/SEK3, 1970COX/PIL]
	V	(342–351)	120.5	346	A	[1987STE/MAL]
C ₈ H ₇ N ₅ O ₈	[43072-20-4] FUS	2,4,6-trinitro- <i>N</i> -(nitromethyl)- <i>m</i> -toluidine	19.33	375.6	DSC	[1996DOM/HEA, 1973KRI/LIC]
C ₈ H ₇ N ₅ O ₈	[6052-13-7] FUS	2,4,6- <i>N</i> -tetranitro- <i>N</i> -ethylaniline	23.51	369	DSC	[1996DOM/HEA, 1973KRI/LIC]
C ₈ H ₈	[277-10-1] TRS	cubane	5.94	394		
	FUS		8.7	404.9	AC	[1992WHI/WAS]
	SUB		55.2 ± 2.0	298	AC + CGC	[2004BAS/CHI]
	SUB	(239–262)	80.3 ± 1.6	298	ME	[1966KYB/CAR, 1970COX/PIL, 1987STE/MAL, 2003DIK/FRE]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		44.6 ± 0.8	298	CGC	[2004BAS/CHI]
C ₈ H ₈	[629-20-9]	cyclooctatetraene				
	FUS		11.25	268.5		[1996DOM/HEA, 1949SCO/GRO]
	SUB		54.4		B	[1949SCO/GRO]
	V	(273–348)	43.9	288	A	[1987STE/MAL, 1949SCO/GRO]
	V	(273–348)	43.1	298		[1949SCO/GRO]
C ₈ H ₈	[500-24-3]	bicyclo[2.2.2]octa-2,5,7-triene				
	V		42.9 ± 0.1	298	C	[1985KUS]
C ₈ H ₈	[16607-77-5]	1,5,7-octatriene-3-yene				
	V	(313–429)	35.1	328	A	[1987STE/MAL]
C ₈ H ₈	[100-42-5]	styrene				
	FUS		10.96	242.3		[1961WAR/PET]
	FUS	(14–300)	10.96	242.3		[1996DOM/HEA, 1946PIT/GUT]
	FUS		10.95	242.5		[1943GUT/WES]
	FUS		11.07	242.6		[1943WOO/HIG]
	V	(332–373)	41.4	350	EB	[2011JON/MAA]
	V	(245–334)	42.5	260	A	[1987STE/MAL]
	V	(334–419)	41.5	349	A	[1987STE/MAL]
	V	(333–343)	39.9	338		[1968GAR/BOV]
	V	(306–333)	42.5	319		[1959CHA/VAN]
	V	(303–417)	43.1	318		[1955DRE/MAR]
	V	(285–333)	43.9	298		[1946PIT/GUT]
	V		43.5 ± 0.4	298		[1946PIT/GUT]
	V	(306–389)	40.2	348		[1942BUR]
	V	(245–357)	43.2	298		[1939PAT/SCH]
C ₈ H ₈	[116316-76-8]	1-cyclopropyl-1,3-pentadiene				
	V		51.9 ± 0.1	298	C	[2007PAS/KUZ]
C ₈ H ₈ BrCl ₂ O ₃ PS	[2104-96-3]	<i>O</i> -(4-bromo-2,5-dichlorophenyl) <i>O</i> , <i>O</i> -dimethylphosphorothioate				
	FUS		31.15	325.3	DSC	[1990DON/DRE]
C ₈ H ₈ BrNO	[103-88-8]	4-bromoacetanilide				
	FUS		26.0	440.3		[2009BAR/ESP]
	FUS		25.8	441.2	DSC	[2004VEC/CAT]
	SUB		110 ± 4	298	F + V	[2009VEC/TOM]
	V		78 ± 2	480	TGA	[2009VEC/TOM]
	V		77 ± 1	460	TGA	[2009VEC/TOM]
C ₈ H ₈ Br ₂	[93-52-7]	(1,2-dibromoethyl)benzene				
	V	(359–527)	64.9	374	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₈ H ₈ Br ₂	[91-13-4]	α , α' -dibromo- <i>o</i> -xylene				
	FUS		26.78	368.2		[1991ACR, 1983WEA]
C ₈ H ₈ Br ₂	[626-15-3]	α , α' -dibromo- <i>m</i> -xylene				
	FUS		23.69	350.2		[1991ACR, 1983WEA]
C ₈ H ₈ ClNO ₂	[3942-54-9]	<i>N</i> -methyl-2-chlorophenylcarbamic acid ester				
	FUS		21.81	362.7	DSC	[1990DON/DRE]
C ₈ H ₈ ClNO ₄	[6940-53-0]	1-chloro-2,5-dimethoxy-4-nitrobenzene				
	FUS		28.02	413.7	DSC	[2015ZHA/JIN]
C ₈ H ₈ Cl ₂	[1124-05-6]	2,5-dichloro-1,4-dimethylbenzene				
	V	(393–573)	52.7	408	A	[1987STE/MAL, 1970DYK/VAN, 1999DYK/SVO]
C ₈ H ₈ Cl ₂	[54484-61-6]	2,5-dichloro-1,4-dimethylbenzene				
	V	(319–495)	48.9	334	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₈ Cl ₂	[54484-63-8] V	2,5-dichloro-1,4-dimethylbenzene (311–490)	46.0	326	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₈ H ₈ Cl ₂	[6623-59-2] V	3,4-dichloro-1-ethylbenzene (320–500)	49.3	335	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₈ H ₈ Cl ₂	[93-52-7] V	1,4-bis(chloromethyl)benzene (412–504)	50.8	427		[1999DYK/SVO]
C ₈ H ₈ Cl ₂	[612-12-4] FUS	α , α' -dichloro- <i>o</i> -xylene 21.26		328.2		[1991ACR, 1983WEA]
C ₈ H ₈ Cl ₂	[626-16-4] FUS	α , α' -dichloro- <i>m</i> -xylene 19.51		307.2		[1991ACR, 1983WEA]
C ₈ H ₈ Cl ₂	[623-25-6] FUS	α , α' -dichloro- <i>p</i> -xylene 23.97		373.2		[1991ACR, 1983WEA]
C ₈ H ₈ Cl ₂ O ₂	[120-67-2] V	2-(2,4-dichlorophenoxy)ethanol (484–560)	65.1	499	A	[1959MCD/SHR, 1984BOU/FRI, 1999DYK/SVO, 1987STE/MAL]
C ₈ H ₈ Cl ₂ O ₂	[2675-77-6] FUS	1,4-dichloro-2,5-dimethoxybenzene 27.56		403.9	DSC	[1991ACR, 1990DON/DRE]
C ₈ H ₈ Cl ₂ O ₃	[78782-46-4] V	3,5-dichloro-2,6-dimethoxyphenol (293–323)	70.4	308	CGC	[1999LEI/WAN2]
C ₈ H ₈ Cl ₂ O ₃	[6597-78-0] FUS	methyl 3,6-dichloro-2-methoxybenzoate 18.49		304.6	DSC	[1990DON/DRE]
C ₈ H ₈ Cl ₃ O ₃ PS	[299-84-3] FUS	<i>O</i> , <i>O</i> -dimethyl- <i>O</i> -(2,4,5-trichlorophenyl)thiophosphate 18.94		313	DSC	[1990DON/DRE]
	V	(298–373)	56.8	313	A	[1987STE/MAL]
C ₈ H ₈ N ₂	[1632-83-3] FUS	1-methylbenzimidazole 13.9		329.9	DSC	[2014ALM/MON2]
	FUS	13.5		333.2	DSC	[2012GAR/VER]
	SUB	(301–329)	86.1 ± 0.2	298	Static	[2014ALM/MON2]
	SUB	(301–327)	87.1 ± 0.5	298	GS	[2012GAR/VER]
	V	(303–372)	73.7 ± 0.2	298	Static	[2014ALM/MON2]
	V	(314–376)	70.9	345	GS	[2013ZAI/YER]
	V	(314–376)	74.4 ± 0.2	298	GS	[2012GAR/VER, 2013ZAI/YER]
C ₈ H ₈ N ₂	[615-15-6] TRS	2-methylbenzimidazole 0.59		383.9		
	FUS	20.49		451.4	DSC	[2002DOM/KOZ]
C ₈ H ₈ N ₂ O ₂	[3665-80-3] FUS	<i>N</i> -ethyl-4-nitroaniline 22.7		368.21	DSC	[2013TRA/KHI]
C ₈ H ₈ N ₂ O ₂	[32692-19-6] SUB	5-nitroindoline (338–360)	109.8 ± 0.8	298	ME	[2009RIB/CAB]
C ₈ H ₈ N ₂ O ₂	[88-96-0] SUB	1,2-benzenedicarboxamide 57.3 ± 4.2			ME	[1972HAM/WIT, 1977PED/RYL]
C ₈ H ₈ N ₂ O ₂	[1740-57-4] SUB	1,3-benzenedicarboxamide 54.4 ± 4.2			ME	[1971HAM/WIT, 1977PED/RYL]
C ₈ H ₈ N ₂ O ₂	[3010-82-0] SUB	1,4-benzenedicarboxamide (373–498)	57.3 ± 4.2			[1972HAM/WIT]
C ₈ H ₈ N ₂ O ₂	[1769-41-1] FUS	2-(hydroxyimino)- <i>N</i> -phenylacetamide 10.4		453.1	DTA	[1982CUE/SOL]
C ₈ H ₈ N ₂ O ₃	[552-32-9] V	2'-nitroacetanilide (473–593)	44.0	488	A	[1987STE/MAL]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₈ N ₂ S	[1477-42-5] FUS	2-amino-4-methylbenzothiazole	15.91	410.7	DSC	[2014CAM/MEN]
C ₈ H ₈ N ₂ S	[2536-91-6] FUS	2-amino-6-methylbenzothiazole	20.04	412.5	DSC	[2014CAM/MEN]
C ₈ H ₈ N ₄ O ₃	[1455-87-4] SUB	4- <i>N</i> , <i>N</i> -dimethylamino-7-nitrobenzofurazan	134.2 ± 3.4	298	ME	[2014SAN/SIL]
C ₈ H ₈ O	[529-20-4] V	2-methylbenzaldehyde	52.5 ± 0.2	298	GS	[2013EME/VER]
C ₈ H ₈ O	[620-23-5] V	3-methylbenzaldehyde	53.7 ± 0.3	298	GS	[2013EME/VER]
C ₈ H ₈ O	[104-87-0] V	4-methylbenzaldehyde	53.5 ± 0.4	298	GS	[2013EME/VER]
C ₈ H ₈ O	[98-86-2] TRS FUS V V V V V V V V V V V	acetophenone	1.36 16.65 55.4 ± 0.4 52.6 ± 0.4 50.1 ± 0.3 47.5 ± 0.3 45.0 ± 0.4 42.2 ± 0.4 53.4 52.7 57.9 49.7 41.9 51.2	289.7 292.7 298 340 380 420 460 500 298 298 298 390 398 325		[2006SED/MAI] [1911LOU/DUP, 2006SED/MAI] [1996STE/CHI] [1996STE/CHI] [1996STE/CHI] [1996STE/CHI] [1996STE/CHI] [1996STE/CHI] [1995CHI/HOS] [1995CHI/HOS] [1995CHI/HOS] [1987STE/MAL] [1965COL/COU] [1947STU]
C ₈ H ₈ O	[496-14-0] V V V V V V	1,3-dihydroisobenzofuran (phthalan)	53.7 ± 0.4 52.2 ± 0.4 49.6 ± 0.3 47.0 ± 0.3 44.4 ± 0.3 41.6 ± 0.5	298 320 360 400 440 480	EB EB EB EB EB EB	[1996STE/CHI3] [1996STE/CHI3] [1996STE/CHI3] [1996STE/CHI3] [1996STE/CHI3] [1996STE/CHI3]
C ₈ H ₈ O	[496-16-2] V	2,3-dihydrobenzofuran	53.2 ± 0.2	298	GS	[2011VER/EME]
C ₈ H ₈ O	[122-78-1] V V	phenylacetaldehyde	59.8 ± 0.3 54.5	298 298	GS A	[2007EME/DAB] [1987STE/MAL]
C ₈ H ₈ O ₂	[493-09-4] V V	1,4-benzodioxan	67.4 ± 1.7 50.4	298 415	C A	[2008MAT/SOU2] [1987STE/MAL, 1958CAS/FLE2]
C ₈ H ₈ O ₂	[104-57-4] V	benzyl formate	51.6	313	A	[1987STE/MAL]
C ₈ H ₈ O ₂	[118-93-4] FUS V V V	2'-hydroxyacetophenone	13.0 58.3 ± 0.3 58.3 50.2	278.5 298 384	DSC C A	[2008BER/MIN] [2008BER/MIN] [1987STE/MAL] [1986BAL/GNA]
C ₈ H ₈ O ₂	[121-71-1] FUS	3'-hydroxyacetophenone	23.4	366.7	DSC	[2005CHE/TAN]
C ₈ H ₈ O ₂	[99-93-4] FUS FUS	4'-hydroxyacetophenone	18.08 17.0	382.8 381.3	DSC DSC	[2008BER/PIE] [2005CHE/TAN]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB (monoclinic)		100.9 ± 0.8	348	C	[2008BER/PIE]
	SUB (monoclinic)		103.2 ± 0.8	298	C	[2008BER/PIE]
	SUB (orthorhombic)		104.3 ± 0.4	348	C	[2008BER/PIE]
	SUB (monoclinic)		101.8 ± 2.7	327	ME	[2008BER/PIE]
	SUB (monoclinic)		103.3 ± 2.7	298	ME	[2008BER/PIE]
	SUB	(320–349)	95.7	335	A	[1987STE/MAL, 1960AIH]
	C ₈ H ₈ O ₂	[123-11-5] V	4-methoxybenzaldehyde (348–521)	58.4	363	A, EB
V		(283–323)	60.4	298	A	[1987STE/MAL, 1955SER/VOI]
V		(346–521)	57.1	361	A	[1987STE/MAL, 1947STU]
C ₈ H ₈ O ₂	[93-58-3] FUS	methyl benzoate (5–320)	14.8	260.8	AC	[2002BLO/PAU]
	FUS		14.83	260.8		[1998MAK/KAB]
	FUS		13.9	261		[1978DOZ/FUJ]
	V	(358–517)	51.1 ± 0.2	360	EB	[2002STE/CHI2]
	V	(358–517)	48.5 ± 0.2	400	EB	[2002STE/CHI2]
	V	(358–517)	45.8 ± 0.2	440	EB	[2002STE/CHI2]
	V	(358–517)	43.0 ± 0.4	480	EB	[2002STE/CHI2]
	V		57.2 ± 0.1	303	C	[1998MAK/KAB]
	V	(313–353)	53.4	298	CGC	[1995CHI/HOS]
	V	(313–363)	53.8	298	CGC	[1995CHI/HOS]
	V	(433–473)	54.7	298	CGC	[1995CHI/HOS]
	V	(334–428)	50.7	379	BG	[1988KAT2]
	V	(334–428)	48.3	410	BG	[1988KAT2]
	V	(283–323)	53.9	298	A	[1987STE/MAL]
	V	(373–533)	49.7	388	A	[1987STE/MAL]
V		55.6 ± 0.1	298	C	[1972COL/LAY, 1971KUS/WAD2]	
V	(341–433)	52.8	363	BG	[1971HAL/BAL]	
C ₈ H ₈ O ₂	[118-90-1] FUS	2-methylbenzoic acid	18.14	376.5	DSC	[1985DOM/HOF, 1989DOM]
	FUS		20.04		DSC	[1983HOL]
	FUS		20.17	376.9		[1991ACR, 1926AND/LYN]
	SUB	(331–373)	95.5 ± 0.5	352	GS	[2015VER/ZAI]
	SUB	(331–373)	96.9 ± 0.6	298	GS	[2015VER/ZAI]
	SUB	(297–337)	95.9 ± 0.1	298	ME	[1986COL/JIM]
	SUB		U137.7 ± 0.5		DSC	[1983HOL]
C ₈ H ₈ O ₂	[99-04-7] FUS	3-methylbenzoic acid	15.73	381.9		[1991ACR, 1926AND/LYN]
	SUB	(303–323)	97.0 ± 0.3	298	ME	[1986COL/JIM]
	V	(473–533)	62.8	503	A	[1987STE/MAL, 1970MUL/GAL]
C ₈ H ₈ O ₂	[99-94-5] FUS	4-methylbenzoic acid	22.3	453.3	DSC	[2015VER/ZAI]
	FUS		15.0	449.2	DSC	[2000KAN/SAM]
	FUS		22.72	452.8		[1991ACR, 1926AND/LYN]
	SUB	(347–408)	94.1 ± 1.1	377	TGA	[2015VER/ZAI]
	SUB	(347–408)	96.2 ± 1.3	298	TGA	[2015VER/ZAI]
	SUB	(340–399)	95.8 ± 0.2	370	GS	[2015VER/ZAI]
	SUB	(340–399)	97.6 ± 0.4	298	GS	[2015VER/ZAI]
	SUB	(320–337)	98.6 ± 0.6	298	ME	[2004MON/ALM]
	SUB	(318–337)	98.8 ± 0.3	298	ME	[1986COL/JIM]
C ₈ H ₈ O ₂	[122-79-2] V	phenyl acetate (313–363)	53.3	298	CGC	[1995CHI/HOS]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(433–473)	53.6	298	CGC	[1995CHI/HOS]
	V	(313–353)	53.1	298	CGC	[1995CHI/HOS]
	V	(311–469)	51.7	326	A	[1987STE/MAL, 1947STU]
C ₈ H ₈ O ₂	[103-82-2]	phenylacetic acid				
	FUS		32.0		DSC	[2003SHA/KAN]
	FUS		15.2	349.2	DSC	[2002GRA/RAS]
	FUS		16.5	350.8	DSC	[2001MON/HIL]
	FUS		14.49	349.9	DSC	[1991ACR, 1983WEA]
[Note: There is a large discrepancy between the value of 32.0 kJ/mole and the other reported literature values. Reference [2003SHA/KAN] quotes a literature value of 32.0 kJ/mole; however, the authors do not provide the source of the cited literature value.]						
	SUB	(307–339)	93.5 ± 0.3	298	GS	[2004ROU/TEM]
	SUB	(305–321)	98.6 ± 0.4	313	ME	[2001MON/HIL]
	SUB	(305–321)	99.0 ± 0.6	298	ME	[2001MON/HIL]
	V	(353–392)	79.1 ± 0.3	298	GS	[2004ROU/TEM]
	V	(370–539)	65.0	385	A	[1987STE/MAL]
C ₈ H ₈ O ₂	[137-18-8]	2,5-dimethyl-1,4-benzoquinone				
	SUB	(273–293)	77.0	283	QF	[1927COO/COO, 1960JON, 1987STE/MAL]
C ₈ H ₈ O ₂	[7145-99-5]	5-methyl-1,3-benzodioxole				
	V		54.9 ± 1.2	298	C	[2007MAT/SOU]
C ₈ H ₈ O ₂	[16806-93-2]	6,7-dihydro-4(5 <i>H</i>)-benzofuranone				
	V		69.4 ± 2.2	298	C	[2013SOS/MOR]
C ₈ H ₈ O ₂ S	[5535-48-8]	phenyl vinyl sulfone				
	FUS		11.72	343.4		[1969MAC/MCN]
	SUB		82 ± 2.5		B	[1969MAC/MCN, 1969MAC/MCN2, 1977PED/RYL]
C ₈ H ₈ O ₃	[935-79-5]	<i>cis</i> -4-cyclohexene-1,2-dicarboxylic acid anhydride				
	V	(325–525)	53.1 ± 0.1			[1984NUR/MEK]
C ₈ H ₈ O ₃	[2426-02-0]	1-cyclohexene-1,2-dicarboxylic acid anhydride				
	FUS	(80–360)	11.88	343.5	AC	[2004LU/TAN]
C ₈ H ₈ O ₃	[25326-19-6]	5,6-dioxycarbonyl[2.2.1]bicyclohept-2-ene				
	TRS		0.9	323.6		
	TRS		8.7	342.4		
	FUS		3.6	388.4	DSC	[1987CUR/ASR]
C ₈ H ₈ O ₃	[99-76-3]	4-hydroxybenzoic acid, methyl ester (methyl paraben)				
	FUS		25.3	400.5	DSC	[2014SUG/KAI]
	FUS		26.3	398.6	DSC	[2011UMN/CHI]
	FUS		25.3	399.2	DSC	[1999GIO/BET]
	FUS		24.31	398.5		[1990MAN/AHU]
	SUB	(323–345)	107.1 ± 0.1	334	ME	[2014ALM/CUN]
	SUB	(323–345)	108.4 ± 0.6	298	ME	[2014ALM/CUN]
	SUB	(339–396)	108.8 ± 0.9	367	Static	[2014ALM/CUN]
	SUB	(339–396)	106.4 ± 0.1	298	Static	[2014ALM/CUN]
	SUB	(303–327)	98.8 ± 0.8	298	GS	[2005PER/ROD]
	V	(383–423)	87.1 ± 1.6	397	Static	[2014ALM/CUN]
	V	(383–423)	79.0 ± 0.1	298	Static	[2014ALM/CUN]
	V		79.5 ± 0.5	298	CGC	[2011UMN/CHI]
	V		83.1	298	CGC	[2005TEM/ROU, 2011UMN/CHI]
	V	(446–517)	81.5	461	A	[1987STE/MAL]
C ₈ H ₈ O ₃	[119-36-8]	methyl salicylate				
	V	(333–433)	U56.2	298	GC	[2005HOS/GRY]
	V		52.3		TG, DTA	[2001CHE/HUA]
	V	(327–497)	59.9	342	A	[1987STE/MAL]
	V	(329–496)	58.7	344	A	[1987STE/MAL]
	V	(288–333)	56.9	303		[1987STE/MAL]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₈ O ₃	[611-71-2]	<i>(d)</i> -mandelic acid (<i>(R)</i> -mandelic acid)				
	FUS		27.41	405.6	DSC	[2011RIE/BAR]
	FUS		26.2	404.1	MDSC	[2004PRO/RAS]
	FUS		26.36	406		[1991CHI/BRA]
C ₈ H ₈ O ₃	[17199-29-0]	<i>(S)</i> -mandelic acid				
	FUS		26.88	405.3	DSC	[2011RIE/BAR]
C ₈ H ₈ O ₃	[156-38-7]	4-hydroxyphenylacetic acid				
	FUS		28.0	422.9	DSC	[2002GRA/RAS]
	FUS		28.4	423.6		[1991ACR, 1979ARM/JAM]
C ₈ H ₈ O ₃	[495-76-1]	1,3-benzodioxole-5-methanol (piperonyl alcohol)				
	FUS		18.05	327.1	DSC	[2004MAT/MON]
	SUB	(305–319)	103.0 ± 0.6	312	ME	[2004MAT/MON]
	SUB	(305–319)	103.7 ± 0.7	298	ME	[2004MAT/MON]
C ₈ H ₈ O ₄	[520-45-6]	2-acetyl-5-hydroxy-3-oxo-4-hexenoic acid- <i>d</i> -lactone (dehydroacetic acid)				
	V	(364–542)	62.1	379	A	[1987STE/MAL, 1947STU]
C ₈ H ₈ O ₄	[121-34-6]	3-methoxy-4-hydroxybenzoic acid (vanillic acid)				
	FUS		32.8	484.9	DSC	[2016ZHA/GUO]
	FUS		29.1	480.7	DSC	[2012MAN/VIL]
	FUS		25.6	484.7	DSC	[2012BOO/BAN]
C ₈ H ₈ O ₄	[28026-96-2]	3,5-dihydroxy-4-methylbenzoic acid				
	FUS		42.5	544.1	DSC	[2012BOO/BAN]
C ₈ H ₈ S	[4565-32-6]	2,3-dihydrobenzo[<i>b</i>]thiophene				
	FUS		14.84	269.8		[2003STE/CHI]
	V	(345–557)	59.1 ± 0.2	298	IPM, EB	[2003STE/CHI]
	V	(345–557)	56.3 ± 0.2	340	IPM, EB	[2003STE/CHI]
	V	(345–557)	53.8 ± 0.2	380	IPM, EB	[2003STE/CHI]
	V	(345–557)	51.4 ± 0.2	420	IPM, EB	[2003STE/CHI]
	V	(345–557)	49.0 ± 0.2	460	IPM, EB	[2003STE/CHI]
	V	(345–557)	46.4 ± 0.3	500	IPM, EB	[2003STE/CHI]
C ₈ H ₉ Br	[553-94-6]	1-bromo-2,5-dimethylbenzene				
	V	(310–480)	50.9	325		[1999DYK/SVO, 1947STU]
	V	(310–480)	53.6	325	A	[1987STE/MAL, 1970DYK/VAN]
C ₈ H ₉ Br	[576-22-7]	1-bromo-2,6-dimethylbenzene				
	V	(274–305)	53.4 ± 0.4	290	GS	[2015VER/SAZ]
	V	(274–305)	52.7 ± 0.6	298	GS	[2015VER/SAZ]
C ₈ H ₉ Br	[585-71-7]	(1-bromoethyl)benzene				
	V	(298-333)	56.4 ± 0.3	298	GS	[2002KRA/VAS]
	V	392	52.4	298	CGC	[2002KRA/VAS]
C ₈ H ₉ Br	[103-63-9]	(2-bromoethyl)benzene				
	V	(348–401)	51.5	363	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₉ Br	[1973-22-4]	1-bromo-2-ethylbenzene				
	V	(368–523)	48.1	383	A	[1987STE/MAL, 1970DYK/VAN, 1999DYK/SVO]
C ₈ H ₉ Br	[1585-07-5]	1-bromo-4-ethylbenzene				
	V	(347–479)	46.2	362		[1999DYK/SVO]
	V	(378–533)	49.4	393	A	[1987STE/MAL, 1970DYK/VAN]
	V	(303–479)	52.0	318		[1947STU]
C ₈ H ₉ Cl	[672-65-1]	<i>(dl)</i> -(1-chloroethyl)benzene				
	V	(281–319)	52.8 ± 0.2	298	GS	[2002KRA/VAS]
	V	392	52.4	298	CGC	[2002KRA/VAS]
	V	(336–372)	51.4	351		[1999DYK/SVO]
	V	(342–378)	47.0	357	A	[1987STE/MAL]
C ₈ H ₉ Cl	[622-24-2]	(2-chloroethyl)benzene				
	V	(356–480)	53.1	368		[1999DYK/SVO]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(356–380)	51.7	368	A	[1987STE/MAL]
C ₈ H ₉ Cl	[89-96-3]	1-chloro-2-ethylbenzene				
	V	(353–503)	46.1	368	A	[1987STE/MAL, 1970DYK/VAN]
	V	(290–450)	47.2	305		[1947STU]
C ₈ H ₉ Cl	[620-16-6]	1-chloro-3-ethylbenzene				
	V	(348–457)	46.4	363		[1999DYK/SVO]
	V	(358–508)	46.8	373	A	[1987STE/MAL, 1970DYK/VAN]
	V	(291–454)	46.4	307		[1947STU]
C ₈ H ₉ Cl	[622-98-0]	1-chloro-4-ethylbenzene				
	V	(350–458)	45.8	365		[1999DYK/SVO]
	V	(358–508)	46.8	373	A	[1987STE/MAL, 1970DYK/VAN]
	V	(381–457)	45.5	396		[1947STU]
C ₈ H ₉ Cl	[104-82-5]	1-(chloromethyl)-4-methylbenzene				
	V	(376–457)	44.9	391	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₉ Cl	[6781-98-2]	1-chloro-2,6-dimethylbenzene				
	V	(275–305)	49.8 ± 0.3	298	GS	[2014VER/EME]
C ₈ H ₉ ClNO ₅ PS	[500-28-7]	<i>O, O</i> -(dimethyl)- <i>O</i> -(3-chloro-4-nitrophenyl)thiophosphate				
	V	(283–409)	92	346	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₉ ClNO ₅ PS	[2463-84-5]	<i>O</i> -(2-chloro-4-nitrophenyl) <i>O, O</i> -dimethyl phosphorothioate				
	FUS		29.08	323.9	DSC	[1990DON/DRE]
C ₈ H ₉ ClN ₂ O	[52943-21-2]	2-chloro- <i>N, N</i> -dimethylnicotinamide				
	FUS	(82–380)	21.39	342.2	AC	[2005SUN/LIU3]
C ₈ H ₉ ClO	[614-72-2]	1-chloro-2-ethoxybenzene				
	V	(318–481)	52.4	333	A	[1987STE/MAL, 1947STU]
C ₈ H ₉ ClO	[1875-88-3]	4-chlorophenethyl alcohol				
	V	(426–673)	59.3	411	A	[1987STE/MAL, 1947STU]
C ₈ H ₉ ClO	[622-61-7]	4-chloro-1-ethoxybenzene				
	V	(395–485)	49.5	410	A	[1987STE/MAL, 1947STU]
C ₈ H ₉ ClO ₂	[7477-64-7]	ethylene glycol, 4-chlorophenyl ether				
	V	(410–554)	68.5	425	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₉ ClO ₃	[18113-22-9]	3-chloro-2,6-dimethoxyphenol				
	V	(293–323)	68.6	308	CGC	[1999LEI/WAN2]
C ₈ H ₉ Cl ₃ O ₄	[98491-17-9]	2-acetyl-4,4,4-trichloro-3-oxobutyric acid, ethyl ester				
	V	(374–409)	53.1	389	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₉ I	[10604-60-1]	(1-iodoethyl)benzene				
	V	(303–340)	59.9 ± 0.4	298	GS	[2002KRA/VAS]
C ₈ H ₉ I	[4214-28-2]	1-iodo-2,4-dimethylbenzene				
	V	(294–328)	56.8 ± 0.3	311	GS	[2015VER/SAZ]
	V	(294–328)	57.7 ± 0.6	298	GS	[2015VER/SAZ]
C ₈ H ₉ I	[608-28-6]	1-iodo-2,6-dimethylbenzene				
	V	(285–333)	56.9 ± 0.1	309	GS	[2015VER/SAZ]
	V	(285–333)	57.6 ± 0.4	298	GS	[2015VER/SAZ]
C ₈ H ₉ N	[140-76-1]	2-methyl-5-vinylpyridine				
	V	(342–457)	55.2	357	A	[1987STE/MAL]
	V	(342–457)	54.5	357		[1961FRO/LOG, 1984BOU/FRI]
C ₈ H ₉ N		<i>N</i> -methylbenzaldehyde-imine				
	V	(283–318)	51.1 ± 0.2	301	GS	[1997VER/MOR]
	V	(283–318)	51.2 ± 0.2	298	GS	[1997VER/MOR]
C ₈ H ₉ N	[496-15-1]	indoline				
	V	(281–338)	60.9 ± 0.2	298	GS	[2011VER/EME]
	V		61.9 ± 1.7	298	C	[2008RIB/CAB3]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₉ NO	[103-84-4]	acetanilide (<i>N</i> -phenylacetamide)				
	FUS		19.64	387.2	DTA	[2013KAN]
	FUS		21.83	387.5	DSC	[2012CHA/LAY]
	FUS		22.1	386.9	DSC	[2012UMN/CHI]
	FUS		21.4	386.9	DSC	[2005CHE/TAN]
	FUS		23.0	387.2	DSC	[2004SHA/TAN]
	FUS		18.3	387.2		[2004VEC/CAT]
	FUS		20.3	389.0	DSC	[1998BUS/ROM]
	FUS		21.65	387.5		[1996DOM/HEA, 1980AND/CON]
	SUB	(303–324)	80.6	313.5	A	[1987STE/MAL, 1955AIH3]
	SUB	(317–336)	87.2	326.5	A	[1987STE/MAL, 1960AIH2]
V		82.1 ± 3.0	298	CGC	[2012UMN/CHI]	
V	(473–577)	64.8	488	A	[1987STE/MAL]	
V	(387–577)	66.3	402		[1947STU]	
C ₈ H ₉ NO	[41977-54-2]	<i>anti</i> 3-methylbenzaloxime				
	SUB		U31 ± 1.7		MS	[1983MAJ/AZZ]
C ₈ H ₉ NO	[3235-02-7]	<i>anti</i> 4-methylbenzaloxime				
	SUB		U36 ± 1.7		MS	[1983MAJ/AZZ]
C ₈ H ₉ NO	[103-81-1]	2-phenylacetamide				
	SUB	(329–352)	96.4	340.5	A	[1987STE/MAL, 1960AIH2]
C ₈ H ₉ NO	[99-03-6]	3-aminoacetophenone				
	FUS		12.13	371.2		[1971LEB/GUT]
C ₈ H ₉ NO	[99-92-3]	4-aminoacetophenone				
	FUS		18.53	380.2	DSC	[2013SIN/PAN]
	FUS		19.6	378.2	DSC	[2005CHE/TAN]
	FUS		15.90	379.2		[1971LEB/GUT]
	SUB	(314–338)	92.7	326	A	[1987STE/MAL, 1960AIH2]
C ₈ H ₉ NO	[613-93-4]	<i>N</i> -methylbenzamide				
	FUS		18.62	347.4	DSC	[2010ALM/MON]
	SUB	(325–349)	99.9 ± 0.2	337	Static	[2010ALM/MON]
	SUB	(325–349)	101.0 ± 0.2	298	Static	[2010ALM/MON]
	SUB	(297–321)	75.0	309	A	[1987STE/MAL, 1955AIH]
	SUB	(307–329)	85.7	318	A	[1987STE/MAL, 1960AIH2]
	V	(323–388)	79.2 ± 0.1	356	Static	[2010ALM/MON]
V	(323–388)	84.9 ± 0.5	298	Static	[2010ALM/MON]	
[Note: VP measurements in [2010ALM/MON] include those for the subcooled liquid.]						
C ₈ H ₉ NO	[527-85-5]	<i>o</i> -methylbenzamide				
	FUS		22.9	415.1	DSC	[2012ALM/MAT]
	SUB	(325–347)	105.0 ± 0.3	336	ME	[2012ALM/MAT]
	SUB	(325–347)	106.1 ± 0.3	298	ME	[2012ALM/MAT]
C ₈ H ₉ NO	[618-47-3]	<i>m</i> -methylbenzamide				
	FUS		21.6	366.7	DSC	[2012ALM/MAT]
	SUB	(325–347)	106.6 ± 0.3	336	ME	[2012ALM/MAT]
	SUB	(325–347)	107.8 ± 0.3	298	ME	[2012ALM/MAT]
C ₈ H ₉ NO	[619-55-6]	<i>p</i> -methylbenzamide				
	FUS		24.3	433.2	DSC	[2012ALM/MAT]
	SUB	(339–361)	108.3 ± 0.3	350	ME	[2012ALM/MAT]
	SUB	(339–361)	109.6 ± 0.3	298	ME	[2012ALM/MAT]
C ₈ H ₉ NO ₂	[81-20-9]	2-nitro-1,3-dimethylbenzene				
	V	(284–323)	57.2 ± 0.8	303	GS	[2000VER/HEI]
	V	(284–323)	57.5 ± 0.8	298	GS	[2000VER/HEI]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₉ NO ₂	V	(373–498)	49.7	388	A	[1987STE/MAL]
	[89-87-2]	4-nitro-1,3-dimethylbenzene				
	V	(368–518)	56.7	383	A	[1987STE/MAL]
C ₈ H ₉ NO ₂	V	(338–517)	57.3	353		[1947STU]
	[83-41-0]	1,2-dimethyl-3-nitrobenzene				
	V	(383–518)	59.4	398		[1984BOU/FRI]
C ₈ H ₉ NO ₂	[99-51-4]	1,2-dimethyl-4-nitrobenzene				
	V	(399–536)	63.6	414		[1984BOU/FRI]
C ₈ H ₉ NO ₂	[612-22-6]	2-nitro-1-ethylbenzene				
	V	(284–323)	62.7 ± 0.4	303	GS	[2000VER/HEI]
	V	(284–323)	63.0 ± 0.4	298	GS	[2000VER/HEI]
	V	(353–422)	56.3	368	A	[1987STE/MAL]
C ₈ H ₉ NO ₂	[100-12-9]	4-nitro-1-ethylbenzene				
	V	(353–433)	59.4	368	A	[1987STE/MAL]
C ₈ H ₉ NO ₂	[103-01-5]	<i>N</i> -phenylglycine				
	SUB		114.1 ± 1.0	365.4	C	[1980SAB/SKO]
	SUB		128.0 ± 2.0	298	C	[1980SAB/SKO]
C ₈ H ₉ NO ₂	[875-74-1]	(<i>d</i>)- α -phenylglycine				
	SUB		148.9 ± 2.2	443	C	[1980SAB/SKO]
	SUB		165.0 ± 6.0	298	C	[1980SAB/SKO]
C ₈ H ₉ NO ₂	[29577-53-5]	2-methoxybenzaloxime				
	SUB (anti)		U20.1 ± 1.7		MS	[1983MAJ/AZZ]
	SUB (syn)		U32.6 ± 1.7		MS	[1983MAJ/AZZ]
C ₈ H ₉ NO ₂	[3235-04-9]	4-methoxybenzaloxime				
	SUB		U67.3 ± 1.7		MS	[1983MAJ/AZZ]
C ₈ H ₉ NO ₂	[134-20-3]	methyl 2-aminobenzoate				
	FUS		17.9	294.1	DSC	[2012ALM/MON2]
	SUB	(287–298)	78.4	292.5	ME	[1987STE/MAL, 1954SER/VOI, 1960JON]
	V	(283–370)	66.0 ± 0.1	326	Static	[2012ALM/MON2]
	V	(283–370)	67.1 ± 0.1	298	Static	[2012ALM/MON2]
	V	(299–333)	62.3	314	A, ME	[1987STE/MAL, 1954SER/VOI]
C ₈ H ₉ NO ₂	[4518-10-9]	methyl 3-aminobenzoate				
	FUS		17.8	325.3	DSC	[2012ALM/MON2]
	SUB	(309–324)	94.1 ± 0.1	316	Static	[2012ALM/MON2]
	SUB	(309–324)	94.6 ± 0.1	298	Static	[2012ALM/MON2]
	V	(312–376)	75.4 ± 0.1	344	Static	[2012ALM/MON2]
	V	(312–376)	78.2 ± 0.1	298	Static	[2012ALM/MON2]
C ₈ H ₉ NO ₂	[619-45-4]	methyl 4-aminobenzoate				
	FUS		24.9	284.2	DSC	[2012ALM/MON2]
	FUS		22.55	385.1		[1990MAN/AHU]
	FUS		22.6	385.2	DSC	[1990NEA/FLY]
	SUB	(319–341)	104.2 ± 0.3	298	ME	[2012ALM/MON2]
	SUB	(333–380)	101.7 ± 0.2	356	Static	[2012ALM/MON2]
	SUB	(333–380)	103.4 ± 0.2	298	Static	[2012ALM/MON2]
	V	(361–428)	74.5 ± 0.1	394	Static	[2012ALM/MON2]
	V	(361–428)	84.0 ± 0.1	298	Static	[2012ALM/MON2]
	C ₈ H ₉ NO ₂	[614-80-2]	<i>o</i> -hydroxyacetanilide			
FUS			37.0	484.1	DSC	[2008PER/VOL2]
FUS			21.25	364.5		[1996DOM/HEA, 1926AND/LYN]
SUB		(330–378)	120.9 ± 0.9	354	GS	[2008PER/VOL2]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₉ NO ₂	[621-42-1]	<i>m</i> -hydroxyacetanilide				
	FUS		26.6	416.2	DSC	[2008PER/VOL2]
	SUB	(345–397)	109.6 ± 1.1	371	GS	[2008PER/VOL2]
C ₈ H ₉ NO ₂	[103-90-2]	<i>p</i> -hydroxyacetanilide (acetaminophen, paracetamol)				
	FUS		27.51	442.35	DSC	[2015MAT/MOR]
	FUS (I)		26.0	442.4		
	FUS (II)		24.9	429.8	DSC	[2014SAI/MUR]
	FUS		27.35	441.9	DSC	[2013BOU/TEY]
	FUS (I)		27.8	441.9		
	FUS (II)		26.7	429.4	DSC	[2012KLI/LEI]
	FUS		27.2	443.8	DSC	[2010PIC/DIO]
	(monoclinic)					
	FUS		27.24	443	DSC	[2010BAI/VAN]
	FUS		28.1	441.1	DSC	[2010AVU/ALE]
	FUS		27.4	442.2	DSC	[2010HAH/GRA]
	FUS		27.6	443.2	DSC	[2009MOT/CAR]
	FUS		27.0	440.3	DSC	[2009VEC/TOM]
	FUS		27.6	443.4	DSC	[2007MIS/MIS2]
	(monoclinic)					
	FUS		26.1	446.2	DSC	[2007CAM/MAG]
	TRS		Not given	149.9		
	FUS		26.49	441.9	AC,DSC	[2006XU/SUN]
	FUS		22.8	447.6	DSC	[2005TOM/CAT]
	FUS		27.0	442.2	DSC	[2004BOL/DRE]
	(monoclinic)					
	FUS		26.2	443	DSC	[2004ROM/BUS]
	FUS		26.0	442.2	DSC	[2002FAR/KAD]
	FUS		24.8	441.0	DSC	[2002SCH/LEN]
	FUS		28.2	442.5	DSC	[1998BUS/ROM]
	FUS		27.2	442.9	DSC	[1993BEC/QUA]
	FUS		26.02	441.2	DSC	[1990MAN/AHU]
	SUB		127.0 ± 1.9	399	C	[2010PIC/DIO]
	(monoclinic)					
	SUB		130.3 ± 1.9	298	C	[2010PIC/DIO]
	(monoclinic)					
	SUB	(394–427)	125.7 ± 3.0	411	ME	[2010PIC/DIO]
(monoclinic)						
SUB	(394–427)	129.5 ± 3.0	298	ME	[2010PIC/DIO]	
(monoclinic)						
SUB		138 ± 3	298	F + V	[2009VEC/TOM]	
SUB	(355–397)	117.9 ± 0.7	298	GS	[2007PER/VOL2]	
(monoclinic)						
SUB	(313–347)	238.7			[2003WIL/WIL, 2010PIC/DIO]	
(monoclinic)						
[Note: Authors of [2010PIC/DIO] state that the value of 238.8 kJ/mole seemed unreasonably high.]						
	V		103 ± 3	521	TGA	[2009VEC/TOM]
	V		99 ± 1	494	TGA	[2009VEC/TOM]
C ₈ H ₉ NO ₂	[2603-10-3]	methyl <i>N</i> -phenylcarbamate				
	FUS		14.56	325		[1971PRI, 1996DOM/HEA]
	SUB	(373–418)	64.5	388	EB	[2013XU/LI]
C ₈ H ₉ NO ₂	[4389-45-1]	2-amino-3-methylbenzoic acid				
	FUS		27.3	447.4	DSC	[2001MON/HIL2]
	SUB	(343–357)	107.3 ± 1.8	298	ME	[2001MON/HIL2]
	SUB	(343–357)	105.8 ± 0.8	350	ME	[2001MON/HIL2]
C ₈ H ₉ NO ₂	[2941-78-8]	2-amino-5-methylbenzoic acid				
	FUS		27.63	450	DSC	[2001MON/HIL2]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		SUB	(345–361)	110.6 ± 1.9	298	ME	[2001MON/HIL2]
		SUB	(345–361)	108.9 ± 0.5	353	ME	[2001MON/HIL2]
C ₈ H ₉ NO ₂	[4389-50-8]	2-amino-6-methylbenzoic acid					
	FUS		27.49	398.7	DSC	[2001MON/HIL2]	
	SUB	(339–355)	116.1 ± 2.0	298	ME	[2001MON/HIL2]	
	SUB	(339–355)	114.7 ± 1.2	347	ME	[2001MON/HIL2]	
C ₈ H ₉ NO ₂	[52130-17-3]	3-amino-2-methylbenzoic acid					
	FUS		38.47	458.8	DSC	[2001MON/HIL2]	
	SUB	(367–381)	127.8 ± 2.6	298	ME	[2001MON/HIL2]	
	SUB	(367–381)	115.6 ± 0.8	374	ME	[2001MON/HIL2]	
C ₈ H ₉ NO ₂	[2458-12-0]	3-amino-4-methylbenzoic acid					
	FUS		26.89	438.8	DSC	[2001MON/HIL2]	
	SUB	(363–377)	119.4 ± 2.5	298	ME	[2001MON/HIL2]	
	SUB	(363–377)	117.3 ± 0.9	370	ME	[2001MON/HIL2]	
C ₈ H ₉ NO ₂	[2486-70-6]	4-amino-3-methylbenzoic acid					
	FUS		21.77	439.4	DSC	[2001MON/HIL2]	
	SUB	(367–383)	122.0 ± 2.6	298	ME	[2001MON/HIL2]	
	SUB	(367–383)	119.8 ± 0.7	375	ME	[2001MON/HIL2]	
C ₈ H ₉ NO ₂	[1197-55-3]	4-aminophenylacetic acid					
	FUS		42.7	468.2	DSC	[2002GRA/RAS]	
C ₈ H ₉ NO ₂	[10541-83-0]	4-(methylamino)benzoic acid					
	FUS		21.0	435.9	DSC	[2010MON/SAN]	
	SUB	(359–381)	121.6 ± 0.4	328	ME	[2010MON/SAN]	
	SUB	(359–381)	123.9 ± 0.4	298	ME	[2010MON/SAN]	
C ₈ H ₉ NO ₂	[2439-77-2]	2-methoxybenzamide					
	FUS		27.21	401.66	DSC	[2014ALM/MON]	
	SUB		109.9 ± 0.4	346	ME	[2014ALM/MON]	
	SUB		113.3 ± 0.4	298	ME	[2014ALM/MON]	
C ₈ H ₉ NO ₂	[5813-86-5]	3-methoxybenzamide					
	FUS		28.60	407.15	DSC	[2014ALM/MON]	
	SUB		118.1 ± 0.4	358	ME	[2014ALM/MON]	
	SUB		119.8 ± 0.4	298	ME	[2014ALM/MON]	
C ₈ H ₉ NO ₂	[3424-93-9]	4-methoxybenzamide					
	FUS		29.04	440.64	DSC	[2014ALM/MON]	
	SUB		117.3 ± 0.4	368	ME	[2014ALM/MON]	
	SUB		119.3 ± 0.4	298	ME	[2014ALM/MON]	
C ₈ H ₉ NO ₂ S ₂	[949171-63-5]	<i>N</i> -theonylthiocarbamic- <i>O</i> -ethyl ester					
	FUS		21.9	345.9	DSC	[2007RIB/MON]	
	SUB		143.2 ± 3.1	298	C	[2007RIB/MON]	
C ₈ H ₉ NO ₃	[3177-80-8]	2-amino-3-methoxybenzoic acid					
	FUS		24.21	443.0	DSC	[2010MON/ALM]	
	SUB	(349–369)	113.3 ± 0.7	359.8	ME	[2010MON/ALM]	
	SUB	(349–369)	115.5 ± 0.7	298	ME	[2010MON/ALM]	
C ₈ H ₉ NO ₃	[6705-03-9]	2-amino-5-methoxybenzoic acid					
	FUS		22.88	425	DSC	[2010MON/ALM]	
	SUB	(353–375)	116.9 ± 0.8	364	ME	[2010MON/ALM]	
	SUB	(353–375)	119.3 ± 0.8	298	ME	[2010MON/ALM]	
C ₈ H ₉ NO ₃	[2840-26-8]	3-amino-4-methoxybenzoic acid					
	FUS		25.34	477.9	DSC	[2010MON/ALM]	

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(380–399)	127.4 ± 0.8	389	ME	[2010MON/ALM]
	SUB	(380–399)	130.7 ± 0.8	298	ME	[2010MON/ALM]
C ₈ H ₉ NO ₃	[74165-74-5]	3-amino-5-methoxybenzoic acid				
	FUS		22.4	456.9	DSC	[2010MON/ALM]
	SUB	(380–400)	132.8 ± 1.0	390	ME	[2010MON/ALM]
	SUB	(380–400)	136.1 ± 1.0	298	ME	[2010MON/ALM]
C ₈ H ₉ NO ₃	[2486-69-3]	4-amino-3-methoxybenzoic acid				
	FUS		25.27	462.4	DSC	[2010MON/ALM]
	SUB	(373–395)	128.9 ± 1.2	384	ME	[2010MON/ALM]
	SUB	(373–395)	132.0 ± 1.2	298	ME	[2010MON/ALM]
C ₈ H ₉ NO ₇	[22401-53-2]	methyl 5-nitro-2-acetoxy-2,5-dihydro-2-furancarboxylate				
SUB			89.1 ± 2.1			[1980BAL/LEB, 1986PED/NAY]
C ₈ H ₉ N ₃	[62679-52-1]	2,2-dicyanohexanenitrile				
	V	(288–323)	61.0 ± 0.2		GS	[1994RAK/VER]
C ₈ H ₉ N ₃ O ₄	[3846-50-2]	<i>N</i> -ethyl-2,4-dinitrobenzenamine				
FUS			19.67	387.2	DSC	[2010MEK/KHI]
C ₈ H ₉ O ₃ PS	[3811-49-2]	2-methoxy-4 <i>H</i> -1,3,2-benzodioxaphosphorin 2-sulfide				
	FUS		16.92	327.9	DSC	[1990DON/DRE]
C ₈ H ₁₀	[95-47-6]	1,2-dimethylbenzene				
	FUS		13.68	248.0	C	[1955TUN/STO]
	FUS		13.6	247.8		[1996DOM/HEA, 1943PIT/SCO]
	FUS	(90–295)	13.0	247.8	C	[1930HUF/PAR2]
	SUB		60.1	248	B	[1986HES/LIC]
	V	(373–423)	42.9	298	CGC	[1995CHI/HOS]
	V	(333–419)	41.1	348	A	[1987STE/MAL]
	V	(416–473)	38.0	431	A	[1987STE/MAL]
	V	(471–571)	36.7	486	A	[1987STE/MAL]
	V	(567–630)	36.7	582	A	[1987STE/MAL]
	V	(386–416)	39.8	401		[1982CAS/FRA]
	V		43.4	298		[1971WIL/ZWO]
	V	(333–342)	41.5	338		[1968GAR/BOV]
	V		43.4 ± 0.1	298	C	[1947OSB/GIN]
	V	(337–419)	40.8	352	MM	[1945WIL/TAY, 1949FOR/NOR]
	V	(273–323)	45.0	288		[1943PIT/SCO, 1984BOU/FRI]
V	(273–323)	43.8 ± 0.2	298		[1943PIT/SCO]	
C ₈ H ₁₀	[108-38-3]	1,3-dimethylbenzene				
	FUS		11.67	225.3	C	[1955TUN/STO]
	FUS		11.59	225.3		[1996DOM/HEA, 1943PIT/SCO]
	TRS		0.21	166		
	FUS	(96–275)	11.44	219.6	C	[1996DOM/HEA, 1930HUF/PAR2]
	V	(360–410)	39.2	375		[2002SWI/MAL]
	V	(327–412)	40.7	342		[1989PAR/GME]
	V	(267–301)	44.7	282	A	[1987STE/MAL]
	V	(412–462)	37.5	427	A	[1987STE/MAL]
	V	(461–554)	36.4	476	A	[1987STE/MAL]
	V	(550–617)	36.2	565	A	[1987STE/MAL]
	V	(380–411)	38.7	395		[1983MAC]
	V		42.7	298		[1971WIL/ZWO]
	V	(326–337)	41	331		[1968GAR/BOV]
	V		42.7 ± 0.1	298	C	[1947OSB/GIN]
	V	(331–415)	40.4	346	MM	[1987STE/MAL, 1945WIL/TAY, 1949FOR/NOR]
V	(273–333)	43.2	288		[1943PIT/SCO, 1984BOU/FRI]	
V	(273–333)	42.5 ± 0.2	298		[1943PIT/SCO]	
C ₈ H ₁₀	[106-42-3]	1,4-dimethylbenzene				
	FUS		17.49	286.5	C	[1955TUN/STO]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		17.11	286.3		[1996DOM/HEA, 1947COR/GIN, 1943PIT/SCO]
	FUS	(92–299)	16.93	286.4	C	[1930HUF/PAR2]
	SUB	(247–286)	59.4	271	A	[1987STE/MAL, 1974OSB/DOU]
	SUB		60.8	286	B	[1986HES/LIC]
	V	(373–423)	42.3	298	CGC	[1995CHI/HOS]
	V	(293–323)	43.0 ± 0.1	298		[1990SMI]
	V		42.3 ± 0.01	298		[1988MES/FIN]
	V		40.3	353		[1988HOS/ARC]
	V	(411–463)	37.3	426	A	[1987STE/MAL]
	V	(460–553)	36.1	475	A	[1987STE/MAL]
	V	(551–616)	36.2	566	A	[1987STE/MAL]
	V		36.0 ± 0.1	411	C	[1985NAT/VIS]
	V		34.5 ± 0.1	436	C	[1985NAT/VIS]
	V		30.5 ± 0.1	484	C	[1985NAT/VIS]
	V		24.7 ± 0.1	540	C	[1985NAT/VIS]
	V	(380–410)	37.3	395		[1982CAS/FRA]
	V	(348–439)	39.6 ± 0.1	348	C	[1981HOS/SCO3]
	V	(348–439)	38.5 ± 0.1	366	C	[1981HOS/SCO3]
	V	(348–439)	37.2 ± 0.1	387	C	[1981HOS/SCO3]
	V	(348–439)	34.6 ± 0.1	427	C	[1981HOS/SCO3]
	V	(348–439)	33.8 ± 0.1	439	C	[1981HOS/SCO3]
	V	(348–439)	42.3 ± 0.1	298	C	[1981HOS/SCO3]
	V		42.6	298		[1974AMB/ELL]
	V	(286–453)	42.4	301	IPM, EB	[1987STE/MAL, 1974OSB/DOU]
	V		42.4	298		[1971WIL/ZWO]
	V	(327–337)	40.5	332		[1968GAR/BOV]
	V	(303–343)	41.6	318		[1968GAW/SW12]
	V		42.4 ± 0.1	298	C	[1947OSB/GIN]
	V	(332–413)	40.1	347	MM	[1945WIL/TAY, 1949FOR/NOR]
	V		42.3 ± 0.2	298		[1943PIT/SCO]
C ₈ H ₁₀	[100-41-4]	ethylbenzene				
	FUS		9.16	178.2		[1996DOM/HEA, 1944GUT/SPI, 1946SCO/BRI]
	FUS		9.16	178.0	C	[1996DOM/HEA, 1930HUF/PAR2]
	V	(324–364)	40.0	344	EB	[2011JON/MAA]
	V	(298–420)	41.8	313	A	[1987STE/MAL]
	V	(409–459)	37.0	424	A	[1987STE/MAL]
	V	(457–554)	35.8	472	A	[1987STE/MAL]
	V	(549–617)	35.5	564	A	[1987STE/MAL]
	V	(320–400)	40.6	335		[1986PAU/KRU]
	V		40.5 ± 0.1	328	C	[1982SVO/CHA]
	V		39.5 ± 0.1	343	C	[1982SVO/CHA]
	V		38.6 ± 0.1	358	C	[1982SVO/CHA]
	V	(346–437)	39.4 ± 0.1	346	C	[1981HOS/SCO3]
	V	(346–437)	38.4 ± 0.1	354	C	[1981HOS/SCO3]
	V	(346–437)	37.7 ± 0.1	376	C	[1981HOS/SCO3]
	V	(346–437)	36.3 ± 0.1	399	C	[1981HOS/SCO3]
	V	(346–437)	34.5 ± 0.1	425	C	[1981HOS/SCO3]
	V	(346–437)	42.4 ± 0.1	298	C	[1981HOS/SCO3]
	V		42.3	298		[1971WIL/ZWO]
	V		42.2 ± 0.1	298	C	[1947OSB/GIN]
	V	(330–410)	40.0	345	MM	[1945WIL/TAY, 1949FOR/NOR]
	V		42.5	294		[1946SCO/BRI]
C ₈ H ₁₀	[27998-49-8]	1,2-bicyclopropylacetylene				
	V		47.6 ± 0.2	298	C	[2007PAS/KUZ]
C ₈ H ₁₀ ClNO ₂	[6358-64-1]	4-chloro-2,5-dimethoxyaniline				
	FUS		26.68	391.9	DSC	[2015ZHA/JIN]
C ₈ H ₁₀ Cl ₂ O ₂	[55701-05-8]	3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic acid (ratio of <i>cis/trans</i> -is 35/65)				
	FUS	(78–389)	16.32	331.5	AC	[2007XUE/WAN]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₈ H ₁₀ Cl ₂ O ₂	[55701-03-6] FUS	<i>trans</i> -(<i>R</i>)-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylic acid (78–389)	13.75	344.8	AC	[2008XUE/LI]	
C ₈ H ₁₀ F ₃ NO ₃	[715-58-2] V	<i>N</i> -trifluoroacetyl- <i>L</i> -proline, methyl ester (303–523)	57.9	318	A	[1987STE/MAL, 1999DYK/SVO, 1960WEY/KLI]	
C ₈ H ₁₀ F ₃ NO ₅	[81084-01-7] V	<i>N</i> -trifluoroacetyl- <i>L</i> -aspartic acid, dimethyl ester (303–423)	58.2	318	A	[1987STE/MAL, 1999DYK/SVO, 1960WEY/KLI]	
C ₈ H ₁₀ NO ₅ PS	[298-00-0] FUS	<i>O, O</i> -dimethyl- <i>O</i> -(4-nitrophenyl) thiophosphate	20.07	308.2	DSC	[1991ACR, 1990DON/DRE]	
	SUB		(298–308)	125.1	303	GS,A	[1984KIM/WOO]
	SUB		(278–288)	108.7	283	GS	[1983SPE/CLI, 1979SPE/SHO]
	V		(293–427)	88.9	308	A	[1987STE/MAL]
	V			87.0		GS	[1979SPE/SHO]
C ₈ H ₁₀ N ₂ O	[138-89-6] SUB	4- <i>N, N</i> -dimethylaminonitrosobenzene (323–334)	82.0 ± 1.7	298	ME	[1994ACR/TUC]	
C ₈ H ₁₀ N ₂ O	[6972-69-6] FUS	<i>N, N</i> -dimethylnicotinamide	19.4	317.3	DSC	[2015ALM/OLI]	
	SUB		(308–315)	93.6 ± 0.4	312	DM	[2015ALM/OLI]
	SUB		(308–315)	94.0 ± 0.8	298	DM	[2015ALM/OLI]
	V		(307–370)	73.0 ± 0.1	338	DM	[2015ALM/OLI]
	V		(307–370)	76.1 ± 0.2	298	DM	[2015ALM/OLI]
C ₈ H ₁₀ N ₂ O ₂	[619-31-8] SUB	3-nitro- <i>N, N</i> -dimethylaniline	92.7 ± 0.3	298	C	[1985MUR/SAK]	
	V		(427–558)	52.3	442	A, GS, EB	[1987STE/MAL, 1960AND/BID]
	V		(357–492)	48.2	372		[1955VON/GEB]
C ₈ H ₁₀ N ₂ O ₂	[100-23-2] SUB	<i>N, N</i> -dimethyl-4-nitroaniline	102.7 ± 1.1	298	C	[1985MUR/SAK]	
	SUB		(344–366)	98.7 ± 1.7	355	ME	[1987STE/MAL, 1956MAJ]
	SUB		(372–393)	101.3 ± 2.0	298	ME	[1994ACR/TUC]
C ₈ H ₁₀ N ₂ O ₃	[22809-78-5] FUS	<i>N</i> -methyl- <i>N</i> -(4-methoxyphenyl)nitramine	22.7	342.6	DSC	[2002DAS/ZAL]	
C ₈ H ₁₀ N ₂ O ₃ S	[144-80-9] FUS	<i>N</i> -[(4-aminophenyl)sulfonyl]acetamide (sulfacetamide)	29.8	455.2	DSC	[2002MAR/GOM, 2001MAR/GOM]	
C ₈ H ₁₀ N ₂ O ₄ S	[156461-84-6] FUS	<i>N</i> -methyl- <i>N</i> -(3-methylsulfonylphenyl)nitramine	26.1	377.8	DSC	[2002DAS/ZAL]	
C ₈ H ₁₀ N ₂ O ₄ S	[23042-38-8] FUS	<i>N</i> -methyl- <i>N</i> -(4-methylsulfonylphenyl)nitramine	19.2	438.1	DSC	[2002DAS/ZAL]	
C ₈ H ₁₀ N ₂ S	[536-33-4] SUB	2-ethyl-4-pyridinecarbothioamide	164.2 ± 1.8	372	GS	[2015BLO/SHA2]	
	SUB		(364–381)	166.5 ± 1.8	298	GS	[2015BLO/SHA2]
C ₈ H ₁₀ N ₄ O ₂	[58-08-2] TRS	caffeine (1,3,7-trimethylxanthine)	3.29	421.5			
	FUS		20.08	510.2	DSC	[2015BOU/BOU]	
	FUS		19.52	510.3	DSC	[2014DIC/LEG]	
	FUS		20.37	508.8	DSC	[2012KLI/LEI]	
	FUS		19.6	508.7	DSC	[2012AGA/MOS]	
	TRS		2.6	405.8			
	FUS		17.9	505.4	DSC	[2012MAN/VIL]	
	FUS		20.8	510.0	DSC	[2010BAI/VAN]	
	FUS		24.8	507.7	DSC	[2010GUO/SAD]	
	TRS		3.00	414.9			
	FUS		23.46	509.6	DSC	[2008MOG/SEP]	

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
			3.43	420.9		
			19.86	509.5	DSC	[2007DON/LI]
			4.02	428.2		
			21.9	510.2	DSC	[2006PIN/DIO]
			3.9	428	DSC	[2005DES/COR]
			19.38	510.2	DSC	[2005KLO/BRO]
			3.94	426		
			23.43	512	DSC	[1990DOM/HEA, 1980CES/STA]
			18.3	510		[1985OHM/LIP]
			3.7	423.2		
			21.5	509.2	DSC	[1985SUZ/SHI]
			1.71	420.8		
			20.95	508.3	DSC	[1984WEI/LEF]
	SUB (I)	(413–463)	104.8 ± 0.2	438	T	[1999GRI/SZE]
	SUB (I)	(413–463)	115	298	T	[1999GRI/SZE]
	SUB (II)	(413–463)	113.6 ± 0.2	369	T	[1999GRI/SZE]
	SUB (II)	(413–463)	119	298	T	[1999GRI/SZE]
	SUB	(315–364)	112.6 ± 2.4		ME	[1998BOL/WIE]
	SUB		105.1 ± 0.7		ME	[1985KAM/ZIE]
	SUB	(373–473)	103.6	423	UV	[1984EBE/FRA]
	SUB (I)	(446–509)	100.0 ± 0.6	478	MM	[1979BOT/CAM]
	SUB (I)		110	298		[1979BOT/CAM, 1999GRI/SZE]
	SUB (II)	(446–509)	110.7 ± 0.7	362	MM	[1979BOT/CAM]
	SUB (II)		114	298		[1979BOT/CAM, 1999GRI/SZE]
	V	(634–743)	64.9 ± 2.4		DSC	[1998BOL/WIE]
C ₈ H ₁₀ O	[526-75-0]	2,3-dimethylphenol				
	FUS		20.29	345.8	DSC	[1998JAM/PAL]
	FUS		21.02	346	DSC	[1991ACR, 1982POE/FAN]
	SUB	(283–323)	84.0 ± 1.0		GS	[1960AND/BID, 1970COX/PIL, 1987STE/MAL]
	V	(433–492)	52.1	448	A, GS, EB	[1987STE/MAL, 1960AND/BID]
C ₈ H ₁₀ O	[105-67-9]	2,4-dimethylphenol				
	FUS		12.76	297.3	DSC	[1998JAM/PAL]
	V	(393–433)	64.6	298	CGC	[1995CHI/HOS]
	V	(282–318)	65.9	297	A	[1987STE/MAL]
	V	(282–318)	65.9 ± 0.2		GS	[1960AND/BID, 1970COX/PIL]
	V	(429–486)	51.8	444	A, GS, EB	[1987STE/MAL, 1960AND/BID]
C ₈ H ₁₀ O	[95-87-4]	2,5-dimethylphenol				
	FUS		13.81	348.1	DSC	[1998JAM/PAL]
	FUS		23.38	348	DSC	[1991ACR, 1982POE/FAN]
	SUB	(282–323)	85.0 ± 0.25		GS	[1960AND/BID, 1970COX/PIL, 1987STE/MAL]
	V	(427–485)	51.7	442	A, GS, EB	[1987STE/MAL, 1960AND/BID]
C ₈ H ₁₀ O	[576-26-1]	2,6-dimethylphenol				
	FUS		18.83	318.6	DSC	[1998JAM/PAL]
	FUS		18.9	318.9	DSC	[1991ACR, 1982POE/FAN]
	SUB		75.6	298		[1971MOR]
	SUB		75.1	298		[1968MOR]
	SUB	(277–313)	75.6 ± 0.17		GS	[1960AND/BID, 1970COX/PIL]
	V		75.6	298		[1971MOR]
	V		75.1	298		[1968MOR]
	V	(417–476)	48.5	432	A, GS, EB	[1987STE/MAL, 1960AND/BID]
C ₈ H ₁₀ O	[95-65-8]	3,4-dimethylphenol				
	FUS		19.04	338.5	DSC	[1998JAM/PAL]
	FUS		18.13	334	DSC	[1991ACR, 1982POE/FAN]

[Note: The author of [1968MOR] refers to the determined value as the enthalpy of vaporization even though the compound is a solid.]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		85.1	298		[1971MOR]
	SUB		85.0	298		[1968MOR]
	SUB	(282–323)	85.7 ± 0.1		GS	[1960AND/BID, 1970COX/PIL, 1987STE/MAL]
	V		85.1	298		[1971MOR]
	V		85.0	298		[1968MOR]
	V	(444–502)	54.9	459	A, GS, EB	[1987STE/MAL, 1960AND/BID]
C ₈ H ₁₀ O	[108-68-9]	3,5-dimethylphenol				
	FUS		18.0	336.8	DSC	[1991ACR, 1982POE/FAN]
	FUS		17.4	336.6	AC	[1957MAS]
	SUB		82	298		[1971MOR]
	SUB	(282–323)	82.8 ± 0.3		GS	[1960AND/BID, 1970LEN/VEL, 1987STE/MAL]
	V	(427–497)	55.3	442	A, GS, EB	[1987STE/MAL, 1960AND/BID]
C ₈ H ₁₀ O	[538-86-3]	benzyl methyl ether				
	V	(274–314)	51.4 ± 0.3	298	GS	[2002KRA/VAS]
C ₈ H ₁₀ O	[103-73-1]	ethoxybenzene				
	V	(390–454)	44.5	405	A	[1987STE/MAL, 1976AMB/ELL]
	V	(390–454)	50.7	298		[1976AMB/ELL]
	V	(390–454)	40.7	443		[1976AMB/ELL]
	V		51.0 ± 0.1	298	C	[1975FEN/HAR]
	V	(400–454)	44.0	415		[1965COL/COU, 1984BOU/FRI]
C ₈ H ₁₀ O	[90-00-6]	2-ethylphenol				
	SUB	(278–317)	80.3 ± 0.5		GS	[1963BID/HAN, 1970COX/PIL, 1987STE/MAL]
	V	(393–433)	64.5	298	CGC	[1995CHI/HOS]
	V	(423–491)	50.5	438	A, GS, EB	[1987STE/MAL, 1963BID/HAN]
	V	(277–318)	63.5	292	A, GS, EB	[1987STE/MAL, 1963BID/HAN]
	V	(359–480)	51.6	374		[1955VON/GEB]
	V	(321–492)	51.4	348		[1953STA/MUL]
	V	(321–492)	49.5	373		[1953STA/MUL]
	V	(321–492)	48.6	398		[1953STA/MUL]
	V	(321–492)	47.0	423		[1953STA/MUL]
	V	(321–492)	43.1	473		[1953STA/MUL]
C ₈ H ₁₀ O	[620-17-7]	3-ethylphenol				
	V	(445–503)	53.1	460	A, GS, EB	[1987STE/MAL, 1963BID/HAN]
	V	(277–323)	68.1	292	A, GS, EB	[1987STE/MAL, 1963BID/HAN]
	V	(334–501)	58.3	348		[1953STA/MUL]
	V	(334–501)	56.5	373		[1953STA/MUL]
	V	(334–501)	55.2	398		[1953STA/MUL]
	V	(334–501)	53.7	423		[1953STA/MUL]
	V	(334–501)	48.8	473		[1953STA/MUL]
C ₈ H ₁₀ O	[123-07-9]	4-ethylphenol				
	V	(444–503)	53.2	459	A, GS, EB	[1987STE/MAL, 1963BID/HAN]
	V	(337–503)	56.5	348		[1953STA/MUL]
	V	(337–503)	54.7	373		[1953STA/MUL]
	V	(337–503)	53.8	398		[1953STA/MUL]
	V	(337–503)	51.3	423		[1953STA/MUL]
	V	(337–503)	47.6	473		[1953STA/MUL]
C ₈ H ₁₀ O	[589-18-4]	4-methylbenzyl alcohol				
	TRS		0.73	179		
	TRS		0.21	210		
	FUS	(10–350)	20.17	331.9	AC	[2005SAI/IKE]
	V	(338–376)	64.2	353	A	[1987STE/MAL]
C ₈ H ₁₀ O	[98-85-1]	<i>(dl)</i> -1-phenylethanol (α -methyl benzyl alcohol)				
	V	(293–363)	64.7	308		[2006LUS/MAL]
	V	(358–398)	59.1	373	EB	[2004CHY/FRA]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(358–398)	75.2	298	EB	[2004CHY/FRA]
	V	(353–480)	53.5	368	A	[1987STE/MAL]
C ₈ H ₁₀ O	[60-12-8]	2-phenylethanol				
	V	(288–363)	66.7	298	GS	[2007EME/DAB]
	V	(313–413)	U54.55	298	GC	[2005HOS/GRY]
	V	(394–613)	55.1	409	A	[1987STE/MAL]
	V	(305–363)	73.4 ± 1.5	298	GC	[1981SHC/RUD, 2007EME/DAB]
	V	(284–287)	69.7 ± 1.6	298	ME	[1958SER/VOI, 2007EME/DAB]
	V	(283–318)	68.4	298	A, ME	[1987STE/MAL, 1954SER/VOI]
	V	(406–492)	64.9 ± 0.3	298	EB	[1949DRE/SHR, 1949DRE/MAR, 2007EME/DAB]
C ₈ H ₁₀ O	[578-58-5]	2-methylanisole				
	V	(276–308)	50.2 ± 0.4	298	GS	[2015EME/ZAI]
	V		45.2			[1986BAL/GNA]
C ₈ H ₁₀ O	[100-84-5]	3-methylanisole				
	V	(277–312)	52.8 ± 0.5	298	GS	[2015EME/ZAI]
C ₈ H ₁₀ O	[104-93-8]	4-methylanisole				
	V	(275–308)	53.3 ± 0.4	298	GS	[2015EME/ZAI]
	V		46.0			[1986BAL/GNA]
C ₈ H ₁₀ OS	[1879-16-9]	4-methoxythioanisole				
	V		53.6			[1986BAL/GNA]
C ₈ H ₁₀ OS	[2530-10-1]	3-acetyl-2,5-dimethylthiophene				
	V		61.3 ± 1.3	298	C	[2008RIB/SAN3]
C ₈ H ₁₀ O ₂		ethyl <i>trans</i> - <i>b</i> -(2-furyl)acrylate				
	V	(428–500)	56.8	464		[1956FRO/LOE]
C ₈ H ₁₀ O ₂	[105-13-5]	4-methoxybenzyl alcohol				
	V	(394–424)	95.6	409	A	[1987STE/MAL]
	V	(354–453)	71.7	369	EB	[1985SCH/BRU]
C ₈ H ₁₀ O ₂	[488-87-9]	1,3-dihydroxy-2,5-dimethylbenzene				
	V	(393–459)	74.7	408	A, GC	[1987STE/MAL, 1975KUN/LIL]
C ₈ H ₁₀ O ₂	[527-55-9]	1,3-dihydroxy-4,5-dimethylbenzene				
	V	(424–453)	67.5	438	A, GC	[1987STE/MAL, 1975KUN/LIL]
C ₈ H ₁₀ O ₂	[615-89-4]	1,3-dihydroxy-4,6-dimethylbenzene				
	V	(388–466)	74.7	403	A, GC	[1975KUN/LIL]
C ₈ H ₁₀ O ₂	[615-90-7]	1,4-dihydroxy-2,5-dimethylbenzene				
	V	(331–361)	101.1	346	A	[1987STE/MAL]
C ₈ H ₁₀ O ₂	[4299-72-3]	1,3-dihydroxy-5-ethylbenzene				
	V	(408–479)	81.3	423	A, GC	[1987STE/MAL, 1975KUN/LIL]
C ₈ H ₁₀ O ₂	[615-90-7]	2,5-dimethylhydroquinone				
	SUB	(332–361)	100.8		QF	[1927COO/COO, 1960JON]
C ₈ H ₁₀ O ₂	[91-16-7]	1,2-dimethoxybenzene				
	FUS		12.6	295.7	DSC	[2003LEE/CHO]
	FUS		15.8	295.9		[1911LOU/DUP]
	V	(293–332)	64.5 ± 0.3	298	GS	[2010VAR/ABA]
	V	(373–468)	52.7	388		[2002SU, 2004LEE/SU]
	V	(373–468)	61.1 ± 0.2	298		[2002SU, 2004LEE/SU, 2010VAR/ABA]
	V		68.1 ± 1.4	298	C	[2000MAT/MIR]
	V		66.9	298		[1958CAS/FLE2, 2010VAR/ABA]
C ₈ H ₁₀ O ₂	[151-10-0]	1,3-dimethoxybenzene				
	V	(296–332)	59.7 ± 0.2	298	GS	[2010VAR/ABA]
	V		61.5 ± 1.4	298	C	[2000MAT/MIR]
	V	(358–423)	60.8	373	A, GC	[1987STE/MAL, 1975KUN/LIL]
C ₈ H ₁₀ O ₂	[150-78-7]	1,4-dimethoxybenzene				

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		20.1	333.0	DSC	[2010VAR/ABA]
	SUB	(283–327)	80.3 ± 0.2	298	GS	[2010VAR/ABA]
	SUB		84.1 ± 2.3	298	C	[2000MAT/MIR]
	V	(330–357)	61.6 ± 0.2	298	GS	[2010VAR/ABA]
	V	(298–357)	62.1	313	A	[1987STE/MAL]
	V		51.5			[1986BAL/GNA]
C ₈ H ₁₀ O ₂	[122-99-6]	2-phenoxyethanol				
	V	(351–519)	66.0	366	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₀ O ₂	[2896-67-5]	3-methoxy-4-hydroxytoluene				
	V	(356–495)	53.2	371	A	[1987STE/MAL]
C ₈ H ₁₀ O ₂	[135-02-4]	2-methoxybenzaldehyde				
	V		55.2			[1986BAL/GNA]
C ₈ H ₁₀ O ₂	[501-94-0]	4-hydroxybenzeneethanol				
	FUS		25.9	364	DSC	[2009QUE/MOT]
C ₈ H ₁₀ O ₂	[10599-70-9]	3-acetyl-2,5-dimethylfuran				
	V		57.5 ± 1.5	298	C	[2011RIB/AMA]
C ₈ H ₁₀ O ₂	[94-71-3]	2-ethoxyphenol				
	V	(380–486)	54.7	392	EB	[2012PAL/ORA]
	V	(380–486)	52.3	415	EB	[2012PAL/ORA]
	V	(380–486)	50.9	428	EB	[2012PAL/ORA]
	V	(380–486)	49.3	445	EB	[2012PAL/ORA]
	V	(380–486)	48.3	457	EB	[2012PAL/ORA]
C ₈ H ₁₀ O ₂ S	[3112-90-1]	benzyl methyl sulfone				
	FUS		25.52	400.5	FPM	[1961BUS/IVI]
	V	(455–529)	64.9	470	A, BG	[1987STE/MAL, 1999DYK/SVO, 1961BUS/IVI]
C ₈ H ₁₀ O ₂ S	[57382-97-5]	ethyl 2-thiopheneacetate				
	V		61.8 ± 1.3	298	C	[2009RIB/SAN2]
C ₈ H ₁₀ O ₂ S	[37784-63-7]	ethyl 3-thiopheneacetate				
	V		63.2 ± 1.3	298	C	[2009RIB/SAN2]
C ₈ H ₁₀ O ₃	[13149-00-3]	<i>cis</i> -cyclohexane-1,2-dicarboxylic acid anhydride				
	TRS	(12–330)	5.59	304		
	FUS	(12–330)	0.85	310.5	AC	[1983GEI/NUR]
	V	(325–525)	48.8 ± 0.1			[1984NUR/MEK]
C ₈ H ₁₀ O ₃	[85-42-7]	1,2-cyclohexanedicarboxylic anhydride				
	FUS	(80–390)	14.71	303.8	AC	[2008LU/GAO]
C ₈ H ₁₀ O ₃	[5150-42-5]	2,3-dimethoxyphenol				
	V		76.5 ± 0.5	298	C	[2003MAT/MIR]
C ₈ H ₁₀ O ₃	[91-10-1]	2,6-dimethoxyphenol				
	SUB		98.4 ± 1.1	298	C	[2003MAT/MIR]
C ₈ H ₁₀ O ₃	[500-99-2]	3,5-dimethoxyphenol				
	SUB		101.1 ± 2.3	298	C	[2003MAT/MIR]
C ₈ H ₁₀ O ₄		<i>trans,trans</i> -2,6-octadiene-1,8-dioic acid				
	TRS		11.04	439		
	FUS		27.77	541		[1969COR/FRA]
C ₈ H ₁₀ O ₄		<i>trans,cis</i> -2,6-octadiene-1,8-dioic acid				
	FUS		22.78	380		[1969COR/FRA]
C ₈ H ₁₀ O ₆	[59743-08-7]	dioxobutanedioic acid, diethyl ester				
	V	(343–507)	59.3	358	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₀ S	[766-92-7]	benzyl methyl sulfide				
	V	(336–368)	51.8	351		[1999DYK/SVO]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(336–368)	50.8	351	A	[1987STE/MAL]
	V	(323–358)	55.2 ± 2.1	298		[1962MAC/MAY]
C ₈ H ₁₀ S	[622-38-8]	ethyl phenyl sulfide				
	V	(255–451)	56.4	298	A	[2004SAW/MOK]
	V	(338–367)	50.9	353		[1999DYK/SVO]
	V	(338–477)	51.7	353		[1987STE/MAL]
	V	(323–358)	53.6 ± 2.1			[1962MAC/MAY]
C ₈ H ₁₀ S	[14092-00-3]	2-(methylthio)toluene				
	V		50.2			[1986BAL/GNA]
C ₈ H ₁₀ S	[623-13-2]	4-(methylthio)toluene				
	V		50.2			[1986BAL/GNA]
C ₈ H ₁₁ Cl ₃ OS	[76619-94-8]	2,3,3-trichloro-2-propenethioic acid, <i>O</i> -pentyl ester				
	V	(413–455)	74.1		GC	[1980PIT/KIS]
C ₈ H ₁₁ F ₃ O ₂	[1549-45-7]	trifluoroacetic acid, cyclohexyl ester				
	V	(345–420)	43	360	A, EB	[1987STE/MAL, 1969SHE/LAN, 1999DYK/SVO]
C ₈ H ₁₁ N	[121-69-7]	<i>N,N</i> -dimethylaniline				
	FUS		11.56	275.6	DSC	[1972AHM/EAD2]
	V	(284–323)	53.7 ± 0.5	304	A	[1997VER]
	V	(363–418)	49.2	378		[1987STE/MAL]
	V		52.8 ± 0.1	298		C
V	(302–467)	47.6	317	A		[1987STE/MAL, 1947STU]
C ₈ H ₁₁ N	[95-68-1]	2,4-dimethylaniline				
	V	(295–339)	61.3 ± 0.6	317	A	[1997VER]
	V	(383–485)	55.5	398		[1987STE/MAL]
	V	(326–485)	56.9	341		[1947STU]
C ₈ H ₁₁ N	[95-78-3]	2,5-dimethylaniline				
	FUS		13.7	279	DSC	[1972AHM/EAD2]
	V	(295–339)	61.7 ± 0.7	317		[1997VER]
C ₈ H ₁₁ N	[87-62-7]	2,6-dimethylaniline				
	V	(286–326)	59.2 ± 0.3	306	GS	[2000VER3]
	V	(286–326)	59.6 ± 0.3	298	GS	[2000VER3]
	V	(373–490)	48.5	388	A	[1987STE/MAL]
	V	(317–491)	50.7	332		[1947STU]
C ₈ H ₁₁ N	[103-69-5]	<i>N</i> -ethylaniline				
	V	(279–318)	58.3 ± 0.6	298	A	[1997VER]
	V	(311–477)	52.2	326		[1987STE/MAL]
C ₈ H ₁₁ N	[578-54-1]	2-ethylaniline				
	V	(283–323)	60.3 ± 0.9	304.3	GS	[2000VER3]
	V	(283–323)	60.6 ± 0.9	298	GS	[2000VER3]
C ₈ H ₁₁ N	[589-16-2]	4-ethylaniline				
	V	(393–491)	53.1	408	A	[1987STE/MAL]
V	(325–490)	54.6	340	[1947STU]		
C ₈ H ₁₁ N	[104-90-5]	5-ethyl-2-methylpyridine				
	V	(348–451)	45.4	363	A	[1987STE/MAL]
	V	(253–276)	51.6	264	GS	[1980VAN/PRA]
C ₈ H ₁₁ N	[98-84-0]	α -methyl benzylamine				
	V	(284–323)	55.3 ± 0.3	298	GS	[2013THO/CHI]
	V		55.3 ± 2.6	298	CGC	[2013THO/CHI]
	V	(283–318)	54.7 ± 0.3	301	GS	[1999VER4]
	V	(283–318)	54.9 ± 0.3	298	GS	[1999VER4]
C ₈ H ₁₁ N	[618-36-0]	<i>dl</i> - α -methyl benzylamine				
	V		54.7 ± 2.4	298	CGC	[2013GOB/RAT]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(292–318)	36.7	305	A	[1987STE/MAL]
	V		54.5 ± 0.1	298	C	[1987ATI/SAI]
C ₈ H ₁₁ N	[3886-69-9]	(+)- α -methylbenzylamine				
	V		54.1 ± 0.1	298	C	[1987ATI/SAI]
C ₈ H ₁₁ N	[2627-86-3]	(-)- α -methylbenzylamine				
	V		54.6 ± 0.1	298	C	[1987ATI/SAI]
C ₈ H ₁₁ N	[104-84-7]	4-methylbenzylamine				
	V	(353–466)	54.4	368	A	[1987STE/MAL]
C ₈ H ₁₁ N	[64-04-0]	2-phenylethylamine				
	V		56.6 ± 2.4	298	CGC	[2013GOB/RAT]
	V	(285–323)	57.5 ± 0.3	298	GS	[2013THO/CHI]
	V		57.7 ± 2.6	298	CGC	[2013THO/CHI]
	V	(277–351)	55.7 ± 0.2	313	DM	[2009MOK/RAZ]
	V	(277–351)	56.8 ± 0.2	298	DM	[2009MOK/RAZ]
C ₈ H ₁₁ N	[695-98-7]	2,3,5-trimethylpyridine				
	V	(293–426)	44.0	359		[1995SAK/UEO]
C ₈ H ₁₁ N	[1462-84-6]	2,3,6-trimethylpyridine				
	V		48.5	328	C	[1985MAJ/SVO2]
	V		47.5	343	C	[1985MAJ/SVO2]
	V		45.7	368	C	[1985MAJ/SVO2]
	V		50.6	298		[1985MAJ/SVO2]
C ₈ H ₁₁ N	[108-75-8]	2,4,6-trimethylpyridine				
	FUS		9.54	229	AC	[1996DOM/HEA, 1957MAS]
	V		51.4 ± 2.8	298	CGC	[2010LIP/PLI]
	V	(342–373)	50.4 ± 2.9	298	CGC	[2009LIP/CHI2]
	V	(323–373)	50.2	298	CGC	[1995CHI/HOS]
	V	(303–424)	46.5	363		[1995SAK/UEO]
	V	(298–444)	51.2	313	EB	[1990LEN]
	V		50.3 ± 0.2	298		[1985MAJ/SVO2]
	V		48.3	328	C	[1985MAJ/SVO2]
	V		47.2	343	C	[1985MAJ/SVO2]
	V		45.5	368	C	[1985MAJ/SVO2]
C ₈ H ₁₁ N	[622-39-9]	2-propylpyridine				
	V	(338–445)	46.6	353	A	[1987STE/MAL]
C ₈ H ₁₁ N	[4673-31-8]	3-propylpyridine				
	V	(350–450)	49.9	365	A	[1987STE/MAL]
C ₈ H ₁₁ N	[1122-81-2]	4-propylpyridine				
	V	(354–465)	47.8	369	A	[1987STE/MAL]
C ₈ H ₁₁ N	[103434-09-9]	1-norbornylisocyanide				
	SUB		60.6 ± 0.5	298		[1987MEI/DOG]
C ₈ H ₁₁ N	[3211-90-3]	<i>exo</i> -2-cyanobicyclo[2.2.1]heptane				
	TRS		7.95	237.7		
	FUS		2.93	298.8	AC	[1996DOM/HEA, 1995KOL]
C ₈ H ₁₁ N	[3211-87-8]	<i>endo</i> -2-cyanobicyclo[2.2.1]heptane				
	TRS		2.25	177.3		
	FUS		2.96	331.2	AC	[1996DOM/HEA, 1995KOL]
C ₈ H ₁₁ NO	[122-98-5]	2-anilinoethanol				
	V	(377–553)	69.9	392	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₁ NO	[94-70-2]	2-ethoxyaniline				
	V	(373–458)	57.3	388	A	[1987STE/MAL]
C ₈ H ₁₁ NO	[156-43-4]	4-ethoxyaniline				
	V	(421–523)	61.2	436	A	[1987STE/MAL]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₁ NO ₂	[4355-17-3]	3-azabicyclo[3.3.1]nonane-2,4-dione				
	TRS		16.3	408.6		
	FUS		3.3	463.6	DSC	[2007HUL/JOH]
C ₈ H ₁₁ N ₃ O ₃ S	[134678-17-4]	2',3'-dideoxy-3'-thiacytidine (lamivudine)				
	FUS		20.84	451.8	DSC	[2012CHA/ARO2]
C ₈ H ₁₁ N ₃ O ₄	[87473-90-3]	methyl <i>N</i> -(4,6-dimethoxypyrimidin-2-yl)carbamate				
	FUS	(80–380)	26.29	357.2	AC	[2004XIN/TAN]
C ₈ H ₁₁ N ₅	[116988-56-8]	8-ethyl-9-methyladenine				
	SUB		127.1 ± 0.7			[1994ZIE/ZIE]
	SUB	(365–370)	115.2 ± 1.0	368	ME	[1987KAM/ZIE]
C ₈ H ₁₁ N ₅	[139909-51-6]	6,8,9-trimethyladenine				
	FUS		23.1	438		[1994ZIE/ZIE]
	SUB	(334–342)	98.6 ± 0.2	338	ME	[1994ZIE/ZIE]
C ₈ H ₁₁ N ₅	[3013-82-9]	<i>N, N, 9</i> -trimethyladenine				
	SUB	(319–349)	101.7 ± 2.1		ME	[1984ZIE/ZIE]
C ₈ H ₁₁ N ₅ O ₂		2-amino-9-[(2-hydroxyethoxy)methyl]-9 <i>H</i> -purine				
	FUS		42.2	462.2	DSC	[1995KRI/VES]
C ₈ H ₁₁ N ₅ O ₃	[59277-89-3]	2-amino-9-[(2-hydroxyethoxy)methyl]-1,9-dihydro-6 <i>H</i> -purin-6-one				
	FUS		30.44	528.2	DSC	[1995KRI/VES]
C ₈ H ₁₂	[13027-75-3]	<i>anti</i> -tricyclo[4.2.0.0 ^{2,5}]octane				
	V		41.8 ± 1.7	298		[2008OSM/CAT]
C ₈ H ₁₂	[28636-10-4]	<i>syn</i> -tricyclo[4.2.0.0 ^{2,5}]octane				
	V		41.8 ± 1.7	298		[2008OSM/CAT]
C ₈ H ₁₂	[250-21-5]	tricyclo[3.3.0.0 ^{2,6}]octane				
	V	(273–343)	40.0	273		[1988LET/SEW]
	V	(273–343)	39.1	298		[1988LET/SEW]
	V	(273–343)	38.3	323		[1988LET/SEW]
C ₈ H ₁₂		cyclooctadiene (mixed isomers)				
	V	(290–474)	34.6	305	A	[1987STE/MAL]
C ₈ H ₁₂	[1552-12-1]	<i>cis,cis</i> -1,5-cyclooctadiene				
	V		43.4 ± 0.1	298	C	[1996VAR/PAS]
C ₈ H ₁₂	[10092-71-4]	1,5-cyclooctadiene				
	TRS		0.38	194.4		
	FUS	(11–323)	9.83	204		[1996DOM/HEA, 1975LEB/TSV]
	V	(348–386)	40.9	363	A	[1987STE/MAL]
C ₈ H ₁₂	[6553-48-6]	<i>dl</i> - <i>trans</i> -1,2-divinylcyclobutane				
	V	(319–371)	38.9 ± 0.5	298	EB	[1996VAR/PAS]
	V	(350–385)	39.1	365	A	[1987STE/MAL]
	V		42.3	298		[1973RAU/GEY]
	V		39.0 ± 0.5	367		[1973RAU/GEY]
C ₈ H ₁₂	[100-40-3]	<i>dl</i> -4-vinyl-1-cyclohexene				
	V	(292–405)	40.1	307	A	[1987STE/MAL]
C ₈ H ₁₂	[931-64-6]	bicyclo[2.2.2]octene				
	TRS	(5–411)	0.19	110.5		
	TRS	(5–411)	5.65	176.5		
	FUS	(5–411)	5.4	389.8	AC	[1970WON/WES]
	SUB		43.8 ± 0.4		C	[1970WES/WON, 1977PED/RYL, 1971WON/WES]
C ₈ H ₁₂	[21426-37-9]	dispiro[2.0.2.2]octane				
	V	(280–369)	38.3		DSC	[1995BEC/RUC]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₂	[25399-32-0] V	dispiro[2.1.2.1]octane (278–362)	32.2		DSC	[1995BEC/RUC]
C ₈ H ₁₂ BrN ₅ O ₃	[81475-44-7] FUS	8-bromo-9-[(2-hydroxyethoxy)methyl]guanine	36.44	452.9	DSC	[1999ZIE/GOL]
C ₈ H ₁₂ Cl ₂ O ₅	V	diethylene glycol bis(chloroacetate) (421–586)	87.3	436	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]
C ₈ H ₁₂ I NO ₂	[55406-53-6] FUS	3-iodo-2-propynyl butylcarbamate	22.68	341.41	DSC	[2012LIM/JAN]
C ₈ H ₁₂ NO ₅ PS ₂	[115-93-5] FUS	<i>O, O</i> -dimethyl <i>O</i> -(4-aminosulfonylphenyl)phosphorodithioate	26.21	344.2	DSC	[1990DON/DRE]
C ₈ H ₁₂ N ₂	[42046-61-7] V	pentylmalodinitrile (298–328)	66.9 ± 0.4		GS	[1990BEC/DOG]
C ₈ H ₁₂ N ₂	[629-40-3] FUS	suberic acid dinitrile (suberonitrile) (303–339)	21.97	268.9	DSC	[2007BAD/BLA]
	V		77.3	318	A	[1987STE/MAL, 1960WOO/MUR]
C ₈ H ₁₂ N ₂	[3333-52-6] TRS	tetramethylsuccinonitrile	18.1	345	DSC	[1996DOM/HEA, 1970MUR/BRE2] [1973LEB/KAT, 1977PED/RYL]
	FUS		7.15	442		
	SUB		81.2 ± 1.7			
C ₈ H ₁₂ N ₂	[1124-11-4] SUB	tetramethylpyrazine	94.6 ± 4.0	298	C	[1996RIB/MOR]
C ₈ H ₁₂ N ₂	[71614-58-9] V	<i>N</i> -cyclopentylimidazole (305–346)	70.6 ± 0.5	298	GS	[2015VER/ZAI3]
C ₈ H ₁₂ N ₂ O	[15029-30-8] SUB	1-(cyanoacetyl)piperidine	103.5 ± 1.9	298	C	[2008RIB/CAB]
C ₈ H ₁₂ N ₂ O ₂	[31703-08-9] FUS	1,3-dimethyl-5-ethyluracil (312–321)	19.4	354.4	DSC	[1996KAM/ZIE]
	SUB		98.7 ± 1.7	316	ME	[1996KAM/ZIE]
	SUB		99.3 ± 0.2	308	ME	[1983COL/JIM]
	SUB		110 ± 1.2	330	QR	[1983COL/JIM]
C ₈ H ₁₂ N ₂ O ₂	[59264-09-4] SUB	1,3,5,6-tetramethyluracil (350–391)	101.7 ± 0.9	298	GS	[2013NOT/EME]
C ₈ H ₁₂ N ₂ O ₂	[822-06-0] FUS	1,6-hexamethylene diisocyanate	18.64	206.1		[1996DOM/HEA, 1983BYK/LEB]
C ₈ H ₁₂ N ₂ O ₂ S	[5217-47-0] FUS	1,3-diethyl-2-thiobarbituric acid (265–365)	35.5	377.1	DSC	[2012ROU/NOT]
	SUB		98.3 ± 0.6	298	GS	[2014NOT/ROU2]
C ₈ H ₁₂ N ₂ O ₂ S	[1709-59-7] FUS	4-amino- <i>N, N</i> -dimethylbenzene sulfonamide	29.7	444.6	DSC	[2014PER/KAZ]
C ₈ H ₁₂ N ₂ O ₃	[32479-73-5] FUS	1,3-diethylbarbituric acid (328–380)	19.6	326.8	DSC	[2011TEM/ROU]
	V		81.4 ± 0.6	298	GS	[2014NOT/ROU2]
C ₈ H ₁₂ N ₂ O ₃	[57-44-3] FUS (I)	5,5-diethylbarbituric acid (barbital)	25.4	463.2	DSC	[2014ZEN/GRI]
	FUS (III)		26.8	456.5		
	FUS (IV)		24.8	454.4		
	FUS (V)		27.3	448.8		
	TRS		0.7	413.3		
	FUS		24.8	462		

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	FUS		24.98	462.6	DSC	[1986CHA/DEM]
	FUS		24.4		DSC	[1982TRE/VAU]
	FUS		28.2		DSC	[1978SEK/TSU]
	SUB	(355–377)	113.9 ± 0.6	366	ME	[2009RIB/RIB3]
	SUB	(355–377)	117.3 ± 0.6	298	ME	[2009RIB/RIB3]
C ₈ H ₁₂ N ₂ O ₃	[13566-66-0]	1,3,5,5-tetramethylbarbituric acid				
	FUS		18.5	382.2	DSC	[2011TEM/ROU]
	SUB	(323–365)	87.7 ± 0.5	298	GS	[2014NOT/ROU]
C ₈ H ₁₂ N ₄ O ₁₀	[2555-54-6]	2,2-dinitropropyl-4,4-dinitropentanoate				
	TRS		23.01	330.6		
	FUS		6.28	370.8	DSC	[1971ROS/HOL]
C ₈ H ₁₂ N ₄ O ₁₀	[34001-51-9]	2-methyl-2-nitropropyl-4,4,4-trinitrobutyrate				
	TRS		24.69	346.1		
	FUS		5.27	349.4	DSC	[1971ROS/HOL]
C ₈ H ₁₂ O	[59348-18-4]	1-methylnorcamphor				
	V		47.6			[1984KOZ/TIM]
C ₈ H ₁₂ O	[7040-43-9]	2- <i>tert</i> -butylfuran				
	V	(270–308)	38.7 ± 0.4	289	GS	[1998VER/WEL]
	V	(270–308)	38.1 ± 0.4	298	GS	[1998VER/WEL]
C ₈ H ₁₂ OS	[20387-67-1]	2-oxa-6-thiaadamantane				
	TRS		4.11	224		
	FUS		8.12	557	DSC	[1978AND/CAR]
C ₈ H ₁₂ O ₂	[10279-96-6]	2,6-dioxaadamantane				
	TRS		5.84	276		
	FUS		3.78	444	DSC	[1978AND/CAR]
C ₈ H ₁₂ O ₂	[562-46-9]	4,4-dimethyl-1,3-cyclohexanedione				
	SUB		99.2 ± 2.1	298	ME	[1993PIL/PAR]
C ₈ H ₁₂ O ₂	[126-81-8]	5,5-dimethyl-1,3-cyclohexanedione				
	SUB		99.8 ± 1.1	298	ME	[1993PIL/PAR]
C ₈ H ₁₂ O ₂	[933-52-8]	2,2,4,4-tetramethyl-1,3-cyclobutanedione				
	SUB		70.3 ± 3.5		HSA	[1975CHI]
	SUB		72.2 ± 0.6			[1971SEL2]
	SUB		72.4 ± 0.6		C	[1971MOR]
C ₈ H ₁₂ O ₂	[1489-74-3]	1,5-cyclooctanedione				
	FUS		11.92	341.2		[1972ALV/BOR]
C ₈ H ₁₂ O ₂	[1516-17-2]	<i>trans,trans</i> -2,4-hexadienyl acetate				
	V		54.7 ± 1.4	298	CGC	[2015KOZ/GOB]
C ₈ H ₁₂ O ₄	[3971-31-1]	1,3-cyclohexanedicarboxylic acid				
	FUS		12.9	439.0	DSC	[2011BOO/MON]
	SUB	(298–318)	67	308	ME	[2011BOO/MON]
C ₈ H ₁₂ O ₄	[623-91-6]	diethyl fumerate				
	V	(326–492)	53.2	341	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₂ O ₄	[141-05-9]	diethyl maleate				
	V	(330–498)	55.2	345	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₂ O ₄ S	[925-47-3]	thiodiacetic acid, diethyl ether				
	V	(385–448)	77.7	400		[1999DYK/SVO]
C ₈ H ₁₂ S ₆	[6327-74-8]	1,3,5,7-tetramethyl-2,4,6,8,9,10-hexathiatricyclo[3.3.1.1.3.7]decane				
	FUS		23.7	501.4	DSC	[2002BOU/SAI]
C ₈ H ₁₃ ClN ₂ O ₂	[5902-51-2]	5-chloro-3-(1,1-dimethylethyl)-6-methyl-2,4(1 <i>H</i> ,3 <i>H</i>)-pyrimidinedione				

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₄	FUS		12.51	448	DSC	[1990DON/DRE]
	[280-33-1]	bicyclo[2.2.2]octane				
	TRS		4.6	164		[1984DOM/EVA]
	TRS	(5-465)	4.6	164.3		
	FUS	(5-465)	8.37	447.5	AC	[1991ACR, 1970WON/WES]
	SUB	(323-363)	46.3 ± 0.8	343	BG	[1971BOY/SAN, 1977PED/RYL, 1987STE/MAL]
	SUB		47.7 ± 0.8	298		[1971BOY/SAN, 1977PED/RYL]
C ₈ H ₁₄	[1755-05-1]	<i>cis</i> -bicyclo[3.3.0]octane				
	V	(298-318)	42.0	308	A	[1987STE/MAL]
						[1970WES/WON, 1971BOY/SAN, 1977PED/RYL]
[Note: The coefficients in [1987STE/MAL] came from [1970CHA/MCN]. The coefficients pertain to log P = A - B/T + C log T, and not the Antoine equation.]						
C ₈ H ₁₄	V		41.5 ± 0.4	318	EB	[1970CHA/MCN]
	V		43.1 ± 0.8	298	EB	[1970CHA/MCN]
C ₈ H ₁₄	[5597-89-7]	<i>trans</i> -bicyclo[3.3.0]octane				
	V	(298-320)	41.4	309	A	[1987STE/MAL]
[Note: The coefficients in [1987STE/MAL] came from [1970CHA/MCN]. The coefficients pertain to log P = A - B/T + C log T, and not the Antoine equation.]						
C ₈ H ₁₄	V		41.3 ± 0.4	320	EB	[1970CHA/MCN]
	V		42.7 ± 0.8	298	EB	[1970CHA/MCN]
C ₈ H ₁₄	[28282-35-1]	<i>cis</i> -bicyclo[4.2.0]octane				
	V	(298-347)	40.7	313	A	[1987STE/MAL]
[Note: The coefficients in [1987STE/MAL] came from [1970CHA/MCN]. The coefficients pertain to log P = A - B/T + C log T, and not the Antoine equation.]						
C ₈ H ₁₄	V		39.5 ± 0.4	347	EB	[1970CHA/MCN]
	V		42.7 ± 1.2	298	EB	[1970CHA/MCN]
C ₈ H ₁₄	[16526-90-2]	<i>cis</i> -bicyclo[5.1.0]octane				
	V	(297-322)	43.6 ± 0.8	309	A, EB	[1987STE/MAL, 1970CHA/MCN]
C ₈ H ₁₄	[286-43-1]	bicyclo[5.1.0]octane				
	V		43.5 ± 0.8	298		[2008OSM/CAT]
C ₈ H ₁₄	[931-88-4]	cyclooctene				
	TRS	(8-330)	9.8	190.1		
	FUS	(8-330)	1.81	259.2	AC	[1994LEB/SMI]
	V	(273-411)	42.0	288	A	[1987STE/MAL]
	V	(273-333)	41.6	300		[1941LIS]
C ₈ H ₁₄	[695-12-5]	vinylcyclohexane				
	V		39.7 ± 0.2	298	GCC	[1979FUC/PEA]
C ₈ H ₁₄	[3524-75-2]	allylcyclopentane				
	V		40.4 ± 0.2	298	GCC	[1979FUC/PEA]
C ₈ H ₁₄	[627-58-7]	2,5-dimethyl-1,5-hexadiene				
	V	(330-388)	38.8	345	A	[1987STE/MAL]
C ₈ H ₁₄	[24253-25-6]	3,3-dimethyl-1,5-hexadiene				
	V	(293-371)	35.2	308	A	[1987STE/MAL, 1969FRE/SOL]
C ₈ H ₁₄		3,4-dimethylhexadiene				
	SUB		53.1			[1956SEK/SUZ, 1960JON]
C ₈ H ₁₄	[1453-24-3]	1-ethylcyclohexene				
	V	(353-412)	39.1	368	A	[1987STE/MAL]
	V	(332-411)	40.1	347	MM	[1960CAM/ROS]
C ₈ H ₁₄	[2439-79-4]	1-methylbicyclo[4.1.0]heptane				
	V	(340-394)	37.2	355	A	[1987STE/MAL]
C ₈ H ₁₄	[629-05-0]	1-octyne				
	V		42.3 ± 0.1	298	C	[1983HAL/STE]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₄	V	(357–400)	38.5	372	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
	[2809-67-8] V	2-octyne	44.5 ± 0.1	298	C	[1983HAL/STE]
C ₈ H ₁₄	V	(368–412)	39.9	383	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
	[15232-76-5] V	3-octyne	43.9	298		[UR/FUC, 1985MAJ/SVO]
C ₈ H ₁₄	V	(363–406)	39.7	378	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
	[1942-45-6] V	4-octyne	42.7 ± 0.1	298	C	[1983HAL/STE]
C ₈ H ₁₄	V	(362–405)	39.6	377	A	[1987STE/MAL, 1970EIS/ORA, 1984BOU/FRI]
	[765-90-2] TRS FUS	<i>endo</i> -2-methylbicyclo[2.2.1]heptane	4.73 1.62	152.4 278.3	AC	[1996DOM/HEA, 1964SER/GOR]
C ₈ H ₁₄	[872-78-6] FUS	<i>exo</i> -2-methylbicyclo[2.2.1]heptane	8.37	164.1	AC	[1996DOM/HEA, 1964SER/GOR]
	C ₈ H ₁₄ Br ₂	[29974-69-4] V	1,2-dibromocyclooctane (292–354)	50.3	307	A
C ₈ H ₁₄ ClN ₅	[1912-24-9] FUS	2-chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine (atrazine)	Not given	448.3	DSC	[2013JIA/LI]
						[Note: Authors of [2013JIA/LI] reported that the enthalpy of fusion could not be determined because the compound decomposed shortly after melting.]
C ₈ H ₁₄ Cl ₂ S	FUS		34.2		DSC	[1971GET/WAR]
	SUB	(324–354)	114.6	339	GS	[1982GRA/FOS]
	SUB	(323–403)	113.8	338	GS-GC	[1964FRI/STA, 1987STE/MAL]
C ₈ H ₁₄ Cl ₂ S	[16660-53-0] V	(2-chlorocyclohexyl)(2-chloroethyl) sulfide (293–333)	62.5	308	A, GS	[1987STE/MAL, 1948RED/CHA, 1999DYK/SVO]
	C ₈ H ₁₄ N ₂	[62842-38-0] V	2-piperidinopropionitrile (283–318)	57.6 ± 0.3	GS	[1997WEL/VER]
C ₈ H ₁₄ N ₂	[49570-30-1] SUB	1,4-dimethyl-2,3-diazabicyclo[2.2.2]octane	72.0 ± 0.5	298	C	[1976ENG/MEL]
	C ₈ H ₁₄ N ₂	[19768-54-8] V	1-pentylimidazole (308–366)	69.1 ± 0.5	298	GS
C ₈ H ₁₄ N ₂	[13435-22-8] V	1-butyl-2-methylimidazole (294–343)	67.8 ± 0.2	298	GS	[2011EME/POR2]
C ₈ H ₁₄ N ₂	[54714-50-0] V	azepan-1-ylacetone	62.2 ± 0.5	298	C	[2014FRE/LEI]
	C ₈ H ₁₄ N ₂ O ₂	[19701-85-0] FUS	α -acetylproline <i>N</i> -methylamide	24.94	375.9	DSC
SUB		(308–318)	69.1	313	A	[1987STE/MAL, 1955AIH]
C ₈ H ₁₄ N ₂ O ₂	FUS	<i>N</i> -acetyl-DL-proline- <i>N'</i> -methylamide	26.06	378.1	DSC	[2014BAD/DEL]
C ₈ H ₁₄ N ₂ O ₂	SUB	β -acetylproline <i>N</i> -methylamide (319–335)	60.7	327	A	[1987STE/MAL, 1955AIH]
C ₈ H ₁₄ N ₄ OS	[21087-64-9] FUS	4-amino-6-(1,1-dimethylethyl)-3-(methylthio)1,2,4-triazin-5(4 <i>H</i>)-one	18.0	399.4	DSC	[1991ACR, 1990DON/DRE]
	C ₈ H ₁₄ N ₄ O ₂	[10095-06-4] SUB	2,4,6,8-tetramethylglycoluril (mebicarum)	108 ± 3	298	ME, MS
C ₈ H ₁₄ N ₅ Cl	[1912-24-9] FUS	6-chloro- <i>N</i> -ethyl- <i>N'</i> -(isopropyl)-1,3,5-triazine-2,4-diamine	38.15	449.7	DSC	[1990DON/DRE]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₄ N ₆ O ₁₀	[14173-62-7] FUS	1,7-diacetoxy-2,4,6-trinitro-2,4,6-triazaheptane	38.49	422.5	DSC	[1996DOM/HEA, 1971HAL]
C ₈ H ₁₄ O	[502-49-8]	cyclooctanone				
	V	(343–383)	54.4	298	CGC	[1995CHI/HOS]
	V	(343–383)	53.6	298	CGC	[1995CHI/HOS]
	V	(343–383)	54.2	298	CGC	[1995CHI/HOS]
	V	(323–403)	47.3	338	A	[1987STE/MAL, 1972WOL]
	V	(394–484)	46.8	409	A, EB	[1987STE/MAL, 1976MEY/HOT]
C ₈ H ₁₄ O	[645-62-5]	2-ethyl-2-hexenal				
	V	(326–448)	48.4	341	A	[1987STE/MAL, 1961DYK/SEP]
C ₈ H ₁₄ O	[28419-86-5]	2-ethyl-4-methyl-2-pentenal				
	V	(311–436)	46.7	326	A	[1987STE/MAL, 1961DYK/SEP]
C ₈ H ₁₄ O	[110-93-0]	6-methyl-5-hepten-2-one				
	V	(284–327)	52.4 ± 0.1	298	Static	[2015ZAI/VER]
	V	(274–313)	51.0 ± 0.4	298	GS	[2015ZAI/VER]
	V	(364–393)	45.9	379	EB	[1989WAN/YIN]
	V	(328–451)	44.7 ± 0.2	390	Static	[1988BAG/GUR]
	V	(328–451)	51.8 ± 0.4	298	Static	[1988BAG/GUR, 2015ZAI/VER]
C ₈ H ₁₄ O	[1193-70-0]	(<i>dl</i>)-2-propylcyclopentanone				
	V	(332–457)	46.0	347	A	[1987STE/MAL]
C ₈ H ₁₄ O	[283-27-2]	3-oxabicyclo[3.2.2]nonane				
	TRS	(6–480)	7.02	208.5		
	FUS	(6–480)	6.75	448.4		[1996DOM/HEA, 1970WES/WON]
	SUB		53.1 ± 0.5			[1971WON/WES, 1977PED/RYL]
	SUB		53.3 ± 0.1	298	ME	[1970WES/WON]
C ₈ H ₁₄ O ₂	[5292-21-7]	cyclohexylacetic acid				
	FUS		13.8	302.6	DSC	[2008DOM/MOR]
C ₈ H ₁₄ O ₂	[5698-29-3]	octanolactone				
	V	(345–380)	48.9 ± 0.2	362	MM	[1991WIB/WAL]
	V	(345–380)	52.8 ± 1.3	298	MM	[1991WIB/WAL]
C ₈ H ₁₄ O ₂	[698-76-0]	δ-octanolactone				
	V		66.6 ± 4.0	298	CGC	[2014KOZ/GOB]
	V	(288–353)	67.0 ± 0.2	298	GS	[2007EME/KOZ]
C ₈ H ₁₄ O ₂	[104-50-7]	γ-octanolactone				
	V		66.0 ± 3.9	298	CGC	[2014KOZ/GOB]
C ₈ H ₁₄ O ₂		acrylic acid, neopentyl ester				
	V	(301–325)	45.7	313	A	[1987STE/MAL]
C ₈ H ₁₄ O ₂	[3891-33-6]	1,4-butanediol divinyl ether				
	V	(335–440)	49.0	350	A	[1987STE/MAL]
C ₈ H ₁₄ O ₂	[97-88-1]	butyl methacrylate				
	FUS		15.55	197.8		[1995LEB/KUL]
	V	(343–373)	47.4	358	A	[1987STE/MAL]
	V	(344–437)	45.1	359	A	[1987STE/MAL]
C ₈ D ₁₄ O ₂	[158612-79-4]	perdeuteriobutyl methacrylate				
	FUS	(10–330)	16.04	198.1	AC	[1995LEB/KUL]
C ₈ H ₁₄ O ₂	[5453-85-0]	cyclopentanecarboxylic acid ethyl ester				
	V	(275–308)	51.2 ± 0.6		GS	[1996VIT/CHA]
C ₈ H ₁₄ O ₂	[177-10-6]	1,4-dioxaspiro[4.5]decane				
	V	(278–308)	50.6 ± 0.6	298	GS	[1998VER/PEN, 2002VER]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₄ O ₂	[622-45-7]	cyclohexyl acetate				
	FUS		3.38	221.45	DSC	[2008DOM/MOR]
	[Note: The value reported in [2008DOM/MOR] seems abnormally small.]					
	TRS		5.23	221.8		
	FUS	(5–320)	8.0	224.6	AC	[1999KAB/KOZ, 2001KOZ/BLO]
	V		52.3 ± 0.2	298	C	[2004PAU/ZAI, 2003ZAI/VER]
	V	(253–283)	56.5 ± 0.5	298	ME	[2003ZAI/VER]
	V	(253–283)	52.6 ± 0.5	298	ME	[2003ZAI/VER]
	V	(274–318)	52.3 ± 0.8	298	GS	[2003ZAI/VER]
C ₈ H ₁₄ O ₂	[585-07-9]	methylacrylic acid, <i>tert</i> -butyl ester				
	V	(313–410)	42.9	328	A	[1987STE/MAL]
	[2998-23-4]	pentyl acrylate				
	V	(325–440)	44.9	340	A	[1987STE/MAL]
	[142-30-3]	2,5-dimethyl-3-hexyne-2,5-diol				
	V		82.8 ± 1.0	298	CGC	[2006UMN/KWE]
	[56922-71-5]	propyl 3-methylbut-2-enoate				
	V	(278–311)	53.0 ± 0.2	298	GS	[2008EME/TOK]
	[25859-51-2]	isopropyl 3-methylbut-2-enoate				
V	(279–313)	50.0 ± 0.2	298	GS	[2008EME/TOK]	
C ₈ H ₁₄ O ₃	[106-31-0]	butyric anhydride				
	V	(349–470)	49.1	364	A	[1987STE/MAL]
C ₈ H ₁₄ O ₃	[764-99-8]	diethylene glycol divinyl ether				
	V	(336–470)	50.0	351	A	[1987STE/MAL]
C ₈ H ₁₄ O ₃	[607-97-6]	2-ethylacetoacetic acid, ethyl ester				
	V	(313–471)	53.3	328	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₄ O ₃	[21884-26-4]	isopropyl levulinate				
	V	(321–481)	56.6	336	A	[1987STE/MAL, 1947STU]
	V		52.0	422		[1931SCH/COW]
C ₈ H ₁₄ O ₃	[645-67-0]	propyl levulinate				
	V	(332–495)	56.3	347	A	[1987STE/MAL]
	V		54.0	436		[1931SCH/COW]
C ₈ H ₁₄ O ₄	[20473-73-8]	2-acetoxypropionic acid, propyl ester				
	V	(318–469)	59.5	333	A	[1987STE/MAL, 1950REH/DIX]
C ₈ H ₁₄ O ₄	[200867-13-6]	3-acetoxypropionic acid, propyl ester				
	V	(361–373)	74.7	367	A	[1987STE/MAL, 1948FEI/FIS]
C ₈ H ₁₄ O ₄	[123-25-1]	diethyl succinate				
	V	(393–468)	51.2	408		[2011MAT/KIM]
	V	(290–346)	63.5		GS	[2011LIP/KRA]
	V	(290–346)	65.1 ± 0.3	298	GS	[2011LIP/KRA]
	V	(327–490)	56.5	342	A	[1987STE/MAL]
	V	(327–490)	64.5	298	A	[1987STE/MAL, 2011LIP/KRA]
	V	(328–490)	54.7	409		[1947STU, 2011LIP/KRA]
	V	(328–490)	64.5	298		[1947STU, 2011LIP/KRA]
	V	(335–455)	54.7	395		[1940HEI/REI, 2011LIP/KRA]
C ₈ H ₁₄ O ₄	[615-81-6]	diisopropyl oxalate				
	V	(288–330)	60.2 ± 0.4	298	GS	[2011POR/KRA]
	V	(418–501)	57.8	433	A	[1987STE/MAL]
	V	(316–467)	62.3	298	A	[1987STE/MAL, 2011POR/KRA]
	V	(316–467)	57.6	331	A	[1987STE/MAL, 1947STU]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₄ O ₄	[627-93-0]	dimethyl adipate				
	V	(353–443)	74.6	368		[2007LEE/LAI]
	V	(294–373)	69.0 ± 0.2	298	GS	[2006VER/KOZ]
	V	(293–344)	67.1 ± 0.3	298	GS	[2006VAS/VER, 2006VER/KOZ]
	V	(293–323)	U55.9 ± 2.0	298	TE	[1997CHE/LIA, 2006VER/KOZ]
	V	(382–500)	58.8	397	A	[1987STE/MAL]
C ₈ H ₁₄ O ₄	[615-98-5]	dipropyl oxalate				
	V	(326–487)	57.8	341	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₄ O ₄	[123-80-8]	ethylene dipropionate				
	V	(295–323)	63.1 ± 1.0		GS	[2011MAS/KRA]
C ₈ H ₁₄ O ₄	[609-08-5]	2-methylmalonic acid, diethyl ester				
	V	(373–468)	55.5	388		[2005LEE/SU]
C ₈ H ₁₄ O ₄	[609-08-5]	2-methylmalonic acid, diethyl ester				
	V	(312–475)	52.5	327	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₄ O ₄	[505-48-6]	octanedioic acid (suberic acid)				
	TRS		2.0	335.9		
	TRS		9.1	403.6		
	FUS		30.7	413.2	DSC	[2005ROU/TEM]
	FUS		28.82	415.3	DSC	[1991ACR, 1974CIN/BER]
	SUB	(348–378)	168 ± 7		TPD	[2007CAP/LOV]
	SUB	(310–320)	148		TPTD	[2001CHA/TOB]
	SUB		147.8 ± 3.8	298		[1999RIB/MON, 1960DAV/THO]
	SUB	(379–407)	143.1 ± 3.8	393	M	[1960DAV/THO, 1970COX/PIL, 1987STE/MAL]
	V	(424–503)	116.7 ± 0.8	298	CGC	[2005ROU/TEM]
V	(445–619)	91.4	460	A	[1987STE/MAL, 1947STU]	
C ₈ H ₁₄ O ₄	[630-51-3]	tetramethysuccinic acid				
	TRS		13.43	383		
	FUS		6.47	464	DSC	[1996DOM/HEA, 1970MUR/BRE2]
C ₈ H ₁₄ O ₄ S	[925-47-3]	thiodiacetic acid, diethyl ester				
V	(384–448)	77.3	399	A	[1987STE/MAL]	
C ₈ H ₁₄ O ₅		isopropyl[1-(methoxycarbonyl)ethyl] carbonate				
V	(330–493)	55.5	345	A	[1987STE/MAL]	
C ₈ H ₁₄ O ₅		2-(lactyloxy)propionic acid, ethyl ester				
V	(321–389)	72.8	336	A	[1987STE/MAL, 1952REH/DIX]	
C ₈ H ₁₄ O ₅	[7554-12-3]	malic acid, diethyl ester				
	V	(353–527)	59.6	368	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₄ O ₅	[902263-88-1]	propyl[1-(methoxycarbonyl)ethyl] carbonate				
V	(373–495)	58.0	388	A	[1987STE/MAL]	
C ₈ H ₁₄ O ₆	[13811-71-7]	(<i>d</i>)-diethyl tartrate				
	V	(375–553)	65.9	390		[1947STU]
C ₈ H ₁₄ O ₆	[87-91-2]	(<i>dl</i>)-diethyl tartrate				
	V	(375–553)	67.3	390	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₄ O ₆		(<i>d</i>)-dimethoxysuccinic acid dimethyl ester				
SUB			53.1			[1937DUN/WOL]
C ₈ H ₁₄ O ₆		(<i>dl</i>)-dimethoxysuccinic acid dimethyl ester				
SUB			57.7			[1937DUN/WOL]
C ₈ H ₁₄ O ₆		<i>meso</i> -dimethoxysuccinic acid dimethyl ester				
SUB			74.1			[1937DUN/WOL]
C ₈ H ₁₄ O ₆ S	[29771-87-7]	sulfonyldiacetic acid, diethyl ester				
	V	(421–494)	88.2	426		[1999DYK/SVO]
	V	(421–494)	87.6	436	A	[1987STE/MAL]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₄ O ₆ S	[5450-67-9] FUS	dimethyl 3,3'-sulfonyldipropionate	41.1	390.3	DSC	[1994WAN/KUO]
C ₈ H ₁₅ Br	[1647-26-3] V	(2-bromoethyl)cyclohexane (311–486)	54.2	326	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₈ H ₁₅ ClO	[111-64-8] V	octanoyl chloride (343–373)	74.5	358	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₁₅ ClO	[99222-85-2] V	5-methylheptanoyl chloride (338–373)	66.3	353	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₁₅ Cl ₃ O ₄	V	trichlorohydrine pentaerythritol (404–449)	80.4	419		[1965LUT/KOL]
C ₈ H ₁₅ N	[283-24-9] TRS	3-azabicyclo[3.2.2]nonane (5–350)	14.48	297.8	AC	[1963BAR/WES]
	FUS	(280–490)	6.92	466.6	AC	[1996DOM/HEA, 1964WUL/WES]
	SUB		57.8 ± 1.3	298	C	[1970WES/WON]
	SUB	(303–443)	52.2	318	A	[1987STE/MAL, 1964WUL/WES]
C ₈ H ₁₅ N	[124-12-9] V	octanenitrile (283–310)	55.7 ± 0.2	298	GS	[2005EME/VER]
	V	(373–480)	50.0	388	A	[1987STE/MAL]
	V		56.8 ± 0.3	298	C	[1977STRI/SUN]
	V	(374–420)	49.8	389	EB	[1971MEY/REN]
	V	(420–479)	48.0	435	EB	[1971MEY/REN]
	V	(316–477)	56.7	331		[1947STU]
	V	(322–460)	53.5	298	EB	[1941RAL/SEL, 2005EME/VER]
V	(294–477)	57.2 ± 0.3	298	MM	[1933HEI, 2005EME/VER]	
C ₈ H ₁₅ NO	[4747-81-3] V	heptyl isocyanate (326–461)	47.5	341	A	[1987STE/MAL]
C ₈ H ₁₅ NO	[6554-73-0] V	methacrylic acid <i>N</i> - <i>tert</i> -butylamide (340–467)	49.6	355	A	[1987STE/MAL]
C ₈ H ₁₅ NO	SUB	<i>trans</i> -2-octenoic acid amide (373–393)	73.5	383	A	[1987STE/MAL]
C ₈ H ₁₅ NO	[935-30-8] FUS	azacyclononan-2-one	18.9	348.5	DSC	[2012EME/VER]
	SUB	(309–344)	102.3 ± 0.5	298	GS	[2012EME/VER]
	V	(353–373)	85.3 ± 0.5	298	GS	[2012EME/VER]
C ₈ H ₁₅ NO ₂	[2867-47-2] FUS	methacrylic acid, 2-(dimethylamino)ethyl ester	16.85	237.7	AC	[1996DOM/HEA, 1985KAR/ABD]
	V	(372–460)	48.8	387	A	[1987STE/MAL]
C ₈ H ₁₅ NO ₂	V	1-lactopiperidine (346–408)	62.1	361	A	[1987STE/MAL]
C ₈ H ₁₅ NO ₂	[1563-86-6] V	<i>N</i> -acetyl- <i>N</i> -butylacetamide	64.4 ± 0.4	298	C	[1965WAD]
C ₈ H ₁₅ NO ₃	[5411-58-5] V	<i>N</i> , <i>N</i> -diethyloxamic acid, ethyl ester (349–525)	60.5	364	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₅ N ₅ O	[673-04-1] FUS	2-methoxy-4,6-bis(ethylamino)-1,3,5-triazine (simatone)	24.7		DSC	[1971GET/WAR]
	SUB	(323–403)	98.2	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
C ₈ H ₁₅ N ₅ S	[1014-70-6] FUS	2-methylthio-4,6-bis(ethylamino)-1,3,5-triazine (simetryn)	24.0	353.2		[2007VEC/BRU]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		120 ± 6	298	DSC	[2007VEC/BRU]
	SUB		115 ± 4	298	DSC	[2007VEC/BRU]
	SUB	(323–355)	101.3	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
	V		88 ± 4	461	DSC	[2007VEC/BRU]
	V		83.7 ± 1.3	453	TGA	[2007VEC/BRU]
C ₈ H ₁₅ N ₅ S	[1014-69-3]	2-methylthio-4-methylamino-6-isopropyl-1,3,5-triazine				
	SUB	(323–357)	101.5	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
C ₈ H ₁₅ N ₇ O ₂ S ₃	[76824-35-6]	3-[[[2-[(aminoiminomethyl)amino]-4-thiazolyl]methyl]thio]-N-(aminosulfonyl)propanimidamide (famotidine)				
	FUS (I)		48.17	445.65		
	FUS (II)		50.28	439.35	DSC	[2015MAT/MOR]
	FUS (I)		49.7	447.0		
	FUS (II)		48.6	438.6	DSC	[2007LU/WAN]
	FUS (I)		45.81	444.4		
	FUS (II)		43.92	436.6	DSC	[2002ROU/DAV]
	SUB		207		TGA	[1997ELD]
C ₈ H ₁₆	[16747-50-5]	1-ethyl-1-methylcyclopentane				
	V	(332–422)	36.9 ± 0.1	332	C	[1981HOS/SCO3]
	V	(332–422)	35.9 ± 0.1	350	C	[1981HOS/SCO3]
	V	(332–422)	34.7 ± 0.1	371	C	[1981HOS/SCO3]
	V	(332–422)	33.9 ± 0.1	384	C	[1981HOS/SCO3]
	V	(332–422)	32.2 ± 0.1	410	C	[1981HOS/SCO3]
	V	(332–422)	38.8	298	C	[1981HOS/SCO3]
C ₈ H ₁₆	[292-64-8]	cyclooctane				
	TRS		6.32	166.5		
	TRS		0.48	183.8		
	FUS		2.41	288		[1991ACR, 1956FIN/SCO]
	TRS		5.72	167.2		
	FUS		2.51	288		[1952KAA/COO]
	SUB		58.7	166	B	[1963BON]
	V	(358–413)	40.3	373		[1991WU/LOC]
	V		43.1 ± 0.2		GC	[1989AZA]
	V	(289–369)	43.3	304	A	[1987STE/MAL]
	V	(373–434)	39.3	388	EB	[1976MEY/HOT]
	V	(291–323)	43.1	306		[1975ANA/GRO]
	V		43.3 ± 0.2	298		[1956FIN/SCO]
	V	(369–467)	39.4	384	A, EB	[1987STE/MAL, 1956FIN/SCO]
C ₈ H ₁₆	[590-66-9]	1,1-dimethylcyclohexane				
	TRS		5.98	153.2		
	FUS	(12–303)	2.01	239.8	AC	[1996DOM/HEA, 1949HUF/TOD]
	V	(271–303)	39.6 ± 0.1	287	GS	[1995CHI/HES]
	V		38.8 ± 0.1	298		[1995CHI/HES]
	V		37.9	298		[1975KUS/SAI]
	V		37.8	298		[1971WIL/ZWO]
	V	(313–395)	36.6	328	A	[1987STE/MAL, 1949FOR/NOR]
C ₈ H ₁₆	[2207-01-4]	<i>cis</i> -1,2-dimethylcyclohexane				
	TRS		8.26	172.5		
	FUS	(12–298)	1.64	223.3	AC	[1996DOM/HEA, 1949HUF/TOD]
	V		39.4	298		[1975KUS/SAI]
	V		39.7	298		[1971WIL/ZWO]
	V		35.5 ± 0.1	370	C	[1951MCC/PER]
	V		34.5 ± 0.1	387	C	[1951MCC/PER]
	V		39.7 ± 0.1	298	C	[1947OSB/GIN]
	V	(322–405)	38.0	337	A, MM	[1987STE/MAL, 1945WIL/TAY]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₆	[6876-23-9]	<i>(dl)</i> - <i>trans</i> -1,2-dimethylcyclohexane				
	FUS	(12–301)	10.5	185	AC	[1996DOM/HEA, 1949HUF/TOD]
	V		38.3	298		[1975KUS/SAI]
	V		38.4	298		[1971WIL/ZWO]
	V		34.4 ± 0.1	373	C	[1951MCC/PER]
	V		33.5 ± 0.1	387	C	[1951MCC/PER]
	V	(316–399)	38.4 ± 0.1	298	C	[1947OSB/GIN]
			37.0	331	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₆	[638-04-0]	<i>cis</i> -1,3-dimethylcyclohexane				
	FUS	(12–299)	10.82	197.6	AC	[1996DOM/HEA, 1949HUF/TOD]
	V	(318–396)	36.8	333	A	[1987STE/MAL]
	V		38.1	298		[1975KUS/SAI]
	V		38.2	298		[1971WIL/ZWO]
	V		34.9 ± 0.1	363	C	[1951MCC/PER]
	V		33.3 ± 0.1	385	C	[1951MCC/PER]
		38.2 ± 0.1	298	C	[1947OSB/GIN]	
	(316–398)	37.7	331	MM	[1945WIL/TAY]	
C ₈ H ₁₆	[2207-03-6]	<i>(dl)</i> - <i>trans</i> -1,3-dimethylcyclohexane				
	FUS	(13–299)	9.87	183.1	AC	[1996DOM/HEA, 1949HUF/TOD]
	V	(314–400)	37.9	329	A	[1987STE/MAL]
	V		39.1	298		[1975KUS/SAI]
	V		39.2	298		[1971WIL/ZWO]
		39.2 ± 0.1	298	C	[1947OSB/GIN]	
	(314–394)	37.4	329	MM	[1945WIL/TAY]	
C ₈ H ₁₆	[624-29-3]	<i>cis</i> -1,4-dimethylcyclohexane				
	FUS	(12–303)	9.29	185.7	AC	[1996DOM/HEA, 1949HUF/TOD]
	V		39.0	298		[1975KUS/SAI]
	V		39.0	298		[1971WIL/ZWO]
		39.0 ± 0.1	298	C	[1947OSB/GIN]	
	(317–400)	37.6	332	A, MM	[1987STE/MAL, 1945WIL/TAY]	
C ₈ H ₁₆	[2207-04-7]	<i>(dl)</i> - <i>trans</i> -1,4-dimethylcyclohexane				
	FUS	(12–299)	12.34	236.2	AC	[1996DOM/HEA, 1949HUF/TOD]
	V		37.6	298		[1975KUS/SAI]
	V		37.9	298		[1971WIL/ZWO]
	V		35.6 ± 0.1	341	C	[1951MCC/PER]
	V		34.6 ± 0.1	357	C	[1951MCC/PER]
	V		33.5 ± 0.1	377	C	[1951MCC/PER]
		39.9 ± 0.1	298	C	[1947OSB/GIN]	
	(313–395)	36.7	328	A, MM	[1987STE/MAL, 1945WIL/TAY]	
C ₈ H ₁₆	[1678-91-7]	ethylcyclohexane				
	FUS		8.45	161.9	AC	[2015RAM/CHI]
	FUS		8.5	161.5	Quasi-AC	[2006MAN/CUT]
	FUS	(12–299)	8.33	161.4		[1996DOM/HEA, 1949HUF/TOD]
	V		39.2 ± 0.4	298	GC	[1987AZA]
	V		39.8 ± 0.1	313	C	[1981SVO/CHA]
	V		38.9 ± 0.1	328	C	[1981SVO/CHA]
	V		37.9 ± 0.1	343	C	[1981SVO/CHA]
	V		37.0 ± 0.1	358	C	[1981SVO/CHA]
	V		36.3 ± 0.1	368	C	[1981SVO/CHA]
	V		40.0 ± 0.4	298	GCC	[1978FUC/PEA]
	V		40.4	298		[1975KUS/SAI]
	V		40.5	298		[1971WIL/ZWO]
	V		40.5 ± 0.1	298	C	[1947OSB/GIN]
	(323–407)	38.6	338	A, MM	[1987STE/MAL, 1945WIL/TAY]	

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₆	[2040-96-2]	propylcyclopentane				
	FUS	(12–364)	10.04	155.8	AC	[1996DOM/HEA, 1965MES/TOD]
	V		41.1	298		[1971WIL/ZWO]
	V	(323–406)	41.1 ± 0.1	298	C	[1947OSB/GIN]
C ₈ H ₁₆	[3875-51-2]	isopropylcyclopentane				
	V		37.9	298		[1971WIL/ZWO]
	V	(320–403)	39.4 ± 0.1	298	C	[1947OSB/GIN]
C ₈ H ₁₆	[4259-00-1]	1,1,2-trimethylcyclopentane				
	V		36.3	324	A, MM	[1987STE/MAL, 1949FOR/NOR]
C ₈ H ₁₆	[4516-69-2]	1,1,3-trimethylcyclopentane				
	V		35.4	316	A, MM	[1987STE/MAL, 1949FOR/NOR]
C ₈ H ₁₆	[16747-50-5]	1-ethyl-1-methylcyclopentane				
	V	(331–397)	36.7	346	A	[1987STE/MAL]
	V	(238–288)	40.2	273	IPM	[1987STE/MAL, 1974OSB/DOU]
	V	(316–396)	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[930-89-2]	(<i>dl</i>)- <i>cis</i> -1-ethyl-2-methylcyclopentane				
	V	(238–304)	42.5	253	A	[1987STE/MAL]
	V	(303–403)	39.3	318	A	[1987STE/MAL]
	V	(238–288)	41.6	273	IPM	[1974OSB/DOU]
	V	(322–402)	40.2	298		[1971WIL/ZWO]
C ₈ H ₁₆	[930-90-5]	<i>trans</i> -1-ethyl-2-methylcyclopentane				
	V		39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[2613-66-3]	<i>cis</i> -1-ethyl-3-methylcyclopentane				
	V		39.3	298		[1941KIR/SIT]
C ₈ H ₁₆	[2613-65-2]	<i>trans</i> -1-ethyl-3-methylcyclopentane				
	V		38.9	298		[1941KIR/SIT]
C ₈ H ₁₆	[4259-00-1]	1,1,2-trimethylcyclopentane				
	V		37.2	298		[1971WIL/ZWO]
C ₈ H ₁₆	[4516-69-2]	1,1,3-trimethylcyclopentane				
	V		36.0	298		[1971WIL/ZWO]
C ₈ H ₁₆		<i>cis, cis</i> -1,2,3-trimethylcyclopentane				
	V		38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆		<i>cis, cis</i> -1,2,4-trimethylcyclopentane				
	V		38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	[15890-40-1]	<i>cis</i> -1,2- <i>trans</i> -3-trimethylcyclopentane				
	V		38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	[4850-28-6]	<i>cis</i> -1,2- <i>trans</i> -4-trimethylcyclopentane				
	V	(311–392)	36.8	326	A, MM	[1987STE/MAL, 1949FOR/NOR]
C ₈ H ₁₆	[13398-35-1]	<i>trans</i> -1,2- <i>cis</i> -4-trimethylcyclopentane				
	V		36.8	298		[1971WIL/ZWO]
C ₈ H ₁₆	[111-66-0]	1-octene				
	FUS	(11–308)	15.31	171.5	C	[1996DOM/HEA, 1957MCC/FIN]
	V	(373–423)	40.6	298	CGC	[1995CHI/HOS]
	V		39.5 ± 0.1	313	C	[1982SVO/CHA]
	V		38.6 ± 0.1	328	C	[1982SVO/CHA]
			37.6 ± 0.1	343	C	[1982SVO/CHA]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		36.6 ± 0.1	358	C	[1982SVO/CHA]
	V		35.8 ± 0.1	368	C	[1982SVO/CHA]
	V	(263–291)	40.2	277	MM	[1981CHI/HYM]
	V	(260–291)	41.2	275	HSA	[1981CHI/HYM]
	V		40.3 ± 0.2	298	C	[1977MAN/SEL]
	V		38.0	298		[1971WIL/ZWO]
	V	(317–395)	38.8	332	A, MM	[1987STE/MAL, 1950FOR/CAM]
C ₈ H ₁₆	[7642-04-8]	<i>cis</i> -2-octene				
	V		40.2	298		[1971WIL/ZWO]
	V	(356–400)	37.8	371	A	[1987STE/MAL, 1983ELV/KUU]
C ₈ H ₁₆	[13389-42-9]	<i>trans</i> -2-octene				
	V	(356–399)	37.9	371	A	[1987STE/MAL, 1983ELV/KUU]
	V		40.2	298		[1971WIL/ZWO]
C ₈ H ₁₆	[14850-22-7]	<i>cis</i> -3-octene				
	V		37.3	298		[1983ELV/KUU]
	V		39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[14919-01-8]	<i>trans</i> -3-octene				
	V	(354–396)	37.6	369	A	[1987STE/MAL, 1983ELV/KUU]
	V		40.2	298		[1971WIL/ZWO]
C ₈ H ₁₆	[7642-15-1]	<i>cis</i> -4-octene				
	V	(353–395)	37.2	368	A	[1987STE/MAL, 1983ELV/KUU]
	V		39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[14850-23-8]	<i>trans</i> -4-octene				
	V	(276–308)	43.2 ± 0.3	292	GS	[2000VER/WAN]
	V	(276–308)	42.9 ± 0.3	298	GS	[2000VER/WAN]
	V	(353–396)	37.4	368	A	[1987STE/MAL, 1983ELV/KUU]
	V		39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[15870-10-7]	2-methyl-1-heptene				
	V		39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[4810-09-7]	3-methyl-1-heptene				
	V		38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[13151-05-8]	4-methyl-1-heptene				
	V		38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[13151-04-7]	5-methyl-1-heptene				
	V		38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[5026-76-6]	6-methyl-1-heptene				
	V		38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[627-97-4]	2-methyl-2-heptene				
	V		39.7	298		[1971WIL/ZWO]
	V	(257–396)	41.2	272	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₆	[22768-19-0]	3-methyl- <i>cis</i> -2-heptene				
	V		39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[22768-20-3]	3-methyl- <i>trans</i> -2-heptene				
	V		39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-16-9]	4-methyl- <i>cis</i> -2-heptene				
	V		38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-17-0]	4-methyl- <i>trans</i> -2-heptene				
	V		38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[24608-84-2]	5-methyl- <i>cis</i> -2-heptene				
	V		39.3	298		[1971WIL/ZWO]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₆	[24608-85-3] V	5-methyl- <i>trans</i> -2-heptene	39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-18-1] V	6-methyl- <i>cis</i> -2-heptene	39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[51065-65-7] V	6-methyl- <i>trans</i> -2-heptene	39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[20488-34-0] V	2-methyl- <i>cis</i> -3-heptene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[692-96-6] V	2-methyl- <i>trans</i> -3-heptene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[22768-17-8] V	3-methyl- <i>cis</i> -3-heptene	39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[22768-18-9] V	3-methyl- <i>trans</i> -3-heptene	39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[14255-24-4] V	4-methyl- <i>cis</i> -3-heptene	39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[13714-85-7] V	4-methyl- <i>trans</i> -3-heptene	39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[50422-80-5] V	5-methyl- <i>cis</i> -3-heptene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[53510-18-2] V	5-methyl- <i>trans</i> -3-heptene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-19-2] V	6-methyl- <i>cis</i> -3-heptene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-20-5] V	6-methyl- <i>trans</i> -3-heptene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[1632-16-2] V	2-ethyl-1-hexene	39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[3404-58-8] V	3-ethyl-1-hexene	38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[16746-85-3] V	4-ethyl-1-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[16746-86-4] V	2,3-dimethyl-1-hexene	38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[16746-87-5] V	2,4-dimethyl-1-hexene	38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[6975-92-4] V	2,5-dimethyl-1-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[3404-77-1] V	3,3-dimethyl-1-hexene	36.0	298		[1971WIL/ZWO]
C ₈ H ₁₆	[16745-94-1] V	3,4-dimethyl-1-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[7423-69-0] V	3,5-dimethyl-1-hexene	38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	[1647-08-1] V	4,4-dimethyl-1-hexene	31.0	298		[1971WIL/ZWO]
C ₈ H ₁₆	[16106-59-5] V	4,5-dimethyl-1-hexene	38.5	298		[1971WIL/ZWO]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₆	[7116-86-1] V	5,5-dimethyl-1-hexene	37.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[36880-72-5] V	3-ethyl- <i>cis</i> -2-hexene	39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[19781-63-6] V	3-ethyl- <i>trans</i> -2-hexene	39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[54616-49-8] V	4-ethyl- <i>cis</i> -2-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[19781-63-6] V	4-ethyl- <i>trans</i> -2-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[7145-20-2] V	2,3-dimethyl-2-hexene	39.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[14255-23-3] V	2,4-dimethyl-2-hexene	38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[3404-78-2] V	2,5-dimethyl-2-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[19550-81-3] V	3,4-dimethyl- <i>cis</i> -2-hexene	39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[19550-82-4] V	3,4-dimethyl- <i>trans</i> -2-hexene	39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-31-8] V	3,5-dimethyl- <i>cis</i> -2-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-12-5] V	3,5-dimethyl- <i>trans</i> -2-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-13-6] V	4,4-dimethyl- <i>cis</i> -2-hexene	38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	[19550-83-5] V	4,4-dimethyl- <i>trans</i> -2-hexene	38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	V	4,5-dimethyl- <i>cis</i> -2-hexene	38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-14-7] V	4,5-dimethyl- <i>trans</i> -2-hexene	38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[39761-61-0] V	5,5-dimethyl- <i>cis</i> -2-hexene	38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	[39782-43-9] V	5,5-dimethyl- <i>trans</i> -2-hexene	38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	[16789-51-8] V	3-ethyl-3-hexene	39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[690-92-6] V V V	<i>cis</i> -2,2-dimethyl-3-hexene (319–380) (305–379)	35.3 37.2 36.1	334 298 320	A MM	[1987STE/MAL] [1971WIL/ZWO] [1960CAM/ROS]
C ₈ H ₁₆	[690-93-7] V V V	<i>trans</i> -2,2-dimethyl-3-hexene (306–379) (303–374)	36.1 37.2 36.3	321 298 318	A MM	[1987STE/MAL] [1971WIL/ZWO] [1960CAM/ROS]
C ₈ H ₁₆	[59643-75-3] V	<i>cis</i> -2,3-dimethyl-3-hexene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[66225-30-7] V	<i>trans</i> -2,3-dimethyl-3-hexene	38.9	298		[1971WIL/ZWO]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₈ H ₁₆	[37549-89-6]	<i>cis</i> -2,4-dimethyl-3-hexene					
	V		38.5	298		[1971WIL/ZWO]	
C ₈ H ₁₆	[61847-78-7]	<i>trans</i> -2,4-dimethyl-3-hexene					
	V		38.5	298		[1971WIL/ZWO]	
C ₈ H ₁₆	[10557-44-5]	<i>cis</i> -2,5-dimethyl-3-hexene					
	V		37.2	298		[1971WIL/ZWO]	
C ₈ H ₁₆	[692-70-6]	<i>trans</i> -2,5-dimethyl-3-hexene					
	V		37.5	298		[1971WIL/ZWO]	
C ₈ H ₁₆	[19550-87-9]	<i>cis</i> -3,4-dimethyl-3-hexene					
	V		39.7	298		[1971WIL/ZWO]	
C ₈ H ₁₆	[19550-88-0]	<i>trans</i> -3,4-dimethyl-3-hexene					
	V		39.7	298		[1971WIL/ZWO]	
C ₈ H ₁₆	[15918-08-8]	2-propyl-1-pentene					
	V		39.3	298		[1971WIL/ZWO]	
C ₈ H ₁₆	[61847-79-8]	2-isopropyl-1-pentene					
	V		38.8	298		[1971WIL/ZWO]	
C ₈ H ₁₆	[3404-67-9]	2-ethyl-3-methyl-1-pentene					
	V		(307–389)	36.4	322	A	[1987STE/MAL]
	V			38.9	298		[1971WIL/ZWO]
	V		(308–383)	36.4	323	MM	[1960CAM/ROS]
C ₈ H ₁₆	[3404-80-6]	2-ethyl-4-methyl-1-pentene					
	V			38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[19780-66-6]	3-ethyl-2-methyl-1-pentene					
	V			37.7	298		[1971WIL/ZWO]
C ₈ H ₁₆	[6196-60-7]	3-ethyl-3-methyl-1-pentene					
	V			38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[61847-80-1]	3-ethyl-4-methyl-1-pentene					
	V			38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[560-23-6]	2,3,3-trimethyl-1-pentene					
	V			38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[565-76-4]	2,3,4-trimethyl-1-pentene					
	V			38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆	[107-39-1]	2,4,4-trimethyl-1-pentene					
	FUS			8.79	178.9		[1996DOM/HEA, 1936PAR/TOD2]
	V	(306–356)	35.7	298	EB	[2007MAL]	
	V	(343–381)	33.5	358	A	[1987STE/MAL]	
	V		35.7	298		[1971WIL/ZWO]	
	V	(301–375)	35.1	316	MM	[1960CAM/ROS]	
C ₈ H ₁₆	[564-03-4]	3,3,4-trimethyl-1-pentene					
	V			38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	[19780-67-7]	2-methyl-3-ethyl-2-pentene					
	V			39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[42067-48-1]	4-methyl-3-ethyl- <i>cis</i> -2-pentene					
	V			39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[42067-49-2]	4-methyl-3-ethyl- <i>trans</i> -2-pentene					
	V			38.9	298		[1971WIL/ZWO]

[Note: The authors give enthalpy of fusion data for two isomers of diisobutylene. It is speculated in the manuscript that the low boiling point isomer is 2,2,4-trimethyl-1-pentene; whereas the high boiling point isomer is believed to be 2,2,4-trimethyl-2-pentene. The value above is for the low boiling isomer.]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₆	[565-77-5] V	2,3,4-trimethyl-2-pentene	39.3	298		[1971WIL/ZWO]
C ₈ H ₁₆	[107-40-4] FUS	2,4,4-trimethyl-2-pentene	6.78	166		[1996DOM/HEA, 1936PAR/TOD2]
	V	(319–380)	35.7	334	A	[1987STE/MAL]
	V		39.3	298		[1971WIL/ZWO]
	V	(305–378)	37.2	320	MM	[1960CAM/ROS]
C ₈ H ₁₆	[39761-64-3] V	3,4,4-trimethyl- <i>cis</i> -2-pentene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[39761-57-4] V	3,4,4-trimethyl- <i>trans</i> -2-pentene	38.9	298		[1971WIL/ZWO]
C ₈ H ₁₆	[111823-35-9] V	3-methyl-2-isopropyl-1-butene	38.1	298		[1971WIL/ZWO]
C ₈ H ₁₆	[18231-53-3] V	3,3-dimethyl-2-ethyl-1-butene	38.5	298		[1971WIL/ZWO]
C ₈ H ₁₆ Br ₂	[62168-26-7] V	1,1-dibromooctane	57.1	427	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN, 1999DYK/SVO]
C ₈ H ₁₆ Cl ₂	[20395-24-8] V	1,1-dichlorooctane	57.7	298	A	[1987VAR/LOS2, 1991BAS/SVO]
	V	(382–533)	51.4	397	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN, 1999DYK/SVO]
C ₈ H ₁₆ Cl ₂	[21948-46-9] V	1,2-dichlorooctane	52.0	385		[1982VAR/PUC, 1999DYK/SVO]
	V	(370–490)	57.6	298		[1982VAR/PUC, 1992LEE/CHE]
C ₈ H ₁₆ Cl ₂	[2162-99-4] V	1,8-dichlorooctane	55.9	426		[1999DYK/SVO]
	V	(410–510)	65.6	298		[1988VAR/LOS, 1991BAS/SVO]
C ₈ H ₁₆ Cl ₂	[2162-99-4] V	erythro-4,5-dichlorooctane	47.3	415		[1999DYK/SVO]
C ₈ H ₁₆ F ₂	[61350-03-6] V	1,1-difluorooctane	44.2	344	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN, 1999DYK/SVO]
C ₈ H ₁₇ NO ₂	V	ethyl 2-(<i>N,N</i> -dimethylamino)-2-methylpropanoate	51.6 ± 0.5	298	GS	[1996VER/ZUF]
C ₈ H ₁₆ N ₂	[5921-54-0] V	methyl ethyl ketazine	40.0			[1993FER/MOR]
C ₈ H ₁₆ N ₂	[19403-24-8] V	1,1,4,4-tetramethyltetramethylenediazine	50.1 ± 0.4	298	C	[1976ENG/MEL]
C ₈ H ₁₆ N ₂	[35672-46-9] V	2-diethylamino-2-methylpropionitrile	56.3 ± 1.1		GS	[1997WEL/VER]
C ₈ H ₁₆ N ₂ O ₂	[1999-46-8] SUB	DL- α -alanyl-DL- α -valine	160 ± 5		ME, MS	[2012BAD/TYU]
C ₈ H ₁₆ N ₂ O ₂	[28529-34-2] SUB	<i>N</i> -acetyl (L)-leucine amide	115.6 ± 1.4	376	C	[1999DEL/BAR]
	SUB		119.8 ± 1.5	298	C	[1999DEL/BAR]
C ₈ H ₁₆ N ₂ O ₂	[16624-68-3] FUS	<i>N</i> -acetyl (D)-leucine amide	20.2	404	DSC	[1996DOM/HEA, 1988FER/DEL]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB		114.8 ± 0.3	393	C	[1999DEL/BAR]
	SUB		120.4 ± 0.4	298	C	[1999DEL/BAR]
	SUB	(374–401)	101 ± 3	388	TE	[1988FER/DEL, 1986BAR/FER]
C ₈ H ₁₆ N ₂ O ₂	[56711-06-9]	<i>N</i> -acetyl (L)-isoleucine amide				
	FUS		41.8	529.6	DSC	[1997PUL/DES]
	SUB		142.7 ± 0.2	390	C	[1999DEL/BAR]
	SUB		147.4 ± 0.3	298	C	[1999DEL/BAR]
C ₈ H ₁₆ N ₂ O ₂	[19701-84-9]	<i>N</i> -acetyl-L-valine- <i>N'</i> -methylamide				
	FUS		34.07	531.3	DSC	[2014BAD/DEL]
C ₈ H ₁₆ N ₂ O ₂	[113830-74-3]	<i>N</i> -acetyl-DL-valine- <i>N'</i> -methylamide				
	FUS		37.23	496.7	DSC	[2014BAD/DEL]
C ₈ H ₁₆ N ₂ O ₂	[33067-46-8]	<i>N</i> -acetyl-DL-norvaline- <i>N'</i> -methylamide				
	FUS		26.24	432.2	DSC	[2014BAD/DEL]
C ₈ H ₁₆ N ₂ O ₂	[3891-73-4]	suberamide				
	TRS		5.45	431.3		
	FUS		58.4	493.2	DSC	[2006BAD/DEL]
C ₈ H ₁₆ N ₆	[16268-62-5]	1-(methylamino)-3,5-bis(dimethylamino)- <i>s</i> -triazine				
	FUS		22.34	378.8	DSC	[1989BRA/RYT]
C ₈ H ₁₆ N ₆ O	[64124-14-7]	1-(hydroxylamino)-3,5-bis(dimethylamino)- <i>s</i> -triazine				
	FUS		30.67	381.5	DSC	[1989BRA/RYT]
C ₈ H ₁₆ O	[124-13-0]	octanal				
	FUS	(50–350)	25.86	288.2	AC	[1980DYA/VAS]
	V	(277–310)	51.0 ± 0.3	298	GS	[2003VER/KRA2]
	V	(313–353)	53.8	298	CGC	[1995CHI/HOS]
	V	(293–438)	43.4	308	A	[1987STE/MAL]
	V		51.3 ± 0.2	298		[1981DYA/KOR]
C ₈ H ₁₆ O	[18641-70-8]	2,4-dimethyl-3-hexanone				
	V	(350–418)	42.5	365	A	[1987STE/MAL]
C ₈ H ₁₆ O	[696-71-9]	cyclooctanol				
	TRS		2.12	263.6		
	FUS		1.91	296.8	DSC	[2014RUZ/FUL]
	FUS		2.02	291.2	DSC	[2008SIN/MUR]
	TRS		2.05	264.1		
	FUS		1.97	297.1	DSC	[2003RUT/SAL]
	TRS		2.12	261.3		
	FUS		2.06	295		[1995SCI/MAY]
[Note: The authors did not report enthalpic data for all transitions.]						
	TRS		2.67	264.0		
	FUS		1.91	297.5	DTA	[1987EDE/WUR]
	TRS		1.69	246.5		
	FUS		1.79	283.8	DSC	[1982DWO/FUC]
C ₈ H ₁₆ O	[1940-18-7]	1-ethylcyclohexanol				
	V	(324–440)	46.9	339	A	[1987STE/MAL]
C ₈ H ₁₆ O	[13019-20-0]	2-methyl-3-heptanone				
	V	(350–428)	43.5	365	A	[1987STE/MAL]
C ₈ H ₁₆ O	[51500-48-2]	6-methyl-3-hepten-2-ol				
	V	(314–449)	59.7	329	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₆ O	[4630-06-2]	<i>dl</i> -6-methyl-5-hepten-2-ol				
	V	(314–448)	57	329	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₆ O	[111-13-7]	2-octanone				
	FUS		24.42	252.9		[1996DOM/HEA, 1965OET]
	V	(343–383)	52.6	298	CGC	[1995CHI/HOS]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(317–446)	49.8	332	A	[1987STE/MAL]
	V		52.0 ± 0.3	298	GCC	[1979SAL/PEA]
	V	(324–520)	49.1	339	A	[1987STE/MAL, 1975AMB/ELL]
	V	(324–520)	51.8	298		[1975AMB/ELL]
	V	(296–446)	50.6	311		[1947STU]
C ₈ H ₁₆ O	[106-68-3]	3-octanone				
	V	(293–348)	43.8	308	A	[1987STE/MAL]
C ₈ H ₁₆ O	[589-63-9]	4-octanone				
	V	(288–433)	36.4	303	A	[1987STE/MAL]
C ₈ H ₁₆ O	[1604-02-0]	1-propylcyclopentanol				
	V	(344–447)	64.2	359	A	[1987STE/MAL, 1944MCL/EDW]
C ₈ H ₁₆ O	[5857-36-3]	2,2,4-trimethyl-3-pentanone				
	V	(287–408)	55.7	302	A	[1987STE/MAL, 1947STU]
	V		43.3 ± 0.2	298	C	[1970SEL2]
	V		43.3 ± 0.1	298	C	[1966WAD]
C ₈ H ₁₆ O ₂	[859810-98-3]	2-butoxy-3-butanone				
	V	(323–398)	36.7	338	A	[1987STE/MAL]
	V	(323–398)	37.8	360	I	[1933HEN/MUR]
C ₈ H ₁₆ O ₂	[20268-00-2]	<i>trans</i> -2,2,4,6-tetramethyl-1,3-dioxane				
	V		41.9 ± 1.2	298		[1967PIH/HEI]
C ₈ H ₁₆ O ₂	[17227-17-7]	<i>cis</i> -2,2,4,6-tetramethyl-1,3-dioxane				
	V		42.3 ± 1.2	298		[1967PIH/HEI]
C ₈ H ₁₆ O ₂	[56444-60-1]	2,2,6,6-tetramethyl-1,3-dioxane				
	FUS		10.9	250.6		[1975BOR]
C ₈ H ₁₆ O ₂	[933-40-4]	1,1-dimethoxycyclohexane				
	V	(278–308)	48.6 ± 0.2	298	GS	[2002VER]
	V	(278–308)	49.0 ± 0.2		GS	[1998VER/PEN]
	V	(315–347)	52.4	331	EB	[1994WIB/MOR]
C ₈ H ₁₆ O ₂	[124-07-2]	octanoic acid (caprylic acid)				
	FUS		21.4	289.7	DSC	[2014CAR/CAS]
	FUS		22.34	289.6	DSC	[2009COS/SAR]
	FUS		20.8	289.3	DSC	[2004INO/HIS2]
	FUS	(155–300)	21.35	289.7	AC	[1996DOM/HEA, 1982SCH/VAN]
	FUS		21.38	289.5		[1996DOM/HEA, 1924GAR/RAN]
	SUB		113.3 ± 6	298	TPD	[2008CAP/LOV]
	V	(297–343)	79.8 ± 0.6	320	GS	[2000VER2]
	V	(297–434)	81.0 ± 0.6	298	GS	[2000VER2]
	V	(353–393)	81.2	298	CGC	[1995CHI/HOS]
	V	(417–514)	66.6	432	A, EB	[1987AMB/GHI3]
	V	(296–331)	85.3	311	A	[1987STE/MAL]
	V	(360–512)	74.4	375	A	[1987STE/MAL]
	V		80.0	290		[1982DEK/SCH]
	V	(291–303)	82.9 ± 1.0	298	TE	[1979DEK/OON]
	V		70.0	407	I	[1943CRA]
C ₈ H ₁₆ O ₂	[99-66-1]	valproic acid				
	V		74.8 ± 2.4	298	CGC	[2012WIL/CHI]
C ₈ H ₁₆ O ₂	[112-23-2]	heptyl formate				
	V	(276–316)	54.2	296	GS	[2012SAM/NAZ]
	V	(276–316)	53.8 ± 0.2	298	GS	[2012SAM/NAZ]
C ₈ H ₁₆ O ₂	[123-66-0]	ethyl hexanoate				
	V		51.5 ± 1.3	298	CGC	[2015KOZ/GOB]
	V	(254–462)	53.3	298	Static	[2013BEN/KHI2]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(408–440)	43.1	423	EB	[2011MAT/YAM]
	V	(253–462)	49.5 ± 0.5	358	Static	[2011BEN/KHI]
	V	(253–462)	54.1 ± 0.5	298	Static	[2011BEN/KHI]
	V	(279–309)	50.8 ± 0.4	294	GS	[1999VER/HEI]
	V	(279–309)	50.6 ± 0.4	298	GS	[1999VER/HEI]
	V	(345–374)	47.4 ± 0.3	359	EB	[1991WIB/WAL]
	V	(345–379)	51.5 ± 1.3	298	EB	[1991WIB/WAL]
	V	(396–449)	51.8	311	A	[1987STE/MAL]
	V	(300–376)	48.6	315	A	[1987STE/MAL]
	V		51.7 ± 0.1	298	C	[1986NIL/WAD]
C ₈ H ₁₆ O ₂	[149-57-5]	<i>(dl)</i> -2-ethylhexanoic acid				
	V	(397–514)	67.0 ± 0.6	400	EB	[1997STE/CHI3]
	V	(397–514)	64.8 ± 0.6	420	EB	[1997STE/CHI3]
	V	(397–514)	59.9 ± 0.5	460	EB	[1997STE/CHI3]
	V	(397–514)	54.2 ± 0.7	500	EB	[1997STE/CHI3]
	V	(397–514)	76.3 ± 0.9	298	EB	[1997STE/CHI3]
	V	(403–500)	61.8	418	A	[1987STE/MAL]
	V		75.6 ± 0.5	298	C	[1976STR]
C ₈ H ₁₆ O ₂	[142-92-7]	hexyl acetate				
	FUS		19.83	212.1		[1996DOM/HEA, 1984VAS/PET]
	V	(274–309)	51.9 ± 0.3	298	GS	[2006KRA/VER]
	V		52.1	298	GC	[1997KOU/HOS]
	V	(303–444)	50.9	318		[1995ARC/BLA]
	V	(304–381)	48.9	319	A	[1987STE/MAL]
	V	(378–459)	46.2	387	DTA	[1980MEY/AWE]
C ₈ H ₁₆ O ₂	[109-21-7]	butyl butanoate				
	FUS		14.93	181.7		[1996DOM/HEA, 1984VAS/PET]
	V	(400–460)	41.8	420		[2005ORT/ESP]
	V	(400–450)	42.2	425	EB	[1995GON/ORT]
C ₈ H ₁₆ O ₂	[539-90-2]	isobutyl butyrate				
	V	(277–430)	41.7	292	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₆ O ₂	[97-85-8]	isobutyl isobutyrate				
	V	(274–319)	48.5	298	GS	[2008VER/EME]
	V	(278–313)	44.5 ± 0.1	298	GS	[1996VER/BEC]
	V	(277–421)	46.9	292	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₆ O ₂	[105-68-0]	isopentyl propionate				
	V	(281–434)	44.1	296	A	[1987STE/MAL]
C ₈ H ₁₆ O ₂	[624-54-4]	pentyl propanoate				
	V	(274–328)	52.1	301	GS	[2012SAM/NAZ]
	V	(274–328)	52.2 ± 0.1	298	GS	[2012SAM/NAZ]
C ₈ H ₁₆ O ₂	[106-73-0]	methyl heptanoate				
	V	(421–444)	46.3	433		[2009POS/MAR]
	V	(278–310)	53.2 ± 0.2	298	GS	[2008VER/EME]
	V		49.1	350		[2002VAN/VAN]
	V		50.2 ± 0.1	326		[2002VAN/VAN]
	V		51.8 ± 0.1	298		[2002VAN/VAN]
	V	(313–363)	53.4	298	CGC	[1995CHI/HOS]
	V	(433–473)	53.7	298	CGC	[1995CHI/HOS]
	V	(313–353)	53.5	298	CGC	[1995CHI/HOS]
	V		49.7 ± 0.5	298	GC	[1987AZA]
	V		53.1 ± 0.4	298	GCC	[1980FUC/PEA]
	V		53.1 ± 0.1	298	C	[1980FUC/PEA]
	V		51.6 ± 0.5	298	C	[1977MAN/SEL]
	V	(332–402)	49.0	347	A, EST	[1987STE/MAL, 1963ROS/SCH]
C ₈ H ₁₆ O ₂	[25415-67-2]	4-methylvaleric acid, ethyl ester				
	V	(284–434)	45.4	299	A	[1987STE/MAL, 1947STU]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₆ O ₂	[557-00-6] V	propyl isovalerate (281–429)	44.3	296	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₆ O ₂	[34949-22-9] V V	<i>tert</i> -pentyl propionate (274–310) (333–378)	45.3 ± 0.1 45.7	298 298	GS CGC	[2008VER/EME] [1999VER/HEI]
C ₈ H ₁₆ O ₂	[34859-98-8] V	1,1-dimethylbutyl acetate (333–378)	45.6	298	CGC	[1999VER/HEI]
C ₈ H ₁₆ O ₂	[15965-97-6] V	[(3-methylbutoxy)methyl]oxirane 55.8 ± 1.9				[1987VAN/KAC]
C ₈ H ₁₆ O ₂	[39255-32-8] V	(<i>dl</i>)-ethyl 2-methylpentanoate 48.4 ± 1.5		298	CGC	[2015KOZ/GOB]
C ₈ H ₁₆ O ₃	[131265-01-5] V	2-butoxypropionic acid, methyl ester (348–417)	51.9	363	A, I	[1987STE/MAL, 1933HEN/MUR]
C ₈ H ₁₆ O ₃	[4126-55-0] V	3-butoxypropionic acid, methyl ester (311–469)	51.1	326	A	[1987STE/MAL]
C ₈ H ₁₆ O ₃	[14144-34-4] V	3-ethoxypropionic acid, propyl ester (343–461)	48.6	358	A	[1987STE/MAL, 1948DIX/REH]
C ₈ H ₁₆ O ₃	[112-07-2] V V	ethylene glycol monobutyl ether acetate (293–465)	51.9 59.5 ± 0.1	308 298	A C	[1987STE/MAL] [1970KUS/WAD]
C ₈ H ₁₆ O ₃	[816-50-2] V	2-hydroxyisobutyric acid, butyl ester (384–458)	47.7	399	A	[1987STE/MAL, 1954FRI/PIC]
C ₈ H ₁₆ O ₃	[4195-88-4] V	3-methoxypropionic acid, butyl ester (311–469)	50.9	326	A	[1987STE/MAL]
C ₈ H ₁₆ O ₃	[6382-06-5] V	pentyl lactate (288–469)	73.9	303	A	[1987STE/MAL, 1950REH/DIX]
C ₈ H ₁₆ O ₃	[112-15-2] V	diethylene glycol monoethyl ether acetate (293–491)	51.7	308	A	[1987STE/MAL]
C ₈ H ₁₆ O ₃	[2305-25-1] V	ethyl 3-hydroxyhexanoate (363–393)	61.9 ± 0.6	298	CGC	[2005TEM/CHI]
C ₈ H ₁₆ O ₄	[294-93-9] FUS V V	1,4,7,10-tetraoxacyclododecane (12-crown-4)	22.46 65.7 ± 3.7 65.6 ± 0.4	290.7 298 298		[1998DOM] [2000NIC/ORF] [1982BYS/MAN]
C ₈ H ₁₆ O ₄	[2780-59-8] V	3,6-diethyl-3,6-dimethyl-1,2,4,5-tetraoxacyclohexane (403–473)	45.09	298	CGC	[2007CAN/EYL]
C ₈ H ₁₆ S ₄	[25423-56-7] FUS	1,4,7,10-tetrathiacyclododecane	31.0	499.2	DSC	[2002ROC/GRI]
C ₈ H ₁₇ Br	[111-83-1] FUS V V V	1-bromooctane (323–363) (373–475)	24.69 55.1 55.8 ± 0.1 49.3	218.2 298 298 388		[1950CRO/SMY] [1995CHI/HOS] [1976STR3, 1977MAN/SEL] [1987STE/MAL, 1961LI/ROS, 1970DYK/VAN]
C ₈ H ₁₇ Br	[557-35-7] V	(<i>dl</i>)-2-bromooctane (343–463)	48.4	358	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₁₇ Cl	[111-85-3] V V	1-chlorooctane (330–460) (327–457)	51.4 50.3	298 342		[1984BOU/FRI, 1991BAS/SVO] [1987STE/MAL, 1969KEM/KRE]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		52.4 ± 0.1	298	C	[1968WAD]
C ₈ H ₁₇ Cl	[628-61-5]	(<i>dl</i>)-2-chlorooctane				
	V	(330–446)	47.8	345	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₁₇ Cl	[123-04-6]	(3-chloromethyl)heptane				
	V	(371–445)	43.2	386	RS	[2013HUA/LV]
	V	(371–443)	44.2	386	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₁₇ ClO ₄	[5197-66-0]	triethylene glycol mono(2-chloroethyl) ether				
	V	(383–555)	68.6	398	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₇ Cl ₂ N	[42520-97-8]	<i>N</i> -butyl bis(2-chloroethyl)amine				
	V	(273–380)	60.7	288	A,GS	[1987STE/MAL, 1948RED/CHA3, 1999DYK/SVO]
C ₈ H ₁₇ Cl ₂ N		<i>N</i> - <i>sec</i> -butyl bis(2-chloromethyl)amine				
	V	(273–373)	59.5	288	GS	[1987STE/MAL, 1948RED/CHA3, 1999DYK/SVO]
C ₈ H ₁₇ Cl ₂ N	[10125-86-7]	<i>N</i> - <i>tert</i> -butyl bis(2-chloromethyl)amine				
	V	(273–345)	58.4	288	A, GS	[1987STE/MAL, 1948RED/CHA3, 1999DYK/SVO]
C ₈ H ₁₇ Cl ₂ N	[87289-70-1]	<i>N</i> -isobutyl bis(2-chloromethyl)amine				
	V	(273–345)	60.3	288	A, GS	[1987STE/MAL, 1948RED/CHA3, 1999DYK/SVO]
C ₈ H ₁₇ F	[463-11-6]	1-fluorooctane				
	V		49.7	298		[UR/FUC, 1985MAJ/SVO]
	V	(307–446)	44.1	322	A, EST	[1987STE/MAL, 1961LI/ROS, 1970DYK/VAN]
C ₈ H ₁₇ I	[629-27-6]	1-iodooctane				
	V	(391–554)	59.7	298	A, EST	[1987STE/MAL, 1961LI/ROS, 1970DYK/VAN, 2006BOL/NER]
	V	(391–554)	50.7	406	A, EST	[1987STE/MAL, 1961LI/ROS, 1970DYK/VAN]
C ₈ H ₁₇ N	[98-94-2]	<i>N, N</i> -dimethylcyclohexylamine				
	V	(275–314)	46.0 ± 0.2	295	GS	[2015EME/VER3]
	V	(275–314)	45.6 ± 0.3	298	GS	[2015EME/VER3]
C ₈ H ₁₇ N	[5470-02-0]	<i>N</i> -propylpiperidine				
	V	(275–314)	45.2 ± 0.4	294	GS	[1998VER6]
	V	(275–314)	44.9 ± 0.4	298	GS	[1998VER6]
C ₈ H ₁₇ NO	[629-01-6]	octanamide				
	TRS		1.91	194.4		
	TRS		0.97	304.5		
	FUS		27.6	377	DSC	[2008ABA/BAD]
	FUS		24.3	374.9	DSC	[1975BER/CIN]
	SUB	(325–374)	110.5 ± 2.9		GS,ME	[1959DAV/JON2, 1987STE/MAL]
C ₈ H ₁₇ NO	[2430-27-5]	2-propylpentamide (valpromide)				
	TRS		1.75	360.6		
	FUS		22.5	398.2	DSC	[2013GUT/RAT]
	SUB		102.2 ± 3.1	298	V + F	[2013GUT/RAT]
	V		83.6 ± 2.5	298	CGC	[2013GUT/RAT]
C ₈ H ₁₇ NO	[1114-76-7]	butyric acid <i>N, N</i> -diethylamide				
	V	(298–373)	38.7	313	A	[1987STE/MAL, 1968DAV/BAT]
C ₈ H ₁₇ NO	[929-55-5]	caprylaldehyde oxime				
	V	(313–400)	71.3	328	A	[1987STE/MAL, 1962GEI/QUI3]
C ₈ H ₁₇ NO	[7207-49-0]	2-octanone oxime				
	V	(293–487)	67.5	308	A	[1987STE/MAL, 1962GEI/QUI3]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₇ NO	[7207-50-3] V	3-octanone oxime (293–400)	67.2	308	A	[1987STE/MAL, 1962GEI/QUI3]
C ₈ H ₁₇ NO	[7207-51-4] V	4-octanone oxime (293–400)	68.8	308	A	[1987STE/MAL, 1962GEI/QUI3]
C ₈ H ₁₇ NO ₂	[5342-78-9] V	2,4,4-trimethyl-2-nitropentane (288–324)	54.2 ± 0.8	306	GS	[1997VER3]
	V		54.7 ± 0.8	298	GS	[1997VER3]
C ₈ H ₁₇ NO ₂	[5395-35-7] V	lactic acid <i>N</i> -isopentylamide (386–433)	77.9	401	A	[1987STE/MAL, 1950RAT/FIS]
C ₈ H ₁₇ NO ₂	[5323-54-6] V	lactic acid <i>N</i> -pentylamide (373–448)	81.8	388	A	[1987STE/MAL, 1950RAT]
C ₈ H ₁₇ NO ₂	[2743-60-4] V	(<i>l</i>) leucine ethyl ester (333–449)	43.5	348	A	[1987STE/MAL]
C ₈ H ₁₇ NO ₂	V	ethyl 2-(<i>N</i> , <i>N</i> -dimethylamino)-2-methylpropionate	55.6 ± 0.4	283	DSC	[1993SCH/BEC]
C ₈ H ₁₇ NO ₂	[7214-62-2] V	(1-methylheptyl)nitrite (303–338)	44.9	318	A	[1987STE/MAL]
C ₈ H ₁₇ NO ₂	[1002-57-9] SUB	8-aminooctanoic acid (391–402)	166.2 ± 0.9	397	C	[1983SKO/SAB]
	SUB		170 ± 4	298	C	[1983SKO/SAB]
C ₈ H ₁₇ NO ₄	[72458-42-5] FUS	<i>N</i> -ethyl-5-amino-1,5-dideoxy-(β)-glycopyranose	26.3	429.1	DSC	[1994BLU/PRA]
C ₈ H ₁₇ N ₃	[7438-05-3] V	1-octylazide (276–326)	58.9 ± 0.3	298	GS	[2014EME/ALG]
C ₈ H ₁₈	[590-73-8] V	2,2-dimethylhexane (243–380)	37.3	298		[1971WIL/ZWO]
	V		39.7	258		[1947STU]
	V		37.3 ± 0.1	298	C	[1947OSB/GIN]
	V		36.6	317	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[584-94-1] V	2,3-dimethylhexane (250–388)	38.8	298		[1971WIL/ZWO]
	V		41.4	265		[1947STU]
	V		38.8 ± 0.1	298	C	[1947OSB/GIN]
	V		37.6	325	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[589-43-5] V	2,4-dimethylhexane (246–382)	37.8	298		[1971WIL/ZWO]
	V		41	261		[1947STU]
	V		37.8 ± 0.1	298	C	[1947OSB/GIN]
	V		36.9	320	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[592-13-2] V	2,5-dimethylhexane (246–382)	37.9	298		[1971WIL/ZWO]
	V		41.1	261		[1947STU]
	V		37.9 ± 0.1	298	C	[1947OSB/GIN]
	V		36.9	322	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[563-16-6] V	3,3-dimethylhexane (247–385)	41.2	262		[1947STU]
	V		37.5 ± 0.1	298	C	[1947OSB/GIN]
	V		36.6	323	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[583-48-2] V	3,4-dimethylhexane (251–390)	41.3	266		[1947STU]
	V		39.0 ± 0.1	298	C	[1947OSB/GIN]
	V		37.7	328	A, MM	[1987STE/MAL, 1945WIL/TAY]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₈	[619-99-8]	3-ethylhexane				
	V		39.7	298		[1971WIL/ZWO]
	V	(251–391)	42.4	268		[1947STU]
	V	(314–393)	39.6 ± 0.1	298	C	[1947OSB/GIN]
			38.2	329	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[609-26-7]	3-ethyl-2-methylpentane				
	V		38.5	298		[1971WIL/ZWO]
	V	(311–390)	38.5 ± 0.1	298	C	[1947OSB/GIN]
			37.4	326	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[1067-08-9]	3-ethyl-3-methylpentane				
	V		38.0	298		[1971WIL/ZWO]
	V	(249–391)	40.2	264		[1947STU]
	V	(312–393)	38.0 ± 0.1	298	C	[1947OSB/GIN]
			36.9	327	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[592-27-8]	2-methylheptane				
	FUS		11.92	164.2		[1996DOM/HEA, 1971MES/FIN]
	V	(285–392)	39.8	300	A	[1987STE/MAL]
	V		39.7 ± 0.1	298	C	[1979MAJ/SVO]
	V		38.7 ± 0.1	313	C	[1979MAJ/SVO]
	V		37.3 ± 0.1	333	C	[1979MAJ/SVO]
	V	(233–283)	36.0 ± 0.1	353	C	[1979MAJ/SVO]
	V		41.6	268	IPM	[1987STE/MAL, 1974OSB/DOU]
	V		39.7	298		[1971WIL/ZWO]
			39.8 ± 0.1	298	C	[1947OSB/GIN]
		(315–391)	38.1	330	MM	[1945WIL/TAY]
C ₈ H ₁₈	[589-81-1]	3-methylheptane				
	FUS		11.67	152.6		[1996DOM/HEA, 1973FIN/MES]
	V		39.8 ± 0.2	298	C	[1987AN/HU]
	V	(286–393)	40.1	301	A	[1987STE/MAL]
	V	(238–286)	41.6	271	IPM	[1987STE/MAL, 1974OSB/DOU]
	V		39.8	298		[1971WIL/ZWO]
	V	(316–393)	39.8 ± 0.1	298	C	[1947OSB/GIN]
			38.3	331	MM	[1945WIL/TAY]
C ₈ H ₁₈	[589-53-7]	4-methylheptane				
	FUS		10.84	152.2		[1991ACR, 1983WEA]
	V		39.7 ± 0.1	298	C	[1979MAJ/SVO]
	V		38.7 ± 0.1	313	C	[1979MAJ/SVO]
	V		37.4 ± 0.1	333	C	[1979MAJ/SVO]
	V		36.1 ± 0.1	353	C	[1979MAJ/SVO]
	V	(253–391)	39.7	298		[1971WIL/ZWO]
	V		42.3	268		[1947STU]
			39.7 ± 0.1	298	C	[1947OSB/GIN]
		(312–392)	38.2	327	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[111-65-9]	octane				
	FUS		21.8	216.6	DSC	[2004MON/RAJ]
	FUS		20.32	215.8	DSC	[2005HUA/SIM]
	FUS		21.0	216.4	C	[1955TUN/STO]
	FUS		20.74	216.4		[1996DOM/HEA, 1954FIN/GRO2]
	FUS		20.62	215.8	C	[1996DOM/HEA, 1931HUF/PAR]
	FUS		20.09	215.6		[1996DOM/HEA, 1930PAR/HUF]
	SUB		68.1	216	B	[1963BON]
	V	(323–563)	39.4	338	EB	[2003EWI/OCH]
	V		41.6	298		[1994RUZ/MAJ]
	V	(297–400)	41.0	312	A	[1987STE/MAL]
V	(216–278)	44.4	263	A	[1987STE/MAL]	

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(396–432)	36.3	411	A	[1987STE/MAL]
	V	(428–510)	35.5	443	A	[1987STE/MAL]
	V	(506–569)	34.9	521	A	[1987STE/MAL]
	V	(295–402)	41.2	310		[1986PAU/KRU]
	V	(298–333)	41.9	313		[1984MIC/JOS]
	V		41.5 ± 0.1	298	C	[1981HOS/SCO2]
	V		41.5 ± 0.1	298	C	[1979MAJ/SVO]
	V		40.5 ± 0.1	313	C	[1979MAJ/SVO]
	V		39.1 ± 0.1	333	C	[1979MAJ/SVO]
	V		37.8 ± 0.1	353	C	[1979MAJ/SVO]
	V	(217–297)	43.0	282		[1973CAR/KOB]
	V		41.5	298		[1971WIL/ZWO]
	V		41.0 ± 0.5	298	C	[1963MOR/SUN]
	V		38.0 ± 0.1	311	C	[1960MCK/SAG]
	V		36.7 ± 0.1	328	C	[1960MCK/SAG]
	V		35.4 ± 0.1	344	C	[1960MCK/SAG]
	V		41.5 ± 0.1	298	C	[1947OSB/GIN]
	V	(326–400)	39.2	341	MM	[1945WIL/TAY]
C ₈ H ₁₈	[560-21-4]	<i>(dl)</i> -2,2,3-trimethylpentane				
	V		37.7 ± 0.1	298	C	[1998SVO/HYN]
	V		37.1 ± 0.1	308	C	[1998SVO/HYN]
	V		36.6 ± 0.1	315	C	[1998SVO/HYN]
	V		36.0 ± 0.1	323	C	[1998SVO/HYN]
	V		35.5 ± 0.1	330	C	[1998SVO/HYN]
	V		35.1 ± 0.1	338	C	[1998SVO/HYN]
	V		34.8 ± 0.1	348	C	[1998SVO/HYN]
	V		34.1 ± 0.1	358	C	[1998SVO/HYN]
	V		33.5 ± 0.1	368	C	[1998SVO/HYN]
	V		36.9	298		[1971WIL/ZWO]
	V		36.9 ± 0.1	298	C	[1947OSB/GIN]
	V	(306–384)	36.1	321	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[540-84-1]	2,2,4-trimethylpentane				
	FUS		9.08	165.8	DTA	[1994TAN/SAB3]
	FUS		9.21	165.8		[1940PIT]
	FUS		9.04	165.3		[1996DOM/HEA, 1930PAR/HUF]
	V	(373–423)	34.9	298	CGC	[1995CHI/HOS]
	V	(289–333)	36.1	304		[1991WU/PIV]
	V	(423–523)	31.6	438	A	[1987STE/MAL]
	V	(372–416)	32.2	387	A	[1987STE/MAL]
	V	(413–494)	31.5	428	A	[1987STE/MAL]
	V	(490–544)	31.4	505	A	[1987STE/MAL]
	V		35.2 ± 0.1	298	C	[1982SVO/CHA]
	V		34.4 ± 0.1	313	C	[1982SVO/CHA]
	V		33.4 ± 0.1	328	C	[1982SVO/CHA]
	V		32.6 ± 0.1	343	C	[1982SVO/CHA]
	V		31.7 ± 0.1	358	C	[1982SVO/CHA]
	V		31.0 ± 0.1	368	C	[1982SVO/CHA]
	V		35.1 ± 0.1	298	C	[1979MAJ/SVO]
	V		34.3 ± 0.1	313	C	[1979MAJ/SVO]
	V		33.2 ± 0.1	333	C	[1979MAJ/SVO]
	V		32.0 ± 0.1	353	C	[1979MAJ/SVO]
	V		35.1	298		[1971WIL/ZWO]
	V	(194–299)	40.7	209	A	[1987STE/MAL, 1956MIL]
	V		35.1 ± 0.1	298	C	[1947OSB/GIN]
	V	(297–374)	34.8	312	A, MM	[1987STE/MAL, 1945WIL/TAY]
	V		31.0	371	C	[1940PIT]
	V	(318–399)	33.9	333	EB	[1940SMI]
C ₈ H ₁₈	[560-21-4]	2,3,3-trimethylpentane				
	V		37.6 ± 0.1	298	C	[1998SVO/HYN]
	V		36.9 ± 0.1	308	C	[1998SVO/HYN]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		36.5 ± 0.1	315	C	[1998SVO/HYN]
	V		36.0 ± 0.1	323	C	[1998SVO/HYN]
	V		35.5 ± 0.1	330	C	[1998SVO/HYN]
	V		35.1 ± 0.1	338	C	[1998SVO/HYN]
	V		34.4 ± 0.1	348	C	[1998SVO/HYN]
	V		33.9 ± 0.1	358	C	[1998SVO/HYN]
	V		33.3 ± 0.1	368	C	[1998SVO/HYN]
	V		37.2	298		[1971WIL/ZWO]
	V		36.9 ± 0.1	298	C	[1947OSB/GIN]
	V		37.2 ± 0.1	298	C	[1947OSB/GIN]
	V	(308–390)	36.4	323	A, MM	[1987STE/MAL, 1945WIL/TAY]
C ₈ H ₁₈	[565-75-3]	2,3,4-trimethylpentane				
	FUS		9.27	163.6		[1996DOM/HEA, 1941PIT/SCO]
	V	(288–400)	37.7	303	A	[1987STE/MAL]
	V	(223–289)	39.1	274	A	[1987STE/MAL]
	V		37.7 ± 0.1	298	C	[1981HOS/SCO2]
	V	(223–426)	41.3	238	IPM, EB	[1974OSB/DOU]
	V	(223–278)	39.8	263	IPM	[1974OSB/DOU]
	V		37.7	298		[1971WIL/ZWO]
	V		37.7 ± 0.1	298	C	[1947OSB/GIN]
	V	(310–388)	36.7	325	MM	[1945WIL/TAY]
C ₈ H ₁₈	[594-82-1]	2,2,3,3-tetramethylbutane				
	TRS		2.0	152.5		
	FUS		7.54	373.9		[1996DOM/HEA, 1952SCO/DOU]
	TRS		2.0	153		[1984DOM/EVA]
	FUS		7.12	377.2		[1929PAR/TOD]
	SUB	(286–377)	43.6	301		[1987STE/MAL]
	SUB	(273–338)	43.4 ± 0.2	298		[1952SCO/DOU, 1970COX/PIL]
	SUB		42.9 ± 0.9	298	C	[1947OSB/GIN]
	SUB	(263–279)	56.2	298	A, MG	[1931LIN]
	V	(377–390)	33.0	383	A	[1987STE/MAL]
C ₈ H ₁₈ N ₂	[2159-75-3]	dibutyldiazene				
	V		49.3 ± 0.2	298	C	[1978ENG/MON]
C ₈ H ₁₈ N ₂	[927-83-3]	di- <i>tert</i> -butyldiazene				
	TRS		4.89	242.6		
	FUS		10.28	258.6	DSC	[1980BYS]
	V		39.1 ± 0.3	298	C	[1976ENG/MEL]
	V	(294–305)	39.6	299	UV	[1974ENG/WOO]
	V		32.7		I	[1974ENG/WOO]
C ₈ H ₁₈ N ₂	[38126-74-8]	butylhydrazone butyraldehyde				
	V	(298–323)	55.6	310		[1980LEB/NAZ]
C ₈ H ₁₈ N ₂	[21041-71-4]	isobutylhydrazone isobutyraldehyde				
	V	(288–313)	57.2	300		[1980LEB/NAZ]
C ₈ H ₁₈ N ₂ O	[16649-52-8]	dibutyldiazene <i>N</i> -oxide				
	TRS		8.34	268		
	FUS		11.52	288.4	DSC	[1980BYS]
	V		45.9 ± 0.1	298	C	[1981BYS]
C ₈ H ₁₈ N ₂ O	[42955-46-4]	1-heptyl urea				
	FUS		29.0	386.1	DSC	[2005HAS/TAJ]
	TRS		1.4	379.2		
	FUS		26.3	382.2	DSC	[1999WEL/DRU]
C ₈ H ₁₈ N ₂ O ₂	[122-96-3]	1,4-bis-(2-hydroxyethyl)piperazine				
	FUS		25.9	405		[1996DOM/HEA, 1984LEB/GUT]
	SUB	(354–396)	128.0 ± 1.0	375	GS	[2002VER2]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(354–396)	130.5 ± 1.0	298	GS	[2002VER2]
	SUB	(334–356)	104.1			[1984LEB/GUT]
	V	(413–507)	67.8 ± 5.3			[1998ABD/MEI]
C ₈ H ₁₈ N ₄ O ₄	[35823-10-0]	<i>N,N'</i> -dimethyl- <i>N,N'</i> dinitro-1,6-hexanediamine				
	FUS		61.68	331	DTA	[1987OYU/BRI]
	SUB		125.5 ± 1.7	298	C	[2009MIR/KON]
[Note: The authors of [2009MIR/KON] tabulate the experimental value as an enthalpy of vaporization; however, they report that the compound is crystalline and use the value to calculate the standard molar enthalpy of formation. Given the crystalline state and how the value was used, we have tabulated the value as an enthalpy of sublimation.]						
C ₈ H ₁₈ O	[629-32-3]	heptyl methyl ether				
	V		46.9	298		[UR/FUC, 1985MAJ/SVO]
C ₈ H ₁₈ O	[1000-63-1]	butyl <i>tert</i> -butyl ether				
	V		43.2	298		[UR/VER, 2002VER]
	V		41.6 ± 0.2	298	C	[2002VAR/AIT]
	V		42.3 ± 0.3	298	C	[1991SHA/MIS]
	V	(293–397)	41.7	308	A	[1987STE/MAL]
	V	(356–397)	38.3	371	EB	[1987STE/MAL, 1969SHE/LAN]
C ₈ H ₁₈ O	[33021-02-2]	<i>tert</i> -butyl isobutyl ether				
	FUS		8.65	162.3		[2006DRU/DOR]
	V	(349–386)	39.1 ± 0.5	298	EB	[2007EFI/PAS]
	V		41.2 ± 0.3	298		[UR/VER, 2002VER]
	V		39.2 ± 0.3	298	C	[2002VAR/AIT]
	V	(273–308)	40.9 ± 0.3	298	GS	[1996VER/BEC]
	V		40.1 ± 0.1	298	C	[1991SHA/MIS]
C ₈ H ₁₈ O	[17071-47-5]	butyl isobutyl ether				
	V	(328–406)	40.3	343	A	[1987STE/MAL]
C ₈ H ₁₈ O	[32970-45-9]	<i>sec</i> -butyl <i>tert</i> -butyl ether				
	V		41.3	298		[UR/VER, 2002VER, 2003VER/KRA]
C ₈ H ₁₈ O	[32970-45-9]	1-methyl-1- <i>tert</i> -butoxypropane				
	V		40.3 ± 0.2	298	C	[1991SHA/MIS]
C ₈ H ₁₈ O	[142-96-1]	dibutyl ether				
	V	(339–415)	40.9	354	A	[1987STE/MAL]
	V	(336–415)	41.7	351	A	[1987STE/MAL]
	V		44.7 ± 0.1	298	C	[1982FUC/PEA]
	V		45.0 ± 0.1	298	C	[1980MAJ/WAG]
	V		43.9	313	C	[1980MAJ/WAG]
	V		42.9	328	C	[1980MAJ/WAG]
	V		41.9	343	C	[1980MAJ/WAG]
	V		40.7	358	C	[1980MAJ/WAG]
	V	(362–414)	44.4	298		[1976AMB/ELL]
	V	(362–414)	36.4	413		[1976AMB/ELL]
	V	(362–413)	40.6	377	EB	[1969CID/POL]
	V	(386–440)	39.4	413		[1965NIS/LAP]
	C ₈ H ₁₈ O	[6163-66-2]	di- <i>tert</i> -butyl ether			
V		(290–386)	37.7 ± 0.3	298	EB	[1996STE/CHI2]
V		(289–382)	37.3	304	A	[1987STE/MAL, 1976AMB/ELL]
V		(289–382)	37.2	298		[1976AMB/ELL]
V		(289–382)	31.6	380		[1976AMB/ELL]
V		(277–382)	37.6 ± 0.1	298	C	[1975FEN/HAR]
C ₈ H ₁₈ O	[628-55-7]	diisobutyl ether				
	TRS	(8–373)	1.8	170.7		
	FUS	(8–383)	11.33	190.4	AC	[2009EFI/DRU]
	V	(331–395)	41.2 ± 0.7	298	EB	[2009EFI/DRU]
	V	(320–396)	38.9	335	A	[1987STE/MAL]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₈ O	[74058-13-2] V	propyl <i>tert</i> -amyl ether	43.8 ± 0.7	298		[UR/VER, 2002VER, 2003VER/KRA]
C ₈ H ₁₈ O	[3249-46-5] V	isopropyl <i>tert</i> -amyl ether	41.6	298		[UR/VER, 2002VER, 2003VER/KRA]
C ₈ H ₁₈ O	[104-76-7] V V V V	2-ethyl-1-hexanol (390–458) (293–331) (373–398) (347–457)	53.3 68.5 ± 0.2 52.7 60.2	405 298 388 362	GS A	[2012LAA/ZAI] [2005ROG/PIS] [1973LIN/WIC] [1987STE/MAL, 1961DYK/SEP]
C ₈ H ₁₈ O	[597-76-2] V	3-ethyl-3-hexanol (331–433)	49.2	345		[1973WIL/ZWO]
C ₈ H ₁₈ O	[10137-88-9] V	2-ethyl-4-methyl-1-pentanol (343–450)	58.9	358	A	[1987STE/MAL, 1961DYK/SEP, 1973WIL/ZWO]
C ₈ H ₁₈ O	[106-67-2] V	2-methyl-1-heptanol (350–449)	53.3	365	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[1070-32-2] V	3-methyl-1-heptanol (360–459)	53.4	375	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[817-91-4] V V	4-methyl-1-heptanol (357–456) (354–456)	55.9 56.7	372 369	A	[1987STE/MAL] [1973WIL/ZWO]
C ₈ H ₁₈ O	[7212-53-5] V	(<i>dl</i>)-5-methyl-1-heptanol (364–460)	57.6	379	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[1653-40-3] V	6-methyl-1-heptanol (368–610)	61.0	383	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[625-25-2] V V V	2-methyl-2-heptanol (275–314) (343–430) (339–429)	62.9 ± 0.2 53.1 55	298 358 354	GS A	[2005ROG/PIS] [1987STE/MAL] [1973WIL/ZWO]
C ₈ H ₁₈ O	[31367-46-1] V	3-methyl-2-heptanol (341–440)	48.0	356	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[56298-90-9] V	4-methyl-2-heptanol (351–445)	54.2	366	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[54630-50-1] V V	5-methyl-2-heptanol (348–445) (348–445)	51.9 47.2	363 363	A	[1987STE/MAL] [1973WIL/ZWO]
C ₈ H ₁₈ O	[4730-22-7] V	(<i>dl</i>)-6-methyl-2-heptanol (354–445)	55.2	369	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[18720-62-2] V	(<i>dl</i>)-2-methyl-3-heptanol (349–441)	54.8	364	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[5582-82-1] V V	3-methyl-3-heptanol (344–433) (338–433)	54.1 54.7	359 353	A	[1987STE/MAL] [1973WIL/ZWO]
C ₈ H ₁₈ O	[14979-39-6] V	4-methyl-3-heptanol (330–429)	43.9	345	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[18720-65-5] V	5-methyl-3-heptanol (330–427)	46.5	345	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[18720-66-6] V	(<i>dl</i>)-6-methyl-3-heptanol (333–432)	47.6	348	A	[1987STE/MAL]
C ₈ H ₁₈ O	[21570-35-4] V	2-methyl-4-heptanol (348–440)	54.8	363	A	[1987STE/MAL]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(345–437)	56.3	360		[1973WIL/ZWO]
C ₈ H ₁₈ O	[1838-73-9]	<i>(dl)</i> -3-methyl-4-heptanol				
	V	(340–438)	48.0	355	A	[1987STE/MAL, 1973WIL/ZWO]
C ₈ H ₁₈ O	[598-01-6]	4-methyl-4-heptanol				
	V	(344–434)	54.4	359	A	[1987STE/MAL]
	V	(331–434)	54.8	345		[1973WIL/ZWO]
C ₈ H ₁₈ O	[19550-07-3]	2,5-dimethyl-3-hexanol				
	V	(337–431)	55	352		[1973WIL/ZWO]
C ₈ H ₁₈ O	[111-87-5]	1-octanol				
	FUS		23.7	258.7	DSC	[2014CAR/DOS, 2014CAR/CAS]
	FUS		24.3	282.3	DSC	[2006NIC/KWE]
	FUS	(5–398)	25.24	258.4		[2003VAN/GAB]
	SUB		100.4	298		[1965DAV/KYB]
	V	(397–466)	56.8	413	EB	[2010CEN/ROH]
	V	(358–463)	69.3	298		[2006NAS/NEU]
	V	(282–321)	69.6	303	GS	[2001KUL/VER2]
	V	(282–321)	70.1	298	GS	[2001KUL/VER2]
	V	(373–423)	71.6	298	CGC	[1995CHI/HOS]
	V	(273–363)	68.7	318		[1992NGU/KAS]
	V	(328–400)	67.3	343	A	[1987STE/MAL]
	V	(430–474)	52.5	445	A	[1987STE/MAL]
	V	(397–479)	56.6	412	A	[1987STE/MAL]
	V	(475–555)	47.8	490	A	[1987STE/MAL]
	V		71.0 ± 0.4	298	C	[1977MAN/SEL]
	V	(343–468)	67.5	358		[1973WIL/ZWO]
	V	(386–480)	58.3	401	EB	[1987STE/MAL, 1970AMB/SPR]
	V	(352–468)	65.0	367	DTA	[1969KEM/KRE]
	V	(293–353)	70.4	308		[1966GEI/FRU]
	V	(267–282)	64.0	274	A, ME	[1987STE/MAL, 1965DAV/KYB]
	V	(365–427)	61.6	380		[1958ROS/PAP]
C ₈ H ₁₈ O	[123-96-6]	<i>(dl)</i> -2-octanol				
	V	(284–329)	67.9 ± 0.3	298	GS	[2007VER/SCH]
	V	(253–353)	70.7	268		[1999NGU/BER]
	V	(333–453)	60.7	348	A	[1987STE/MAL]
	V	(367–453)	56.1	382		[1984SAC/MAR]
	V	(345–453)	60.0	360		[1973WIL/ZWO]
C ₈ H ₁₈ O	[20296-29-1]	<i>(dl)</i> -3-octanol				
	V	(288–324)	67.9 ± 0.3	298	GS	[2007VER/SCH]
	V	(253–348)	71.6	268		[1999NGU/BER]
	V	(313–450)	64.1	328	A	[1987STE/MAL]
	V	(366–450)	54.5	381		[1984SAC/MAR]
	V	(349–449)	58.8	364		[1973WIL/ZWO]
C ₈ H ₁₈ O	[589-62-8]	<i>(dl)</i> -4-octanol				
	V	(288–322)	67.2 ± 0.5	298	GS	[2007VER/SCH]
	V	(343–450)	57.3	358	A	[1987STE/MAL]
	V	(364–449)	54.8	379		[1984SAC/MAR]
	V	(341–449)	62.1	356		[1973WIL/ZWO]
C ₈ H ₁₈ O	[123-44-4]	<i>(dl)</i> -2,4,4-trimethyl-1-pentanol				
	V		60.6 ± 0.1	328	C	[1996ULB/KLU]
	V		58.6 ± 0.1	343	C	[1996ULB/KLU]
	V		56.5 ± 0.1	358	C	[1996ULB/KLU]
	V	(352–446)	54.2	367	A	[1987STE/MAL]
	V	(333–441)	54.7	348		[1973WIL/ZWO]
C ₈ H ₁₈ O	[7294-05-5]	2,2,3-trimethyl-3-pentanol				
	V	(318–426)	47.3	333		[1973WIL/ZWO]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₈ O	[5162-48-1]	2,2,4-trimethyl-3-pentanol				
	V	(328–428)	57.1	343		[1973WIL/ZWO]
C ₈ H ₁₈ O ₂	[110-05-4]	di- <i>tert</i> -butyl peroxide				
	V	(308–358)	37.0	333	EB	[1995DIO/MIN]
	V	(308–358)	38.9	298	EB	[1995DIO/MIN]
	V		36.6 ± 0.6	298	C	[1990VAN/PAV]
	V	(246–311)	32.0	261	A	[1987STE/MAL, 1978IND/STO]
	V	(273–384)	31.0	288	A	[1987STE/MAL, 1951EGE/EMT]
C ₈ H ₁₈ O ₂	[18854-56-3]	1,2-dipropoxyethane				
	V	(234–453)	U28.2	249	A	[1987STE/MAL]
C ₈ H ₁₈ O ₂			50.6 ± 0.1	298	C	[1970KUS/WAD]
	[4413-13-2]	1-butoxy-2-ethoxyethane				
C ₈ H ₁₈ O ₂			50.9 ± 0.1	298	C	[1970KUS/WAD]
	[4468-93-3]	ethylene glycol mono(2-ethylbutyl) ether				
C ₈ H ₁₈ O ₂			53.4	372	A	[1987STE/MAL]
	[112-25-4]	ethylene glycol monoethyl ether				
C ₈ H ₁₈ O ₂			54.6	378	A	[1987STE/MAL]
		3-hydroxymethyl-4-heptanol				
C ₈ H ₁₈ O ₂			61.6	390	A	[1987STE/MAL]
	[629-41-4]	1,8-octanediol				
C ₈ H ₁₈ O ₂	FUS		36.3	331.6	DSC	[2014BAD/NOW]
	FUS		36.1	332.8	DTA	[1991ACR, 1990KNA/SAB]
	FUS		28.9	336.2	C	[1969COR/GOO]
	SUB		138.3 ± 0.8	323	C	[1990KNA/SAB]
	SUB		139.3 ± 0.9	298	C	[1990KNA/SAB]
	V		104.9 ± 0.3	298	CGC	[2006UMN/KWE]
	V		101.0 ± 1.7	356		[1993PIA/FER, 2006UMN/KWE]
	V		107.0 ± 2.2	298		[1993PIA/FER, 2006UMN/KWE]
	V		105.4 ± 1.8	298		[1990KNA/SAB, 2006UMN/KWE]
C ₈ H ₁₈ O ₂	[144-19-4]	2,2,4-trimethyl-1,3-pentanediol				
	FUS		24.2	328.3		[2002STE/CHI]
	V	(396–489)	66.6 ± 2.1	400	EB	[2002STE/CHI]
	V	(396–489)	60.3 ± 1.7	440	EB	[2002STE/CHI]
	V	(396–489)	55.0 ± 1.6	480	EB	[2002STE/CHI]
	V	(413–502)	58.5	428	A	[1987STE/MAL]
C ₈ H ₁₈ O ₂	[94-96-2]	2-ethyl-1,3-hexanediol				
	V	(331–413)	79.5	298		[1974BLA/LEV, 2007VER]
C ₈ H ₁₈ O ₂	[110-03-2]	2,5-dimethyl-2,5-hexanediol				
	V		85.2 ± 3.5	298	CGC	[2006UMN/KWE]
C ₈ H ₁₈ O ₂ S	[598-04-9]	di- <i>n</i> -butyl sulfone				
	SUB		100.4 ± 2.5			[UR/MAC, 1970COX/PIL]
C ₈ H ₁₈ O ₂ S	[1886-75-5]	di- <i>tert</i> -butyl sulfone				
	SUB		94.1 ± 2.9			[UR/MAC, 1970COX/PIL]
C ₈ H ₁₈ O ₃	[1538-75-6]	trimethylacetic acid anhydride				
	V	(355–513)	50.7 ± 0.2	360	EB	[2002STE/CHI4]
	V	(355–513)	47.4 ± 0.2	400	EB	[2002STE/CHI4]
	V	(355–513)	44.0 ± 0.4	440	EB	[2002STE/CHI4]
	V	(355–513)	40.3 ± 0.7	480	EB	[2002STE/CHI4]
C ₈ H ₁₈ O ₃	[112-36-7]	diethylene glycol diethyl ether				
	V	(363–453)	53.0	378		[2005LEE/SU]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		56.4 ± 1.4	298	CGC	[2000NIC/ORF]
	V	(330–461)	48.3	345	A	[1987STE/MAL]
C ₈ H ₁₈ O ₃	[112-34-5]	diethylene glycol monobutyl ether				
	V	(415–505)	55.7	430	A	[1987STE/MAL]
C ₈ H ₁₈ O ₃ S	[626-85-7]	dibutyl sulfite				
	V		67.8 ± 1.7	298	BP	[1969MAC/STE2]
C ₈ H ₁₈ O ₄	[112-49-2]	1,2-bis(2-methoxyethoxy)ethane (triglyme)				
	V		63.7 ± 3.3	298	CGC	[2000NIC/ORF]
C ₈ H ₁₈ O ₄	[112-49-2]	2,5,8,11-tetraoxadodecane				
	FUS		23.71	229.3		[1996DOM/HEA, 1966BEA/CLE]
C ₈ H ₁₈ O ₄	[52894-25-4]	1,2,7,8-octanetetraol (1,2,7,8-tetrahydroxyoctane)				
	FUS		36.7	352.2		[1991HEN/TSC, 1994HEN/DIE]
C ₈ H ₁₈ O ₄ S	[625-22-9]	dibutyl sulfate				
	V		75.5 ± 1.7	298	BP	[1969MAC/STE2]
C ₈ H ₁₈ O ₄ S ₂	[76-20-0]	2,2-butanediol bis(ethylsulfonate) (trional)				
	V	(443–493)	75.7	458	A	[1987STE/MAL, 1999DYK/SVO]
	V		78.2	448	I	[1943CRA]
C ₈ H ₁₈ O ₅	[112-60-7]	tetraethylene glycol				
	V	(426–581)	92.2	441	A	[1987STE/MAL, 1947STU]
C ₈ H ₁₈ S	[544-40-1]	dibutyl sulfide				
	FUS	(12–355)	19.41	198.1		[1996DOM/HEA, 1961MCC/FIN]
	V	(255–422)	44.8	339		[2004SAW/MOK]
	V	(283–390)	40.3	298		[1999DYK/SVO]
	V		53	298		[1981SHI/SAI]
	V		54.2 ± 0.8	298	GC	[1964MAC/MCC]
	V	(390–470)	46.5	405	A, EB	[1987STE/MAL, 1952WHI/BAR]
C ₈ H ₁₈ S	[626-26-6]	di- <i>tert</i> -butyl sulfide				
	V	(264–329)	44.9	279		[1999DYK/SVO]
	V	(329–470)	41.4	344		[1999DYK/SVO]
	V	(390–470)	46.4	405		[1999DYK/SVO]
	V	(278–308)	44.8	293		[1998STO/NG]
	V	(324–420)	42.4	339	A	[1987STE/MAL]
	V		43.8	298		[1981SHI/SAI]
	V		43.8 ± 0.1	298		[1972GOO]
	V		49.3 ± 0.8	298	GC	[1964MAC/MCC]
	V	(325–350)	42.3	333	EB	[1962MAC/MAY2]
C ₈ H ₁₈ S	[592-65-4]	diisobutyl sulfide				
	V	(325–346)	46.4	335	A	[1987STE/MAL, 1999DYK/SVO]
	V		48.7	298		[1981SHI/SAI]
	V		48.5 ± 0.8	298	GC	[1964MAC/MCC]
	V	(326–346)	43.1	336	EB	[1962MAC/MAY2]
C ₈ H ₁₈ S	[626-26-6]	di- <i>sec</i> -butyl sulfide				
	V	(255–422)	47.0	298		[2004SAW/MOK]
C ₈ H ₁₈ S	[111-88-6]	1-octanethiol				
	FUS		24.27	224		[1996DOM/HEA, 1985DEA]
	V	(372–473)	49.6	387	A	[1987STE/MAL, 1999DYK/SVO, 1932ELL/REI]
C ₈ H ₁₈ S	[3001-66-9]	2-octanethiol				
	V	(347–489)	49.0	362		[1999DYK/SVO]
C ₈ H ₁₈ S	[10435-81-1]	(<i>dl</i>)-2-octanethiol				
	V	(361–460)	48.0	376	A	[1987STE/MAL, 1999DYK/SVO, 1932ELL/REI]
C ₈ H ₁₈ S ₂	[629-45-8]	dibutyl disulfide				
	V	(383–423)	64.1	298	CGC	[1995CHI/HOS]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		62.3 ± 0.2	298	C	[1985KUS]
	V		62.3	298		[1981SHI/SAI]
C ₈ H ₁₈ S ₂	[1518-72-5]	diisobutyl disulfide				
	V		57.2 ± 0.1	298	C	[1985KUS]
	V		57.2	298		[1981SHI/SAI]
C ₈ H ₁₈ S ₂	[110-06-5]	2,2,5,5-tetramethyl-3,4-dithiahexane				
	V	(383–423)	53.8	298	CGC	[1995CHI/HOS]
	V		52.5 ± 0.2	298	C	[1985KUS]
	V		52.5	298		[1981SHI/SAI]
C ₈ H ₁₈ S ₂	[1191-62-4]	1,8-octanedithiol				
	V	(405–543)	60.9	420	A	[1987STE/MAL, 1943HAL/REI, 1999DYK/SVO]
C ₈ H ₁₉ N	[20810-06-4]	<i>N</i> -butyl isobutylamine				
	V	(313–423)	41.2	328	A	[1987STE/MAL]
C ₈ H ₁₉ N	[111-92-2]	<i>N, N</i> -dibutylamine				
	V		50.8 ± 4.1	298	CGC	[2014THO/GOB]
	V	(343–479)	46.0	358	A	[1987STE/MAL]
	V		46.0 ± 0.1	343	C	[1979PET/MAJ]
	V		44.8 ± 0.1	358	C	[1979PET/MAJ]
	V	(291–305)	48.1	298		[1971LEB/KAT2]
	V		49.4 ± 0.1	298	C	[1969WAD]
	V	(273–333)	45.7 ± 0.3	298	I	[1969FRA/WAT]
C ₈ H ₁₉ N	[110-963-3]	<i>N, N</i> -diisobutylamine				
	V	(291–305)	39.3	298		[1971LEB/KAT2]
	V	(273–333)	43.1 ± 0.3	298	I	[1969FRA/WAT]
	V	(268–413)	43.8	283	A	[1987STE/MAL, 1947STU]
	V		35.6	408	C	[1901KAH]
C ₈ H ₁₉ N	[626-23-3]	<i>N, N</i> -di- <i>sec</i> -butylamine				
	V	(273–333)	41.3 ± 0.3	298	I	[1969FRA/WAT]
C ₈ H ₁₉ N	[104-75-6]	2-ethylhexylamine				
	V	(341–447)	44.8	356	A	[1987STE/MAL]
C ₈ H ₁₉ N	[111-86-4]	octylamine				
	FUS		34.74	273.4	DSC	[2005DOM/MAR]
	V		55.5 ± 2.2	298	GS	[2013GOB/RAT]
	V	(274–313)	55.3 ± 0.3	294	GS	[2013THO/CHI]
	V	(274–313)	55.1 ± 0.3	298	GS	[2013THO/CHI]
	V		55.6 ± 6.0	298	CGC	[2013THO/CHI]
	V	(343–494)	54.8 ± 0.5	298	EB, IPM	[1996STE/CHI3]
	V	(343–494)	48.7 ± 0.3	360	EB, IPM	[1996STE/CHI3]
	V	(343–494)	45.3 ± 0.3	400	EB, IPM	[1996STE/CHI3]
	V	(343–494)	41.8 ± 0.4	440	EB, IPM	[1996STE/CHI3]
	V	(343–494)	38.1 ± 0.7	480	EB, IPM	[1996STE/CHI3]
	V	(323–373)	54.6	298	CGC	[1995CHI/HOS]
	V	(308–453)	50.8	323	A	[1987STE/MAL]
V	(308–453)	55.5 ± 2.3	298	BP	[1940RAL/SEL, 2013THO/CHI]	
C ₈ H ₁₉ O ₂ PS ₃	[298-04-4]	<i>O, O</i> -diethyl- <i>S</i> -[2-(ethylthio)ethyl] dithiophosphate				
	V	(283–401)	76.7	298	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₁₉ O ₂ PS ₃	[2253-44-3]	<i>O, O'</i> -dibutyl dithiophosphate				
	V		81.8	298		[2008SAG/SAF]
C ₈ H ₁₉ O ₃ P	[1809-19-4]	dibutyl phosphite				
	V	(298–438)	37.8	313	A	[1987STE/MAL, 1958PAG/PUR]
C ₈ H ₁₉ O ₃ P	[1067-69-2]	diisopropyl ethylphosphonate				
	V		60.7 ± 4.2			[1956NEA/WIL, 1982PIL/SKI]

TABLE 11. Phase change enthalpies of C₈ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₈ H ₁₉ O ₃ PS ₂	[298-03-3] V	<i>O, O</i> -diethyl- <i>O</i> -[2-(ethylthio)ethyl] thiophosphate (283–411)	78.7	298	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₁₉ O ₃ PS ₂	[126-75-0] V	<i>O, O</i> -diethyl- <i>S</i> -[2-(ethylthio)ethyl] thiophosphate (283–401)	76.4	298	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₂₀ ClN	[6287-40-7] V	dibutylammonium chloride (553–563)	116.7	558	A	[1987STE/MAL, 1999DYK/SVO, 1967KIS]
C ₈ H ₂₀ N ₂	[373-44-4]	octane-1,8-diamine				
	FUS		50.51	324.9	DSC	[2006KHI/DAH2]
	FUS		52.4	325.6	AC	[2004MON/VAN, 2014FUL/RUZ]
	FUS		50.98	324.8	DSC	[2002DAL/DEL]
	SUB	(289–313)	116.7	298	Static	[2014FUL/RUZ]
C ₈ H ₂₀ N ₂	V	(328–363)	71.7 ± 0.6	298	GS	[2011POZ/VER]
C ₈ H ₂₀ N ₂	[4267-00-9] V	tetraethylhydrazine (308–368)	33.4	323	A	[1987STE/MAL, 1943WES/EUC]
C ₈ H ₂₀ N ₂	[97-84-7] V	<i>N, N, N', N'</i> -tetramethyl-1,3-butanediamine (273–363)	49.2	288		[2002DAH/MOK]
	V	(273–363)	47.9 ± 0.4	298		[2002DAH/MOK, 2012VER/CHE]
	V	(335–439)	42.7	350	A	[1987STE/MAL]
C ₈ H ₂₀ N ₂ O	[5336-24-3] TRS	1,3-di- <i>tert</i> -butyl urea (5–320)	1.9	301.7	AC	[1995KAB/KOZ2]
	SUB	(323–372)	91.9 ± 0.9	348	ME	[2003ZAI/KAB]
	SUB	(323–372)	91.9 ± 0.9	350	ME	[2003ZAI/KAB]
	SUB		90.0 ± 1.0	350	C	[2003ZAI/KAB]
	SUB		91.7 ± 0.7	298		[2003ZAI/KAB]
C ₈ H ₂₀ N ₂ O ₂ S	[2832-49-7] V	<i>N, N, N', N'</i> -tetraethylsulfamide (407–528)	59.1	422	A	[1987STE/MAL, 1978LUK/MAK]
C ₈ H ₂₀ N ₂ O ₃	[6487-26-5] V	<i>N, N, N'</i> -tris(2-hydroxyethyl)ethylenediamine (373–472)	90.0	423	GS	[1998ABD/MEI]
C ₈ H ₂₀ O ₅ P ₂ S ₂	[3689-24-5] V	dithiopyrophosphoric acid, tetraethyl ester (293–409)	80.6	308	A	[1987STE/MAL, 1999DYK/SVO]
C ₈ H ₂₀ O ₇ P ₂	[107-49-3] V	pyrophosphoric acid, tetraethyl ester (283–411)	82.2	298	A	[1987STE/MAL]
C ₈ H ₂₃ N ₅	[112-57-2] V	tetraethylene pentamine (464–615)	71.3	478	A	[1987STE/MAL]
C ₈ H ₂₄ N ₄ O ₃ P ₂	[152-16-9] V	pyrophosphoric acid tetrakis(dimethylamide) (273–415)	65.5	288	A	[1987STE/MAL]

TABLE 12. Phase change enthalpies of C₉ organic compounds

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ F ₁₆	[75240-06-1]	<i>trans</i> -perfluorohydrindane				
	V		45.2 ± 0.1	298	C	[1996VAR/DRU]
C ₉ F ₁₆	[75262-87-2]	<i>cis</i> -perfluorobicyclo[4.3.0]nonane				
	TRS	(5–350)	8.76	200.6		
	TRS	(5–350)	1.27	245.6		
	FUS	(5–350)	2.72	291.3	AC	[1998VAR/DRU]
C ₉ F ₁₆	[75240-06-1]	<i>trans</i> -perfluorobicyclo[4.3.0]nonane				
	TRS	(5–350)	8.91	236.6		
	FUS	(5–350)	2.63	248.1	AC	[1998VAR/DRU]
C ₉ F ₁₇ NO ₃ S	[34834-20-3]	perfluoro-1-octanesulfonylisocyanate				
	V	(324–470)	67.7	339	A	[1987STE/MAL, 1999DYK/SVO, 1974BEH/HAA]
C ₉ F ₁₈	[374-59-4]	perfluoro(propyl)cyclohexane				
	V	(321–396)	40.4	336		[1999DYK/SVO]
	V		43.1 ± 0.1	298	C	[1996VAR/DRU]
	V		43.1 ± 0.5	298	EB	[1981VAR/BUL]
	V		43.1 ± 0.1	298	C	[1981VAR/BUL]
C ₉ F ₁₈	[423-02-9]	perfluoro(isopropyl)cyclohexane				
	V		46.7 ± 0.1	298	C	[1996VAR/DRU]
C ₉ F ₁₈ N ₂	[34451-14-4]	1,1,1,3,3,3-hexafluoro- <i>N,N'</i> -bis[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene]-2,2-propanediamine				
	V	(314–381)	35.5	329	A	[1987STE/MAL, 1972SWI/SHR]
C ₉ F ₁₈ O ₃	[40719-69-5]	carbonic acid, bis[1,1,1,3,3,3-hexafluoro-2-(trifluoromethyl)-2-propyl ester				
	V	(316–358)	39.7	331	A	[1987STE/MAL, 1975WAL/DES2]
C ₉ F ₁₉ NO	[54120-06-8]	2,2,2-trifluoro- <i>N</i> -[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]ethanimidic acid,				
	V	1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl ester	37.6	385		[1975PET/SHR]
C ₉ F ₂₀	[375-96-2]	perfluorononane				
	V	(288–333)	45.3 ± 0.2	298		[2005DIA/GON]
	V	(387–524)	32.8	402	A	[1987STE/MAL, 1967BER/WES, 1999DYK/SVO]
C ₉ F ₂₁ N	[514-03-4]	perfluoro- <i>N</i> -methyl- <i>N,N</i> -dibutylamine				
	V	(339–407)	48.8 ± 0.8	298	EB	[1995VAR/DRO]
	V		48.2 ± 0.1	298	C	[1995VAR/DRO]
C ₉ F ₂₁ N	[338-83-0]	tris(heptafluoropropyl)amine				
	V		46.6 ± 0.3	298	C	[1995VAR/DRO]
	V	(329–403)	46.9 ± 0.7	298	EB	[1995VAR/DRO]
	V	(333–403)	40.6	348	A	[1987STE/MAL, 1951HAS]
C ₉ H ₂ Cl ₆ O ₃	[7365-74-4]	4,5,6,7,8,8-hexachloro-3a,4,7,7a-tetrahydro-4,7-methanoisobenzofuran-1,3-dione				
	TRS		10.64	385.4		
	FUS		2.67	506	DSC	[1984WEI/LEF]
C ₉ H ₄ ClF ₁₅ O	[65064-85-9]	7-(2-chloro-1,1,2-trifluoroethoxy)-1,1,2,2,3,3,4,4,5,5,6,6-dodecafluoroheptane				
	V	(358–460)	64.6 ± 1.1	298	EB	[1981VAR/BUL2]
	V		63.8 ± 0.4	298	C	[1981VAR/BUL2]
C ₉ H ₄ Cl ₃ NO ₂ S	[133-07-3]	2-[(trichloromethyl)thio]-1 <i>H</i> -isoindole-1,3(2 <i>H</i>)-dione				
	FUS		35.49	454.2	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₄ Cl ₄ O ₄	[887-54-7]	methyl tetrachloroterephthalic acid ester				
	FUS		16.89	444.3	DSC	[1990DON/DRE]
C ₉ H ₄ Cl ₈ O	[76341-69-0]	1,3,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoisobenzofuran				
	FUS		25.94	395.4	DSC	[1969PLA/GLA]
C ₉ H ₄ O ₅	[552-30-7]	trimellitic acid anhydride				
	FUS		10.46	385		[1996DOM/HEA, 1978MAR/CIO]
	V	(558–596)	65.6	573	A	[1987STE/MAL]
C ₉ H ₅ BrClNO	[7640-33-7]	7-bromo-5-chloro-8-hydroxyquinoline				
	SUB	(353–368)	110.1 ± 0.8	361	ME	[1992RIB/MON2]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₉ H ₅ Br ₂ NO		SUB	(353–368)	113.2 ± 0.8	298	ME	[1992RIB/MON2]
	[521-74-4]		5,7-dibromo-8-hydroxyquinoline				
		SUB	(365–380)	113.6 ± 1.3	372	ME	[1992RIB/MON2]
		SUB	(365–380)	117.3 ± 1.3	298	ME	[1992RIB/MON2]
C ₉ H ₅ ClINO		SUB	(363–393)	94.1			[1963HOR/WEN]
	[130-26-7]		5-chloro-7-iodo-8-hydroxyquinoline				
		SUB	(359–378)	111.3 ± 0.4	368	ME	[1992RIB/MON2]
		SUB	(359–378)	114.8 ± 0.4	298	ME	[1992RIB/MON2]
C ₉ H ₅ ClINO	[35048-13-6]		5-iodo-7-chloro-8-hydroxyquinoline				
		SUB	(383–414)	131			[1963HOR/WEN]
C ₉ H ₅ CIN ₂ O ₂	[15166-26-4]		5-chloro-2,4-diisocyanato-1-methylbenzene				
		V	(373–433)	66.7	388	A	[1987STE/MAL]
		V	(373–433)	60.2 ± 0.2	403		[1972STR/NOV]
C ₉ H ₅ Cl ₂ N	[86-98-6]		4,7-dichloroquinoline				
		SUB		89.5 ± 2.3	298	C	[2006RIB/MAT]
C ₉ H ₅ Cl ₂ NO	[773-76-2]		5,7-dichloro-8-hydroxyquinoline				
		SUB	(351–366)	106.3 ± 0.7	358	ME	[1992RIB/MON2]
		SUB	(351–366)	109.3 ± 0.7	298	ME	[1992RIB/MON2]
		SUB	(363–393)	92.9			[1963HOR/WEN]
C ₉ H ₅ Cl ₃ N ₄	[101-05-3]		4,6-dichloro- <i>N</i> -(2-chlorophenyl)-1,3,5-triazin-2-amine				
		FUS		31.48	431	DSC	[1990DON/DRE]
C ₉ H ₅ I ₂ NO	[83-73-8]		5,7-diiodo-8-hydroxyquinoline				
		SUB	(389–404)	121.9 ± 0.8	396	ME	[1992RIB/MON2]
		SUB	(389–404)	126.8 ± 0.8	298	ME	[1992RIB/MON2]
		SUB	(403–423)	110.9			[1963HOR/WEN]
C ₉ H ₆ BrN	[5332-24-1]		3-bromoquinoline				
		V		70.7 ± 2.3	298	C	[2008RIB/AMA]
C ₉ H ₆ ClN	[612-62-4]		2-chloroquinoline				
		SUB		84.3 ± 2.6	298	C	[2006RIB/MAT]
C ₉ H ₆ ClN	[611-35-8]		4-chloroquinoline				
		SUB		78.6 ± 1.7	298	C	[2006RIB/MAT]
C ₉ H ₆ ClN	[612-57-7]		6-chloroquinoline				
		SUB		80.8 ± 1.9	298	C	[2006RIB/MAT]
C ₉ H ₆ ClNO	[130-16-5]		5-chloro-8-hydroxyquinoline				
		SUB	(317–327)	97.5 ± 0.9	322	ME	[1992RIB/MON2]
		SUB	(317–327)	98.7 ± 0.9	298	ME	[1992RIB/MON2]
C ₉ H ₆ ClNO ₂	[17564-64-6]		<i>N</i> -chloromethylphthalimide				
		SUB		103.5 ± 1.1	298	C	[2007RIB/SAN3]
		SUB	(323–343)	103.6 ± 0.9	298	ME	[2007RIB/SAN3]
C ₉ H ₆ Cl ₂ N ₂ O ₃	[20354-26-1]		2-(3,4-dichlorophenyl)-4-methyl-1,2,4-oxadiazolidine-3,5-dione				
		FUS		29.5	396.3	DSC	[1990DON/DRE]
C ₉ H ₆ Cl ₂ O ₃	[17812-11-2]		2,3-dichloro-5-norbornene-2,3-dicarboxylic anhydride				
		TRS		17.94	339.1		
		FUS		5.36	457.6	DSC	[1984WEI/LEF]
C ₉ H ₆ Cl ₆ O ₃ S	[959-98-8]		endosulfan I				
		FUS		10.0	380	DSC	[1990DON/DRE]
		V	(343–453)	80.4	398	GC	[1990HIN/BID2]
C ₉ H ₆ Cl ₆ O ₃ S	[33213-65-9]		endosulfan II				
		V	(343–453)	82.4	398	GC	[1990HIN/BID2]
C ₉ H ₆ Cl ₆ O ₃ S	[115-29-7]		6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide (endosulfan)				
		FUS		16.52	368	DSC	[2000ROD/VEC]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₆ Cl ₆ O ₄ S	[1031-07-8] V	endosulfan sulfate (343–453)	85.6	398	GC	[1990HIN/BID2]
C ₉ H ₆ Cl ₆ O ₄ S	[1031-07-8] FUS	6,7,8,9,10,10-hexachloro-6,9-methano-2,4,3-benzodioxathiapin-3,3-dioxide	21.66	419.7	DSC	[1990DON/DRE]
C ₉ H ₆ INO	[13207-63-1] SUB	5-iodo-8-hydroxyquinoline (363–393)	118.8		ME	[1963HOR/WEN]
C ₉ H ₆ N ₂ O ₂	[584-84-9] V	2,4-toluene diisocyanate (373–530)	59.7	388	A	[1987STE/MAL]
	V	(393–530)	59.5	408	A	[1987STE/MAL]
	V	(373–530)	61.3	388	I	[1975FRE/ADA]
	V	(373–433)	57.7 ± 0.2	403		[1972STR/NOV]
C ₉ H ₆ N ₂ O ₂	[91-08-7] V	2,6-toluene diisocyanate (373–463)	60.4	388	A	[1987STE/MAL]
C ₉ H ₆ N ₂ O ₂	[607-34-1] SUB	5-nitroquinoline (310–324)	93.2 ± 0.7	317	ME	[1997RIB/MAT5]
	SUB	(310–324)	94.2 ± 0.7	298	ME	[1997RIB/MAT5]
C ₉ H ₆ N ₂ O ₂	[613-50-3] SUB	6-nitroquinoline (336–350)	101.5 ± 1.0	343	ME	[1997RIB/MAT5]
	SUB	(336–350)	103.8 ± 1.0	298	ME	[1997RIB/MAT5]
C ₉ H ₆ N ₂ O ₂	[607-35-2] SUB	8-nitroquinoline (338–352)	104.3 ± 0.9	345	ME	[1997RIB/MAT5]
	SUB	(338–352)	106.7 ± 0.9	298	ME	[1997RIB/MAT5]
C ₉ H ₆ N ₂ O ₃	[4008-48-4] FUS	5-nitro-8-hydroxyquinoline	19.61	455.2	DSC	[2010GAO/LIN]
	FUS		24.7	453.2	DSC	[2001ZOR/COS]
	SUB	(413–453)	81.66		TGA	[2010GAO/LIN]
	SUB	(413–453)	86.14	298	TGA	[2010GAO/LIN]
Note: The authors of [2010GAO/LIN] did note that their experimental value differed significantly from the earlier published literature values.	SUB	(352–362)	114.1 ± 2.2	298	ME	[1989RIB/MON]
	SUB		111.2 ± 3.0	298	C	[1989RIB/MON]
C ₉ H ₆ N ₄ O ₂	[23190-84-3] SUB	3-amino-2-quinoxalinecarbonitrile 1,4-dioxide	139.7 ± 3.7	298	ME	[2004RIB/GOM]
C ₉ H ₆ O ₂	[91-64-5] FUS	coumarin	16.04	344.4	DSC	[2015HUA/WAN]
	FUS		19.54	341.7	DSC	[2013DOS/MOR]
	FUS		18.63	342.3	DSC	[2009MAT/SOU4]
	FUS		19.6	342.0	DSC	[2004STU/WIT]
	FUS		19.14	342.1		[1996DOM/HEA, 1991ELW/SAB, 1992SAB/WAT]
	SUB		95.4 ± 2.6	298	C	[2009MAT/SOU4]
	SUB		83.1	298	C	[1991ELW/SAB, 1992SAB/WAT]
	SUB	(293–353)	86.2	323	ME	[1953SER/VOI, 1960JON, 1987STE/MAL]
	V	(379–463)	63.2	394	A	[1987STE/MAL, 1947STU]
C ₉ H ₆ O ₂	[491-38-3] FUS	chromone	15.44	329.9	DSC	[2009MAT/SOU4]
	FUS		17.31	330.3		[1991ACR, 1996DOM/HEA, 1988SAB/ELW]
	SUB		86.5 ± 1.1	298	C	[2009MAT/SOU4]
	SUB		81.3 ± 0.2	298	C	[1988SAB/ELW]
C ₉ H ₆ O ₂	[606-23-5] FUS	1,3-indandione	21.8	401.5	DSC	[2007MAT/MIR]
	SUB		97.3 ± 1.8	298	C	[2007MAT/MIR]
C ₉ H ₆ O ₂	[637-44-5] FUS	3-phenylpropionic acid	25.95	410.54	DSC	[2001MON/HIL5]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(329–343)	103.9 ± 0.6	336	ME	[2001MON/HIL5]
	SUB	(329–343)	105.0 ± 1.4	298	ME	[2001MON/HIL5]
C ₉ H ₆ O ₃	[93-35-6]	1-hydroxycoumarin				
	FUS		31.25	503.7	DSC	[2011SOU/MAT2]
	SUB		133.6 ± 1.5	298	C	[2011SOU/MAT2]
C ₉ H ₆ O ₃	[939-19-5]	3-hydroxycoumarin				
	FUS		27.10	425.6	DSC	[2010SOU/MOR]
	SUB		91.9 ± 0.6	298	C	[2010SOU/MOR]
C ₉ H ₆ O ₃	[1076-38-6]	4-hydroxycoumarin				
	FUS		24.49	488.3	DSC	[2013DOS/MOR]
	FUS		23.17	483.6	DSC	[2010SOU/MOR]
	SUB		128.5 ± 1.8	298	C	[2010SOU/MOR]
C ₉ H ₆ O ₆	[528-44-9]	1,2,4-benzenetricarboxylic acid				
	FUS		30.8	499.6	DSC	[2012BOO/BAN]
C ₉ H ₆ O ₆	[554-95-0]	1,3,5-benzenetricarboxylic acid				
	SUB	(553–593)	159.4	573	GS	[1987STE/MAL, 1962KRA/BER]
C ₉ H ₆ S ₃	[3445-76-9]	5-phenyl-1,2-dithiole-3-thione				
	SUB	(363–373)	117.4 ± 0.4			[1972GEI/RAU]
	SUB		123.3 ± 0.4	298		[1972GEI/RAU]
C ₉ H ₆ S ₃	[3445-76-9]	5-phenyldithiolethione				
	FUS		26.27	398	DSC	[1999DOL/LEC]
C ₉ H ₇ BrO ₂	[14473-91-7]	3-bromo- <i>trans</i> -cinnamic acid				
	FUS		31.06	443.2	DSC	[2001AHN/HAR]
C ₉ H ₇ Cl ₃ O ₃	[93-72-1]	2-(2,4,5-trichlorophenoxy)propanoic acid				
	FUS		39.58	450.6	DSC	[1990DON/DRE]
C ₉ H ₇ Cl ₃ O ₃	[1928-37-6]	2,4,5-trichlorophenoxyacetic acid, methyl ester				
	FUS		30.46	361.9	DSC	[1990DON/DRE]
	V	(444–573)	76.9	459	A	[1987STE/MAL, 1999DYK/SVO]
C ₉ H ₇ F ₃ O ₂	[1736-09-0]	trifluoroacetic acid, 3-tolyl ester				
	V	(363–439)	47.4	378	A, EB	[1987STE/MAL, 1969SHE/LAN, 1999DYK/SVO]
C ₉ H ₇ F ₃ O ₂	[1813-29-2]	trifluoroacetic acid, 4-tolyl ester				
	V	(365–442)	47.8	380	A, EB	[1987STE/MAL, 1969SHE/LAN, 1999DYK/SVO]
C ₉ H ₇ N	[119-65-3]	isoquinoline				
	FUS		13.54	299.6		[1996DOM/HEA, 1988STE/ARC]
	V		53.3		GC	[1996GOV/RUT]
	V	(313–566)	58.9 ± 0.1	320	IPM, EB	[1988STE/ARC]
	V	(313–566)	56.4 ± 0.1	360	IPM, EB	[1988STE/ARC]
	V	(313–566)	54.1 ± 0.1	400	IPM, EB	[1988STE/ARC]
	V	(313–566)	51.7 ± 0.1	440	IPM, EB	[1988STE/ARC]
	V	(313–566)	49.4 ± 0.2	480	IPM, EB	[1988STE/ARC]
	V	(313–566)	47.0 ± 0.3	520	IPM, EB	[1988STE/ARC]
	V	(439–517)	51.0	454	A, EB	[1987STE/MAL, 1961MAL]
C ₉ H ₇ N	[91-22-5]	quinoline				
	TRS		0.07	220		
	FUS		10.66	258.4		[1996DOM/HEA, 1988STE/ARC]
	FUS		10.72	257.9	AC	[1957MAS]
	FUS		10.80	258.4		[1936PAR/TOD]
	V		53.3		GC	[1996GOV/RUT]
	V	(573–668)	46.9	588	DSC	[1996BAC/GRZ]
	V	(504–616)	46.5	519		[1992LEE/CHE]
	V	(298–559)	57.9 ± 0.1	320	IPM, EB	[1988STE/ARC]
	V	(298–559)	55.5 ± 0.1	360	IPM, EB	[1988STE/ARC]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(298–559)	53.1 ± 0.1	400	IPM, EB	[1988STE/ARC]
	V	(298–559)	50.7 ± 0.1	440	IPM, EB	[1988STE/ARC]
	V	(298–559)	48.4 ± 0.2	480	IPM, EB	[1988STE/ARC]
	V	(298–559)	46.0 ± 0.3	520	IPM, EB	[1988STE/ARC]
	V	(473–548)	U65.4	488		[1987KLA/MOH]
	V	(463–794)	46.1	478	A	[1987STE/MAL]
	V	(286–309)	58.1	298	GS	[1980VAN/PRA]
	V	(433–511)	49.2	448	EB	[1987STE/MAL, 1961MAL]
C ₉ H ₇ NO	[59-31-4]	2-hydroxyquinoline				
	SUB	(375–390)	115.2 ± 0.6	383	ME	[1990RIB/MAT]
	SUB	(375–390)	119.4 ± 0.6	298	ME	[1990RIB/MAT]
C ₉ H ₇ NO	[611-36-9]	4-hydroxyquinoline				
	SUB	(415–433)	128.8 ± 1.1	424	ME	[1990RIB/RIB]
	SUB	(415–433)	135.1 ± 1.1	298	ME	[1990RIB/RIB]
C ₉ H ₇ NO	[148-24-3]	8-hydroxyquinoline				
	FUS	(70–370)	40.3	345.7	AC	[2008WAN/TAN]
	FUS		22.1	346.8	DSC	[2001ZOR/COS]
	SUB	(293–303)	89.5 ± 0.9	298	ME	[1989RIB/MON]
	SUB		89.0 ± 1.4	298	C	[1989RIB/MON]
	SUB	(308–328)	108.8 ± 1.7		ME	[1963HOR/WEN, 1970COX/PIL, 1987STE/MAL]
C ₉ H ₇ NO	[491-30-5]	1-hydroxyisoquinoline				
	SUB		113.6 ± 2.2	298	C	[2005RIB/MAT]
C ₉ H ₇ NO	[2439-04-5]	5-hydroxyisoquinoline				
	SUB		109.6 ± 2.1	298	C	[2005RIB/MAT]
C ₉ H ₇ NO	[614-16-4]	Ω- cyanoacetophenone				
	SUB		98.5 ± 2.1	298	C	[2015AMA/SZT]
	SUB	(318–333)	99.8	325.5	A	[1987STE/MAL]
	SUB		92.5 ± 4.2		ME	[1969LEB/DNE, 1977PED/RYL]
C ₉ H ₇ NO	[6136-68-1]	3-acetylbenzonitrile				
	SUB		94.7 ± 1.5	298	C	[2015AMA/SZT]
C ₉ H ₇ NO	[487-89-8]	indole-3-carboxyaldehyde				
	SUB	(372–394)	119.1 ± 1.0	383	ME	[2014AMA/DEC]
	SUB	(372–394)	120.3 ± 1.0	298	ME	[2014AMA/DEC]
C ₉ H ₇ NO ₂	[696-04-8]	indole-2-carboxylic acid				
	SUB	(360–382)	118.2 ± 1.0	371	ME	[2014AMA/DEC]
	SUB	(360–382)	121.9 ± 1.0	298	ME	[2014AMA/DEC]
C ₉ H ₇ NO ₂	[5154-02-9]	1,5-dihydroxyisoquinoline				
	SUB		123.6 ± 2.2	298	C	[2005RIB/MAT]
C ₉ H ₇ NO ₂	[550-44-7]	<i>N</i> -methylphthalimide				
	SUB	(298–316)	91.1 ± 0.5	307	ME	[1997ROU/JIM]
	SUB	(298–316)	91.1 ± 0.5	298	ME	[1997ROU/JIM]
C ₉ H ₇ NO ₂	[2058-74-4]	1-methyl-1 <i>H</i> -indole-2,3-dione (<i>N</i> -methylisatin)				
	FUS		19.5	403.3	DSC	[2003MAT/MIR2]
	SUB		105.6 ± 3.3	298	C	[2003MAT/MIR2]
C ₉ H ₇ N ₃ O ₂	[35975-00-9]	5-amino-6-nitroquinoline				
	SUB	(400–424)	130.7 ± 0.8	412	ME	[1998RIB/CAR]
	SUB	(400–424)	136.4 ± 0.8	298	ME	[1998RIB/CAR]
C ₉ H ₇ N ₃ O ₂ S	[473-42-7]	4-nitro- <i>N</i> -2-thiazolylbenzene sulfonamide				
	FUS		31.8	529.8	DSC	[2014PER/KAZ]
	SUB	(452–509)	144.0 ± 2.0	298	GS	[2016VOL/BLO]
C ₉ H ₇ N ₃ S	[41814-78-2]	5-methyl-1,2,4-triazolo[3,4- <i>b</i>]benzothiazole				
	FUS		24.07	460.2	DSC	[1990DON/DRE]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₈	[95-13-6]	indene				
	FUS	(15–320)	10.20	271.7		[1996DOM/HEA, 1961STU/SIN]
	V	(275–339)	50.3 ± 0.1	298	GS	[2011VER/EME3]
	V	(369–457)	45.3	384	A	[1987STE/MAL]
	V	(289–455)	43.6	304	A	[1987STE/MAL, 1947STU]
	V	(329–454)	43.9	392		[1942BUR]
C ₉ H ₈ Cl ₂ O ₃	[6597-78-0]	methyl 3,6-dichloro-2-methoxybenzoate				
	FUS		18.49	304.6	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₈ Cl ₂ O ₃	[120-36-5]	2-(2,4-dichlorophenoxy)propanoic acid				
	FUS		32.0	391.3	DSC	[2005VEC/BRU]
	FUS		30.43	389.2	DSC	[1991ACR, 1990DON/DRE]
	SUB		116 ± 6	298	DSC	[2005VEC/BRU]
	SUB	(343–375)	128 ± 2	359	TE	[2005VEC/BRU]
	SUB	(343–375)	130 ± 3	298	TE	[2005VEC/BRU]
C ₉ H ₈ Cl ₂ O ₃	[1928-38-7]	2,4-dichlorophenoxyacetic acid, methyl ester				
	FUS		20.0	313.4	DSC	[2005VEC/BRU]
	FUS		25.1	315.4	DSC	[1969PLA/GLA]
	V	(403–548)	68.0	418	A	[1987STE/MAL, 1999DYK/SVO]
C ₉ H ₈ Cl ₂ O ₄	[76330-06-8]	2,6-dichlorosyringaldehyde				
	V	(293–323)	82.2	308	CGC	[1999LEI/WAN2]
C ₉ H ₈ Cl ₃ NO ₃	[75907-45-8]	2,2,4-trichloro-5-(4-morpholinyl)-4-cyclopentene-1,3-dione				
	V	(453–483)	79.6	468	GC	[1980SHA/SAD]
C ₉ H ₈ N ₂	[1126-00-7]	1-phenylpyrazole				
	V		68.6 ± 2.9	298	CGC	[2010LIP/PLI]
	V		70.2 ± 3.4	298	C	[2000RIB/RIB2]
C ₉ H ₈ N ₂	[7164-98-9]	1-phenylimidazole				
	V		74.3 ± 2.6	298	CGC	[2010LIP/PLI]
	V		84.6 ± 3.7	298	C	[2000RIB/RIB2]
C ₉ H ₈ N ₂	[670-96-2]	2-phenylimidazole				
	FUS		17.81	420	DSC	[2007SIF/AIT]
C ₉ H ₈ N ₂	[580-17-6]	3-aminoquinoline				
	SUB	(329–345)	101.1 ± 0.9	337	ME	[1993RIB/MAT]
	SUB	(329–345)	103.1 ± 0.9	298	ME	[1993RIB/MAT]
	SUB		104.8 ± 4.8	298	C	[1993RIB/MAT]
C ₉ H ₈ N ₂	[611-34-7]	5-aminoquinoline				
	SUB	(329–349)	102.9 ± 0.7	339	ME	[1993RIB/MAT]
	SUB	(329–349)	105.0 ± 0.7	298	ME	[1993RIB/MAT]
	SUB		103.3 ± 3.4	298	C	[1993RIB/MAT]
C ₉ H ₈ N ₂	[580-15-4]	6-aminoquinoline				
	SUB	(333–349)	103.6 ± 1.0	341	ME	[1993RIB/MAT]
	SUB	(333–349)	105.7 ± 1.0	298	ME	[1993RIB/MAT]
C ₉ H ₈ N ₂	[578-66-5]	8-aminoquinoline				
	SUB	(296–314)	93.0 ± 0.5	305	ME	[1993RIB/MAT]
	SUB	(296–314)	93.33 ± 0.5	298	ME	[1993RIB/MAT]
C ₉ H ₈ N ₂ O	[14003-34-0]	2-methyl-3-hydroxyquinoxaline				
	FUS		33.4	522.9	DSC	[2000MON/HIL2]
	SUB	(375–391)	117.2 ± 0.4	383	ME	[2000MON/HIL2]
	SUB	(375–391)	119.7 ± 2.8	298	ME	[2000MON/HIL2]
	SUB		123.0 ± 4.4	298	C	[2000RIB/MAT]
C ₉ H ₈ N ₂ O ₂	[6639-86-7]	2-methylquinoxaline-1,4-dioxide				
	SUB		107.0 ± 6.2	298	C	[1997ACR/POW]
C ₉ H ₈ N ₂ O ₂	[5972-09-8]	3-methylaminophthalimide				

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₉ H ₈ O		SUB	(402–450)	104.9	417	RG	[1987STE/MAL, 1956KLO]
	[83-33-0]	1-indanone					
	FUS			17.6	314.1	DSC	[2007MAT/MIR]
	FUS			17.78	312.9	DSC	[1998VER4]
	SUB			78.7 ± 2.8	298	C	[2007MAT/MIR]
	SUB			83.5 ± 0.7	298	GS	[1998VER4]
C ₉ H ₈ O	V	(318–348)	60.3 ± 0.4			GS	[1998GUD/TOR]
	[615-13-4]	2-indanone					
	FUS			16.89	330	DSC	[2007MAT/MIR]
C ₉ H ₈ O	SUB			78.3 ± 1.1	298	C	[2007MAT/MIR]
	[104-55-2]	3-phenyl-2-propenal (cinnamaldehyde)					
	V			62.4	298	GC	[2002VAN/PAR]
	V	(408–482)		51.7	444	TGA	[2002HAZ/DOL]
C ₉ H ₈ O ₂	V	(349–519)		58.2	364	A	[1987STE/MAL, 1947STU]
	V	(353–373)		72.7	363	A	[1987STE/MAL]
	[621-82-9]	cinnamic acid					
	FUS			11.97	408.7	DSC	[2009MUR/BER]
C ₉ H ₈ O ₂	FUS			22.63	406.2	DTA	[1986SIN/KUM]
	[140-10-3]	<i>trans</i> -cinnamic acid					
	FUS			22.21	406.1	DSC	[2008MOT/QUE]
	FUS			25.7	405.5	DSC	[2004STU/WIT]
	FUS			22.6	404.8	DSC	[2004SHA/JAM]
	FUS			22.63	406.2		[1991ACR, 1983WEA]
	SUB	(333–347)	107.1 ± 0.8	298		ME	[1999MON/HIL]
	V	(430–573)	73.9	445		A	[1987STE/MAL]
	[102-94-3]	allocinnamic acid (<i>cis</i> -cinnamic acid)					
	FUS	(255–360)	16.8	340.1		DSC	[2016DAV/LIM]
FUS		16.95	341.2			[1991ACR, 1983WEA]	
C ₉ H ₈ O ₂	SUB	(306–326)	101.0 ± 1.2	298		ME	[2016DAV/LIM]
	[39869-70-0]	7,7-dimethoxynorborane					
	V	(321–357)	49.0	339		EB	[1994WIB/MOR]
C ₉ H ₈ O ₂	[119-84-6]	3,4-dihydrocoumarin					
	V		69.9 ± 0.5	298		C	[2009MAT/SOU2]
C ₉ H ₈ O ₂	[491-37-2]	chromanone					
	FUS			16.7	312.3	DSC	[2009MAT/SOU]
	SUB		84.6 ± 1.3	298		C	[2009MAT/SOU]
C ₉ H ₈ O ₂	[4385-35-7]	3-isochromanone					
	FUS			18.3	355.9	DSC	[2009MAT/SOU]
C ₉ H ₈ O ₂	SUB		97.3 ± 1.4	298		C	[2009MAT/SOU]
	[621-82-9]	3-phenylacrylic acid					
	SUB	(380–404)	110.7 ± 6.3	392		ME	[2014DIB/RAE]
C ₉ H ₈ O ₂ S	SUB	(380–404)	113.8 ± 6.3	298		ME	[2014DIB/RAE]
	[2525-42-0]	phenyl propadienyl sulfone					
C ₉ H ₈ O ₂ S	SUB		105.4 ± 2.5				[1969MAC/STE, 1970COX/PIL]
	[2525-41-9]	phenyl prop-1-ynyl sulfone					
C ₉ H ₈ O ₂ S	SUB		95.4 ± 2.5			B	[1969MAC/STE, 1970COX/PIL]
	[2525-40-8]	phenyl prop-2-ynyl sulfone					
C ₉ H ₈ O ₂ S	SUB		105. ± 2.5			B	[1969MAC/STE, 1970COX/PIL]
	[129-64-6]	<i>endo</i> -5-norbornene-2,3-dicarboxylic anhydride					

Note: In both instances, the authors did not specify *cis*-or *trans*, and Chemical Abstracts gave a CARN of [621-82-9] when indexing the compound.

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₈ O ₃	TRS		15.73	367.2		
	FUS		3.71	437.2	DSC	[1967PIN/WIL]
	SUB		97 ± 4.2	298	MG	[1973ROG/QUA, 1977PED/RYL]
C ₉ H ₈ O ₃	[2746-19-2]	<i>exo</i> -5-norbornene-2,3-dicarboxylic anhydride				
	FUS		21.77	416.2	DSC	[1967PIN/WIL]
C ₉ H ₈ O ₃	[3162-29-6]	5-oxoethyl-1,3-benzodioxole				
	FUS		26.23	358.9	DSC	[2007MAT/SOU]
	SUB		104.4 ± 2.2	298	C	[2007MAT/SOU]
C ₉ H ₈ O ₃	[29668-44-8]	2,3-dihydro-1,4-benzodioxin-6-carboxaldehyde				
	FUS		19.44	324.4	DSC	[2008MAT/SOU2]
	SUB		98.2 ± 1.4	298	C	[2008MAT/SOU2]
C ₉ H ₈ O ₃	[20312-36-1]	L 3-phenyllactic acid				
	FUS (I)		30.5	395.3		
	FUS (II)		30.5	368.0		
	FUS (racemic)		26.5	366.6	DSC	[2011NAV/MAC]
C ₉ H ₈ O ₃	[7400-08-0]	3-(4-hydroxyphenyl)propenoic acid (p-coumaric acid)				
	SUB		130.9 ± 3.3	298	ME	[2012DAV/HER]
C ₉ H ₈ O ₄	[331-39-5]	3,4-dihydroxycinnamic acid (caffeic acid)				
	FUS		27.53	496.5	DSC	[2010PAR/LEE]
	SUB	(409–424)	170.2 ± 4.6	411	ME	[2006CHE/OJA]
C ₉ H ₈ O ₄	[1679-64-7]	monomethyl terephthalate				
	FUS		39.73	493.7	DSC	[2013ZHA/XIA]
	FUS		37.68	492.5	DSC	[2005MON/SOU]
	SUB	(363–381)	121.0 ± 0.5	372.3	ME	[2005MON/SOU]
	SUB	(363–381)	124.1 ± 1.0	298	ME	[2005MON/SOU]
	SUB		124.9 ± 0.5		C	[1998MAK/KAB]
	SUB		130.4 ± 0.5		C	[1998MAK/KAB]
	SUB	(433–493)	72.1	448	A	[1987STE/MAL]
	SUB	(433–493)	82.8	473	GS	[1962KRA/BER]
C ₉ H ₈ O ₄	[4376-18-5]	monomethyl phthalate				
	FUS		21.63	357.5	DSC	[2005MON/SOU]
	SUB	(335–355)	115.9 ± 0.6	345.3	ME	[2005MON/SOU]
	SUB	(335–355)	117.9 ± 0.8	298	ME	[2005MON/SOU]
C ₉ H ₈ O ₄	[1877-71-0]	monomethyl isophthalate				
	FUS		36.5	466.7	DSC	[2005MON/SOU]
	SUB	(359–379)	122.6 ± 0.7	369.2	ME	[2005MON/SOU]
	SUB	(359–379)	125.6 ± 1.0	298	ME	[2005MON/SOU]
C ₉ H ₈ O ₄	[50-78-2]	2-acetoxybenzoic acid (aspirin)				
	FUS		33.51	408.65	DSC	[2015MAT/MOR]
	FUS		33.85	407.7	DSC	[2015ALM/SOU]
	FUS (I)		30.9	410		
	FUS (II)		29.9	406	DSC	[2012BAG/RED]
	FUS		25.9	415.1	DSC	[2011GOR/WOJ]
	FUS		U19.1	408.8	DSC	[2010CAM/MIC]
Note: The value reported in [2010CAM/MIC] is not in agreement with other independently measured values						
	FUS		32.56	409.0	DSC	[2010HAH/GRA]
	FUS		29.17	409.2	DSC	[2004XU/SUN2]
	FUS		31.01	412.7	DSC	[2001PER/BAU, 2003PER/BAU]
	FUS		27.6	414 (Graph)	DSC	[2000JOH/PYK]
	FUS		29.8	414	DSC	[2000KIR]
	SUB	(341–361)	116.6 ± 1.0	351	ME	[2015ALM/SOU]
	SUB	(341–361)	118.7 ± 1.0	298	ME	[2015ALM/SOU]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₈ O ₄	[6304-89-8]	3-acetoxybenzoic acid				
	FUS					[2015ALM/SOU]
	SUB	(344–362)	119.3 ± 0.7	353	ME	[2015ALM/SOU]
	SUB	(344–362)	121.1 ± 0.7	298	ME	[2015ALM/SOU]
C ₉ H ₈ O ₄	[2345-34-8]	4-acetoxybenzoic acid				
	FUS		30.5	464.8	DSC	[2010MON/SAN]
	FUS		26.35	467.2	DSC	[1997YUA/ZHA]
	SUB	(351–373)	113.9 ± 0.3	314.4	ME	[2010MON/SAN]
	SUB(II)	(351–373)	116.1 ± 0.3	298	ME	[2010MON/SAN]
C ₉ H ₈ O ₄	[2861-28-1]	1,3-benzodioxole-5-acetic acid (homopiperonylic acid)				
	FUS		24.94	401.7	DSC	[2004MAT/MON]
	SUB	(346–364)	120.1 ± 0.8	355	ME	[2004MAT/MON]
	SUB	(346–364)	122.9 ± 1.4	298	ME	[2004MAT/MON]
C ₉ H ₈ O ₄	[3663-80-7]	<i>(dl)</i> -1,4-benzodioxan-2-carboxylic acid				
	SUB		117.8 ± 2.1	298	C	[2008MAT/SOU]
C ₉ H ₈ O ₄	[4316-23-8]	4-methylphthalic acid				
	FUS		20.3	425.9	DSC	[2012BOO/BAN]
C ₉ H ₉ BrO ₃	[32019-08-2]	<i>(dl)</i> -2-(<i>p</i> -bromophenoxy)propanoic acid				
	FUS		31.8	385		[1991CHI/BRA]
C ₉ H ₉ BrO ₃		<i>(d)</i> -2-(<i>p</i> -bromophenoxy)propanoic acid				
	FUS		27.61	380		[1991CHI/BRA]
C ₉ H ₉ BrO ₃	[40620-67-5]	<i>(dl)</i> -3-(<i>m</i> -bromophenyl)-3-hydroxypropanoic acid				
	FUS		26.78	349		[1991CHI/BRA]
C ₉ H ₉ BrO ₃	[40620-57-3]	<i>(d)</i> -3-(<i>m</i> -bromophenyl)-3-hydroxypropanoic acid				
	FUS		23.85	350		[1991CHI/BRA]
C ₉ H ₉ BrO ₃	[40620-68-6]	<i>(dl)</i> -3-(<i>p</i> -bromophenyl)-3-hydroxypropanoic acid				
	FUS		28.87	371		[1991CHI/BRA]
C ₉ H ₉ BrO ₃	[40620-58-4]	<i>(d)</i> -3-(<i>p</i> -bromophenyl)-3-hydroxypropanoic acid				
	FUS		35.56	398		[1991CHI/BRA]
C ₉ H ₉ ClO ₃	[25140-86-7]	<i>(dl)</i> -2-(<i>o</i> -chlorophenoxy)propanoic acid				
	FUS		32.22	388		[1991CHI/BRA]
C ₉ H ₉ ClO ₃		<i>(d)</i> -2-(<i>o</i> -chlorophenoxy)propanoic acid				
	FUS		26.78	369		[1991CHI/BRA]
C ₉ H ₉ ClO ₃	[101-10-0]	<i>(dl)</i> -2-(<i>m</i> -chlorophenoxy)propanoic acid				
	FUS		33.05	386		[1991CHI/BRA]
C ₉ H ₉ ClO ₃		<i>(d)</i> -2-(<i>m</i> -chlorophenoxy)propanoic acid				
	FUS		29.71	367.5		[1991CHI/BRA]
C ₉ H ₉ ClO ₃		<i>(dl)</i> -3-(<i>p</i> -chlorophenyl)-3-hydroxypropanoic acid				
	FUS		29.71	357		[1991CHI/BRA]
C ₉ H ₉ ClO ₃	[40620-55-1]	<i>(d)</i> -3-(<i>p</i> -chlorophenyl)-3-hydroxypropanoic acid				
	FUS		28.03	385		[1991CHI/BRA]
C ₉ H ₉ ClO ₃	[40620-64-2]	<i>(dl)</i> -3-(<i>m</i> -chlorophenyl)-3-hydroxypropanoic acid				
	FUS		23.85	340		[1991CHI/BRA]
C ₉ H ₉ ClO ₃	[40620-54-0]	<i>(d)</i> -3-(<i>m</i> -chlorophenyl)-3-hydroxypropanoic acid				
	FUS		28.03	368		[1991CHI/BRA]
C ₉ H ₉ ClO ₃	[94-74-6]	(4-chloro- <i>o</i> -tolylxy)acetic acid				
	FUS		29.98	392.9	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₉ ClO ₄	[76341-69-0]	2-chlorosyringaldehyde				
	V	(293–323)	77.7	308	CGC	[1999LEI/WAN2]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	References			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)						
C ₉ H ₉ Cl ₂ NO	[709-98-8]	3', 4'-dichloropropionanilide		363.7	DSC	[1991ACR, 1990DON/DRE]			
	FUS		18.26						
C ₉ H ₉ FO ₃	[40620-61-9]	(dl)-3-(m-fluorophenyl)-3-hydroxypropanoic acid		290		[1991CHI/BRA]			
	FUS		20.5						
C ₉ H ₉ FO ₃	[40620-51-7]	(d)-3-(m-fluorophenyl)-3-hydroxypropanoic acid		311		[1991CHI/BRA]			
	FUS		24.27						
C ₉ H ₉ FO ₃		(dl)-3-(o-fluorophenyl)-3-hydroxypropanoic acid		342		[1991CHI/BRA]			
	FUS		27.2						
C ₉ H ₉ FO ₃	[40620-50-6]	(d)-3-(o-fluorophenyl)-3-hydroxypropanoic acid		348		[1991CHI/BRA]			
	FUS		22.59						
C ₉ H ₉ FO ₃	[40620-62-0]	(dl)-3-(p-fluorophenyl)-3-hydroxypropanoic acid		362		[1991CHI/BRA]			
	FUS		27.61						
C ₉ H ₉ FO ₃		(d)-3-(p-fluorophenyl)-3-hydroxypropanoic acid		381		[1991CHI/BRA]			
	FUS		30.96						
C ₉ H ₉ F ₆ NO ₅	[1548-45-4]	(l) N,O-bis(trifluoroacetal)-threonine methyl ester (323–413)		338	A	[1987STE/MAL, 1999DYK/SVO, 1960WEY/KLI]			
C ₉ H ₉ N	[603-76-9]	1-methylindole		276.5	DSC	[2014ALM/MON2]			
	FUS		10.9						
	SUB	(267–275)	73.9 ± 0.3				298	Static	[2014ALM/MON2]
	V	(269–342)	61.8 ± 0.1				298	Static	[2014ALM/MON2]
	V	(296–338)	64.3 ± 0.4				298	GS	[2011VER/EME3]
	V		61.1 ± 3.1				298	CGC	[2010LIP/PLI]
C ₉ H ₉ N		2-methylindole		329.4		[1997PEY/LET]			
	FUS		15.72						
C ₉ H ₉ N		3-methylindole (skatole)		298	C	[2009RIB/CAB2]			
	SUB		90.4 ± 1.9						
	SUB	(288–333)	83.3				303	A	[1987STE/MAL]
	V	(368–540)	64.5				383	A	[1987STE/MAL, 1947STU]
C ₉ H ₉ N	[1823-91-2]	α -methylbenzylcyanide		301	GS	[2000VER]			
	V	(284–318)	60.8 ± 0.7						
	V	(284–318)	60.9 ± 0.7				298	GS	[2000VER]
C ₉ H ₉ N	[21789-36-6]	2,6-dimethylbenzoxazole		298	C	[1991ACR/TUC]			
	SUB		83.9 ± 2.8						
C ₉ H ₉ NO	[5676-58-4]	2,5-dimethylbenzoxazole		298	C	[2013SIL/CIM3]			
	V		60.1 ± 1.3						
C ₉ H ₉ NO ₂	[122-85-0]	4-acetamidobenzaldehyde		337	A	[1987STE/MAL, 1960AIH2]			
	SUB	(328–346)	99.0						
C ₉ H ₉ NO ₃	[89-52-1]	2-(acetylamino)benzoic acid		455.1	DSC	[2015ALM/SOU]			
	FUS		29.32						
	FUS		49.4				458.4	DSC	[2014MAN/VOR]
	SUB	(367–389)	124.8 ± 1.3				378	ME	[2015ALM/SOU]
	SUB	(367–389)	127.6 ± 1.3				298	ME	[2015ALM/SOU]
	SUB	(345–393)	116 ± 1				298	GS	[2014MAN/VOR]
C ₉ H ₉ NO ₃	[587-48-4]	3-(acetylamino)benzoic acid		522.2	DSC	[2015ALM/SOU]			
	FUS		42.28						
	FUS		39.4				518.2	DSC	[2014MAN/VOR]
	SUB	(423–441)	152.6 ± 1.3				432	ME	[2015ALM/SOU]
	SUB	(423–441)	157.3 ± 1.3				298	ME	[2015ALM/SOU]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.		Compound			
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₉ NO ₃	SUB	(407–443)	137 ± 1	298	GS	[2014MAN/VOR]
	[556-08-1]	4-(acetylamino)benzoic acid				
	FUS		34.2	535.3	DSC	[2014MAN/VOR]
C ₉ H ₉ NO ₃	FUS		42.4	531.7	DSC	[2010MON/SAN]
	SUB	(395–440)	137 ± 1	298	GS	[2014MAN/VOR, 2014MAN/VOR2]
	SUB	(423–443)	144.2 ± 1.1	325	ME	[2010MON/SAN]
	SUB	(423–443)	148.9 ± 1.1	298	ME	[2010MON/SAN]
	[618-98-4]	3-nitrobenzoic acid, ethyl ester				
C ₉ H ₉ NO ₄	V	(381–571)	65.1	396	A	[1987STE/MAL, 1947STU]
	[5251-93-4]	[(benzoylamino)oxy] acetic acid				
C ₉ H ₉ NO ₄	FUS		31.46	416.9	DSC	[1991ACR, 1990DON/DRE]
	[5453-67-8]	dimethyl pyridine-2,6-dicarboxylate				
C ₉ H ₉ NO ₅	SUB		113.5 ± 3.8	298	C	[2005MAT/MOR]
	FUS		(<i>dl</i>)-2-(<i>p</i> -nitrophenoxy)propanoic acid	32.22	411.4	[1991CHI/BRA]
C ₉ H ₉ NO ₅	FUS		(<i>d</i>)-2-(<i>p</i> -nitrophenoxy)propanoic acid	20.92	362	[1991CHI/BRA]
	[95-26-1]	2,5-dimethylbenzothiazole				
C ₉ H ₉ NS	FUS		18.3	313.0	DSC	[2014SIL/CIM]
	SUB		84.9 ± 1.5	298	C	[2014SIL/CIM]
	[107023-66-5]	2-[methyl(4-nitrophenyl)amino]acetonitrile				
C ₉ H ₉ N ₃ O ₂	FUS		22.96	388.8	DSC	[2006GAO/CHE]
	[72-14-0]	4-amino- <i>N</i> -2-thiazolylbenzenesulfonamide (sulfathiazole)				
C ₉ H ₉ N ₃ O ₂ S ₂	FUS		27.4	474.2	DSC	[2015GAU/VAN]
	FUS		30.3	473	DSC	[2003MAR/AVI, 2002MAR/GOM, 2001MAR/GOM]
	FUS		24.1	473.4	DSC	[1983KHA]
	[602-96-0]	2,4,6-trinitromesitylene				
C ₉ H ₁₀	SUB	(319–397)	103.6 ± 1.2		ME	[1987STE/MAL, 1978CUN/PAL]
	[496-11-7]	indane				
	TRS	(5–445)	0.15	73.83		
	FUS	(5–445)	8.55	221.8	AC	[2016CHI/STE]
	FUS	(15–320)	8.6	221.8		[1996DOM/HEA, 1961STU/SIN]
	V	(338–495)	48.9 ± 0.2	298	EB	[2016CHI/STE]
	V	(338–495)	46.3 ± 0.2	340	EB	[2016CHI/STE]
	V	(338–495)	44.0 ± 0.2	380	EB	[2016CHI/STE]
	V	(338–495)	41.7 ± 0.2	420	EB	[2016CHI/STE]
	V	(338–495)	39.1 ± 0.4	460	EB	[2016CHI/STE]
	V	(338–495)	37.8 ± 0.5	480	EB	[2016CHI/STE]
	V	(284–338)	49.0 ± 0.2	298	GS	[2011VER/EME]
	V	(374–466)	44.0	389	A	[1987STE/MAL]
	V	(382–451)	43.9 ± 0.1	382	C	[1981HOS/SCO3]
	V	(382–451)	41.9 ± 0.1	415	C	[1981HOS/SCO3]
	V	(382–451)	41.3 ± 0.1	424	C	[1981HOS/SCO3]
	V	(382–451)	40.4 ± 0.1	440	C	[1981HOS/SCO3]
	V	(382–451)	39.6 ± 0.1	451	C	[1981HOS/SCO3]
	V	(382–451)	49.0	298	C	[1981HOS/SCO3]
	V	(355–482)	45.0	370		[1976AMB/SPR]
C ₉ H ₁₀	[611-15-4]	2-methylstyrene				
	V	(305–385)	47.9	320	A	[1987STE/MAL, 1953CLE/WIS]
C ₉ H ₁₀	[100-80-1]	3-methylstyrene				
	V	(314–385)	47.5	329	A	[1987STE/MAL, 1953CLE/WIS]
C ₉ H ₁₀	[622-97-9]	4-methylstyrene				
	V	(304–390)	47.6	319	A	[1987STE/MAL, 1953CLE/WIS]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₀	[98-83-9]	α -methylstyrene				
	FUS		11.92	250.8		[1996DOM/HEA, 1971LEB/RAB]
	V	(274–314)	49.2 ± 0.3	294	GS	[1999VER6]
	V	(274–314)	48.9 ± 0.3	298	GS	[1999VER6]
	V	(331–467)	48.6 ± 0.4	298	EB	[1997STE/CHI2]
	V	(331–467)	45.9 ± 0.3	340	EB	[1997STE/CHI2]
	V	(331–467)	43.3 ± 0.3	380	EB	[1997STE/CHI2]
	V	(331–467)	40.6 ± 0.3	420	EB	[1997STE/CHI2]
C ₉ H ₁₀	[766-90-5]	<i>cis</i> - β -methylstyrene				
	V	(348–498)	44.8	363	A	[1987STE/MAL]
C ₉ H ₁₀	[873-66-5]	<i>trans</i> - β -methylstyrene				
	V	(291–452)	46.4	306	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₀	[300-57-2]	allylbenzene				
	V	(274–313)	46.5 ± 0.2	294	GS	[1999VER6]
C ₉ H ₁₀ BrClN ₂ O ₂	[13360-45-7]	3-(4-bromo-3-chlorophenyl)-1-methoxy-1-methylurea				
	FUS		26.54	369.8	DSC	[1990DON/DRE]
C ₉ H ₁₀ BrClO	[27983-04-6]	1-(3-bromopropoxy)-4-chlorobenzene				
	FUS		25.98	315.9	DSC	[2013JIA/HU]
C ₉ H ₁₀ ClNO ₃	[194085-75-1]	(1S)-1-(2-chlorophenyl)-1,2-ethanediol, 2-carbamate, (carisbamate)				
	FUS		33.0	409.6	DSC	[2009WU/MEH]
C ₉ H ₁₀ ClN ₅ O ₂	[138261-41-3]	1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine (imidacloprid)				
	FUS		24.7	416.8	DSC	[2011CAI/XIA]
C ₉ H ₁₀ Cl ₂ N ₂ O	[330-54-1]	3-(3,4-dichlorophenyl)-1,1-dimethylurea (diuron)				
	FUS		25.28	435.1	DSC	[2000ROD/VEC]
	FUS		30.47	430.5	DSC	[1990DON/DRE]
	FUS		33.89	429.7	DSC	[1969PLA/GLA]
	SUB		119 ± 0.6	393	C	[1997PFE/SAB]
	SUB		133.9 ± 0.7	298	C	[1997PFE/SAB]
C ₉ H ₁₀ Cl ₂ N ₂ O ₂	[330-55-2]	<i>N'</i> -(3,4-dichlorophenyl)- <i>N</i> -methoxy- <i>N</i> -methylurea (linuron)				
	FUS		26.56	365.8	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₁₀ F ₂	[146377-62-0]	1,1-difluoro-3-phenylpropane				
	V	(278–318)	53.3 ± 0.4	298	GS	[1997SCH/VER]
C ₉ H ₁₁ N	[155-09-9]	<i>trans</i> -2-phenylcyclopropylamine				
	V		60.3 ± 2.1	298	CGC	[2013GOB/RAT]
C ₉ H ₁₀ N ₂	[1075-76-9]	<i>N</i> -(2-cyanoethyl)aniline				
	TRS	(83–353)	0.98	310.6		
C ₉ H ₁₀ N ₂	[2876-08-6]	1,2-dimethylbenzimidazole				
	FUS		19.4	379.7	DSC	[2013ZAI/YER]
C ₉ H ₁₀ N ₂		(323–373)	92.5	348	GS	[2013ZAI/YER]
	SUB	(323–373)	94.0 ± 0.3	298	GS	[2013ZAI/YER]
	V		79.0 ± 0.5	298	S-F	[2013ZAI/YER]
C ₉ H ₁₀ N ₂	[7035-68-9]	1-ethylbenzimidazole				
	V	(329–376)	76.1 ± 0.4	298	GS	[2012GAR/VER]
C ₉ H ₁₀ N ₂	[53406-41-0]	<i>N</i> -amino-2-methylindole				
	FUS		25.55	384.6		[1997PEY/LET]
C ₉ H ₁₀ N ₂ O	[92-43-3]	1-phenyl-3-pyrazolidinone				

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		SUB	(327–348)	84.3	337.5	A	[1987STE/MAL, 1960AIH2]
C ₉ H ₁₀ N ₂ O ₃	[612-45-3]	<i>N</i> -(4-methyl-2-nitrophenyl)acetamide					
	FUS (white crystals)		24.25	366.2			
	FUS (amber crystals)		20.97	356.7			
	FUS (yellow crystals)		22.37	364.2	DSC	[2001HE/STO]	
C ₉ H ₁₀ N ₂ O ₃	[6335-41-7]	2-(hydroxyimino)- <i>N</i> -(4-methoxyphenyl)acetamide					
	FUS		8.3	457.6	DTA	[1982CUE/SOL]	
C ₉ H ₁₀ N ₂ O ₃	[6335-42-8]	2-(hydroxyimino)- <i>N</i> -(2-methoxyphenyl)acetamide					
	FUS		27.8	424.6	DTA	[1982CUE/SOL]	
C ₉ H ₁₀ O	[1746-13-0]	allyl phenyl ether					
	V	(349–456)	49.4	364	A	[1987STE/MAL]	
C ₉ H ₁₀ O	[104-54-1]	cinnamyl alcohol					
	FUS		15.73	308.2	DSC	[1991CHI/BRA]	
	V	(295–325)	68.1 ± 0.1	310	TG, DTA	[2002SOR/DOL]	
	V	(310–328)	79.8	319	A	[1987STE/MAL]	
	V	(373–523)	56.2	388	A	[1987STE/MAL]	
C ₉ H ₁₀ O	[15764-16-6]	2,4-dimethylbenzaldehyde					
	V	(358–489)	57.4	373	A	[1987STE/MAL]	
C ₉ H ₁₀ O	[1470-94-6]	5-hydroxyindane					
	V	(393–524)	55.4	408	A	[1987STE/MAL]	
C ₉ H ₁₀ O	[577-16-2]	2'-methylacetophenone					
	V		58.9 ± 0.9	298	C	[2013AMA/RIB]	
C ₉ H ₁₀ O	[122-00-9]	4'-methylacetophenone					
	V		60.7 ± 1.0	298	C	[2013AMA/RIB]	
	V	(288–333)	59.6	303	A	[1987STE/MAL]	
C ₉ H ₁₀ O	[93-53-8]	2-phenylpropionaldehyde					
	V	(364–517)	52.3 ± 0.2	360	EB	[2002STE/CHI5]	
	V	(364–517)	49.4 ± 0.2	400	EB	[2002STE/CHI5]	
	V	(364–517)	46.6 ± 0.3	440	EB	[2002STE/CHI5]	
	V	(364–517)	43.4 ± 0.5	480	EB	[2002STE/CHI5]	
C ₉ H ₁₀ O	[104-53-0]	3-phenylpropionaldehyde					
	V	(330–363)	67.5	345	A	[1987STE/MAL]	
C ₉ H ₁₀ O	[103-79-7]	benzyl methyl ketone					
	V	(343–383)	56.1	298	CGC	[1995CHI/HOS]	
	V	(343–383)	55.0	298	CGC	[1995CHI/HOS]	
	V	(273–328)	53.5 ± 0.3	298		[1954NIC/SZA]	
C ₉ H ₁₀ O	[93-55-0]	ethyl phenyl ketone (propiophenone)					
	V	(388–623)	52.1	403	A	[1987STE/MAL]	
	V	(391–454)	44.4	406	EB, GS	[1965COL/COU]	
C ₉ H ₁₀ O	[612-15-7]	2-vinylanisole					
	V	(314–467)	56.7	329	A	[1987STE/MAL, 1947STU]	
C ₉ H ₁₀ O	[626-20-0]	3-vinylanisole					
	V	(316–471)	55.9	331	A	[1987STE/MAL, 1947STU]	
C ₉ H ₁₀ O	[637-69-4]	4-vinylanisole					
	V	(318–478)	54.9	333	A	[1987STE/MAL, 1947STU]	
C ₉ H ₁₀ O	[4407-36-7]	<i>trans</i> -3-phenyl-2-propen-1-ol					
	SUB	(288–307)	109.6	297.5	A	[1987STE/MAL]	
	SUB		69.5		ME	[1954SER/VOI]	
C ₉ H ₁₀ O	[493-08-3]	chroman					
	FUS	(12–442)	16.26	269.8	AC	[1996DOM/HEA, 1990CHI/ARC]	

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(293–535)	56.7 ± 0.1	298	IPM, EB	[1990CHI/ARC]
	V	(293–535)	55.2 ± 0.1	320	IPM, EB	[1990CHI/ARC]
	V	(293–535)	52.7 ± 0.1	360	IPM, EB	[1990CHI/ARC]
	V	(293–535)	50.2 ± 0.1	400	IPM, EB	[1990CHI/ARC]
	V	(293–535)	48.9 ± 0.1	440	IPM, EB	[1990CHI/ARC]
	V	(293–535)	45.1 ± 0.3	480	IPM, EB	[1990CHI/ARC]
	V	(293–535)	42.5 ± 0.5	520	IPM, EB	[1990CHI/ARC]
C ₉ H ₁₀ O	[493-05-0]	isochroman				
	FUS	(12–440)	16.75	277.5	AC	[1996DOM/HEA, 1990CHI/ARC]
	V	(295–536)	57.1 ± 0.1	298	IPM, EB	[1990CHI/ARC]
	V	(295–536)	55.6 ± 0.1	320	IPM, EB	[1990CHI/ARC]
	V	(295–536)	52.9 ± 0.1	360	IPM, EB	[1990CHI/ARC]
	V	(295–536)	50.3 ± 0.1	400	IPM, EB	[1990CHI/ARC]
	V	(295–536)	48.7 ± 0.1	440	IPM, EB	[1990CHI/ARC]
	V	(295–536)	45.3 ± 0.3	480	IPM, EB	[1990CHI/ARC]
	V	(295–536)	42.6 ± 0.5	520	IPM, EB	[1990CHI/ARC]
C ₉ H ₁₀ O ₂	[89-71-4]	methyl <i>o</i> -toluate				
	FUS	(5–320)	12.47	228.8	AC	[2002BLO/PAU]
	FUS		12.5	228.8	AC	[1998MAK/KAB]
	V		57.3 ± 0.2	293	C	[1998MAK/KAB]
C ₉ H ₁₀ O ₂	[99-36-5]	methyl <i>m</i> -toluate				
	FUS	(5–320)	17.14	270.6	AC	[2002BLO/PAU]
	FUS		21.15	269.9	AC	[1998MAK/KAB]
	V		60.3 ± 0.2	296	C	[1998MAK/KAB]
	V	(359–500)	54.8	374	A	[1987STE/MAL]
	V		53.5	388		[1974MUR/TUD]
C ₉ H ₁₀ O ₂	[99-75-2]	methyl <i>p</i> -toluate				
	FUS		20.2	305.9	DSC	[2011ALM/MON]
	FUS	(5–320)	20.78	306.5	AC	[2002BLO/PAU]
	FUS		20.77	306.5	AC	[1998MAK/KAB]
	SUB	(269–301)	80.6 ± 0.1	285	Static	[2011ALM/MON]
	SUB	(269–301)	80.2 ± 0.1	298	Static	[2011ALM/MON]
	SUB		83.3 ± 0.3	298	C	[1998MAK/KAB]
	SUB	(403–493)	51.6	418		[1998SEM/WIL]
	V	(293–357)	57.8 ± 0.1	325	Static	[2011ALM/MON]
	V	(293–357)	59.8 ± 0.2	298	Static	[2011ALM/MON]
C ₉ H ₁₀ O ₂	[122-46-3]	acetic acid, 3-tolyl ester				
	SUB	(274–317)	60.7	295	TE	[1947BAL, 1960JON]
	V	(385–480)	55.7	400	A, EB	[1987STE/MAL, 1969SHE/LAN]
C ₉ H ₁₀ O ₂	[140-39-6]	acetic acid, 4-tolyl ester				
	V	(385–480)	55.9	400	A, EB	[1987STE/MAL, 1969SHE/LAN]
C ₉ H ₁₀ O ₂	[579-74-8]	2-acetylanisole (2'-methoxyacetophenone)				
	V		66.7 ± 1.2	298	C	[2014AMA/MOR]
	V		56.5			[1986BAL/GNA]
C ₉ H ₁₀ O ₂	[586-37-8]	3-acetylanisole (3'-methoxyacetophenone)				
	V		67.8 ± 1.2	298	C	[2014AMA/MOR]
C ₉ H ₁₀ O ₂	[100-06-1]	4-acetylanisole (4'-methoxyacetophenone)				
	SUB		87.8 ± 1.4	298	C	[2014AMA/MOR]
	SUB	(276–300)	77.7		V	[1959AIH]
	SUB	(283–333)	93.7	308		[1954SER/VOI, 1960JON, 1987STE/MAL]
	V	(311–334)	66.5	322	A, ME	[1987STE/MAL, 1954SER/VOI]
C ₉ H ₁₀ O ₂	[7216-18-4]	3,4-dihydro-2 <i>H</i> -1,5-benzodioxepin				

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		V		55.6		[1958CAS/FLE2]	
C ₉ H ₁₀ O ₂	[140-11-4]	benzyl acetate					
	V	(283–490)	55.5	298	A	[1987STE/MAL]	
	V	(283–328)	60.4	305	ME	[1954SER/VOI]	
C ₉ H ₁₀ O ₂	[93-89-0]	ethylbenzoate					
	V	(283–332)	61.1 ± 0.3	298	GS	[2006VAS/VER]	
	V	(369–531)	52.5 ± 0.2	380	EB	[2002STE/CHI2]	
	V	(369–531)	49.6 ± 0.2	420	EB	[2002STE/CHI2]	
	V	(369–531)	46.7 ± 0.3	460	EB	[2002STE/CHI2]	
	V	(369–531)	43.6 ± 0.5	500	EB	[2002STE/CHI2]	
	V	(344–440)	57.0	356	BG	[1988KAT2]	
	V	(344–440)	50.5	419	BG	[1988KAT2]	
	V	(288–333)	55.9	303	A	[1987STE/MAL]	
C ₉ H ₁₀ O ₂	[501-52-0]	3-phenylpropionic acid (hydrocinnamic acid)					
	FUS		15.61	321.2	DSC	[2001MON/HIL4]	
	FUS		17.68	321.2		[1991ACR, 1983WEA]	
	SUB	(305–315)	102.0 ± 0.7	310	ME	[2001MON/HIL4]	
	SUB	(305–315)	102.4 ± 0.8	298	ME	[2001MON/HIL4]	
	V	(375–553)	67.0	390	A	[1987STE/MAL, 1947STU]	
C ₉ H ₁₀ O ₂	[122-60-1]	(phenoxymethyl)oxirane					
	V	(400–532)	69.9 ± 0.7	298	EB	[1997STE/CHI]	
	V	(400–532)	60.3 ± 0.5	400	EB	[1997STE/CHI]	
	V	(400–532)	56.7 ± 0.4	440	EB	[1997STE/CHI]	
	V	(400–532)	53.1 ± 0.4	480	EB	[1997STE/CHI]	
	V	(400–532)	51.3 ± 0.5	500	EB	[1997STE/CHI]	
	V	(400–532)	49.4 ± 0.6	520	EB	[1997STE/CHI]	
C ₉ H ₁₀ O ₂	[101-41-7]	methyl phenylacetate					
	V	(333–433)	57.4	298	GC	[2005HOS/GRY]	
C ₉ H ₁₀ O ₂	[936-51-6]	2-phenyl-1,3-dioxolane					
	V	(285–333)	62.6 ± 0.7	298	GS	[2002VER]	
		V	(298–333)	62.1 ± 0.3	316	GS	[1995VER/DOG]
C ₉ H ₁₀ O ₂	[612-19-1]	2-ethylbenzoic acid					
	SUB	(298–313)	100.5	305.5	ME	[1987STE/MAL, 1976COL/JIM]	
	SUB		101.1 ± 0.4	298	ME	[1984COL/JIM]	
		SUB	(298–313)	100.7 ± 2.5	298	ME	[1976COL/JIM]
C ₉ H ₁₀ O ₂	[619-20-5]	3-ethylbenzoic acid					
	SUB	(300–318)	99.1	309	ME	[1987STE/MAL, 1976COL/JIM]	
	SUB		99.7 ± 0.4	298	ME	[1984COL/JIM]	
		SUB	(300–318)	99.1 ± 2.5	298	ME	[1976COL/JIM]
C ₉ H ₁₀ O ₂	[619-64-7]	4-ethylbenzoic acid					
	FUS		13.2	380.2	DSC	[2000KAN/SAM]	
	FUS		14.06	386.2	DSC	[1991CHI/BRA]	
	SUB	(321–335)	101.2 ± 0.8	298	ME	[2004MON/ALM]	
	SUB	(310–329)	98.2	319.5	ME	[1987STE/MAL, 1976COL/JIM]	
	SUB		98.9 ± 0.2	298	ME	[1984COL/JIM]	
C ₉ H ₁₀ O ₂	[603-79-2]	2,3-dimethylbenzoic acid					
	FUS		18.3	417.6	CVC	[1996BEL/UFN]	
	SUB	(316–337)	102.3 ± 0.4	326	ME	[1984COL/JIM2]	
		SUB	(316–337)	104.6 ± 0.4	298	ME	[1984COL/JIM2]
C ₉ H ₁₀ O ₂	[611-01-8]	2,4-dimethylbenzoic acid					

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	SUB	(312–331)	102.7 ± 0.3	321	ME	[1984COL/JIM2]
	SUB	(312–331)	103.5 ± 0.3	298	ME	[1984COL/JIM2]
C ₉ H ₁₀ O ₂	[610-72-0]	2,5-dimethylbenzoic acid				
	SUB	(315–334)	103.6 ± 0.6	324	ME	[1984COL/JIM2]
	SUB	(315–334)	105.0 ± 0.6	298	ME	[1984COL/JIM2]
C ₉ H ₁₀ O ₂	[632-46-2]	2,6-dimethylbenzoic acid				
	SUB	(309–324)	98.2 ± 0.2	317	ME	[1984COL/JIM2]
	SUB	(309–324)	99.1 ± 0.2	298	ME	[1984COL/JIM2]
C ₉ H ₁₀ O ₂	[632-46-2]	3,4-dimethylbenzoic acid				
	SUB	(325–347)	104.5 ± 0.3	336	ME	[1984COL/JIM2]
	SUB	(325–347)	106.4 ± 0.3	298	ME	[1984COL/JIM2]
C ₉ H ₁₀ O ₂	[499-06-9]	3,5-dimethylbenzoic acid				
	FUS		22.6	442.9	CVC	[1996BEL/UFN]
	SUB	(322–341)	100.8 ± 0.3	332	ME	[1984COL/JIM2]
	SUB	(322–341)	102.3 ± 0.3	298	ME	[1984COL/JIM2]
C ₉ H ₁₀ O ₂	[122-60-1]	phenyl glycidyl ether				
	FUS		17.32	279.8		[1988LEB/BYK]
C ₉ H ₁₀ O ₂	[935-92-2]	2,3,5-trimethyl-1,4-benzoquinone				
	V	(393–450)	49.9	408	EB	[2004TAN/LI]
C ₉ H ₁₀ O ₂ S	[5535-52-4]	<i>p</i> -tolyl vinyl sulfone				
	FUS		10.88	340.4		[1969MAC/MCN]
	SUB		82.4 ± 2.5		B	[1969MAC/MCN, 1969MAC/MCN2, 1977PED/RYL]
C ₉ H ₁₀ O ₃	[118-61-6]	ethyl salicylate				
	V	(288–333)	59.2	303	A	[1987STE/MAL]
	V	(334–505)	55.2	349	A	[1987STE/MAL]
C ₉ H ₁₀ O ₃	[623-20-1]	2-furanacrylic acid, ethyl ester				
	V	(428–500)	56.8	443	A	[1987STE/MAL]
C ₉ H ₁₀ O ₃	[121-98-2]	methyl 4-methoxybenzoate				
	SUB	(292–320)	88.0 ± 0.2	306	Static	[2014ALM/CUN]
	SUB	(292–320)	87.7 ± 0.2	298	Static	[2014ALM/CUN]
	V	(310–358)	67.0 ± 0.1	334	Static	[2014ALM/CUN]
	V	(310–358)	69.3 ± 0.3	298	Static	[2014ALM/CUN]
	V	(382–472)	61.1	397	EB	[1985SCH/BRU]
C ₉ H ₁₀ O ₃	[120-47-8]	ethyl 4-hydroxybenzoate				
	FUS		25.76	388.7	DSC	[2014YAN/RAS]
	FUS		26.5	388.5	DSC	[2011UMN/CHI]
	FUS		27.9	389.2	DSC	[2008WAS/HOL]
	FUS		32.49	388.9	DSC	[2008NIC/BEL]
	FUS		29.8	387.0	DSC	[2004STU/WIT]
	FUS		26.4	389.0	DSC	[1999GIO/BET]
	SUB	(313–326)	100.9 ± 0.7	298	GS	[2005PER/ROD]
	V		84.0 ± 0.5	298	CGC	[2011UMN/CHI]
	V		75.0		TGA	[2002CHA/DOL]
V		72.6		TGA	[2001CHA/DOL]	
C ₉ H ₁₀ O ₃	[35438-32-5]	<i>cis,cis</i> -3-methyl-4-cyclohexene-1,2-dicarboxylic acid anhydride				
	V	(325–525)	49.5 ± 1.0			[1984NUR/MEK]
C ₉ H ₁₀ O ₃	[3425-89-6]	4-methyl-4-cyclohexene-1,2-dicarboxylic anhydride				
	FUS	(80–361)	17.67	335.5	AC	[2005LU/TAN]
C ₉ H ₁₀ O ₃	[121-32-4]	3-ethoxy-4-hydroxybenzaldehyde (ethyl vanillin)				
	FUS		23.1	349.8	DSC	[2008TEM/ROU]
	SUB	(296–338)	101.5	311		[1987STE/MAL, 1957LIT, 1960JON]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₀ O ₃	[120-14-9] FUS	3,4-dimethoxybenzaldehyde	20.3	317	DSC	[2008TEM/ROU]
C ₉ H ₁₀ O ₃	FUS	(<i>dl</i>)-3-phenyl-3-hydroxypropanoic acid	29.71	366		[1991CHI/BRA]
C ₉ H ₁₀ O ₃	[2768-42-5] FUS	(<i>d</i>)-3-phenyl-3-hydroxypropanoic acid	32.64	391		[1991CHI/BRA]
C ₉ H ₁₀ O ₃	[940-31-8] FUS	(<i>dl</i>)-2-phenoxypropionic acid	33.05	388		[1991CHI/BRA]
C ₉ H ₁₀ O ₃	FUS	(<i>d</i>)-2-phenoxypropionic acid	22.59	359		[1991CHI/BRA]
C ₉ H ₁₀ O ₃	[104-01-8] FUS	4-methoxyphenylacetic acid	21.8	358.1		[1991ACR, 1979ARM/JAM]
C ₉ H ₁₀ O ₃	[501-97-3] FUS	4-hydroxyphenylpropionic acid	28.9	402.5		[1991ACR, 1979ARM/JAM]
C ₉ H ₁₀ O ₃	[619-86-3] FUS FUS FUS SUB SUB SUB	4-ethoxybenzoic acid	35.07 28.9 29.4 (349–373) 119.4 ± 0.5 (349–373) 121.9 ± 1.0 123.3 ± 0.9	471.8 465.2 472.8 361 298 298	DSC DSC DSC ME ME ME	[2010FON/SAN] [2000KAN/SAM] [1991ACR, 1979ARM/JAM] [2010FON/SAN] [2010FON/SAN] [2010RIB/FER3]
C ₉ H ₁₀ O ₃	[3663-82-9] FUS SUB	1,4-benzodioxan-2-hydroxymethyl	28.78 106.9 ± 0.8	362.4 298	DSC C	[2008MAT/SOU] [2008MAT/MIR2]
C ₉ H ₁₀ O ₃	[53282-12-5] V	ethyl <i>trans</i> -b-(2-furyl)acrylate (428–500)	56.8	464		[1956FRO/LOE]
C ₉ H ₁₀ O ₄	[1521-38-6] SUB SUB	2,3-dimethoxybenzoic acid (336–356) (336–356)	115.1 ± 0.3 116.6 ± 0.3	346 298	ME ME	[1985COL/JIM] [1985COL/JIM]
C ₉ H ₁₀ O ₄	[91-52-1] SUB SUB	2,4-dimethoxybenzoic acid (346–367) (346–367)	120.5 ± 0.4 123.4 ± 0.4	357 298	ME ME	[1985COL/JIM] [1985COL/JIM]
C ₉ H ₁₀ O ₄	[1466-76-8] SUB SUB	2,6-dimethoxybenzoic acid (335–378) (335–378)	118.4 ± 0.4 121.7 ± 0.4	367 298	ME ME	[1985COL/JIM] [1985COL/JIM]
C ₉ H ₁₀ O ₄	[93-07-2] FUS SUB SUB	3,4-dimethoxybenzoic acid	29.60 126.1 ± 0.6 129.8 ± 0.6	453.12 369 298	DSC ME ME	[2013LI/LU] [1985COL/JIM] [1985COL/JIM]
C ₉ H ₁₀ O ₄	[2785-98-0] SUB SUB	2,5-dimethoxybenzoic acid (324–342) (324–342)	113.3 ± 0.7 116.1 ± 0.7	333 298	ME ME	[1996JIM/ROU] [1996JIM/ROU]
C ₉ H ₁₀ O ₄	[1132-21-4] SUB SUB	3,5-dimethoxybenzoic acid (356–376) (356–376)	124.5 ± 0.6 127.1 ± 0.6	369 298	ME ME	[1985COL/JIM] [1985COL/JIM]
C ₉ H ₁₀ O ₄	FUS	(±)-bicyclo[2.2.1]hept-5-ene- <i>trans</i> -2,3-dicarboxylic acid	29.8	458.2	DSC	[1971PIN/TON]
C ₉ H ₁₀ O ₄	[32216-02-7] FUS	(+)-bicyclo[2.2.1]hept-5-ene- <i>trans</i> -2,3-dicarboxylic acid	22.5	449.2	DSC	[1971PIN/TON]
C ₉ H ₁₀ O ₄	FUS	(<i>dl</i>)-erythro phenylglyceric acid	31.38	395		[1991CHI/BRA]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₀ O ₄		<i>(d)</i> -erythro phenylglyceric acid				
	FUS		23.43	371.5		[1991CHI/BRA]
C ₉ H ₁₀ O ₅	[613-75-2]	2-(diacetoxyethyl)furan				
	SUB		109.6 ± 2.5			[1980BAL/LEB, 1986PED/NAY]
C ₉ H ₁₀ O ₅	[530-57-4]	3,5-dimethoxy-4-hydroxybenzoic acid (syringic acid)				
	FUS		28.1	482.5	DSC	[2012BOO/BAN]
	FUS		33.7	480.3	DSC	[2009QUE/MOT]
C ₉ H ₁₁ Br	[7073-94-1]	1-bromo-2-isopropylbenzene				
	V	(404–484)	48.4	419		[1999DYK/SVO]
	V	(378–528)	49.8	393	A	[1987STE/MAL, 1970DYK/VAN]
C ₉ H ₁₁ Br	[586-61-8]	1-bromo-4-isopropylbenzene				
	V	(362–493)	51.1	377		[1999DYK/SVO]
	V	(388–528)	50.4	403	A	[1987STE/MAL, 1970DYK/VAN]
C ₉ H ₁₁ Br	[3575-19-7]	cumyl bromide				
	V	392	58.0	298	CGC	[2002KRA/VAS]
C ₉ H ₁₁ BrN ₂ O	[3060-89-7]	<i>N'</i> -(4-bromophenyl)- <i>N</i> -methoxy- <i>N</i> -methylurea				
	FUS		24.44	368.3	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₁₁ BrO ₂	[109417-60-9]	1-bromo-2-(2-methoxyethoxy)benzene				
	V	(302–368)	64.5 ± 0.3	298	GS	[2006DAB/SPO]
C ₉ H ₁₁ BrO ₃	[63834-58-2]	(racemic) 3-(2-bromophenoxy)propane-1,2-diol				
	FUS		33.4	353.5	DSC	[2006ZAK/LAZ]
C ₉ H ₁₁ BrO ₃	[386702-67-6]	<i>(R)</i> -3-(2-bromophenoxy)propane-1,2-diol				
	FUS		38.4	374.3	DSC	[2006ZAK/LAZ]
C ₉ H ₁₁ Cl	[2077-13-6]	1-chloro-2-isopropylbenzene				
	V	(341–465)	48.1	356		[1999DYK/SVO]
	V	(363–508)	47.7	378	A	[1987STE/MAL, 1970DYK/VAN]
C ₉ H ₁₁ Cl	[2621-46-7]	1-chloro-4-isopropylbenzene				
	V	(307–472)	51.4	322		[1999DYK/SVO]
	V	(368–513)	48.5	383	A	[1987STE/MAL, 1970DYK/VAN]
C ₉ H ₁₁ Cl	[934-53-2]	cumyl chloride				
	V	392	54.7	298	CGC	[2002KRA/VAS]
C ₉ H ₁₁ ClN ₂ O	[150-68-5]	3-(4-chlorophenyl)-1,1-dimethylurea (monuron)				
	FUS		29.3	447.6		[2004KON/TAN2]
	FUS		29.46	447.6	DSC	[1991ACR, 1990DON/DRE]
	SUB	(303–379)	114.6 ± 4.9	341	ME, C	[1987STE/MAL, 1972WIE]
C ₉ H ₁₁ ClN ₂ O ₂	[1746-81-2]	<i>N'</i> -(4-chlorophenyl)- <i>N</i> -methoxy- <i>N</i> -methylurea				
	FUS		22.54	353.4	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₁₁ ClO ₂	[67146-43-4]	propylene glycol mono(4-chlorophenyl) ether				
	V	(417–542)	64.9	432	A	[1987STE/MAL, 1999DYK/SVO]
C ₉ H ₁₁ ClO ₃	[93-65-2]	2-(4-chloro-2-methylphenoxy)propanoic acid				
	FUS		26.43	366.2	DSC	[1990DON/DRE]
C ₉ H ₁₁ ClO ₃	[5112-21-0]	(racemic) 3-(2-chlorophenoxy)propane-1,2-diol				
	FUS		29.0	344.9	DSC	[2006ZAK/LAZ]
C ₉ H ₁₁ ClO ₃	[153547-60-5]	<i>(R)</i> -3-(2-chlorophenoxy)propane-1,2-diol				
	FUS		38.2	363.3	DSC	[2006ZAK/LAZ]
C ₉ H ₁₁ ClS	[4332-51-8]	benzyl (2-chloroethyl) sulfide				
	V	(293–333)	52.3	308	A, GS	[1987STE/MAL, 1948RED/CHA, 1999DYK/SVO]
C ₉ H ₁₁ Cl ₃ NO ₃ PS	[330-55-2]	<i>O,O</i> -diethyl- <i>O</i> -(3,5,6-trichloro-2-pyridyl)phosphorothioate				
	FUS		24.53	315	DSC	[1991ACR, 1990DON/DRE]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₁ Cl ₃ NO ₄ P	[5598-15-2] SUB	3,5,6-trichloro-2-pyridyl diethylphosphate (chlorpyrifos oxon) (373–403)	79.0	388	GC	[2007GOE/MCC]
C ₉ H ₁₁ FO ₃	[399-28-0] FUS	(racemic) 3-(2-fluorophenoxy)propane-1,2-diol	20.5	318.2	DSC	[2006ZAK/LAZ]
C ₉ H ₁₁ FO ₃	[912556-93-5] FUS	(<i>R</i>)-3-(2-fluorophenoxy)propane-1,2-diol	26.0	333.7	DSC	[2006ZAK/LAZ]
C ₉ H ₁₁ F ₅ O ₂	[24262-73-5] V	pentafluoropropionic acid, cyclohexyl ester (335–428)	46.4	350	A, EB	[1987STE/MAL, 1969SHE/LAN]
C ₉ H ₁₁ F ₉	[1190430-21-7] V	1,1,1,2,2,3,3,4,4-nonafluorononane (278–328)	45.7 ± 0.1	298	Static	[2015MOR/DAS]
C ₉ H ₁₁ I	[54290-22-1] V	cumyl iodide 392	63.3	298	CGC	[2002KRA/VAS]
C ₉ H ₁₁ IO ₃	[55169-06-7] FUS	(racemic) 3-(2-iodophenoxy)propane-1,2-diol	34.2	362.5	DSC	[2006ZAK/LAZ]
C ₉ H ₁₁ IO ₃	[912556-94-6] FUS	(<i>R</i>)-3-(2-iodophenoxy)propane-1,2-diol	37.4	383.5	DSC	[2006ZAK/LAZ]
C ₉ H ₁₁ N	[635-46-1] FUS	1,2,3,4-tetrahydroquinoline (12–441)	11.81	290	AC	[1991ACR, 1989STE/CHI3]
	V	(323–572)	65.3 ± 0.2	298	IPM, EB	[1989STE/CHI3]
	V	(323–572)	62.1 ± 0.1	340	IPM, EB	[1989STE/CHI3]
	V	(323–572)	59.2 ± 0.1	380	IPM, EB	[1989STE/CHI3]
	V	(323–572)	56.3 ± 0.1	420	IPM, EB	[1989STE/CHI3]
	V	(323–572)	53.5 ± 0.2	460	IPM, EB	[1989STE/CHI3]
	V	(323–572)	50.8 ± 0.3	500	IPM, EB	[1989STE/CHI3]
	V	(323–572)	47.9 ± 0.4	540	IPM, EB	[1989STE/CHI3]
C ₉ H ₁₁ N	[10500-57-9] FUS	5,6,7,8-tetrahydroquinoline (5–442)	9.08	222.7	AC	[1991ACR, 1989STE/CHI3]
	V	(303–544)	57.6 ± 0.2	298	IPM, EB	[1989STE/CHI3]
	V	(303–544)	56.1 ± 0.1	320	IPM, EB	[1989STE/CHI3]
	V	(303–544)	53.6 ± 0.1	360	IPM, EB	[1989STE/CHI3]
	V	(303–544)	51.1 ± 0.1	400	IPM, EB	[1989STE/CHI3]
	V	(303–544)	48.7 ± 0.3	440	IPM, EB	[1989STE/CHI3]
	V	(303–544)	46.2 ± 0.4	480	IPM, EB	[1989STE/CHI3]
	V	(303–544)	43.5 ± 0.5	520	IPM, EB	[1989STE/CHI3]
C ₉ H ₁₁ N	[824-21-5] V	<i>N</i> -methylindoline (296–338)	64.2 ± 0.4	298	GS	[2011VER/EME]
C ₉ H ₁₁ NO	[579-10-2] V	<i>N</i> -methylacetanilide (383–519)	60.1	398	A	[1987STE/MAL]
	V	(377–526)	56.7	392		[1947STU]
C ₉ H ₁₁ NO	[120-66-1] SUB	<i>N</i> -(2-methylphenyl)acetamide (315–340)	96.8	327.5		[1987STE/MAL, 1960AIH2]
C ₉ H ₁₁ NO	[103-89-9] SUB	<i>N</i> -(4-methylphenyl)acetamide (331–350)	99.0	341		[1960AIH2]
C ₉ H ₁₁ NO	[611-74-5] FUS	<i>N,N</i> -dimethylbenzamide	21.22	316.9	DSC	[2010ALM/MON]
	SUB	(297–315)	88.6 ± 0.3	306	Static	[2010ALM/MON]
	SUB	(297–315)	88.8 ± 0.3	298	Static	[2010ALM/MON]
	SUB	(289–305)	89.7 ± 0.3	298		[1995ABB/JIM]
	V	(302–362)	68.7 ± 0.1	332	Static	[2010ALM/MON]
	V	(302–362)	72.5 ± 0.1	298	Static	[2010ALM/MON]
Note: VP measurements reported in [2010ALM/MON] include those for the subcooled liquid	V		61.9 ± 2.9			[1978BEA/LEE]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₁ NO	[120-66-1] FUS	2-(acetylamino)toluene	21.7	382.7	DSC	[2003HUA, 2005HUA/TAN]
C ₉ H ₁₁ NO	[103-89-9] FUS	4-(acetylamino)toluene	29.4	421.3	DSC	[2012UMN/CHI]
	FUS		28.93	424	DSC	[2003HUA, 2005HUA/TAN]
	V		86.2 ± 3.2	298	CGC	[2012UMN/CHI]
C ₉ H ₁₁ NO	[100-10-7] FUS	4-(<i>N,N</i> -dimethylamino)benzaldehyde (80–360)	19.07	346.2	AC	[1999MEN/LIA]
C ₉ H ₁₁ NO ₂	[6526-72-3] V	1-nitro-2-isopropylbenzene (278–323)	65.5 ± 0.7	301	GS	[2000VER/HEI]
	V		65.6 ± 0.7	298	GS	[2000VER/HEI]
C ₉ H ₁₁ NO ₂	[87-25-2] V	ethyl 2-aminobenzoate (ethyl anthranilate) (433–593)	59.6	448	A	[1987STE/MAL]
C ₉ H ₁₁ NO ₂	[94-09-7] FUS (II)	ethyl 4-aminobenzoate (benzocaine)	23.3	362.4	DSC	[2013GAN/BAR]
	FUS		17.81	362.7	DTA	[2013FUL/VLA]
	FUS		22.55	362	DSC	[2010BAI/VAN]
	FUS		25.65	362.6	DSC	[2010MIY/KHA]
	FUS		24.6	362.6	DSC	[2008WAS/HOL]
	FUS		21.4	362.5	DSC	[2004STU/WIT]
	FUS		21.16		DSC	[1995YAM/KIT]
	FUS		23.56	362.8		[1991ACR, 1990MAN/AHU, 1989NEA/FLY, 1990NEA/FLY]
	SUB		112.9 ± 4.3	298	V+ F	[2013GOB/GUT]
	V		91.8 ± 4.2	298	CGC	[2013GOB/GUT]
C ₉ H ₁₁ NO ₂	[101-99-5] V	ethyl carbanilate (380–510)	84.2	395	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₁ NO ₂	[603-71-4] SUB	2,4,6-trimethylnitrobenzene	78.6 ± 1.0	298	C	[1993ACR/TUC2]
C ₉ H ₁₁ NO ₂	[63-91-2] SUB	<i>L</i> -(<i>l</i>)-phenylalanine	158.3 ± 2.0	418	ME,MS	[2014TYU/KRA]
	SUB		160.6 ± 3.5	298	ME,MS	[2014TYU/KRA]
	SUB		145 ± 6	439	ME,MS	[2013TYU/BAD]
	SUB		(342–442) U 90 ± 6.3	392	LE	[1977GAF/PIE]
	SUB		(451–469) 154.0 ± 0.8	455	ME	[1965SVE/CLY, 1970COX/PIL, 1987STE/MAL, 1964CLY/SVE]
C ₉ H ₁₁ NO ₂	[101-99-5] FUS	ethyl phenyl carbamate	16.27	326		[1971PRI]
C ₉ H ₁₁ NO ₂	[51-66-1] FUS	<i>p</i> -methoxyacetanilide	25.4	398.2	DSC	[2012UMN/CHI]
	FUS		27.82	400.3		[1990MAN/AHU]
	V		92.0 ± 3.4	298	CGC	[2012UMN/CHI]
	V		85.7	466	I	[1943CRA]
C ₉ H ₁₁ NO ₂	[610-16-2] FUS	2-(dimethylamino)benzoic acid	14.1	341.9	DSC	[2012BOO/BAN]
C ₉ H ₁₁ NO ₂	[99-64-9] FUS	3-(dimethylamino)benzoic acid	21.8	423.3	DSC	[2012BOO/BAN]
C ₉ H ₁₁ NO ₂	[619-84-1] FUS	4-(dimethylamino)benzoic acid	34.1	512.5	DSC	[2010MON/SAN]
	SUB		(369–385) 117.4 ± 0.5	309	ME	[2010MON/SAN]
	SUB		(369–385) 120.3 ± 0.5	298	ME	[2010MON/SAN]
C ₉ H ₁₁ NO ₂ S ₂	[949171-64-6] FUS	<i>N</i> -theonylthiocarbamic- <i>O</i> -propyl ester	26.1	370.1	DSC	[2007RIB/MON]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₁ NO ₃	SUB		136.5 ± 1.8	298	C	[2007RIB/MON]
	[60-18-4]	(<i>l</i>)-tyrosine				
	SUB		200.0 ± 1.8	471	ME,MS	[2014TYU/KRA]
	SUB	(412–512)	101 ± 8	462	LE	[1977GAF/PIE]
C ₉ H ₁₁ NS	[15482-60-7]	<i>N,N</i> -dimethylbenzenecarbothioamide				
	FUS		25.1			[1978BEA/LEE]
	SUB		94.8 ± 2.0	298	C	[1989RIB/SOU]
C ₉ H ₁₁ NS	V		73.6 ± 4.0			[1978BEA/LEE]
	[40780-82-3]	<i>N</i> -methylthiobenzimidate				
C ₉ H ₁₁ O ₄ P	V		66.1 ± 3.3			[1978BEA/LEE]
	[14657-64-8]	2-carboxyethyl(phenyl)phosphinic acid				
C ₉ H ₁₂	FUS		33.58	432.66	DSC	[2010GUO/WAN2]
	[38451-18-2]	<i>cis</i> -bicyclo[4.3.0]nona-3,7-diene				
	V	(356–429)	41.8	371	A	[1987STE/MAL]
C ₉ H ₁₂	V		44.9	298		[1972KOZ/TIM]
	[28304-66-7]	(<i>Z</i>)-5-ethylidene-2-norbornene				
	V	(315–462)	44.3 ± 0.3	298	EB	[1997STE/CHI]
	V	(315–462)	43.0 ± 0.3	320	EB	[1997STE/CHI]
	V	(315–462)	40.5 ± 0.3	360	EB	[1997STE/CHI]
C ₉ H ₁₂	V	(315–462)	38.0 ± 0.3	400	EB	[1997STE/CHI]
	V	(315–462)	35.2 ± 0.5	440	EB	[1997STE/CHI]
C ₉ H ₁₂	[3048-64-4]	5-ethylidene-2-norbornene				
	V	(314–420)	42.3 ± 0.3	298	EB	[1996STE/CHI2]
C ₉ H ₁₂	[28304-67-8]	<i>trans</i> -5-ethylidene-2-norbornene				
	V	(346–416)	41.2	361	A	[1987STE/MAL]
C ₉ H ₁₂	[611-14-3]	2-ethyltoluene				
	V		46.9	298		[1994RUZ/ZAB]
	V		47.7	298		[1971WIL/ZWO]
	V	(353–443)	43.6	368	A	[1987STE/MAL, 1949FOR/NOR]
C ₉ H ₁₂	[620-14-4]	3-ethyltoluene				
	V		46.6	298		[1994RUZ/ZAB]
	V		46.9	298		[1971WIL/ZWO]
	V	(348–438)	43.4	363	A	[1987STE/MAL, 1949FOR/NOR]
C ₉ H ₁₂	[622-96-8]	4-ethyltoluene				
	V		46.5	298		[1994RUZ/ZAB]
	V		46.6	298		[1971WIL/ZWO]
	V	(349–442)	43.2	364	A	[1987STE/MAL, 1949FOR/NOR]
C ₉ H ₁₂	[98-82-8]	isopropylbenzene				
	FUS		7.32	177.1	AC	[1973KIS/SUG]
	V		45.1	298		[1994RUZ/ZAB]
	V	(349–426)	41.2	364		[1989CEP/GON]
	V	(339–433)	42.1	354	A	[1987STE/MAL]
	V		45.1 ± 0.1	298	C	[1982FUC/HAL]
	V		44.0	298		[1975KUS/SAI]
	V		45.1	298		[1971WIL/ZWO]
	V		45.1	298	C	[1947OSB/GIN]
V	(343–426)	41.9	358	MM	[1949FOR/NOR, 1945WIL/TAY]	
C ₉ H ₁₂	[103-65-1]	propylbenzene				
	FUS		9.27	173.6		[1991ACR, 1965MES/TOD2]
	V		46.2	298		[1994RUZ/ZAB]
	V	(340–391)	43.8	355		[1986PAU/KRU]
V		45.0	298		[1975KUS/SAI]	

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
			46.2	298		[1971WIL/ZWO]
			46.2	298	C	[1947OSB/GIN]
		(348–433)	42.7	363	A, MM	[1987STE/MAL, 1949FOR/NOR, 1987STE/MAL, 1964CLY/SVE]
C ₉ H ₁₂	[3048-65-5]	3a,4,7,7a-tetrahydro-1 <i>H</i> -indene				
	V	(338–440)	42.3	353	A	[1987STE/MAL]
C ₉ H ₁₂	[526-73-8]	1,2,3-trimethylbenzene				
	TRS		0.66	218.7		
	TRS		1.33	230.3		
	FUS		8.18	247.8		[1996DOM/HEA, 1955TAY/JOH]
	V		49.0	298		[1994RUZ/ZAB]
	V		48.8	298		[1974KUS/SAI]
	V	(363–456)	44.8	378	A	[1987STE/MAL, 1949FOR/NOR]
	V		49.1	298		[1971WIL/ZWO]
	V	(259–270)	42.5	265	RG	[1948HOP/SEA]
	V		49.1	298	C	[1947OSB/GIN]
C ₉ H ₁₂	[95-63-6]	1,2,4-trimethylbenzene				
	FUS		13.19	229.3		[1996DOM/HEA, 1957PUT/KIL]
	FUS		12.65	228.6	C	[1996DOM/HEA, 1931HUF/PAR]
	V		48.0	298		[1994RUZ/ZAB]
	V		47.2	298		[1974KUS/SAI]
	V		47.9	298		[1971WIL/ZWO]
	V	(357–450)	44.1	372	A	[1987STE/MAL, 1949FOR/NOR]
	V	(257–267)	46.5	262	RG	[1948HOP/SEA]
	V		47.9	298	C	[1947OSB/GIN]
C ₉ H ₁₂	[108-67-8]	1,3,5-trimethylbenzene (mesitylene)				
	TRS		0.33	91.3		
	TRS		0.07	188.5		[2000YAM/TAN]
	FUS		9.51	228.4		[1996DOM/HEA, 1991RAD/RAD]
	V		47.6	298		[1994RUZ/ZAB]
	V	(296–342)	46.2 ± 1.3	319	MM	[1991WIB/WAL]
	V	(296–342)	47.5 ± 2.1	298	MM	[1991WIB/WAL]
	V	(348–424)	43.5	363		[1989PAR/GME]
	V	(249–356)	49.7	264	A	[1987STE/MAL]
	V		47.5 ± 0.1	298	C	[1987AN/HU]
	V	(273–299)	47.7	286	MM	[1981CHI/HYM]
	V	(354–445)	43.9	369	A	[1987STE/MAL, 1949FOR/NOR]
	V		47.5	298		[1971WIL/ZWO]
	V	(255–268)	51.1	262	RG	[1948HOP/SEA]
	V		47.5	298	C	[1947OSB/GIN]
C ₉ H ₁₂	[3048-64-4]	5-vinyl-2-norbornene				
	V	(301–410)	42.0	316	A	[1987STE/MAL]
	V	(354–409)	48.9	369	A	[1987STE/MAL]
C ₉ H ₁₂	[31561-59-8]	trispiro[2.0.2.0.2.0]nonane ([3] rotane)				
	FUS		14.14	312.1	DSC	[1995BEC/RUC]
	V	(273–308)	59.2 ± 0.5		GS	[1995BEC/RUC]
C ₉ H ₁₂	[50874-24-3]	trispiro[2.0.0.2.1.1]nonane ([3] triangulane)				
	V	(275–314)	46.3 ± 0.5		GS	[1995BEC/RUC]
C ₉ H ₁₂ ClN ₅	[22936-86-3]	6-chloro- <i>N</i> -cyclopropyl- <i>N'</i> -(1-methylethyl)-1,3,5-triazine-2,4-diamine				
	FUS		28.76	441.6	DSC	[1990DON/DRE]
C ₉ H ₁₂ F ₃ N ₃ O ₅	[651-18-3]	<i>N</i> -[<i>N</i> -(<i>N</i> -[trifluoroacetyl]glycyl)glycyl]glycine methyl ester				
	SUB	(343–433)	133.4	358		[1987STE/MAL, 1960WEY/KLI]
C ₉ H ₁₂ NO ₃ PS	[122-14-5]	<i>O,O</i> -dimethyl- <i>O</i> -(3-methyl-4-nitrophenyl)thiophosphate				
	V	(293–382)	78.0	308	A	[1987STE/MAL]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₂ N ₂	[103-02-6] V	phenylhydrazone acetone (413–436)	74.6	424	A	[1987STE/MAL, 1913BLA]
C ₉ H ₁₂ N ₂	[1502-10-9] SUB	<i>N</i> -methyl-7-(methylimino)-1,3,5-cycloheptatrienylamine	49.4 ± 4			[1971JAC/HUN, 1977PED/RYL]
C ₉ H ₁₂ N ₂	[31529-46-1] FUS	<i>N</i> -amino-2-methylindoline	24.45	318.2		[1997PEY/LET]
C ₉ H ₁₂ N ₂ O	[101-42-8] FUS	1,1-dimethyl-3-phenylurea	22.81	404.8	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₁₂ N ₂ O ₂	[13142-86-4] SUB	3-ethoxyphenylurea	75.3 ± 8.3			[1954TSU/KAT, 1970COX/PIL]
C ₉ H ₁₂ N ₂ O ₂	[150-69-6] SUB	4-ethoxyphenylurea (dulcin)	83.7 ± 8.3			[1954TSU/KAT, 1970COX/PIL]
C ₉ H ₁₂ N ₂ O ₂ S ₂	[2651-16-3] FUS	<i>S</i> -methyl- <i>N</i> '-tosylisothiourea	31.2	401.2	DSC	[1992REI/HAN]
C ₉ H ₁₂ N ₂ S	[14222-60-7] FUS	2-propyl-4-pyridinecarbothioamide	23.21	414.1		[2007WAN/ZHA]
C ₉ H ₁₂ N ₄ O ₂	[5770-28-5] FUS	8-ethyltheophylline	37.2	545.3	DSC	[1989GON/KRA]
C ₉ H ₁₂ N ₄ O ₃	[519-37-9] FUS	1,3-dimethyl-7-(2-hydroxyethyl)xanthine	32.62	435.8	DSC	[2014POB/DOM]
C ₉ H ₁₂ O	[4013-34-7] V V	(1-methoxyethyl)benzene (298–313) (298–313)	49.2 ± 0.4 49.1 ± 0.4	296 298	GS GS	[2001VER/HEI] [2001VER/HEI]
C ₉ H ₁₂ O	[539-30-0] V V	benzyl ethyl ether (278–314) (299–460)	53.5 ± 0.4 48.0	298 314	GS A	[2002KRA/VAS] [1987STE/MAL, 1947STU]
C ₉ H ₁₂ O	[14804-32-1] V	2-ethylanisole (302–460)	49.8	317	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₂ O	[10568-38-4] V	3-ethylanisole (306–470)	49.3	321	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₂ O	[1515-95-3] V	4-ethylanisole (306–470)	51.9	321	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₂ O	[698-71-5] V V	5-ethyl-3-methylphenol (468–521) (385–506)	55.0 58.5	483 58.5	A, GS, EB	[1987STE/MAL, 1964HAN/HAR] [1955VON/GEB]
C ₉ H ₁₂ O	[88-69-7] V V V V	2-isopropylphenol (375–493) (370–489) (375–493) (335–501)	63.5 55.1 56.1 57.3	390 385 390 350	EB A	[1990NES/NAZ] [1987STE/MAL] [1986TSV/NAZ] [1947STU]
C ₉ H ₁₂ O	[618-45-1] V	3-isopropylphenol (377–497)	64.3	392	A	[1987STE/MAL]
C ₉ H ₁₂ O	[99-89-8] V V	4-isopropylphenol (391–507) (380–496)	63.7 63.1	406 395	EB A	[1990NES/NAZ] [1987STE/MAL]
C ₉ H ₁₂ O	[2741-16-4] V	isopropyl phenyl ether (345–448)	49.5	360	A	[1987STE/MAL, 1965HEI/SUR, 1984BOU/FRI]
C ₉ H ₁₂ O	[122-97-4] V V	3-phenyl-1-propanol (284–328) (347–508)	62.8 62.6	299 362	A	[1987STE/MAL] [1947STU]
C ₉ H ₁₂ O	[617-94-7]	2-phenyl-2-propanol				

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(391–423)	52.9	406	A	[1987STE/MAL]
C ₉ H ₁₂ O	[622-85-5]	phenyl propyl ether				
	V	(374–463)	46.5	389	A	[1987STE/MAL]
C ₉ H ₁₂ O	[644-35-9]	2-propylphenol				
	V	(377–495)	56.9	392	A	[1987STE/MAL]
	V	(381–504)	59.9	398		[1953STA/MUL]
	V	(381–504)	57.2	423		[1953STA/MUL]
	V	(381–504)	53.0	473		[1953STA/MUL]
C ₉ H ₁₂ O	[621-27-2]	3-propylphenol				
	V	(408–538)	60.2	423	A	[1987STE/MAL]
	V	(386–512)	59.9	398		[1953STA/MUL]
	V	(386–512)	57.2	423		[1953STA/MUL]
	V	(386–512)	53.0	473		[1953STA/MUL]
C ₉ H ₁₂ O	[645-56-7]	4-propylphenol				
	V	(383–508)	56.7	398	A	[1987STE/MAL]
	V	(347–517)	61.3	348		[1953STA/MUL]
	V	(347–517)	59.5	373		[1953STA/MUL]
	V	(347–517)	58.4	398		[1953STA/MUL]
	V	(347–517)	56.2	423		[1953STA/MUL]
	V	(347–517)	51.5	473		[1953STA/MUL]
C ₉ H ₁₂ O	[697-82-5]	2,3,5-trimethylphenol				
	V	(459–521)	53.9	474	A, GS, EB	[1987STE/MAL, 1964HAN/HAR]
	V	(379–506)	55.1	394		[1955VON/GEB]
C ₉ H ₁₂ O	[2416-94-6]	2,3,6-trimethylphenol				
	FUS		22.05	331.2		[1999VER]
	SUB		86.7 ± 0.6	298	GS	[1999VER]
C ₉ H ₁₂ O	[496-78-6]	2,4,5-trimethylphenol				
	V	(379–505)	56.5	394	A	[1987STE/MAL, 1955VON/GEB]
C ₉ H ₁₂ O	[527-60-6]	2,4,6-trimethylphenol				
	SUB		82.8 ± 0.3	298	GS	[1999VER]
	SUB		95.0	298	C	[1971BER/GIR, 1999VER]
	V	(367–494)	53.2	382	A	[1987STE/MAL, 1955VON/GEB]
C ₉ H ₁₂ O	[2416-94-6]	2,5,6-trimethylphenol				
	V	(359–503)	51.1 ± 0.2	431	Static	[1988BAG/GUR]
C ₉ H ₁₂ O	[527-54-8]	3,4,5-trimethylphenol				
	V	(396–521)	61.1	411	A	[1987STE/MAL]
C ₉ H ₁₂ O	[617-94-7]	α , α -dimethylbenzyl alcohol				
	SUB	(276–302)	82.8 ± 0.7	289	GS	[1999VER4]
	SUB	(276–302)	82.3 ± 0.7	298	GS	[1999VER4]
	V	(311–338)	63.4 ± 0.5	325	GS	[1999VER4]
	V	(311–338)	65.0 ± 0.5	298	GS	[1999VER4]
C ₉ H ₁₂ O ₂	[700-13-0]	trimethylhydroquinone				
	V	(450–501)	45.5 ± 0.3	475	Static	[1988BAG/GUR]
C ₉ H ₁₂ O ₂	[80-15-9]	cumene hydroperoxide				
	V	(283–333)	69.9	298	A	[1987STE/MAL]
	V	(347–390)	74.0	362	A	[1987STE/MAL]
C ₉ H ₁₂ O ₂		1,3-dihydroxy-5-methyl-2-ethylbenzene				
	V	(388–453)	77.1	403	A, GC	[1987STE/MAL, 1975KUN/LIL]
C ₉ H ₁₂ O ₂	[4179-19-5]	3,5-dimethoxytoluene				
	V	(374–520)	59.5	389	A	[1987STE/MAL]
C ₉ H ₁₂ O ₂	[622-08-2]	ethylene glycol monobenzyl ether				

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(453–530)	58.6	468	A	[1987STE/MAL]
C ₉ H ₁₂ O ₂	[770-35-4]	propylene glycol 1-phenyl ether				
	V	(389–509)	59.5	404	A	[1987STE/MAL]
C ₉ H ₁₂ O ₂	V	isopropyl catechol (isomer not specified)				
	V	(393–453)	65.3	423		[1965GAK/BAB]
C ₉ H ₁₂ O ₂	[1125-88-8]	benzaldehyde dimethyl acetal				
	V	(278–318)	60.9 ± 0.5	298	GS	[2002VER]
	V	(283–318)	56.5 ± 0.7	300	GS	[1995VER/DOG]
C ₉ H ₁₂ O ₂	[2138-48-9]	3-isopropyl-1,2-dihydroxybenzene				
	SUB		97.8 ± 1.7	298	C	[1984RIB/RIB2]
C ₉ H ₁₂ O ₂	[1125-21-9]	2,6,6-trimethyl-2-cyclohexene-1,4-dione				
	FUS		7.2	297.3	DSC	[1992BAB/HWA]
C ₉ H ₁₂ O ₃	[634-36-6]	1,2,3-trimethoxybenzene				
	SUB		98.0 ± 0.3	298	C	[2000MAT/MIR]
C ₉ H ₁₂ O ₃	[621-23-8]	1,3,5-trimethoxybenzene				
	SUB		100.6 ± 1.9	298	C	[2000MAT/MIR]
	V		68.2 ± 2.0	298	CGC	[2000NIC/ORF]
C ₉ H ₁₂ O ₃	[538-43-2]	(racemic) 3-phenoxypropane-1,2-diol				
	FUS		28.0	331.7	DSC	[2008BRE/BRE, 2006ZAK/LAZ]
C ₉ H ₁₂ O ₃	[82430-38-4]	(<i>R</i>)-3-phenoxypropane-1,2-diol				
	FUS		31.8	341.5	DSC	[2008BRE/BRE, 2006ZAK/LAZ]
C ₉ H ₁₂ O ₃	[5662-95-3]	3,3-tetramethyleneglutaric acid anhydride				
	FUS		15.3	338.4	DSC	[2008MAT/MIR]
	SUB		96.4 ± 1.1	298	C	[2008MAT/MIR]
C ₉ H ₁₂ O ₄	[642-71-7]	3,4,5-trimethoxyphenol				
	FUS		31.94	420.2	DSC	[2008MAT/MIR2]
	SUB		125.3 ± 3.1	298	C	[2008MAT/MIR2]
C ₉ H ₁₂ S	[6263-62-3]	benzyl ethyl sulfide				
	V	(346–370)	56.0	358		[1999DYK/SVO]
	V	(345–500)	54.8	360	A	[1987STE/MAL]
	V		56.9 ± 2.1	298		[1962MAC/MAY]
C ₉ H ₁₂ S	[20760-06-9]	2-ethylthioanisole				
	V	(481–511)	44.3	496		[1999DYK/SVO]
C ₉ H ₁₂ S	[34786-24-8]	ethyl <i>m</i> -tolyl sulfide				
	V	(472–502)	43.5	487		[1999DYK/SVO]
C ₉ H ₁₂ S	[622.63-9]	ethyl <i>p</i> -tolyl sulfide				
	V	(473–503)	43.6	488		[1999DYK/SVO]
C ₉ H ₁₂ S	[3019-20-3]	(isopropylthio)benzene				
	V	(461–491)	U23.6	476		[1999DYK/SVO]
C ₉ H ₁₂ S	[874-79-3]	(propylthio)benzene				
	V	(473–503)	44.3	488		[1999DYK/SVO]
C ₉ H ₁₃ BrN ₂ O ₂	[314-40-9]	5-bromo-6-methyl-3-(1-methylpropyl)-2,4(1 <i>H</i> ,3 <i>H</i>)-pyrimidinedione				
	FUS		22.02	428.3	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₁₃ ClN ₆	[21725-46-2]	2-[[4-chloro-6-(ethylamino)-1,3,5-triazin-2-yl]amino]-2-methylpropanenitrile				
	FUS		41.96	437.9	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₁₃ ClN ₆	[21725-46-2]	2-[(4-chloro-6-ethylamino- <i>s</i> -triazin-2-yl)amino]-2-methylpropionitrile (cyanazine)				
	SUB	(339–365)	90.7	352	GS	[1982GRA/FOS]
C ₉ H ₁₃ Cl ₃ NO ₄ P	[5598-15-2]	<i>O,O</i> -diethyl- <i>O</i> -(3,5,6-trichloro-2-pyridyl) phosphate				
	FUS		15.61	312.5	DSC	[1990DON/DRE]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₃ Cl ₃ OS	[76619-95-9] V	2,3,3-trichloro-2-propenethioic acid, <i>O</i> -hexyl ester (433–483)	69.5		GC	[1980PIT/KIS]
C ₉ H ₁₃ N	[585-32-0] V	α , α -dimethylbenzylamine (283–323)	56.4 ± 0.7	303	GS	[1999VER4]
	V	(283–323)	56.7 ± 0.7	298	GS	[1999VER4]
C ₉ H ₁₃ N	[103-83-3] V	<i>N,N</i> -dimethylbenzylamine (288–328)	48.9 ± 0.4	308	GS	[1999VER4]
	V	(288–328)	49.5 ± 0.4	298	GS	[1999VER4]
	V		50.1 ± 0.9	298	C	[1996MIR/ORL]
C ₉ H ₁₃ N	[609-72-3] V	<i>N,N</i> -dimethyl-2-toluidine (301–458)	52.4	316	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₃ N	[121-72-2] V	<i>N,N</i> -dimethyl-3-toluidine	58.2 ± 6.9	298	CGC	[1996RIB/RIB]
C ₉ H ₁₃ N	[99-97-8] V	<i>N,N</i> -dimethyl-4-toluidine (323–483)	60.7	338	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₃ N	[102-27-2] V	<i>N</i> -ethyl-3-toluidine	60.0 ± 3.0	298	CGC	[1996RIB/RIB]
C ₉ H ₁₃ N	[643-28-7] V	2-isopropylaniline (286–326)	61.3 ± 0.9	306	GS	[2000VER3]
	V	(286–326)	61.8 ± 0.9	298	GS	[2000VER3]
C ₉ H ₁₃ N	[99-88-7] V	4-isopropylaniline (333–500)	57.5	348	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₃ N	[300-62-9] V	1-phenyl-2-propylamine (<i>dl</i>)-amphetamine (333–353)	53.4	343	A	[1987STE/MAL]
	V	(333–353)	57.1 ± 1.1	298	A	[1987STE/MAL, 2013THO/CHI]
C ₉ H ₁₃ N	[51-64-9] V	(<i>S</i>)-1-phenyl-2-propylamine (<i>d</i>)-amphetamine	58.2 ± 2.7	298	CGC	[2013THO/CHI]
C ₉ H ₁₃ N	[88-05-1] V	2,4,6-trimethylaniline (341–510)	64.1	356	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₃ N	[3978-81-2] V	4- <i>tert</i> -butylpyridine	54.4 ± 1.3	298	C	[2008FRI/ACR]
	V	(283–303)	51.0	298		[1979ARN/CHA]
C ₉ H ₁₃ NO	[492-41-1] FUS	(–)-2-amino-1-phenyl-1-propanol (norephedrine)	15.87	324.4	DSC	[1999LI/ZEL]
C ₉ H ₁₃ NO	[14838-15-4] FUS	(±)-2-amino-1-phenyl-1-propanol (norephedrine)	26.11	374.3	DSC	[1999LI/ZEL]
C ₉ H ₁₃ NO	[104-63-2] V	<i>N</i> -benzylethanolamine (293–363)	71.7	328	Static	[2009RAZ/HAJ]
	V	(293–363)	74.5	298	Static	[2009RAZ/HAJ]
C ₉ H ₁₃ NO ₂	[1075-89-4] FUS	3,3-tetramethyleneglutarimide	24.2	426.6	DSC	[2008MAT/MIR]
	SUB		106.8 ± 2.0	298	C	[2008MAT/MIR]
C ₉ H ₁₃ NO ₂	[94-07-5] FUS	4-[1-hydroxy-2-(methylamino)ethyl]phenol	99.7	463.5	DSC	[2015POB/JUR]
C ₉ H ₁₃ N ₃ O ₃ S	[69500-53-4] FUS	(<i>S</i>)-4-[4-(oxiran-2-ylmethoxy)-1,2,5-thiadiazol-3-yl]morpholine	39.9	387.7	DSC	[2014BRE/ZAK]
C ₉ H ₁₃ N ₃ O ₃ S	FUS	racemic 4-[4-(oxiran-2-ylmethoxy)-1,2,5-thiadiazol-3-yl]morpholine	38.6	374.0	DSC	[2014BRE/ZAK]
C ₉ H ₁₃ N ₅	[139909-52-7] FUS	6,9-dimethyl-8-ethyladenine	29.8	436.8		[1994ZIE/ZIE]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
		SUB	(345–351)	94.1 ± 0.1	348	ME	[1994ZIE/ZIE]
C ₉ H ₁₃ N ₅	[117954-97-9]	8-propyl-9-methyladenine					
		SUB	(364–370)	124.2 ± 0.8	367	ME	[1987KAM/ZIE]
C ₉ H ₁₃ N ₅ O ₄	[82410-32-0]	9-[(1,3-dihydroxy-2-propoxy)methyl]quanine					
		FUS		37.88	509.2	DSC	[1999ZIE/GOL]
C ₉ H ₁₄		1-ethylnortricyclo[2.2.1,0 ^{2,6}]heptane					
		V		42.0 ± 0.1	298	C	[1996VAR/PAS]
C ₉ H ₁₄	[2972-20-5]	2-methylenebicyclo[2.2.2]octane					
		V		45.2			[1974KOZ/BYC]
C ₉ H ₁₄	[4893-13-4]	2-methylbicyclo[2.2.2]oct-2-ene					
		V	(363–402)	40.2	378	A	[1987STE/MAL]
		V		43.5 ± 0.4	298	EB	[1974VAR/DRU, 1974KOZ/BYC]
C ₉ H ₁₄	[2146-39-6]	2-vinylbicyclo[2.2.1]heptane					
		V	(350–385)	38.6	365	A	[1987STE/MAL]
C ₉ H ₁₄	[7124-86-9]	bicyclo[3.2.2]non-6-ene					
		SUB		48 ± 1.0	298	C	[1982JOC/DEK2]
C ₉ H ₁₄	[6671-66-5]	bicyclo[3.3.1]non-2-ene					
		SUB		48.2 ± 0.4	298	C	[1982JOC/DEK2]
C ₉ H ₁₄	[16456-33-0]	bicyclo[4.2.1]non-3-ene					
		SUB		49.7 ± 0.8	298	C	[1982JOC/DEK2]
C ₉ H ₁₄ ClN ₅	[139-40-2]	2-chloro-4,6-bis(isopropylamino)-1,3,5-triazine (propazine)					
		FUS		41.87	490.3	DSC	[1991ACR, 1990DON/DRE]
		FUS		42.1		DSC	[1971GET/WAR]
C ₉ H ₁₄ F ₃ NO ₃	[1115-39-5]	<i>N</i> -trifluoroacetyl- <i>l</i> -leucine, methyl ester					
		V	(273–463)	55.9	288	A	[1987STE/MAL, 1999DYK/SVO, 1960WEY/KLI]
C ₉ H ₁₄ N ₂	[1675-69-0]	azelaic acid dinitrile					
		FUS		18.68	251.1	DSC	[2007BAD/BLA]
		V	(308–341)	80.4	323	A	[1987STE/MAL, 1960WOO/MUR]
C ₉ H ₁₄ N ₂ O ₂	[82413-39-6]	1,3-dimethyl-5-propyluracil					
		FUS		26.3	355	DSC	[1996KAM/ZIE]
		SUB	(317–327)	111.0 ± 1.6	322	ME	[1996KAM/ZIE]
C ₉ H ₁₄ N ₂ O ₂	[175412-48-3]	1,3-dimethyl-5-isopropyluracil					
		FUS		22.4	354.7	DSC	[1996KAM/ZIE]
		SUB	(316–328)	102.9 ± 1.6	322	ME	[1996KAM/ZIE]
C ₉ H ₁₄ N ₂ O ₂	[21472-93-5]	1,3-diethylthymine					
		FUS		21.6	327	DSC	[1984ZIE/ZIE2]
		SUB		89.8 ± 0.4	298	C	[1980SAB/KOM]
		SUB	(307–325)	95.0 ± 2.1	317	QR	[1980TEP/YAN]
C ₉ H ₁₄ N ₂ O ₃	[50-11-3]	metharbital					
		FUS		30.1		DSC	[1978SEK/TSU]
C ₉ H ₁₄ O	[281-24-3]	2-oxadamantane					
		FUS		8.12	567	DSC	[1978AND/CAR]
C ₉ H ₁₄ O	[17931-55-4]	bicyclo[3.3.1]nonan-9-one					
		TRS		13.99	299	DSC	[1998PAR/GIL2]
		TRS		14.11	300.5	AC	[1991WHI/PER]
C ₉ H ₁₄ O	[5689-04-3]	<i>cis</i> -2-hexahydroindanone					
		V		57.5	298		[1971SEL3]
C ₉ H ₁₄ O	[16484-17-6]	<i>trans</i> -2-hexahydroindanone					
		V		56.1	298		[1971SEL3]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₄ O	[20030-30-2] V	2,5,6-trimethyl-2-cyclohexen-1-one (371–478)	45.5 ± 0.3	425	Static	[1988BAG/GUR]
C ₉ H ₁₄ O	[78-59-1] V	3,5,5-trimethyl-2-cyclohex-1-one (isophorone) (311–489)	48.6	326	A	[1987STE/MAL, 1947STU, 1975GAR/STY]
C ₉ H ₁₄ O	[504-20-1] FUS V	2,6-dimethyl-2,5-heptadien-4-one (phorone) (315–471)	17.1 54.1	299 330	DSC A	[1992BAB/HWA2, 1992BAB/HWA] [1987STE/MAL, 1947STU]
C ₉ H ₁₄ O ₂	V	bicyclo[2.2.1]heptan-7-one ethylene ketal (283–318)	53.8 ± 0.2		GS	[1998VER/PEN, 2002VER]
C ₉ H ₁₄ O ₂	[111-12-6] V	methyl 2-octynoate (283–312)	64.5	297	A, ME	[1987STE/MAL, 1955SER/VOI]
C ₉ H ₁₄ O ₄	[691-83-8] V	diethyl citraconate (332–504)	54.9	347	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₄ O ₄	[2409-52-1] V	diethyl itaconate (324–501)	51.0	339	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₄ O ₄	[2418-31-7] V	diethyl mesaconate (335–502)	55.9	350	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₄ O ₄	[1559-02-0] V	1,1-cyclopropanedicarboxylic acid diethyl ester (288–318)	63.9 ± 0.5		GS	[1998VER/KUM]
C ₉ H ₁₄ O ₄	[16713-66-9] FUS SUB	3,3-tetramethyleneglutaric acid	32.1 126.9 ± 2.4	452.9 298	DSC C	[2008MAT/MIR] [2008MAT/MIR]
C ₉ H ₁₄ O ₄	[23684-11-9] FUS	carbisopropoxy methyl methacrylate	19.87	276.5	AC	[1985KAR/ABD]
C ₉ H ₁₄ O ₅	[570-08-1] V	diethyl acetylmalonate (363–510)	54.0	378	A	[1987STE/MAL]
C ₉ H ₁₄ O ₅	V	ethyl[(1-allyloxycarbonyl)ethyl] carbonate (342–496)	61.3	357	A	[1987STE/MAL]
C ₉ H ₁₄ O ₅	V	2-lactyloxypropionic acid, allyl ester (331–401)	75.1	346	A	[1987STE/MAL]
C ₉ H ₁₄ O ₅	[57822-06-7] SUB	3-oxononanedioic acid (312–330)	118		TPTD	[2005CHA/ZIE]
Note: Values based on TPTD method are not consistent with values determined by other experimental methods						
C ₉ H ₁₄ O ₆	[102-76-1] FUS V V V V V V	glycerol triacetate (triacetin) (300–328) (320–361) (440–590) (284–319)	25.8 83.9 ± 0.8 81.9 ± 0.3 83.8 ± 0.9 82.0 85.7 ± 0.3 83.4 ± 1.0	275.3 298 298 298 299 298 298		[1996DOM/HEA, 1983RAB/KHL] [2010MAS/KRA] [2009VER/EME2] [1990DAU/HUT, 2009VER/EME2] [1987STE/MAL, 1963WOO/ADI] [1986NIL/WAD] [1980FUC/PEA]
C ₉ H ₁₄ O ₇	[1587-20-8] V	trimethyl citrate (379–560)	617.4	394	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₄ S	[281-25-4] TRS FUS	2-thiaadamantane	1.95 8.1	211 597		[1978AND/CAR]
C ₉ H ₁₄ S	[4861-58-9] V	2-pentylthiophene	52.0 ± 1.2	298	C	[2007RIB/SAN]
C ₉ H ₁₅ Cl ₃ O ₂	V	3-chloro-2,2-bis(chloromethyl)propyl butyrate (426–482)	73.6	441	A	[1987STE/MAL, 1999DYK/SVO]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₅ Cl ₆ O ₄ P	[13674-87-8] V	tris(1,3-dichloroisopropyl)phosphate (383–413)	91.3	398	GC-RT	[2014BRO/JAN]
C ₉ H ₁₅ NOS	[59300-33-3] V	carbamothioic acid, (1-methylethyl)-2-propynyl- <i>S</i> -ethyl ester (298–313)	72.8	305	A	[1987STE/MAL, 1999DYK/SVO, 1976DEP]
C ₉ H ₁₅ NOS	[59300-32-2] V	carbamothioic acid, propyl-2-propynyl- <i>S</i> -ethyl ester (298–313)	64.6	305	A	[1987STE/MAL, 1976DEP]
C ₉ H ₁₅ NO ₃ S	[62571-86-2] FUS FUS	1-[(2 <i>S</i>)-3-mercapto-2-methyl-1-oxopropyl]-(<i>L</i>)-proline	26.68 20.38	378.7 379.5	DSC DSC	[2015MAR/PIN] [2008STU/ROR]
C ₉ H ₁₅ NO ₅	[1068-90-2] FUS	diethyl acetamidomalonate 34.3		368.7	DSC	[2013LI/TAN]
C ₉ H ₁₅ N ₃ O ₃	[82859-98-1] TRS FUS	<i>N</i> -acetylglycyl-(<i>L</i>)-prolinamide	5.6 27.0	450.6 457.8	DSC	[1996PUL/BAR]
C ₉ H ₁₅ N ₃ O ₃	[52186-41-1] FUS	<i>N</i> -acetyl-(<i>L</i>)-prolyl-glycinamide 32.2		434.1	DSC	[1992BAR/GIA]
C ₉ H ₁₅ N ₃ O ₈	[34001-52-0] FUS	neopentyl-4,4,4-trinitrobutyrate 22.59		333.5	DSC	[1971ROS/HOL]
C ₉ H ₁₆	[3452-09-3] V V V V	1-nonyne (320–464)	45.6 ± 0.2 42.7 ± 0.2 39.7 ± 0.3 36.4 ± 0.5	320 360 400 440	EB EB EB EB	[2002STE/CHI4] [2002STE/CHI4] [2002STE/CHI4] [2002STE/CHI4]
C ₉ H ₁₆	[39124-79-3] V	<i>trans</i> -bicyclo[6.1.0]nonane 42.7 ± 0.6			EB	[1978COR/PER]
C ₉ H ₁₆	[13757-43-2] V V	<i>cis</i> -bicyclo[6.1.0]nonane (297–360)	49.8 ± 0.8 50.4 ± 0.8	312	EB A	[1978COR/PER] [1987STE/MAL, 1970CHA/MCN]
C ₉ H ₁₆	[20454-81-3] V	1,4-dimethylbicyclo[2.2.1]heptane (328–393)	36.8	343	A	[1987STE/MAL, 1970VAR/BEL, 1984BOU/FRI]
C ₉ H ₁₆	[20558-16-1] V	<i>trans</i> -2,3-dimethylbicyclo[2.2.1]heptane (345–411)	39.3	360	A	[1987STE/MAL, 1970VAR/BEL, 1984BOU/FRI]
C ₉ H ₁₆	[2146-41-0] V	2-ethylbicyclo[2.2.1]heptane (349–396)	44.4	364	A	[1987STE/MAL]
C ₉ H ₁₆	[4551-51-3] TRS TRS FUS V V V V	<i>cis</i> -hexahydroindan	8.26 0.39 1.4 47.1 45.9 41.9 42.6	182.3 184.5 236.5 278 305 378 365	A A A A A A GS	[1972FIN/MCC] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1955CAM/ROS]
C ₉ H ₁₆	[3296-50-2] FUS V V V V V	<i>trans</i> -hexahydroindan	10.9 45.1 41.1 45.9 41.0 41.6	213.9 296 371 272 373 360	A A A A A GS	[1972FIN/MCC] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1987STE/MAL] [1955CAM/ROS]
C ₉ H ₁₆	[2114-42-3] V	allylcyclohexane 44.0 ± 0.2		298	GCC	[1979FUC/PEA]
C ₉ H ₁₆	[1003-64-1]	ethylidenecyclohexane				

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V		42.0 ± 0.2	298	GCC	[1979FUC/PEA]
C ₉ H ₁₆	[175-93-9]	spiro[4.4]nonane				
	V	(278–313)	44.5 ± 0.6	298	GS	[2002VER]
C ₉ H ₁₆	[280-65-9]	bicyclo[3.3.1]nonane				
	SUB	(290–340)	50.6 ± 2	298	TSGC	[1977PAR/STE]
C ₉ H ₁₆ ClN ₅	[139-40-2]	2-chloro-4,6-bis(isopropylamino)-1,3,5-triazine				
	SUB	(323–403)	125.1	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
C ₉ H ₁₆ ClN ₅	[5915-41-3]	6-chloro- <i>N</i> -(1,1-dimethylethyl)- <i>N</i> '-ethyl-1,3,5-triazine-2,4-diamine				
	FUS		33.57	448.6	DSC	[1990DON/DRE]
C ₉ H ₁₆ ClN ₅	[1912-26-1]	2-chloro-4-ethylamino-6-diethylamino- <i>s</i> -triazine (trietazine)				
	FUS		22.3		DSC	[1971GET/WAR]
C ₉ H ₁₆ Cl ₄	[1561-48-4]	1,1,1,9-tetrachlorononane				
	V	(303–434)	78.0	318		[1999DYK/SVO]
	V	(298–338)	89.0	313	A	[1987STE/MAL, 1960MAL/MAL]
C ₉ H ₁₆ NO ₂	[2896-70-0]	2,2,6,6-tetramethyl-4-oxopiperidine-1-oxyl				
	SUB		83.3 ± 1.7		ME	[1965KAL/ROZ, 1970COX/PIL, 1987STE/MAL]
C ₉ H ₁₆ N ₂	[2273-41-8]	2-methyl-2-piperidinopropionitrile				
	FUS		21.59	316.2		[1997WEL/VER]
	SUB		80.3 ± 0.5	298		[1997WEL/VER]
	V		57.6 ± 0.4		GS	[1997WEL/VER]
C ₉ H ₁₆ N ₂	[33529-01-0]	1-hexylimidazole				
	V	(309–363)	73.1 ± 0.1	298	GS	[2011EME/POR]
C ₉ H ₁₆ N ₂	[70780-89-1]	1-pentyl-2-methylimidazole				
	V	(303–354)	71.4 ± 0.3	298	GS	[2011EME/POR2]
C ₉ H ₁₆ N ₂	[6674-22-2]	1,8-diazabicyclo[5.4.0]undec-7-ene				
	V		60.0	411	DP-LPD	[2016OST/UUS]
	V		68.4 ± 1.5	298	DP-LPD	[2016OST/UUS]
	V	(328–368)	70.7 ± 0.2	298	GS	[2011LIP/RAT]
	V		67.8 ± 2.6	298	CGC	[2011LIP/RAT]
C ₉ H ₁₆ N ₂ S	[1071937-38-6]	1-thia-3-azaspiro[5.5]undec-2-2n-2-ylamine				
	FUS		26.5	385.1	DSC	[2013PER/BLO2]
	SUB		100.7 ± 0.8	298	GS	[2013PER/BLO2]
C ₉ H ₁₆ N ₄ OS	[34014-18-1]	<i>N</i> -[5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl]- <i>N,N'</i> -dimethylurea				
	FUS		29.48	435.3	DSC	[1991ACR, 1990DON/DRE]
C ₉ H ₁₆ O	[3350-30-9]	cyclononanone				
	TRS		14.7	247		
	FUS		1.6	298	DSC	[1998GON/SZW]
	V	(333–413)	51.4	348	A	[1987STE/MAL, 1972WOL]
	V	(333–413)	53.1 ± 0.6	298	VP	[1972WOL]
C ₉ H ₁₆ O	[6555-60-8]	1-(1-methyl-3-cyclohexen-3-yl)ethanol				
	V	(358–410)	54.6	373	A	[1987STE/MAL, 1955PIN/MAR]
C ₉ H ₁₆ O	[2890-62-2]	methyl (1-methylcyclohexyl) ketone				
	V	(374–414)	46.1	389	A	[1987STE/MAL, 1955PIN/MAR]
C ₉ H ₁₆ O	[18829-56-6]	<i>trans</i> -2-nonenal				
	V	(363–398)	56.1	378	A	[1987STE/MAL]
C ₉ H ₁₆ O	[873-94-9]	(<i>dl</i>)-3,5,5-trimethylcyclohexanone				
	V	(423–463)	39.3	438	A	[1987STE/MAL, 1975GAR/STY]
C ₉ H ₁₆ O	[1000-30-2]	2,5,5-trimethyl-4-hexene-1-al				
	V	(293–353)	57.0	308	A	[1987STE/MAL]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₆ OS	[22842-41-7] V	tetrahydro-2,2,6,6-tetramethyl-4 <i>H</i> -thiopyran-4-one (300–360)	34.7	315	A	[1987STE/MAL, 1972GEI/SAW, 1999DYK/SVO]
C ₉ H ₁₆ O ₂	[6222-35-1] V V V V V	cyclohexyl propanoate (253–293) (253–293) (274–313) (333–378)	55.9 ± 0.1 59.4 ± 0.8 56.4 ± 0.5 54.3 ± 0.4 56.8	298 298 298 298 298	C ME ME GS CGC	[2004PAU/ZAI, 2003ZAI/VER] [2003ZAI/VER] [2003ZAI/VER] [2003ZAI/VER] [1999VER/HEI]
C ₉ H ₁₆ O ₂	[16737-30-7] V	1-methylcyclohexyl acetate (333–378)	52.4	298	CGC	[1999VER/HEI]
C ₉ H ₁₆ O ₂	[66922-08-5] V	3-methylcyclohexyl acetate (333–378)	53.6	298	CGC	[1999VER/HEI]
C ₉ H ₁₆ O ₂	[22597-23-5] V	4-methylcyclohexyl acetate (333–378)	54.1	298	CGC	[1999VER/HEI]
C ₉ H ₁₆ O ₂	[39869-70-0] V	bicyclo[2.2.1]heptan-7-one dimethyl ketal (283–318)	50.2 ± 0.2		GS	[1998VER/PEN, 2002VER]
C ₉ H ₁₆ O ₂	[5726-19-2] V	acetic acid, 2-methylcyclohexyl ester, mixed isomers (337–457)	49.0	353	A	[1987STE/MAL]
C ₉ H ₁₆ O ₂	[61732-95-4] V	2-butyl-4,7-dihydro-1,3-dioxepine (318–453)	50.9	333	A	[1987STE/MAL]
C ₉ H ₁₆ O ₂	[2499-95-8] V	hexyl acrylate (342–461)	48.2	357	A	[1987STE/MAL]
C ₉ H ₁₆ O ₂	 V	methacrylic acid, neopentyl ester (313–338)	40.5	325	A	[1987STE/MAL]
C ₉ H ₁₆ O ₂	[6008-27-1] V V V	oxo-2-cyclodecanone (nonanolactone) (352–381) (352–381) (333–383)	54.5 ± 0.2 59.0 ± 1.3 60.9	366 298 348	MM MM A	[1991WIB/WAL] [1991WIB/WAL] [1987STE/MAL]
C ₉ H ₁₆ O ₂	[104-61-0] V V	γ -nonanolactone (296–363)	70.5 ± 4.1 70.3 ± 0.2	298 298	CGC GS	[2014KOZ/GOB] [2008EME/KOZ, 2009EME/VER]
C ₉ H ₁₆ O ₂	[3301-94-8] V V	δ -nonanolactone (293–348)	71.1 ± 4.1 70.7 ± 0.4	298 298	CGC GS	[2014KOZ/GOB] [2007EME/KOZ]
C ₉ H ₁₆ O ₂	[18362-64-6] V	2,6-dimethyl-3,5-heptanedione (339–456)	56.1	298		[1978RIB/IRV]
C ₉ H ₁₆ O ₂	[2849-98-1] V	pentyl methacrylate (279–323)	47.6	354	A	[1987STE/MAL]
C ₉ H ₁₆ O ₂	[54056-51-8] V	butyl 3-methylbut-2-enoate (280–323)	56.6 ± 0.3 54.7 ± 0.2	298 298	GS GS	[2008EME/TOK] [2008EME/TOK]
C ₉ H ₁₆ O ₂	[30434-54-9] V	isobutyl 3-methylbut-2-enoate (280–323)	54.7 ± 0.2	298	GS	[2008EME/TOK]
C ₉ H ₁₆ O ₂	[33467-74-2] V	<i>cis</i> -3-hexenyl propionate (333–378)	55.7 ± 1.0	298	CGC	[2015KOZ/GOB]
C ₉ H ₁₆ O ₂	[123-68-2] V	allyl hexanoate (333–378)	55.2 ± 1.2	298	CGC	[2015KOZ/GOB]
C ₉ H ₁₆ O ₃	[2052-15-5] V V	butyl levulinate (338–511)	55.5 56.0	373 452	A A	[1987STE/MAL] [1931SCH/COW]
C ₉ H ₁₆ O ₃	 V	<i>sec</i> -butyl levulinate (393–499)	51.0	408	A	[1987STE/MAL]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₆ O ₃	[3757-32-2]	isobutyl levulinate				
	V	(338–503)	61.5	353	A	[1987STE/MAL, 1947STU]
	V		54.7	444		[1931SCH/COW]
C ₉ H ₁₆ O ₃	[60028-15-1]	4-methyl-1-propyl-2,6,7-trioxabicyclo[2.2.2]octane				
	FUS		16.1	311.2		[1995RAK/VER2]
C ₉ H ₁₆ O ₄	[5422-69-5]	2-acetoxypionic acid, butyl ester				
	V	(325–485)	63.2	340	A	[1987STE/MAL, 1950REH/DIX]
C ₉ H ₁₆ O ₄	[40326-38-3]	3-acetoxypionic acid, butyl ester				
	V	(373–391)	75.4	382	A	[1987STE/MAL, 1948FEI/FIS]
C ₉ H ₁₆ O ₄	[818-38-2]	diethyl glutarate				
	V	(298–348)	67.3	323	GS	[2011LIP/KRA]
	V	(298–348)	69.8 ± 0.4	298	GS	[2011LIP/KRA]
	V	(338–510)	55.7	353	A	[1987STE/MAL]
	V	(338–510)	67.0	298		[1987STE/MAL, 2011LIP/KRA]
	V	(339–510)	55.5	353		[1947STU, 2011LIP/KRA]
	V	(339–510)	67.6	298		[1947STU, 2011LIP/KRA]
	V	(340–473)	54.9	298		[1940HEI/REI, 2011LIP/KRA]
	V	(340–473)	65.9 ± 0.1	298		[1940HEI/REI, 2011LIP/KRA]
C ₉ H ₁₆ O ₄	[133-13-1]	ethylmalonic acid, diethyl ester				
	V	(323–485)	55.3	338	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₆ O ₄	[123-99-9]	nonanedioic acid (azelaic acid)				
	FUS		35.3	375.6	DSC	[2009CHE/XIA]
	[Note: The authors of [2009CHE/XIA] explicitly state in the manuscript that no solid-solid phase transition was observed]					
	TRS		0.01	330.6		
	TRS		0.7	339.8		
	FUS		29.7	372.4	DSC	[2005ROU/TEM]
	FUS		32.67	380.0	DSC	[1991ACR, 1974CIN/BER]
	SUB	(348–373)	178 ± 5		TPD	[2007CAP/LOV]
	SUB	(294–311)	138		TPTD	[2005CHA/ZIE]
	SUB	(367–377)	156.2 ± 0.5	372	ME	[1999RIB/MON]
	SUB	(367–377)	159.9 ± 1.0	298	ME	[1999RIB/MON]
	V	(434–503)	119.7 ± 0.8	298	CGC	[2005ROU/TEM]
	V	(451–630)	89.3	466	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₆ O ₄	[1732-08-7]	dimethyl pimelate				
	V	(291–353)	73.5 ± 0.3	298	GS	[2006VER/KOZ]
C ₉ H ₁₆ O ₄	[1117-19-7]	dipropyl malonate				
	V	(293–339)	64.4	316	GS	[2011LIP/KRA]
	V	(293–339)	66.2 ± 0.4	298	GS	[2011LIP/KRA]
C ₉ H ₁₆ O ₄	[13195-64-7]	diisopropyl malonate				
	V	(289–325)	63.9 ± 0.3	298	GS	[2011POR/KRA]
C ₉ H ₁₆ O ₅		butyl[1-(methoxycarbonyl)ethyl] carbonate				
	V	(349–510)	61.7	364	A	[1987STE/MAL]
C ₉ H ₁₆ O ₅		isobutyl[1-(methoxycarbonyl)ethyl] carbonate				
	V	(340–501)	59.1	355	A	[1987STE/MAL]
C ₉ H ₁₆ O ₅		2-lactoylpropionic acid, propyl ester				
	V	(327–397)	73.5	342	A	[1987STE/MAL, 1952REH/DIX]
C ₉ H ₁₆ O ₅	[902261-22-7]	methyl[1-(butoxycarbonyl)ethyl] carbonate				
	V	(311–503)	60.2	326	A	[1987STE/MAL]
C ₉ H ₁₇ N	[767-92-0]	<i>trans</i> -(<i>R,S</i>)-decahydroquinoline				
	FUS		25.72	321.4		[1994STE/CHI]
	V	(325–525)	50.4	340	EB, IPM	[1994STE/CHI]
	V	(325–525)	47.6	380	EB, IPM	[1994STE/CHI]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(325–525)	45.0	420	EB, IPM	[1994STE/CHI]
	V	(325–525)	42.3	460	EB, IPM	[1994STE/CHI]
	V	(325–525)	39.5	500	EB, IPM	[1994STE/CHI]
C ₉ H ₁₇ N	[2243-27-8]	octyl cyanide				
	V	(285–323)	62.0 ± 0.3	298	GS	[2005EME/VER]
	V	(328–503)	56.8	343	A	[1987STE/MAL]
	V	(314–480)	58.0	298	EB	[1941RAL/SEL, 2005EME/VER]
C ₉ H ₁₇ NO	[2896-70-0]	2,2,6,6-tetramethyl-4-oxopiperidine				
	SUB		60.8 ± 2.7		ME	[1966LEB/ROS, 1970COX/PIL]
C ₉ H ₁₇ NO	[14952-05-7]	<i>trans</i> -2-nonenic acid amide				
	SUB	(383–393)	111.9	388	A	[1987STE/MAL]
C ₉ H ₁₇ NO ₂	[3637-11-4]	2,2,6,6-tetramethyl-1-hydroxy-4-oxopiperidine				
	SUB	(288–328)	80.0	303	A	[1987STE/MAL]
	SUB		80.1 ± 4.6		ME	[1965KAL/ROZ, 1970COX/PIL]
C ₉ H ₁₇ NO ₃	[56430-36-5]	(<i>dl</i>)- <i>N</i> -acetylvaline ethyl ester				
	V	(382–466)	67.7	397	A, EB	[1987STE/MAL, 1953MEL/VIO]
C ₉ H ₁₇ NO ₃ S	[33280-93-2]	(<i>dl</i>)- <i>N</i> -acetylmethionine ethyl ester				
	V	(432–519)	81.6	447	A, EB	[1987STE/MAL, 1999DYK/SVO, 1953MEL/VIO]
C ₉ H ₁₇ N ₅ O	[1610-17-9]	2-methoxy-4-ethylamino-6-isopropylamino-1,3,5-triazine (atratone)				
	FUS		22.9		DSC	[1971GET/WAR]
	SUB	(323–403)	94.4	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
C ₉ H ₁₇ N ₅ S	[834-12-8]	2-methylthio-4-ethylamino-6-isopropylamino-1,3,5-triazine (ametryn)				
	FUS		26.0	359.1	DSC	[2007VEC/BRU]
	FUS		21.9		DSC	[1971GET/WAR]
	SUB		125 ± 6	298	DSC	[2007VEC/BRU]
	SUB		118 ± 4	298	TGA	[2007VEC/BRU]
	SUB	(323–403)	100.9	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
	V		91 ± 4	466	DSC	[2007VEC/BRU]
	V		84.9 ± 1.3	453	TGA	[2007VEC/BRU]
C ₉ H ₁₈	[293-55-0]	cyclononane				
	FUS		1.93	283.9		[1952KAA/COO]
C ₉ H ₁₈	[2040-95-1]	butylcyclopentane				
	FUS	(11–367)	11.31	165.2	AC	[1996DOM/HEA, 1965MES/TOD]
	V	(413–432)	39.4	422	A	[1987STE/MAL]
	V		43.8 ± 0.1	328	C	[1981SVO/CHA]
	V		42.7 ± 0.1	343	C	[1981SVO/CHA]
	V		41.6 ± 0.1	358	C	[1981SVO/CHA]
	V		40.9 ± 0.1	368	C	[1981SVO/CHA]
	V		46.0	298		[1971WIL/ZWO]
C ₉ H ₁₈	[19489-10-2]	<i>cis</i> -1-ethyl-3-methylcyclohexane				
	V	(373–465)	39.0	388	A	[1987STE/MAL]
C ₉ H ₁₈	[696-29-7]	isopropylcyclohexane				
	V	(295–431)	44.1	310	A	[1987STE/MAL]
	V	(344–429)	41.1	359		[1949FOR/NOR]
C ₉ H ₁₈	[1678-92-8]	propylcyclohexane				
	FUS		10.6	178	Quasi-AC	[2006MAN/CUT]
	FUS	(12–373)	10.37	178.3	AC	[1991ACR, 1965FIN/MES]
	V		42.8 ± 0.5	298	GC	[1987AZA]
	V		44.7 ± 0.4	298	GCC	[1978FUC/PEA]
	V		45.2	298		[1971WIL/ZWO]
	V		45.1	298		[1965FIN/MES]
	V		45.2	298	C	[1947OSB/GIN]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₈	V	(346–431)	41.7	361	A, MM	[1987STE/MAL, 1947STU, 1949FOR/NOR]
	[3073-66-3]	1,1,3-trimethylcyclohexane				
	V	(348–411)	37.7	363	A	[1987STE/MAL]
	V	(327–410)	38.6	342		[1962PAS/THO, 1984BOU/FRI]
C ₉ H ₁₈	V	(328–411)	38.4	343		[1949FOR/NOR]
	[7094-27-1]	1,1,4-trimethylcyclohexane				
C ₉ H ₁₈	V		45.6 ± 0.2	298		[1995LUK/KOZ2]
	[1795-27-3]	<i>cis</i> -1,3,5-trimethylcyclohexane				
C ₉ H ₁₈	V	(318–410)	38.3	333	A	[1987STE/MAL]
	[3074-78-0]	2,6-dimethyl-1-heptene				
C ₉ H ₁₈	V	(273–306)	46.3 ± 0.5	290	GS	[2000VER/WAN]
	V	(273–306)	45.9 ± 0.5	298	GS	[2000VER/WAN]
C ₉ H ₁₈	[124-11-8]	1-nonene				
	FUS		19.97	191.6		[1990MES/TOD]
	V	(278–318)	44.7 ± 0.2	298	GS	[2000VER/WAN]
	V		45.5	298		[1971WIL/ZWO]
C ₉ H ₁₈	V	(339–423)	42.0	354	A, MM	[1987STE/MAL, 1950FOR/CAM]
	[6434-77-1]	<i>cis</i> -2-nonene				
C ₉ H ₁₈	V	(379–424)	40.7	394	A	[1987STE/MAL, 1983ELV/KUU]
	[6434-78-2]	<i>trans</i> -2-nonene				
C ₉ H ₁₈	V	(379–422)	40.8	394	A	[1987STE/MAL, 1983ELV/KUU]
	[20237-46-1]	<i>cis</i> -3-nonene				
C ₉ H ₁₈	V	(376–422)	40.3	391	A	[1987STE/MAL, 1983ELV/KUU]
	[20063-92-7]	<i>trans</i> -3-nonene				
C ₉ H ₁₈	V	(377–421)	40.6	392	A	[1987STE/MAL, 1983ELV/KUU]
	[10405-84-2]	<i>cis</i> -4-nonene				
C ₉ H ₁₈	V	(376–421)	40.1	391	A	[1987STE/MAL, 1983ELV/KUU]
	[10405-85-3]	<i>trans</i> -4-nonene				
C ₉ H ₁₈	V	(376–420)	40.4	391	A	[1987STE/MAL, 1983ELV/KUU]
	[62168-27-8]	1,1-dibromononane				
C ₉ H ₁₈ Br ₂	V	(427–591)	59.5	442	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN, 1999DYK/SVO]
	[821-88-5]	1,1-dichlorononane				
C ₉ H ₁₈ Cl ₂	V	(420–490)	62.3	298		[1987VAR/LOS2, 1991BAS/SVO]
	V	(398–556)	54.0	413	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN, 1999DYK/SVO]
C ₉ H ₁₈ Cl ₂	[56375-96-3]	1,2-dichlorononane				
	V	(430–510)	52.1	443		[1999DYK/SVO]
C ₉ H ₁₈ Cl ₃ O _{4P}	V	(430–510)	62.1	298		[1986VAR, 1991BAS/SVO]
	[13674-84-5]	tris(2-chloroisopropyl)phosphate				
C ₉ H ₁₈ F ₂	V	(333–363)	85.2	348	GC-RT	[2014BRO/JAN]
	[62127-42-8]	1,1-difluorononane				
C ₉ H ₁₈ F ₂	V	(347–482)	47.2	362	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN, 1999DYK/SVO]
	[145853-37-8]	2,2-difluorononane				
C ₉ H ₁₉ NO ₂	V	(279–313)	46.7 ± 0.2	298	GS	[1997SCH/VER]
	V	propyl 2-(<i>N,N</i> -dimethylamino)-2-methylpropanoate				
C ₉ H ₁₉ NO ₂	V	(282–318)	54.0 ± 0.5	298	GS	[1996VER/ZUF]
	V	ethyl 2-(<i>N,N</i> -diethylamino)-2-propanoate				
C ₉ H ₁₉ NO ₂	V	(283–313)	54.9 ± 0.6	298	GS	[1996VER/ZUF]
	[2226-96-2]	2,2,6,6-tetramethyl-4-hydroxypiperidine-1-oxyl				
C ₉ H ₁₉ NO ₂	SUB	(293–318)	101.5 ± 5.2	306	ME	[1966LEB/ROS, 1970COX/PIL]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₈ N ₂	[19340-91-1]	2-(diethylamino)pentanenitrile				
	V	(283–318)	57.4 ± 0.4		GS	[1997WEL/VER]
	V	(283–326)	58.8	298	A	[1987STE/MAL]
C ₉ H ₁₈ N ₂ OS	[95600-05-8]	<i>N,N</i> -diethyl- <i>N'</i> -isobutanoylthiourea				
	SUB	363	120.8 ± 2.5	298	C	[2001RIB/RIB]
C ₉ H ₁₈ N ₂ O ₂	[1842-72-4]	azelamide				
	FUS		55.0	450.4	DSC	[2006BAD/DEL]
C ₉ H ₁₈ N ₂ O ₂	[32483-15-1]	<i>N</i> -acetyl- <i>L</i> -leucine- <i>N'</i> -methylamide				
	FUS		23.19	438.2	DSC	[2014BAD/DEL]
C ₉ H ₁₈ N ₂ O ₂	[26090-94-8]	<i>N</i> -acetyl- <i>D,L</i> -leucine- <i>N'</i> -methylamide				
	FUS		27.16	432.1	DSC	[2014BAD/DEL]
C ₉ H ₁₈ N ₂ O ₂	[27777-86-2]	<i>N</i> -acetyl- <i>D,L</i> -norleucine- <i>N'</i> -methylamide				
	FUS		34.34	444.0	DSC	[2014BAD/DEL]
C ₉ H ₁₈ N ₂ O ₂	[32483-16-2]	<i>N</i> -acetyl- <i>L</i> -isoleucine- <i>N'</i> -methylamide				
	FUS		38.13	525.7	DSC	[2014BAD/DEL]
C ₉ H ₁₈ N ₂ O ₂	[120328-70-3]	<i>N</i> -acetyl- <i>D,L</i> -isoleucine- <i>N'</i> -methylamide				
	FUS		27.13	482.0	DSC	[2014BAD/DEL]
C ₉ H ₁₈ N ₂ O ₂ S	[39196-18-4]	3,3-dimethyl-1-(methylthio)-2-butanone <i>O</i> -((methylamino)carboxyl)oxime				
	FUS		19.83	330.2	DSC	[1991ACR, 1990DON/DRE]
	SUB	(298–328)	93.5 ± 6	308	ME	[1987STE/MAL, 1976DEP]
C ₉ H ₁₈ N ₂ O ₄	[57-53-4]	2-methyl-2-propyl-1,3-propanediol-1,3-dicarbamate				
	FUS (I)		35.64	377.8		
	FUS (II)		32.97	372.7		[1991LEF/GUI]
C ₉ H ₁₈ N ₆	[645-05-6]	1,3,5-tris(dimethylamino)- <i>s</i> -triazine				
	FUS		23.01	444.4	DSC	[1991ACR, 1989BRA/RYT]
C ₉ H ₁₈ N ₆	[16268-64-7]	1-(ethylamino)-3,5-bis(dimethylamino)- <i>s</i> -triazine				
	FUS		16.74	333	DSC	[1991ACR, 1989BRA/RYT]
C ₉ H ₁₈ O	[1462-97-1]	1-butylcyclopentanol				
	V	(359–466)	63.5	374	A	[1987STE/MAL]
C ₉ H ₁₈ O	[815-24-7]	2,2,4,4-tetramethyl-3-pentanone				
	V		45.5 ± 0.4	298	C	[1977PEA/FUC]
	V		45.4 ± 0.1	298	C	[1970SEL2]
	V		45.4 ± 0.1	298	C	[1966WAD]
C ₉ H ₁₈ O	[108-83-8]	2,6-dimethyl-4-heptanone				
	V		49.8 ± 0.1	308	C	[1992SVO/KUB]
	V		49.3 ± 0.1	313	C	[1992SVO/KUB]
	V		48.4 ± 0.1	323	C	[1992SVO/KUB]
	V		47.9 ± 0.1	328	C	[1992SVO/KUB]
	V		47.1 ± 0.1	338	C	[1992SVO/KUB]
	V		46.6 ± 0.1	343	C	[1992SVO/KUB]
	V		46.1 ± 0.1	348	C	[1992SVO/KUB]
	V		45.2 ± 0.1	358	C	[1992SVO/KUB]
	V	(322–471)	51.0	298		[1975AMB/ELL]
	V		50.9 ± 0.1	298	C	[1970SEL2]
	V	(336–451)	46.8	351	A, MM	[1987STE/MAL, 1947STR/GAB]
C ₉ H ₁₈ O	[6555-61-9]	1-(1-methylcyclohexyl)ethanol				
	V	(358–408)	55.5	373	A	[1987STE/MAL, 1955PIN/MAR]
C ₉ H ₁₈ O	[124-19-6]	nonanal				
	FUS		29.6	253.9		[1980DYA/VAS]
	V	(276–309)	55.3 ± 0.3	298	GS	[2003VER/KRA2]
	V	(323–343)	55.2	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
	V	(313–353)	58.9	298	CGC	[1995CHI/HOS]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	V	(306–458)	51.1	321	A	[1987STE/MAL]
	V		56.3 ± 0.2	298		[1981DYA/KOR]
C ₉ H ₁₈ O	[925-78-0]	2-nonanone				
	V	(283–466)	55.6	300		[1999DIA/GUE]
	V	(335–468)	52.6	350	A	[1987STE/MAL]
	V		56.6 ± 0.6	298	GCC	[1979SAL/PEA]
	V		56.4 ± 0.1	298	C	[1977SEL]
	V	(342–545)	56.4	298		[1975AMB/ELL]
	V	(335–437)	52.7	348		[1966MEY/WAG]
C ₉ H ₁₈ O	[502-56-7]	5-nonanone				
	TRS	(12–319)	0.373	110		
	FUS	(12–319)	24.94	269.3	AC	[1991ACR, 1970AND/COU]
	V	(284–337)	54.9 ± 0.1	298	Static	[2015ZAI/VER]
	V	(274–318)	54.7 ± 0.5	298	GS	[2015ZAI/VER]
	V	(443–486)	44.7	458	A	[1987STE/MAL]
	V		54.9 ± 0.4	298	GCC	[1979SAL/PEA]
	V	(357–468)	49.7	372	A	[1987STE/MAL, 1975AMB/ELL]
	V		55.0	298	EB	[1975AMB/ELL]
	V		53.3 ± 0.1	298	C	[1970HAR/HEA]
	V	(333–353)	55.6	343	Static	[1968REN/PRA]
	V	(333–353)	58.7 ± 0.8	298	Static	[1968REN/PRA, 2015ZAI/VER]
	V	(283–323)	40.2	298	A	[1987STE/MAL, 1937RIN/SAY]
C ₉ H ₁₈ O	[116-02-9]	3,3,5-trimethylcyclohexanol				
	V	(343–473)	61.8	358	A	[1987STE/MAL]
C ₉ H ₁₈ O	[53965-16-5]	2,2,5-trimethyl-4-hexene-1-ol				
	V	(323–373)	61.5	338	A	[1987STE/MAL, 1974VOI/SHC]
C ₉ H ₁₈ O ₂	[858858-08-9]	2-butoxy-3-pentanone				
	V	(333–398)	39.8	348	A, I	[1987STE/MAL, 1933HEN/MUR]
C ₉ H ₁₈ O ₂	[22432-66-2]	2-butyl-1,3-dioxepane				
	V	(325–358)	57.4	340	A	[1987STE/MAL, 1977VOI/SHC2]
C ₉ H ₁₈ O ₂	[3274-29-1]	2-ethylheptanoic acid				
	V	(386–475)	63.4	401	A, EB	[1987STE/MAL, 1960TRE/MIL]
C ₉ H ₁₈ O ₂	[4352-95-8]	2-methyl-2-pentyl-1,3-dioxolane				
	V	(278–318)	54.0 ± 0.3	298	GS	[1998VER/PEN, 2002VER]
C ₉ H ₁₈ O ₂	[4421-10-7]	2,2-diisopropyl-1,3-dioxolane				
	V	(278–318)	49.9 ± 0.3	293	GS	[1998VER/PEN, 2002VER]
C ₉ H ₁₈ O ₂	[1708-34-5]	2-hexyl-1,3-dioxolane				
	V	(325–353)	55.0	339	A	[1987STE/MAL, 1977VOI/SHC]
C ₉ H ₁₈ O ₂	[64198-22-7]	methyl 2,4,4-trimethylpentanoate				
	V	(278–318)	48.4 ± 0.2	298	GS	[1996VER/BEC]
C ₉ H ₁₈ O ₂	[112-32-3]	octyl formate				
	V	(283–338)	57.1	310	GS	[2012SAM/NAZ]
	V	(283–338)	58.2 ± 0.2	298	GS	[2012SAM/NAZ]
C ₉ H ₁₈ O ₂	[5129-37-3]	butyl pivalate				
	V	(274–313)	49.5 ± 0.2	298	GS	[2008VER/EME]
	V	(274–313)	50.4 ± 0.3	298	GS	[1996VER/BEC]
C ₉ H ₁₈ O ₂	[2445-76-3]	hexyl propanoate				
	V	(287–333)	56.5	310	GS	[2012SAM/NAZ]
	V	(287–333)	57.1 ± 0.2	298	GS	[2012SAM/NAZ]
C ₉ H ₁₈ O ₂	[589-59-3]	isobutyl isovalerate				
	V	(289–442)	47.3	304	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₈ O ₂	[106-27-4]	isopentyl butyrate				
	V	(294–452)	47.4	309	A	[1987STE/MAL, 1947STU]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₈ O ₂	[2050-01-3]	isopentyl isobutyrate				
	V		51.7 ± 1.6	298	CGC	[2015KOZ/GOB]
	V	(287–442)	47.4	302	A	[1987STE/MAL, 1947STU]
C ₉ H ₁₈ O ₂	[2311-46-8]	isopropyl caproate				
	V	(307–383)	51.6	322	A	[1987STE/MAL]
C ₉ H ₁₈ O ₂	[111-11-5]	methyl octanoate (methyl caprylate)				
	V		53.3	350		[2002VAN/VAN]
	V		52.6 ± 0.1	363		[2002VAN/VAN]
	V		56.9 ± 0.1	298		[2002VAN/VAN]
	V		54.7 ± 0.6	298	GC	[1987AZA]
	V		57.3 ± 0.4	298	GCC	[1980FUC/PEA]
	V		57.9 ± 0.4	298	C	[1977PEA/FUC]
	V		56.4 ± 0.5	298	C	[1977MAN/SEL]
	V	(347–470)	52.4	362	A, EST	[1987STE/MAL, 1963ROS/SCH]
	V	(373–419)	50.8	388		[1961ROS/SUP, 1984BOU/FRI]
	V	(307–350)	55.2	322	MG, OM	[1952SCO/MAC]
C ₉ H ₁₈ O ₂	[112-05-0]	nonanoic acid				
	TRS		8.15	263.0		
	FUS	(90–305)	19.82	285.5	AC	[1982SCH/VAN2]
	TRS		5.61	268		
	FUS		20.31	285.5		[1991ACR, 1924GAR/RAN]
	V	(381–528)	76.9	396	A	[1987STE/MAL]
	V	(292–313)	85.3 ± 2.0	304	ME, TE	[1982DEK/SCH]
	V	(293–303)	82.4 ± 0.4	298		[1968BAC/NOV]
	V	(387–483)	64.2		EB	[1960TRE/MIL]
C ₉ H ₁₈ O ₂	[626-77-7]	propyl caproate				
	V	(315–394)	52.8	330	A	[1987STE/MAL]
	V	(315–394)	52.1	330		[1961ROS/SUP, 1984BOU/FRI]
C ₉ H ₁₈ O ₂	[112-06-1]	heptyl acetate				
	V	(274–306)	57.1 ± 0.2	298	GS	[2006KRA/VER]
	V		56.9	298	GC	[1997KOU/HOS]
	V	(387–478)	49.2	402	DTA	[1980MEY/AWE]
C ₉ H ₁₈ O ₂	[2050-00-2]	<i>tert</i> -amyl butyrate				
	V	(274.5–309)	50.3 ± 0.2	298	GS	[2008VER/EME]
	V	(333–378)	48.9	298	CGC	[1999VER/HEI]
	V	(278–308)	50.8 ± 0.6	298	GS	[1996VER/BEC]
C ₉ H ₁₈ O ₂	[194784-93-5]	<i>tert</i> -amyl isobutyrate				
	V	(333–378)	47.8	298	CGC	[1999VER/HEI]
C ₉ H ₁₈ O ₂	[245658-26-8]	2-methyl-2-pentanol propanoate				
	V	(333–378)	49.8	298	CGC	[1999VER/HEI]
C ₉ H ₁₈ O ₂	[245658-31-5]	2,3-dimethyl-2-butanol 2-propanoate				
	V	(333–378)	49.9	298	CGC	[1999VER/HEI]
C ₉ H ₁₈ O ₂	[15706-73-7]	butyl 2-methylbutanoate				
	V	(274–319)	54.4 ± 0.3	298	GS	[2008VER/EME]
	V	(278–313)	50.6 ± 0.5	298	GS	[1996VER/BEC]
C ₉ H ₁₈ O ₂	[540-18-1]	pentyl butyrate				
	V		53.6 ± 0.6	298	CGC	[2015KOZ/GOB]
C ₉ H ₁₈ O ₃	[109857-47-8]	2-butoxypropionic acid, ethyl ester				
	V	(348–438)	80.3	363	A, I	[1987STE/MAL, 1933HEN/MUR]
C ₉ H ₁₈ O ₃	[14144-35-5]	3-ethoxypropionic acid, butyl ester				
	V	(346–479)	51.8	361	A	[1987STE/MAL, 1948DIX/REH]
C ₉ H ₁₈ O ₃	[93282-65-6]	3-hydroxypropionic acid, hexyl ester				
	V	(408–432)	69.6	420	A	[1987STE/MAL]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₁₈ O ₃	[20279-51-0] V	lactic acid, hexyl ester (307–494)	67.4	322	A	[1987STE/MAL]
C ₉ H ₁₈ O ₃	[10500-16-0] V	3-methoxypropionic acid, pentyl ester (322–485)	53.3	337	A	[1987STE/MAL]
C ₉ H ₁₈ O ₃	[14144-41-3] V	3-propoxypropionic acid, propyl ester (317–484)	50.9	332	A	[1987STE/MAL]
C ₉ H ₁₈ O ₃	[542-52-9] V	dibutyl carbonate (287–329)	62.9 ± 0.4	298	GS	[2008KOZ/EME]
C ₉ H ₁₈ O ₃	[34619-03-9] SUB	di- <i>tert</i> -butylcarbonate	65.4 ± 0.2	298	C	[1985KUS]
C ₉ H ₁₈ O ₉	[17088-37-8] FUS	hexamethyl-1,4,7-cyclononatriperoxane (triacetone triperoxide)	5.84	360	DSC	[2014MBA/KNO]
Note: Enthalpy of fusion reported in [2014MBA/KNO] differs significantly with other reported values						
	FUS		21.25	358.6		
	FUS		23.6	357.1	DSC	[2010RAM/FEL]
Note: The values in the text for the measured enthalpy of fusion and melting point temperature were different than the value in Table 1 of [2010RAM/FEL]						
	SUB		71 ± 4.8		HSA	[2015MBA/KNO]
	SUB		65 ± 6.1		HSA	[2015MBA/KNO]
	SUB	(298–327)	71.7	313	TGA	[2014MBA/KNO]
	SUB	(303–338)	72.1		TGA	[2011FEL/RAM]
	SUB	(314–332)	91.7	323	TGA	[2010OXL/SMI]
	SUB	(288–323)	73	304	HSA	[2009OXL/SMI]
	SUB	(288–333)	109.3	309	HSA	[2005OXL/SMI]
C ₉ H ₁₈ S ₄	[25423-58-9] TRS FUS	1,5,9-trithiacyclododecane	12 19.4	349.2 373.2	DSC	[2002ROC/GRI]
C ₉ H ₁₉ Br	[693-58-3] FUS V V	1-bromononane (376–525) (391–549)	30.12 53.1 52.2	243.2 391 406	A, EST	[1950CRO/SMY] [1999DYK/SVO] [1987STE/MAL, 1961LI/ROS, 1970DYK/VAN]
C ₉ H ₁₉ Cl	[2473-01-0] V V V	1-chlorononane (363–509) (340–480) (342–478)	51.5 55.9 53.4	378 298 357	A, DTA	[1999DYK/SVO] [1984BOU/FRI, 1991BAS/SVO] [1987STE/MAL, 1969KEM/KRE]
C ₉ H ₁₉ F	[463-18-3] V V	1-fluorononane (278–313) (333–473)	50.8 ± 0.9 46.8	298 348	GS A, EST	[1994STE/CHI] [1987STE/MAL, 1961LI/ROS, 1970DYK/VAN, 1999DYK/SVO]
C ₉ H ₁₉ I	[4282-42-2] V V V V	1-iodononane (391–551) (408–577) (343–493)	64.5 54.6 53.5 64.3	298 406 423 358	A	[2006BOL/NER, 1961LI/ROS] [1999DYK/SVO] [1987STE/MAL, 1970DYK/VAN] [1947STU]
C ₉ H ₁₉ N	[768-66-1] V	2,2,6,6-tetramethylpiperidine (288–313)	44.5 ± 0.5	300		[1997VER]
C ₉ H ₁₉ N	[4945-48-6] V V	<i>N</i> -butylpiperidine (275–313) (275–313)	49.2 ± 0.2 48.9 ± 0.2	294 298	GS GS	[1998VER6] [1998VER6]
C ₉ H ₁₉ N	[13173-21-2] V	<i>N,N</i> -diethyl-4-pentenylamine (338–430)	41.5	353	A	[1987STE/MAL]
C ₉ H ₁₉ NO	[103-00-4] V	1-(cyclohexylamino)-2-propanol (423–512)	56.6	438	A	[1987STE/MAL, 1984BOU/FRI, 1959MCD/SHR]
C ₉ H ₁₉ NO	[1120-07-6] SUB	nonanamide (353–370)	114.6 ± 3.3	361	ME, A	[1959DAV/JON2, 1987STE/MAL]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
	Transition	Temp. range (K)					
C ₉ H ₁₉ NO ₂	[35601-84-4]	heptylcarbamic acid, methyl ester		109.8	383	A	[1987STE/MAL]
	V	(368–408)					
C ₉ H ₁₉ NO ₂	[3637-10-3]	2,2,6,6-tetramethyl-1,4-dihydropiperidine		100.4 ± 0.6	328	ME	[1966LEB/ROS, 1970COX/PIL]
	SUB	(318–348)					
C ₉ H ₁₉ NS	[5842-07-9]	diisopropylaminoethanethiol		55.6 52.7 50.6 48.4	293 323 353 393	GS,DSC GS,DSC GS,DSC GS,DSC	[2013WIL/HUL] [2013WIL/HUL] [2013WIL/HUL] [2013WIL/HUL]
	V	(275–423)					
	V	(275–423)					
	V	(275–423)					
C ₉ H ₂₀	[111-84-2]	nonane		8.39 13.24 6.2 15.0 6.28 15.48 74.6 46.5 ± 0.2 46.7 46 46.6 ± 0.2 46.6 43.9 44.3 43.2 42.1 46.4 48.3 46.4 42.7	217.2 219.2 218.2 219.5 217.2 219.7 219 298 299 314 298 298 337 328 343 358 298 234 298 359	DSC DSC DSC DSC DSC DSC B C C C C C C C A C A, MM	[2005HUA/SIM] [2004MON/RAJ] [1991ACR, 1996DOM/HEA, 1954FIN/GRO2] [1963BON] [2007PAS/KUZ] [1996VIT/CHA] [1996VIT/CHA] [1996VAR/PAS] [1994RUZ/MAJ] [1986PAU/KRU] [1984MAJ/SVO3] [1984MAJ/SVO3] [1984MAJ/SVO3] [1971WIL/ZWO] [1987STE/MAL, 1973CAR/KOB] [1947OSB/GIN] [1987STE/MAL, 1945WIL/TAY, 1949FOR/NOR]
	TRS						
	FUS						
	TRS						
	FUS						
	TRS						
	FUS						
	SUB						
	V						
	V						
	V						
	V						
	V	(322–413)					
	V						
	V						
	V	(219–308)					
V							
V	(344–426)						
C ₉ H ₂₀	[3221-61-2]	2-methyloctane		17.99	192.8	A	[1998HEL/OWE] [1987STE/MAL] [1971WIL/ZWO, 1961LAB/GRE]
	FUS						
	V	(305–417)					
C ₉ H ₂₀	[2216-33-3]	3-methyloctane		16.99	165.6		[1998HEL/OWE] [1971WIL/ZWO, 1961LAB/GRE]
	FUS						
C ₉ H ₂₀	[2216-34-4]	4-methyloctane		44.5	298		[1971WIL/ZWO, 1961LAB/GRE]
	V						
C ₉ H ₂₀	[15869-80-4]	3-ethylheptane		44.5	298		[1971WIL/ZWO, 1961LAB/GRE]
	V						
C ₉ H ₂₀	[2216-32-2]	4-ethylheptane		44.1	298		[1961LAB/GRE]
	V						
C ₉ H ₂₀	[1071-26-7]	2,2-dimethylheptane		42.3	298		[1971WIL/ZWO, 1961LAB/GRE]
	V						
C ₉ H ₂₀	[3074-71-3]	2,3-dimethylheptane		43.6	298		[1971WIL/ZWO, 1961LAB/GRE]
	V						
C ₉ H ₂₀	[2213-23-2]	2,4-dimethylheptane		42.9	298		[1971WIL/ZWO, 1961LAB/GRE]
	V						
C ₉ H ₂₀	[2216-30-0]	2,5-dimethylheptane		43.3	298		[1971WIL/ZWO, 1961LAB/GRE]
	V						
C ₉ H ₂₀	[1072-05-5]	2,6-dimethylheptane		43.3	298		[1971WIL/ZWO, 1961LAB/GRE]
	V						

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₂₀	[4032-86-4] V	3,3-dimethylheptane	42.6	298		[1971WIL/ZWO, 1961LAB/GRE]
C ₉ H ₂₀	[922-28-1] V	3,4-dimethylheptane	43.6	298		[1971WIL/ZWO, 1961LAB/GRE]
C ₉ H ₂₀	[926-82-9] V	3,5-dimethylheptane	43.3	298		[1971WIL/ZWO]
C ₉ H ₂₀	[1068-19-5] V	4,4-dimethylheptane	42.2	298		[1971WIL/ZWO, 1961LAB/GRE]
C ₉ H ₂₀	[1067-20-5] TRS TRS FUS FUS V V V	3,3-diethylpentane (11–365) (11–365) (11–365) (90–260)	0.48 0.81 10.09 10.03	208.3 210.4 240.1 240.1	AC	[1996DOM/HEA, 1976FIN/MES] [1954STA/WAR]
			42.6 ± 0.3	298	GCC	[1979FUC/PEA]
			43.6	298		[1971WIL/ZWO, 1961LAB/GRE]
		(335–426)	39.8	350	A	[1987STE/MAL, 1949FOR/NOR]
C ₉ H ₂₀	[16789-46-1] V	2-methyl-3-ethylhexane	43.2	298		[1961LAB/GRE]
C ₉ H ₂₀	[3074-75-7] V	2-methyl-4-ethylhexane	42.9	298		[1961LAB/GRE]
C ₉ H ₂₀	[3074-76-8] V	3-methyl-3-ethylhexane	42.9	298		[1961LAB/GRE]
C ₉ H ₂₀	[3074-77-9] V	3-methyl-4-ethylhexane	43.6	298		[1961LAB/GRE]
C ₉ H ₂₀	[16747-25-4] V V	2,2,3-trimethylhexane (238–303)	42.2 41.7	288 298	IPM	[1974OSB/DOU] [1971WIL/ZWO, 1961LAB/GRE]
C ₉ H ₂₀	[16747-26-5] V V V V	2,2,4-trimethylhexane (288–410) (238–393) (238–303)	39.5 41.0 40.5 40.7	303 278 288 298	A A IPM	[1987STE/MAL] [1987STE/MAL] [1974OSB/DOU] [1971WIL/ZWO]
C ₉ H ₂₀	[3522-94-9] V V V V V	2,2,5-trimethylhexane (288–399) (238–303)	40.1 41.1 40.2 38.5 40.2	303 288 298 334 298	A A, IPM C	[1987STE/MAL] [1987STE/MAL, 1974OSB/DOU] [1971WIL/ZWO] [1949FOR/NOR] [1947OSB/GIN]
C ₉ H ₂₀	[16747-28-7] V V V	2,3,3-trimethylhexane (238–303) (288–422)	44.2 39.4 42.1	253 303 298	A A	[1987STE/MAL] [1987STE/MAL] [1971WIL/ZWO, 1961LAB/GRE]
C ₉ H ₂₀	[921-47-1] V	2,3,4-trimethylhexane	42.7	298		[1971WIL/ZWO, 1961LAB/GRE]
C ₉ H ₂₀	[1069-53-0] V V	2,3,5-trimethylhexane	41.4 41.4	298 298	C	[1971WIL/ZWO] [1947OSB/GIN]
C ₉ H ₂₀	[16747-30-1] V V	2,4,4-trimethylhexane (323–406)	41.1 38.5	298 338	A	[1971WIL/ZWO, 1961LAB/GRE] [1987STE/MAL, 1949FOR/NOR]
C ₉ H ₂₀	[16747-31-2] V	3,3,4-trimethylhexane	42.2	298		[1971WIL/ZWO, 1961LAB/GRE]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References	
C ₉ H ₂₀	[16747-32-3]	2,2-dimethyl-3-ethylpentane					
	V		41.7	298		[1971WIL/ZWO, 1961LAB/GRE]	
C ₉ H ₂₀	[16747-33-4]	2,3-dimethyl-3-ethylpentane					
	V		42.7	298		[1971WIL/ZWO, 1961LAB/GRE]	
C ₉ H ₂₀	[1068-87-7]	2,4-dimethyl-3-ethylpentane					
	V		42.3	298		[1971WIL/ZWO, 1961LAB/GRE]	
C ₉ H ₂₀	[7154-79-2]	2,2,3,3-tetramethylpentane					
	TRS	(12–400)	7.33	174.5			
	FUS	(12–400)	2.33	263.4	AC	[1996DOM/HEA, 1976FIN/MES]	
	V		41.2	298		[1971WIL/ZWO, 1961LAB/GRE]	
C ₉ H ₂₀	[1186-53-4]	2,2,3,4-tetramethylpentane					
		V		40.8	298		[1971WIL/ZWO, 1961LAB/GRE]
	V	(325–413)	38.4	340	A	[1987STE/MAL, 1949FOR/NOR]	
	[1070-87-7]	2,2,4,4-tetramethylpentane					
FUS	(12–379)	9.75	206.7	AC	[1996DOM/HEA, 1976FIN/MES]		
C ₉ H ₂₀	[16747-38-9]	2,3,3,4-tetramethylpentane					
		V		38.5 ± 0.1	298	C	[1982FUC/PEA]
		V		38.5 ± 0.3	298	GCC	[1979FUC/PEA]
		V		38.2	298		[1971WIL/ZWO, 1961LAB/GRE]
		V	(313–397)	37.2	328	A	[1987STE/MAL, 1949FOR/NOR]
		V	(331–375)	36.5	346	EB	[1941SMI, 1984BOU/FRI]
C ₉ H ₂₀	[16747-38-9]	2,3,3,4-tetramethylpentane					
		V		41.8	298		[1971WIL/ZWO, 1961LAB/GRE]
		V	(331–416)	39.3	346	A	[1987STE/MAL, 1949FOR/NOR]
C ₉ H ₂₀ ClF ₃ N ₂ S	[63265-72-5]	chlorobis(<i>N</i> -ethylethanaminato)(trifluoromethyl) sulfur					
	V		39.8	479	I	[1977KIT/SHR2]	
C ₉ H ₂₀ ClF ₃ N ₂ OS	[63265-74-7]	chlorobis(<i>N</i> -ethylethanaminato)oxo(trifluoromethyl) sulfur					
	V		44.4	486	I	[1977KIT/SHR2]	
C ₉ H ₂₀ N ₂ O	[1792-17-2]	1,3-dibutylurea					
	TRS		11.1	311.5			
	FUS		14.87	346.9		[1996DOM/HEA, 1987DEL/FER]	
	SUB	(323–372)	91.9 ± 0.9	348	ME	[2003ZAI/KAB]	
	SUB	(323–372)	91.9 ± 0.9	350	ME	[2003ZAI/KAB]	
	SUB		90.0 ± 1.0	350	C	[2003ZAI/KAB]	
C ₉ H ₂₀ N ₂ O	[2158-10-3]	1-octyl urea					
		TRS		11.8	353.2		
		FUS		24.4	374.6	DSC	[2005HAS/TAJ]
		TRS		11.5	350.2		
		FUS		24.6	372.2	DSC	[1999WEL/DRU]
C ₉ H ₂₀ N ₂ O	[1187-03-7]	1,1,3,3-tetraethylurea					
	FUS		20.55	253		[1990KOZ/SIM2, 1996DOM/HEA, 1995KAB/KOZ2]	
C ₉ H ₂₀ N ₂ S	[109-46-6]	1,3-butylthiourea					
	FUS		28.34	338	DSC	[2000DEL/JOZ]	
	SUB		141.0 ± 2	298	B	[2000DEL/JOZ]	
	SUB		137 ± 3.0	298	C	[1994TER/PIA]	
C ₉ H ₂₀ N ₂ S	[109-46-6]	1,3-butylthiourea					
		V	(368–403)	105 ± 2.0	386	ME, TE	[1994TER/PIA]
		diethylammonium diethyldithiocarbamate					
		SUB		209.9 ± 3.0		C	[1988RIB/REI]
C ₉ H ₂₀ N ₂ S ₂	[1518-58-7]	diethylammonium diethyldithiocarbamate					
	SUB		111.8 ± 3.0			[1979CAV/HIL]	

Note: The authors of [1988RIB/REI] state compound decomposes on sublimation

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₂₀ N ₄ O ₄	[134273-36-2]	<i>N,N'</i> -dibutyl- <i>N,N'</i> -dinitromethanediamine				
	FUS		31.0	345.2	DSC	[2003SPI/WAN]
C ₉ H ₂₀ O	[143-08-8]	1-nonanol				
	FUS		24.54	268.1	DSC	[2005DOM/MAR]
	V	(284–353)	74.7 ± 0.3	298	GS	[2005ROG/PIS]
	V		72.2	298	CGC	[2000OVA/KOU]
	V	(373–423)	76.7	298	CGC	[1995CHI/HOS]
	V	(273–323)	77.4	298		[1992NGU/KAS]
	V	(368–500)	65.0	383	A	[1987STE/MAL]
	V	(381–495)	62.9	396	A	[1987STE/MAL]
	V		76.9 ± 0.8	298	C	[1977MAN/SEL]
	V	(425–494)	59.7	440	EB	[1976HON/SIN]
C ₉ H ₂₀ O	[628-99-9]	2-nonanol				
	V	(286–324)	72.9 ± 0.6	298	GS	[2007VER/SCH]
	V	(253–353)	79.6	268		[1999NGU/BER]
C ₉ H ₂₀ O	[624-51-1]	3-nonanol				
	V	(263–363)	70.9 ± 0.3	298	GS	[2007VER/SCH]
	V	(263–363)	75.5	278		[1999NGU/BER]
C ₉ H ₂₀ O	[5932-79-6]	4-nonanol				
	V	(285–324)	71.5 ± 0.3	298	GS	[2007VER/SCH]
	V	(366–468)	57.1	381		[1973WIL/ZWO]
C ₉ H ₂₀ O	[623-93-8]	5-nonanol				
	V	(289–334)	71.4 ± 0.4	298	GS	[2007VER/SCH]
C ₉ H ₂₀ O	[628-44-4]	2-methyl-2-octanol				
	V	(338–451)	64.6	353		[1973WIL/ZWO]
C ₉ H ₂₀ O	[26533-34-6]	2-methyl-3-octanol				
	V	(388–453)	49.5	403		[1973WIL/ZWO]
C ₉ H ₂₀ O	[5340-36-3]	3-methyl-3-octanol				
	V	(353–388)	53.2	368		[1973WIL/ZWO]
C ₉ H ₂₀ O		2,2-dimethyl-4-heptanol				
	V	(320–445)	50.2	335		[1973WIL/ZWO]
C ₉ H ₂₀ O	[108-82-7]	2,6-dimethyl-4-heptanol				
	V	(278–321)	65.2 ± 0.3	298	GS	[2005ROG/PIS]
	V	(363–453)	54.5	378		[1973WIL/ZWO]
	V	(374–452)	52.8	389	A, MM	[1987STE/MAL, 1947STR/GAB]
C ₉ H ₂₀ O	[5340-41-0]	2,2,3-trimethyl-3-hexanol				
	V	(343–441)	55.1	358		[1973WIL/ZWO]
C ₉ H ₂₀ O	[3452-97-9]	3,5,5-trimethyl-1-hexanol				
	V	(288–324)	67.9 ± 0.4	298	GS	[2005ROG/PIS]
C ₉ H ₂₀ O	[3970-59-0]	2,4-dimethyl-3-ethyl-3-pentanol				
	V	(369–451)	50.0	384		[1973WIL/ZWO]
C ₉ H ₂₀ O	[29772-39-2]	2,2,3,4-tetramethyl-3-pentanol				
	V	(329–448)	60.8	344		[1973WIL/ZWO]
C ₉ H ₂₀ O	[14609-79-1]	di- <i>tert</i> -butylmethanol				
	SUB	(274–322)	62.7 ± 0.9	298	GS	[1998VER3]
C ₉ H ₂₀ O	[14609-79-1]	2,2,4,4-tetramethylpentan-3-ol				
	TRS		1.9	263		
	FUS		7.3	322		[1996DOM/HEA, 1990BAT/JAK]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₂₀ O	[3249-47-6] V	butyl 1,1-dimethylpropyl ether (278–308)	46.1 ± 0.3	298	GS	[1996VER/BEC]
C ₉ H ₂₀ O	[62108-41-2] V	2-methoxy-2,4,4-trimethylpentane (381–418)	38.5	396		[2001UUS/POK]
C ₉ H ₂₀ O	[62108-41-2] V V	methyl <i>tert</i> -octyl ether	45.3 45.33	298 298	EB	[UR/VER, 2002VER, 2003VER/KRA] [2001UUS/POK, 2003VER/KRA]
C ₉ H ₂₀ O	[10100-95-5] V V V	pentyl <i>tert</i> -butyl ether (319–365) (319–365)	48.3 43.7 46.9 ± 1.0	298 334 298	EB EB	[UR/VER, 2002VER, 2003VER/KRA] [1990ROZ/BAR] [1990ROZ/BAR]
C ₉ H ₂₀ O	[10100-95-5] V	isobutyl <i>tert</i> -amyl ether	46.3	298		[UR/VER, 2002VER, 2003VER/KRA]
C ₉ H ₂₀ O	V	<i>sec</i> -butyl <i>tert</i> -amyl ether	46.8	298		[UR/VER, 2002VER, 2003VER/KRA]
C ₉ H ₂₀ O	[3249-47-6] V	butyl <i>tert</i> -amyl ether	48.3	298		[UR/VER, 2002VER, 2003VER/KRA]
C ₉ H ₂₀ O S	[3079-27-4] FUS	methyl octyl sulfoxide	36.8		C	[1969COR/GOO]
C ₉ H ₂₀ O ₂	[22419-28-9] V	2,6,6-trimethyl-5-oxa-2-heptanol (329–454)	53.3	344		[1968KAC/NEM, 1984BOU/FRI]
C ₉ H ₂₀ O ₂	[2568-90-3] V V	dibutyoxymethane (366–452) (363–452)	47.9 48.1	381 298	EB EB	[2000PAL/SZA] [2000PAL/SZA]
C ₉ H ₂₀ O ₂	[18854-58-5] V	1-butyoxy-2-propoxyethane	54.7 ± 0.1	298	C	[1970KUS/WAD]
C ₉ H ₂₀ O ₂	[115-84-4] FUS V V V	2-butyl-2-ethyl-1,3-propanediol 20.8 (424–523) (424–523) (424–523)	74.3 ± 0.3 67.2 ± 0.3 61.4 ± 0.6	420 460 500	EB EB EB	[2002STE/CHI] [2002STE/CHI] [2002STE/CHI] [2002STE/CHI]
C ₉ H ₂₀ O ₂	[22419-28-9] V	4- <i>tert</i> -butoxy-2-methyl-2-butanol (367–483)	61.5	382	A	[1987STE/MAL]
C ₉ H ₂₀ O ₂	[3937-56-2] FUS FUS FUS SUB V V V V V	1,9-nonanediol 36.7 36.4 33.5 148.7 112.5 ± 0.2 104.4 111.4 ± 7.0 110.0 ± 1.0 112.8 ± 2.1	318.7 319.6 318.6	318.7 319.6 318.6	DSC DTA C CGC TE TE C C	[2014BAD/NOW] [1991ACR, 1990KNA/SAB] [1969COR/GOO] [1990KNA/SAB] [2006UMN/KWE] [1994PIA/FER, 2006UMN/KWE] [1994PIA/FER, 2006UMN/KWE] [1990KNA/SAB, 2006UMN/KWE] [1990KNA/SAB, 2006UMN/KWE]
C ₉ H ₂₀ O ₂	[3089-24-5] V	2,2,4-trimethyl-1,6-hexanediol (419–541)	68.0	434	A	[1987STE/MAL]
C ₉ H ₂₀ O ₂ S	[54581-77-0] FUS	3-(hexylthio)-1,2-propanediol 48.5		290.8	DSC	[1993ACR, 1990VAN/VAN]
C ₉ H ₂₀ O ₂ S ₂	FUS	<i>meso</i> -1,3-bis(propylsufinyl)propane 40.58		411.3	DSC	[2001CAL/MEL]
C ₉ H ₂₀ O ₂ S ₂	FUS	racemic 1,3-bis(propylsufinyl)propane 35.15		387.8	DSC	[2001CAL/MEL]

TABLE 12. Phase change enthalpies of C₉ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T_m (K)	Method	References
C ₉ H ₂₀ O ₃		dipropylene glycol isopropyl ether (319–479)	55.0	334	A	[1987STE/MAL, 1947STU]
C ₉ H ₂₀ O ₃	[10305-38-1] FUS	3-(hexyloxy)-1,2-propanediol	10.2	272.9	DSC	[1990VAN/VAN]
C ₉ H ₂₀ O ₄		tripropylene glycol (369–541)	63.3	384	A	[1987STE/MAL]
C ₉ H ₂₀ O ₄	[4161-32-4] FUS	3,3'-[1,3-propanediylbis(oxy)]bis-1-propanol	21.15	263.1	DSC	[1991BED/BOO]
C ₉ H ₂₀ O ₄	[78-09-1] V	tetraethoxymethane	52.9 ± 0.2	298	C	[1985MAR/MAN]
C ₉ H ₂₀ S	[1455-21-6] FUS	1-nonanethiol	33.5	267.7		[1985DEA]
	V	(390–494)	52.6	405	A	[1987STE/MAL, 1999DYK/SVO, 1932ELL/REI]
C ₉ H ₂₀ S	[13281-11-3] V	2-nonanethiol (379–482)	50.3	394		[1999DYK/SVO, 1932ELL/REI]
C ₉ H ₂₀ S ₂	[3489-28-9] V	1,9-nonanedithiol (418–557)	63.6	433	A	[1987STE/MAL, 1999DYK/SVO, 1943HAL/REI]
C ₉ H ₂₁ N	[2439-54-5] V	<i>N</i> -methyl octylamine (365–508)	49.2	380	A	[1987STE/MAL]
C ₉ H ₂₁ N	[112-20-9] V	nonylamine (377–478)	50.7	392	A	[1987STE/MAL]
C ₉ H ₂₁ N	[102-69-2] V V	tripropylamine (341–475)	45.6 46.2 ± 0.1	356 298	A C	[1987STE/MAL] [1969WAD]
C ₉ H ₂₁ NO ₃	[122-20-3] V	triisopropanolamine (428–573)	73.7	443	A	[1987STE/MAL]
C ₉ H ₂₁ O ₄ P	[513-08-6] V V V V V V	tripropylphosphate (263–293) (401–527) (401–527) (401–527) (401–527) (394–525)	77.8 62.7 60.4 58.4 57.2 56.7	283 413 453 493 525 409	GS DSC DSC DSC DSC A	[2014BRO/BUC] [2014BRO/BUC] [2014BRO/BUC] [2014BRO/BUC] [2014BRO/BUC] [1987STE/MAL, 1930EVA/DAV]
C ₉ H ₂₁ P	[2234-97-1] V	tripropylphosphine (324–368)	39.4 ± 0.2	346		[2001BAE]
C ₉ H ₂₂ ClN ₂ PS	[58023-20-4] V	<i>P</i> -(chloromethyl)- <i>N,N'</i> -bis(1-methylpropyl)phosphorothioic diamide (333–368)	66.8	348	A	[1987STE/MAL, 1999DYK/SVO, 1975KOR/VIA]
C ₉ H ₂₂ N ₂	[646-24-2] FUS TRS FUS V V	nonane-1,9-diamine	49.2 7.77 36.24 70.6 75.5 ± 0.3	310.4 301.7 308.1 341 298	AC DSC DSC GS GS	[2004MON/VAN, 2014FUL/RUZ] [2002DAL/DEL] [2011POZ/VER] [2011POZ/VER]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ Cl ₈	[2234-13-1]	octachloronaphthalene				
	V	(323–423)	96.1	373	GC	[1999LEI/WAN]
C ₁₀ Cl ₁₂	[2385-85-5]	mirex				
	V	(343–453)	90.3	398	GC	[1990HIN/BID2]
C ₁₀ D ₂₂	[16416-29-8]	decane-d ₂₂				
	V		51.8	298	CGC	[2008ZHA/UNH]
C ₁₀ F ₈	[313-72-4]	octafluoronaphthalene				
	TRS		2.12	283.6		
	FUS		17.55	358.8	DSC	[1999MIC/NEG]
	SUB	(293–323)	79.4 ± 2.5	308	A	[1987STE/MAL, 1974RAD/KAT]
C ₁₀ F ₁₆	[54939-04-7]	perfluorobicyclo[4.4.0]dec-1(6)-ene				
	TRS	(6–300)	0.75	200		
	TRS	(6–300)	1.12	234		
	FUS	(6–300)	10.47	263	AC	[1996DOM/HEA, 1981ZHO/KOS]
	V		45.3 ± 0.1	298	C	[1996VAR/DRU]
C ₁₀ F ₁₈	[60433-11-6]	perfluoro(<i>cis</i> -decahydronaphthalene)				
	TRS	(6–310)	4.24	232.5		
	FUS	(6–310)	10.3	266.7		[1996DOM/HEA, 1981ZHO/KOS2]
	V		50.4 ± 3.9	298	CGC	[2012HAS/DRA]
	V	(313–415)	43.9	328		[1999DYK/SVO]
	V		46.2 ± 0.1	298	C	[1996VAR/DRU]
	V		46.7 ± 0.6	298	EB	[1981VAR/BUL]
C ₁₀ F ₁₈	[60433-12-7]	perfluoro(<i>trans</i> -decahydronaphthalene)				
	FUS	(6–310)	17.96	294.6		[1996DOM/HEA, 1981ZHO/KOS2]
	V		51.3 ± 3.9	298	CGC	[2012HAS/DRA]
	V	(315–417)	43.3	330		[1999DYK/SVO]
	V		45.4 ± 0.1	298	C	[1996VAR/DRU]
	V		45.9 ± 0.6	298	EB	[1981VAR/BUL]
C ₁₀ F ₁₈	[306-94-5]	perfluorodecalin				
	V	(288–333)	41.5 ± 0.5	298		[2005DIA/GON]
C ₁₀ F ₂₀	[35328-43-9]	perfluoro-1-decene				
	V	(315–399)	42.3	330		[1999DYK/SVO]
C ₁₀ F ₂₀	[116667-53-9]	perfluoro(1-methyl-4-isopropyl)cyclohexane				
	V	(339–418)	42.7	354		[1999DYK/SVO]
C ₁₀ F ₂₀	[80274-98-2]	perfluoro(isobutyl)cyclohexane				
	V	(327–415)	43.4	342		[1999DYK/SVO]
	V		46.3 ± 0.6	298	EB	[1981VAR/BUL]
	V		46.7 ± 0.1	298	C	[1981VAR/BUL]
C ₁₀ F ₂₀ N ₂ S	[77984-27-1]	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-[[2,2,2-trifluoro-1-(trifluoromethyl)-1-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]amino]ethyl]imino]thiophene				
	V		29.3	389		[1981ABE/SHR]
C ₁₀ F ₂₂	[307-45-9]	perfluorodecane				
	V	(404–543)	34	420	A	[1987STE/MAL, 1967ERM/SKR, 1999DYK/SVO]
C ₁₀ F ₂₂ O	[464-36-8]	bis(undecafluoropentyl)ether				
	V	(337–411)	49.9 ± 1.5	298	EB	[1989VAR/PAS]
	V		49.5 ± 0.1	298	C	[1989VAR/PAS]
	V	(288–313)	51.5	300	A	[1987STE/MAL, 1999DYK/SVO]
	V		47.3 ± 0.8	298	EB	[1976KOL/SLA]
C ₁₀ F ₂₂ O ₈	[927699-29-4]	perfluoro-2,4,6,8,11,13,15,17-octaoxy-n-octadecane				
	V	(363–437)	61.9 ± 1.2	298	EB	[2006DRU/KRO]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ HCl ₅ F ₁₄ O ₂	[335-74-0] V	2,2,3,4,4,5,6,6,7,8,8,9,10,10-tetrafluoro-3,5,7,9,10-pentachlorodecanoic acid (373–578)	80.6	388	A	[1987STE/MAL, 1957BAR/SEF, 1999DYK/SVO]
C ₁₀ HCl ₇	[58863-14-2] TRS FUS V	1,2,3,4,5,6,7-heptachloronaphthalene (323–423)	8.54 8.75 90.6	454.5 456 373	DSC GC	[2006LAH/PAA] [1999LEI/WAN]
C ₁₀ H ₂ Cl ₆	[90948-28-0] FUS V	1,2,4,5,6,8-hexachloronaphthalene (323–423)	28.89 85.3	449.4 373	DSC GC	[2006LAH/PAA] [1999LEI/WAN]
C ₁₀ H ₂ Cl ₆	[103426-94-4] V	1,2,3,5,7,8-hexachloronaphthalene (323–423)	85.0	373	GC	[1999LEI/WAN]
C ₁₀ H ₂ Cl ₆	[103426-97-7] V	1,2,3,5,6,7-hexachloronaphthalene (323–423)	84.5	373	GC	[1999LEI/WAN]
C ₁₀ H ₂ Cl ₆	[103426-96-6] V	1,2,3,4,6,7-hexachloronaphthalene (323–423)	84.5	373	GC	[1999LEI/WAN]
C ₁₀ H ₂ O ₆	[89-32-7] TRS FUS FUS SUB SUB SUB V V	1,2,4,5-benzenetetracarboxylic dianhydride (pyromellitic acid dianhydride) (641–665) (562–621)	3.38 32.39 15.82 122.3 ± 2.4 100 100.4 79.6 83.4	505.9 558.9 557.2 298 559 576	DSC C C TGA V + F A	[1984WEI/LEF] [1996DOM/HEA, 1978MAR/CIO] [2007MAT/MIR2] [1999DUT/TAK] [1975BAG/AND] [1987STE/MAL] [1967MUL/MUK]
C ₁₀ H ₃ Cl ₅	[150224-24-1] TRS TRS FUS V	1,2,3,5,8-pentachloronaphthalene (323–423)	14.39 0.92 8.44 80.5	387.8 443.4 453.3 373	DSC GC	[2006LAH/PAA] [1999LEI/WAN]
C ₁₀ H ₃ Cl ₅	[53555-65-0] FUS V	1,2,3,5,7-pentachloronaphthalene (323–423)	27.14 78.2	444.9 373	DSC GC	[2006LAH/PAA] [1999LEI/WAN]
C ₁₀ H ₃ Cl ₅	[67922-26-3] V	1,2,3,4,6-pentachloronaphthalene (323–423)	78.9	373	GC	[1999LEI/WAN]
C ₁₀ H ₃ Cl ₅	[150224-16-1] FUS	1,2,3,6,7-pentachloronaphthalene	22.94	416.6	DSC	[2006LAH/PAA]
C ₁₀ H ₃ Cl ₅	[150205-21-3] FUS	1,2,3,7,8-pentachloronaphthalene	17.55	381.6	DSC	[2006LAH/PAA]
C ₁₀ H ₃ Cl ₅	[150224-20-7] TRS FUS	1,2,4,5,6-pentachloronaphthalene	15.64 8.41	404.2 412.7	DSC	[2006LAH/PAA]
C ₁₀ H ₃ Cl ₅	[150224-17-2] FUS	1,2,4,6,7-pentachloronaphthalene	22.58	404.3	DSC	[2006LAH/PAA]
C ₁₀ H ₃ Cl ₅	[150224-22-9] FUS	1,2,4,6,8-pentachloronaphthalene	19.75	429	DSC	[2006LAH/PAA]
C ₁₀ H ₃ F ₁₇	[21652-58-4] V V V V	(perfluorooctyl)ethylene (254–309) (254–309) (254–309) (254–309)	53.7 52.1 50.7 49.6	254 272 291 309	GS GS GS GS	[2013SCH/BUC] [2013SCH/BUC] [2013SCH/BUC] [2013SCH/BUC]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₄ Cl ₂ O ₂	[117-80-6] FUS	2,3-dichloro-1,4-naphthalenedione	28.53	469	DSC	[1991ACR, 1990DON/DRE]
C ₁₀ H ₄ Cl ₄	[67922-21-8] V	1,2,4,7-tetrachloronaphthalene (323–423)	72.1	373	GC	[1999LEI/WAN]
C ₁₀ H ₄ Cl ₄	[53555-63-8] FUS	1,2,3,5-tetrachloronaphthalene	27.14	453	DSC	[2006LAH/PAA]
	V	(323–423)	73.4	373	GC	[1999LEI/WAN]
C ₁₀ H ₄ Cl ₄	[20020-02-4] TRS	1,2,3,4-tetrachloronaphthalene	10.53	440.5		
	TRS		1.33	454.3		
	FUS		11.54	470.8	DSC	[2006LAH/PAA]
	V	(323–423)	73.2	373	GC	[1999LEI/WAN]
C ₁₀ H ₄ Cl ₄	[149864-82-4] FUS	1,2,7,8-tetrachloronaphthalene	14.62	401.3	DSC	[2006LAH/PAA]
C ₁₀ H ₄ Cl ₈ O	[27304-13-8] V	2,3,4,5,6,6a,7,7-octachloro-1a,1b,5,5a,6,6a-hexahydro-2,5-methano-2H-indeno-[1,2-b]oxirene (oxychlorane)	75	388	GC	[2007GOE/MCC]
C ₁₀ H ₅ Cl ₃	[50402-52-3] FUS	1,2,3-trichloronaphthalene	18.44	354.7	DSC	[2006LAH/PAA]
	V	(323–423)	68	373	GC	[1999LEI/WAN]
C ₁₀ H ₅ Cl ₇	[76-44-8] FUS	1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-endomethanoindene (heptachlor)	20.72	362.2	TGA, DSC	[2000ROD/VEC]
	TRS		23.4	358.2		
	FUS		2.09	371	DSC	[1995KSI/NAG]
	V	(343–453)	76.5	398	GC	[1990HIN/BID2]
C ₁₀ H ₅ Cl ₇ O	[1024-57-3] TRS	1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7a-tetrahydro-4,7-endo-methanoindan	18.9	385.2		
	FUS		2.85	434.9	DSC	[1995KSI/NAG]
	V	(373–423)	75	398	GC	[2007GOE/MCC]
C ₁₀ H ₅ Cl ₉	[5103-73-1] V	<i>cis</i> -nonachlor (343–453)	83.8	398	GC	[1990HIN/BID2]
C ₁₀ H ₅ Cl ₉	[39765-80-5] V	<i>trans</i> -nonachlor (343–453)	85.5	398	GC	[1990HIN/BID2]
C ₁₀ H ₅ F ₁₅ O ₂	[3108-24-5] V	ethyl perfluorooctanoate (254–309)	64.1	263	GS	[2013SCH/BUC]
	V	(254–309)	60.4	278	GS	[2013SCH/BUC]
	V	(254–309)	57.4	293	GS	[2013SCH/BUC]
	V	(254–309)	54.9	308	GS	[2013SCH/BUC]
C ₁₀ H ₆ BrNO ₂	[13380-67-1] SUB	1-(4-bromophenyl)-1H-pyrrole-2,5-dione (350–370)	105.9 ± 0.7		C	[1998KIS/KAS]
C ₁₀ H ₆ Br ₂	[83-53-4] FUS	1,4-dibromonaphthalene	21.0	353.1	DSC	[2015SOL/VAR]
	SUB	(297–322)	90.8 ± 1.7		ME	[2008GOL/SUU2]
C ₁₀ H ₆ Cl ₂	[2050-69-3] V	1,2-dichloronaphthalene (323–423)	60.7	373	GC	[1999LEI/WAN]
C ₁₀ H ₆ Cl ₂	[1825-31-6] V	1,4-dichloronaphthalene (323–423)	58.7	373	GC	[1999LEI/WAN]
C ₁₀ H ₆ Cl ₄ O ₄	[1861-32-1] FUS	dimethyl-2,3,5,6-tetrachloro-1,4-benzenedicarboxylate (chlorthal)	30.23	431.7	DSC	[1991ACR, 1990DON/DRE]
	SUB	(348–433)	104.9 ± 1.4	390	ME, GS	[1981DEP]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₆ Cl ₈	[5103-71-9]	<i>cis</i> -chlordane				
	V	(323–409)	83	338		[1999DYK/SVO]
	V	(343–453)	82	398	GC	[1990HIN/BID2]
C ₁₀ H ₆ Cl ₈	[5103-74-2]	<i>trans</i> -chlordane				
	V	(373–409)	81.7	388		[1999DYK/SVO]
	V	(343–453)	80.7	398	GC	[1990HIN/BID2]
C ₁₀ H ₆ Cl ₈	[5103-71-9]	1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-ethano-1 <i>H</i> -indene				
	FUS		23.15	379.9	DSC	[1990DON/DRE]
C ₁₀ H ₆ F ₃ NO ₂	[53518-15-3]	4-trifluoromethyl-7-aminocoumarin				
	FUS		31.7	494.8	DSC	[1991ZHA/HUA]
C ₁₀ H ₆ N ₂	[1436-43-7]	2-cyanoquinoline				
	SUB		89.3 ± 3.3	298	C	[1995RIB/MAT2]
	SUB	(312–326)	93.4 ± 0.7	319	ME	[1995RIB/MAT2]
	SUB	(312–326)	94.4 ± 0.7	298	ME	[1995RIB/MAT2]
C ₁₀ H ₆ N ₂	[34846-64-5]	3-cyanoquinoline				
	SUB		91.3 ± 1.8	298	C	[1995RIB/MAT2]
	SUB	(312–326)	93.4 ± 0.7	319	ME	[1995RIB/MAT2]
	SUB	(312–326)	93.2 ± 0.8	298	ME	[1995RIB/MAT2]
C ₁₀ H ₆ N ₂ O ₄	[7300-93-8]	1-(3-nitrophenyl)-1 <i>H</i> -pyrrole-2,5-dione				
	SUB	(350–370)	115.7 ± 0.9		C	[1998KIS/KAS]
C ₁₀ H ₆ N ₂ O ₄	[4338-06-1]	1-(4-nitrophenyl)-1 <i>H</i> -pyrrole-2,5-dione				
	SUB	(350–370)	117.3 ± 1.2		C	[1998KIS/KAS]
C ₁₀ H ₆ N ₂ O ₆	[605-71-0]	1,5-dinitronaphthalene				
	V	(506–642)	74.7	521	A	[1987STE/MAL]
C ₁₀ H ₆ N ₂ O ₆	[602-38-0]	1,8-dinitronaphthalene				
	TRS		6.3			
	FUS		22.2		DTA	[1961KOZ]
	V	(553–715)	78.5	568	A	[1987STE/MAL]
C ₁₀ H ₆ OS ₂	[49833-12-7]	naphthalene 1,8-disulfide <i>S</i> -oxide				
	TRS		3.2	363		
	FUS		23.3	421.2	DSC	[1975CUC]
C ₁₀ H ₆ O ₂	[130-15-4]	1,4-naphthoquinone				
	SUB		91.0 ± 0.8	298	C	[1989RIB/RIB]
	SUB		90.7 ± 2	313	TE, ME	[1981DEK/SMI]
	SUB		72.4 ± 3.8			[1956MAG, 1970COX/PIL]
(C ₁₀ H ₆ O ₂)- (C ₁₀ H ₈ O ₂)	[21414-85-7]	(1,4-naphthoquinone)-(1,4-naphthohydroquinone)				
	SUB		102.3 ± 2	342.4	ME, TE	[1981DEK/SMI]
2(C ₁₀ H ₆ O ₂)- (C ₁₀ H ₈ O ₂)	[66653-77-8]	2(1,4-naphthoquinone)-(1,4-naphthohydroquinone)				
	SUB		88.7 ± 3	328.5	ME, TE	[1981DEK/SMI]
C ₁₀ H ₆ O ₄	[39079-62-4]	chromone-3-carboxylic acid				
	FUS		33.70	475.4	DSC	[2014FLO/XIM]
	FUS		31.42	473.2	DSC	[2010MAT/SOU]
	SUB		113.8 ± 1.2	298	C	[2010MAT/SOU]
C ₁₀ H ₆ O ₄	[531-81-7]	coumarin-3-carboxylic acid				
	FUS		30.95	463.1	DSC	[2010MAT/SOU]
	SUB		118.2 ± 2.7	298	C	[2010MAT/SOU]
C ₁₀ H ₆ S ₂	[209-22-3]	naphthalene 1,8-disulfide				
	FUS		13.0	394.8	DSC	[1975CUC2]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₇ Br	[90-11-9]	1-bromonaphthalene				
	FUS		15.16	271.4		[1991ACR, 1981KHA/KHE]
	V	(303–336)	63.9 ± 0.4	298	GS	[2003VER]
	V	(357–555)	58.5	372	A	[1987STE/MAL]
	V	(295–359)	56 ± 6	329	ME	[1980URB/GIG]
	[Note: Verevkin [2003VER] noted that the VP reported in [1980URB/GIG] is internally inconsistent.]					
	V	(469–559)	45.8	484	A, EB	[1987STE/MAL, 1976HON/SIN, 1999DYK/SVO]
C ₁₀ H ₇ Br	[580-13-2]	2-bromonaphthalene				
	TRS		5.76	319		
	FUS		14.4	329		[1996DOM/HEA, 1981CHA/HAG]
	FUS		11.97	322		[1991ACR, 1981KHA/KHE]
	SUB(I)	(280–318)	81.6 ± 0.4	298	GS	[2003VER]
	SUB(II)	(319–328)	78.0 ± 0.6	298	GS	[2003VER]
	SUB		81.2 ± 1.0	298	C	[1993RIB/FER]
	SUB	(275–378)	64 ± 5	298	TE, ME	[1981FER/PIA]
	V	(330–360)	66.1 ± 0.4	298	GS	[2003VER]
	V	(330–378)	42.5	354		[1999DYK/SVO]
V	(322–359)	40.4	340	ME, TE	[1981FER/PIA]	
C ₁₀ H ₇ Cl	[90-13-1]	1-chloronaphthalene				
	FUS		12.9	270.7		[1991ACR, 1981KHA/KHE]
	V		64.7	298		[2006BOL/NER2]
	V	(289–332)	62.0 ± 0.4	298	GS	[2003VER]
	V		64.0 ± 0.3	298	GS	[2001PUR/CHI]
	V	(323–423)	58.6	373	GC	[1999LEI/WAN]
V	(353–553)	59.6	368	A	[1987STE/MAL, 1947STU]	
C ₁₀ H ₇ Cl	[91-58-7]	2-chloronaphthalene				
	FUS		13.9	330.7	DSC	[2000MAR/MIK]
	FUS		14.7	332		[1991ACR, 1981KHA/KHE]
	FUS	(5–370)	14.0	331.2	AC	[1991VAN/VER]
	FUS		13.9	332.1	DSC	[1971MAS/CHE]
	SUB	(280–330)	75.7 ± 0.3	298	GS	[2003VER]
	V	(332–362)	62.3 ± 1.1	298	GS	[2003VER]
	V	(400–435)	57.9	417		[1999DYK/SVO]
	V	(323–423)	58.5	373	GC	[1999LEI/WAN]
	V	(400–435)	57.8	415	A	[1987STE/MAL]
V	(400–435)	66.6	298	A	[1987STE/MAL, 2003VER]	
C ₁₀ H ₇ Cl ₅ O	[58138-08-2]	2-(3,5-dichlorophenyl)-2-(2,2,2-trichloroethyl)oxirane				
	FUS		18.54	313.2	DSC	[1990DON/DRE]
C ₁₀ H ₇ Cl ₇	[2589-15-3]	1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindan				
	SUB	(333–353)	83.8	343	A	[1987STE/MAL, 1974BES/CHE, 1999DYK/SVO]
C ₁₀ H ₇ F ₃ O ₂	[326-06-7]	benzoyltrifluoroacetone				
	SUB	(276–284)	88.0 ± 0.9	280	ME	[1992RIB/MON]
	SUB	(276–284)	87.1 ± 0.9	298	ME	[1992RIB/MON]
C ₁₀ H ₇ F ₅ O ₂	[24271-51-0]	pentafluoropropionic acid, 3-tolyl ester				
	V	(371–446)	48.5	386	A, EB	[1987STE/MAL, 1969SHE/LAN, 1999DYK/SVO]
C ₁₀ H ₇ F ₅ O ₂	[24271-52-1]	pentafluoropropionic acid, 4-tolyl ester				
	V	(371–448)	48.3	386	A, EB	[1987STE/MAL, 1969SHE/LAN, 1999DYK/SVO]
C ₁₀ H ₇ I	[90-14-2]	1-iodonaphthalene				
	FUS		15.91	280		[1991ACR, 1981KHA/KHE]
	V	(303–347)	69.9 ± 0.3	298	GS	[2003VER]
	V	(321–428)	78.9	336		[1999DYK/SVO]
	V	(368–422)	61.0	395	GS	[1980PEL/FER]
V	(368–422)	65.5 ± 0.5	298	GS	[1980PEL/FER]	

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	V	(322–370)	66.6 ± 0.5	298	TE	[1980PEL/FER]
	V	(348–356)	65.8 ± 0.1	298	ME	[1980PEL/FER]
C ₁₀ H ₇ I	[612-55-5]	2-iodonaphthalene				
	FUS		16.04	327.6		[1991ACR, 1981KHA/KHE]
	SUB		90.8			[1956SMI]
	V		69.8 ± 0.5	298	GC	[2003VER]
C ₁₀ H ₇ NO ₂	[86-57-7]	1-nitronaphthalene				
	FUS		17.3	328.9	DSC	[2010KES/AUC]
	FUS		19.28	329.5	DSC	[2008MOG/SEP]
	FUS		18.43	329.9		[1991ACR, 1983WEA]
	SUB	(305–321)	94.4 ± 0.4	313	ME	[2006RIB/AMA3]
	SUB	(305–321)	95.1 ± 0.4	298	ME	[2006RIB/AMA3]
	SUB	(309–326)	U68.5 ± 1.9	318	A	[1987STE/MAL, 1974RAD/KAT]
	SUB	(325–332)	106.9	328.5	A	[1987STE/MAL]
	SUB		107.1 ± 2.1			[1950NIT/SEK, 1970COX/PIL]
	V	(332–580)	66.4	347	A	[1987STE/MAL]
C ₁₀ H ₇ NO ₂	[581-89-5]	2-nitronaphthalene				
	FUS		14.5	348.2	DSC	[2010KES/AUC]
C ₁₀ H ₇ NO ₂	[131-91-9]	1-nitroso-2-naphthol				
	SUB		86.6 ± 4.2		ME	[1968HAM/FAG, 1977PED/RYL]
C ₁₀ H ₇ NO ₂	[132-53-6]	2-nitroso-1-naphthol				
	SUB		56.5 ± 4.2		ME	[1968HAM/FAG, 1977PED/RYL]
C ₁₀ H ₇ NO ₂	[605-60-7]	4-nitroso-1-naphthol				
	SUB		87.4 ± 4.2		ME	[1968HAM/FAG, 1977PED/RYL]
C ₁₀ H ₇ NO ₂	[941-69-5]	1-phenyl-1 <i>H</i> -pyrrole-2,5-dione				
	SUB	(350–370)	98.1 ± 1		C	[1998KIS/KAS]
C ₁₀ H ₇ N ₃ S	[148-79-8]	2-(4-thiazolyl)-1 <i>H</i> -benzimidazole (thiabenzazole)				
	FUS		35.2	573.2	DSC	[2010MUE/ESC, 2010BUS/MEU]
C ₁₀ H ₈	[275-51-4]	azulene				
	FUS		17.53	373.5	DSC	[1998CHI/HES]
	SUB		81.1 ± 1.1	298	C	[2014SOU/MAT]
	SUB	(283–326)	78.4 ± 1.3	303	HSA	[1998CHI/HES]
	SUB		72.7	298	CGC-DSC	[1998CHI/HES]
	SUB	(290–372)	82.8	305	A	[1987STE/MAL]
	SUB		82.9	298	A	[1987STE/MAL, 1993CHI/HOS]
	SUB	(253–293)	75.8	273		[1958HOY/PEP]
	SUB		75.3	298	A	[1987STE/MAL, 1993CHI/HOS]
	SUB		76.8 ± 0.2		C	[1972MOR]
	SUB	(293–323)	95.4 ± 0.4	298	ME	[1962BAU/GUN, 1970COX/PIL]
	SUB		67.6			[1947HEI/WIE]
	V		52.8	298	CGC	[1998CHI/HES]
	V	(369–515)	53.0	384	A	[1987STE/MAL]
	V	(442–534)	51.2	457	EB	[1977MEY/GEN]
	V	(373–423)	55.5	373		[1962BAU/GUN]
V		55.5			[1947HEI/WIE]	
C ₁₀ H ₈	[91-20-3]	naphthalene				
	FUS		U13.84	353.2	DSC	[2014HAS/JIR]
	FUS		19.5	354.8	DSC	[2013CAR/LUC]
	FUS		18.83	353.4	DSC	[2012CHA/LAY]
	FUS		19.12	353.7		[2012SHA/LAL]
	FUS		18.84	353.7	DSC	[2008MOG/SEP]
	FUS		19.1	353.5	DSC	[2008SHA/GUP]
	FUS		U16.44	353.8	DSC	[2007HAF/MAH]
	FUS		19.55	354.7	DSC	[2006KHI/DAH2]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference	
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)				
		FUS		19.55	354.7	DSC	[2006KHI/DAH]
		FUS		18.71	253.2	DSC	[2004STU/WIT]
		FUS		19.1		DSC	[2003SHA/KAN]
		FUS		19.03	353.4	AC	[2002VAN/VAN3]
		FUS	(5–440)	19.0	353.4	AC	[2002CHI/KNI]
		FUS		18.2	356.2	DSC	[1998RAI/RAI2]
		FUS		19.11		DSC	[1992SHA/SHA]
		FUS		19.1	353.4		[1980AND/CON]
		FUS		19.0	353.3	DSC	[1980RAD/RAD]
		FUS		18.96	353.4	DSC	[1980KRA/PIG]
		FUS		19.1	353.4	DSC	[1991ACR, 1973CAS/VEC]
		FUS		19.1	353.5		[1964RAS/BAS]
		FUS		19.4	351.2	DTA	[1958VAR]
		FUS		18.81	353.4	AC	[1957MAS]
		FUS		19.37	353.5	C	[1955TUN/STO]
		FUS		18.79	353.0		[1950UEB/ORT]
		FUS		18.79	353.4		[1944EIB]
		FUS		19.04	353.4		[1941SCH]
		FUS		19.20	353.0	RC	[1932SPA/THO]
		FUS		19.00	353.2		[1926AND/LYN]
		SUB		69.1 ± 0.3		UV/Vis	[2015HIK/WEE]
		SUB	(303–316)	68.9 ± 0.5	309	UV/Vis	[2013HIK/WEE]
		SUB	(303–348)	69.9		TGA	[2011FEL/RAM]
		SUB	(303–313)	71.8 ± 1.0	308	TGA	[2007SID/ATA]
		SUB		71.7 ± 1.3	298	DSC	[2001ROJ/ORO]
		SUB	(267–303)	88.0 ± 2.5		ME	[1998BOL/WIE]
		SUB		70.4	298	CGC-DSC	[1998CHI/HES]
		SUB	(313–353)	71.7	333	GS	[1995NAS/LEN]
		SUB	(243–273)	73.7 ± 1.0	258	GS	[1994WAN/SHU]
		SUB	(337–352)	78.2 ± 1		GC	[1988KHU]
		SUB		70.9 ± 0.4	323	DSC	[1988TOR/BAR]
		SUB		72.3 ± 0.4	298	DSC	[1988TOR/BAR]
		SUB	(299–331)	73.4	315	GS	[1986SAT/INO]
		SUB	(333–393)	69.9		GS	[1985MAT/KUW2]
		SUB		73.7 ± 0.6			[1985KIS/VEI]
		SUB	(293–331)	72.3 ± 0.8		QR	[1985GLU/ARK]
		SUB	(283–323)	75.8 ± 1.1	303	GS	[1983SON/ZOL]
		SUB		72.6 ± 0.4		DSC	[1983HOL]
		SUB		72.6 ± 0.1	298	TE, ME, DM	[1983VAN/JAC, 1981DEK/KUI]
		SUB	(302–352)	72.8	327	GS	[1982GRA/FOS]
		SUB	(271–285)	72.8 ± 0.3		ME	[1982COL/JIM]
		SUB		72.4 ± 0.7	298	C	[1982MUR/SAK]
		SUB	(274–353)	72.5 ± 0.1		DM	[1981DEK/KUI]
		SUB	(328–398)	76.0 ± 2.0		DSC	[1980MUR/CAV]
		SUB	(253–273)	72.6 ± 0.6	298	TE	[1980DEK]
		SUB	(280–305)	71.3	293	GS	[1979MAC/PRA]
		SUB	(253–273)	74.77 ± 0.4		TE	[1977DEK/VAN]
		SUB	(253–273)	73.9 ± 0.2		ME	[1977DEK/VAN]
		SUB	(303–329)	74.35 ± 1.7		TSGC	[1975MCE/SAN]
		SUB		72.3 ± 0.4		C	[1976FER/PIA]
		SUB	(263–343)	72.5 ± 0.3		DM	[1975AMB/LAW]
		SUB		67.8 ± 3.5	280	HSA	[1975CHI]
		SUB		72.5	298	GS	[1974SIN]
		SUB		72.7 ± 1.7			[1974RAD/KAT]
		SUB	(281–290)	64 ± .5		LE	[1973MCE/SAN]
		SUB		72.1 ± 0.25	298	C	[1972MOR]
		SUB		73.0 ± 0.3	298	C	[1972IRV]
		SUB	(283–323)	72.7		ME	[1971RAD]
		SUB		66.5			[1968KAR/RAB]
		SUB	(230–260)	72.7 ± 0.3		KG	[1963MIL, 1970COX/PIL]
		SUB	(276–283)	66.3		V	[1959AIH]
		SUB	(283–303)	65.8	293	ME	[1958SKL/MAR]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
		SUB	(253–283)	69.2	268	[1958HOY/PEP]
		SUB	(273–311)	72.1	292	[1957SHE/BRY]
		SUB	(279–294)	72.4		[1953BRA/CLE2, 1960JON, 1954SEA/HOP]
		SUB		64.0	298	ME [1951INO]
		SUB	(288–306)	65.7	297	ME [1940ZIL]
		SUB		66.5 ± 1.7	298	QF [1938WOL/WEG]
		SUB	(237–276)	76.6		[1926AND]
		SUB	(283–303)	82.0	293	ME [1925SWA/MAC]
		V		54.6	298	CGC [2008ZHA/UNH]
		V	(333–403)	60.3 ± 1.1	298	GC [2006HAF/PAR]
		V	(323–473)	56.1	398	GC [2002LEI/CHA]
		V	(491–747)	47.6 ± 1.8		DSC [1998BOL/WIE]
		V		53.4	298	CGC [1998CHI/HES]
		V	(460–647)	45.4	475	DSC [1996BAC/GRZ]
		V	(403–453)	56.6	298	CGC [1995CHI/HOS]
		V		48.7 ± 0.3	400	EB [1993CHI/KNI]
		V		46.4	440	EB [1993CHI/KNI]
		V		44.0	480	EB [1993CHI/KNI]
		V		41.5	520	EB [1993CHI/KNI]
		V	(513–613)	44.4	528	[1993LEE/HOL]
		V	(418–613)	47.9	423	EB [1990AMB/EWI]
		V	(352–500)	50.6	367	A [1987STE/MAL]
		V	(491–565)	44.8	506	A [1987STE/MAL]
		V	(563–663)	43.2	578	A [1987STE/MAL]
		V	(661–750)	43.3	676	A [1987STE/MAL]
		V		51.5		GS [1985MAT/KUW2]
		V	(441–727)	44.7	466	[1981WIL/JOH]
		V	(353–388)	50.3 ± 0.2	370	[1981DEK/KUI]
		V	(354–453)	50.7	369	[1968FOW/TRU]
		V	(399–491)	49.0	414	[1955CAM/ROS]
		V		51.5		[1952GOT/NIK]
		V		46.4	441	C [1951BAR/MCC]
		V		48.3	379	I [1943CRA]
		V	(373–473)	47.2	423	I [1923MOR/MUR]
		V	(360–494)	47.7	427	I [1922NEL/SEN]
C ₁₀ D ₈	[1146-65-2]	naphthalene-d ₈				
		SUB	(282–323)	70.6 ± 0.5	303	GS [1983SON/ZOL]
		V		54.7	298	CGC [2008ZHA/UNH]
C ₁₀ H ₈ BrNO ₂	[574-98-1]	<i>N</i> -(2-bromoethyl)phthalimide				
		SUB		108.7 ± 1.0	298	C [2007RIB/SAN3]
C ₁₀ H ₈ Br ₂ N ₂	[3138-86-1]	2,3-bis(bromomethyl)quinoxaline				
		FUS		32.43	423.6	DSC [2000MON/HIL2]
		SUB	(351–365)	111.7 ± 0.5	358	ME [2000MON/HIL2]
		SUB	(351–365)	114.0 ± 2.0	298	ME [2000MON/HIL2]
C ₁₀ H ₈ ClN	[5044-38-2]	1-(4-chlorophenyl)pyrrole				
		SUB	(295–311)	88.2 ± 0.7	303	ME [2010SAN/RIB4]
		SUB	(295–311)	88.5 ± 0.5	298	ME [2010SAN/RIB4]
C ₁₀ H ₈ ClNO ₂	[6270-06-0]	<i>N</i> -(2-chloroethyl)phthalimide				
		SUB		98.4 ± 1.9	298	C [2007RIB/SAN3]
C ₁₀ H ₈ ClN ₃ O	[1698-60-8]	5-amino-4-chloro-2-phenyl-3(2 <i>H</i>)-pyridazinone				
		FUS		26.75	479.2	DSC [1991ACR, 1990DON/DRE]
C ₁₀ H ₈ ClN ₃ O ₂	[5707-69-7]	4-(2-chlorophenylhydrazone)-3-methyl-5-isoxazolone				
		FUS		28.04	440.4	DSC [1990DON/DRE]
C ₁₀ H ₈ ClN ₅	[120356-37-8]	6-chloro-4-pyrimidinyl)hydrazone-(2-pyridinecarboxaldehyde)				
		FUS		50	525.6	DSC [2013PER/KAZ]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₈ Cl ₂ O ₆	[24648-18-8]	3,6-dichloro-2,5-dihydroxyterephthalate				
	TRS		1.7	380		
	FUS (white)		41.0	455	DSC	[1990RIC/YAN]
	FUS (white)		44.6	461	DSC	[1972BYR/CUR]
	TRS (yellow-white)		2.6	403	DSC	[1972BYR/CUR]
C ₁₀ H ₈ ClN	[81329-31-9]	1-(4-chlorophenyl)pyrrole				
	SUB	(271–287)	79.8 ± 1.0	279	ME	[2010SAN/RIB4]
		(271–287)	78.9 ± 1.0	298	ME	[2010SAN/RIB4]
C ₁₀ H ₈ I N	[92636-36-7]	1-(4-iodophenyl)pyrrole				
	SUB	(319–341)	91.5 ± 0.5	330	ME	[2010SAN/RIB4]
		(319–341)	100.7 ± 0.5	298	ME	[2010SAN/RIB4]
C ₁₀ H ₈ NO ₂	[87-51-4]	indole-3-acetic acid				
	SUB	(313–423)	64.0 ± 1.5	368	ME	[1988TOR/BAR]
C ₁₀ H ₈ N ₂	[366-18-7]	2,2'-bipyridine				
	FUS		20.4	345	DSC	[2009LIP/HAN]
	FUS		19.9	342	DSC	[1986AIR/SIL]
	SUB		81.8 ± 2.3	298	C	[1995RIB/MOR]
	SUB		75.0 ± 5.0	298	B	[1996CHA/EMM]
	SUB		81.9 ± 0.3			[1985SKI/PIL]
	V		67.0 ± 2.3	298	CGC	[2009LIP/CHI, 2009LIP/HAN]
C ₁₀ H ₈ N ₂	[581-47-5]	2,4'-bipyridine				
	FUS		17.4	332.8	DSC	[2009LIP/HAN]
	SUB		87.9 ± 1.7	298	C	[1995RIB/MOR]
	V		70.9 ± 1.6	298	CGC	[2009LIP/CHI, 2009LIP/HAN]
C ₁₀ H ₈ N ₂	[553-26-4]	4,4'-bipyridine				
	FUS		24.7	385.0	DSC	[2015SUR/SIM]
	FUS		16.1	377.5	DSC	[2009LIP/HAN]
	SUB		106.3 ± 2.8	298	C	[1995RIB/MOR]
	V		71.1 ± 2.6	298	CGC	[2009LIP/CHI, 2009LIP/HAN]
C ₁₀ H ₈ N ₂	[3438-48-0]	4-phenylpyrimidine				
	FUS		18.8	334.1	DSC	[2009LIP/HAN]
	V		68.8 ± 2.5	298	CGC	[2009LIP/HAN]
C ₁₀ H ₈ N ₂ O	[33421-43-1]	2,2'-bipyridine- <i>N</i> -oxide				
	SUB	(319–331)	103.7 ± 0.8	325	ME	[2011SAN/MON]
	SUB	(319–331)	105.1 ± 0.8	298	ME	[2011SAN/MON]
C ₁₀ H ₈ N ₂ O ₂	[7275-43-6]	2, 2'-bipyridine- <i>N,N'</i> -dioxide				
	SUB	(410–450)	125.0 ± 2.0	298	ME	[2011SAN/MON]
C ₁₀ H ₈ N ₂ O ₂	[3634-83-1]	1,3-bis(isocyanatomethyl)benzene				
	V	(403–473)	46.7	418	A	[1987STE/MAL]
C ₁₀ H ₈ N ₂ O ₂	[1014-98-8]	1,4-bis(isocyanatomethyl)benzene				
	V	(403–473)	56.9	418	A	[1987STE/MAL]
C ₁₀ H ₈ N ₂ O ₂	[64711-83-7]	benzene, ethyldiisocyanato (mixed isomers)				
	V	(363–473)	60.7	378	A	[1987STE/MAL, 1977ZHU/MEL]
C ₁₀ H ₈ N ₂ O ₂	[881-07-2]	8-nitroquinaldine				
	SUB	(346–360)	108.3 ± 0.8	353	ME	[1997RIB/MAT5]
	SUB	(346–360)	111.0 ± 0.8	298	ME	[1997RIB/MAT5]
C ₁₀ H ₈ N ₂ O ₂	[33265-60-0]	1-(2-nitrophenyl)pyrrole				
	SUB	(306–326)	100.4 ± 0.4	316	ME	[2010SAN/RIB2]
	SUB	(306–326)	101.3 ± 0.4	298	ME	[2010SAN/RIB2]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
C ₁₀ H ₈ N ₂ O ₂	[4533-42-0]	1-(4-nitrophenyl)pyrrole					
	SUB	(344–366)	109.6 ± 0.4	355	ME	[2010SAN/RIB2]	
	SUB	(344–366)	112.4 ± 0.4	298	ME	[2010SAN/RIB2]	
C ₁₀ H ₈ N ₂ O ₃	[6118-65-6]	3-acetamidophthalimide					
	SUB	(428–468)	108.5	443	A	[1987STE/MAL, 1956KLO]	
C ₁₀ H ₈ O	[90-15-3]	1-naphthol					
	FUS	(5–445)	24.26	368.5	AC	[2015CHI/STE]	
	FUS		21.77	368.3	DSC	[2015SIN/SIN]	
	FUS		20.76	367.2	DSC	[2014HAS/JIR]	
	FUS		21.62	368.2	DSC	[2012GUP/AGR]	
	FUS		23.54	368.2		[2012SHA/LAL]	
	FUS		23.3	368.7	DSC	[2002RAI/PAN]	
	FUS		24.4	369.7	DSC	[1998RAI/RAI]	
	FUS		23.93		DSC	[1992SHA/SHA]	
	FUS		23.47	368.7	DTA	[1992MAN]	
	FUS		22.2	367.2	DSC	[1990DON/DRE]	
	FUS		23.49	368		[1983WEA]	
	FUS		23.33	367.2	C	[1979KHE/LAL, 1991ACR]	
	FUS		23.22	369	DSC	[1967PAC]	
	FUS		23.47	368.2	C	[1926AND/LYN]	
	SUB	(296–313)	91.2 ± 0.4		ME	[1974COL/ROU2]	
	SUB	(279–328)	89.1 ± 1.7	304	ME	[1974ARS]	
	SUB	(298–312)	93.3	305	A	[1987STE/MAL, 1960AIH]	
	SUB	(314–324)	84.3	319	A	[1987STE/MAL, 1960AIH]	
	[Note: In reference [1960AIH] the author mentions that there may be a small phase transition at 39.4 °C as evidenced in the log P versus 1/T graph.]						
	SUB			91.5 ± 3.8	298	B	[1926AND/LYN, 1970COX/PIL, 1927MAY/BER]
V	(370–569)	67.3 ± 0.3	380	IPM	[2015CHI/STE]		
V	(370–569)	64.0 ± 0.2	420	IPM	[2015CHI/STE]		
V	(370–569)	60.9 ± 0.2	460	IPM	[2015CHI/STE]		
V	(370–569)	57.8 ± 0.3	500	IPM	[2015CHI/STE]		
V	(370–569)	56.3 ± 0.3	520	IPM	[2015CHI/STE]		
V	(399–556)	58.5	414	A	[1987STE/MAL]		
V	(423–563)	60.8	473		[1927MAY/BER]		
C ₁₀ H ₈ O	[135-19-3]	2-naphthol					
	FUS		21.9	394.2	DSC	[2014HAS/JIR]	
	FUS		17.51	392.2	DTA	[2013KAN]	
	FUS		21.08	394.2	DSC	[2010AGR/GUP, 2012GUP/AGR]	
	FUS		24.1	393.9	DSC	[2008MOG/SEP]	
	FUS	(363–413)	20.9	392.5	DSC	[2003ROJ/ORO]	
	FUS		21.2	395.2	DSC	[1998RAI/RAI2]	
	FUS		17.51	396.2	C	[1979KHE/LAL]	
	FUS		18.79	393.6	C	[1991ACR, 1926AND/LYN]	
	SUB		85.5 ± 1.2	298	DSC	[2003ROJ/ORO]	
	SUB	(305–323)	94.2 ± 0.5		ME	[1974COL/ROU2]	
	SUB	(277–324)	87.4 ± 2.5	300	ME	[1974ARS]	
	SUB	(283–323)	78.7 ± 0.8	298		[1968KAR/RAB, 1977PED/RYL, 1987STE/MAL]	
	SUB	(298–312)	97.8	305	A	[1987STE/MAL, 1960AIH]	
	SUB	(314–332)	87.8	323	A	[1987STE/MAL, 1960AIH]	
	[Note: In reference [1960AIH] the author mentions that there may be a small phase transition at 39.1 °C as evidenced in the log P versus 1/T graph.]						
	SUB			83.0 ± 3.8	298	B	[1926AND/LYN, 1927MAY/BER, 1970COX/PIL]
V	(393–433)	76.2	298	CGC	[1995CHI/HOS]		
V	(401–561)	59.7	416	A	[1987STE/MAL]		
V	(426–473)	64.2	449	EB	[1974MAN/LOG]		
V	(417–561)	59.7	432		[1955VON/GEB]		
V	(423–563)	61.8	473		[1927MAY/BER]		
C ₁₀ H ₈ O	[4759-11-9]	1,6-oxido[10]annulene					
	SUB		80.4 ± 8.4		B	[1969BRE/HAG, 1977PED/RYL]	

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
C ₁₀ H ₈ OS ₃	[532-11-6] FUS	5-(4-methoxyphenyl)-3 <i>H</i> -1,2-dithiole-3-thione	24.39	382.2	DSC	[1999DOL/LEC]	
C ₁₀ H ₈ O ₂	[571-60-8] SUB	1,4-naphthohydroquinone	119 ± 1	381	ME, TE	[1981DEK/SMI]	
C ₁₀ H ₈ O ₂	[574-00-5] SUB	1,2-dihydroxynaphthalene	109.3 ± 0.9	298	C	[1988RIB/RIB]	
C ₁₀ H ₈ O ₂	[132-86-5] SUB	1,3-dihydroxynaphthalene	116.0 ± 1.1	298	C	[1988RIB/RIB]	
C ₁₀ H ₈ O ₂	[92-44-4] SUB	2,3-dihydroxynaphthalene	109.6 ± 1.0	298	C	[1988RIB/RIB]	
		(341–359)	109.4 ± 0.5	350	ME	[1979COL/JIM2]	
C ₁₀ H ₈ O ₃	[90-33-5] FUS	4-methyl-7-hydroxycoumarin	31.41	462.0	DSC	[2011AMA/PIN]	
			29.14	460.7	DSC	[1996DOM/HEA, 1989ZHA/HUA]	
C ₁₀ H ₈ O ₃	[531-59-9] FUS	7-methoxycoumarin	23.16	391.0	DSC	[2010MOR/SOU]	
			107.3 ± 1.8	298	C	[2010MOR/SOU]	
C ₁₀ H ₈ O ₄	[32846-66-5] FUS	pentacyclo[4.2.0.0 ^{2,5} .0 ^{3,8} .0 ^{4,7}]octane-1,4-dicarboxylic acid (1,4-cubanedicarboxylic acid)	17.4	495.0	DSC	[2011ROU/MAR]	
		V	122.5 ± 8.0	298	CGC	[2011ROU/MAR]	
C ₁₀ H ₉ Br	[207844-51-7] FUS	bromobullvalene	14.2	317.2	DSC	[1998LUS/OLI]	
C ₁₀ H ₉ Cl	[27576-94-9] FUS	chlorobullvalene	13.5	287.2	DSC	[1998LUS/OLI]	
C ₁₀ H ₉ Cl ₂ NO	[2164-09-2] FUS	<i>N</i> -(3,4-dichlorophenyl)-2-methyl-2-propenamide	32.04	395.5	DSC	[1991ACR, 1990DON/DRE]	
C ₁₀ H ₉ Cl ₃ O ₃	[1928-39-8] V	(2,4,5-trichlorophenoxy)acetic acid, ethyl ester	76.4	459	A	[1987STE/MAL, 1999DYK/SVO]	
		(444–573)	68.7	508	GC	[1966JEN/SCH]	
C ₁₀ H ₉ Cl ₃ O ₃	[4841-20-7] FUS	methyl 2-(2,4,5-trichlorophenoxy)propionate	31.95	360.6	DSC	[1991ACR, 1990DON/DRE]	
C ₁₀ H ₉ Cl ₃ O ₃	[93-80-1] FUS	4-(2,4,5-trichlorophenoxy)butanoic acid	30.28	386.7	DSC	[1991ACR, 1990DON/DRE]	
C ₁₀ H ₉ Cl ₄ NO ₂ S	[2425-06-1] FUS	<i>N</i> -[(1,1,2,2-tetrachloroethyl)thio]-4-cyclohexene-1,2-dicarboximide	40.22	432.7	DSC	[1990DON/DRE]	
			43.1	432	DSC	[1969PLA/GLA]	
C ₁₀ H ₉ I	[207844-52-8] FUS	iodobullvalene	15.5	376.2	DSC	[1998LUS/OLI]	
C ₁₀ H ₉ IO ₂	[122200-58-2] FUS	methyl-4-iodocubane-carboxylate	22.3	395	DSC	[2010GRI/TSA]	
C ₁₀ H ₉ N	[91-63-4] FUS	2-methylquinoline (quinaldine)	12.52	270.5	AC, DSC	[2005CHI/STE]	
		V	(319–553)	62.6 ± 0.1	298	IPM, EB	[2005CHI/STE]
		V	(319–553)	61.0 ± 0.1	320	IPM, EB	[2005CHI/STE]
		V	(319–553)	58.2 ± 0.1	360	IPM, EB	[2005CHI/STE]
		V	(319–553)	55.6 ± 0.1	400	IPM, EB	[2005CHI/STE]
		V	(319–553)	53.0 ± 0.1	440	IPM, EB	[2005CHI/STE]
		V	(319–553)	50.4 ± 0.1	480	IPM, EB	[2005CHI/STE]
		V	(319–553)	47.7 ± 0.2	520	IPM, EB	[2005CHI/STE]
		V		66.1 ± 1.9	298	C	[1995RIB/MAT]
		V	(281–313)	61.2	297	GS	[1980VAN/PRA]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₉ N	V	(443–521)	54.7	548	A, EB	[1987STE/MAL, 1961MAL2, 1961MAL]
	[612-58-8]	3-methylquinoline				
	V	(443–528)	55.8	458	A	[1987STE/MAL, 1961MAL2]
C ₁₀ H ₉ N	V	(449–528)	55.1	466		[1964MAL/WEC]
	[491-35-0]	4-methylquinoline (lepidine)				
	V	(463–539)	67.6 ± 1.8	298	C	[1995RIB/MAT]
C ₁₀ H ₉ N	V	(463–539)	58.2	478	A, EB	[1987STE/MAL, 1961MAL2, 1961MAL]
	[91-62-3]	6-methylquinoline				
	V	(453–540)	67.7 ± 1.8	298	C	[1995RIB/MAT]
C ₁₀ H ₉ N	V	(453–540)	56.1	468	A	[1987STE/MAL]
	V	(459–540)	55.7	474		[1964MAL/WEC]
	[612-60-2]	7-methylquinoline				
C ₁₀ H ₉ N	V	(493–532)	56.7	508	A, EB	[1987STE/MAL, 1961MAL]
	[611-32-5]	8-methylquinoline				
C ₁₀ H ₉ N	FUS		10.73	246.9	AC, DSC	[2005CHI/STE]
	V	(324–553)	62.1 ± 0.1	298	IPM, EB	[2005CHI/STE]
	V	(324–553)	59.2 ± 0.1	340	IPM, EB	[2005CHI/STE]
	V	(324–553)	56.6 ± 0.1	380	IPM, EB	[2005CHI/STE]
	V	(324–553)	54.0 ± 0.1	420	IPM, EB	[2005CHI/STE]
	V	(324–553)	51.3 ± 0.1	460	IPM, EB	[2005CHI/STE]
	V	(324–553)	49.0 ± 0.2	500	IPM, EB	[2005CHI/STE]
	V	(324–553)	46.2 ± 0.3	540	IPM, EB	[2005CHI/STE]
	V	(324–553)	65.7 ± 1.9	298	C	[1995RIB/MAT]
	V	(493–523)	52.2	508	A, EB	[1987STE/MAL, 1961MAL]
C ₁₀ H ₉ N	[134-32-7]	1-naphthylamine				
	FUS		13.3	321.2	DSC	[2014HAS/JIR]
	FUS		16.18	323	DSC	[1993TIE, 2007VER/GEO]
	FUS		13.30		DSC	[1992SHA/SHA]
	FUS		14.49	323.2	C	[1979KHE/LAL, 1991ACR]
	FUS		14.0	322.2	DTA	[1958VAR]
	SUB	(290–320)	88.1 ± 0.4	298	GS	[2007VER/GEO]
	SUB		90.0 ± 4.2		TE	[1947BAL, 1970COX/PIL]
	V	(323–353)	73.3 ± 0.4	298	GS	[2007VER/GEO]
	V	(377–574)	63.6	392	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₉ N	[91-59-8]	2-naphthylamine				
	FUS		25.8		DTA	[1999RAI/SHE]
	FUS		23.61	386.2	C	[1979KHE/LAL]
	FUS		23.33	386.2		[1991ACR, 1970CHA/BOU]
	SUB	(283–323)	73.9	298	A	[1987STE/MAL]
	SUB		74.1 ± 1.7		ME	[1968KAR/RAB, 1977PED/RYL]
	SUB		88.3 ± 4.2			[1947STU, 1970COX/PIL]
	V	(388–579)	63.5	403	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₉ N	[635-90-5]	1-phenylpyrrole				
	SUB	(271–287)	81.8 ± 0.6	279	ME	[2010SAN/RIB]
C ₁₀ H ₉ NO	SUB	(271–287)	80.8 ± 0.6	298	ME	[2010SAN/RIB]
	[5263-87-6]	6-methoxyquinoline				
C ₁₀ H ₉ NO	V		78.1 ± 2.3	298	C	[2003RIB/SAN]
	[5343-98-6]	β-cyanopropiophenone				
C ₁₀ H ₉ NO	SUB	(318–333)	101.7 ± 4.2		ME	[1969LEB/DNE, 1977PED/RYL]
	SUB	(318–333)	108.5	325.5	A	[1987STE/MAL]
C ₁₀ H ₉ NO	[18615-86-6]	2-methyl-4-hydroxyquinoline				
	SUB	(424–442)	132.2 ± 1.0	433	ME	[1990RIB/MAT]
	SUB	(424–442)	139.0 ± 1.0	298	ME	[1990RIB/MAT]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₉ NO	[826-81-3]	2-methyl-8-hydroxyquinoline				
	SUB	(296–307)	90.4 ± 0.7	298	ME	[1989RIB/MON]
	SUB	(308–333)	87.2 ± 1.9	298	C	[1989RIB/MON]
C ₁₀ H ₉ NO	[607-66-9]	4-methyl-2-hydroxyquinoline				
	SUB	(391–405)	87.9		ME	[1987STE/MAL, 1963HOR/WEN]
	SUB	(391–405)	123.1 ± 1.6	398	ME	[1990RIB/MAT]
C ₁₀ H ₉ NO ₂	[87-51-4]	indole-3-acetic acid				
	SUB	(313–423)	64.0 ± 1.4 U	368	ME	[1988GAL/GON]
C ₁₀ H ₉ NO ₂	[26093-31-2]	4-methyl-7-aminocoumarin				
	FUS		32.09	499.9	DSC	[1996DOM/HEA, 1989ZHA/HUA]
C ₁₀ H ₉ NO ₂	[5022-29-7]	<i>N</i> -ethylphthalimide				
	SUB		90.9 ± 1.2	298	C	[2006RIB/SAN]
C ₁₀ H ₉ NO ₂	[6563-13-9]	6-methoxyquinoline <i>N</i> -oxide				
	SUB		117.9 ± 1.0	298	C	[2003RIB/SAN]
C ₁₀ H ₉ NO ₂	[942-24-5]	methyl 1 <i>H</i> -indole-3-carboxylate				
	SUB	(353–375)	114.6 ± 0.9	364	ME	[2016CAR/AMA]
	SUB	(353–375)	116.8 ± 0.9	298	ME	[2016CAR/AMA]
C ₁₀ H ₉ N ₃ O ₂	[929692-87-5]	2-carbamoyl-3-methylquinoxaline <i>N</i> -oxide				
	SUB		138.0 ± 0.6	298	C	[2012VIV/FRE]
C ₁₀ H ₉ N ₃ O ₃	[23433-66-1]	3-methylquinoxaline-2-carboxamide-1,4-dioxide				
	SUB		166.6 ± 3.7	298	ME	[2007GOM/SOU2]
C ₁₀ H ₁₀	[5603-34-9]	pentacyclo[4.4.0.0 ^{2,5} .0 ^{3,8} .0 ^{4,7}]dec-9-ene (basketene)				
	FUS		2.72	331.8	DSC	[2002VER/KUM]
	SUB	(274–313)	55.4 ± 0.5	294	GS	[2002VER/KUM]
	SUB	(274–313)	55.3 ± 0.5	298	GS	[2002VER/KUM]
C ₁₀ H ₁₀	[21604-76-2]	tricyclo[4.2.2.0 ^{2,5}]dec-3,7,9-triene				
	FUS		1.46	293.7	DSC	[2002VER/KUM]
	V	(296–326)	47.2 ± 0.4	311	GS	[2002VER/KUM]
	V	(296–326)	47.9 ± 0.4	298	GS	[2002VER/KUM]
C ₁₀ H ₁₀	[26934-61-2]	2,2a,2b,3,5a,5b-hexahydro-1,2,3-metheno-1 <i>H</i> -cycloprop[cd]indene (snoutene)				
	FUS		7.87	334	DSC	[2002VER/KUM]
	SUB	(274–313)	58.9 ± 0.4	294	GS	[2002VER/KUM]
C ₁₀ H ₁₀	[108-57-6]	1,3-divinylbenzene				
	V	(305–453)	48.3	320	A	[1987STE/MAL, 1947STU]
	V	(307–440)	42.4	322		[1947STU]
C ₁₀ H ₁₀	[447-53-0]	1,2-dihydronaphthalene				
	FUS	(5–444)	10.53	264.4	AC	[2008CHI/STE]
	V		54.8 ± 0.1	298	IPM, EB	[2008CHI/STE]
	V		53.4 ± 0.1	320	IPM, EB	[2008CHI/STE]
	V		50.8 ± 0.1	360	IPM, EB	[2008CHI/STE]
	V		48.4 ± 0.1	400	IPM, EB	[2008CHI/STE]
	V		45.9 ± 0.1	440	IPM, EB	[2008CHI/STE]
	V	(274–319)	51.9 ± 0.4	296	GS	[1999VER6]
C ₁₀ H ₁₀	[612-17-9]	1,4-dihydronaphthalene				
	FUS		9.35	298.1	DSC	[1999VER6]
	SUB		63.6 ± 1.6	298		[1999VER6]

[Note: The authors report two solid/solid phase transitions having negligible enthalpy of transition.]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	V	(300–333)	53.2 ± 0.4	296	GS	[1999VER6]
	V	(300–333)	54.2 ± 0.4	298	GS	[1999VER6]
C ₁₀ H ₁₀	[5187-81-5] V	diisopropenyldiacetylene	50.2			[1977LEB/RVA]
C ₁₀ H ₁₀	[1005-51-2] FUS	bullvalene (5–450)	15.25	366.5	AC, DSC	[1996DOM/HEA, 1980FAL]
	SUB		71.8	298	C	[1981MAN/SUN]
C ₁₀ H ₁₀	[6053-74-3] V	tricyclo[5.2.1.0 ^{4,10}]deca-2,5,8-triene (291–326)	47.3 ± 0.7	308	GS	[1998VER/BEC2]
C ₁₀ H ₁₀ Cl ₂ O ₃	[533-23-3] V	(2,4-dichlorophenoxy)acetic acid, ethyl ester (444–573)	72.6	459	A	[1987STE/MAL, 1999DYK/SVO]
	V	(444–573)	66.3	508	GC	[1966JEN/SCH]
C ₁₀ H ₁₀ Cl ₂ O ₃	[94-82-6] FUS	4-(2,4-dichlorophenoxy)butyric acid	35.0	395.5	DSC	[2005VEC/BRU]
	FUS		38.42	391.4	DSC	[1991ACR, 1990DON/DRE]
	SUB		124 ± 6	298	DSC	[2005VEC/BRU]
	SUB	(356–391)	146 ± 1	374	TE	[2005VEC/BRU]
	SUB	(356–391)	149 ± 2	298	TE	[2005VEC/BRU]
C ₁₀ H ₁₀ N ₂	[2243-62-1] SUB	1,5-diaminonaphthalene (367–389)	118.5 ± 0.9	378	ME	[2010RIB/FER]
	SUB	(367–389)	122.5 ± 0.9	298	ME	[2010RIB/FER]
	SUB	(345–371)	120.2 ± 0.7	298	GS	[2007VER/GEO]
C ₁₀ H ₁₀ N ₂	[479-27-6] FUS	1,8-diaminonaphthalene	16.15	339.8	DSC	[2007VER/GEO]
	SUB	(314–338)	97.6 ± 0.7	326	ME	[2010RIB/FER]
	SUB	(314–338)	99.0 ± 0.7	298	ME	[2010RIB/FER]
	SUB	(304–335)	94.1 ± 0.4	298	GS	[2007VER/GEO]
	V	(339–379)	79.6 ± 0.3	298	GS	[2007VER/GEO]
C ₁₀ H ₁₀ N ₂	[10199-67-4] V	1-benzylpyrazole	73.8 ± 2.0	298	C	[1999MO/YAN]
C ₁₀ H ₁₀ N ₂	[2379-55-7] FUS	2,3-dimethylquinoxaline	22.35	379.5	DSC	[2000MON/HIL2]
	SUB	(294–308)	87.7 ± 0.4	301	ME	[2000MON/HIL2]
	SUB		87.8 ± 0.4	298	ME	[2000MON/HIL2]
	SUB		85.8 ± 1.8	298	C	[1996RIB/MOR]
C ₁₀ H ₁₀ N ₂	[6628-04-2] SUB	4-aminoquinaldine (352–373)	112.1 ± 0.8	363	ME	[1998RIB/CAR]
	SUB	(352–373)	115.3 ± 0.8	298	ME	[1998RIB/CAR]
C ₁₀ H ₁₀ N ₂	[4238-71-5] FUS	1-benzylimidazole	21.5	343.9	DSC	[2010LIP/PLI]
	SUB	(262–282)	102.1 ± 0.4	298	ME	[1999MO/YAN]
	V		79.2 ± 2.7	298	CGC	[2010LIP/PLI]
C ₁₀ H ₁₀ N ₂	[6025-60-1] SUB	1-(2-aminophenyl)pyrrole (296–318)	98.3 ± 0.4	307	ME	[2011SAN/RIB2]
	SUB	(296–318)	98.8 ± 0.4	298	ME	[2011SAN/RIB2]
C ₁₀ H ₁₀ N ₂ O ₂	[6118-66-7] SUB	3-dimethylaminophthalimide (392–431)	90.9	407	RG	[1987STE/MAL, 1956KLO]
C ₁₀ H ₁₀ N ₂ O ₂	[5432-74-6] SUB	2,3-dimethylquinoxaline 1,4-dioxide	124.4 ± 2.7	298	C	[2004RIB/GOM2]
C ₁₀ H ₁₀ N ₂ O ₅	[143248-63-9]	2,3-dihydro-3-[2-(nitrooxy)ethyl]-4H-1,3-benzoxazin-4-one				

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₀ N ₄ O ₂ S	FUS		23.0	326.3	DSC	[1996FON/ROS]
	[68-35-9]	4-amino-N-(2-pyrimidinyl)benzene sulfonamide (sulfadiazine)				
	FUS		44.3	532.7	DSC	[2003MAR/AVI, 2002MAR/GOM, 2001MAR/GOM]
	FUS		44.3	520.4		[1985MAR/WU]
	FUS		43.3	530.2	DSC	[1983KHA]
C ₁₀ H ₁₀ O	[101-39-3]	2-methyl-3-phenyl-2-propenal				
	V	(401–556)	59.3 ± 0.2	400	EB	[2002STE/CHI4]
	V	(401–556)	56.3 ± 0.2	440	EB	[2002STE/CHI4]
	V	(401–556)	53.4 ± 0.2	480	EB	[2002STE/CHI4]
	V	(401–556)	50.5 ± 0.4	520	EB	[2002STE/CHI4]
	V	(401–556)	47.7 ± 0.6	560	EB	[2002STE/CHI4]
	V	(343–393)	71.5	358	A	[1987STE/MAL]
C ₁₀ H ₁₀ O	[122-57-6]	4-phenyl-3-buten-2-one				
	V	(354–534)	58.5	369	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₀ O	[529-34-0]	1-tetralone				
	V	(284–324)	65.0 ± 0.3	298	GS	[1998VER4]
	V	(388–535)	61.5	403	A	[1987STE/MAL, 1971YAK/BLY]
C ₁₀ H ₁₀ O	[530-93-8]	2-tetralone				
	V		73.0 ± 1.1	298	C	[2008MAT/SOU3]
C ₁₀ H ₁₀ O ₂	[1754-62-7]	<i>trans</i> -cinnamic acid, methyl ester				
	FUS		33.1	309		[2002STE/CHI4]
	V	(409–557)	59.9 ± 0.2	420	EB	[2002STE/CHI4]
	V	(409–557)	56.9 ± 0.2	460	EB	[2002STE/CHI4]
	V	(409–557)	53.8 ± 0.3	500	EB	[2002STE/CHI4]
	V	(409–557)	50.5 ± 0.5	540	EB	[2002STE/CHI4]
C ₁₀ H ₁₀ O ₂	[103-26-4]	cinnamic acid, methyl ester				
	V	(288–333)	62.4	303	A	[1987STE/MAL]
	V	(350–536)	58.3	365	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₀ O ₂	[6781-42-6]	1,3-diacetylbenzene				
	V	(323–418)	43.2	338	A	[1987STE/MAL]
	V	(323–433)	47.2			[1967KHO/BYK]
C ₁₀ H ₁₀ O ₂	[1009-61-6]	1,4-diacetylbenzene				
	V	(388–431)	82.2	403	A	[1987STE/MAL]
	V	(323–433)	75.6			[1967KHO/BYK]
C ₁₀ H ₁₀ O ₂	[120-58-1]	isosafole				
	V	(393–531)	59.4	408	A	[1987STE/MAL]
C ₁₀ H ₁₀ O ₂	[1199-77-5]	α -methylcinnamic acid				
	V	(398–561)	78.5	413	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₀ O ₂	[1963-36-6]	4-methoxycinnamaldehyde				
	FUS		19.0	332.7	DSC	[2008TEM/ROU]
C ₁₀ H ₁₀ O ₂	[94-59-7]	safrole				
	V	(336–506)	54.6	351	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₀ O ₂	[15844-05-0]	4-carboxypentacyclo[4.3.0.0.2 ⁻⁵ .0 ^{4,7}]nonane				
	V		82.0		C	[1984BEC/RUC]
C ₁₀ H ₁₀ O ₂	[93-91-4]	1-phenyl-1,3-butanedione				
	SUB	(292–302)	91.1 ± 0.6	297	ME	[1992RIB/MON]
	SUB	(292–302)	91.0 ± 0.6	298	ME	[1992RIB/MON]
	SUB	(278–300)	83.7	289	V	[1987STE/MAL, 1959AIH]
C ₁₀ H ₁₀ O ₂	[28315-93-7]	5-hydroxy- α -tetralone				
	FUS		33.67	480.1	DSC	[2009MAT/SOU3]
	SUB		118.5 ± 1.5	298	C	[2009MAT/SOU3]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₀ O ₂	[3470-50-6]	6-hydroxy- α -tetralone				
	TRS		13.02	387.5		
	FUS		18.98	425.9	DSC	[2009MAT/SOU3]
	SUB		117.5 \pm 1.4	298	C	[2009MAT/SOU3]
C ₁₀ H ₁₀ O ₂	[39513-75-2]	6-methyl-4-chromanone				
	FUS		14.88	307.8	DSC	[2014FLO/XIM]
C ₁₀ H ₁₀ O ₂ S	[16192-08-8]	<i>p</i> -tolyl propadienyl sulfone				
	SUB		113 \pm 2.5		B	[1969MAC/STE, 1970COX/PIL]
C ₁₀ H ₁₀ O ₂ S	[14027-53-3]	<i>p</i> -tolyl prop-1-ynyl sulfone				
	SUB		103.3 \pm 2.5		B	[1969MAC/STE, 1970COX/PIL]
C ₁₀ H ₁₀ O ₂ S	[16192-07-7]	<i>p</i> -tolyl prop-2-ynyl sulfone				
	SUB		107.5 \pm 2.5		B	[1969MAC/STE, 1970COX/PIL]
C ₁₀ H ₁₀ O ₃	[14737-91-8]	<i>cis</i> -2-methoxycinnamic acid (339–352)				
	SUB		121.7 \pm 0.6	298	ME	[1999MON/HIL]
C ₁₀ H ₁₀ O ₃	[3943-97-3]	methyl 4-hydroxycinnamate				
	FUS		30.22	410.7	DSC	[2010PAN/SAR]
C ₁₀ H ₁₀ O ₃	[1011-54-7]	<i>trans</i> -2-methoxycinnamic acid (368–382)				
	SUB		128.8 \pm 0.6	298	ME	[1999MON/HIL]
C ₁₀ H ₁₀ O ₃	[6099-03-2]	2-methoxycinnamic acid				
	FUS		32.54	458.7	DSC	[1994HUA/CHE]
C ₁₀ H ₁₀ O ₃	[17570-26-2]	<i>trans</i> -3-methoxycinnamic acid (353–367)				
	SUB		124.0 \pm 0.9	298	ME	[1999MON/HIL]
C ₁₀ H ₁₀ O ₃	[6099-04-3]	3-methoxycinnamic acid				
	FUS		22.58	390.5	DSC	[1994HUA/CHE]
C ₁₀ H ₁₀ O ₃	[943-89-5]	<i>trans</i> -4-methoxycinnamic acid (369–383)				
	SUB		134.0 \pm 1.0	298	ME	[1999MON/HIL]
C ₁₀ H ₁₀ O ₃	[830-09-1]	4-methoxycinnamic acid				
	TRS		24.75	446.4		
	FUS		2.49	461.9	DSC	[1994HUA/CHE]
C ₁₀ H ₁₀ O ₃	[2879-20-1]	6-acetylbenzodioxan				
	FUS		23.49	356	DSC	[2008MAT/SOU2]
	SUB		102.5 \pm 1.1	298	C	[2008MAT/SOU2]
C ₁₀ H ₁₀ O ₃	[24327-08-0]	<i>endo</i> -bicyclo[2.2.2]oct-5-ene-2,3-dicarboxylic anhydride				
	TRS		18.19	382.9		
	FUS		4.54	419.2	DSC	[1984WEI/LEF]
C ₁₀ H ₁₀ O ₃	[830-09-1]	3-(4-methoxyphenyl)acrylic acid				
	SUB	(394–422)	150.2 \pm 5.5	408	ME	[2014DIB/RAE]
	SUB	(394–422)	154.6 \pm 5.5	298	ME	[2014DIB/RAE]
C ₁₀ H ₁₀ O ₄	[635-67-6]	1,2-diacetoxybenzene (371–551)				
	V		62.9	386	A	[1987STE/MAL]
C ₁₀ H ₁₀ O ₄	[1459-93-4]	dimethyl isophthalate				
	FUS		30.15	341.5	DSC	[1997STE/CHI2]
	FUS		25.3	341.2	DSC	[1993ACR, 1978DOZ/FUJ]
	SUB	(295–309)	100.7 \pm 0.2	302	ME	[1998ROU/JIM]
	SUB	(295–309)	100.9 \pm 0.2	298	ME	[1998ROU/JIM]
	SUB		100.7	298	C	[1998MAK/KAB]
	V		79.4 \pm 2.8	298	CGC	[2014GOB/CHI]
	V	(350–607)	77.2 \pm 0.8	298	EB, IPM	[1997STE/CHI2]
	V	(350–607)	71.6 \pm 0.7	360	EB, IPM	[1997STE/CHI2]
	V	(350–607)	68.1 \pm 0.6	400	EB, IPM	[1997STE/CHI2]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
	V	(350–607)	64.7 ± 0.5	440	EB, IPM	[1997STE/CHI2]	
	V	(350–607)	61.3 ± 0.5	480	EB, IPM	[1997STE/CHI2]	
	V	(350–607)	57.7 ± 0.5	520	EB, IPM	[1997STE/CHI2]	
	V	(350–607)	53.9 ± 0.7	560	EB, IPM	[1997STE/CHI2]	
	V	(393–550)	60.5	408	A, GS	[1987STE/MAL, 1963VOI]	
C ₁₀ H ₁₀ O ₄	[131-11-3]	dimethyl phthalate					
	FUS		16.95	274.2		[1998MAK/KAB, 1986RAB/NOV]	
	FUS		15.7	273.2	DSC	[1993ACR, 1978DOZ/FUJ]	
	V		84.2 ± 3.4	298	CRT	[2015GOB/CHI]	
	V		66.4 ± 12	298	CGC	[2015GOB/CHI]	
	V		76.7 ± 1.7	298	CGC	[2014GOB/CHI]	
	V	(466–518)	61.5	481	EB	[1999ROH/MUS]	
	V		69.4 ± 0.1	365	C	[1998MAK/KAB]	
	V		72.5 ± 0.6	344	C	[1998MAK/KAB]	
	V		74.5 ± 0.3	326	C	[1998MAK/KAB]	
	V	(304–371)	78.7	319	A	[1987STE/MAL]	
	V	(371–547)	63.7	386	A	[1987STE/MAL]	
	V	(377–440)	68.6	409		[1969DAV/MAK]	
V		64.8		Static	[1968DAV/BAT]		
V		78.7			[1948SMA/SMA]		
C ₁₀ H ₁₀ O ₄	[120-61-6]	dimethyl terephthalate					
	FUS		34.87	414.3	DSC	[2013ZHA/XIA]	
	FUS		32.9	413.8	DSC	[1993ACR, 1978DOZ/FUJ]	
	FUS		31.63	413.7	AC	[1968ELL/CHR]	
	SUB	(311–330)	103.8 ± 0.3	321	ME	[1998ROU/JIM]	
	SUB	(311–330)	104.6 ± 0.3	298	ME	[1998ROU/JIM]	
	SUB	(373–413)	94.4	388	A	[1987STE/MAL]	
	SUB	(373–413)	88.3	393	GS	[1962KRA/BER]	
	SUB		105.3		C	[1998MAK/KAB]	
	V		78.6 ± 1.1	298	CGC	[2014GOB/CHI]	
	V	(413–523)	62.0	428	A	[1987STE/MAL]	
	C ₁₀ H ₁₀ O ₄	[1135-24-6]	3-(4-hydroxy-3-methoxyphenyl)-2-propenoic acid (ferulic acid)				
		FUS		34.7	445.9	DSC	[2016EME/YER]
FUS			31.9	444.9	DSC	[2008MOT/QUE, 2012MAN/VIL]	
FUS			17.89	435.3	DSC	[1994HUA/CHE]	
SUB		(385–442)	133.2 ± 1.8	413	TGA	[2016EME/YER]	
SUB		(385–442)	137.4 ± 1.9	298	TGA	[2016EME/YER]	
SUB			131.8 ± 4.0	298	ME	[2012DAV/HER]	
SUB		(369–390)	132.4 ± 1.3	379	ME	[2006CHE/OJA]	
C ₁₀ H ₁₀ O ₄	[635-51-8]	(R <i>S</i>)-phenylsuccinic acid					
	FUS		37.37	440.1	DSC	[2006PRO/RAS]	
C ₁₀ H ₁₀ O ₄	[4036-30-0]	(S)-phenylsuccinic acid					
	FUS		41.84	446.9	DSC	[2006PRO/RAS]	
C ₁₀ H ₁₁ ClN ₂ O ₄	[310412-18-1]	ethyl (2-chloromethyl-2,3-dihydro-5 <i>H</i> -oxazolo[3,2- <i>a</i>]-pyrimidin-5-one)-6-carboxylate					
	TRS		5.38	379.7			
	FUS		10.77	413.4	DSC	[2000CHA/SOS]	
C ₁₀ H ₁₁ ClO ₃		(dl)-2-(2-chloro-3-methylphenoxy)propionic acid					
	FUS		30.54	391.5	DSC	[1976LEC/COL]	
C ₁₀ H ₁₁ ClO ₃		(d)-2-(2-chloro-3-methylphenoxy)propionic acid					
	FUS		22.18	359.5	DSC	[1976LEC/COL]	
C ₁₀ H ₁₁ F ₃ N ₂ O	[2164-17-2]	<i>N,N</i> -dimethyl- <i>N'</i> -[3-(trifluoromethyl)-phenyl]urea					
	FUS		29.82	434.1	DSC	[1991ACR, 1990DON/DRE]	
C ₁₀ H ₁₁ F ₃ N ₂ O ₃ S	[47000-92-0]	<i>N</i> -[4-methyl-3-[(trifluoromethyl)sulfonyl]amino]phenyl]acetamide					
	FUS		40.47	455.7	DSC	[1990DON/DRE]	

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₁ N	[1195-98-8]	α , α -dimethylbenzylcyanide				
	V	(284–323)	60.3 ± 0.6	303	GS	[2000VER]
	V	(284–323)	60.6 ± 0.6	298	GS	[2000VER]
C ₁₀ H ₁₁ N	[769-68-6]	α -ethylbenzylcyanide				
	V	(283–313)	64.3 ± 0.6	298	GS	[2000VER]
C ₁₀ H ₁₁ N	[2571-52-0]	2,4,6-trimethylbenzotrile				
	FUS		15.5	325.5	DSC	[2015ZAI/EME]
	SUB		82.9 ± 1.6	298	C	[1991ACR/TUC]
C ₁₀ H ₁₁ N	[91-55-4]	2,3-dimethylindole				
	SUB	(313–373)	86.8 ± 0.3	298	GS	[2011VER/EME3]
C ₁₀ H ₁₁ NO	[2904-59-8]	2,4,6-trimethylbenzotrile <i>N</i> -oxide				
	SUB		87.5 ± 0.5	314	C	[1993ACR/SEV]
	SUB		87.9 ± 1.9	298		[1993ACR/SEV]
	SUB		84.7 ± 1.8	319	ME	[1992ACR/SIM]
	SUB		77.5 ± 3.7	298	C	[1991ACR/TUC]
C ₁₀ H ₁₁ NO	[1128-85-4]	3-amino-1-phenyl-but-2-enone				
	SUB		109.4 ± 2.1	298	C	[1993RIB/RIB]
C ₁₀ H ₁₁ NO ₂	[1563-87-7]	<i>N</i> -phenyldiacetamide				
	SUB		90.0 ± 0.8	298	C	[1965WAD, 1970COX/PIL]
C ₁₀ H ₁₁ NO ₂	[93-17-4]	(3,4-dimethoxyphenyl)acetone				
	FUS	(78–399)	24.72	336.8	AC	[2009MEN/ZHA]
C ₁₀ H ₁₁ NO ₂ S	[6958-78-7]	<i>N</i> -benzoylthiocarbamic <i>O</i> -ethyl ester				
	SUB		112.2 ± 1.3	298	C	[2004RIB/SAN2]
C ₁₀ H ₁₁ NO ₃	[2571-54-2]	2,4,6-trimethoxybenzotrile				
	SUB		112.6 ± 2.0	298	C	[1991ACR/TUC]
C ₁₀ H ₁₁ NO ₃	[34295-85-7]	<i>N</i> -salicylidene- β -alanine				
	FUS		28.5	408	DSC	[1996DOM/HEA, 1991WU/XIO]
C ₁₀ H ₁₁ NO ₃	[2623-33-8]	<i>N</i> -[4-(acetyloxy)phenyl]acetamide				
	FUS		30.97	427.5	DSC	[1990BHA/LAL]
C ₁₀ H ₁₁ NO ₄	[2904-59-8]	2,4,6-trimethoxybenzotrile <i>N</i> -oxide				
	SUB		91.9 ± 1.9	298	C	[1991ACR/TUC]
C ₁₀ H ₁₁ N ₃ O	[5809-38-1]	3,5-dimethyl-1-phenyl-4-nitrosopyrazole				
	SUB		89.7 ± 2.0	298	C	[2001RIB/FER]
C ₁₀ H ₁₁ N ₃ O ₂	[10495-38-2]	3-dimethylamino-6-aminophthalimide				
	SUB	(434–459)	108.8	446.5	A	[1987STE/MAL, 1956KLO]
C ₁₀ H ₁₁ N ₃ O ₃ S	[723-46-6]	4-amino- <i>N</i> -(5-methyl-3-isoxazolyl)benzene sulfonamide (sulfamethoxazole)				
	FUS		31.9	441.3	DSC	[2016VOL/BLO]
	FUS		31.1	442.5	DSC	[2013AGA/MOS]
	FUS		33.8	440.7	DSC	[2003MAR/AVI, 2002MAR/GOM, 2001MAR/GOM]
	FUS		35.26	440		[1998ISS/ELA]
	SUB	(379–436)	124.0 ± 2.0	298	GS	[2016VOL/BLO]
C ₁₀ H ₁₁ N ₅ O ₃	[134287-59-5]	3,9-dihydro-3-[(2-hydroxyethoxy)methyl]-9-oxo-5 <i>H</i> -imidazol[1,2- <i>a</i>]pyrine				
	FUS		43.33	520.6	DSC	[1999ZIE/GOL]
C ₁₀ H ₁₂	[1755-01-7]	<i>endo</i> -dicyclopentadiene				
	TRS		8.04	216.1		
	FUS		1.79	304.7		[1997SMI/LEB]
	TRS		9.66	216		
	FUS		2.22	304.8		[1996DOM/HEA, 1977LEB/LIT]
	V	(350–446)	43.6	365	A	[1987STE/MAL]
	V	(350–423)	46.4			[1968TUR/HUL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₂ N ₂ O ₂	[70320-93-3] FUS	<i>N</i> -(2-acetoxyethyl)-4-nitroaniline	20.8	387.0	DSC	[2013TRA/KHI]
C ₁₀ H ₁₂ N ₂ O ₃	[52-43-7] FUS	allobarbital	32.31	442.6	DSC	[1986CHA/DEM]
	FUS		24.9		DSC	[1982TRE/VAU]
	FUS		31.7		DSC	[1978SEK/TSU]
C ₁₀ H ₁₂ N ₂ O ₃	[38423-62-0] FUS	2-ethoxyisonitrosoacetanilide	23.0	407.3	DTA	[1996DOM/HEA, 1982CUE/SOL]
C ₁₀ H ₁₂ N ₂ O ₃	[17122-74-6] FUS	4-ethoxyisonitrosoacetanilide	7.6	491.2	DTA	[1982CUE/SOL, 1996DOM/HEA]
C ₁₀ H ₁₂ N ₂ O ₃ S	[25057-89-0] FUS	3-(1-methylethyl)-(1 <i>H</i>)-2,1,3-benzothiadiazin-4(3 <i>H</i>)-one 2,2-dioxide	21.77	412.5	DSC	[1990DON/DRE]
C ₁₀ H ₁₂ N ₂ O ₄	[84592-41-6] FUS	(2-hydroxyethyl)[3-[(hydroxyimino)methyl]phenyl carbamic acid	28.9	508.3	DTA	[1982CUE/SOL]
C ₁₀ H ₁₂ N ₂ O ₄	[3056-17-5] FUS	2,3'-didehydro-3'-deoxythymidine (stavudine)	26.91	443.2	DSC	[2000GAN/BOG]
C ₁₀ H ₁₂ N ₂ O ₄ S	[138517-12-1] FUS	(4-nitrophenyl)-2-(methylthio)ethyl carbamate	31.27	349.4	DSC	[1993TIE/FRA]
C ₁₀ H ₁₂ N ₂ O ₅	[88-85-7] FUS	2- <i>sec</i> -butyl-4,6-dinitrophenol	21.81	313.7	DSC	[1990DON/DRE]
C ₁₀ H ₁₂ N ₄ O ₃	[74392-01-1] SUB	4- <i>N,N</i> -diethylamino-7-nitrobenzofurazan	139.2 ± 1.6	298	ME	[2014SAN/SIL]
C ₁₀ H ₁₂ N ₂ S	[7341-63-1] FUS	<i>N</i> -allyl- <i>N</i> -phenylthiourea	27.61	375		[1996DOM/HEA, 1928SHI]
C ₁₀ H ₁₂ N ₃ O ₃ PS ₂	[86-50-0] FUS	<i>S</i> -(3,4-dihydro-4-oxobenzo[d][1,2,3]-triazin-3-ylmethyl) <i>O,O</i> -dimethylphosphorodithioate	27.76	345.3	DSC	[1991ACR, 1990DON/DRE]
C ₁₀ H ₁₂ N ₄ O ₁₂	[94616-58-7] SUB	1,3,5,7-tetranitrateadamantane	150.2 ± 2.0	298	C	[2001MAT/LEB]
C ₁₀ H ₁₂ O	[104-46-1] FUS	anethole	16.0	294.7	C	[1911LOU/DUP]
	V		61.9	298	GC	[2002VAN/PAR]
C ₁₀ H ₁₂ O	[25679-28-1] V	<i>cis</i> -anethole (333–363)	68.7	348	A	[1987STE/MAL]
C ₁₀ H ₁₂ O	[4180-23-8] V	<i>trans</i> -anethole (333–363)	78.3	348	A	[1987STE/MAL]
C ₁₀ H ₁₂ O	[140-67-0] V	estragole (325–488)	56.3	340	A	[1987STE/MAL]
C ₁₀ H ₁₂ O	[2142-64-5] V	2'-ethylacetophenone (363–397)	52.8	378	A	[1987STE/MAL]
	V		U23.7	368		[1968KHO/BYK]
C ₁₀ H ₁₂ O	[937-30-4] V	4'-ethylacetophenone (294–368)	42.2	309	A	[1987STE/MAL]
	V		39.8	368		[1968KHO/BYK]
C ₁₀ H ₁₂ O	[122-03-2] V	4-isopropylbenzaldehyde (cuminal) (331–505)	55.3	346	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₂ O	[5445-77-2] V	2-methyl-3-phenylpropanal (333–373)	59.1	348	A	[1987STE/MAL]
C ₁₀ H ₁₂ O	[5337-93-9] V	4'-methypropiofenone (332–512)	52.6	347	A	[1987STE/MAL, 1947STU]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₂ O	[5459-40-5] V	4-vinylphenetole (337–498)	59.2	352	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₂ O	[1712-69-2] FUS	4-methoxy- α -methylstyrene	19.07	309.2		[1999VER6]
	SUB		81.2 \pm 0.4	298		[1999VER6]
	V	(308–343)	60.6 \pm 0.3	326	GS	[1999VER6]
	V	(308–343)	62.1 \pm 0.3	298	GS	[1999VER6]
C ₁₀ H ₁₂ O ₂	[3674-77-9] SUB	2-phenyl-2-methyl-1,3-dioxolane (293–324)	81.9 \pm 0.5	308	T	[1995VER/DOG]
C ₁₀ H ₁₂ O ₂	[103-45-7] V	acetic acid, phenethyl ester	61.3 \pm 1.3	298	CGC	[2015KOZ/GOB]
	V	(283–318)	67.4	298	A	[1987STE/MAL]
	V	(422–506)	52.2	437	A	[1987STE/MAL]
C ₁₀ H ₁₂ O ₂	[31508-44-8] V	methyl 2-phenylpropionate (284–318)	61.8 \pm 0.7	301	GS	[1999VER8]
	V	(284–318)	62.0 \pm 0.7	298	GS	[1999VER8]
C ₁₀ H ₁₂ O ₂	[97-53-0] V	4-allyl-2-methoxyphenol (eugenol)	66.3	298	GC	[2002VAN/PAR]
	V	(395–527)	57.7	410	A	[1987STE/MAL]
	V	(285–333)	66.1	300	ME	[1987STE/MAL, 1959SCO/DOU]
	V	(351–526)	60.3	366		[1947STU]
C ₁₀ H ₁₂ O ₂	[122-63-4] V	benzyl propionate (298–378)	59.0	313	A	[1987STE/MAL]
C ₁₀ H ₁₂ O ₂	[501-19-9] V	5-allyl-2-methoxyphenol (345–527)	61.4	371	A	[1987STE/MAL]
C ₁₀ H ₁₂ O ₂	[97-54-1] V	2-methoxy-4-(1-propenyl)phenol (isoeugenol) (359–540)	60.7	374		[1957DYK/SEP]
C ₁₀ H ₁₂ O ₂	[5912-86-7] V	<i>cis</i> -isoeugenol (373–403)	69.7	388	A	[1987STE/MAL]
C ₁₀ H ₁₂ O ₂	[5932-68-3] V	<i>trans</i> -isoeugenol (363–420)	69.1	378	A	[1987STE/MAL]
C ₁₀ H ₁₂ O ₂	[3674-77-9] FUS	acetophenone ethylene glycol ketal	25.2	333.6		[1995VER/DOG]
C ₁₀ H ₁₂ O ₂	[16108-50-2] FUS	2-acetyl-3,5-dimethylphenol	1.36	333.2	DTA	[1989SAL/ABA]
[Note: Reported enthalpy of fusion is too small, and the published enthalpy and entropy of fusion data are internally inconsistent.]						
C ₁₀ H ₁₂ O ₂	[101-97-3] V	phenylacetic acid, ethyl ester (333–433)	60.7	298	GC	[2005HOS/GRY]
	V	(288–328)	63.9 \pm 0.4	308	GS	[1999VER8]
	V	(288–328)	64.5 \pm 0.4	298	GS	[1999VER8]
	V	(393–500)	54	408	A	[1987STE/MAL]
C ₁₀ H ₁₂ O ₂	[2315-68-6] V	propylbenzoate (359–458)	60.2	379	BG	[1988KAT2]
	V	(359–458)	52.7	440	BG	[1988KAT2]
	V	(327–504)	53.8	342	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₂ O ₂	[2930-05-4] V	[(phenylmethoxy)methyl]oxirane	71.0 \pm 0.4			[1987VAN/KAC]
C ₁₀ H ₁₂ O ₂	[2529-36-4] SUB	2,3,6-trimethylbenzoic acid (314–336)	104.4 \pm 0.2	298	ME	[1987COL/JIM2]
	SUB	(314–336)	103.6 \pm 0.2	325	ME	[1987COL/JIM2]
C ₁₀ H ₁₂ O ₂	[480-63-7] SUB	2,4,6-trimethylbenzoic acid (316–340)	103.6 \pm 0.3	298	ME	[1987COL/JIM2]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
C ₁₀ H ₁₂ O ₂		SUB	(316–340)	102.5 ± 0.3	328	ME	[1987COL/JIM2]
	[1076-47-7]		2,3,4-trimethylbenzoic acid				
		SUB	(329–351)	109.3 ± 0.3	298	ME	[1987COL/JIM2]
C ₁₀ H ₁₂ O ₂		SUB	(329–351)	108.2 ± 0.3	340	ME	[1987COL/JIM2]
	[2437-66-3]		2,3,5-trimethylbenzoic acid				
		SUB	(320–338)	106.7 ± 0.3	298	ME	[1987COL/JIM2]
C ₁₀ H ₁₂ O ₂		SUB	(320–338)	105.7 ± 0.3	329	ME	[1987COL/JIM2]
	[528-90-5]		2,4,5-trimethylbenzoic acid				
		SUB	(324–346)	109.6 ± 0.5	298	ME	[1987COL/JIM2]
C ₁₀ H ₁₂ O ₂		SUB	(324–346)	108.3 ± 0.5	335	ME	[1987COL/JIM2]
	[1076-88-6]		3,4,5-trimethylbenzoic acid				
		SUB	(340–359)	111.0 ± 0.5	298	ME	[1987COL/JIM2]
C ₁₀ H ₁₂ O ₂		SUB	(340–359)	109.3 ± 0.5	350	ME	[1987COL/JIM2]
	[2438-05-3]		4-propylbenzoic acid				
		TRS		3.4	301		
		FUS		23.3	422	DSC	[1985PRI/PUC]
C ₁₀ H ₁₂ O ₂		SUB	(331–347)	109.1 ± 0.8	298	ME	[2004MON/ALM]
	[2438-04-2]		2-isopropylbenzoic acid				
		SUB	(300–320)	100.2 ± 0.4	310	ME	[1987COL/JIM]
C ₁₀ H ₁₂ O ₂		SUB	(300–320)	101.0 ± 0.4	298	ME	[1987COL/JIM]
	[5651-47-8]		3-isopropylbenzoic acid				
		SUB	(300–316)	103.3 ± 0.3	308	ME	[1987COL/JIM]
C ₁₀ H ₁₂ O ₂		SUB	(300–316)	104.1 ± 0.3	298	ME	[1987COL/JIM]
	[536-66-3]		4-isopropylbenzoic acid				
		SUB	(316–334)	99.0 ± 0.3	310	ME	[1987COL/JIM]
C ₁₀ H ₁₂ O ₂		SUB	(316–334)	99.0 ± 0.3	298	ME	[1987COL/JIM]
	[1821-12-1]		4-phenylbutyric acid				
		FUS		19.5	324.2	DSC	[2001MON/HIL]
C ₁₀ H ₁₂ O ₂		SUB	(309–323)	112.4 ± 0.8	316	ME	[2001MON/HIL]
		SUB	(309–323)	113.0 ± 1.0	298	ME	[2001MON/HIL]
	[527-17-3]		2,3,5,6-tetramethyl-1,4-benzoquinone				
C ₁₀ H ₁₂ O ₂		FUS		18.39 ± 0.1	384.1	DSC	[2004ROJ/FOR]
		FUS		18.54 ± 0.1	384.8	HFC	[2004ROJ/FOR]
		SUB		93.2 ± 1.2	298	DSC	[2004ROJ/FOR]
	[490-91-5]		2-isopropyl-5-methyl-1,4-benzoquinone (thymoquinone)				
C ₁₀ H ₁₂ O ₂ S		FUS		18.16	323.2		[2003PAG/BEN]
	[32228-15-2]		<i>p</i> -tolyl <i>trans</i> -prop-1-enyl sulfone				
		SUB		83.7 ± 2.1		B	[1969MAC/STE, 1970COX/PIL]
C ₁₀ H ₁₂ O ₂ S	[3112-87-6]		<i>p</i> -tolyl prop-2-enyl sulfone				
		SUB		95.8 ± 2.9		B	[1969MAC/STE, 1970COX/PIL]
C ₁₀ H ₁₂ O ₂ S	[67605-02-1]		<i>p</i> -tolyl isopropenyl sulfone				
		SUB		88.7 ± 2.5		B	[1969MAC/MCN, 1969MAC/MCN2, 1977PED/RYL]
C ₁₀ H ₁₂ O ₃	[6192-44-5]		acetic acid, (2-phenoxyethyl) ester				
		V	(355–533)	56.8	370	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₂ O ₃	[94-13-3]		propyl 4-hydroxybenzoate				
		FUS		26.51	369.6	DSC	[2014YAN/RAS]
		FUS		27.3	368.8	DSC	[2011UMN/CHI]
		FUS		27.2	369.3	DSC	[1999GIO/BET]
		FUS		27.99	369.2		[1990MAN/AHU]
		SUB	(319–333)	123.7 ± 0.6	298	GS	[2005PER/ROD]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	V		89.5 ± 0.6	298	CGC	[2011UMN/CHI]
	V		79.1		TGA	[2002CHA/DOL]
	V		76.5		TGA	[2001CHA/DOL]
C ₁₀ H ₁₂ O ₃	[3759-31-7] FUS	(dl)-3-hydroxy-3-phenylbutyric acid	19.66	330		[1991CHI/BRA]
C ₁₀ H ₁₂ O ₃	FUS	(d)-3-hydroxy-3-phenylbutyric acid	22.59	357		[1991CHI/BRA]
C ₁₀ H ₁₂ O ₃	[4919-33-9] FUS	4-ethoxyphenylacetic acid	23.0	360.2		[1991ACR, 1979ARM/JAM]
C ₁₀ H ₁₂ O ₃	[6342-77-4] FUS	3-(2-methoxyphenyl)propionic acid	25.33	360.5	DSC	[2001MON/HIL4]
	SUB	(331–347)	116.0 ± 0.4	339	ME	[2001MON/HIL4]
	SUB	(331–347)	117.8 ± 1.4	298	ME	[2001MON/HIL4]
C ₁₀ H ₁₂ O ₃	[1929-29-9] FUS FUS	3-(4-methoxyphenyl)propionic acid	29.57 28.5	376.1 376.9	DSC	[2001MON/HIL4] [1991ACR, 1979ARM/JAM]
	SUB	(341–357)	122.3 ± 0.3	349	ME	[2001MON/HIL4]
	SUB	(341–357)	124.5 ± 1.7	298	ME	[2001MON/HIL4]
C ₁₀ H ₁₂ O ₃	[5438-19-7] TRS (liq cryst) TRS (liq cryst) TRS (liq cryst-to-liq)	4-propoxybenzoic acid	7.95 16.74 2.51	394.2 419.9 426.7	DSC	[1967HER]
	SUB	(345–365)	123.8 ± 0.5	355	ME	[2010FON/SAN]
	SUB(II)	(345–365)	126.0 ± 0.5	298	ME	[2010FON/SAN]
C ₁₀ H ₁₂ O ₄	[999-21-3] V	maleic acid, diallyl ester	77.7	407	A	[1987STE/MAL, 1958MOR/YOS]
C ₁₀ H ₁₂ O ₄	[20765-04-2] FUS	2,5-diethoxy-1,4-benzoquinone	28.7	459.3	DSC	[1996KEE/VAN]
C ₁₀ H ₁₂ O ₅	[490-64-2] FUS	2,4,5-trimethoxybenzoic acid	31.15	417.9	DSC	[2003HUA, 2005HUA/TAN]
C ₁₀ H ₁₂ O ₅	[118-41-2] FUS	3,4,5-trimethoxybenzoic acid	29.9	444.5	DSC	[2003HUA, 2005HUA/TAN]
	SUB	(354–372)	127.9 ± 0.8	363	ME	[2001ROU/JIM2]
	SUB		131.2 ± 0.8	298	ME	[2001ROU/JIM2]
C ₁₀ H ₁₂ O ₆	[6289-46-9] FUS FUS	dimethyl 2,5-dioxo-1,4-cyclohexanedicarboxylate	27.69 26.52	429.9 427.7	DSC DSC	[2014LIU/ZOU] [2011CHE/YAN]
C ₁₀ H ₁₃ Br	[2437-76-5] V	2-bromo-4-isopropyltoluene	50.2	415	A	[1987STE/MAL, 1970DYK/VAN, 1999DYK/SVO]
C ₁₀ H ₁₃ Br	[4478-10-8] V	3-bromo-4-isopropyltoluene	48.3	415	A	[1987STE/MAL, 1970DYK/VAN, 1999DYK/SVO]
C ₁₀ H ₁₃ BrO	[54514-31-7] V	2-bromophenyl isobutyl ether	64.0 ± 0.2	298	GS	[2005STR/SPO]
C ₁₀ H ₁₃ BrO	[223564-75-8] V	3-bromophenyl isobutyl ether	65.3 ± 0.2	298	GS	[2005STR/SPO]
C ₁₀ H ₁₃ BrO	[30752-23-9] V	4-bromophenyl isobutyl ether	66.8 ± 0.6	298	GS	[2005STR/SPO]
C ₁₀ H ₁₃ Cl	[4395-79-3] V	2-chloro-4-isopropyltoluene	49.3	415	A	[1987STE/MAL, 1970DYK/VAN, 1999DYK/SVO]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
C ₁₀ H ₁₃ Cl	[15146-00-6] V	3-chloro-4-isopropyltoluene (400–490)	47.1	415	A	[1987STE/MAL, 1970DYK/VAN]	
C ₁₀ H ₁₃ ClN ₂ O ₂	[19937-59-8] FUS	<i>N'</i> -(3-chloro-4-methoxyphenyl)- <i>N,N</i> -dimethylurea	27.48	399.2	DSC	[1990DON/DRE]	
C ₁₀ H ₁₃ ClN ₂ O ₃ S	[94-20-2] FUS	1-(4-chlorobenzenesulfonyl)-3-propylurea (chlorpropamide)	27.44	397	DSC	[2010BAI/VAN]	
	FUS		25.7	401	DSC	[2006WAS/HOL, 2008WAS/HOL]	
C ₁₀ H ₁₃ ClN ₆	[32889-48-8] FUS	2-((4-chloro-6-(cyclopropylamino)-1,3,5-triazin-2-yl)amino-2-methylpropanenitrile	22.51	438.5	DSC	[1990DON/DRE]	
C ₁₀ H ₁₃ ClO	[4446-91-7] V	2-chloroethyl α -methylbenzyl ether (335–508)	54.8	350	A	[1987STE/MAL, 1947STU, 1999DYK/SVO]	
C ₁₀ H ₁₃ ClO ₃	[58498-77-4] V	diethylene glycol 4-chlorophenyl ether (450–523)	75.9	465	A	[1987STE/MAL, 1999DYK/SVO]	
C ₁₀ H ₁₃ ClO ₃	[94-81-5] FUS	4-(4-chloro-2-methylphenoxy)butanoic acid	32.02	373.4	DSC	[1990DON/DRE]	
C ₁₀ H ₁₃ Cl ₂ O ₂ P	[18351-36-5] V	4- <i>tert</i> -butyl phenyl dichlorophosphate (369–572)	59.6	384		[1947STU]	
C ₁₀ H ₁₃ Cl ₃ NO ₃ P	[18361-88-1] V	<i>P</i> -chloromethyl- <i>N</i> -(1-methylethyl)amidothiophosphonic acid, <i>O</i> -(2,4-dichlorophenyl) ester (323–368)	93.1	345	A	[1987STE/MAL, 1999DYK/SVO]	
C ₁₀ H ₁₃ F ₉	[1190430-19-3] V	1,1,1,2,2,3,3,4,4-nonafluorodecane (278–328)	49.4 ± 0.2	298	Static	[2015MOR/DAS]	
C ₁₀ H ₁₃ NO	[6935-65-5] V	<i>N,N</i> -dimethyl- <i>m</i> -toluamide (374–405)	29.9	390		[1969DAV/MAK]	
C ₁₀ H ₁₃ NO ₂	[591-33-3] FUS	3'-ethoxyacetanilide	28.9	368.0	DSC	[2012UMN/CHI]	
	V		94.1 ± 3.5	298	CGC	[2012UMN/CHI]	
C ₁₀ H ₁₃ NO ₂	[62-44-2] FUS	4'-ethoxyacetanilide (phenacetin)	28.79	407.0	DSC	[2014MAN/MAH]	
	FUS		32.0	407.0	DSC	[2012UMN/CHI]	
	FUS		31.5	409.0	DSC	[2010BAI/VAN]	
	FUS		36.93	407.6	DSC	[2010MIY/KHA]	
	FUS		30.0	409.6	DSC	[2009VEC/TOM]	
	FUS		28.75	408.3	DSC	[2009PEN/ESC]	
	FUS		34.1	407.4	DSC	[2006WAS/HOL, 2008WAS/HOL]	
	FUS		21.4	410.2	DSC	[2004VEC/CAT]	
	FUS		31.25	407.2		[1990MAN/AHU]	
	SUB			120 ± 3	298	V + F	[2009VEC/TOM]
	SUB		(312–387)	115.5 ± 2.4	350	C, ME	[1972WIE, 1987STE/MAL]
	V			94.8 ± 3.5	298	CGC	[2012UMN/CHI]
	V			79 ± 1	459	TGA	[2009VEC/TOM]
	V			82 ± 1	476	TGA	[2009VEC/TOM]
V	(463–533)	82.6	478	A	[1987STE/MAL]		
V		83.2	470	I	[1943CRA]		
C ₁₀ H ₁₃ NO ₂	[943-15-7] V	2-nitro-4-isopropyltoluene (370–415)	67.7	385	A	[1987STE/MAL]	
C ₁₀ H ₁₃ NO ₂	[35480-94-5] V	3-nitro-4-isopropyltoluene (330–430)	54.0	345	A	[1987STE/MAL]	
C ₁₀ H ₁₃ NO ₂	[1886-57-3] V	2-nitro-1- <i>tert</i> -butylbenzene (278–323)	64.8 ± 0.6	301	GS	[2000VER/HEI]	
	V		65.0 ± 0.6	298	GS	[2000VER/HEI]	
C ₁₀ H ₁₃ NO ₂	[94-12-2]	propyl 4-aminobenzoate					

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₃ NO ₂	FUS		20.54	347.1	DSC	[1991ACR, 1990MAN/AHU, 1989NEA/FLY, 1990NEA/FLY]
	[1202-25-1]	methyl <i>p</i> - <i>N,N</i> -dimethylaminobenzoate				
	FUS		23.4	371.3	DSC	[2011ALM/MON]
	FUS		26.07	371.8		[1991ACR, 1990MAN/AHU]
	SUB	(311–333)	100.1 ± 0.3	298	ME	[2011ALM/MON]
	SUB	(325–368)	100.9 ± 0.2	298	Static	[2011ALM/MON]
	SUB	(325–368)	99.0 ± 0.2	347	Static	[2011ALM/MON]
	V	(353–390)	81.0 ± 0.1	298	Static	[2011ALM/MON]
	V	(353–390)	74.0 ± 0.1	371	Static	[2011ALM/MON]
C ₁₀ H ₁₃ NO ₂	[5532-90-1]	propyl <i>N</i> -phenylcarbamate				
	FUS		21.08	331		[1971PRI]
C ₁₀ H ₁₃ NO ₂	[122-42-9]	isopropyl phenylcarbamate				
	FUS		19.37	359.5	DSC	[1991ACR, 1990DON/DRE]
C ₁₀ H ₁₃ NO ₂	[2425-10-7]	3,4-dimethylphenyl methylcarbamate				
	FUS		24.97	350.8	DSC	[1991ACR, 1990DON/DRE]
C ₁₀ H ₁₃ NO ₂	[5426-62-0]	<i>N</i> -benzyl-β-alanine				
	FUS		42.7	457.0	DSC	[2011ROU/NOT2]
	SUB		171.6 ± 3.7	298	C	[2011NOT/ROU]
C ₁₀ H ₁₃ NO ₂ S ₂	[949171-65-7]	<i>N</i> -theonylthiocarbamic- <i>O</i> -butyl ester				
	FUS		23.89	364.3	DSC	[2007RIB/MON]
	SUB		147.5 ± 1.9	298	C	[2007RIB/MON]
C ₁₀ H ₁₃ NO ₄	[6988-21-2]	2-(1,3-dioxolan-2-yl)phenyl methylcarbamate				
	FUS		23.82	387.2	DSC	[1990DON/DRE]
C ₁₀ H ₁₃ N ₅ O ₃		2-acetylamino-9-[(2-hydroxyethoxy)methyl]-9 <i>H</i> -purine				
	FUS		54.92	454.2	DSC	[1995KRI/VES]
C ₁₀ H ₁₃ N ₅ O ₃		9-[(2-acetoxyethoxy)methyl]-2-amino-9 <i>H</i> -purine				
	FUS		42.69	408.2	DSC	[1995KRI/VES]
C ₁₀ H ₁₃ N ₅ O ₄	[110104-37-5]	2-acetylamino-9-[(2-hydroxyethoxy)methyl]-1,9-dihydro-6 <i>H</i> -purin-6-one				
	FUS		53.83	490.2	DSC	[1995KRI/VES]
C ₁₀ H ₁₃ N ₅ O ₄	[102728-64-3]	2-amino-9-[(2-acetoxyethoxy)methyl]-1,9-dihydro-6 <i>H</i> -purin-6-one				
	FUS		49.9	515.2	DSC	[1995KRI/VES]
C ₁₀ H ₁₃ N ₅ O ₄	[30516-87-1]	3'-azido-2,3'-dideoxythymidine (zidovudine)				
	FUS		31.12	296.8	DSC	[2010ARA/DOS]
	FUS		33.03	395.8	DSC	[2003ARA/STO]
C ₁₀ H ₁₄	[104-51-8]	butylbenzene				
	FUS		11.22	185.3		[1996DOM/HEA, 1965MES/TOD2]
	FUS		10.98	184.6	C	[1996DOM/HEA, 1931HUF/PAR]
	V	(343–501)	47.4 ± 0.2	350	EB	[2002STE/CHI, 2006VER]
	V	(343–501)	43.5 ± 0.2	410	EB	[2002STE/CHI]
	V	(343–501)	40.6 ± 0.4	450	EB	[2002STE/CHI]
	V	(343–501)	37.5 ± 0.7	490	EB	[2002STE/CHI]
	V		50.8	298		[1994RUZ/ZAB]
	V	(243–403)	53.5	258		[1993KAS/MOK]
	V		48.0 ± 0.1	343	C	[1982SVO/CHA]
	V		46.8 ± 0.1	358	C	[1982SVO/CHA]
	V		46.0 ± 0.1	368	C	[1982SVO/CHA]
	V		50.1	298		[1971WIL/ZWO]
	V	(374–454)	45.2	389		[1965LIN/FRI, 1984BOU/FRI]
	V	(369–463)	45.7	384	A	[1987STE/MAL, 1949FOR/NOR]
C ₁₀ H ₁₄	[135-98-8]	(<i>dl</i>)- <i>sec</i> -butylbenzene				
	V	(335–491)	45.7 ± 0.2	340	EB	[2002STE/CHI]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	V	(335–491)	43.2 ± 0.2	380	EB	[2002STE/CHI]
	V	(335–491)	40.6 ± 0.3	420	EB	[2002STE/CHI]
	V	(335–491)	37.8 ± 0.5	460	EB	[2002STE/CHI]
	V		48.1	298		[1994RUZ/ZAB]
	V	(243–373)	50.6	258		[1993KAS/MOK]
	V	(384–448)	42.8	399	A	[1987STE/MAL]
	V		49.5	298		[1971WIL/ZWO]
	V	(368–448)	44.0	375		[1949FOR/NOR]
C ₁₀ H ₁₄	[98-06-6]	<i>tert</i> -butylbenzene				
	FUS		8.4	215.3	DSC, AC	[2009CHI/STE]
	FUS		8.41	215	C	[1996DOM/HEA, 1930HUF/PAR2]
	V	(332–486)	45.3 ± 0.2	340	EB	[2002STE/CHI]
	V	(332–486)	42.6 ± 0.2	380	EB	[2002STE/CHI]
	V	(332–486)	39.9 ± 0.3	420	EB	[2002STE/CHI]
	V	(332–486)	37.0 ± 0.5	460	EB	[2002STE/CHI]
	V	(278–308)	47.8 ± 0.4	293	GS	[1998VER]
	V	(278–308)	47.5 ± 0.4	298	GS	[1998VER]
	V		47.6	298		[1994RUZ/ZAB]
	V	(368–444)	43.1	383	A	[1987STE/MAL]
	V		47.7	298		[1974KUS/SAI]
	V		49.1	298		[1971WIL/ZWO]
V	(357–443)	43.7	372		[1949FOR/NOR]	
C ₁₀ H ₁₄	[135-01-3]	1,2-diethylbenzene				
	V		52.8	298		[1971WIL/ZWO]
	V	(369–464)	46.0	384	A	[1987STE/MAL, 1949FOR/NOR]
C ₁₀ H ₁₄	[141-93-5]	1,3-diethylbenzene				
	V		52.5	298		[1971WIL/ZWO]
	V	(368–457)	45.8	383	A	[1987STE/MAL, 1949FOR/NOR]
C ₁₀ H ₁₄	[105-05-5]	1,4-diethylbenzene				
	V		52.5	298		[1971WIL/ZWO]
	V	(369–464)	45.8	384	A	[1987STE/MAL, 1949FOR/NOR]
C ₁₀ H ₁₄	[933-98-2]	1,2-dimethyl-3-ethylbenzene				
	V	(344–497)	49.7	359	A	[1987STE/MAL]
	V		54.9	298		[1971WIL/ZWO]
C ₁₀ H ₁₄	[934-80-5]	1,2-dimethyl-4-ethylbenzene				
	V	(340–493)	48.9	355	A	[1987STE/MAL]
	V		53.9	298		[1971WIL/ZWO]
C ₁₀ H ₁₄	[2870-04-4]	1,3-dimethyl-2-ethylbenzene				
	V	(341–493)	48.8	356	A	[1987STE/MAL]
	V		53.9	298		[1971WIL/ZWO]
	V	(299–461)	48.6	314		[1947STU]
C ₁₀ H ₁₄	[874-41-9]	1,3-dimethyl-4-ethylbenzene				
	V	(339–492)	48.5	354	A	[1987STE/MAL]
	V		53.3	298		[1971WIL/ZWO]
C ₁₀ H ₁₄	[934-74-7]	1,3-dimethyl-5-ethylbenzene				
	V	(336–487)	48.0	351	A	[1987STE/MAL]
	V		52.4	298		[1971WIL/ZWO]
	V	(295–456)	47.5	310		[1947STU]
C ₁₀ H ₁₄	[1758-88-9]	1,4-dimethyl-2-ethylbenzene				
	V	(338–490)	48.0	353	A	[1987STE/MAL]
	V		52.6	298		[1971WIL/ZWO]
	V	(299–440)	48.7	313		[1947STU]
C ₁₀ H ₁₄	[538-93-2]	<i>isobutyl</i> benzene				
	V		48.0	298		[1994RUZ/ZAB]
	V	(373–447)	43.2	388	A	[1987STE/MAL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₄	V		49.5	298		[1971WIL/ZWO]
	V	(360–447)	43.8	375		[1949FOR/NOR]
	[527-84-4]	2-isopropyltoluene				
C ₁₀ H ₁₄	V	(354–453)	44.4	369	A	[1987STE/MAL, 1959MCD/SHR, 1984BOU/FRI]
	V		50.6	298		[1971WIL/ZWO]
C ₁₀ H ₁₄	[535-77-3]	3-isopropyltoluene				
	V	(351–450)	44.7	366	A	[1987STE/MAL, 1959MCD/SHR, 1984BOU/FRI]
C ₁₀ H ₁₄	V		50.0	298		[1971WIL/ZWO]
	[99-87-6]	4-isopropyltoluene				
C ₁₀ H ₁₄	FUS		9.67	204.2	C	[1996DOM/HEA, 1931HUF/PAR]
	V	(333–443)	49.2	298	GC	[2005HOS/GRY]
	V		48.9	298		[1994RUZ/ZAB]
	V	(380–452)	44.0	395	A	[1987STE/MAL, 1959MCD/SHR, 1984BOU/FRI]
	V		50.3	298		[1971WIL/ZWO]
C ₁₀ H ₁₄	[1074-17-5]	2-propyltoluene				
	V	(337–488)	48.0	352	A	[1987STE/MAL]
C ₁₀ H ₁₄	V		52.7	298		[1971WIL/ZWO]
	[1074-43-7]	3-propyltoluene				
C ₁₀ H ₁₄	V	(334–485)	47.8	349	A	[1987STE/MAL]
	V		52.1	298		[1971WIL/ZWO]
C ₁₀ H ₁₄	[1074-55-1]	4-propyltoluene				
	V	(335–487)	47.6	350	A	[1987STE/MAL]
C ₁₀ H ₁₄	V		51.9	298		[1971WIL/ZWO]
	[488-23-3]	1,2,3,4-tetramethylbenzene (prehnitene)				
C ₁₀ H ₁₄	FUS		11.23	265.4	C	[1996DOM/HEA, 1931HUF/PAR]
	V		54.0	298		[1994RUZ/ZAB]
	V		52.6 ± 0.2	298	C	[1994SAB/TAB, 1990YAW/YAN]
	V	(352–509)	50.7	367	A	[1987STE/MAL]
	V		57.2	298		[1971WIL/ZWO]
C ₁₀ H ₁₄	V	(316–477)	55.7	331		[1947STU]
	[527-53-7]	1,2,3,5-tetramethylbenzene (isodurene)				
	FUS		12.93	248.6	C	[1996DOM/HEA, 1931HUF/PAR]
	V		53.2	298		[1994RUZ/ZAB]
	V		52.0 ± 0.2	298	C	[1994SAB/TAB]
C ₁₀ H ₁₄	V	(348–502)	50.0	363	A	[1987STE/MAL]
	V		55.8	298		[1971WIL/ZWO]
	V	(314–471)	58.9	329		[1947STU]
	[95-93-2]	1,2,4,5-tetramethylbenzene (durene)				
	FUS		21.62	352.3	AC	[2002VAN/VAN3]
C ₁₀ H ₁₄	FUS		20.88	352.4		[1996DOM/HEA, 1944EIB]
	FUS		21.34	352.1		[1996DOM/HEA, 1933FER/THO]
	SUB		71.7 ± 0.3	298	C	[1994SAB/TAB]
	SUB	(263–277)	74.6 ± 0.3	298	ME	[1989COL/JIM]
	SUB	(318–348)	71.3	333	A	[1947BAL/DEN]
	SUB		72.4	298	H	[1947BAL/DEN, 1993CHI/HOS]
	V	(363–381)	47.7 ± 0.3	375	DM	[2001BLO/VAN]
	V	(353–500)	49.4	368	A	[1987STE/MAL]
	[310-45-2]	spirocyclopropane-1,6-tricyclo[3.2.1.0 ^{2,4}]octane				
	V		47.8 ± 0.1	298	C	[1998KOL/PIM, 1996VAR/PAS]
C ₁₀ H ₁₄ Cl ₂ NO ₂ PS	[299-85-4]	<i>O</i> -(2,4-dichlorophenyl) <i>O</i> -methyl-(1-methylethyl) phosphoramidothioate				
	FUS		29.25	321.5	DSC	[1990DON/DRE]
C ₁₀ H ₁₄ NO ₅ PS	[56-38-2]	<i>O,O</i> -diethyl <i>O</i> -4-nitrophenyl phosphorothioate (parathion)				

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
		FUS		15.72	278.1	DSC	[1991ACR, 1990DON/DRE]
		SUB	(293–433)	93.4	308	A	[1987STE/MAL, 1999DYK/SVO]
		SUB	(298–318)	100.6	308	A	[1979SPE/SHO, 1983SPE/CLI]
C ₁₀ H ₁₄ NO ₃ PS	[3270-86-8]	phosphorothioic acid, <i>O,O'</i> -diethyl- <i>S</i> -(4-nitrophenyl)					
		V	(313–366)	75.9	328	A	[1987STE/MAL, 1999DYK/SVO, 1950BRI/CUT]
C ₁₀ H ₁₄ NO ₃ PS	[597-88-6]	phosphorothioic acid, <i>O,S</i> -diethyl- <i>O'</i> -(4-nitrophenyl)					
		V	(332–364)	75.1	347	A	[1987STE/MAL, 1999DYK/SVO, 1950BRI/CUT]
C ₁₀ H ₁₄ NO ₆ P	[311-45-5]	<i>O,O</i> -diethyl- <i>O</i> -(4-nitrophenyl) phosphate					
		V	(273–422)	87.9	288	A	[1987STE/MAL]
C ₁₀ H ₁₄ N ₂	[22083-74-5]	(<i>dl</i>)-nicotine					
		V	(406–520)	53.3	421	A	[1987STE/MAL]
C ₁₀ H ₁₄ N ₂	[54-11-5]	(<i>l</i>)-nicotine					
		V	(448–618)	51.4	463	DSC	[2014SII/KAM]
		V	(448–618)	68.5	298	DSC	[2014SII/KAM]
		V		63.9 ± 2.1	298	CGC	[2009LIP/HAN]
		V	(373–523)	46.1	448		[1934GOR]
C ₁₀ H ₁₄ N ₂	[494-52-0]	3-(2 <i>S</i>)-2-piperidinylpyridine					
		V	(373–523)	49.5	448		[1934GOR]
C ₁₀ H ₁₄ N ₂	[13078-04-1]	3-(2-piperidyl)pyridine ((±)-anabasin)					
		V	(478–644)	55.2	498	DSC	[2014SII/KAM]
		V	(478–644)	75.2	298	DSC	[2014SII/KAM]
C ₁₀ H ₁₄ N ₂ O	[120-22-9]	4-diethylaminonitrosobenzene					
		SUB		107.9 ± 3.7	298	C	[1998RIB/MAT2]
C ₁₀ H ₁₄ N ₂ O ₂ S	[77336-92-6]	<i>N,N</i> -diethyl- <i>N'</i> -furoylthiourea					
		SUB		132.0 ± 3.5	298	C	[2002RIB/RIB]
C ₁₀ H ₁₄ N ₂ O ₃	[77-02-1]	aprobarbitone					
		FUS		21.4		DSC	[1982TRE/VAU]
C ₁₀ H ₁₄ N ₂ O ₄	[55100-59-9]	1,3-dinitroadamantane					
		SUB		103.8 ± 1.5	298	C	[2002MIR/LEB2, 2001MAT/LEB]
C ₁₀ H ₁₄ N ₂ O ₄	[88381-75-3]	2,2-dinitroadamantane					
		TRS		16.76	362.2		
		FUS		5.06	491.2	DSC	[1990FRI/DOG]
		SUB		89.1 ± 1.5	298	C	[2002MIR/LEB2, 2001MAT/LEB]
		SUB	(278–317)	96.4 ± 1.4	298	T	[1990FRI/DOG]
C ₁₀ H ₁₄ N ₂ O ₆	[53488-28-1]	1,3-adamantanediyl dinitrate					
		SUB		105.9 ± 1.7	298	C	[2002MIR/LEB2, 2001MAT/LEB]
C ₁₀ H ₁₄ N ₄ O ₂	[2850-41-1]	8-propyltheophylline					
		FUS		33.3	534.3	DSC	[1991ACR, 1989GON/KRA]
C ₁₀ H ₁₄ N ₄ O ₂	[2850-40-0]	8-isopropyltheophylline					
		FUS		34.4	569.3	DSC	[1991ACR, 1989GON/KRA]
C ₁₀ H ₁₄ N ₄ O ₃	[603-00-9]	(<i>R,S</i>)-3,7-dihydro-7-(2-hydroxypropyl)-1,3-dimethyl-1 <i>H</i> -pyrine-2,6-dione (proxiphylline)					
		FUS(I)		24.7	408.2		
		FUS(II)		20.8	389.2	DSC	[2000GRI/AUE]
C ₁₀ H ₁₄ N ₄ O ₄	[479-18-5]	7-(2,3-dihydroxypropyl)-3,7-dihydro-1,3-dimethyl-1 <i>H</i> -purine-2,6-dione (dyphylline)					
		FUS		32.8	434.5	DSC	[2013BRA/AMH]
		FUS		39.3	435.7	DSC	[1999GRI/AUE]
C ₁₀ H ₁₄ N ₄ O ₄	[72376-77-3]	(<i>S</i>)-7-(2,3-dihydroxypropyl)-3,7-dihydro-1,3-dimethyl-1 <i>H</i> -purine-2,6-dione					
		FUS		31.7	438.9	DSC	[2013BRA/AMH]
C ₁₀ H ₁₄ N ₄ O ₄	[72376-78-4]	(<i>R</i>)-7-(2,3-dihydroxypropyl)-3,7-dihydro-1,3-dimethyl-1 <i>H</i> -purine-2,6-dione					
		FUS		31.7	438.9	DSC	[2013BRA/AMH]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
C ₁₀ H ₁₄ O	[3180-09-4]	2-butylphenol					
	V	(403–533)	55.1	418	A	[1987STE/MAL, 1975ARR/MEL]	
	V	(382–520)	52.9	398		[1953STA/MUL]	
	V	(382–520)	51.0	423		[1953STA/MUL]	
C ₁₀ H ₁₄ O	[89-72-5]	2-sec-butylphenol					
	V	(451–513)	52.1	466	A, GS, EB	[1987STE/MAL, 1964HAN/HAR]	
	C ₁₀ H ₁₄ O	[88-18-6]	2-tert-butylphenol				
		V	(289–329)	62.6 ± 0.2	309	GS	[1999VER2]
V		(289–329)	63.2 ± 0.2	298	GS	[1999VER2]	
V		(409–467)	74.1	424	EB	[1990NES/NAZ]	
V		(409–465)	52.9	424		[1986TSV/NAZ]	
V		(353–498)	54.9	368	A	[1987STE/MAL]	
V		(330–507)	55.6	348		[1953STA/MUL]	
V		(330–507)	53.9	373		[1953STA/MUL]	
C ₁₀ H ₁₄ O	[4074-43-5]	3-butylphenol					
	V	(396–533)	62.5	411	A	[1987STE/MAL]	
	V	(396–533)	56.6	398		[1953STA/MUL]	
	V	(396–533)	54.4	423		[1953STA/MUL]	
C ₁₀ H ₁₄ O	[585-34-2]	3-tert-butylphenol					
	SUB		88.9 ± 0.5	298	C	[1999RIB/MAT2]	
	SUB	(278–319)	86.0 ± 0.5	298	GS	[1999VER2]	
	SUB	(266–299)	70.7	281		[1987STE/MAL]	
	V	(320–348)	69.1 ± 0.8	334	GS	[1999VER2]	
	V	(320–348)	71.3 ± 0.8	298	GS	[1999VER2]	
	V	(391–524)	62.4	406	A	[1987STE/MAL]	
	V	(391–524)	56.6	398		[1953STA/MUL]	
C ₁₀ H ₁₄ O	[1638-22-8]	4-butylphenol					
	V	(395–653)	61.7	410	A	[1987STE/MAL]	
	V	(357–529)	57.6	373		[1953STA/MUL]	
	V	(357–529)	56.6	398		[1953STA/MUL]	
	V	(357–529)	54.4	423		[1953STA/MUL]	
C ₁₀ H ₁₄ O	[99-71-8]	4-sec-butylphenol					
	V	(344–516)	59.0	359	A	[1987STE/MAL, 1947STU]	
C ₁₀ H ₁₄ O	[98-54-4]	4-tert-butylphenol					
	FUS		14.52	373.2	DTA	[1972INO/LIA]	
	SUB		89.4 ± 2.5	298	C	[1999RIB/MAT2]	
	SUB	(293–334)	85.0 ± 0.5	313	GS	[1999VER2]	
	SUB	(293–334)	85.9 ± 0.5	298	GS	[1999VER2]	
	SUB	(280–304)	84.3	292		[1987STE/MAL, 1960AIH]	
	V		67.9 ± 1.0	298	C	[1999RIB/MAT2]	
	V	(471–525)	54.3	486	A, GS, EB	[1987STE/MAL, 1947STU, 1964HAN/HAR]	
	V	(346–523)	59.6	348		[1953STA/MUL]	
	V	(346–523)	57.6	373		[1953STA/MUL]	
C ₁₀ H ₁₄ O	[1126-79-0]	butyl phenyl ether					
	V	(391–483)	48.9	406	A	[1987STE/MAL, 1949DRE/SHR, 1984BOU/FRI]	

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₄ O	[4371-48-6] V	3-isopropyl-2-methylphenol (365–516)	60.2	380	EB	[1969LAM/PER]
C ₁₀ H ₁₄ O	[1740-97-2] V	4-isopropyl-2-methylphenol (382–503)	59.8	397	EB	[1969LAM/PER]
C ₁₀ H ₁₄ O	[499-75-2] V V V V	5-isopropyl-2-methylphenol (carvacrol) (330–422) (387–512) (343–510)	66.2 68.2 59.4 56.5	345 298 402 358	TGA GC EB A	[2014LIM/CRE] [2002VAN/PAR] [1969LAM/PER] [1987STE/MAL, 1947STU]
C ₁₀ H ₁₄ O	[3228-04-4] V	6-isopropyl-2-methylphenol (371–499)	54.5	386	EB	[1969LAM/PER]
C ₁₀ H ₁₄ O	[1197-34-8] V	3,5-diethylphenol (387–521)	54.3	402	A	[1987STE/MAL, 1955VON/GEB]
C ₁₀ H ₁₄ O	[4167-74-2] V	4-isobutylphenol (345–510)	58.1	360	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₄ O	[527-35-5] V	2,3,5,6-tetramethylphenol (381–522)	51.2	396	A	[1987STE/MAL, 1955VON/GEB]
C ₁₀ H ₁₄ O	[89-83-8] FUS FUS FUS FUS FUS SUB SUB SUB SUB SUB V V V V V V V V V V	2-isopropyl-5-methylphenol (thymol) (273–295) (293–323) (229–312) (273–313) (283–323) (333–433) (393–433) (381–514) (339–514) (339–514) (339–514) (339–514) (339–514) (339–514) (339–514) (339–514) (337–505) (337–505)	22.1 17.54 17.4 20.99 19.12 22.18 75.1 89.1 ± 4.5 U 69.0 91.2 ± 4.1 91.5 70.9 68.7 70.5 58.4 63.2 58.4 55.2 52.8 51.5 54.9 60.3	322.7 322.8 322.0 322.4 324.0 324.2 284 303 270 298 298 298 396 373 398 423 448 473 352 387	DSC DSC DSC DSC DSC DSC A HSA TGA TE GC GC CGC A A A A A A A I	[2016ZHU/CHE] [2016OKU/PAD] [2012MAN/VIL] [2010MIY/KHA] [2004STU/WIT] [1991CHI/BRA] [1987STE/MAL, 1960AIH] [1975CHI] [1971ASH] [1970COX/PIL, 1960JON, 1947BAL] [1957SHE/BRY, 1987STE/MAL] [2005HOS/GRY] [2002VAN/PAR] [1995CHI/HOS] [1987STE/MAL] [1953STA/MUL] [1953STA/MUL] [1953STA/MUL] [1953STA/MUL] [1953STA/MUL] [1953STA/MUL] [1947STU] [1943CRA]
C ₁₀ H ₁₄ O	[22327-39-5] FUS (metastable) FUS (stable) V	(dl)-carvone (330–501)	8.98 12.70 55	231.0 241.2 345	DSC A	[1996GAL/VAN3] [1987STE/MAL, 1947STU]
C ₁₀ H ₁₄ O	[6485-40-1] FUS	(l)-carvone 11.55	247.7	DSC	[1996GAL/BOU, 1996GAL/VAN2]	
C ₁₀ H ₁₄ O	[2244-16-8] V V	(+)-carvone (283–313) (323–433)	58.6 ± 2.8 58.2	298 298	GS GC	[2010WID/BRU] [2005HOS/GRY]
C ₁₀ H ₁₄ O	[1196-01-6] V V	(1S,5S)-4,6,6-trimethylbicyclo[3.1.1]hept-3-en-2-one ((-)-verbenone) (274–308)	58.6 ± 0.1 58.9 ± 1.5	298 298	Static C	[2013STE/FUL] [2013STE/FUL]
C ₁₀ H ₁₄ O	[18486-69-6] V	(-)-myrtenal (323–423)	55.1	298	GC	[2005HOS/GRY]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
C ₁₀ H ₁₄ O	[1585-06-4] V	4-ethylphenetole (321–481)	54.3	336	A	[1987STE/MAL, 1947STU]	
C ₁₀ H ₁₄ O	[22545-12-6] V	2-(2-ethylphenyl)ethanol (420–653)	59.5	435	A	[1987STE/MAL, 1949DRE/MAR, 1949DRE/SHR]	
C ₁₀ H ₁₄ O	[22545-13-7] V	2-(4-ethylphenyl)ethanol (420–653)	59.1	435	A	[1987STE/MAL, 1949DRE/MAR, 1949DRE/SHR]	
C ₁₀ H ₁₄ O	[536-60-7] V	4-isopropylbenzyl alcohol (347–520)	59.7	362	A	[1987STE/MAL, 1947STU]	
C ₁₀ H ₁₄ O	[7384-80-7] V	2-methyl-3-phenyl-1-propanol (343–393)	71.9	358	A	[1987STE/MAL]	
C ₁₀ H ₁₄ O	[3299-05-6] V	(1-ethoxyethyl)benzene (286–318)	52.4 ± 0.2	302	GS	[2001VER/HEI]	
	V		52.6 ± 0.2	298	GS	[2001VER/HEI]	
C ₁₀ H ₁₄ O	[700-58-3] TRS	2-adamantanone (5–310)	7.63	216.4	AC	[2006BAZ/BLO]	
	FUS		11.77	557.5	DSC	[2006BAZ/BLO]	
	SUB		66.4 ± 0.3	298	C	[2006BAZ/BLO]	
	SUB		(280–333)	66.3 ± 0.8	298	ME	[2006BAZ/BLO]
	SUB			76.1 ± 1.5	298	C	[2002MIR/LEB, 2006BAZ/BLO, 2002MIR/LEB2, 2001MAT/LEB]
	SUB		(320–370)	80.3 ± 2.5	298	BG	[1978ARO/STE]
	V			60.7 ± 0.2	298	GC	[2002VAN/PAR]
C ₁₀ H ₁₄ O	[935-67-1] V	(1-methoxy-1-methylethyl)-benzene (278–313)	53.0 ± 0.5	296	GS	[2001HEI/VER]	
	V		52.9 ± 0.5	298	GS	[2001HEI/VER]	
C ₁₀ H ₁₄ O ₂	[4026-05-5] V	1,2-dihydroxy-3- <i>tert</i> -butylbenzene (334–384)	70.1 ± 0.8	359	GS	[2000VER/SCH]	
	V		73.5 ± 0.8	298	GS	[2000VER/SCH]	
C ₁₀ H ₁₄ O ₂	[98-29-3] FUS	1,2-dihydroxy-4- <i>tert</i> -butylbenzene (334–384)	15.1	330.4	DSC	[2000VER/SCH]	
	FUS		4.5	327		[1997STE/CHI2]	
C ₁₀ H ₁₄ O ₂							
		SUB (303–323)	98.7 ± 0.9	313	GS	[2000VER/SCH]	
		SUB (303–323)	99.2 ± 0.9	298	GS	[2000VER/SCH]	
		SUB	99.3 ± 1.4	298	C	[1984CAR]	
		V (439–516)	96.5 ± 2.8	298	EB	[1997STE/CHI2]	
		V (439–516)	69.6 ± 0.6	440	EB	[1997STE/CHI2]	
C ₁₀ H ₁₄ O ₂							
		V (439–516)	65.2 ± 0.5	480	EB	[1997STE/CHI2]	
C ₁₀ H ₁₄ O ₂	[1948-33-0] FUS	2- <i>tert</i> -butyl-1,4-dihydroxybenzene (333–368)	27.74	350.9	DSC	[1999VER7]	
	SUB		101.2 ± 1.3	351	GS	[1999VER7]	
	SUB		104.4 ± 1.3	298	GS	[1999VER7]	
C ₁₀ H ₁₄ O ₂	[13331-20-9] V	1,3-dihydroxy-2-butylbenzene (413–469)	75.3	428	A, GC	[1987STE/MAL, 1975KUN/LIL]	
C ₁₀ H ₁₄ O ₂	[2785-87-7] V	2-methoxy-4-propylphenol (373–413)	78.0	388	A	[1987STE/MAL]	
C ₁₀ H ₁₄ O ₂		<i>tert</i> -butylcatechol (isomer not specified) (421–466)	58.2	443		[1965GAK/BAB]	
C ₁₀ H ₁₄ O ₂	[490-06-2] SUB	6-methyl-3-isopropyl-1,2-dihydroxybenzene (421–466)	96.6 ± 0.9	298	C	[1984CAR]	

[Note: Reference [2000VER/SCH] notes the large discrepancy between their measured enthalpy of fusion and that reported in [1997STE/CHI2]. The authors of [2000VER/SCH] attribute the difference to the solid sample in [1997STE/CHI2] being only partly crystalline.]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₄ O ₂	[18523-34-7] V	1,1-dimethoxy-2-phenylcyclopropane (278–313)	63.7 ± 0.6	298	GS	[2002VER]
C ₁₀ H ₁₄ O ₂	[4316-35-2] V	acetophenone dimethyl ketal (268–303)	54.0 ± 0.8	298	GS	[2002VER]
	V	(268–303)	55.0 ± 1.3	286	GS	[1995VER/DOG]
C ₁₀ H ₁₄ O ₂	[2767-84-2] FUS	(1S)-(+)-camphorquinone	6.07	473.2	DSC	[1992ELS/PRA]
[Note: Fusion enthalpy seems low, the compound may have an unmeasured phase transition at a lower temperature.]						
C ₁₀ H ₁₄ O ₂	[21651-62-7] V	(4aS,7S,7aR)-nepetalactone	69.4 ± 1.9	298	CGC	[2016SIM/GOB]
C ₁₀ H ₁₄ O ₂	[17257-15-7] V	(4aS,7S,7aS)-nepetalactone	68.0 ± 1.9	298	CGC	[2016SIM/GOB]
C ₁₀ H ₁₄ O ₃	[707-07-3] V	trimethyl orthobenzoate (294–333)	59.9 ± 0.4	298	GS	[2002VER]
	V	(294–333)	58.6 ± 0.4		GS	[1995RAK/VER2]
C ₁₀ H ₁₄ O ₃	[595-31-3] TRS	(d)-camphoric anhydride	19.5	404.4		
	FUS		5.65	493.6	DSC	[1984WEI/LEF]
	TRS		29	406		
	FUS		8.7	495	DSC	[1979MJO]
C ₁₀ H ₁₄ O ₃	[76-32-4] TRS	(dl)-camphoric anhydride	17.31	374.5		
	FUS		5.72	493.9	DSC	[1984WEI/LEF]
	TRS		24.0	375		
	FUS		8.7	495	DSC	[1979MJO]
C ₁₀ H ₁₄ O ₃	FUS	(racemic) 3-(2-methylphenoxy)propane-1,2-diol	32.2	343.8	DSC	[2008BRE/BRE]
C ₁₀ H ₁₄ O ₃	[52153-44-3] FUS	(S)- 3-(2-methylphenoxy)propane-1,2-diol	34.4	364.2	DSC	[2008BRE/BRE]
C ₁₀ H ₁₄ O ₃	[59-47-2] FUS	3-(2-methylphenoxy)propane-1,2-diol (mephenesin)	29.8	343.1	DSC	[2014SAI/MUR]
C ₁₀ H ₁₄ O ₅	V	allyl[(1-allyloxycarbonyl)ethyl] carbonate (353–503)	61.9	368	A	[1987STE/MAL]
C ₁₀ H ₁₄ O ₈	FUS	(dl)-dimethyl diacetyltartrate	25.94	355.2		[1991CHI/BRA]
C ₁₀ H ₁₄ O ₈	FUS	(d)-dimethyl diacetyltartrate	29.29	377.2		[1991CHI/BRA]
C ₁₀ H ₁₅ Br	[768-90-1] TRS	1-bromoadamantane (6–320)	0.001	31	AC	[2005BAZ/BLO]
	TRS	(6–320)	1.39	282.3	AC	[2005BAZ/BLO]
	TRS	(290–430)	7.42	309.9	DSC	
	FUS	(290–430)	3.97	391.8	DSC	[2005BAZ/BLO]
	TRS		0.88	279		
	TRS		6.93	310.5		
	FUS		3.83	396.5	DSC	[1977CLA/KNO]
	SUB(II)	(288–310)	71.6 ± 1.1	299	ME	[2005BAZ/KAB]
SUB(II)		71.8 ± 0.3	303	C	[2005BAZ/KAB]	
SUB(I)	(310–323)	63.2 ± 2.1	317	ME	[2005BAZ/KAB]	
C ₁₀ H ₁₅ Br	[7314-85-4] TRS	2-bromoadamantane	12.09	277.9		
	FUS		3.21	413.4	DTA	[2014NEG/BAR]
C ₁₀ H ₁₅ Cl	[935-56-8] FUS	1-chloroadamantane (13–445)	5.53	439.7	AC	[1998KOB/KYO]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₅ Cl			6.01	244.2		
			4.87	442.5	DSC	[1977CLA/KNO]
			63.2 ± 0.7	298	ME	[1999FLO/DAV]
C ₁₀ H ₁₅ Cl	[7346-41-0]	2-chloroadamantane				
			0.48	224.4		
			8.27	240.9		
			0.17	244.0		
			5.3	467.5	DTA	[2014NEG/BAR]
			0.47	227		
			8.3	242	DSC	[1988PAR/KAW]
		61.5 ± 0.8	298	ME	[2002ABB/CAS]	
C ₁₀ H ₁₅ Cl ₃ OS	[76633-71-1]	2,3,3-trichloro-2-propenethioic acid, O-heptyl ester				
	V	(433–483)	72.7		GC	[1980PIT/KIS]
C ₁₀ H ₁₅ F	[768-92-3]	1-fluoroadamantane				
			1.65	227	DSC	[1991KAW/GIL]
			1.5	221.6	DSC	[1977CLA/KNO]
C ₁₀ H ₁₅ I	[768-93-4]	1-iodoadamantane				
			2.14	211		
			10.22	347	DSC	[1977CLA/KNO]
C ₁₀ H ₁₅ N	[6310-21-0]	2- <i>tert</i> -butylaniline				
	V	(279–318)	62.7 ± 0.4	298	GS	[2000VER3]
C ₁₀ H ₁₅ N	[579-66-8]	2,6-diethylaniline				
	V	(284–328)	69.5 ± 0.6	306	GS	[2000VER3]
	V	(284–328)	65.9 ± 0.6	298	GS	[2000VER3]
C ₁₀ H ₁₅ N	[2051-53-8]	5-isopropyl-2-methylaniline				
	V	(360–386)	72.0	373	A	[1987STE/MAL]
C ₁₀ H ₁₅ N	[537-46-2]	<i>N</i> - α -dimethylphenethylamine				
	V		58.7 ± 4.3	298	CGC	[2014THO/GOB]
	V	(270–304)	52.8	285	A	[1987STE/MAL]
C ₁₀ H ₁₅ N	[1126-78-9]	<i>N</i> -butylaniline				
	V	(413–643)	55.6	428	A	[1987STE/MAL]
C ₁₀ H ₁₅ N	[91-66-7]	<i>N,N</i> -diethylaniline				
	V	(343–493)	54.5	358	A	[1987STE/MAL]
C ₁₀ H ₁₅ N	[122-09-8]	α , α -dimethylphenethylamine				
	V		60.2 ± 2.6	298	CGC	[2013GOB/RAT]
C ₁₀ H ₁₅ NO	[3319-03-7]	2-(dimethylamino)-1-phenylethanone				
	V	(293–333)	69.7 ± 0.5	298	GS	[1994WEL/VER]
C ₁₀ H ₁₅ NO	[103-62-8]	4-(butylamino)phenol				
	V	(464–511)	71.2	478	A	[1987STE/MAL]
C ₁₀ H ₁₅ NO	[55658-55-4]	(<i>dl</i>)-carvoxime				
	FUS		17.03	365.1	DTA	[1981CHI/GAR]
	SUB	(324–343)	101.6 ± 5	334	HSA	[1981CHI/GAR]
C ₁₀ H ₁₅ NO	[80124-30-7]	(<i>d</i>)-carvoxime				
	FUS		22.72	346.5	DTA	[1981CHI/GAR]
	SUB	(324–343)	90.8 ± 4.5	334	HSA	[1981CHI/GAR]
C ₁₀ H ₁₅ NO	[90-82-4]	(+)- <i>threo</i> -2-(methylamino)-1-phenyl-1-propanol (pseudoephedrine)				
	FUS		31.95	392.4	DSC	[1999LI/ZEL]
C ₁₀ H ₁₅ NO	[4125-58-0]	(±)- <i>threo</i> -2-(methylamino)-1-phenyl-1-propanol (pseudoephedrine)				
	FUS		34.1	391.1	DSC	[1999LI/ZEL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₅ NO	[299-42-3]	(-)-2-(methylamino)-1-phenyl-1-propanol (ephedrine)				
	FUS		11.97	310.0	DSC	[2010COO/DAV]
[Note: The authors of [2010COO/DAV] state that ephedrine hydrates readily in air, and that the sample used was as received. Sample may be mixture of hydrated and unhydrated phases.]						
C ₁₀ H ₁₅ NO	[90-81-3]	(±)-2-(methylamino)-1-phenyl-1-propanol (ephedrine)				
	FUS		17.33	312.9	DSC	[1999LI/ZEL]
C ₁₀ H ₁₅ NO ₂	[120-07-0]	<i>N,N</i> -bis(2-hydroxyethyl)aniline (418–611)				
	V		77.6	433	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₅ NO ₂	[7575-82-8]	1-nitroadamantane				
	FUS		4.18	435.2	DSC	[1990FRI/DOG]
[Note: Entropy seems low, the compound may have lower temperature phase transitions.]						
C ₁₀ H ₁₅ NO ₂	[54564-31-7]	2-nitroadamantane				
	FUS		4.23	452.2	DSC	[1990FRI/DOG]
[Note: Entropy seems low, the compound may have lower temperature phase transitions.]						
C ₁₀ H ₁₅ NO ₂	[54564-31-7]	2-nitroadamantane				
	SUB	(331–368)	58.0 ± 2.3	350	T	[1990FRI/DOG]
C ₁₀ H ₁₅ NO ₃	[32314-61-7]	1-nitroxoadamantane				
	SUB		79.9 ± 1.5	298	C	[2002MIR/LEB2, 2001MAT/LEB]
C ₁₀ H ₁₅ N ₅	[153495-35-3]	6,9-dimethyl-8-propyladenine				
	FUS		30.2	411.9		[1994ZIE/ZIE]
C ₁₀ H ₁₅ N ₅	[153495-35-3]	6,9-dimethyl-8-propyladenine				
	SUB	(345–349)	129.0 ± 0.1	347	ME	[1994ZIE/ZIE]
C ₁₀ H ₁₅ N ₅	[117954-98-0]	8-butyl-9-methyladenine				
	SUB	(363–368)	135.1 ± 1.2	366	ME	[1987KAM/ZIE]
C ₁₀ H ₁₅ N ₅ O ₃	[39809-25-1]	9-(4-hydroxy-3-hydroxymethylbut-1-yl)guanine				
	FUS		35.74	551.2	DSC	[2004AHM/BAR]
C ₁₀ H ₁₅ O ₃ PS ₂	[55-38-9]	<i>O,O</i> -dimethyl- <i>O</i> -[3-methyl-4-(methylthio)phenyl]thiophosphate				
	V	(293–373)	75.6	308	A	[1987STE/MAL, 1999DYK/SVO]
C ₁₀ H ₁₆	[53130-19-1]	tricyclo[4.3.1.0 ^{3,8}]decane				
	SUB	(310–335)	64.9 ± 1.8	323	TSGC	[1975CLA/KNO]
	SUB		65.6	298	H	[1975CLA/KNO, 1993CHI/HOS]
C ₁₀ H ₁₆	[6004-38-2]	tricyclo[5.2.1.0 ^{2,6}]decane				
	TRS	(80–360)	2.57	204.3		
	FUS	(80–360)	3.07	345.3	AC	[2003KON/TAN]
	FUS		2.95	352	DSC	[1996DOM/HEA, 1971BOY/SAN]
	SUB	(359–443)	52.9 ± 1.3	298	BG	[1971BOY/SAN, 1977PED/RYL]
	V	(394–457)	46.0	409	EB	[2009XIN/FAN, 2011XIN/YAN]
	V	(358–465)	43.5	373	A	[1987STE/MAL]
	V	(358–417)	43.5 ± 0.8	387	BG	[1971BOY/SAN]
C ₁₀ H ₁₆		<i>exo</i> -tricyclo[5.2.1.0 ^{2,6}]decane (395–447)				
	V		45.9	410	EB	[2014LI/SUN]
C ₁₀ H ₁₆	[2825-82-3]	<i>exo</i> -tetrahydrodicyclopentadiene				
	TRS		3.18	162.1		
	FUS		1.2	183.2	DSC	[2002CHI/HIL]
C ₁₀ H ₁₆	[2825-83-4]	<i>endo</i> -tetrahydrodicyclopentadiene				
	TRS		10.7	213.8		
	FUS		3.48	356.8	DSC	[2002CHI/HIL]
C ₁₀ H ₁₆	[17760-91-7]	tricyclo[5.2.1.0 ^{4,10}]decane (hexahydrotriquinacene)				
	SUB		56.6 ± 1.3	307	TSGC	[1979CLA/KNO]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₆	[283-50-1]	bicyclo[3.3.2]decane				
	SUB	(290–340)	58.2 ± 2	298	TSGC	[1977PAR/STE]
C ₁₀ H ₁₆	[281-23-2]	adamantane				
	TRS	(80–370)	3.28	208.7	AC	[2011BAZ/BLO]
	TRS		2.8	207.7	DSC	[2007BLA]
	TRS	(6–330)	3.21	208	AC	[2006VAN/VAN]
	FUS		12.4	543	DSC	[2001ESP/CEO]
	FUS	(340–600)	13.8	543.2		[2000KAB/BLO]
	FUS		10.9	541	DSC	[1998CHI/HES, 1966PIR]
	TRS	(5–350)	3.38	208.6	AC	[1960CHA/WES, 1961WES, 1996DOM/HEA, 1993HAK]
	SUB		58.2 ± 1.2	298	C	[2002MIR/LEB2]
	SUB		59.4 ± 0.2	298	C	[2001MAT/LEB]
	SUB		59.1	298		[2000MOK/RUZ]
	SUB		58.3	308	C	[2000KAB/BLO]
	SUB		52.6	298	CGC-DSC	[1998CHI/HES]
	SUB	(278–368)	59.7	293	A	[1987STE/MAL]
	SUB	(328–373)	55.3	343	A	[1987STE/MAL]
	SUB		58.45	298	C	[1982JOC/DEK]
	SUB	(278–443)	59.5	300		[1975LEE/SLU]
	SUB	(310–336)	59.7 ± 0.8	326	TSGC	[1975CLA/KNO, 1979CLA/KNO]
	SUB		58.6	298	H	[1975CLA/KNO, 1993CHI/HOS]
	SUB	(310–336)	59.3 ± 0.2	326	BG	[1971BOY/SAN]
	SUB		60.5 ± 1.3	298	H	[1971BOY/SAN, 1993CHI/HOS]
	SUB	(312–366)	53.6	332	I	[1971WU/HSU]
	SUB		54.8	298	H	[1971WU/HSU, 1993CHI/HOS]
	SUB		59.3 ± 0.16	298	C	[1970MAN/RAP]
	SUB		59.5	298		[1970VON/WIL, 1971BUT/CAR]
	SUB	(343–483)	54.3	358	A	[1987STE/MAL, 1968FLO]
	SUB	(313–353)	58.6 ± 0.6	333	DBM	[1967BRA/SZI]
	SUB		59.6	298	H	[1967BRA/SZI, 1993CHI/HOS]
	SUB		62.3	298		[1967BRA/SZI]
	V		48.2	298	GC	[2002VAN/PAR]
	V	(403–453)	51.7	298	CGC	[1995CHI/HOS]
C ₁₀ H ₁₆	[79-92-5]	(<i>dl</i>)-2,2-dimethyl-3-methylenebicyclo[2.2.1]heptane (camphene)				
	FUS		2.7	317.6	DSC	[2014STE/FUL]
	SUB	(238–308)	47.5 ± 0.3	298	Static	[2014STE/FUL]
	SUB		46.8		C	[1977KOZ/BYC]
	V	(310–407)	37.7	430	BP	[2014WAN/HUA]
	V	(313–413)	44.7	298	GC	[2005HOS/GRY]
	V	(320–434)	44.0	335	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₆	[4497-92-1]	(<i>d</i>)-3,7,7-trimethylbicyclo[4.1.0]hept-2-ene (2-carene)				
	V	(313–413)	48.5	298	GC	[2005HOS/GRY]
	V	(293–450)	45.5	308	A	[1987STE/MAL, 1954BUK/MAJ]
C ₁₀ H ₁₆	[498-15-7]	(<i>d</i>)-3,7,7-trimethylbicyclo[4.1.0]hept-3-ene (3-carene)				
	V	(238–308)	48.1 ± 0.3	298	Static	[2014STE/FUL2]
	V	(313–413)	48.5	298	GC	[2005HOS/GRY]
	V	(359–443)	42.8	374	A	[1987STE/MAL, 1937RUD/KOR]
C ₁₀ H ₁₆	[5989-27-5]	(<i>d</i>)-limonene				
	FUS		11.38	199.2		[1996GAL/VAN3, 2000GAL/VAN]
	V	(238–308)	49.3 ± 0.3	298	Static	[2014STE/FUL2]
	V	(326–445)	49.5	298		[2009CLA/GOM]
	V	(313–413)	49.6	298	GC	[2005HOS/GRY]
	V		49.9	298	GC	[2002VAN/PAR]
	V	(339–495)	46.1 ± 0.2	350	EB	[2002STE/CHI2]
	V	(339–495)	43.5 ± 0.2	390	EB	[2002STE/CHI2]
	V	(339–495)	40.9 ± 0.3	430	EB	[2002STE/CHI2]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₆	V	(339–495)	37.9 ± 0.6	470	EB	[2002STE/CHI2]
	V	(243–461)	49.2	300		[1999DIA/GUE]
	V	(373–423)	49.6	298	CGC	[1995CHI/HOS]
	V		48.9 ± 0.1	298	C	[1987ATI/SAI]
	V	(287–448)	44.5	302	A	[1987STE/MAL]
	V	(288–323)	47.7	303	A	[1987STE/MAL]
C ₁₀ H ₁₆	[5989-54-8]	<i>(l)</i> -limonene				
	V	(238–308)	49.3 ± 0.3	298	Static	[2014STE/FUL2]
	V	(320–451)	47.4	335		[1996ROD/BER]
	V	(325–450)	47.0	340		[1993NAD/BER]
	V	(303–363)	49.0 ± 0.1	298	C	[1987ATI/SAI]
C ₁₀ H ₁₆	[138-86-3]	<i>(dl)</i> -limonene				
	V	(347–420)	45.3	370	BP	[2014WAN/HUA]
C ₁₀ H ₁₆	V	(287–448)	45.9	302	A	[1987STE/MAL]
	V	limonene (353–405)	39.4	379	TGA	[2002HAZ/DOL]
C ₁₀ H ₁₆	V	β -myrcene (303–363)	47.0	318		[1954BUK/MAJ]
	[123-35-3]	7-methyl-3-methylene-1,6-octadiene (myrcene)				
C ₁₀ H ₁₆	V		50.6	298	GC	[2002VAN/PAR]
	V	(287–445)	45.7	302	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₆	[99-83-2]	5-isopropyl-2-methyl-1,3-cyclohexadiene				
	V	(293–448)	47.7	308	A	[1987STE/MAL]
C ₁₀ H ₁₆	[555-10-2]	3-isopropyl-6-methylenecyclohexene				
	V	(303–363)	47.7	318	A	[1987STE/MAL, 1954BUK/MAJ]
C ₁₀ H ₁₆	[7785-26-4]	<i>(-)</i> - α -pinene				
	V	(238–308)	44.6 ± 0.1	298	Static	[2013STE/FUL]
C ₁₀ H ₁₆	V	α -pinene (320–429)	42.5	335		[1996ROD/BER]
	V	(365–430)	40.2	380		[1993REI/SAN]
	V		44.6 ± 0.1	298	C	[1987AN/HU]
	V	(327–363)	43.6			[1954TUC/HAW]
	V	(363–395)	40.8			[1954TUC/HAW]
	V	(395–413)	39.6			[1954TUC/HAW]
C ₁₀ H ₁₆	[80-56-8]	<i>(d)</i> - α -pinene				
	V	(308–427)	45.4	298		[2009CLA/GOM]
	V	(292–433)	45.0	307	A	[1987STE/MAL]
	V	(293–363)	43.4	308		[1954BUK/MAJ]
C ₁₀ H ₁₆	[127-91-3]	β -pinene				
	V	(290–439)	46.0	305		[1996ROD/BER]
	V	(364–439)	41.6	379		[1993REI/SAN]
	V		45.8 ± 0.1	298	C	[1987AN/HU]
	V	(353–371)	44.0			[1954TUC/HAW]
V	(372–404)	41.5		[1954TUC/HAW]		
C ₁₀ H ₁₆	V	<i>(l)</i> - β -pinene (291–441)	46.1	306	A	[1987STE/MAL]
	V	(293–363)	44.9	308		[1954BUK/MAJ]
C ₁₀ H ₁₆	[18172-67-3]	<i>(-)</i> - β -pinene				
	V	(248–308)	45.9 ± 0.1	298	Static	[2013STE/FUL]
C ₁₀ H ₁₆	[586-62-9]	terpinolene				
	V	(313–363)	50.8	328		[1954BUK/MAJ]
C ₁₀ H ₁₆	V	(305–458)	50.5	320	A	[1987STE/MAL, 1947STU]
	[99-85-4]	γ -terpinene				

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₆	V	(313–413)	51.4	298	GC	[2005HOS/GRY]
	[4221-98-1] V	sabinene (313–413)	46.9	298	GC	[2005HOS/GRY]
C ₁₀ H ₁₆	[4221-98-1] V	(-)- α -phellandrene (313–423)	48.3	298	GC	[2005HOS/GRY]
	C ₁₀ H ₁₆	[2867-05-2] V	α -thujene (313–413)	44.8	298	GC
C ₁₀ H ₁₆ Cl ₃ NOS	[2303-17-5] FUS	carbamothioic acid, bis(isopropyl), <i>S</i> -(2,3,3-trichloroallyl) ester	27.11	306.4	DSC	[1991ACR, 1990DON/DRE]
	V	(293–318)	84.3	305	A	[1987STE/MAL]
	V	(293–318)	84.0			[1983SPE/CLI, 1978GRO/SPE]
C ₁₀ H ₁₆ NO ₄ PS	[52-85-7] FUS	<i>O</i> -[4-(dimethylamino)sulfonyl]phenyl <i>O,O</i> -dimethylphosphorothionate	26.5	326.8	DSC	[1990DON/DRE]
	C ₁₀ H ₁₆ N ₂	[1871-96-1] FUS	sebaconitrile	28.2	281.2	DSC
V		(303–343)	83.7	318	A	[1987STE/MAL]
C ₁₀ H ₁₆ N ₂	[33089-74-6] V	<i>N'</i> -(2,4-dimethylphenyl)- <i>N</i> -methylformamidine	89.2	303		[1998ZHA/MO]
	C ₁₀ H ₁₆ N ₂	[85688-96-6] SUB	methyl(1,1,1-trimethylpropyl)propanedinitrile	62.0 ± 0.7	298	
C ₁₀ H ₁₆ N ₂		[85688-95-5] FUS	(1,1-dimethylpropyl)ethylpropanedinitrile	19.25	307.5	
	SUB		76.2 ± 0.8	298		[1990BEC/DOG]
C ₁₀ H ₁₆ N ₂	[85688-81-9] FUS	<i>meso</i> -2,3-diethyl-2,3-dimethylsuccinonitrile	26.78	370.2		[1983BAR/BEC]
	C ₁₀ H ₁₆ N ₂	[71621-00-6] V	<i>N</i> -cyclohexylmethylimidazole (314–353)	77.5 ± 0.4	298	GS
C ₁₀ H ₁₆ N ₂ O ₂		[82413-40-9] FUS	1,3-dimethyl-5-butyluracil	22.0	312.1	DSC
	SUB	(306–311)	106.3 ± 1.3	309	ME	[1996KAM/ZIE]
C ₁₀ H ₁₆ N ₂ O ₂	[125-40-6] FUS	5-ethyl-5-(1-methylpropyl)-2,4,6(1 <i>H</i> , 3 <i>H</i> , 5 <i>H</i>)-pyrimidinetrione (butabarbitione)	23.1		DSC	[1982TRE/VAU]
C ₁₀ H ₁₆ N ₂ O ₂ S	[1709-39-3] FUS	4-amino- <i>N,N</i> -diethylbenzene sulfonamide	19.4	378.8	DSC	[2014PER/KAZ]
	C ₁₀ H ₁₆ N ₂ O ₃	[77-28-1] FUS(I)	5-butyl-5-ethylbarbituric acid (butobarbital)	13.6	394.2	
FUS(II)			14.7	392.7		
FUS(III)			17.3	396.2	DSC	[1989CHA/DEM]
FUS			16.8		DSC	[1982TRE/VAU]
C ₁₀ H ₁₆ N ₄ O ₂ S	[55511-98-3] FUS	3-(5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl)-4-hydroxy-1-methyl-2-imidazolidinone	25.46	408.9	DSC	[1990DON/DRE]
	C ₁₀ H ₁₆ N ₆ S	[51481-61-9] FUS	<i>N</i> -cyano- <i>N'</i> -methyl- <i>N''</i> -[2-[(5-methyl-1 <i>H</i> -imidazol-4-yl)-thio]ethyl]guanidine (cimetidine)	35.49	414.15	DSC
FUS			U79.7	415.1	DSC	[2011DOM/POB]
FUS			41.36	414.9		
FUS			41.97	416.6	DSC	[2002SOU/DAV]
FUS(I)			41.0	413.8		
FUS(II)			39.7	413.5	DSC	[1999BAU/MAR]
FUS(A)			34.8	413.7		
FUS(B)			35.4	413.6		

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	FUS(C)		36.6	417.7		
	FUS(D)		38.2	412.2	DSC	[1996BAU]
[Note: Cimetidine is reported to have seven different crystalline forms [1990SUD/SAT], with only two being used in the pharmaceutical industry.]						
C ₁₀ H ₁₆ O	[29171-20-8]	3,7-dimethyl-6-octen-1-yn-3-ol (dehydrolinalool)				
	V	(406–471)	52.1	421	EB	[2001ZHU/LI]
	V	(359–381)	Unreliable			[1999ZAR/CHA]
	V	(369–445)	50.4 ± 0.1	407	Static	[1988BAG/GUR]
C ₁₀ H ₁₆ O		camphor				
	V	(343–383)	54.4	298	CGC	[1995CHI/HOS]
	V	(343–383)	54.5	298	CGC	[1995CHI/HOS]
	V	(343–383)	55.2	298	CGC	[1995CHI/HOS]
C ₁₀ H ₁₆ O	[464-48-2]	(-)-camphor				
	TRS		11.0	243.9		
	TRS		0.2	373.4		
	FUS		4.9	448.5	DSC	[2014STE/FUL]
	SUB	(273–308)	56.9 ± 0.3	298	Static	[2014STE/FUL]
C ₁₀ H ₁₆ O	[464-49-3]	(d)-camphor				
	TRS		11.2	242.7		
	TRS		0.16	370.0		
	FUS		6.3	451.8	DSC	[2010RIE/BAR]
	TRS		16.0	242.0		
	TRS		0.23	374.0		
	FUS		6.0	450.8	DSC	[2003ABR/SMI, 2010RIE/BAR]
	TRS		11.3	244.0		
	FUS		5.4	450.0	DSC	[1983SEK/TSU, 2010RIE/BAR]
	TRS		10.65	243.0		[1970ROB/ROS, 2010RIE/BAR]
	FUS		5.3	452.0	DSC	[1979MJO]
	TRS		11.5	245.0		[1956SCH/WAG, 2010RIE/BAR]
	FUS		6.0	450.8		[1899HUL, 2010RIE/BAR]
C ₁₀ H ₁₆ O	[76-22-2]	(dl)-camphor				
	TRS		1.3	206.1		
	TRS		0.17	364		
	FUS		5.9	448.0	DSC	[2010RIE/BAR]
	FUS		5.6	443.0	DSC	[2003ABR/SMI, 2010RIE/BAR]
	TRS		0.72	203.8		
	TRS		0.23	350.0		[1958SCH/WAG, 2010RIE/BAR]
	TRS		0.84	210.0		
	FUS		6.86	452.0		[1952SCH/FRE, 2010RIE/BAR]
	SUB		51.8 ± 0.8			[1977STE]
	SUB	(273–293)	51.5 ± 2.6	283	HSA	[1975CHI]
	SUB	(273–298)	U 65.8			[1960JON, 1940ZIL]
	SUB		50.7			[1960JON, 1937DEW]
	SUB	(273–453)	53.6	363		[1960JON]
	SUB	(285–318)	54.7	301		[1957SHE/BRY]
C ₁₀ H ₁₆ O	[464-49-3]	(+) -camphor				
	V		55.3	298	GC	[2002VAN/PAR]
C ₁₀ H ₁₆ O	[547-61-5]	(-)-trans-pinocarveol				
	V	(283–323)	62.5 ± 1.0	298	GS	[2010WID/BRU]
C ₁₀ H ₁₆ O	[1686-14-2]	α -pinene oxide				
	V		53.6	298	GC	[2002VAN/PAR]
C ₁₀ H ₁₆ O	[13854-85-8]	(d)-3-bornanone				
	SUB	(273–408)	54.2	288	A	[1987STE/MAL]
	SUB	(323–339)	55.0	331	A	[1987STE/MAL]
	SUB	(408–451)	49.8	423	A	[1987STE/MAL]
	V	(452–488)	44.6	467	A	[1987STE/MAL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₆ O	[4695-62-9]	<i>(d)</i> -1,3,3-trimethylbicyclo[2.2.1]heptan-2-one (fenchone)				
	FUS		17.4	278.6	DSC	[2014STE/FUL]
	SUB	(238–278)	67.3 ± 0.4	298	Static	[2014STE/FUL]
	V	(243–308)	51.8 ± 0.3	298	Static	[2014STE/FUL]
	[Note: VP measurements in [2014STE/FUL] include values for the subcooled liquid.]					
	V	(365–384)	47.0	374		[2002BAT]
	V		51.7 ± 0.1	298	C	[1987ATI/SAI]
C ₁₀ H ₁₆ O	[7787-20-4]	<i>(l)</i> -1,3,3-trimethylbicyclo[2.2.1]heptan-2-one (fenchone)				
	V		51.1 ± 0.1	298	C	[1987ATI/SAI]
	V		51.3 ± 0.1	298	C	[1987ATI/SAI]
	V		51.4 ± 0.1	298	C	[1985KUS]
	V		51.1 ± 0.1	298	C	[1985KUS]
	V	(301–464)	48.9	316	A	[1987STE/MAL, 1947STU]
	C ₁₀ H ₁₆ O	[89-82-7]	pulegone			
V		(353–453)	58.0	298	GC	[2005HOS/GRY]
V			62.0	298	GC	[2002VAN/PAR]
C ₁₀ H ₁₆ O	[471-15-8]	<i>(d)</i> -1-isopropyl-4-methylbicyclo[3.1.0]hexan-3-one (thujone)				
	V	(311–474)	51.8	326	A	[1987STE/MAL, 1947STU]
	V		51.4 ± 0.1	298	C	[1985KUS]
C ₁₀ H ₁₆ O	[499-74-1]	<i>(dl)</i> -3-isopropyl-6-methyl-2-cyclohexene-1-one				
	V	(364–507)	56.9	379	A	[1987STE/MAL]
C ₁₀ H ₁₆ O	[43205-82-9]	5-isopropyl-2-methyl-2-cyclohexen-1-one				
	V	(361–503)	56.8	376	A	[1987STE/MAL]
C ₁₀ H ₁₆ O	[21218-11-1]	3,4-epoxycarane (α -isomer)				
	V		49.4			[1977ALE/KOZ]
C ₁₀ H ₁₆ O	[35671-18-2]	3,4-epoxycarane (β -isomer)				
	V		50.2			[1977ALE/KOZ]
C ₁₀ H ₁₆ O	[4584-09-2]	<i>(dl)</i> -dihydrocarvone				
	V	(319–496)	51.2	334	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₆ O	[5392-40-5]	citral				
	V	(372–473)	55.9	298		[2009CLA/GOM]
C ₁₀ H ₁₆ O	[141-27-5]	geranial (<i>trans</i> -citral)				
	V	(343–453)	62.5	298	GC	[2005HOS/GRY]
	V	(283–333)	61	298	A	[1987STE/MAL]
C ₁₀ H ₁₆ O	[13040-03-4]	<i>(+)</i> - <i>cis</i> -verbenol				
	V	(323–433)	54.9	298	GC	[2005HOS/GRY]
	V		54.9	388	A	[1987STE/MAL]
C ₁₀ H ₁₆ O	[18881-04-4]	<i>(-)</i> - <i>cis</i> -verbenol				
	SUB	(278–313)	81.2 ± 0.1	298	Static	[2013STE/FUL]
	SUB		80.0 ± 1.2	298	C	[2013STE/FUL]
C ₁₀ H ₁₆ O	[22339-08-8]	<i>(+)</i> - <i>trans</i> -verbenol				
	V	(323–433)	55.0	298	GC	[2005HOS/GRY]
C ₁₀ H ₁₆ O	[106-26-3]	neral				
	V	(343–453)	60.2	298	GC	[2005HOS/GRY]
C ₁₀ H ₁₆ O	[768-95-6]	1-adamantanol				
	TRS	(5–600)	11.29	357.1		
	FUS	(5–600)	12.36	552.9		[2003CHA/BLO]
	TRS		13.81	365	DSC	[1991CHI/BRA]
	TRS		2.5	369.2	DTA	[1989SAL/ABA2, 1987SAL/SAI]
	SUB		86.8 ± 0.2	298	C	[2003CHA/BLO2]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
C ₁₀ H ₁₆ O		SUB	(288–323)	86.7 ± 0.2	298	ME	[2003CHA/BLO2]
		SUB		82.0 ± 1.5	298	C	[2002MIR/LEB2, 2001MAT/LEB]
		SUB	(320–370)	86.6 ± 2.5	298	BG	[1978ARO/STE]
		V		60.8	298	GC	[2002VAN/PAR]
	[700-57-2]	2-adamantanol					
		TRS	(5–600)	0.16	238.4		
		TRS	(5–600)	2.3	322.3		
C ₁₀ H ₁₆ O		TRS	(5–600)	7.98	389.3		
		FUS	(5–600)	11.94	567.3		[2003CHA/BLO]
		TRS		0.3	325.2		
		TRS		3.74	391.2	DTA	[1989SAL/ABA2, 1988SAL/ABA]
		SUB	(303–318)	88.1 ± 1.6	298	ME	[2003CHA/BLO2]
		SUB	(320–370)	88.7 ± 2.5	298	BG	[1978ARO/STE]
	C ₁₀ H ₁₆ O	[20379-99-1]	<i>trans</i> -octahydro-3a-methyl-2 <i>H</i> -inden-2-one				
	V		58.3 ± 0.2	298	C	[1970SEL]	
C ₁₀ H ₁₆ O	[13351-29-6]	<i>cis</i> -8-methyl-2-hydrindanone					
	SUB		60.9 ± 0.2	298	C	[1970SEL, 1977PED/RYL]	
C ₁₀ H ₁₆ O ₂	[2704-78-1]	3-acetyl-2,2-dimethylcyclobutaneacetaldehyde (pinonaldehyde)					
	V	(283–308)	75.5 ± 5.6		ME	[1997HAL/WAN]	
C ₁₀ H ₁₆ O ₂	[26946-56-5]	2,2-dimethyl-3-(2-oopropyl)cyclopropaneacetaldehyde (caronaldehyde)					
	V	(283–308)	77.4 ± 6.9		ME	[1997HAL/WAN]	
C ₁₀ H ₁₆ O ₂	[490-03-9]	1-methyl-4-isopropyl-1-cyclohexen-2-ol-3-one (diosphenol)					
	V	(339–505)	56.2	354	A	[1987STE/MAL, 1947STU]	
C ₁₀ H ₁₆ O ₂	[512-77-6]	1-methyl-3-(1-methylethyl)-cyclopentanecarboxylic acid (fencholic acid)					
	V	(374–537)	77.5	389		[1947STU]	
C ₁₀ H ₁₆ O ₂		(2,3,3-trimethyl-3-cyclopentadienyl)acetic acid					
	V	(370–529)	71.3	385	A	[1987STE/MAL, 1947STU]	
C ₁₀ H ₁₆ O ₂	[38734-05-3]	1,6-cyclodecanedione					
	FUS		29.58	372.2		[1972ALV/BOR]	
C ₁₀ H ₁₆ O ₂	[10453-89-1]	2,2-dimethyl-3-(2-methyl-1-propen-1-yl)cyclopropanecarboxylic acid (chrysanthemic acid)					
	FUS	(80–400)	14.51	390.7	AC	[2004XUE/WAN]	
C ₁₀ H ₁₆ O ₃	[61826-55-9]	3-acetyl-2,2-dimethylcyclobutaneacetic acid (<i>cis</i> -pinonic acid)					
	FUS		23.8	377.8	DSC	[2011BOO/MON]	
	SUB	(298–318)	109	308	ME	[2011BOO/MON]	
C ₁₀ H ₁₆ O ₄	[183-97-1]	1,4-cyclohexanedione bis ethylene ketal					
	FUS		25.77	353.2		[1972ALV/BOR]	
C ₁₀ H ₁₆ O ₄	[3779-29-1]	1,1-cyclobutanedicarboxylic acid diethyl ester					
	V	(288–318)	65.8 ± 0.4		GS	[1998VER/KUM]	
C ₁₀ H ₁₆ O ₄	[124-83-4]	1,2,2-trimethyl-1,3-cyclopentanedicarboxylic acid (D-camphoric acid)					
	FUS		19.6	455.2	DSC	[2004STU/WIT]	
C ₁₀ H ₁₆ O ₆		lactic acid, <i>O</i> -ethoxycarbonyl, tetrafurfuryl ester					
	V	(390–523)	71.2	405	A	[1987STE/MAL]	
C ₁₀ H ₁₆ O ₆	[6279-86-3]	tris(carboethoxy)methane					
	V	(297–338)	79.1 ± 0.7	298	GS	[1992VER/BEC]	
C ₁₀ H ₁₆ O ₆	[890649-58-8]	1,2,4,5-tetroxane-3,6-dibutanol					
	SUB		153.6			[2007DAN/MAR]	
C ₁₀ H ₁₆ S	[53402-10-1]	(1 <i>R</i>)-(-)-thiocamphor					
	SUB	(262–282)	62.2 ± 0.9	272	ME	[1999ROU/JIM]	
	SUB	(262–282)	61.7 ± 0.9	298	ME	[1999ROU/JIM]	
	V		55.5	298	GC	[2002VAN/PAR]	

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₆ S	[18794-77-9] V	2-hexylthiophene	56.4 ± 1.3	298	C	[2007RIB/SAN]
C ₁₀ H ₁₆ S	[1693-86-3] V	3-hexylthiophene	58.5 ± 1.3	298	C	[2007RIB/SAN]
C ₁₀ H ₁₆ S ₄	[7000-79-5] SUB	1,3,5,7-tetramethyl-2,4,6,8-tetrathiaadamantane	117.1 ± 4.1	298	TE	[1978HEA/HEF]
C ₁₀ H ₁₇ ClO ₆	[856372-74-2] SUB	lactic acid, <i>O</i> -ethoxycarbonyl, 2-(2-chloroethoxy)ethyl ester (406–523)	83.8 (sub)	421	A	[1987STE/MAL]
C ₁₀ H ₁₇ N	[1197-53-1] V	1-cyclohexylimino-2-butene	58.3			[1993OVC/SOB]
C ₁₀ H ₁₇ N	[768-94-5] TRS TRS FUS SUB V	1-aminoadamantane (5–370) (5–370) Not measured (291–343) (291–343)	1.72 5.31 Not measured 61.7 ± 0.6 59.9 ± 2.5	241.4 284.6 298 298	AC AC AC ME, GS CGC	[2008BAZ/BLO] [2008BAZ/BLO] [2013GOB/RAT]
C ₁₀ H ₁₇ NO	[2792-42-9] TRS FUS TRS FUS	(<i>d</i>)-camphor oxime	14.48 2.1 13.3 1.8	384.5 393.3 383 389	DSC DSC	[1984WEI/LEF] [1979MJO]
C ₁₀ H ₁₇ NO	[13559-66-5] TRS TRS FUS	(<i>dl</i>)-camphor oxime	3.0 11.2 1.2	375 380 388	DSC	[1979MJO]
C ₁₀ H ₁₇ NOS	[59300-35-5] SUB	carbamothioic acid, <i>N</i> -butyl- <i>N</i> -(2-propynyl), <i>S</i> -ethyl ester (298–313)	82.1	305.5	ME	[1987STE/MAL, 1976DEP]
C ₁₀ H ₁₇ NOS	[59300-36-6] SUB	carbamothioic acid, <i>N,N</i> -dipropyl <i>S</i> -(2-propynyl) ester (298–313)	92.4	305.5	ME	[1987STE/MAL, 1976DEP]
C ₁₀ H ₁₇ NOS	[59300-34-4] SUB	carbamothioic acid, <i>N</i> -2-methylpropyl- <i>N</i> -(2-propynyl), <i>S</i> -ethyl ester (298–313)	74.0	305.5	ME	[1987STE/MAL, 1976DEP]
C ₁₀ H ₁₇ NO ₃	[5338-12-5] V	2-(2-cyanoethoxy)propionic acid, butyl ester (328–382)	61.7	343	A	[1987STE/MAL]
C ₁₀ H ₁₇ NO ₅	[897957-85-6] V	(<i>l</i>)- <i>N</i> -acetylaspartic acid, diethyl ester (418–508)	76.0	433	A, EB	[1987STE/MAL, 1953MEL/VIO]
C ₁₀ H ₁₇ N ₅ O	[1610-18-0] FUS FUS	4,6-bis(isopropylamino)-2-methoxy- <i>s</i> -triazine (prometone)	21.18 20.7	363.5	DSC DSC	[1991ACR, 1990DON/DRE] [1971GET/WAR]
C ₁₀ H ₁₈	[176-63-6] V V	spiro[4.5]decane (348–389)	54.8 44.0	298 363	C	[1975SUB/ZWO] [1965NAR]
C ₁₀ H ₁₈	[16189-46-1] V V V	<i>cis</i> -bicyclo[5.3.0]decane (298–377)	49.8 46.9 ± 0.8 53.6 ± 1.2	313 377 298	A EB EB	[1987STE/MAL] [1970CHA/MCN] [1970CHA/MCN]
C ₁₀ H ₁₈	[1636-39-1] TRS FUS V V V	bicyclopentyl (12–300) (12–300) (383–509) (384–509) (384–509)	0.26 13.4 50.4 ± 0.1 44.1 ± 0.1 41.6 ± 0.1	171.5 237.8 298 400 440	AC AC EB EB EB	[2004CHI/STE] [2004CHI/STE] [2005CHI/STE] [2004CHI/STE] [2004CHI/STE]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₈	V	(384–509)	38.9 ± 0.2	480	EB	[2004CHI/STE]
	V	(350–393)	43.2	365	A	[1987STE/MAL]
C ₁₀ H ₁₈	[18968-24-6]	<i>cis</i> -carane				
	V	(362–445)	42.8	377	A	[1987STE/MAL]
C ₁₀ H ₁₈	V		46.1 ± 0.7	298	EB	[1975VAR/DRU, 1976KOZ/ALE]
	[18968-23-5]	<i>trans</i> -carane				
C ₁₀ H ₁₈	V		46.4 ± 0.7	298	EB	[1975VAR/DRU, 1976KOZ/ALE]
	[493-01-6]	<i>cis</i> -decahydronaphthalene				
C ₁₀ H ₁₈	FUS	(13–344)	14.43	242.8	AC	[1996DOM/HEA, 1957MCC/FIN2]
	SUB		64.8	230	B	[1963BON]
	SUB		62.5	298	H	[1963BON, 1993CHI/HOS]
	V	(371–473)	45.5	386	A, GS	[1987STE/MAL, 1955CAM/ROS]
C ₁₀ H ₁₈	[493-02-7]	<i>trans</i> -decahydronaphthalene				
	TRS	(12–344)	2.13	216.1		
	FUS	(12–344)	9.49	230.2	AC	[1996DOM/HEA, 1957MCC/FIN2]
	SUB		66.2	241	B	[1963BON]
	SUB		64.3	298	H	[1963BON, 1993CHI/HOS]
C ₁₀ H ₁₈	V	(363–461)	44.2	378	A, GS	[1987STE/MAL, 1955CAM/ROS]
	[1942-46-7]	5-decyne				
C ₁₀ H ₁₈	V	(477–487)	45.5	366	A	[1987STE/MAL]
	[473-55-2]	2,6,6-trimethylbicyclo[3.1.1]heptane (pinane)				
C ₁₀ H ₁₈	V	(330–415)	44.1	350	BP	[2014WAN/HUA]
	[4755-33-3]	<i>cis</i> -2,6,6-trimethylbicyclo[3.1.1]heptane (<i>cis</i> -pinane)				
C ₁₀ H ₁₈	V	(378–441)	41.8	393		[2003WAN/LI]
	[10281-53-5]	<i>trans</i> -2,6,6-trimethylbicyclo[3.1.1]heptane (<i>trans</i> -pinane)				
C ₁₀ H ₁₈	V	(238–308)	46.1 ± 0.3	298	Static	[2014STE/FUL2]
	[2436-90-0]	3,7-dimethylocta-1,6-diene (dihydromyrcene)				
C ₁₀ H ₁₈	V	(317–392)	44.3	332	BP	[2013WAN/GUO, 2014WAN/HUA]
	[1912-25-0]	2-chloro-4-isopropylamino-6-diethylamino-1,3,5-triazine (ipazine)				
C ₁₀ H ₁₈ Cl ₄	FUS		21.3		DSC	[1971GET/WAR]
	[205646-11-3]	1,2,9,10-tetrachlorodecane				
C ₁₀ H ₁₈ N ₂	V		75.4			[1998DRO/TOM]
	[82410-68-2]	1-hexyl-2-methylimidazole				
C ₁₀ H ₁₈ N ₂ S	V	(313–363)	74.7 ± 0.4	298	GS	[2011EME/POR2]
	[1072064-73-3]	methyl-(1-thia-3-azaspiro[5.5]undec-2-en-2-yl)amine				
C ₁₀ H ₁₈ N ₆ O ₂	FUS		14.1	340.6	DSC	[2013PER/BLO2]
	SUB		95.1 ± 1.0	298	GS	[2013PER/BLO2]
C ₁₀ H ₁₈ O	[64124-17-0]	1-(sarcosino)-3,5-bis(dimethylamino)-s-triazine				
	FUS		29.83	431	DSC	[1989BRA/RYT]
C ₁₀ H ₁₈ O	[470-82-6]	1,3,3-trimethyl-2-oxabicyclo[2.2.2]octane (1,8-cineole, 1,8-eucalyptol)				
	FUS		13.8	274.1	DSC	[2014STE/FUL2]
	V	(253–308)	48.7 ± 0.3	298	Static	[2014STE/FUL2]
C ₁₀ H ₁₈ O	V	(278–323)	46.1	298		[2011GIM/TOR]
	V	(264–303)	35.6	279	A	[1987STE/MAL]
	[464-45-9]	(-)-borneol				
C ₁₀ H ₁₈ O	TRS		1.3	216.1		
	TRS		3.1	348.2		
	FUS		7.4	480.8	DSC	[2015STE/DER]
	TRS		3.2	347.9		

[Note: Measurements in [2014STE/FUL2] included values for the subcooled liquid.]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
		FUS		7.3	480.2	DSC	[2014STE/FUL]
		SUB(I)	(348–363)	76.1 ± 0.6	298	Static	
		SUB(II)	(293–347)	75.6 ± 0.2	298	Static	
		SUB	(273–308)	74.7 ± 0.4	298	Static	[2014STE/FUL]
C ₁₀ H ₁₈ O	[6627-72-1]	(<i>dl</i>)-borneol					
		SUB	(350–475)	69.3	365	A	[1987STE/MAL]
		V	(477–487)	50.9	482	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[470-67-7]	1,4-cineole					
		V	(288–449)	46.1	303	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[470-82-6]	1,8-cineole					
		V	(327–420)	46.3	342		[2011TOR/GAR]
		V	(313–413)	49.0	298	GC	[2005HOS/GRY]
		V		53.2	298	GC	[2002VAN/PAR]
		V	(353–403)	41.1	378	TGA	[2002HAZ/DOL]
C ₁₀ H ₁₈ O	[619-01-2]	(<i>d</i>)-dihydrocarveol					
		V	(336–498)	58.2	351	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[2217-01-8]	(<i>dl</i>)-fenchyl alcohol					
		V	(318–474)	89.1	333	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[106-24-1]	geraniol					
		V	(273–368)	76.9 ± 0.2	298	Static	[2015STE/DER]
		V	(288–333)	62.9	303	A	[1987STE/MAL]
		V	(342–503)	59.1	357	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[7786-67-6]	(<i>d</i>)-isopulegol					
		V	(335–485)	49.8	350	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[126-90-9]	(<i>d</i>)-linalool					
		V	(273–323)	65.4	298		[1999DIA/GUE]
		V	(313–471)	52.4	328	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[78-70-6]	linalool					
		V	(285–353)	65.6 ± 0.1	298	Static	[2015ZAI/VER]
		V	(285–328)	66.2 ± 0.6	298	GS	[2015ZAI/VER]
		V	(352–468)	65.0	298		[2009CLA/GOM]
		V	(333–433)	55.3	298	GC	[2005HOS/GRY]
		V	(368–428)	51.4	399	TGA	[2002HAZ/DOL]
		V	(409–465)	50.3	424	EB	[2002DEN/LI]
C ₁₀ H ₁₈ O	[106-25-2]	<i>cis</i> -3,7-dimethyl-2,6-octadien-1-ol (nerol)					
		V	(334–499)	55.4	349	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[98-55-5]	(<i>dl</i>)- α -terpineol					
		SUB	(287–308)	80.1	297.5	A	[1987STE/MAL]
		V	(325–491)	54.0	340	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[7785-53-7]	(+)- α -terpineol					
		V		60.7	298	GC	[2002VAN/PAR]
C ₁₀ H ₁₈ O	[10482-56-1]	α -terpineol					
		FUS	(83–344)	15.78	308.5	AC	[2016MAR/SMI]
		SUB	(283–328)	80.3	305	ME	[1954SER/VOI, 1960JON]
C ₁₀ H ₁₈ O	[562-74-3]	terpinen-4-ol					
		V	(323–433)	55.5	298	GC	[2005HOS/GRY]
C ₁₀ H ₁₈ O	[124-76-5]	(<i>dl</i>)-isoborneol					
		SUB	(373–457)	41.1	388	A	[1987STE/MAL, 1936GRE]
C ₁₀ H ₁₈ O	[1196-00-5]	(1R,2R,3R,5S)-(-)-isopinocampheol					
		SUB	(283–313)	80.5 ± 1.1	298	GS	[2010WID/BRU]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₈ O	[132203-71-5] V	(+)- <i>trans</i> -myrtanol (283–313)	73.0 ± 2.4	298	GS	[2010WID/BRU]
C ₁₀ H ₁₈ O	[854885-23-7] V	1-(1-methylcyclohex-3-enyl)-1-propanol (397–422)	53.6	409	A	[1987STE/MAL, 1955PIN/MAR]
C ₁₀ H ₁₈ O	[1502-06-3] FUS	cyclodecanone	24.3	294.9	DSC	[1998GON/SZW]
	V	(353–423)	55.2	368	A	[1987STE/MAL, 1972WOL]
	V	(353–423)	58.4 ± 0.6	298	VP	[1972WOL]
C ₁₀ H ₁₈ O	[2890-65-5] V	ethyl (1-methylcyclohexyl) ketone (388–431)	45.2	403	A	[1987STE/MAL, 1955PIN/MAR]
C ₁₀ H ₁₈ O	[10458-14-7] V	2-isopropyl-5-methylcyclohexanone (menthone) (372–397)	50.1	385		[2002BAT]
	V	(350–483)	51.2	365	A	[1987STE/MAL]
C ₁₀ H ₁₈ O	[2385-77-5] V	(<i>d</i>)-citronellal (288–333)	54.9	303	A	[1987STE/MAL]
	V	(317–480)	53.2	332	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₈ O	[69891-94-7] V	(<i>Z</i>)-3-decenal (323–343)	59.2	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[68676-85-7] V	(<i>E</i>)-3-decenal (323–343)	59.8	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[21662-09-9] V	(<i>Z</i>)-4-decenal (323–343)	59.3	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[65405-70-1] V	(<i>E</i>)-4-decenal (323–343)	60	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[21662-08-8] V	(<i>Z</i>)-5-decenal (323–343)	58.5	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[21662-11-3] V	(<i>E</i>)-5-decenal (323–343)	59.2	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[147159-48-6] V	(<i>Z</i>)-6-decenal (323–343)	59.3	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[147159-48-6] V	(<i>E</i>)-6-decenal (323–343)	59.5	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[21661-97-2] V	(<i>Z</i>)-7-decenal (323–343)	59.9	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[21662-10-2] V	(<i>E</i>)-7-decenal (323–343)	59.8	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[174155-46-5] V	(<i>Z</i>)-8-decenal (323–343)	60.5	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O	[174155-47-6] V	(<i>E</i>)-8-decenal (323–343)	60.2	298	CGC	[1996KOU/HOS, 2000OVA/KOU]
C ₁₀ H ₁₈ O ₂	[502-47-6] V	3,7-dimethyl-6-octenoic acid (372–530)	68.7	387	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₈ O ₂	[702-75-0] V	8,8-dimethyl-6,10-dioxaspiro[4.5]decane (283–313)	53.7 ± 0.5	298	GS	[1998VER/PEN, 2002VER]
C ₁₀ H ₁₈ O ₂	[7333-23-5] V	2,2,6-dimethyl-3,5-heptanedione	57.7	298		[1976BUR/SHR]
C ₁₀ H ₁₈ O ₂	V	<i>l</i> -decanolactone (365–387)	57.7 ± 0.8	376	MM	[1991WIB/WAL]
	V	(365–387)	63.0 ± 1.5	298	MM	[1991WIB/WAL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₈ O ₂	[706-14-9]	γ -decanolactone				
	V		75.0 ± 4.3	298	CGC	[2014KOZ/GOB]
	V	(298–365)	75.6 ± 0.3	298	GS	[2008EME/KOZ]
C ₁₀ H ₁₈ O ₂	[705-86-2]	δ -decanolactone				
	V		75.5 ± 4.3	298	CGC	[2014KOZ/GOB]
	V	(309–358)	74.2 ± 0.3	298	GS	[2007EME/KOZ]
C ₁₀ H ₁₈ O ₂	[2499-58-3]	heptyl acrylate				
	V	(359–481)	51.1	374	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₂	[142-09-6]	hexyl methacrylate				
	V	(354–475)	50.5	369	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₂	[512-77-6]	1-methyl-3-isopropylcyclopentane carboxylic acid				
	V	(374–538)	91.6	389	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₂	[1551-44-6]	cyclohexyl butyrate				
	FUS	(5–320)	16.57	219.6	AC	[2001KOZ/BLO]
	V		60.0 ± 0.2	298	C	[2004PAU/ZAI]
	V		60.1 ± 0.2	298	C	[2003ZAI/VER]
	V	(273–310)	64.1 ± 0.6	298	ME	[2003ZAI/VER]
	V	(273–310)	59.8 ± 0.6	298	ME	[2003ZAI/VER]
	V	(278–313)	58.4 ± 0.7	298	GS	[2003ZAI/VER]
	V	(333–378)	60.0	298	CGC	[1999VER/HEI]
	V	(283–313)	60.0 ± 0.6	298	GS	[1996VER/BEI]
C ₁₀ H ₁₈ O ₂	[1129-47-1]	cyclohexyl isobutyrate				
	V	(333–378)	57.7	298	CGC	[1999VER/HEI]
C ₁₀ H ₁₈ O ₂		1-methylcyclohexyl propanoate				
	V	(333–378)	55.8	298	CGC	[1999VER/HEI]
C ₁₀ H ₁₈ O ₂		3-methylcyclohexyl propanoate				
	V	(333–378)	58.3	298	CGC	[1999VER/HEI]
C ₁₀ H ₁₈ O ₂		4-methylcyclohexyl propanoate				
	V	(333–378)	58.9	298	CGC	[1999VER/HEI]
C ₁₀ H ₁₈ O ₂	[56922-72-6]	pentyl 3-methylbut-2-enoate				
	V		61.8 ± 0.4	298	GS	[2008EME/TOK]
C ₁₀ H ₁₈ O ₂	[71697-84-2]	(-)-5-hydroxy- <i>a</i> , <i>a</i> ,4-trimethyl-3-cyclohexene-1-methanol (<i>trans</i> -sobrrolol)				
	FUS		34.69	423.6	DSC	[1999LI/ZEL, 1990BET/GIO]
C ₁₀ H ₁₈ O ₂	[42370-41-2]	(±)-5-hydroxy- <i>a</i> , <i>a</i> ,4-trimethyl-3-cyclohexene-1-methanol (<i>trans</i> -sobrrolol)				
	FUS		34.39	404.9	DSC	[1999LI/ZEL, 1990BET/GIO]
C ₁₀ H ₁₈ O ₂	[772-36-1]	(-)-5-hydroxy- <i>a</i> , <i>a</i> ,4-trimethyl-3-cyclohexene-1-methanol (<i>cis</i> -sobrrolol)				
	FUS		23.18	382.9	DSC	[1999LI/ZEL, 1990BET/GIO]
C ₁₀ H ₁₈ O ₂	[54164-89-5]	(±)-5-hydroxy- <i>a</i> , <i>a</i> ,4-trimethyl-3-cyclohexene-1-methanol (<i>cis</i> -sobrrolol)				
	FUS		25.86	378.9	DSC	[1999LI/ZEL, 1990BET/GIO]
C ₁₀ H ₁₈ O ₂	[16491-36-4]	<i>cis</i> -3-hexenyl butyrate				
	V		59.9 ± 1.7	298	CGC	[2015KOZ/GOB]
C ₁₀ H ₁₈ O ₃	[103985-60-0]	3-hydroxy-2,3-dimethyl-4-hexenoic acid, ethyl ester				
	V	(362–387)	57.4	374	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₃	[71172-75-3]	isopentyl levulinate				
	V	(403–521)	59.4	418	A	[1987STE/MAL]
	V		56.3	461		[1931SCH/COW]
C ₁₀ H ₁₈ O ₃		1-ethylpropyl levulinate				
	V	(397–513)	58.6	412	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₃		1-methylbutyl levulinate				
	V	(397–513)	57.2	412	A	[1987STE/MAL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₁₈ O ₃		2-methylbutyl levulinate				
	V	(391–473)	56.5	406	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₃	[20279-49-6]	pentyl levulinate				
	V	(354–527)	66.3	369	A	[1987STE/MAL, 1947STU]
	V		56.2	466		[1931SCH/COW]
C ₁₀ H ₁₈ O ₃	[173729-59-4] FUS	1- <i>tert</i> -butyl-4-methyl-2,6,7-trioxabicyclo[2.2.2]octane				
			16.4	375.2		[1995RAK/VER2]
C ₁₀ H ₁₈ O ₄	[20473-77-2] V	pentyl 2-acetoxypropionate				
		(312–501)	68.5	327	A	[1987STE/MAL, 1950REH/DIX]
C ₁₀ H ₁₈ O ₄	[141-28-6]	diethyl adipate				
	V	(304–353)	70.8	329	GS	[2011LIP/KRA]
	V	(304–353)	74.0 ± 0.3	298	GS	[2011LIP/KRA]
	V	(347–513)	57.5	362	A	[1987STE/MAL]
	V	(351–524)	58.4	438		[1947STU, 2011LIP/KRA]
	V	(351–524)	73	298		[1947STU, 2011LIP/KRA]
C ₁₀ H ₁₈ O ₄	[2050-60-4]	dibutyl oxalate				
	V	(291–358)	68.8	324	GS	[2011LIP/KRA]
	V	(291–358)	71.4 ± 0.3	298	GS	[2011LIP/KRA]
C ₁₀ H ₁₈ O ₄	[2050-61-5] V	diisobutyl oxalate				
		(336–503)	55.5	351	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₈ O ₄	[691-64-5]	di- <i>tert</i> -butyl oxalate				
	SUB	(292–339)	84.0	316	GS	[2011POR/KRA]
	SUB	(292–339)	84.8 ± 0.6	298	GS	[2011POR/KRA]
	V	(346–371)	63.5 ± 0.3	298	GS	[2011POR/KRA]
C ₁₀ H ₁₈ O ₄	[925-15-5]	dipropyl succinate				
	V	(308–344)	67.9	326		[2011LIP/KRA]
	V	(308–344)	71.0 ± 0.3	298		[2011LIP/KRA]
	V	(350–524)	59.4	365	A	[1987STE/MAL]
	V	(350–524)	72.4	298	A	[1987STE/MAL, 2011LIP/KRA]
	V	(351–534)	58.4	443		[1947STU, 2011LIP/KRA]
	V	(351–534)	73.0	298		[1947STU, 2011LIP/KRA]
C ₁₀ H ₁₈ O ₄	[924-88-9]	diisopropyl succinate				
	V	(304–333)	68.3 ± 0.3	298	GS	[2011POR/KRA]
	V	(357–497)	70.8 ± 0.4	298		[2011POR/KRA, 1992KAT]
C ₁₀ H ₁₈ O ₄	[2049-70-9] V	diethyl ethylmethylmalonate				
		(317–481)	53.2	332	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₄	[1732-09-8] V	dimethyl suberate				
		(293–352)	78.1 ± 0.2	298	GS	[2006VER/KOZ]
C ₁₀ H ₁₈ O ₄	[105-72-6]	ethylene glycol dibutyrate				
	V	(297–327)	71.7 ± 1.3		GS	[2011MAS/KRA]
	V		73.2 ± 0.6	298	C	[1986NIL/WAD]
C ₁₀ H ₁₈ O ₄	[7402-23-5] V	ethylene glycol di(2-methylpropanoate)				
		(295–323)	66.6 ± 1.3		GS	[2011MAS/KRA]
C ₁₀ H ₁₈ O ₄	[111-20-6]	sebacic acid				
	FUS		46.9	405.7	DSC	[2008VEN/BAY]
	FUS		45.3	405.6	DSC	[2008XIA/ZHA]
	TRS		0.4	370.3		
	FUS		46.6	403.9	DSC	[2005ROU/TEM]
	FUS		40.8	404.0	DSC	[1991ACR, 1974CIN/BER, 1996DOM/HEA]
	FUS		40.5			[1972CHA/HAG, 2008VEN/BAY]
	SUB	(353–385)	181 ± 8		TPD	[2007CAP/LOV]
	SUB	(302–320)	146.5		TPTD	[2005CHA/ZIE]

[Note: Values based on TPTD method are not consistent with values determined by other experimental methods.]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	SUB		165.3 ± 2.9			[1999RIB/MON, 1960DAV/THO]
	SUB	(375–403)	160.7 ± 2.5	389	ME	[1960DAV/THO, 1970COX/PIL, 1987STE/MAL]
	V	(424–503)	124.8	298	CGC	[2005ROU/TEM]
	V	(456–625)	85.9	471		[1947STU]
C ₁₀ H ₁₈ O ₅		ethyl[1-(butoxycarbonyl)ethyl] carbonate				
	V	(324–473)	70.2	339	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₅		2-lactoyloxypropionic acid, butyl ester				
	V	(336–407)	74.8	351	A	[1987STE/MAL, 1952REH/DIX]
C ₁₀ H ₁₈ O ₅	[854415-86-4]	2-lactoyloxypropionic acid, <i>sec</i> -butyl ester				
	V	(329–399)	74.3	344	A	[1987STE/MAL, 1952REH/DIX]
C ₁₀ H ₁₈ O ₅	[500790-23-8]	pentyl[1-(ethoxycarbonyl)methyl] carbonate				
	V	(383–503)	68.2	398	A	[1987STE/MAL]
C ₁₀ H ₁₈ O ₅	[500787-65-5]	pentyl[1-(methoxycarbonyl)ethyl] carbonate				
	V	(360–524)	63.7	375	A	[1987STE/MAL, 1950REH/DIX2]
C ₁₀ H ₁₈ O ₆	[62961-64-2]	(<i>d</i>)-diisopropyl tartrate				
	V	(376–548)	65.7	391	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₈ O ₆	[2217-14-3]	(<i>d</i>)-dipropyl tartrate				
	V	(388–576)	71.8	403	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₁₈ O ₆ S	[7355-12-6]	diethyl 3,3'-sulfonyldipropionate				
	FUS		38.0	359.7	DSC	[1994WAN/KUO]
C ₁₀ H ₁₉ ClNO ₅ P	[13171-21-6]	phosphamidon				
	V	(293–388)	90.1	308	A	[1987STE/MAL, 1999DYK/SVO]
C ₁₀ H ₁₉ Cl ₂ N	[4261-59-0]	<i>N,N</i> -bis(2-chloroethyl)cyclohexylamine				
	V	(273–333)	62.4	288	A, GS	[1987STE/MAL, 1948RED/CHA3, 1999DYK/SVO]
C ₁₀ H ₁₉ N	[7335-04-8]	<i>N</i> -cyclopentylpiperidine				
	V	(283–318)	54.9 ± 0.3	301	GS	[1998VER6]
	V	(283–318)	55.1 ± 0.3	298	GS	[1998VER6]
C ₁₀ H ₁₉ N	[1975-78-6]	decanenitrile (caprinitrile)				
	V	(295–326)	66.3 ± 0.4	298	GS	[2005EME/VER]
	V	(381–519)	58.0	396	A	[1987STE/MAL]
	V		66.8 ± 0.4	298	C	[1977STRI/SUN]
	V	(381–431)	57.8	396	EB	[1971MEY/REN]
	V	(431–518)	54.4	446	EB	[1971MEY/REN]
C ₁₀ H ₁₉ NO ₂	[105-16-8]	<i>N,N</i> -diethylaminoethyl methacrylate				
	FUS		13.08	207.5	AC	[1985KAR/ABD]
C ₁₀ H ₁₉ NO ₃	[4819-22-1]	<i>L-N</i> -acetylisoleucine, ethyl ester				
	V	(391–476)	69.1	406	A, EB	[1987STE/MAL, 1953MEL/VIO]
C ₁₀ H ₁₉ NO ₃	[1114-55-2]	<i>L-N</i> -acetylleucine, ethyl ester				
	V	(396–476)	74.8	411	A, EB	[1987STE/MAL, 1953MEL/VIO]
C ₁₀ H ₁₉ N ₅ O	[1610-18-0]	2-methoxy-4,6-bis(isopropylamino)-1,3,5-triazine				
	SUB	(323–365)	92.2	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
C ₁₀ H ₁₉ N ₅ S	[7287-19-6]	2-methylthio-4,6-bis(isopropylamino)-1,3,5-triazine (prometryne)				
	FUS		22.0		DSC	[1971GET/WAR]
	SUB	(323–393)	100	338	GS-GC	[1987STE/MAL, 1964FRI/STA]
C ₁₀ H ₁₉ N ₅ S	[5210-74-2]	2-(diethylamino)-4-(ethylamino)-6-(methylthio)-s-triazine (trietatryne)				
	FUS		37.3		DSC	[1971GET/WAR]
C ₁₀ H ₁₉ N ₅ S	[886-50-0]	2-methylmercapto-4-ethylamino-6- <i>tert</i> -butylamino-1,3,5-triazine (terbutryn)				
	FUS		21	376.1	DSC	[2007VEC/BRU]
	FUS		21.42	375.9	DSC	[1990DON/DRE]
	SUB		115 ± 7	298	DSC	[2007VEC/BRU]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	SUB		111 ± 4	298	TGA	[2007VEC/BRU]
	V		87 ± 5	467	DSC	[2007VEC/BRU]
	V		83.2 ± 1.0	452	TGA	[2007VEC/BRU]
C ₁₀ H ₁₉ O ₆ PS ₂	[121-75-5]	(<i>dl</i>)-malathion (283–419)	71.1	298	A	[1987STE/MAL]
C ₁₀ H ₁₉ O ₇ PS	[1634-78-2]	<i>O,O</i> -dimethyl- <i>S</i> -[1,2-bis(ethoxycarbonyl)ethyl]thiophosphate (283–406)	93.4	298	A	[1987STE/MAL]
C ₁₀ H ₂₀	[2158-55-6]	1,1,4-trimethylcycloheptane	45.5 ± 0.2	298	C	[1996VAR/PAS]
[Note: The text in [1996VAR/PAS] states 1,1,4-trimethylcycloheptane; however, the molecular structure of 1,1,4-trimethylcyclohexane is given in the paper.]						
C ₁₀ H ₂₀	[293-96-9]	cyclodecane	18.95	282.7	DSC	[2005HUA/SIM]
	FUS					
	V	(404–489)	45.1	419	A, EB	[1987STE/MAL, 1976MEY/HOT]
	V	(343–386)	48.2	358	EB	[1987STE/MAL, 1976MEY/HOT]
C ₁₀ H ₂₀	[1678-93-9]	butylcyclohexane				
	FUS		14.2	198	Quasi-AC	[2006MAN/CUT]
	FUS	(12–365)	14.16	198.4	AC	[1996DOM/HEA, 1965FIN/MES]
	V	(274–313)	47.4 ± 0.2	294	GS	[1995CHI/HES]
	V		47.0 ± 0.2	298		[1995CHI/HES]
	V		48.9 ± 0.5	298	GC	[1987AZA]
	V		49.4 ± 0.4	298	GCC	[1978FUC/PEA]
	V		49.4	298		[1975KUS/SAI]
	V		50.0	298		[1971WIL/ZWO]
	V		50.0	298		[1965FIN/MES]
	V	(367–457)	44.9	382	A	[1987STE/MAL, 1949FOR/NOR]
C ₁₀ H ₂₀	[7058-01-7]	<i>sec</i> -butylcyclohexane				
	FUS	(15–199)	8.07	178.4	AC	[2014RAM/OGI]
	V	(369–455)	44.1	384	A	[1987STE/MAL, 1949FOR/NOR]
C ₁₀ H ₂₀	[3178-22-1]	<i>tert</i> -butylcyclohexane				
	V		45.0 ± 0.1	328	C	[1981SVO/CHA]
	V		44.0 ± 0.1	343	C	[1981SVO/CHA]
	V		43.0 ± 0.1	358	C	[1981SVO/CHA]
	V		42.4 ± 0.1	368	C	[1981SVO/CHA]
	V	(355–446)	42.9	370	A	[1987STE/MAL, 1949FOR/NOR]
C ₁₀ H ₂₀	[1678-98-4]	isobutylcyclohexane				
	V		47.5	298		[1975KUS/SAI]
	V	(355–446)	43.5	370	A	[1987STE/MAL, 1949FOR/NOR]
C ₁₀ H ₂₀	[99-82-1]	1-isopropyl-4-methylcyclohexane				
	V	(382–443)	43.6	297	A	[1987STE/MAL]
C ₁₀ H ₂₀	[3741-00-2]	<i>n</i> -pentylcyclopentane				
	V		51.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₀	[872-05-9]	1-decene				
	TRS	(12–356)	7.95	198.3		
	FUS	(12–356)	13.81	206.9	C	[1996DOM/HEA, 1957MCC/FIN]
	V	(383–445)	43.8	398	A	[1987STE/MAL]
	V		50.4 ± 0.2	298	C	[1977MAN/SEL]
	V		50.5	298		[1971WIL/ZWO]
	V	(360–445)	45.1	375		[1950FOR/CAM]
C ₁₀ H ₂₀	[20348-51-0]	<i>cis</i> -2-decene				
	V	(401–447)	43.6	416	A, EB	[1987STE/MAL, 1983ELV/KUU]
C ₁₀ H ₂₀	[20063-97-2]	<i>trans</i> -2-decene				

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	V	(401–447)	43.7	416	A, EB	[1987STE/MAL, 1983ELV/KUU]
C ₁₀ H ₂₀	[19398-86-8] V	<i>cis</i> -3-decene (398–444)	43.1	413	A, EB	[1987STE/MAL, 1983ELV/KUU]
C ₁₀ H ₂₀	[19150-21-1] V	<i>trans</i> -3-decene (398–445)	43.4	413	A, EB	[1987STE/MAL, 1983ELV/KUU]
C ₁₀ H ₂₀	[19398-88-0] V	<i>cis</i> -4-decene (397–444)	43.0	412	A, EB	[1987STE/MAL, 1983ELV/KUU]
C ₁₀ H ₂₀	[19398-89-1] V	<i>trans</i> -4-decene (398–444)	43.2	413	A, EB	[1987STE/MAL, 1983ELV/KUU]
C ₁₀ H ₂₀	[7433-78-5] V	<i>cis</i> -5-decene (397–443)	42.9	412	A, EB	[1987STE/MAL, 1983ELV/KUU]
C ₁₀ H ₂₀	[7433-56-9] V	<i>trans</i> -5-decene (398–444)	43.2	413	A, EB	[1987STE/MAL, 1983ELV/KUU]
C ₁₀ H ₂₀	[4485-13-6] V	4-propyl-3-heptene (333–371)	43.7	348	A, MG	[1987STE/MAL, 1955SCH/WHI]
C ₁₀ H ₂₀	[692-48-8] V	<i>trans</i> -2,2,5,5-tetramethyl-3-hexene	42.0 ± 0.2	298	GCC	[1979FUC/PEA]
C ₁₀ H ₂₀	[22808-06-6] TRS TRS FUS	2,2,5,5-tetramethylhex-3-ene	1.21 4.33 10.25	235.8 243.5 268.9	DSC	[1980BYS]
C ₁₀ H ₂₀ Br ₂	[59104-80-2] V	1,1-dibromodecane (442–610)	62.2	457	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN, 1999DYK/SVO]
C ₁₀ H ₂₀ Br ₂	[28467-71-2] V	1,2-dibromodecane (368–524)	67.0	383	A	[1987STE/MAL, 1947STU, 1970DYK/VAN]
C ₁₀ H ₂₀ Cl ₂	[3162-62-7] V	1,1-dichlorodecane (415–577)	56.9	430	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN]
C ₁₀ H ₂₀ Cl ₂	[2162-98-3] V V V	1,10-dichlorodecane (441–520) (441–520) (440–540)	61.1 67.3 73.1	456 456 298		[1999DYK/SVO] [1998DRO/TOM] [1991BAS/SVO]
C ₁₀ H ₂₀ Cl ₂ N ₃ O ₄ P ₃	[131471-44-8] FUS (α) FUS (β)	2,2,4,4-bis(2',2'-dimethylpropane-1',3'-dioxy)-6,6-dichlorocyclotriphosphazene	32.7 29.4	484.1 484.6	DSC DSC	[2011HAC/MON] [2011HAC/MON]
C ₁₀ H ₂₀ F ₂	[62127-43-9] V	1,1-difluorodecane (364–504)	50.2	379	A, EST	[1987STE/MAL, 1956MAN, 1970DYK/VAN, 1999DYK/SVO]
C ₁₀ H ₂₀ N ₂	[53657-09-3] V	1-heptylimidazole (299–366)	76.8 ± 0.3	298	GS	[2011EME/POR]
C ₁₀ H ₂₀ N ₂ OS	[398995-30-7] SUB	<i>N,N</i> -diethyl- <i>N'</i> -isovalerylthiourea 363	121.5 ± 3.2	298	C	[2001RIB/RIB]
C ₁₀ H ₂₀ N ₂ OS	[398995-31-8] SUB	<i>N,N</i> -diethyl- <i>N'</i> -pivaloylthiourea 366	114.9 ± 2.7	298	C	[2001RIB/RIB]
C ₁₀ H ₂₀ N ₂ O ₂	[14288-05-2] FUS V	tetraethylamide	17.0 63	310.2 464	DSC TGA, DSC	[2003CLO/JAN] [2003CLO/JAN]
C ₁₀ H ₂₀ N ₂ O ₂	[1740-54-1] FUS	sebacamide	68.7	484.3	DSC	[2006BAD/DEL]
C ₁₀ H ₂₀ N ₆	[16268-73-8] FUS	1-(ethylmethylamino)-3,5-bis(dimethylamino)-s-triazine	21.3	384	DSC	[1991ACR, 1989BRA/RYT]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₂₀ N ₆ O	[52298-71-2] FUS	1-(2-hydroxyethylmethylamino)-3,5-bis(dimethylamino)-s-triazine				
			17.32	373.3	DSC	[1989BRA/RYT]
C ₁₀ H ₂₀ O	[106-22-9] SUB	3,7-dimethyl-6-octene-1-ol (citronellol)				
		(283–333)	66.1	308		[1954SER/VOI, 1960JON]
	V	(343–453)	63.5	298	GC	[2005HOS/GRY]
	V	(293–333)	72.6	308	A	[1987STE/MAL]
	V	(373–500)	65.9	388	A	[1987STE/MAL]
C ₁₀ H ₂₀ O	[7540-51-4] V	(-)- β -citronellol				
		(274–363)	77.3 \pm 0.2	298	Static	[2015STE/DER]
C ₁₀ H ₂₀ O	[26902-25-0] V	bis(3-methyl-2-butenyl) ether				
		(383–413)	47.8	398	EB	[1989WAN/YIN]
C ₁₀ H ₂₀ O	[103-44-6] V	(2-ethylhexyl) vinyl ether				
		(330–451)	44.7	345	A	[1987STE/MAL]
C ₁₀ H ₂₀ O	[5445-30-7] V	1-butylcyclohexanol				
		(362–481)	55.7	377	A	[1987STE/MAL, 1947WIL/EDW]
C ₁₀ H ₂₀ O	[18479-58-8] V	2,6-dimethyloct-7-en-2-ol (dihydromyrcenol)				
		(317–391)	60.2	361	BP	[2013WAN/GUO, 2014WAN/HUA]
C ₁₀ H ₂₀ O	[2216-51-5] FUS	<i>(l)</i> -menthol				
	FUS		12.83	316.7	DSC	[2016OKU/PAD]
	FUS		14.1	316.1	DSC	[2010COR/NEG]
	FUS		11.88	316.2	DTA	[1981CHI/GAR]
	SUB	(279–299)	95.8 \pm 4.8	289	HSA	[1981CHI/GAR]
	V	(372–488)	59.1	387	A	[1987STE/MAL]
	V	(329–485)	58.2	344		[1947STU]
C ₁₀ H ₂₀ O	[89-78-1] FUS	<i>(dl)</i> -menthol				
			10.25	301.2	DTA	[1981CHI/GAR]
	SUB	(279–299)	78.6 \pm 4	289	HSA	[1981CHI/GAR]
C ₁₀ H ₂₀ O	[2216-51-5] V	(-)-menthol				
		(323–433)	56.6	298	GC	[2005HOS/GRY]
C ₁₀ H ₂₀ O	[1502-05-2] SUB	cyclodecanol				
		(287–292)	100.5 \pm 0.5	288	TCM	[1955ENG]
C ₁₀ H ₂₀ O	[854708-25-1] V	1-(1-methylcyclohexyl)-1-propanol				
		(396–420)	55.4	408	A	[1987STE/MAL, 1955PIN/MAR]
C ₁₀ H ₂₀ O	[27331-02-8] V	2-(1-methylcyclohexyl)-2-propanol				
		(393–418)	53.0	405	A	[1987STE/MAL, 1955PIN/MAR]
C ₁₀ H ₂₀ O	[10340-22-4] V	<i>(Z)</i> -3-decen-1-ol				
		(323–363)	78.7	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[10339-60-3] V	<i>(E)</i> -3-decen-1-ol				
		(323–363)	78.8	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[57074-37-0] V	<i>(Z)</i> -4-decen-1-ol				
		(323–363)	79.6	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[10339-62-5] V	<i>(E)</i> -4-decen-1-ol				
		(323–363)	80.3	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[51652-47-2] V	<i>(Z)</i> -5-decen-1-ol				
		(323–363)	80.3	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[56578-18-8] V	<i>(E)</i> -5-decen-1-ol				
		(323–363)	80.6	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[68760-59-8] V	<i>(Z)</i> -6-decen-1-ol				
		(323–363)	80.3	298	CGC	[2000OVA/KOU, 1994KOU/HOS]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₂₀ O	[38421-92-0] V	(<i>E</i>)-6-decen-1-ol (323–363)	80.6	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[16504-66-8] V	(<i>Z</i>)-7-decen-1-ol (323–363)	80.8	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[52957-12-7] V	(<i>E</i>)-7-decen-1-ol (323–363)	81.1	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[83799-67-1] V	(<i>Z</i>)-8-decen-1-ol (323–363)	81.6	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[83799-68-2] V	(<i>E</i>)-8-decen-1-ol (323–363)	81.5	298	CGC	[2000OVA/KOU, 1994KOU/HOS]
C ₁₀ H ₂₀ O	[693-54-9] V V V V	2-decanone (317–484) (357–560) (358–568)	51.7 55.1 60.9 ± 0.5 44.6	332 372 298 487	A A GCC	[1987STE/MAL, 1947STU] [1987STE/MAL] [1979SAL/PEA] [1975AMB/ELL]
C ₁₀ H ₂₀ O	[868-91-7] V	2,2,5,5-tetramethyl-3-hexanone 48.8 ± 0.2		298	C	[1970SEL2]
C ₁₀ H ₂₀ O	[112-31-2] FUS V V V V V	decanal (50–350) (280–316) (308–353) (288–333) (293–358) (324–482)	30.6 59.5 ± 0.4 60.5 57.3 57.3 60.4 ± 0.3 56.3	268.2 298 298 303 308 298 339	AC GS CGC A A	[1980DYA/VAS] [2003VER/KRA2] [1996KOU/HOS, 2000OVA/KOU] [1987STE/MAL] [1987STE/MAL] [1981DYA/KOR] [1987STE/MAL, 1947STU]
C ₁₀ H ₂₀ O ₂	[4359-57-3] V	2-heptyl-1,3-dioxolane (318–453)	62.0	333	A	[1987STE/MAL, 1977VOI/SHC]
C ₁₀ H ₂₀ O ₂	[4359-47-1] V	2-(1-ethylpentyl)-1,3-dioxolane (333–453)	55.3	348	A	[1987STE/MAL, 1977VOI/SHC]
C ₁₀ H ₂₀ O ₂	[2244-85-1] V	4-hexyl-1,3-dioxane (318–453)	56.9	333	A	[1987STE/MAL, 1977VOI/SHC]
C ₁₀ H ₂₀ O ₂	[61827-60-9] V	3-pentyl-4-hydroxytetrahydropyran (383–453)	72.6	398	A	[1987STE/MAL, 1977VOI/SHC]
C ₁₀ H ₂₀ O ₂	[859773-58-3] V	2-butoxy-3-hexanone (333–418)	39.5	348	A, I	[1987STE/MAL, 1933HEN/MUR]
C ₁₀ H ₂₀ O ₂	[107-75-5] V	hydroxycitronellal (283–333)	75.3	298	A, ME	[1987STE/MAL, 1955SER/VOI]
C ₁₀ H ₂₀ O ₂	[112-14-1] V V V V	octyl acetate (274–309) (334–417) (345–472)	60.7 ± 0.4 61.7 54.9 47.8	298 298 349 360	GS GC A A	[2006KRA/VER] [1997DEF/CAR] [1987STE/MAL] [1987STE/MAL]
C ₁₀ H ₂₀ O ₂	[106-32-1] V V V V V	ethyl octanoate (284–462) (284–462) (382–412) (382–412) (330–480)	55.0 ± 0.6 62.0 ± 0.6 52.5 ± 0.2 59.5 ± 1.3 53.2	373 298 397 298 345	Static Static EB EB A	[2011BEN/KHI] [2011BEN/KHI] [1991WIB/WAL] [1991WIB/WAL] [1987STE/MAL]
C ₁₀ H ₂₀ O ₂	[103-09-3] V	2-ethylhexyl acetate (333–472)	50.1	348	A	[1987STE/MAL]
C ₁₀ H ₂₀ O ₂	[659-70-1] V	isopentyl isovalerate (341–479)	46.4	356	A	[1987STE/MAL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	V	(300–467)	47.2	315		[1947STU]
C ₁₀ H ₂₀ O ₂	[5340-26-1]	neopentyl pivalate				
	V	(280–310)	49.1 ± 0.5	295	GS	[1999VER/HEI]
	V	(280–310)	48.9 ± 0.5	298	GS	[1999VER/HEI]
C ₁₀ H ₂₀ O ₂	[89397-96-6]	2,2-dimethylpropanoic acid, 1,1-dimethylpropyl ester				
	V	(333–378)	48.0	298	CGC	[1999VER/HEI]
C ₁₀ H ₂₀ O ₂	[245658-27-9]	2-methylpropanoic acid, 1,1-dimethylbutyl ester				
	V	(333–378)	51.4	298	CGC	[1999VER/HEI]
C ₁₀ H ₂₀ O ₂	[245658-32-6]	2-methylpropanoic acid, 1,1,2-trimethylpropyl ester				
	V	(333–378)	51.7	298	CGC	[1999VER/HEI]
C ₁₀ H ₂₀ O ₂		butanoic acid, 1,1,2-trimethylpropyl ester				
	V	(333–378)	53.8	298	CGC	[1999VER/HEI]
C ₁₀ H ₂₀ O ₂	[245658-37-1]	2,4-dimethyl-2-pentanol, propanoate				
	V	(333–378)	51.7	298	CGC	[1999VER/HEI]
C ₁₀ H ₂₀ O ₂	[1731-84-6]	methyl nonanoate				
	V		57.4	350		[2002VAN/VAN]
	V		56.7 ± 0.3	364		[2002VAN/VAN]
	V		61.6 ± 0.4	298		[2002VAN/VAN]
	V		57.7 ± 0.7	298	GC	[1987AZA]
	V		62.0 ± 0.5	298	GCC	[1980FUC/PEA]
	V		62.0 ± 0.4	298	C	[1977MAN/SEL]
	V	(364–439)	55.6	379	A, EST	[1987STE/MAL, 1963ROS/SCH]
C ₁₀ H ₂₀ O ₂	[334-48-5]	decanoic acid (capric acid)				
	FUS		27.23	305.5	DSC	[2015CAR/CON]
	FUS		29.6	305.7	DSC	[2015RAM/MAR]
	FUS		27.2	304.3	DSC	[2014WEI/HAN]
	FUS		28.0	305.3	DSC	[2014CAR/CAS]
	FUS		24.6	303.4	DSC	[2013HUA/LU]
	FUS		33.6	305.2	DSC	[2011EGO/MAR]
	FUS		28.2	304.4	DSC	[2009COS/SAR]
	FUS		28.3	303.8	DSC	[2007MOR/COR]
	FUS		28.6	305.0	DSC	[2004INO/HIS2]
	FUS		U 22.2	304.2	DSC	[1992BAB/HWA2]
	FUS	(90–345)	27.82	304.5	AC	[1996DOM/HEA, 1982SCH/VAN]
	FUS		27.99	304.4		[1996DOM/HEA, 1924GAR/RAN]
	FUS		29.22	300.1		[1996DOM/HEA, 1889EYK]
	SUB		129.6 ± 5	298	TPD	[2008CAP/LOV]
	SUB	(293–303)	118.8 ± 2.2	298	ME	[1968BAC/NOV, 1970COX/PIL, 1987STE/MAL]
	SUB	(290–301)	117.1 ± 1.7	295	ME	[1961DAV/MAL]
	V	(398–543)	76.4	413	A	[1987STE/MAL]
	V	(305–323)	88.6	314	ME, TE	[1982DEK/SCH]
	V	(416–450)	75.4	433	EB	[1953HOV/JOH]
	V		71.4	418	I	[1943CRA]
C ₁₀ H ₂₀ O ₃	[869190-73-8]	propyl 3-butoxypropionate				
	V	(373–473)	44.2	388	A, I	[1987STE/MAL, 1933HEN/MUR]
C ₁₀ H ₂₀ O ₃	[14144-36-6]	pentyl 3-ethoxypropionate				
	V	(374–498)	54.1	389	A	[1987STE/MAL, 1948DIX/REH]
C ₁₀ H ₂₀ O ₃	[7419-97-8]	methyl 3-hexyloxypropionate				
	V	(373–473)	55.1	388	A	[1987STE/MAL]
C ₁₀ H ₂₀ O ₃	[14156-10-6]	peroxydecanoic acid				
	SUB	(293–303)	117.1 ± 0.8	298	ME	[1980SWA/KWA]
C ₁₀ H ₂₀ O ₄	[124-17-4]	diethylene glycol monobutyl ether acetate				
	V	(393–520)	57.7	408	A	[1987STE/MAL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound					
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference	
C ₁₀ H ₂₀ O ₄	[33785-99-8] V	3,3,6,6-tetraethyl-1,2,4,5-tetraoxacyclohexane (403–473)	50.1	298	CGC	[2007CAN/EYL]	
C ₁₀ H ₂₀ O ₅	[33100-27-5] V	1,4,7,10,13-pentaoxacyclopentadecane (15-crown-5)	75.7 ± 1.7	298	CGC	[2000NIC/ORF]	
	V		79.6 ± 0.3	298	C	[1982BYS/MAN]	
C ₁₀ H ₂₀ S ₄	[24194-61-4] TRS	1,4,8,11-tetrathiacyclotetradecane	2.7	345.2	DSC	[2002ROC/GRI]	
	FUS		33.0	393.2			
C ₁₀ H ₂₀ S ₅	[36338-04-2] TRS	1,4,7,10,13-pentathiacyclopentadecane	11.0	318.2	DSC	[2002ROC/GRI]	
	TRS		4.2	340.2			
	FUS		17.0	391.2			
C ₁₀ H ₂₁ Br	[112-29-8] V	1-bromodecane (391–545)	56.1	406	A, EST	[1999DYK/SVO]	
	V		(383–570)	56.6		398	[1987STE/MAL, 1961LI/ROS]
C ₁₀ H ₂₁ Cl	[1002-69-3] V	1-chlorodecane	64.0 ± 0.2	298	GS	[2001PUR/CHI]	
	V		(379–530)	54.4	394	[1999DYK/SVO]	
	V		(359–499)	56.2	374	A, DTA	[1987STE/MAL, 1969KEM/KRE]
C ₁₀ H ₂₁ F	[334-56-5] V	1-fluorodecane (342–503)	50.4	357	A	[1987STE/MAL, 1961LI/ROS]	
C ₁₀ H ₂₁ I	[2050-77-3] V	1-iododecane (397–598)	69.8	298	A, EST	[1987STE/MAL, 1961LI/ROS, 2006BOL/NER]	
	V		(407–571)	57.4		422	[1999DYK/SVO]
	V		(397–598)	58.1		412	A, EST
C ₁₀ H ₂₁ N	[101-40-6] V	<i>N</i> , α -dimethylcyclohexanethylamine (270–300)	50.2	285	A	[1987STE/MAL]	
C ₁₀ H ₂₁ NO	[6282-97-9] V	<i>N,N</i> -diethylhexanamide (373–443)	47.7	388	A	[1987STE/MAL]	
C ₁₀ H ₂₁ NO	[2319-29-1] TRS	decanamide	1.05	218.7	DSC	[2008ABA/BAD]	
	TRS		18.8	366.6			
	FUS		15.1	370.6			
	SUB		(353–370)	125.9 ± 1.3			361.5
C ₁₀ H ₂₁ NO ₂	V	ethyl 2-(<i>N,N</i> -diethylamino)butanoate (283–313)	57.3 ± 0.2	298	GS	[1996VER/ZUF]	
C ₁₀ H ₂₁ N ₃	[62103-13-3] V	1-decylazide (299–344)	67.8 ± 0.4	298	GS	[2014EME/ALG]	
C ₁₀ H ₂₂	[124-18-5] FUS	decane	26.48	243.5	DSC	[2005HUA/SIM]	
	FUS		27.6	243.0	DSC	[2004MAR/KAI]	
	FUS		28.7	243.5		[1996DOM/HEA, 1954FIN/GRO2]	
	FUS		28.78	243.1	C	[1996DOM/HEA, 1931HUF/PAR]	
	SUB		80.3	298	B	[1980SWA/KWA]	
	SUB		84.8	243	B	[1963BON]	
	SUB		82.4	298	H	[1963BON, 1993CHI/HOS]	
	V		(324–402)	48.3	339	GC	[2007MOK/RAZ]
	V		(337–376)	46.6	352		[2002BAT]
	V			51.1 ± 3.9	298	CGC	[2000NIC/ORF]
	V			51.5	299	C	[1996VIT/CHA]
	V			50.5	314	C	[1996VIT/CHA]
	V			50.1	324	C	[1996VIT/CHA]
V		49.2	334	C	[1996VIT/CHA]		

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	V	(403–453)	50.9	298	CGC	[1995CHI/HOS]
	V	(423–473)	51.5	298	CGC	[1995CHI/HOS]
	V		51.4	298		[1994RUZ/MAJ]
	V	(409–584)	42.5	424		[1992LEE/DEM]
	V	(268–490)	48.1	340	EB, IPM	[1989CHI/NGU]
	V	(268–490)	51.4	298	EB, IPM	[1989CHI/NGU]
	V	(252–383)	53.8	267	A	[1987STE/MAL]
	V	(447–526)	41.7	462	A	[1987STE/MAL]
	V	(524–617)	38.6	539	A	[1987STE/MAL]
	V	(298–347)	50.3	313	GS	[1986ALL/JOS]
	V	(308–351)	49.8 ± 1.7			[1984BEC/RUC]
	V		51.4 ± 0.1	298	C	[1982FUR/SAK]
	V	(243–310)	55.9	258		[1973CAR/KOB]
	V		51.4	298		[1971WIL/ZWO]
	V	(373–443)	45.3	388		[1987STE/MAL, 1970VAR/BEL]
	V		50.2 ± 0.4	298	C	[1963MOR/SUN]
	V		51.4	298	C	[1947OSB/GIN]
	V	(368–440)	45.5	383	MM	[1945WIL/TAY]
C ₁₀ H ₂₂	[871-83-0] FUS	2-methylnonane	17.49	198.8		[1996DOM/HEA, 1941PAR/WES]
	V	(324–441)	46.4 ± 0.2	339	A	[1987STE/MAL]
	V		47.3 ± 0.2	328	C	[1984MAJ/SVO3]
	V		46.2 ± 0.2	343	C	[1984MAJ/SVO3]
	V		45.0 ± 0.2	358	C	[1984MAJ/SVO3]
	V		51.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[5911-04-6] FUS	3-methylnonane	18.7	188.5		[1996DOM/HEA, 1941PAR/WES]
	V		47.3 ± 0.2	328	C	[1984MAJ/SVO3]
	V		46.2 ± 0.2	343	C	[1984MAJ/SVO3]
	V		45.1 ± 0.2	358	C	[1984MAJ/SVO3]
	V		50.2	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[17301-94-9] FUS	4-methylnonane	15.19	174.7		[1996DOM/HEA, 1941PAR/WES]
	V		49.5	298		[1961LAB/GRE]
C ₁₀ H ₂₂	[15869-85-9] FUS	5-methylnonane	16.65	186.7		[1996DOM/HEA, 1941PAR/WES]
	V		47.0 ± 0.2	328	C	[1984MAJ/SVO3]
	V		45.9 ± 0.2	343	C	[1984MAJ/SVO3]
	V		44.6 ± 0.2	358	C	[1984MAJ/SVO3]
	V		49.8	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[5881-17-4] V	3-ethyloctane	49.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[15869-86-0] V	4-ethyloctane	48.1	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[3178-29-8] V	4-propylheptane	48.5	298		[1971WIL/ZWO]
	V	(331–430)	44.1	346	A, MG	[1987STE/MAL, 1955SCH/WHI]
C ₁₀ H ₂₂	[52896-87-4] V	4-isopropylheptane	47.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[15869-87-1] V	2,2-dimethyloctane	49.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[7146-60-3] V	2,3-dimethyloctane	48.1	298		[1971WIL/ZWO]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₂₂	[4032-94-4]	2,4-dimethyloctane				
	V		44.9 ± 0.2	328	C	[1984MAJ/SVO2]
	V		43.6 ± 0.2	343	C	[1984MAJ/SVO2]
	V		42.4 ± 0.2	358	C	[1984MAJ/SVO2]
C ₁₀ H ₂₂	[15869-89-3]	2,5-dimethyloctane				
	V		49.0	298		[1971WIL/ZWO]
	[2051-30-1]	2,6-dimethyloctane				
	V		49.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[1072-16-8]	2,7-dimethyloctane				
	V		47.7	298		[1971WIL/ZWO]
C ₁₀ H ₂₂		(279–433)	45.2	294	A	[1987STE/MAL, 1947STU]
	[4110-44-5]	3,3-dimethyloctane				
C ₁₀ H ₂₂	V		48.5	298		[1971WIL/ZWO]
	[15869-92-8]	3,4-dimethyloctane				
C ₁₀ H ₂₂	V		48.1	298		[1971WIL/ZWO]
	[15869-93-9]	3,5-dimethyloctane				
C ₁₀ H ₂₂	V		48.5	298		[1971WIL/ZWO]
	[15869-94-0]	3,6-dimethyloctane				
C ₁₀ H ₂₂	V		47.3	298		[1971WIL/ZWO]
	[15869-95-1]	4,4-dimethyloctane				
C ₁₀ H ₂₂	V		48.1	298		[1971WIL/ZWO]
	[15869-96-2]	4,5-dimethyloctane				
C ₁₀ H ₂₂	V		48.5	298		[1971WIL/ZWO]
	[14676-29-0]	2-methyl-3-ethylheptane				
C ₁₀ H ₂₂	V		48.1	298		[1971WIL/ZWO]
	[52896-88-5]	2-methyl-4-ethylheptane				
C ₁₀ H ₂₂	V		47.3	298		[1971WIL/ZWO]
	[13475-78-0]	2-methyl-5-ethylheptane				
C ₁₀ H ₂₂	V		48.1	298		[1971WIL/ZWO]
	[17302-01-1]	3-methyl-3-ethylheptane				
C ₁₀ H ₂₂	V		47.7	298		[1971WIL/ZWO]
	[52896-89-6]	3-methyl-4-ethylheptane				
C ₁₀ H ₂₂	V		47.7	298		[1971WIL/ZWO]
	[52896-90-9]	3-methyl-5-ethylheptane				
C ₁₀ H ₂₂	V		47.7	298		[1971WIL/ZWO]
	[52896-91-0]	4-methyl-3-ethylheptane				
C ₁₀ H ₂₂	V		48.1	298		[1971WIL/ZWO]
	[17302-04-4]	4-methyl-4-ethylheptane				
C ₁₀ H ₂₂	V		47.2	298		[1961LAB/GRE]
	[52896-92-1]	2,2,3-trimethylheptane				
C ₁₀ H ₂₂	V		46.9	298		[1971WIL/ZWO]
	[14720-74-2]	2,2,4-trimethylheptane				
C ₁₀ H ₂₂	V		45.6	298		[1971WIL/ZWO]
	[20291-95-6]	2,2,5-trimethylheptane				
C ₁₀ H ₂₂	V		46.0	298		[1971WIL/ZWO]
	[1190-83-6]	2,2,6-trimethylheptane				
C ₁₀ H ₂₂	V		46.4	298		[1971WIL/ZWO]
	[52896-93-2]	2,3,3-trimethylheptane				
C ₁₀ H ₂₂	V		46.9	298		[1971WIL/ZWO]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₂₂	[52896-95-4] V	2,3,4-trimethylheptane	47.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[20278-85-7] V	2,3,5-trimethylheptane	47.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[4032-93-3] V	2,3,6-trimethylheptane	47.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[4032-92-2] V	2,4,4-trimethylheptane	45.2	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[20278-84-6] V	2,4,5-trimethylheptane	46.9	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[2613-61-8] V	2,4,6-trimethylheptane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[1189-99-7] V	2,5,5-trimethylheptane	46.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[20278-88-0] V	3,3,4-trimethylheptane	46.9	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[7154-80-5] V	3,3,5-trimethylheptane	46.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[20278-88-0] V	3,4,4-trimethylheptane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[20278-89-1] V	3,4,5-trimethylheptane	47.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[62016-13-1] V	2-methyl-3-isopropylhexane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[17302-02-2] V	3,3-diethylhexane	47.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[19398-77-7] V	3,4-diethylhexane	47.7	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[20291-91-2] V	2,2-dimethyl-3-ethylhexane	46.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52896-99-8] V	2,2-dimethyl-4-ethylhexane	45.2	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-00-4] V	2,3-dimethyl-3-ethylhexane	46.9	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-01-5] V	2,3-dimethyl-4-ethylhexane	46.9	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[7220-26-0] V	2,4-dimethyl-3-ethylhexane	46.9	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-03-7] V	2,4-dimethyl-4-ethylhexane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-04-8] V	2,5-dimethyl-3-ethylhexane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-05-9] V	3,3-dimethyl-4-ethylhexane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-06-0] V	3,4-dimethyl-3-ethylhexane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[13475-81-5] V	2,2,3,3-tetramethylhexane	45.2	298		[1971WIL/ZWO]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₂₂	[52897-08-2] V	2,2,3,4-tetramethylhexane	45.6	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-09-3] V	2,2,3,5-tetramethylhexane	45.2	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[51750-65-3] V	2,2,4,4-tetramethylhexane	43.5	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[16747-42-5] V	2,2,4,5-tetramethylhexane	44.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[1071-81-4] V	2,2,5,5-tetramethylhexane	43.5	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-10-6] V	2,3,3,4-tetramethylhexane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-11-7] V	2,3,3,5-tetramethylhexane	45.2	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-12-8] V	2,3,4,4-tetramethylhexane	46.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-15-1] V	2,3,4,5-tetramethylhexane	46.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[5171-84-6] V	3,3,4,4-tetramethylhexane	42.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[13475-79-1] V	2,4-dimethyl-3-isopropylpentane	45.6	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-16-2] V	2-methyl-3,3-diethylpentane	47.3	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-17-3] V	2,2,3-trimethyl-3-ethylpentane	46.0	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-18-4] V	2,2,4-trimethyl-3-ethylpentane	44.8	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[52897-19-5] V	2,3,4-trimethyl-3-ethylpentane	46.4	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[16747-44-7] V	2,2,3,3,4-pentamethylpentane	45.2	298		[1971WIL/ZWO]
C ₁₀ H ₂₂	[16747-45-8] V	2,2,3,4,4-pentamethylpentane	43.5	298		[1971WIL/ZWO]
C ₁₀ H ₂₂ N ₂ O	[28141-55-1] FUS	1-nonyl urea	38.9	380.3	DSC	[2005HAS/TAJ]
C ₁₀ H ₂₂ O	[69775-79-7] V	hexyl <i>tert</i> -butyl ether	53.2	298	CGC	[UR/VER, 2002VER, 2003VER/KRA]
C ₁₀ H ₂₂ O	 V	pentyl <i>tert</i> -amyl ether	53.5	298	CGC	[UR/VER, 2002VER, 2003VER/KRA]
C ₁₀ H ₂₂ O	[187103-12-4] V	ethyl <i>tert</i> -octyl ether	45.3 ± 0.3	298	GS	[UR/VER, 2002VER, 2003VER/KRA]
C ₁₀ H ₂₂ O	[693-65-2] V V	dipentyl ether (373–460) (423–480)	46.2 45.6	388 451	A	[1987STE/MAL] [1968LAP/NIS]
C ₁₀ H ₂₂ O	[54459-71-1] V	butyl hexyl ether	53.2 ± 0.1	298	C	[1985KUS]
C ₁₀ H ₂₂ O	[544-01-4]	diisopentyl ether				

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
	V	(353–393)	51.4	298	CGC	[1995CHI/HOS]
	V	(417–470)	41.4	443		[1968LAP/NIS]
	V	(291–447)	47.6	306	A	[1987STE/MAL, 1947STU]
C ₁₀ H ₂₂ O	[112-30-1]	1-decanol				
	FUS		29.66	280.1	DSC	[2015CAR/CON]
	FUS		28.8	280.6	DSC	[2014CAR/DOS, 2014CAR/CAS]
	FUS		31.4	278.67	DSC	[2005DOM/MAR]
	FUS	(5–388)	33.67	280		[2003VAN/GAB]
	FUS		37.66	280.1		[1997DOM/GON]
	FUS		28.8	280.2	DSC	[1978ECK/MUL]
	SUB	(264–273)	115.5 ± 6.3	268	ME	[1965KAR/KYB, 1987STE/MAL]
	SUB		112.5 ± 6.3	298		[1965KAR/KYB]
	V	(281–327)	79.5	309	GS	[2001KUL/VER2]
	V	(281–327)	80.9	298	GS	[2001KUL/VER2]
	V	(278–378)	81.1	293		[1999NGU/BER]
	V	(373–423)	81.7	298	CGC	[1995CHI/HOS]
	V	(353–393)	79.3	298	CGC	[1994KOU/HOS, 2000OVA/KOU]
	V	(283–388)	75.4	336		[1992NGU/KAS]
	V	(349–410)	71.6	364	A	[1987STE/MAL]
	V	(405–528)	62.6	420	A	[1987STE/MAL]
	V	(474–529)	53.9	489	A	[1987STE/MAL]
	V		78.2 ± 0.8	323	C	[1979SEV]
	V		81.5 ± 0.8	298	C	[1979SEV]
	V		81.5 ± 0.8	298	C	[1977MAN/SEL]
	V	(298–325)	77.6	313		[1973WIL/ZWO]
V	(400–529)	63.5	415	A, EB	[1987STE/MAL, 1970AMB/SPR]	
V	(378–504)	69.5	393	DTA	[1969KEM/KRE]	
V	(298–325)	77.6	311	ME	[1965DAV/KYB]	
V	(364–461)	69.6	379		[1958ROS/PAP]	
C ₁₀ H ₂₂ O	[106-21-8]	<i>(dl)</i> -3,7-dimethyl-1-octanol				
	V	(341–467)	79.1	356	A	[1987STE/MAL]
C ₁₀ H ₂₂ O ₂	[112-48-1]	ethylene glycol dibutyl ether (1,2-dibutoxyethane)				
	V	(356–476)	55.9	371	A	[1987STE/MAL]
			58.8 ± 0.1	298	C	[1970KUS/WAD]
C ₁₀ H ₂₂ O ₂	[871-22-7]	1,1-dibutoxyethane				
	V	(274–314)	58.6 ± 0.3	298	GS	[2012SIL/PER]
	V	(304–464)	57.8 ± 0.2	298		[1948GON/ELV, 2012SIL/PER]
		(303–464)	47.3	318	A	[1987STE/MAL]
C ₁₀ H ₂₂ O ₂	[5669-09-0]	ethylene glycol diisobutyl ether				
	V	(336–456)	46.1	351	A	[1987STE/MAL]
C ₁₀ H ₂₂ O ₂	[1559-35-9]	ethylene glycol mono(2-ethylhexyl) ether				
	V	(381–502)	56.5	396	A	[1987STE/MAL]
C ₁₀ H ₂₂ O ₂	[6931-71-1]	3,4-diethyl-3,4-hexanediol				
	V	(405–507)	54.7	420	A, EB	[1987STE/MAL, 1979BAL/FRI]
C ₁₀ H ₂₂ O ₂	[2050-83-1]	3-ethyl-3-hydroxymethyl-2-heptanol				
	V	(338–500)	63.4	353	A	[1987STE/MAL]
C ₁₀ H ₂₂ O ₂	[112-47-0]	1,10-decanediol				
	FUS		45.0	345.8	DSC	[2014BAD/NOW]
	FUS	(80–370)	44.2	345.6	AC	[1999LI/TAN]
	FUS		43.5	345.6	DSC	[1999LI/TAN]
	FUS		45.8	345.7		[1994STE/CHI2, 2014BAD/NOW]
	FUS		41.7	345.5	DTA	[1991ACR, 1990KNA/SAB]
	SUB		149.8 ± 0.6	342	C	[1990KNA/SAB]
	SUB		155.8 ± 0.9	298	C	[1990KNA/SAB]
	V		126.6 ± 4.2	298		[1994STE/CHI2, 2006UMN/KWE]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound		T _m (K)	Method	Reference
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_{\text{m}}$ (kJ mol ⁻¹)			
		V		112.4		[1993PIA/FER, 2006UMN/KWE]
		V		120.4 ± 4.9		[1993PIA/FER, 2006UMN/KWE]
		V		113.7 ± 2.1		[1990KNA/SAB, 2006UMN/KWE]
C ₁₀ H ₂₂ O ₂ S	[126835-71-0]		3-(heptylthio)-1,2-propanediol			
		TRS		27.3	289.5	
		FUS		1.7	292.5	DSC [1993ACR, 1990VAN/VAN]
C ₁₀ H ₂₂ O ₃	[112-59-4]		diethylene glycol monoethyl ether			
		V	(413–473)	62.8	428	[2005LEE/SU]
		V	(403–423)	86.5	298	EB [2004CHY/FRA2]
		V	(406–531)	62.7	421	A [1987STE/MAL]
C ₁₀ H ₂₂ O ₃	[24083-03-2]		dipropylene glycol monobutyl ether			
		V	(337–500)	63.2	352	A [1987STE/MAL, 1947STU]
C ₁₀ H ₂₂ O ₃	[127748-41-8]		3-(heptyloxy)-1,2-propanediol			
		FUS		28.8	288	DSC [1993ACR, 1990VAN/VAN]
C ₁₀ H ₂₂ O ₄	[20324-33-8]		tripropylene glycol monomethyl ether			
		V	(308–515)	58.7	323	A [1987STE/MAL]
C ₁₀ H ₂₂ O ₅	[143-24-8]		tetraethylene glycol dimethyl ether (tetraglyme)			
		V		76.9 ± 2.6	298	CGC [2000NIC/ORF]
		V	(419–553)	58	434	A [1987STE/MAL]
C ₁₀ H ₂₂ S	[3698-94-0]		1-ethylthiooctane			
		V	(384–545)	63.9 ± 0.6	298	EB [1996STE/CHI]
C ₁₀ H ₂₂ S	[143-10-2]		1-decanethiol			
		FUS		33.3	247.9	[1996DOM/HEA, 1970FIN/MCC]
		V	(390–544)	56.4	405	[1999DYK/SVO]
		V	(283–293)	58.6	288	A [1987STE/MAL]
		V	(413–534)	54.6	428	A [1987STE/MAL]
		V		65.5 ± 0.5	298	C [1977MAN/SEL]
C ₁₀ H ₂₂ S	[13402-60-3]		2-decanethiol			
		V	(380–534)	54.6	395	[1999DYK/SVO]
C ₁₀ H ₂₂ S	[544-02-5]		diisopentyl sulfide			
		V	(339–366)	57.9	352	A [1987STE/MAL, 1999DYK/SVO]
		V	(340–365)	56.9	352	C [1962MAC/MAY2]
C ₁₀ H ₂₂ S	[872-10-6]		dipentyl sulfide			
		V	(346–365)	U66.3	356	[1999DYK/SVO]
		V	(346–366)	58.7	356	A [1987STE/MAL]
		V	(346–366)	57.5	358	EB [1962MAC/MAY2]
C ₁₀ H ₂₂ S ₂	[112-51-6]		dipentyl disulfide			
		V	(410–571)	59.8	425	[1999DYK/SVO]
		V		71.1 ± 0.2	298	C [1985KUS]
C ₁₀ H ₂₂ S ₂	[1191-67-9]		1,10-decanedithiol			
		V	(434–571)	72.3	449	A [1987STE/MAL, 1999DYK/SVO, 1943HAL/REI]
C ₁₀ H ₂₃ N	[2016-57-1]		decylamine			
		FUS		42.70	289.2	DSC [2005DOM/MAR]
		V		65.3 ± 2.3	298	CGC [2013GOB/RAT]
		V	(299–343)	64.9 ± 0.3	298	GS [2013THO/CHI]
		V		64.8 ± 4.6	298	CGC [2013THO/CHI]
		V	(410–506)	52.4	425	A, EST [1987STE/MAL, 1956MAN2]
		V	(329–431)	56.1 ± 0.6	380	BP [1940RAL/SEL, 2013THO/CHI]
		V	(329–431)	65.1 ± 0.6	380	BP [1940RAL/SEL, 2013THO/CHI]
C ₁₀ H ₂₃ N	[7378-99-6]		<i>N,N</i> -methyloctylamine			
		V	(420–458)	46.9	439	EB [2012ROZ/BRU]
		V	(284–323)	54.0 ± 0.5	303	[1997VER]
		V	(371–517)	50.2	386	A [1987STE/MAL]

TABLE 13. Phase change enthalpies of C₁₀ organic compounds—Continued

Molecular formula	CAS reg. no.	Compound				
	Transition	Temp. range (K)	$\Delta_{\text{trans}}H_m$ (kJ mol ⁻¹)	T _m (K)	Method	Reference
C ₁₀ H ₂₃ N	[2050-92-2]	dipentylamine				
	V		61.2 ± 2.6	298	CGC	[2014THO/GOB]
	V	(379–527)	51.2	394	A	[1987STE/MAL]
C ₁₀ H ₂₃ NO ₂	[126835-62-9]	3-(heptylamino)-1,2-propanediol				
	FUS		28.8	324.9	DSC	[1993ACR, 1990VAN/VAN]
C ₁₀ H ₂₃ N ₃	[67752-90-3]	[2-(dimethylamino)ethyl]methylhydrazone-2-propanone				
	V	(288–315)	62.3	301	A	[1987STE/MAL, 1980LEB/NAZ]
C ₁₀ H ₂₄ NO ₃ PS	[78-53-5]	<i>O,O</i> -diethyl- <i>S</i> -[2-(diethylamino)ethyl]thiophosphate				
	V	(358–407)	94.5	373	A	[1987STE/MAL, 1999DYK/SVO]
C ₁₀ H ₂₄ N ₂	[646-25-3]	decane-1,10-diamine				
	FUS		57.81	332.9	DSC	[2002DAL/DEL]
	V	(338–353)	73.6	345	GS	[2011POZ/VER]
C ₁₀ H ₂₄ N ₄	[996-70-3]	tetrakis(dimethylamino)ethylene				
	V	(358–485)	53.9 ± 0.5	298	EB	[1997STE/CHI4]
C ₁₀ H ₂₄ N ₄	[295-37-4]	1,4,8,11-tetraazacyclotetradecane				
	SUB	(352–372)	133.9 ± 2.5	362	TE	[1983CLA/COR]
C ₁₀ H ₂₇ N ₅ O ₆	[114606-56-3]	8-[[1 <i>R</i>]-1-(3,4-dimethoxyphenyl)-2-hydroxyethyl]amino]-3,7-dihydro-7-(2-methoxyethyl)-1,3-dimethyl-1 <i>H</i> -pyrrole-2,6-dione				
	FUS(I)		40.31	384.2		
	FUS(II)		39.88	401.2		
	FUS(III)		38.58	391.2	DSC	[1999GIR/PIE]

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5. References

- 1871REG M. Regnault, *Ann. Chim. Phys.* **23**, 73 (1871).
 1873BER M. Berthelot, *Compt. Rend.* **77**, 26 (1873).
 1879PET Petterson, *Ges. Wiss. Upsala* **36** (1879).
 1883KAH G. W. A. Kahlbaum, *Ber. Dtsch. Chem. Ges.* **16**, 2476–2484 (1883).
 1884WER E. Werner, *Ann. Chim. Phys.* **2**, 567 (1884).
 1886RIC A. Richardson, *J. Chem. Soc., Trans.* **49**, 761–776 (1886).
 1889COL N. Collie, *J. Chem. Soc., Trans.* **55**, 110 (1889).
 1889EYK J. F. Eykman, *Z. Phys. Chem.* **4**, 497–519 (1889).
 1889YOU S. Young, *J. Chem. Soc.* **55**, 486 (1889).
 1894BRU L. Bruner, *Chem. Ber.* **27**, 2102 (1894).
 1894KAH G. W. A. Kahlbaum, *Z. Phys. Chem.* **13**, 14–55 (1894).
 1895PIC S. U. Pickering, *J. Chem. Soc.* **67**, 664 (1895).
 1896GRI/MAR E. H. Griffiths and D. Marshall, *Philos. Mag. J. Sci.* **41**, 1 (1896).
 1898KAH G. W. A. Kahlbaum, *Z. Phys. Chem.* **26**, 577 (1898).
 1898LOU W. Louguinine, *Ann. Chim.* **7**, 334–337 (1898).
 1899HUL G. A. Hulett, *Z. Phys. Chem.* **28**, 629 (1899).
 1901DEF M. de Forcrand, *Comp. Rend.* **132**, 688–690 (1901).
 1901DEF2 M. de Forcrand, *Comp. Rend.* **132**, 569–571 (1901).
 1901KAH L. Kahlenberg, *J. Phys. Chem.* **5**, 284 (1901).
 1901KAH2 L. Kahlenberg, *J. Phys. Chem.* **5**, 215 (1901).
 1906REX A. Rex, *Z. Phys. Chem.* **55**, 355–370 (1906).
 1907MCI D. McIntosh, *J. Phys. Chem.* **11**, 306 (1907).
 1908BOG/WIN A. Bogojawlenski and N. Windogradow, *Z. Phys. Chem.* **64**, 251 (1908).
 1909MAS/FAU G. Massol and A. Faucon, *Compt. Rend.* **149**, 345 (1909).
 1910BIN E. C. Bingham, *Am. Chem. J.* **43**, 287–309 (1910).
 1910MEY J. Meyer, *Z. Phys. Chem.* **72**, 225–254 (1910).
 1911LOU/DUP W. Louguinine and G. Dupont, *Bull. Soc. Chim. Fr.* **9**, 219–224 (1911); *Chem. Abstr.* **5**, 10166 (1911).
 1912DEF M. de Forcrand, *C. R. Hebd. Seances Acad. Sci.* **154**, 1766 (1912).
 1913BLA J. J. Blanksma, *Chem. Weekbl.* **9**, 924 (1913).
 1913FLE/TYR J. F. Fletcher and D. Tyrer, *J. Chem. Soc.* **103**, 513 (1913).
 1913HER/RAT W. Herz and W. Rathmann, *Chem.-Ztg.* **36**, 1417 (1913).
 1913MUN C. F. Mündel, *Z. Phys. Chem.* **85**, 435–465 (1913).
 1914MUL A. H. R. Muller, *Z. Phys. Chem.* **86**, 177 (1914).
 1915BRI P. W. Bridgman, *Phys. Rev.* **6**, 94 (1915).
 1916TER J. W. Terwen, *Z. Phys. Chem.* **91**, 469–499 (1916).
 1918NAR J. Narbutt, *Z. Elektrochem. Angew. Phys. Chem.* **24**, 339 (1918).
 1919BEL/SAW J. M. Bell and J. P. Sawyer, *J. Ind. Eng. Chem.* **11**, 1025–1028 (1919).
 1919MOL/BAT E. Moles and T. J. Batuecas, *Chim. Phys. Phys.-Chim. Biol.* **17**, 537–588 (1919).
 1920ATK/HEY R. H. Atkinson, C. T. Heycock, and W. J. Pope, *J. Chem. Soc., Trans.* **117**, 1410 (1920).
 1920BAX/BEZ G. P. Baxter, F. K. Bezzenger, and C. H. Wilson, *J. Am. Chem. Soc.* **42**, 1386–1392 (1920).
 1920GIB/PAR G. E. Gibson, G. S. Parks, and W. M. Latimer, *J. Am. Chem. Soc.* **42**, 1542 (1920).
 1920MON K. P. Monroe, *J. Ind. Eng. Chem.* **12**, 969–971 (1920).
 1921MAA/WRI O. Maass and C. H. Wright, *J. Am. Chem. Soc.* **43**, 1098–1111 (1921).
 1921SID/RUB N. V. Sidgwick and H. E. Rubie, *J. Chem. Soc., Faraday Trans.* **119**, 1013 (1921).

- 1921STO/HEN A. Stock, F. Henning, and E. Kuss, *Ber. Dtsch. Chem. Ges.* **54**, 1119–1129 (1921).
- 1922LAT W. M. Latimer, *J. Am. Chem. Soc.* **44**, 90 (1922).
- 1922NEL/SEN O. A. Nelson and C. E. Senseman, *Ind. Eng. Chem.* **14**, 58–62 (1922).
- 1922STR/PAR K. Stratton and J. R. Partington, *Philos. Mag.* **43**, 436 (1922).
- 1922TAY/SMI R. S. Taylor and L. B. Smith, *J. Am. Chem. Soc.* **44**, 2450–2463 (1922).
- 1923AWB/GRI J. H. Awbery and E. Griffiths, *Proc. Phys. Soc., London* **36**, 303 (1923).
- 1923GIB/GIA G. E. Gibson and W. F. Giauque, *J. Am. Chem. Soc.* **45**, 93 (1923).
- 1923JEN/SHO C. F. Jenkin and D. N. Shorthose, Special Report 14, Department of Scientific and Industrial Research, Food Investigation Board, Great Britain, 1923.
- 1923MOR/MUR F. S. Mortimer and R. V. Murphy, *Ind. Eng. Chem.* **15**, 1140–1142 (1923).
- 1923WEI/DOW R. M. Weis and C. R. Downs, *J. Am. Chem. Soc.* **45**, 1003 (1923).
- 1924EUC/KAR A. Eucken and E. Karwat, *Z. Phys. Chem.* **112**, 467 (1924).
- 1924GAR/RAN W. E. Garner and F. C. Randall, *J. Chem. Soc., Trans.* **125**, 881 (1924).
- 1924SHO D. N. Shorthose, Special Report 19, Department of Scientific and Industrial Research, Food Investigation Board, Great Britain, 1924.
- 1924STR/PAR K. Stratton and J. R. Partington, *Philos. Mag.* **48**, 1085 (1924).
- 1925KOH G. T. Kohman, *J. Phys. Chem.* **29**, 1048 (1925).
- 1925MAA/WAL O. Maas and L. J. Walbauer, *J. Am. Chem. Soc.* **47**, 1 (1925).
- 1925NEL/WAL O. A. Nelson and H. Wales, *J. Am. Chem. Soc.* **47**, 867 (1925).
- 1925PAR G. S. Parks, *J. Am. Chem. Soc.* **47**, 338 (1925).
- 1925PAR/KEL G. S. Parks and K. K. Kelley, *J. Am. Chem. Soc.* **47**, 2089–2097 (1925).
- 1925PER/BAR J. H. Perry and D. C. Bardwell, *J. Am. Chem. Soc.* **47**, 2629–2632 (1925).
- 1925SWA/MAC T. H. Swan and H. Mack, Jr., *J. Am. Chem. Soc.* **47**, 2112–2116 (1925).
- 1925WIL J. W. A. Williams, *J. Am. Chem. Soc.* **47**, 2644 (1925).
- 1926AND M. R. Andrews, *J. Phys. Chem.* **30**, 1497–1500 (1926).
- 1926AND/LYN D. H. Andrews, G. Lynn, and J. Johnston, *J. Am. Chem. Soc.* **48**, 1274–1287 (1926).
- 1926BER/MAY J. F. T. Berliner and O. E. May, *J. Am. Chem. Soc.* **48**, 2630 (1926).
- 1926DAN/JEN L. I. Dana, A. C. Jenkins, J. N. Burdick, and R. C. Timm, *Refriger. Eng.* **12**, 387 (1926).
- 1926EVA/AYL W. V. Evans and M. B. Aylesworth, *Ind. Eng. Chem.* **18**, 24–27 (1926).
- 1926FEL/DUR W. A. Felsing and S. A. Durban, *J. Am. Chem. Soc.* **48**, 2885–2893 (1926).
- 1926LOO/WAL A. G. Loomis and J. E. Walters, *J. Am. Chem. Soc.* **48**, 2051–2055 (1926).
- 1926MAT J. H. Mathews, *J. Am. Chem. Soc.* **48**, 562–576 (1926).
- 1926NOY/WEB W. A. Noyles, Jr. and D. E. Webbe, *J. Am. Chem. Soc.* **48**, 1882–1887 (1926).
- 1926PAR/AND G. S. Parks and C. T. Anderson, *J. Am. Chem. Soc.* **48**, 1506 (1926).
- 1926PER/POR J. H. Perry and F. Porter, *J. Am. Chem. Soc.* **48**, 299–302 (1926).
- 1926SIN/HAR H. Sinozaki, R. Hara, and S. Mitsukuri, *Bull. Chem. Soc. Jpn.* **1**, 59–61 (1926).
- 1926STR F. Straus, *Ber. Dtsch. Chem. Ges.* **59**, 1664–1681 (1926).
- 1926TAY/RIN C. A. Taylor and W. H. Rinkenbach, *J. Chem. Soc.* **48**, 1305–1309 (1926).
- 1926YAT G. W. C. Yates, *Philos. Mag.* **2**, 817–826 (1926).
- 1927BER/MAY J. F. T. Berliner and O. E. May, *J. Am. Chem. Soc.* **49**, 1007–1011 (1927).
- 1927COO/COO A. S. Coolidge and M. S. Coolidge, *J. Am. Chem. Soc.* **49**, 100–104 (1927).
- 1927DAN/BAR L. I. Dana, J. N. Bardick, and A. C. Jenkins, *J. Am. Chem. Soc.* **49**, 2801 (1927).
- 1927EDW/WIL M. J. Edwards and J. M. Williams, *J. Chem. Soc.* **1927**, 855.
- 1927KLO/WOO S. Klosky, L. P. L. Woo, and R. J. Flanigan, *J. Am. Chem. Soc.* **49**, 1280–1284 (1927).
- 1927MAY/BER O. E. May, J. F. T. Berliner, and D. F. J. Lynch, *J. Am. Chem. Soc.* **49**, 1012–1016 (1927).
- 1927NAG N. N. Nagornov, *Anal. Instrum. Anal. Phys. Chem.* **3**, 562–583 (1927); *Chem. Zentr.* II 2668 (1927); *Chem. Abstr.* **22**, 4298 (1928).
- 1927PER J. H. Perry, *J. Phys. Chem.* **31**, 1737–1741 (1927).
- 1927RIN W. H. Rinkenbach, *Ind. Eng. Chem.* **19**, 474–476 (1927).
- 1927STE/JOH L. E. Steiner and J. J. Johnston, *J. Phys. Chem.* **32**, 912–939 (1927).
- 1927SUT/LAY J. A. Sutcliffe, F. C. Lay, and W. L. Prichard, *Proc. R. Soc. A* **115**, 88 (1927).
- 1928EUC/HAU A. Eucken and F. Hauck, *Z. Phys. Chem.* **134**, 161 (1928).
- 1928NEL O. A. Nelson, *Ind. Eng. Chem.* **20**, 1382–1384 (1928).
- 1928NEL2 O. A. Nelson, *Ind. Eng. Chem.* **20**, 1380–1382 (1928).
- 1928PAR/BAR G. S. Parks and B. J. Barton, *J. Am. Chem. Soc.* **50**, 24–27 (1928).
- 1928PAR/KEL G. S. Parks and K. K. Kelley, *J. Phys. Chem.* **32**, 734 (1928).
- 1928ROL M. Roland, *Bull. Soc. Chim. Belg.* **37**, 117–140 (1928).
- 1928SHI V. P. Shishokina, *Izv. Inst. Fiz.-Khim. Anal., Akad. Nauk SSSR* **4**, 183 (1928).
- 1928SKA/SAX E. L. Skau and B. Saxton, *J. Am. Chem. Soc.* **50**, 2693 (1928).
- 1928STE D. F. Stedman, *Trans. Faraday Soc.* **24**, 289 (1928).
- 1929BAB/JAC V. S. Babasinian and J. G. Jackson, *J. Am. Chem. Soc.* **51**, 2147 (1929).
- 1929CLU K. Clusius, *Z. Phys. Chem.* **B3**, 41 (1929).
- 1929HAG/WEI C. F. Haggerty and J. F. Weiler, *J. Am. Chem. Soc.* **51**, 1623–1626 (1929).
- 1929KEL K. K. Kelley, *J. Am. Chem. Soc.* **51**, 2738 (1929).
- 1929KEL2 K. K. Kelley, *J. Am. Chem. Soc.* **51**, 180 (1929).
- 1929KEL3 K. K. Kelley, *J. Am. Chem. Soc.* **51**, 1145 (1929).
- 1929KEL4 K. K. Kelley, *J. Am. Chem. Soc.* **51**, 779 (1929).
- 1929KEL5 K. K. Kelley, *J. Am. Chem. Soc.* **51**, 1400 (1929).
- 1929MOO/LUD R. B. Mooney and E. B. Ludlam, *Proc. R. Soc. Edinburgh* **49**, 160 (1929).
- 1929PAR/TOD G. S. Parks and S. S. Todd, *J. Ind. Eng. Chem.* **21**, 1235 (1929).
- 1929PEA/PET J. N. Pearce and P. E. Peters, *J. Phys. Chem.* **33**, 873–878 (1929).
- 1929SMY/ENG C. P. Smyth and E. W. Engel, *J. Am. Chem. Soc.* **51**, 2646–2660 (1929).
- 1930COO A. S. Coolidge, *J. Am. Chem. Soc.* **52**, 1874–1887 (1930).
- 1930DRU/FLA C. Drucker and Th. Flade, *Z. Wiss. Photogr., Schaum Festschr.* **29**, 29–42 (1930).
- 1930EVA/DAV D. P. Evans, W. C. Davies, and W. J. Jones, *J. Chem. Soc.* **1930**, 1310.
- 1930HUF/PAR H. M. Huffman, G. S. Parks, and S. B. Thomas, *J. Am. Chem. Soc.* **52**, 3241 (1930).
- 1930HUF/PAR2 H. M. Huffman, G. S. Parks, and A. C. Daniels, *J. Am. Chem. Soc.* **52**, 1547 (1930).
- 1930LIV/HEI R. Livingston and J. B. Heisig, *J. Am. Chem. Soc.* **52**, 2409–2410 (1930).
- 1930NEL O. A. Nelson, *Ind. Eng. Chem.* **22**, 971–972 (1930).
- 1930PAR/HUF G. S. Parks, H. M. Huffman, and S. B. Thomas, *J. Am. Chem. Soc.* **52**, 1032 (1930).
- 1930PAR/HUF2 G. S. Parks and H. M. Huffman, *J. Am. Chem. Soc.* **52**, 4381 (1930).
- 1930PHI/WAT J. C. Philip and S. C. Waterton, *J. Chem. Soc.* **1930**, 2783.
- 1930SCH/THO H. A. Schuette and R. W. Thomas, *J. Am. Chem. Soc.* **52**, 2028–2030 (1930).
- 1930SOU/AND J. C. Southland and D. H. Andrews, *J. Franklin Inst.* **209**, 349–360 (1930).
- 1930WAS A. Wasserman, *Z. Phys. Chem.* **A146**, 418 (1930).
- 1930WIE/HUB R. Wiebe, K. H. Hubbard, and M. J. Brevoort, *J. Am. Chem. Soc.* **52**, 611 (1930).

- 1930ZMA M. A. Zmaczynski, *J. Chim. Phys.* **27**, 503–517 (1930).
- 1931BUF/FLE R. M. Buffington and J. Fleischer, *J. Ind. Eng. Chem.* **23**, 1290–1292 (1931).
- 1931COS V. E. Cosslett, *Z. Anorg. Allg. Chem.* **201**, 75–80 (1931); *Chem. Abstr.* **26**, 1535 (1932).
- 1931CRO/BIJ C. A. Crommelin, W. J. Bijleveld, and E. G. Brown, *Proc. Acad. Sci. Amsterdam* **34**, 1314–1317 (1931); *Chem. Abstr.* **26**, 2904 (1931).
- 1931DEE R. F. Deese, *J. Am. Chem. Soc.* **53**, 3673 (1931).
- 1931FIO/GIN E. F. Fiock, D. C. Ginnings, and W. B. Holton, *J. Res. Natl. Bur. Stand.* **6**, 881 (1931).
- 1931HIL A. E. Hill, *J. Am. Chem. Soc.* **53**, 2598–2608 (1931).
- 1931HUF/PAR H. M. Huffman, G. S. Parks, and M. Barmore, *J. Am. Chem. Soc.* **53**, 3876 (1931).
- 1931LIN E. G. Lindner, *J. Phys. Chem.* **35**, 531–535 (1931).
- 1931MAT/FEH J. E. Mathews and P. R. Fehlandt, *J. Am. Chem. Soc.* **53**, 3212 (1931).
- 1931PAR/HUF G. S. Parks and H. M. Huffman, *Ind. Eng. Chem.* **23**, 1138 (1931).
- 1931SCH/COW H. A. Schuette and M. A. Cowley, *J. Am. Chem. Soc.* **53**, 3485–3489 (1931).
- 1931VAN/MAN P. A. van der Meulen and R. F. Mann, *J. Am. Chem. Soc.* **53**, 451–453 (1931).
- 1932CLA/GIA J. O. Clayton and W. F. Giauque, *J. Am. Chem. Soc.* **54**, 2610–2626 (1932).
- 1932ELL/REI L. M. Ellis, Jr. and E. E. Reid, *J. Am. Chem. Soc.* **54**, 1674–1687 (1932).
- 1932GRI/AWB E. Griffiths and J. H. Awbery, *Proc. Phys. Soc.* **44**, 121 (1932).
- 1932KUB T. Kubota, *J. Chem. Soc. Jpn.* **53**, 404–417 (1932).
- 1932SPA/THO M. E. Spaght, S. B. Thomas, and G. S. Parks, *J. Phys. Chem.* **36**, 882–888 (1932).
- 1932VAU W. E. Vaughan, *J. Am. Chem. Soc.* **54**, 3863–3876 (1932).
- 1933BAR/BUR E. G. V. Barrett and J. L. Burrage, *J. Phys. Chem.* **37**, 1029–1035 (1933).
- 1933BOO/BUR H. S. Booth, P. E. Burchfield, E. M. Bixly, and J. B. MacKelvey, *J. Am. Chem. Soc.* **53**, 2231–2235 (1933).
- 1933BRO/FRA L. F. Broadway and R. G. J. Fraser, *J. Chem. Soc.* 429–430 (1933).
- 1933DEI V. R. Deitz, *J. Am. Chem. Soc.* **55**, 472–475 (1933).
- 1933FER/THO J. D. Ferry and S. B. Thomas, *J. Phys. Chem.* **37**, 253 (1933).
- 1933HEI G. Heim, *Bull. Soc. Chim. Belg.* **42**, 467–482 (1933).
- 1933HEI/MUR G. B. Heisig and O. D. Murd, *J. Am. Chem. Soc.* **55**, 3485–3487 (1933).
- 1933HEI2 G. B. Heisig, *J. Am. Chem. Soc.* **55**, 2304–2311 (1933).
- 1933HEN/MUR H. R. Henze and T. J. Murchison, *J. Am. Chem. Soc.* **55**, 4255–4259 (1933).
- 1933HOR/GEI F. Horvorka and F. E. Geiger, *J. Am. Chem. Soc.* **55**, 4759–4761 (1933).
- 1933HOR/LAN F. Horvorka, H. P. Lankelma, and C. K. Naujoks, *J. Am. Chem. Soc.* **53**, 4820–4822 (1933).
- 1933JOH J. D. A. Johnson, *J. Chem. Soc.* 1530 (1933).
- 1933LEN C. W. Lenth, *J. Am. Chem. Soc.* **55**, 3283 (1933).
- 1933MAR/CUT J. Marsden and A. C. Cuthbertson, *Can. J. Res.* **9**, 419 (1933).
- 1933MEH W. Mehl, *Beih., Z. Ges. Kalte-Ind. Ser.* **1**, 5 (1933).
- 1933MEN/MOH W. Menzel and F. Mohry, *Z. Anorg. Allg. Chem.* **210**, 257–263 (1933).
- 1933MIL/MEN F. T. Miles and A. W. C. Menzies, *J. Phys. Chem.* **37**, 425–430 (1933).
- 1933NEL/YOU O. A. Nelson and H. D. Young, *J. Am. Chem. Soc.* **55**, 2429–2431 (1933).
- 1933PAR/HUF G. S. Parks, H. M. Huffman, and M. Barmore, *J. Am. Chem. Soc.* **55**, 2733–2740 (1933).
- 1933ROT/MEY W. A. Roth and I. Meyer, *Z. Electrochem.* **39**, 35 (1933).
- 1933RUF/BRE O. Ruff and O. Bretschneider, *Z. Anorg. Allg. Chem.* **210**, 173 (1933).
- 1933TAN H. Tanneberger, *Ber. Dtsch. Chem. Ges.* **66**, 484–486 (1933); *Chem. Abstr.* **27**, 3374 (1933).
- 1933TAY/LAY A. Taylor and E. T. Layng, *J. Chem. Phys.* **1**, 798–808 (1933).
- 1933THO/BUR N. V. Thornton, A. B. Burg, and H. I. Schlesinger, *J. Am. Chem. Soc.* **55**, 3177 (1933).
- 1933TOR/MOL M. T. Toral and E. Moles, *An. R. Soc. Esp. Fis. Quim.* **31**, 735–745 (1933); *Chem. Abstr.* **28**, 954 (1934).
- 1933WHI/FLE F. C. Whitmore and G. H. Fleming, *J. Am. Chem. Soc.* **55**, 3803–3806 (1933).
- 1933YOS/STO D. M. Yost and W. E. Stone, *J. Am. Chem. Soc.* **55**, 1889–1895 (1933).
- 1934CAM/CAM A. N. Campbell and A. J. R. Campbell, *Trans. Faraday Soc.* **30**, 1109–1114 (1934).
- 1934GOO J. W. Goodeve, *Trans. Faraday Soc.* **30**, 501–504 (1934), Note: Vapor pressure data is presented graphically in paper as log P versus 1/T.
- 1934GOR S. V. Gorbachev, *Zh. Prikl. Khim.* **7**, 388–391 (1934); *Chem. Abstr.* **29**, 13996 (1934).
- 1934HIE/WOE W. Hieber and A. Woerner, *Z. Elektrochem. Angew. Phys. Chem.* **40**, 252–256 (1934).
- 1934HIR H. Hirsbrunner, *Helv. Chim. Acta* **17**, 477–504 (1934).
- 1934JAC/PAR C. J. Jacobs and G. S. Parks, *J. Am. Chem. Soc.* **56**, 1513 (1934).
- 1934JOH/LON H. L. Johnston and E. A. Long, *J. Am. Chem. Soc.* **56**, 31 (1934).
- 1934LEW/SCH G. N. Lewis and P. W. Schutz, *J. Am. Chem. Soc.* **56**, 1002 (1934).
- 1934MEH W. Mehl, *Z. Phys. Chem.* **A164**, 312–313 (1934).
- 1934MIL/DIT F. W. Miller, Jr. and H. R. Dittmar, *J. Am. Chem. Soc.* **56**, 848 (1934).
- 1934OGO/ANJ S. Oguri, S. Anjo, and Y. Kuwabara, *Waseda Appl. Chem. Soc. Bull.* **22**, 1–4 (1934); *Chem. Abstr.* **28**, 4298 (1934).
- 1934PAR/THO G. S. Parks and S. B. Thomas, *J. Am. Chem. Soc.* **56**, 1423 (1934).
- 1934POU/WIL J. R. Pound and A. M. Wilson, *J. Phys. Chem.* **39**, 1135 (1934).
- 1934RIG/FEL N. E. Rigler, W. A. Felsing, and H. R. Henze, *J. Am. Chem. Soc.* **56**, 1499 (1934).
- 1934ROT/NAG L. Rotinjanz and N. Nagornow, *Z. Phys. Chem. A* **169**, 20–30 (1934).
- 1934RUF/MIL O. Ruff and G. Miltschitzky, *Z. Anorg. Allg. Chem.* **221**, 154 (1934).
- 1934WOL/TRI K. L. Wolf and H. G. Trieschmann, *Z. Phys. Chem. B* **27**, 376–380 (1934).
- 1935BAU/BUR H. Bauer and K. Burschkies, *Ber. Dtsch. Chem. Ges.* **68**, 1238–1243 (1935).
- 1935BOO/ELS H. S. Booth, H. M. Elsey, and P. E. Burchfield, *J. Am. Chem. Soc.* **57**, 2066 (1935).
- 1935BUT/RAM J. A. V. Butler, C. N. Ramchandani, and D. W. Thompson, *J. Chem. Soc.* **1935**, 280–285.
- 1935CAR/DIC J. L. Carrico and R. G. Dickinson, *J. Am. Chem. Soc.* **57**, 1343–1348 (1935).
- 1935HUF/ELL H. M. Huffman and E. L. Ellis, *J. Am. Chem. Soc.* **57**, 46 (1935).
- 1935KIR/POP V. A. Kireev and A. A. Popov, *J. Gen. Chem. (USSR)* **5**, 1399–1401 (1935); *Chem. Abstr.* **30**, 2441 (1936).
- 1935LEE P. Z. Lee, *Z. Anorg. Allg. Chem.* **223**, 213–217 (1935); *Chem. Abstr.* **29**, 6118 (1935).
- 1935MIL P. Miller, *Iowa State Coll. J. Sci.* **10**, 91 (1935).
- 1935SCH/STA H. Schierholtz and M. L. Staples, *J. Am. Chem. Soc.* **57**, 2709–2711 (1935).
- 1935SPE/WIL R. Spence and W. Wild, *J. Chem. Soc.* **138**, 506–509 (1935).
- 1935THO/LIN H. W. Thompson and J. W. Linnett, *Trans. Faraday Soc.* **31**, 1743–1747 (1935).
- 1935TIM J. Timmermans, *Bull. Soc. Chim. Belg.* **44**, 17 (1935).
- 1935TRI H. G. Trieschmann, Ph.D. dissertation (Inst. Fur Phys. Chem. and Electrochem. der Universitat Kiel, Germany, 1935).
- 1935WIB/SUT E. Wiberg and W. Sutterlin, *Z. Elektrochem. Angew. Phys. Chem.* **41**, 151 (1935).
- 1935WIL A. L. Wilson, *Ind. Eng. Chem.* **27**, 867–871 (1935).
- 1936AST/MES J. G. Aston and G. H. Messerly, *J. Am. Chem. Soc.* **58**, 2354–2361 (1936).
- 1936BEN/CUT H. E. Bent, G. R. Cuthbertson, M. Dorfman, and R. E. Leary, *J. Am. Chem. Soc.* **58**, 165–170 (1936).

- 1936DEB J. H. De Boer, *Trans. Faraday Soc.* **32**, 10 (1936).
- 1936EWE M. Ewert, *Bull. Soc. Chim. Belg.* **45**, 493–515 (1936).
- 1936GRE M. A. Grekhnev, *Lesokhim. Prom-st.* **5**, 11–12 (1936); *Chem. Abstr.* **32**, 5271 (1938).
- 1936HOV/SCH F. Hovorka, R. A. Schaefer, and D. Dreisback, *J. Am. Chem. Soc.* **58**, 2264 (1936).
- 1936LUC/LIK G. P. Luchinskii and A. I. Likhacheva, *Zh. Fiz. Khim.* **7**, 723 (1936).
- 1936PAR/TOD G. S. Parks, S. S. Todd, and W. A. Moore, *J. Am. Chem. Soc.* **58**, 398 (1936).
- 1936PAR/TOD2 G. S. Parks, S. S. Todd, and C. H. Shomate, *J. Am. Chem. Soc.* **58**, 2505 (1936).
- 1936PEA/BAK J. N. Pearce and H. M. Bakke, *Proc. Iowa Acad. Sci.* **43**, 171 (1936).
- 1936RUF/BRE O. Ruff, O. Bretschneider, W. Luchsinger, and G. Mitschitzky, *Ber. Dtsch. Chem. Ges. B* **69**, 299 (1936).
- 1936RUF/GIE O. Ruff and M. Giese, *Ber. Dtsch. Chem. Ges. B* **69**, 684 (1936); *Chem. Abstr.* **30**, 31302 (1936).
- 1936THO/LIN H. W. Thompson and J. W. Linnett, *Trans. Faraday Soc.* **32**, 681–685 (1936).
- 1936TOD/PAR S. S. Todd and G. S. Parks, *J. Am. Chem. Soc.* **58**, 134 (1936).
- 1937AST/SIL J. G. Aston, C. W. Siller, and G. H. Messerly, *J. Am. Chem. Soc.* **59**, 1743–1751 (1937).
- 1937BEK/WOO N. Bekkedahl and L. A. Wood, *J. Res. Natl. Bur. Stand* **19**, 551 (1937).
- 1937BRO/MAN O. L. I. Brown and G. G. Manov, *J. Am. Chem. Soc.* **59**, 500 (1937).
- 1937CAR/MOR T. S. Carswell and H. L. Morrill, *Ind. Eng. Chem.* **29**, 1247 (1937).
- 1937DEW J. H. de Wilde, *Z. Anorg. Allg. Chem.* **233**, 411–414 (1937).
- 1937DUN/WOL H. Dunken and K. L. Wolf, *Z. Phys. Chem. B* **38**, 441–450 (1937).
- 1937EGA/KEM C. J. Egan and J. D. Kemp, *J. Am. Chem. Soc.* **59**, 1264–1268 (1937).
- 1937GAL/HIB A. F. Gallagher and H. Hibbert, *J. Am. Chem. Soc.* **59**, 2521–2525 (1937).
- 1937GAR/BRE G. S. Gardner and J. E. Brewer, *Ind. Eng. Chem.* **29**, 179–181 (1937).
- 1937GIA/EGA W. F. Giauque and C. J. Egan, *J. Chem. Phys.* **5**, 45–54 (1937).
- 1937GUY/SCH A. Guyer, W. Schutze, and M. Weidenmann, *Helv. Chim. Acta* **20**, 936–949 (1937).
- 1937HEN A. L. Henne, *J. Am. Chem. Soc.* **59**, 1200 (1937).
- 1937HRY/SMO K. Hrynakowski and A. Smoczkiwiczowa, *Rocz. Chem.* **17**, 165 (1937).
- 1937ISH/TAN F. Ishikawa and C. Tanobe, *Rikagaku Kenkyusho Iho* **16**, 1318 (1937); *Chem. Abstr.* **32**, 41687 (1938).
- 1937KEM/GIA J. D. Kemp and W. F. Giauque, *J. Am. Chem. Soc.* **59**, 79–84 (1937).
- 1937KLE/WAG A. Klemenc and G. Wagner, *Ber. Dtsch. Chem. Ges.* **70**, 1880–1882 (1937); *Chem. Abstr.* **31**, 8412 (1937).
- 1937MOO/KAN V. G. Moor, E. K. Kanep, and I. E. Dobkin, "Materials on cracking and chemical treatment of cracking products," *Trans. Exptl. Research Lab. Khemgas USSR* **3**, 320–328 (1937); *Chem. Abstr.* **31**, 6072 (1937).
- 1937PAR/SHO G. S. Parks, C. H. Shomate, W. D. Kennedy, and B. L. Crawford, Jr., *J. Chem. Phys.* **5**, 359 (1937).
- 1937PER A. Perlick, *Bull. Int. Inst. Refrig.* **18**, 1 (1937).
- 1937RIN/SAY J. C. Rintelen, Jr., J. H. Saylor, and P. M. Gross, *J. Am. Chem. Soc.* **59**, 1129–1130 (1937).
- 1937RUD/KOR G. A. Rudakov and S. Ya. Korotov, *Zh. Prikl. Khim.* **10**, 312 (1937); *Chem. Abstr.* **31**, 32399 (1937).
- 1937STU D. R. Stull, *J. Am. Chem. Soc.* **59**, 2726 (1937).
- 1937THO/DAI H. W. Thompson and F. S. Dainton, *Trans. Faraday Soc.* **33**, 1546–1555 (1937).
- 1937WIT/KEM R. K. Witt and J. D. Kemp, *J. Am. Chem. Soc.* **59**, 273–276 (1937).
- 1938BAS/EME L. A. Bashford, H. J. Emeleus, and H. V. A. Briscoe, *J. Chem. Soc.* **1938**, 1358.
- 1938BRA J. D. Brandner, *Ind. Eng. Chem.* **30**, 681–684 (1938).
- 1938EFT E. Efring, Ph.D. dissertation, University of Lund, 1938, as quoted in [1956KIR].
- 1938EGA/KEM C. G. Egan and J. D. Kemp, *J. Am. Chem. Soc.* **60**, 2097–2101 (1938).
- 1938EUC/SCH A. Eucken and E. Schroder, *Z. Phys. Chem.* **B41**, 307 (1938).
- 1938HOV/LAN F. Hovorka, H. P. Lankelma, and S. C. Stanford, *J. Am. Chem. Soc.* **60**, 820–827 (1938).
- 1938KEM/EGA J. D. Kemp and C. J. Egan, *J. Am. Chem. Soc.* **60**, 1521–1525 (1938).
- 1938KEN/SHO W. D. Kennedy, C. H. Shomate, and G. P. Parks, *J. Am. Chem. Soc.* **60**, 1507 (1938).
- 1938KUC K. Kuchinskaya, *Sbornik Trudov. Opytnogo Zavoda im. Akad. S. V. Lebedeva* 27–30 (1938); *Chem. Abstr.* **34**, 3147 (1940).
- 1938LEV/SHT E. Levin and I. Shtern, *Zh. Prikl. Khim. (Moscow)* **11**, 426–441 (1938).
- 1938LIN M. Linhard, *Z. Anorg. Allg. Chem.* **236**, 200–208 (1938).
- 1938RAD/ALE D. Radalescu and M. Alexa, *Bull. Chem. Soc. Rom.* **20A**, 89–113 (1938).
- 1938REI L. Reidel, *Z. Ges. Kalte-Ind.* **45**, 221 (1938).
- 1938SCA/RAY G. Scatchard and C. L. Raymond, *J. Am. Chem. Soc.* **60**, 1278–1287 (1938); Erratum, **60**, 3099 (1938).
- 1938WOL/WEG K. L. Wolf and H. Z. Weghofer, *Z. Phys. Chem. B* **39**, 194–208 (1938).
- 1939AST/EID J. G. Aston, M. L. Eidinoff, and W. S. Forster, *J. Am. Chem. Soc.* **61**, 1539–1543 (1939).
- 1939FRA/CLU A. Frank and K. Clusius, *Z. Phys. Chem.* **42B**, 395–421 (1939).
- 1939FRE/HIL K. J. Frederick and J. H. Hildebrand, *J. Am. Chem. Soc.* **61**, 1555 (1939).
- 1939GIA/RUE W. F. Giauque and R. A. Ruehrwein, *J. Am. Chem. Soc.* **61**, 2626 (1939).
- 1939PAT/SCH W. Patnode and W. J. Scheiber, *J. Am. Chem. Soc.* **61**, 3449–3451 (1939).
- 1939POW/GIA T. M. Powell and W. F. Giauque, *J. Am. Chem. Soc.* **61**, 2366–2370 (1939).
- 1939RAI W. E. Railing, *J. Am. Chem. Soc.* **61**, 3349 (1939).
- 1939REI L. Reidel, *Bull. Int. Inst. Refrig.* **20**, 1–10 (1939).
- 1939RHE/MOT H. Rheinboldt and E. Motzkus, *Ber. Dtsch. Chem. Ges. B* **72**, 657 (1939).
- 1939RUE/GIA R. A. Ruehrwein and W. F. Giauque, *J. Am. Chem. Soc.* **61**, 2940–2944 (1939).
- 1939VAN A. Van de Vloed, *Bull. Soc. Chem. Belg.* **48**, 229–268 (1939).
- 1940AST/KEN J. G. Aston, R. M. Kennedy, and S. C. Schumann, *J. Am. Chem. Soc.* **62**, 2059–2063 (1940).
- 1940AST/MES J. G. Aston and G. H. Messerly, *J. Am. Chem. Soc.* **62**, 1917–1923 (1940).
- 1940BEL A. F. Belyaev, *Zh. Fiz. Khim.* **14**, 1009 (1940).
- 1940BEN/MCH A. F. Benning and R. C. McHarness, *Ind. Eng. Chem.* **32**, 497–499 (1940).
- 1940BIR/BUC L. Birckenbach and E. Buchner, *Ber. Dtsch. Chem. Ges. B* **73**, 1153 (1940).
- 1940DAR/VER F. R. Darkis, H. E. Vermillion, and P. M. Gross, *Ind. Eng. Chem.* **32**, 946–949 (1940).
- 1940HEI/REI W. Heiber and E. Reindl, *Ztschr. Electrochim.* **10**, 559–570 (1940).
- 1940HOD E. B. Hodge, *Ind. Eng. Chem.* **32**, 748 (1940).
- 1940HOV/LAN F. Hovorka, H. P. Lankelma, and A. E. Axelrod, *J. Am. Chem. Soc.* **62**, 187–189 (1940).
- 1940HOV/LAN2 F. Hovorka, H. P. Lankelma, and I. Schneider, *J. Am. Chem. Soc.* **62**, 1096–1098 (1940).
- 1940HOV/LAN3 F. Hovorka, H. P. Lankelma, and W. R. Smith, *J. Am. Chem. Soc.* **62**, 2372–2374 (1940).
- 1940LAM/ROP A. B. Lamb and E. E. Roper, *J. Am. Chem. Soc.* **62**, 806–814 (1940).
- 1940MES/AST G. H. Messerly and J. G. Aston, *J. Am. Chem. Soc.* **62**, 886–890 (1940).
- 1940MES/KEN G. H. Messerly and R. M. Kennedy, *J. Am. Chem. Soc.* **62**, 2988–2991 (1940).
- 1940PIT K. S. Pitzer, *J. Am. Chem. Soc.* **62**, 1224–1227 (1940).
- 1940PIT2 K. S. Pitzer, *J. Am. Chem. Soc.* **62**, 331 (1940).

- 1940QUA/NOR O. R. Quayle and H. M. Norton, *J. Am. Chem. Soc.* **62**, 1170 (1940).
- 1940RAL/SEL A. W. Ralston, W. M. Selby, W. O. Pool, and R. H. Potts, *Ind. Eng. Chem.* **32**, 1093 (1940).
- 1940ROS/SAN E. J. Rosenbaum and C. R. Sandberg, *J. Am. Chem. Soc.* **62**, 1622 (1940).
- 1940SMI E. R. Smith, *J. Res. Natl. Bur. Stand.* **24**, 229–234 (1940).
- 1940STU/SAY J. M. Stuckey and J. H. Saylor, *J. Am. Chem. Soc.* **62**, 2922–2925 (1940).
- 1940ZIL A. A. Zil'berman-Granovskaya, *J. Phys. Chem. USSR* **14**, 759–767 (1940); **14**, 768–773 (1940); **14**, 1004–1006 (1940); *Chem. Abstr.* **35**, 3867 (1941).
- 1941BEL A. F. Belyaev, *Acta Physicochem. U.S.S.R.* **14**, 523 (1941).
- 1941DAV D. S. Davis, *Ind. Eng. Chem.* **33**, 401 (1941).
- 1941HEI C. B. Heisig, *J. Am. Chem. Soc.* **63**, 1698–1699 (1941).
- 1941KEN/SAG R. M. Kennedy, M. Sagenkahn, and J. G. Aston, *J. Am. Chem. Soc.* **63**, 2267–2272 (1941).
- 1941KIR/SIT V. A. Kireev and I. P. Sitnikov, *J. Appl. Chem. USSR* **14**, 483–485 (1941); *Chem. Abstr.* **36**, 2189 (1942).
- 1941LIS M. W. Lister, *J. Am. Chem. Soc.* **63**, 143–149 (1941).
- 1941MIL G. Milazzo, *Boll. Sci. Fac. Chim. Ind. Bologna* 94–98 (1941).
- 1941NIT/SEK I. Nitta and S. Seki, *J. Chem. Soc. Jpn.* **62**, 581–586 (1941); *Chem. Abstr.* **36**, 15 (1942).
- 1941OSB/GAR D. W. Osborne, C. S. Garner, R. N. Doecher, and D. M. Yost, *J. Am. Chem. Soc.* **63**, 3496–3499 (1941).
- 1941PAR/WES G. S. Parks, T. J. West, and G. E. Moore, *J. Am. Chem. Soc.* **63**, 1133 (1941).
- 1941PIT/GWI K. S. Pitzer and W. D. Gwinn, *J. Am. Chem. Soc.* **63**, 3313 (1941).
- 1941PIT/SCO K. S. Pitzer and D. W. Scott, *J. Am. Chem. Soc.* **63**, 2419 (1941).
- 1941RAL/SEL A. W. Ralston, W. M. Selby, and W. O. Pool, *J. Ind. Eng. Chem.* **33**, 682–683 (1941).
- 1941RIE L. Riedel, *Z. Ges. Kalte-Ind.* **48**, 9–13 (1941).
- 1941SCH W. R. Schmidt, M.S. thesis, Washington University, St. Louis, 1941.
- 1941SEK/NIT S. Seki and I. Nitta, *J. Chem. Soc. Jpn.* **62**, 907–912 (1941).
- 1941SMI E. R. Smith, *J. Res. Natl. Bur. Stand.* **26**, 129–134 (1941).
- 1941STO/FIS J. W. Stout and L. H. Fisher, *J. Chem. Phys.* **9**, 163–168 (1941).
- 1941YOS/OSB D. M. Yost, D. W. Osborne, and C. S. Garner, *J. Am. Chem. Soc.* **63**, 3492 (1941).
- 1942BEA/ING J. A. Beattie, H. G. Ingersoll, and W. H. Stockmayer, *J. Am. Chem. Soc.* **64**, 546–548 (1942).
- 1942BEN S. W. Benson, *Ind. Eng. Chem., Anal. Ed.* **13**, 189–191 (1942).
- 1942BEN/KIS S. W. Benson and G. B. Kistiakowsky, *J. Am. Chem. Soc.* **64**, 80–86 (1942).
- 1942BUR P. E. Burchfield, *J. Am. Chem. Soc.* **64**, 2501 (1942).
- 1942DAV/BRO N. Davidson and H. C. Brown, *J. Am. Chem. Soc.* **64**, 718 (1942).
- 1942OSB/DOE D. W. Osborne, R. W. Doescher, and D. M. Yost, *J. Am. Chem. Soc.* **64**, 169–172 (1942).
- 1942RUS/OSB H. D. Russell, Jr., D. W. Osborne, and D. M. Yost, *J. Am. Chem. Soc.* **64**, 165–169 (1942).
- 1942SCH/AST S. C. Schumann, J. G. Aston, and M. Sagenkahn, *J. Am. Chem. Soc.* **64**, 1039–1043 (1942); *Erratum*, **64**, 30690 (1942).
- 1942WIL/GIL G. E. Williams and E. C. Gilbert, *J. Am. Chem. Soc.* **64**, 2776–2777 (1942).
- 1942ZIE/AND W. T. Ziegler and D. H. Andrews, *J. Am. Chem. Soc.* **64**, 2482–2485 (1942).
- 1943AST/FIN J. G. Aston, H. L. Finke, and S. C. Schumann, *J. Am. Chem. Soc.* **65**, 341–346 (1943).
- 1943AST/SZA J. G. Aston, G. J. Szasz, and H. L. Finke, *J. Am. Chem. Soc.* **65**, 1135–1139 (1943).
- 1943BAC/PER H. J. Backer and W. G. Perdok, *Recl. Trav. Chim. Pays-Bas Belg.* **62**, 533 (1943).
- 1943BUR P. Z. Burbo, *J. Phys. USSR* **7**, 286–289 (1943); *J. Phys. Chem. USSR* **18**, 253–257 (1944); *Chem. Abstr.* **39**, 1581 (1945).
- 1943BUR2 A. B. Burg, *J. Am. Chem. Soc.* **65**, 1629–1635 (1943).
- 1943CRA K. S. N. Cramer, *Recl. Trav. Chim. Pays-Bas* **62**, 606–610 (1943); *Chem. Zentr. II* 2234 (1943); *Chem. Abstr.* **38**, 6148 (1944).
- 1943GUT/WES L. Guttman, E. F. Westrum, and K. S. Pitzer, *J. Am. Chem. Soc.* **65**, 1246 (1943).
- 1943HAL/REI W. P. Hall and E. E. Reid, *J. Am. Chem. Soc.* **65**, 1466–1468 (1943).
- 1943HOL/MEL G. Holst and L. Melander, *Svensk. Kem. Tid.* **55**, 131–135 (1943); *Chem. Abstr.* **40**, 2706 (1946).
- 1943KET/KRU J. A. A. Ketelaar and S. Kruyer, *Rec. Trav. Chim.* **62**, 550–552 (1943); *Chem. Abstr.* **38**, 1926 (1944).
- 1943LEM/FEL J. F. Lemons and W. A. Felsing, *J. Am. Chem. Soc.* **65**, 46–48 (1943).
- 1943NIT/SEK I. Nitta and S. Seki, *J. Chem. Soc. Jpn.* **64**, 475–482 (1943); *Chem. Abstr.* **41**, 3359a (1947).
- 1943PIT/SCO K. S. Pitzer and D. W. Scott, *J. Am. Chem. Soc.* **65**, 803–811 (1943).
- 1943RUE/HUF R. A. Ruehrwein and H. M. Huffman, *J. Am. Chem. Soc.* **65**, 1620 (1943).
- 1943WES/EUC O. Westphal and M. Eucken, *Ber. Dtsch. Chem. Ges. B* **76**, 1137 (1943).
- 1943WOO/HIG L. A. Wood and C. F. Higgins, *India Rubber World* **107**, 475 (1943); *Chem. Abstr.* **37**, 13815 (1943).
- 1944AST/SAG J. G. Aston, M. L. Sagenkahn, G. J. Szasz, G. W. Moessen, and H. F. Zuhler, *J. Am. Chem. Soc.* **66**, 1171–1177 (1944).
- 1944EIB J. Eibert, M.S. thesis, Washington University, St. Louis, 1944.
- 1944GUT/SPI G. B. Guthrie, Jr., R. W. Spitzer, and H. M. Huffman, *J. Am. Chem. Soc.* **66**, 2120 (1944).
- 1944HIC/HOO J. F. G. Hicks, J. G. Hooley, and C. C. Stephenson, *J. Am. Chem. Soc.* **66**, 1054 (1944).
- 1944IOF/YAM I. I. Ioffe and E. S. Yamp'olskaya, *Zh. Prikl. Khim.* **17**, 527–528 (1944); *Chem. Abstr.* **39**, 3986 (1945).
- 1944MCD H. J. McDonald, *J. Phys. Chem.* **48**, 47–50 (1944).
- 1944MCL/EDW C. R. McLellan and W. R. Edwards, Jr., *J. Am. Chem. Soc.* **66**, 409 (1944).
- 1944MIL G. Milazzo, *Gazz. Chim. Ital.* **74**, 58–62 (1944).
- 1944MIL2 G. Milazzo, *Gazz. Chim. Ital.* **74**, 49–57 (1944).
- 1944ODA/MID M. Odan, S.-I. Midzushima, and Y. Morino, *Sci. Pap. Inst. Phys. Chem. Res. (Jpn.)* **42**, 27 (1944); *Chem. Abstr.* **41**, 30419 (1947).
- 1944RUB/LEV T. R. Rubin, B. D. Levedahl, and D. M. Yost, *J. Am. Chem. Soc.* **66**, 279–282 (1944).
- 1944RUS/GOL H. Russell, Jr., D. R. V. Golding, and D. M. Yost, *J. Am. Chem. Soc.* **66**, 16–20 (1944).
- 1944SCO/FER R. B. Scott, W. J. Ferguson, and F. G. Brickwedde, *J. Res. Natl. Bur. Stand.* **33**, 1–20 (1944).
- 1944YOS U. Yoshida, *Mem. Coll. Sci. Eng., Kyoto Imp. Univ.* **24A**, 135 (1944).
- 1945DAV/WIE H. S. Davis and O. F. Wiedeman, *Ind. Eng. Chem.* **37**, 482–485 (1945).
- 1945FAW/RAS F. S. Fawcett and H. E. Rasmussen, *J. Am. Chem. Soc.* **67**, 1705–1709 (1945).
- 1945GUT/PIT L. Guttman and K. S. Pitzer, *J. Am. Chem. Soc.* **67**, 324–327 (1945).
- 1945SCO/MEY R. B. Scott, C. H. Meyers, R. D. Rands, Jr., F. G. Brickwedde, and N. Bekkedahl, *J. Res. Natl. Bur. Stand.* **35**, 39 (1945).
- 1945SWI/HOC E. S. Swift, Jr. and H. P. Hochanadel, *J. Am. Chem. Soc.* **67**, 880–881 (1945).
- 1945WAC/LIN R. C. Wackher, C. B. Linn, and A. V. Grosse, *Ind. Eng. Chem.* **37**, 464–468 (1945).
- 1945WIL/TAY C. B. Willingham, W. J. Taylor, J. M. Pignocco, and F. D. Rossini, *J. Res. Natl. Bur. Stand.* **35**, 219–224 (1945).
- 1946AST/FIN J. G. Aston, H. L. Finke, A. B. Bestul, E. L. Pace, and G. J. Szasz, *J. Am. Chem. Soc.* **68**, 52–57 (1946).
- 1946CRO/FEE D. A. Crooks and F. M. Feetham, *J. Chem. Soc.* **1946**, 899–901.
- 1946DOU/HUF D. R. Douslin and H. M. Huffman, *J. Am. Chem. Soc.* **68**, 1704 (1946).
- 1946DOU/HUF2 D. R. Douslin and H. M. Huffman, *J. Am. Chem. Soc.* **68**, 173 (1946).

- 1946DZU L. S. Dzung, *Brown Boveri Rev.* **33**, 158–163 (1946).
- 1946FIE/SAY F. H. Field and J. H. Saylor, *J. Am. Chem. Soc.* **68**, 2649–2650 (1946).
- 1946KIL/PIT J. E. Kilpatrick and K. S. Pitzer, *J. Am. Chem. Soc.* **68**, 1066–1072 (1946).
- 1946KNO/SCH J. W. Knowlton, N. C. Schieltz, and D. MacMillan, *J. Am. Chem. Soc.* **68**, 208–210 (1946).
- 1946PIT/GUT K. S. Pitzer, L. Guttman, and E. F. Westrum, Jr., *J. Am. Chem. Soc.* **68**, 2209–2212 (1946).
- 1946RUE/POW R. A. Ruehrkeim and T. M. Powell, *J. Am. Chem. Soc.* **68**, 1063–1066 (1946).
- 1946SCO/BRI R. B. Scott and R. G. Brickwedde, *J. Res. Natl. Bur. Stand.* **35**, 501–512 (1946).
- 1946SPI/PIT R. Spitzer and K. S. Pitzer, *J. Am. Chem. Soc.* **68**, 2537–2538 (1946).
- 1946THO G. W. Thompson, *Chem. Rev.* **38**, 1–39 (1946).
- 1947AST/FIN J. G. Aston, H. L. Fink, J. W. Tooke, and M. R. Cines, *Anal. Chem.* **19**, 218 (1947).
- 1947AST/SZA J. G. Aston and G. J. Szasz, *J. Am. Chem. Soc.* **69**, 3108–3114 (1947).
- 1947BAL E. W. Balson, *Trans. Faraday Soc.* **43**, 54–60 (1947).
- 1947BAL/DEN E. W. Balson, K. G. Denbigh, and N. K. Adam, *Trans. Faraday Soc.* **43**, 42–48 (1947).
- 1947BAL2 E. W. Balson, *Trans. Faraday Soc.* **43**, 48 (1947).
- 1947BEE/JUN J. Beersmans and J. C. Jungers, *Bull. Soc. Chim. Belg.* **56**, 238–250 (1947).
- 1947BOL/COL J. M. Bolling, A. R. Collett, and C. L. Lazzell, *Proc. W. Va. Acad. Sci.* **19**, 61 (1947).
- 1947COR/GIN R. J. Corruccini and D. C. Ginnings, *J. Am. Chem. Soc.* **69**, 2271 (1947).
- 1947DOU/WIN D. E. Douglass and C. A. Winkler, *Can. J. Res.* **25B**, 381 (1947).
- 1947EFR/BLO A. Efron and R. E. Blom, *J. Phys. Chem.* **51**, 480 (1947).
- 1947FOW/HAM R. D. Fowler, J. M. Hamilton, Jr., J. S. Kasper, C. E. Weber, W. B. Burford III, and H. C. Anderson, *Ind. Eng. Chem.* **39**, 375–378 (1947).
- 1947GOL/MAR K. B. Goldblum, R. W. Martin, and R. B. Young, *Ind. Eng. Chem.* **39**, 1474–1476 (1947).
- 1947GOU/HOL C. Gould, Jr., G. Holzman, and C. Niemann, *Anal. Chem.* **19**, 204–206 (1947).
- 1947GRA A. Granovskaya, *J. Phys. Chem. USSR* **21**, 967–968 (1947); *Chem. Abstr.* **42**, 2486d (1948).
- 1947HEI/WIE E. Heilbronner and K. Wieland, *Helv. Chim. Acta* **30**, 947–956 (1947).
- 1947IVI/DAI K. J. Ivin and F. S. Dainton, *Trans. Faraday Soc.* **43**, 32–35 (1947).
- 1947JON/GIA W. M. Jones and W. F. Giauque, *J. Am. Chem. Soc.* **69**, 983–987 (1947).
- 1947KET/VAN J. A. A. Ketalaar, P. F. Van Velden, and J. S. Zalm, *Recl. Trav. Chim. Pays-Bas* **66**, 721–732 (1947).
- 1947LEI/SHO A. G. Leibush and E. D. Shorina, *Zh. Prikl. Khim.* **20**, 69–76 (1947).
- 1947OSB/GIN N. S. Osborne and D. C. Ginnings, *J. Res. Natl. Bur. Stand.* **39**, 453–477 (1947); *Chem. Abstr.* **42**, 1795i (1948).
- 1947SCO/WAD D. W. Scott, G. Waddington, J. C. Smith, and H. M. Huffman, *J. Chem. Phys.* **15**, 565 (1947).
- 1947STR/GAB F. H. Stross, C. M. Gable, and G. C. Rounds, *J. Am. Chem. Soc.* **69**, 1629–1630 (1947).
- 1947STR/MON F. H. Stross, J. M. Monger, and H. de V. Finch, *J. Am. Chem. Soc.* **69**, 1627–1628 (1947).
- 1947STU D. R. Stull, *Ind. Eng. Chem.* **39**, 517–540 (1947).
- 1947SZA/MOR G. J. Szasz, J. A. Morrison, E. L. Pace, and J. G. Aston, *J. Chem. Phys.* **15**, 562 (1947).
- 1947TOD/OLI S. S. Todd, G. D. Oliver, and H. M. Huffman, *J. Am. Chem. Soc.* **69**, 1519 (1947).
- 1947WAD/DOU G. Waddington and D. R. Douslin, *J. Am. Chem. Soc.* **69**, 2275–2279 (1947).
- 1947WAD/TOD G. Waddington, S. S. Todd, and H. M. Huffman, *J. Am. Chem. Soc.* **69**, 22–30 (1947).
- 1947WIL/EDW H. B. Williams and W. R. Edwards, *J. Am. Chem. Soc.* **69**, 336 (1947).
- 1948BAN/EME A. A. Banks, H. J. Emeleus, R. N. Haszeldine, and V. Kerrigan, *J. Chem. Soc.* **1948**, 2188–2190.
- 1948BEN/FRA H. E. Bent and R. J. Francel, *J. Am. Chem. Soc.* **70**, 634–637 (1948).
- 1948BOO/MAR H. S. Booth, D. R. Martin, and F. E. Kendall, *J. Am. Chem. Soc.* **70**, 2523 (1948).
- 1948BRO/SUJ H. C. Brown and S. Sujishi, *J. Am. Chem. Soc.* **1948**, 2878–2881.
- 1948CAT/ELL J. B. Catch, D. F. Elliot, D. H. Hey, and E. R. H. Jones, *J. Chem. Soc.* 272 (1948).
- 1948DAY/NIC H. O. Day, D. E. Nicholson, and W. A. Felsing, *J. Am. Chem. Soc.* **70**, 1784–1785 (1948).
- 1948DIX/REH M. B. Dixon, C. E. Rehberg, and C. E. Fisher, *J. Am. Chem. Soc.* **70**, 3733 (1948).
- 1948DOU T. B. Douglas, *J. Am. Chem. Soc.* **70**, 2001–2002 (1948).
- 1948EME/WOO H. J. Emeleus and J. F. Wood, *J. Chem. Soc.* **1948**, 2183–2188.
- 1948FEI/FIS M. L. Fein and C. M. Fisher, *J. Org. Chem.* **13**, 749 (1948).
- 1948GAN/JUN J. F. Ganef and J. C. Jungers, *Bull. Soc. Chim. Belg.* **57**, 82–87 (1948).
- 1948GIA/JON W. F. Giauque and W. M. Jones, *J. Am. Chem. Soc.* **70**, 120–124 (1948).
- 1948GLE/HAU O. Glemser and V. Häuser, *Z. Naturforsch., B* **3**, 159–163 (1948).
- 1948GON/ELV A. Z. Gonner, P. J. Elving, and S. Steingiser, *Ind. Eng. Chem.* **40**, 497 (1948).
- 1948GOR/GIA J. Gordon and W. F. Giauque, *J. Am. Chem. Soc.* **70**, 1506–1510 (1948).
- 1948HOP/SEA E. R. Hopke and G. W. Sears, *J. Am. Chem. Soc.* **70**, 3801–3803 (1948).
- 1948HUF/EAT H. M. Huffman, M. Eaton, and G. D. Oliver, *J. Am. Chem. Soc.* **70**, 2911 (1948).
- 1948KEL/CAD K. B. Kellogg and G. H. Cady, *J. Am. Chem. Soc.* **70**, 3986–3990 (1948).
- 1948KLA/MOH F. Klages and K. Mohler, *Chem. Ber.* **81**, 411–417 (1948).
- 1948MIC/WAS A. Michels and T. Wassenaar, *Physica (Amsterdam)* **14**, 104–110 (1948).
- 1948NIT/SEK I. Nitta and S. Seki, *J. Chem. Soc. Jpn.* **69**, 85–87 (1948); *Chem. Abstr.* **44**, 9204e (1950).
- 1948NIT/SEK2 I. Nitta and S. Seki, *J. Chem. Soc. Jpn. Pure Chem. Sect.* **69**, 141–143 (1948); **69**, 143–145 (1948); *Chem. Abstr.* **46**, 1320i (1952).
- 1948OLI/EAT G. D. Oliver, M. Eaton, and H. M. Huffman, *J. Am. Chem. Soc.* **70**, 1502 (1948).
- 1948PAC/AST E. L. Pace and J. G. Aston, *J. Am. Chem. Soc.* **70**, 566–570 (1948).
- 1948RAL/RUS J. H. Raley, F. F. Rust, and W. E. Vaughan, *J. Am. Chem. Soc.* **70**, 88–94 (1948).
- 1948RED/CHA C. E. Redemann, S. W. Chaikin, and R. B. Fearing, *J. Am. Chem. Soc.* **70**, 631–634 (1948).
- 1948RED/CHA3 C. E. Redemann, S. W. Chaikin, and R. B. Fearing, *J. Am. Chem. Soc.* **70**, 1648–1650 (1948).
- 1948RED/CHA4 C. E. Redemann, S. W. Chaikin, R. B. Fearing, J. W. Rotariu, J. Savit, and D. Van Hoesen, *J. Am. Chem. Soc.* **70**, 3604–3606 (1948).
- 1948RED/CHA5 C. E. Redemann, S. W. Chaikin, and R. B. Fearing, *J. Am. Chem. Soc.* **70**, 2582 (1948).
- 1948SEA/HOP G. W. Sears and E. R. Hopke, *J. Phys. Chem.* **52**, 1137–1142 (1948).
- 1948SMA/SMA P. A. Small, K. W. Small, and P. Cowley, *Trans. Faraday Soc.* **44**, 810–816 (1948).
- 1948TSC H. Tschamler, *Monatsh. Chem.* **79**, 162 (1948).
- 1949COL/DEV C. F. Coleman and T. De Vries, *J. Am. Chem. Soc.* **71**, 2839 (1949).
- 1949DRE/MAR R. R. Dreisbach and R. A. Martin, *Ind. Eng. Chem.* **41**, 2875–2878 (1949).
- 1949DRE/SHR R. R. Dreisbach and S. A. Shrader, *Ind. Eng. Chem.* **41**, 2879–2880 (1949).
- 1949EME/HAS H. J. Emeleus and R. N. Haszeldine, *J. Chem. Soc.* **1949**, 2948.
- 1949FOR/NOR A. F. Forziati, W. R. Norris, and F. D. Rossini, *J. Res. Natl. Bur. Stand.* **43**, 555–563 (1949).
- 1949GIA/GOR W. F. Giauque and J. Gordon, *J. Am. Chem. Soc.* **71**, 2176–2181 (1949).

- 1949HIG/END T. Higuchi, N. Endow, and J. E. Willard, *J. Am. Chem. Soc.* **71**, 365–366 (1949).
- 1949HOL/DOR D. E. Holcomb and C. L. Dorsey, Jr., *Ind. Eng. Chem.* **41**, 2788–2792 (1949); Erratum, **42**, 570 (1950).
- 1949HUF/TOD H. M. Huffman, S. S. Todd, and G. D. Oliver, *J. Am. Chem. Soc.* **71**, 584 (1949).
- 1949KRE/WIE C. B. Kretschmer and R. Wiebe, *J. Am. Chem. Soc.* **71**, 1793–1797 (1949).
- 1949NIC J. C. Nicholson, *J. Chem. Soc.* **1949**, 1553–1555.
- 1949NIC/LAF E. Nicolini and P. Laffitte, *Comp. Rend.* **229**, 757–759 (1949); **229**, 935–936 (1949).
- 1949SCO/GRO D. W. Scott, M. E. Gross, G. D. Oliver, and H. M. Huffman, *J. Am. Chem. Soc.* **71**, 1634–1636 (1949).
- 1949SCO/WAD D. W. Scott, G. Waddington, J. C. Smith, and H. M. Huffman, *J. Am. Chem. Soc.* **71**, 2767–2773 (1949).
- 1949SEA/HOP G. W. Sears and E. R. Hopke, *J. Am. Chem. Soc.* **71**, 2575–2576 (1949).
- 1949SEA/HOP2 G. W. Sears and E. R. Hopke, *J. Am. Chem. Soc.* **71**, 1632–1634 (1949).
- 1949STA/GUP L. A. K. Staveley and A. K. Gupta, *Trans. Faraday Soc.* **45**, 50 (1949).
- 1949THO/EME J. Thompson and H. J. Emeleus, *J. Chem. Soc.* **1949**, 3080.
- 1949WAD/KNO G. Waddington, J. W. Knowlton, D. W. Scott, S. D. Oliver, S. S. Todd, W. N. Hubbard, J. C. Smith, and H. M. Huffman, *J. Am. Chem. Soc.* **71**, 797–808 (1949).
- 1949WAD/SMI G. Waddington, J. C. Smith, D. W. Scott, and H. M. Huffman, *J. Am. Chem. Soc.* **71**, 3902–3906 (1949).
- 1949WIN/KUL L. O. Winstrom and L. Kulp, *Ind. Eng. Chem.* **41**, 2584–2586 (1949).
- 1949YAR/FED N. L. Yarym-Agaev, N. N. Fedos'ev, and K. G. Skorikov, *Zh. Fiz. Khim.* **11**, 1257–1265 (1949).
- 1950AST/MAS J. G. Aston, S. V. R. Mastrangelo, and G. W. Moessen, *J. Am. Chem. Soc.* **72**, 5287–5291 (1950).
- 1950BRI/CUT N. F. H. Bright, J. C. Cuthill, and N. H. Woodbury, *J. Sci. Food Agric.* **1**, 344 (1950).
- 1950COL/POP K. F. Coles and F. Popper, *Ind. Eng. Chem.* **42**, 1434–1438 (1950).
- 1950CON/ELV A. Z. Conner, P. J. Elving, J. Benischeck, P. E. Tobias, and S. Steingiser, *Ind. Eng. Chem.* **42**, 106–110 (1950).
- 1950CRO/SMY R. W. Crowe and C. P. Smyth, *J. Am. Chem. Soc.* **72**, 1098–1106 (1950).
- 1950CRO/SMY2 R. W. Crowe and C. P. Smyth, *J. Am. Chem. Soc.* **72**, 4009 (1950).
- 1950DAY/FEL H. O. Day and W. A. Felsing, *J. Am. Chem. Soc.* **72**, 1698–1699 (1950).
- 1950EDW G. T. Edwards, *Trans. Faraday Soc.* **46**, 423–427 (1950).
- 1950FOR/CAM A. F. Forziati, D. L. Camin, and F. D. Rossini, *J. Res. Natl. Bur. Stand.* **45**, 406–410 (1950).
- 1950IWA B. L. Iwanclow, Ph.D. dissertation, University of Wisconsin, 1950.
- 1950KUS/CRO L. M. Kushner, R. W. Crowe, and C. P. Smyth, *J. Am. Chem. Soc.* **72**, 1091 (1950).
- 1950MAT/SUM J. B. Matthews, J. F. Sumner, and E. A. Moellyn-Hughes, *Trans. Faraday Soc.* **46**, 797–803 (1950).
- 1950MCK/COP C. McKinley and J. P. Copes, *J. Am. Chem. Soc.* **72**, 5331 (1950).
- 1950MIC/WAS A. Michels and T. Wassenaar, *Physica (Amsterdam)* **16**, 221–224 (1950).
- 1950MIC/WAS2 A. Michels, T. Wassenaar, Th. Zwietering, and P. Smits, *Physica* **16**, 501 (1950).
- 1950NIT/SEK I. Nitta, S. Seki, M. Momotani, and K. Sato, *J. Chem. Soc. Jpn.* **71**, 378–382 (1950); *Chem. Abstr.* **45**, 6448g (1951).
- 1950NIT/SEK2 I. Nitta, S. Seki, M. Momotani, K. Suzuki, and S. Nakagawa, *Proc. Jpn. Acad.* **26**, 11–18 (1950); *Chem. Abstr.* **45**, 4545b (1950).
- 1950NIT/SEK3 I. Nitta, S. Seki, and M. Momotani, *J. Chem. Soc. Jpn., Pure Chem. Sect.* **71**, 430–433 (1950); *Chem. Abstr.* **1951**, 45; **1951**, 6448i.
- 1950NIT/SEK4 I. Nitta, S. Seki, and M. Momotani, *Proc. Jpn. Acad.* **26**, 25–26 (1950).
- 1950NOY/NOY R. M. Noyes, W. A. Noyes, and H. Steinmetz, *J. Am. Chem. Soc.* **72**, 33–34 (1950).
- 1950RAT W. R. Ratchford, *J. Org. Chem.* **15**, 326 (1950).
- 1950RAT/FIS W. P. Ratchford and C. H. Fisher, *J. Org. Chem.* **15**, 317 (1950).
- 1950REH/DIX C. E. Rehberg and M. B. Dixon, *J. Am. Chem. Soc.* **72**, 1918–1922 (1950).
- 1950REH/DIX2 C. E. Rehberg and M. B. Dixon, *J. Org. Chem.* **15**, 565 (1950).
- 1950SCO/FIN D. W. Scott, H. L. Finke, M. E. Gross, and H. M. Huffman, *J. Am. Chem. Soc.* **72**, 2424–2430 (1950).
- 1950SCO/FIN2 D. W. Scott, H. L. Finke, W. N. Hubbard, J. P. McCullough, M. E. Gross, K. D. Williamson, G. Waddington, and H. M. Huffman, *J. Am. Chem. Soc.* **72**, 4664–4666 (1950).
- 1950SCO/WAD D. W. Scott and G. Waddington, *J. Am. Chem. Soc.* **72**, 4310–4311 (1950).
- 1950SEK/MOM S. Seki and M. Momotani, *Bull. Chem. Soc. Jpn.* **23**, 30 (1950).
- 1950SIL/CAD G. A. Silvey and G. H. Cady, *J. Am. Chem. Soc.* **72**, 3624 (1950).
- 1950UEB/ORT K. Ueberreiter and H.-J. Orthmann, *Z. Naturforsch.* **5A**, 101 (1950).
- 1950WIS/PUC H. Wise, T. T. Puck, and C. F. Farley, *J. Phys. Chem.* **54**, 734–741 (1950).
- 1951AST/FIN J. G. Aston, H. L. Finke, G. J. Janz, and K. E. Russell, *J. Am. Chem. Soc.* **73**, 1939–1943 (1951).
- 1951AST/JAN J. G. Aston, G. J. Janz, and K. E. Russell, *J. Am. Chem. Soc.* **73**, 1943–1945 (1951).
- 1951BAR/MCC G. M. Barrow and A. L. McClellan, *J. Am. Chem. Soc.* **73**, 573–575 (1951).
- 1951BRY/HOW D. Bryce-Smith and K. E. Howlett, *J. Chem. Soc.* 1141–1142 (1951).
- 1951BUR/CAD L. L. Burger and G. H. Cady, *J. Am. Chem. Soc.* **73**, 4243–4246 (1951).
- 1951CAR/KUB B. Carroll, D. G. Kubler, H. W. Davis, and A. M. Whaley, *J. Am. Chem. Soc.* **73**, 5382 (1951).
- 1951COA/HAR G. E. Coates, J. Harris, and T. Sutcliffe, *J. Chem. Soc.* 2762–2763 (1951).
- 1951EGE/EMT A. C. Egerton, W. Emte, and G. J. Minkoff, *Discuss. Faraday Soc.* **10**, 278–282 (1951).
- 1951FLO/ALP D. G. Flom, N. Alpert, and P. J. Elving, *Ind. Eng. Chem.* **43**, 1178–1181 (1951).
- 1951FUR/MCC G. T. Furukawa, R. E. McCoskey, and G. T. King, *J. Res. Natl. Bur. Stand.* **47**, 256 (1951).
- 1951HAS R. N. Haszeldine, *J. Chem. Soc.* **1951**, 102.
- 1951HAS2 R. N. Haszeldine, *J. Chem. Soc.* **1951**, 588.
- 1951INO H. Inokuchi, *Nippon Kagaku Zasshi* **72**, 552–555 (1951).
- 1951MCC/PER J. P. McCullough, W. B. Person, and R. Spitzer, *J. Am. Chem. Soc.* **73**, 4069–4071 (1951).
- 1951MCE/RIG W. S. McErvan and M. W. Rigg, *J. Am. Chem. Soc.* **73**, 4725–4727 (1951).
- 1951NIC G. R. Nicholson, as quoted by, J. W. Cook, A. R. Gibb, R. A. Raphael, and A. R. Somerville, *J. Chem. Soc.* 503–511 (1951).
- 1951NIT/SEK I. Nitta, S. Seki, H. Chihara, and K. Suzuki, *Science Papers Osaka University No. 29*, 1951; *Chem. Abstr.* **46**, 3820 (1952).
- 1951NIT/SEK2 I. Nitta, S. Seki, and K. Suzuki, *Bull. Chem. Soc. Jpn.* **24**, 63–69 (1951).
- 1951OLI/GRI G. D. Oliver and J. W. Grisard, *J. Am. Chem. Soc.* **73**, 1688–1690 (1951).
- 1951OLI/GRI2 G. D. Oliver, J. W. Grisard, and C. W. Cunningham, *J. Am. Chem. Soc.* **73**, 5719 (1951).
- 1951PAR/BRO J. D. Park, H. A. Brown, and J. R. Lacher, *J. Am. Chem. Soc.* **73**, 709 (1951).
- 1951POT/SAY J. C. Potter and J. H. Saylor, *J. Am. Chem. Soc.* **73**, 90–91 (1951).
- 1951SCO/FIN D. W. Scott, H. L. Finke, J. P. McCullough, M. E. Gross, K. D. Williamson, G. Waddington, and H. M. Huffman, *J. Am. Chem. Soc.* **73**, 261–265 (1951).
- 1951SMI/BON T. F. Smith and R. F. Bonner, *Ind. Eng. Chem.* **43**, 1169–1173 (1951).
- 1951TIC/LOS A. W. Tickner and F. P. Lossing, *J. Phys. Chem.* **55**, 733–741 (1951).

- 1951VAU W. E. Vaughan, *Discuss. Faraday Soc.* **10**, 330 (1951).
- 1952AIH A. Aihara, *J. Chem. Soc. Jpn., Pure Chem. Sect.* **73**, 855–857 (1952); *Chem. Abstr.* **47**, 3634d (1953).
- 1952BAC/SIM K. C. Bachman and E. L. Simons, *Ind. Eng. Chem.* **44**, 202 (1952).
- 1952BAN J. Banus, *Nature* **171**, 173 (1952).
- 1952BRA/COT R. S. Bradley, S. Cotson, and E. G. Cox, *J. Chem. Soc.* 740–741 (1952).
- 1952BRA/EME G. A. R. Brandt, H. J. Emeleus, and R. N. Haszeldine, *J. Chem. Soc.* **1952**, 2198–2205.
- 1952BRO I. Brown, *Aust. J. Sci. Res.* **5**, 530–540 (1952).
- 1952BYW S. Bywater, *J. Polym. Sci.* **9**, 417–422 (1952).
- 1952EDW G. Edwards, *Trans. Faraday Soc.* **48**, 513–515 (1952).
- 1952FIN/SCO H. L. Finke, D. W. Scott, M. E. Gross, G. Waddington, and H. M. Huffman, *J. Am. Chem. Soc.* **74**, 2804–2806 (1952).
- 1952FUG/BOW E. T. G. Fuge, S. T. Bowden, and W. J. Jones, *J. Phys. Chem.* **56**, 1013–1016 (1952).
- 1952GOT/NIK R. Goto and M. Nikki, *Bull. Inst. Chem. Res., Kyoto Univ.* **28**, 68–69 (1952); *Chem. Abstr.* **47**, 34027 (1953).
- 1952GUT/SCO D. W. Scott, W. N. Hubbard, C. Katz, J. P. McCullough, M. E. Gross, K. D. Williamson, and G. Waddington, *J. Am. Chem. Soc.* **74**, 4662–4669 (1952).
- 1952GUT/SCO2 G. B. Guthrie, D. W. Scott, and G. Waddington, *J. Am. Chem. Soc.* **74**, 2795–2800 (1952).
- 1952HAS/LEE R. N. Haszeldine and K. Leedham, *J. Chem. Soc.* **1952**, 3483.
- 1952HUB/FIN W. N. Hubbard, H. L. Finke, D. W. Scott, J. P. McCullough, C. Katz, M. E. Gross, J. F. Messerly, R. E. Pennington, and G. Waddington, *J. Am. Chem. Soc.* **74**, 6025–6030 (1952).
- 1952JON/TAM W. S. Jones and W. S. Tamplin, "Physical properties of propylene glycol," in *Glycols*, edited by G. O. Curme, Jr., American Chemical Society Monograph (Reinhold, New York, 1952), Vol. 114, Chap. 9, pp. 210–240.
- 1952KAA/COO S. Kaarsemaker and J. Coops, *Recl. Trav. Chim. Pays-Bas* **71**, 261 (1952).
- 1952LEI/MOR L. C. Leitch and A. T. Morse, *Can. J. Chem.* **30**, 924–932 (1952).
- 1952MCC/SCO J. P. McCullough, D. W. Scott, H. L. Finke, M. E. Gross, K. D. Williamson, R. E. Pennington, G. Waddington, and H. M. Huffman, *J. Am. Chem. Soc.* **74**, 2801–2804 (1952).
- 1952MCK/MOE J. S. McKinley-McKee and E. A. Moelwyn-Hughes, *Trans. Faraday Soc.* **48**, 247 (1952).
- 1952MIC/WAS A. Michels, T. Wassenaar, and Th. N. Zwietering, *Physica* **18**, 160 (1952).
- 1952OLI/GRI G. D. Oliver and J. W. Grisard, *J. Am. Chem. Soc.* **74**, 2705–2707 (1952).
- 1952REH/DIX C. E. Rehberg and M. B. Dixon, *J. Am. Chem. Soc.* **74**, 1609 (1952).
- 1952SCH/FRE K. Schafer and O. Frey, *Z. Elektrochem.* **56**, 882 (1952).
- 1952SCO/DOU D. W. Scott, D. R. Douslin, M. E. Gross, G. D. Oliver, and H. M. Huffman, *J. Am. Chem. Soc.* **74**, 883–887 (1952).
- 1952SCO/FIN D. W. Scott, H. L. Finke, W. N. Hubbard, J. P. McCullough, G. D. Oliver, M. E. Gross, C. Katz, K. D. Williamson, G. Waddington, and H. M. Huffman, *J. Am. Chem. Soc.* **74**, 4656–4662 (1952).
- 1952SCO/FIN2 D. W. Scott, H. L. Finke, J. P. McCullough, M. E. Gross, R. E. Pennington, and G. Waddington, *J. Am. Chem. Soc.* **74**, 2478–2484 (1952).
- 1952SCO/MAC T. A. Scott, Jr., D. MacMillan, and E. H. Melvin, *Ind. Eng. Chem.* **44**, 172–175 (1952).
- 1952SIM/MAU J. H. Simons and J. W. Mausteller, *J. Chem. Phys.* **20**, 1516–1519 (1952).
- 1952SPE/TAM H. T. Spengler and W. S. Tamplin, *Anal. Chem.* **24**, 941 (1952).
- 1952STI/CAD V. E. Stiles and G. H. Cady, *J. Am. Chem. Soc.* **74**, 3771–3773 (1952).
- 1952WHI G. H. Whipple, *Ind. Eng. Chem.* **44**, 1664–1667 (1952).
- 1952WHI/BAR P. T. White, D. G. Barnard-Smith, and F. A. Fidler, *Ind. Eng. Chem.* **44**, 1430–1438 (1952).
- 1953AIH A. Aihara, *J. Chem. Soc. Jpn., Pure Chem. Sect.* **74**, 437–441 (1953); **74**, 631–634 (1953); **74**, 634–635 (1953); *Chem. Abstr.* **48**, 1088h (1954).
- 1953AST/WOO J. G. Aston, J. L. Wood, and T. P. Zolki, *J. Am. Chem. Soc.* **75**, 6202–6204 (1953).
- 1953ATK/TRE B. Atkinson and A. B. Trenwith, *J. Chem. Soc.* **1953**, 2082.
- 1953BAN J. Banus, *J. Chem. Soc.* **1953**, 3755.
- 1953BAR/BRO J. A. Barker, I. Brown, and F. Smith, *Discuss. Faraday Soc.* **15**, 142–150 (1953).
- 1953BEN/EME F. W. Bennet, H. J. Emeleus, and R. N. Haszeldine, *J. Chem. Soc.* **1953**, 1565.
- 1953BRA/CAR R. S. Bradley and A. D. Care, *J. Chem. Soc.* **1953**, 1688–1690.
- 1953BRA/CLE R. S. Bradley and T. G. Cleasby, *J. Chem. Soc.* **1953**, 1690–1692.
- 1953BRA/CLE2 R. S. Bradley and T. G. Cleasby, *J. Chem. Soc.* **1953**, 1681–1684.
- 1953BRA/COT R. S. Bradley and S. Cotson, *J. Chem. Soc.* **1953**, 1684–1688.
- 1953CLE/WIS H. E. Clements, K. V. Wise, and S. E. Johnson, *J. Am. Chem. Soc.* **75**, 1593–1595 (1953).
- 1953COP/EVE J. L. Copp and D. H. Everett, *Discuss. Faraday Soc.* **15**, 174–188 (1953).
- 1953DAV/SCH R. T. Davis, Jr. and R. W. Schiessler, *J. Phys. Chem.* **57**, 966–968 (1953).
- 1953EDW G. Edwards, *Trans. Faraday Soc.* **49**, 152–154 (1953).
- 1953EWA A. H. Ewald, *Trans. Faraday Soc.* **49**, 1401–1405 (1953).
- 1953FRA/DUV J. W. Frazer and V. L. DuVal, *J. Inorg. Nucl. Chem.* **25**, 1066 (1953).
- 1953FUR/MCC G. T. Furukawa, R. E. McCoskey, and M. L. Reilly, *J. Res. Natl. Bur. Stand.* **51**, 69–72 (1953).
- 1953GIN/FUR D. C. Ginnings and G. T. Furukawa, *J. Am. Chem. Soc.* **75**, 522 (1953).
- 1953GRA/SMI P. Gray and P. L. Smith, *J. Chem. Soc.* **1953**, 2380.
- 1953GRO/OLI M. E. Gross, G. D. Oliver, and H. M. Huffman, *J. Am. Chem. Soc.* **75**, 2801 (1953).
- 1953HAS/KID R. N. Haszeldine and J. M. Kidd, *J. Chem. Soc.* **1953**, 3219.
- 1953HER/MAR E. F. G. Herington and J. F. Martin, *Trans. Faraday Soc.* **49**, 154–162 (1953).
- 1953HOV/JOH S. R. Hoover, H. John, and E. F. Mellon, *Anal. Chem.* **25**, 1940 (1953).
- 1953JAN/HAS J. Jander and R. N. Haszeldine, *Naturwissenschaften* **40**, 579 (1953); *Chem. Abstr.* **49**, 23487 (1955).
- 1953JEN/STY A. D. Jenkins and D. W. G. Style, *J. Chem. Soc.* **1953**, 2337–2340.
- 1953KAR/SAY S. Kardon and J. H. Saylor, *J. Am. Chem. Soc.* **75**, 1997 (1953).
- 1953MCC/SCO J. P. McCullough, D. W. Scott, H. L. Finke, W. N. Hubbard, M. E. Gross, C. Katz, R. E. Pennington, J. F. Messerly, and G. Waddington, *J. Am. Chem. Soc.* **75**, 1818–1824 (1953).
- 1953MEL/VIO E. F. Mellon, S. J. Viola, and S. R. Hooper, *J. Phys. Chem.* **57**, 607–608 (1953).
- 1953MIC/WAS A. Michels, T. Wassenaar, P. Louwse, R. J. Lunbeck, and G. W. Wolkers, *Physica* **19**, 287–289 (1953).
- 1953MIL/PAO G. Milazzo and L. Paoloni, *Gazz. Chim. Ital.* **83**, 867–874 (1953).
- 1953RAT/GWI G. W. Rathjens and W. D. Gwinn, *J. Am. Chem. Soc.* **75**, 5629–5633 (1953).
- 1953SCO/FIN D. W. Scott, H. L. Finke, W. N. Hubbard, J. P. McCullough, C. Katz, M. E. Gross, J. P. Messerly, R. E. Pennington, and G. Waddington, *J. Am. Chem. Soc.* **75**, 2795–2800 (1953).
- 1953SEK/SUZ S. Seki and K. Suzuki, *Bull. Chem. Soc. Jpn.* **26**, 209–213 (1953); **26**, 372–380 (1953).
- 1953SER/VOI V. V. Serpinskii, S. A. Voitkevich, and N. Y. Lyuboshits, *Zh. Fiz. Khim.* **27**, 1032–1038 (1953); *Chem. Abstr.* **49**, 3594e (1955).
- 1953STA/MUL H. Stage, E. Müller, and P. Faldix, *Erdöle Kohle* **6**, 375–380 (1953), Note: Enthalpies of vaporization were calculated by fitting published vapor pressure data, taken from various sources to the Antoine equation. Some of the references are to unpublished data measured by chemical companies.

- 1953WAG/BUR R. I. Wagner and A. B. Burg, *J. Am. Chem. Soc.* **75**, 3869–3871 (1953).
- 1953WAL K. A. Walsh, U.S. Atomic Energy Commission Report LA-1649, U.S. Atomic Energy Commission (1953); *Chem. Abstr.* **55**, 19319c–19319d (1961).
- 1954ABR/DAV A. Abrams and T. W. Davis, *J. Am. Chem. Soc.* **76**, 5993–5995 (1954); R. B. Mooney and E. B. Ludlam, *Proc. R. Soc. Edinburgh* **49**, 160–169 (1929).
- 1954BOW/JON T. I. Bowell and G. L. Jones, Jr., *J. Phys. Chem.* **58**, 666–667 (1954).
- 1954BUK/MAJ M. Bukala, J. Majewski, and W. Rodzinski, *Przem. Chem.* **10**, 6–11 (1954).
- 1954BUR/WOO A. B. Burg and H. W. Woodrow, *J. Am. Chem. Soc.* **76**, 219 (1954).
- 1954CRO/JON T. I. Crowell and G. L. Jones, *J. Phys. Chem.* **58**, 666–667 (1954).
- 1954DAV/JEN M. Davies and D. G. Jenkin, *J. Chem. Soc.* **1954**, 2374–2377.
- 1954DAV/JON M. Davies and J. I. Jones, *Trans. Faraday Soc.* **50**, 1042–1047 (1954).
- 1954DOU/FUR T. B. Douglas, G. T. Furukawa, R. E. McCoskey, and A. F. Ball, *J. Res. Natl. Bur. Stand.* **53**, 139 (1954).
- 1954DUN S. A. Dunn, *J. Am. Chem. Soc.* **76**, 6191–6192 (1954).
- 1954FIN/GRO H. L. Finke, M. E. Gross, J. F. Messerly, and G. Waddington, *J. Am. Chem. Soc.* **76**, 854 (1954).
- 1954FIN/GRO2 H. L. Finke, M. E. Gross, G. Waddington, and H. M. Huffman, *J. Am. Chem. Soc.* **76**, 333 (1954).
- 1954FRI/PIC V. Fried, J. Pick, E. Hala, and O. Vilim, *Chem. Listy* **48**, 774–775 (1954).
- 1954FUR/MCC G. T. Furukawa, R. E. McCoskey, and M. L. Reilly, *J. Res. Natl. Bur. Stand.* **52**, 11–16 (1954).
- 1954GEO/CAV K. K. Georleff, W. T. Cave, and K. G. Blaikie, *J. Am. Chem. Soc.* **76**, 5494 (1954).
- 1954GRA/SMI P. Gray and P. L. Smith, *J. Chem. Soc.* **1954**, 769.
- 1954HUB/WAD W. N. Hubbard and G. Waddington, *Recl. Trav. Chim. Pays-Bas* **73**, 910–913 (1954).
- 1954JAN/HAS J. Jander and R. N. Haszeldine, *J. Chem. Soc.* **1954**, 696–698.
- 1954JAN/HAS2 J. Jander and R. N. Haszeldine, *J. Chem. Soc.* **1954**, 919.
- 1954JOR T. E. Jordan, *Vapour Pressure of Organic Compounds* (Wiley, New York, 1954).
- 1954LOR/WOO G. Lord and A. A. Woolf, *J. Chem. Soc.* **1954**, 2546–2551.
- 1954MCC/FIN J. P. McCullough, H. L. Finke, W. N. Hubbard, W. D. Good, R. E. Pennington, J. F. Messerly, and G. Waddington, *J. Am. Chem. Soc.* **76**, 2661–2664 (1954).
- 1954MCC/FIN2 J. P. McCullough, H. L. Tinke, D. W. Scott, M. E. Gross, J. F. Messerly, R. E. Pennington, and G. Waddington, *J. Am. Chem. Soc.* **76**, 4796 (1954).
- 1954MCC/SCO J. P. McCullough, D. W. Scott, R. E. Pennington, I. A. Hossenlopp, and G. Waddington, *J. Am. Chem. Soc.* **76**, 4791–4796 (1954).
- 1954MEN/CAD A. Menefee and G. H. Cady, *J. Am. Chem. Soc.* **76**, 2020 (1954).
- 1954NIC/SZA G. R. Nicholson, M. Szarc, and J. W. Taylor, *J. Chem. Soc.* **1954**, 2767–2769.
- 1954POT/RIT A. E. Potter, Jr. and H. L. Ritter, *J. Phys. Chem.* **58**, 1040–1042 (1954).
- 1954SEA/HOP G. W. Sears and E. R. Hopke, *J. Am. Chem. Soc.* **76**, 2026 (1954).
- 1954SER/VOI V. V. Serpinskii, S. A. Voitkevich, and N. Y. Lyuboshits, *Zh. Fiz. Khim.* **28**, 810–813 (1954); **28**, 1969–1974 (1954); *Chem. Abstr.* **49**, 6677C (1955); **50**, 4573h–4573i (1956).
- 1954STA/WAR L. A. K. Staveley, J. B. Warren, H. P. Paget, and D. J. Dowrick, *J. Chem. Soc.* **1954**, 1992 (1954).
- 1954TSU/KAT Y. Tsuzuki, S. Kata, and H. Okazaki, *Kagaku* **24**, 523–524 (1954); *Chem. Abstr.* **48**, 13740h (1954).
- 1954TUC/HAW W. C. Tucker, Jr. and J. E. Hawkins, *Ind. Eng. Chem.* **46**, 2387 (1954).
- 1954WIS K. V. Wise, *J. Am. Chem. Soc.* **76**, 3094–3095 (1954).
- 1954WIT C. R. Witschonke, *Anal. Chem.* **26**, 562 (1954).
- 1955AIH A. Aihara, *J. Chem. Soc. Jpn., Pure Chem. Sect.* **76**, 495–497 (1955).
- 1955AIH2 A. Aihara, *J. Chem. Soc. Jpn., Pure Chem. Sect.* **76**, 497–499 (1955).
- 1955AIH3 A. Aihara, *Nippon Kagaku Zasshi* **76**, 492–494 (1955); *Chem. Abstr.* **49**, 15323c (1955).
- 1955ARM/BRI G. T. Armstrong, F. G. Brickwedde, and R. B. Scott, *J. Res. Natl. Bur. Stand.* **55**, 39–52 (1955).
- 1955AST/WIL J. G. Aston, P. E. Wills, and T. P. Zolki, *J. Am. Chem. Soc.* **77**, 3939–3941 (1955).
- 1955AST/ZOL J. G. Aston, T. P. Zolki, and J. L. Wood, *J. Am. Chem. Soc.* **77**, 281–284 (1955).
- 1955CAM/ROS D. L. Camin and F. D. Rossini, *J. Phys. Chem.* **59**, 1173–1179 (1955).
- 1955CUM/MCL G. A. N. Cummings and E. McLaughlin, *J. Chem. Soc.* 1391–1392 (1955).
- 1955DRE/MAR R. Dreyer, W. Martin, and U. von Weber, *J. Prakt. Chem.* **273**, 324–328 (1955).
- 1955ENG J. J. Engelsman, Ph. D. thesis, Vrije Universiteit Te Amsterdam, Holland, 1955.
- 1955FOZ/MOR O. R. Foz Gazulla, J. Morcilio, A. Perez-Masia, and A. Mendes, *An. R. Soc. Esp. Fis. Quim.* **50B**, 23–34 (1955).
- 1955HAR/SWI N. H. Hartshorne and P. McL. Swift, *J. Chem. Soc.* **1955**, 3705–3720.
- 1955ISH/MAT T. Ishiguro and K. Matsumoto, *Yakugaku Zasshi* **75**, 1414–1417 (1955); *Chem. Abstr.* **50**, 53875 (1956).
- 1955JAS/MIL J. J. Jasper and G. B. Miller, *J. Phys. Chem.* **59**, 441–442 (1955).
- 1955KOS G. H. Kosolapoff, *J. Chem. Soc.* 2964–2965 (1955).
- 1955LON/SAC2 L. H. Long and J. F. Sackman, *Res. Corresp. Suppl. Research (London)* **8**, 523 (1955); *Chem. Abstr.* **50**, 47201 (1956).
- 1955MCC/FIN J. P. McCullough, H. L. Finke, J. F. Messerly, R. E. Pennington, I. A. Hossenlopp, and G. Waddington, *J. Am. Chem. Soc.* **77**, 6119–6125 (1955).
- 1955MEA/STA W. H. Mears, R. F. Stahl, S. R. Orfeo, R. C. Shair, L. F. Kells, W. Thompson, and H. McCann, *Ind. Eng. Chem.* **47**, 1449–1454 (1955).
- 1955MOR/AYS A. T. Morse, P. B. Ayscough, and L. C. Leitch, *Can. J. Chem.* **33**, 453–457 (1955).
- 1955NEA/WIL E. Neale and L. T. D. Williams, *J. Chem. Soc.* **1955**, 2485–2490.
- 1955PIN/MAR H. Pines and J. Marechal, *J. Am. Chem. Soc.* **77**, 2819 (1955).
- 1955SCH/WHI R. W. Schiessler and F. C. Whitmore, *Ind. Eng. Chem.* **47**, 1660–1665 (1955), data is deposited as supplementary material, Document No. 4597.
- 1955SCO/FIN D. W. Scott, H. L. Finke, J. P. McCullough, M. E. Gross, J. F. Messerly, R. E. Pennington, and G. Waddington, *J. Am. Chem. Soc.* **77**, 4993–4998 (1955).
- 1955SER/VOI V. V. Serpinskii, S. A. Voitkevich, and N. Yu. Lyuboshits, *Zh. Fiz. Khim.* **29**, 653–657 (1955); *Chem. Abstr.* **50**, 16231e (1956).
- 1955TAY/JOH R. D. Taylor, B. H. Johnson, and J. E. Kilpatrick, *J. Chem. Phys.* **23**, 1225 (1955).
- 1955TUN/STO D. D. Tunnicliff and H. Stone, *Anal. Chem.* **27**, 73 (1955).
- 1955VON/GE B E. Von Terres, F. Gebert, H. Hulsemann, H. Peterreit, H. Toepsch, and W. Ruppert, *Brennst.-Chem.* **36**, 272–274 (1955).
- 1955WEL W. Weltner, *J. Am. Chem. Soc.* **77**, 3941 (1955).
- 1956AMB D. Ambrose, *Trans. Faraday Soc.* **52**, 772–781 (1956).
- 1956BAR/CAD E. J. Barber and C. H. Cady, *J. Phys. Chem.* **60**, 504–506 (1956).
- 1956BAR/HAS D. A. Barr and R. N. Haszeldine, *J. Chem. Soc.* **1956**, 3416–3428.
- 1956BAR/HAS2 D. A. Barr and R. N. Haszeldine, *J. Chem. Soc.* **1956**, 3428.
- 1956BRE/UBB D. Brennan and A. R. Ubbelohde, *J. Chem. Soc.* **1956**, 3011–3016.
- 1956CAM/ROS D. L. Camin and F. D. Rossini, *J. Phys. Chem.* **60**, 1446–1351 (1956).
- 1956CAP/JAC R. H. Capps and W. M. Jackson, *J. Phys. Chem.* **60**, 811–812 (1956).

- 1956FIN/SCO H. L. Finke, D. W. Scott, M. E. Gross, J. F. Messerly, and G. Waddington, *J. Am. Chem. Soc.* **78**, 5469–5476 (1956).
- 1956FRO/LOE F. Fromm and M. C. Loeffler, *J. Phys. Chem.* **60**, 252–253 (1956).
- 1956GAR/SCH D. Garvin and C. Schubert, *J. Phys. Chem.* **60**, 807–808 (1956).
- 1956GLE/REE D. N. Glew and L. W. Reeves, *J. Phys. Chem.* **60**, 615 (1956).
- 1956GRA/HAS T. Gramstad and R. N. Haszeldine, *J. Chem. Soc.* **1956**, 173.
- 1956GRA/PRA P. Gray, M. W. Pratt, and M. J. Larkin, *J. Chem. Soc.* **1956**, 210–212.
- 1956KIR F. W. Kirkbride, *J. Appl. Chem.* **6**, 11–21 (1956).
- 1956KLO V. P. Klochkov, *Zh. Fiz. Khim.* **30**, 2823–2824 (1956); *Chem. Abstr.* **51**, 13495g (1957).
- 1956LI/PIT J. C. M. Li and K. S. Pitzer, *J. Am. Chem. Soc.* **78**, 1077–1080 (1956).
- 1956MAG A. Magnus, *Z. Phys. Chem.* **9**, 141–161 (1956).
- 1956MAJ T. G. Majury, *Chem. Ind. (London)* 349–350 (1956), data also published in *J. Soc. Dyers Col.* **72**, 41–49 (1956).
- 1956MAN Manufacturing Chemists Association Research Project, Tables 23-9-2(2.0111)-k and 23-9-2(2.0112)-k; Tables 23-10-2(2.0111)-k and 23-10-2(2.0112)-k; Tables 23-11-2(2.0111)-k and 23-11-2(2.0112)-k, (Manufacturing Chemists Association, College Station, TX, 1956); Note: The authors suspect that the tabulated Antoine Constants for the various compounds were generated in the manner discussed in [1961LI/ROS].
- 1956MAN2 Manufacturing Chemists Association Research Project, Tables 23-18-2(1.01111)-k and 23-18-2(1.01112)-k (Manufacturing Chemists Association, College Station, TX, 1956); Note: The authors suspect that the tabulated Antoine Constants for the various compounds were generated in the manner discussed in [1961LI/ROS].
- 1956MAR/STA J. G. Marshall, L. A. K. Staveley, and K. R. Hart, *Trans. Faraday Soc.* **52**, 19 (1956).
- 1956MCL/SCO E. P. McLaughlin and R. L. Scott, *J. Phys. Chem.* **60**, 674 (1956).
- 1956MIL G. Milazzo, *Ann. Chim. (Roma)* **46**, 1105–1111 (1956); *Chem. Abstr.* **51**, 7791b (1957).
- 1956NEA/WIL E. Neale, L. T. D. Williams, and V. T. Moores, *J. Chem. Soc.* **1956**, 422–427.
- 1956PAR/KEN G. S. Parks, W. D. Kennedy, R. R. Gates, J. R. Mosely, G. E. Moore, and M. L. Renquist, *J. Am. Chem. Soc.* **78**, 56 (1956).
- 1956PEN/FIN R. E. Pennington, H. L. Finke, W. N. Hubbard, J. F. Messerly, F. R. Frow, I. A. Hossenlopp, and G. Waddington, *J. Am. Chem. Soc.* **78**, 2055–2060 (1956).
- 1956PEN/SCO R. E. Pennington, D. W. Scott, H. L. Finke, J. P. McCullough, J. F. Messerly, I. A. Hossenlopp, and G. Waddington, *J. Am. Chem. Soc.* **78**, 3266–3272 (1956).
- 1956PIC/FRI J. Pick, V. Fried, E. Hala, and O. Vilim, *Collect. Czech. Chem. Commun.* **21**, 260–261 (1956).
- 1956PLA R. Plank, *Kaltetechnik* **8**, 127 (1956).
- 1956SCH/WAG K. Schafer, U. Wagner, and H. Engelbach, *Chem. Ber.* **89**, 327 (1956).
- 1956SCO/MCC D. W. Scott, J. P. McCullough, W. N. Hubbard, J. F. Messerly, I. A. Hossenlopp, F. R. Frow, and G. Waddington, *J. Am. Chem. Soc.* **78**, 5463–5468 (1956).
- 1956SCO/MCC2 D. W. Scott, J. P. McCullough, W. D. Good, J. F. Messerly, R. E. Pennington, T. C. Kincheloe, I. A. Hossenlopp, D. R. Douslin, and G. Waddington, *J. Am. Chem. Soc.* **78**, 5457–5463 (1956).
- 1956SEK/SUZ S. Seki, K. Suzuki, and T. Koide, *J. Chem. Soc. Jpn., Pure Chem. Sect.* **77**, 346–349 (1956); *Chem. Abstr.* **50**, 5343i (1956).
- 1956SMI L. Smith, *Acta Chem. Scand.* **10**, 884–886 (1956).
- 1956SUZ/ONI K. Suzuki, S. Onishi, T. Koide, and S. Seki, *Bull. Chem. Soc. Jpn.* **29**, 127–131 (1956).
- 1956TOO E. M. Toops, Jr., *J. Phys. Chem.* **60**, 304–306 (1956).
- 1956VON/JEN A. Von Brockhaus and E. Jenckel, *Macromol. Chem.* **18**, 262–293 (1956).
- 1957AYL J. Aylett, *J. Chem. Soc.* 4152–4154 (1957).
- 1957BAR/SEF W. S. Barnhart, R. J. Seffl, R. F. Wade, F. W. West, and J. L. Zollinger, *J. Chem. Eng. Data* **2**, 80–83 (1957).
- 1957BES/KOC S. D. Beskov, L. I. Kochetkova, and R. M. Golubeva, *Uch. Zap. - Mosk. Gos. Pedagog. Inst. Im. V. I. Lenina* **99**, 147–149 (1957); *Chem. Abstr.* **53**, 20993d (1959).
- 1957BIS/PAR T. C. Bissot, R. W. Parry, and D. H. Campbell, *J. Am. Chem. Soc.* **79**, 796–800 (1957).
- 1957BRO/SMI I. Brown and F. Smith, *Aust. J. Chem.* **10**, 423–428 (1957).
- 1957CAL F. Call, *J. Sci. Food Agric.* **8**, 81–85 (1957).
- 1957CAR/DAV E. L. Carpenter and H. S. Davis, *J. Appl. Chem.* **7**, 671–676 (1957).
- 1957DYK/SEP J. Dykyj, M. Seprakova, and J. Paulech, *Chem. Zvesti* **11**, 461–466 (1957).
- 1957EAS/HAR B. C. Easton, M. K. Hargreaves, and R. K. S. Mitchell, *J. Appl. Chem. (London)* **7**, 198–204 (1957).
- 1957FRA/JOH D. M. Frankel, C. E. Johnson, and H. M. Pitt, *J. Org. Chem.* **22**, 1119 (1957).
- 1957FRA/SAN J. W. Frazer and R. H. Sanborn, U.S. Atomic Energy Commission Report UCRL-4978, U.S. Atomic Energy Commission (1957); *Chem. Abstr.* **52**, 8936a (1958).
- 1957GLA/RUL F. Glaser and H. Ruland, *Chem. Ing. Tech.* **29**, 772–775 (1957).
- 1957GRA/PRA P. Gray and M. W. T. Pratt, *J. Chem. Soc.* **1957**, 2163–2168.
- 1957KEM/GOL M. D. Kemp, S. Goldhagen, and F. A. Zihlman, *J. Phys. Chem.* **61**, 240–242 (1957).
- 1957LIT R. Littlewood, *J. Chem. Soc.* 2419–2420 (1957).
- 1957LON/SAC L. H. Long and J. F. Sackman, *Trans. Faraday Soc.* **53**, 1606–1611 (1957).
- 1957MAI/SEY L. Maier, O. Seyforth, F. C. A. Stone, and E. Rochov, *J. Am. Chem. Soc.* **79**, 5884–5889 (1957).
- 1957MAS S. V. R. Mastrangelo, *Anal. Chem.* **29**, 841 (1957).
- 1957MCC/DOU J. P. McCullough, D. R. Douslin, J. F. Messerly, I. A. Hossenlopp, T. C. Kincheloe, and G. Waddington, *J. Am. Chem. Soc.* **79**, 4289–4295 (1957).
- 1957MCC/FIN J. P. McCullough, H. L. Finke, M. E. Gross, J. F. Messerly, and G. Waddington, *J. Phys. Chem.* **61**, 289 (1957).
- 1957MCC/FIN2 J. P. McCullough, H. L. Finke, J. F. Messerly, S. S. Todd, T. C. Kincheloe, and G. Waddington, *J. Phys. Chem.* **61**, 1105 (1957).
- 1957MCC/HUB J. P. McCullough, W. N. Hubbard, F. R. Frow, I. A. Hossenlopp, and G. Waddington, *J. Am. Chem. Soc.* **79**, 561–566 (1957).
- 1957NEI/WHI E. F. Neilson and D. White, *J. Am. Chem. Soc.* **79**, 5618–5621 (1957).
- 1957PEN/KOB R. E. Pennington and K. A. Kobe, *J. Am. Chem. Soc.* **79**, 300 (1957).
- 1957POR/CAD R. S. Porter and G. H. Cady, *J. Am. Chem. Soc.* **79**, 5625–5627 (1957).
- 1957PUT/KIL W. E. Putnam and J. E. Kilpatrick, *J. Chem. Phys.* **27**, 1075 (1957).
- 1957ROS/ACC A. Rose, J. A. Acciari, R. C. Johnson, and W. W. Sanders, *Ind. Eng. Chem.* **49**, 104–109 (1957).
- 1957ROW/THA J. S. Rowlinson and R. Thacker, *Trans. Faraday Soc.* **53**, 1–8 (1957).
- 1957SAG A. J. Saggiomo, *J. Org. Chem.* **22**, 1171–1175 (1957).
- 1957SCO/FIN D. W. Scott, H. L. Finke, J. P. McCullough, J. F. Messerly, R. E. Pennington, I. A. Hossenlopp, and G. Waddington, *J. Am. Chem. Soc.* **79**, 1062–1068 (1957).
- 1957SER/VOI V. V. Serpinski, S. A. Voitkevich, and N. Yu. Lyuboshits, *Zh. Fiz. Khim.* **31**, 1278–1284 (1957); *Chem. Abstr.* **52**, 3270f (1958).
- 1957SHE/BRY T. K. Sherwood and H. S. Bryant, Jr., *Can. J. Chem. Eng.* **35**, 51–57 (1957); *Chem. Abstr.* **52**, 92a (1958).
- 1957STR/KLI I. N. Stranski, G. Klipping, A. F. Bogenschuetz, H. J. Heinrich, and H. Maennig, *Adv. Catal.* **9**, 406 (1957); *Chem. Abstr.* **53**, 1793 (1959).
- 1957WIL/HAR K. D. Williamson and R. H. Harrison, *J. Chem. Phys.* **26**, 1409–1411 (1957).
- 1958BID/MAR D. P. Biddiscombe and J. F. Martin, *Trans. Faraday Soc.* **54**, 1316–1322 (1958).

- 1958BIL/NOL J. J. Billings and A. W. Nolle, *J. Chem. Phys.* **29**, 214 (1958).
- 1958BOO/MOR H. S. Booth and W. C. Morris, *J. Phys. Chem.* **62**, 875 (1958).
- 1958BRO/MEA J. A. Brown and W. H. Mears, *J. Phys. Chem.* **62**, 960–962 (1958).
- 1958BUR/SLO A. B. Burg and P. J. Slota, Jr., *J. Am. Chem. Soc.* **80**, 1107–1109 (1958).
- 1958CAS/FLE R. C. Cass, S. E. Fletcher, C. T. Mortimer, P. G. Quincey, and H. D. Springall, *J. Chem. Soc.* **1958**, 958–963.
- 1958CAS/FLE2 R. C. Cass, S. E. Fletcher, C. T. Mortimer, P. G. Quincey, and H. D. Springall, *J. Chem. Soc.* **1958**, 2595–2599.
- 1958CAS/FLE3 R. C. Cass, S. E. Fletcher, C. T. Mortimer, H. D. Springall, and T. R. White, *J. Chem. Soc.* **1958**, 1406–1410.
- 1958DIC/HIL F. Dickinson, R. Hill, and J. Murray, *J. Chem. Soc.* **1958**, 1441.
- 1958DUN/MUR R. D. Dunlap, C. J. Murphy, Jr., and R. C. Bedford, *J. Am. Chem. Soc.* **80**, 83–85 (1958).
- 1958GRA/PRA P. Gray and M. W. T. Pratt, *J. Chem. Soc.* **1958**, 3403–3412.
- 1958HOY/PEP H. Hoyer and W. Peperle, *Z. Electrochem.* **62**, 61–66 (1958).
- 1958HUB/DOU W. N. Hubbard, D. R. Douslin, J. P. McCullough, D. W. Scott, S. S. Todd, J. F. Messerly, I. A. Hossenlopp, A. George, and G. Waddington, *J. Am. Chem. Soc.* **80**, 3547–3554 (1958).
- 1958KLI/STR V. G. Klipping and I. N. Stranski, *Z. Anorg. Allg. Chem.* **297**, 23–31 (1958).
- 1958KOS/SAM V. N. Kostyukov, O. P. Samorukov, and P. G. Strelkov, *Zh. Fiz. Khim.* **32**, 1354 (1958).
- 1958LOO/DOW C. E. Looney and J. R. Downey, *J. Am. Chem. Soc.* **80**, 2840–2844 (1958).
- 1958MAH/BUR W. Mahler and A. B. Burg, *J. Am. Chem. Soc.* **80**, 6161–6167 (1958).
- 1958MCC/FIN J. P. McCullough, H. L. Finke, D. W. Scott, R. E. Pennington, M. E. Gross, J. F. Messerly, and G. Waddington, *J. Am. Chem. Soc.* **80**, 4786–4793 (1958).
- 1958MOL L. Molard, *Mem. Poudres* **40**, 13 (1958), as quoted in [1977PEL].
- 1958MOR/YOS T. Morikawa and K. Yoshida, *Kagaku to Kogyo* **32**, 228 (1958).
- 1958PAG/PUR F. M. Page and J. H. Purnell, *J. Chem. Soc.* **1958**, 621.
- 1958PEP W. J. Peppel, *Ind. Eng. Chem.* **50**, 767–770 (1958).
- 1958ROS/PAP A. Rose, B. T. Paphronis, and E. T. Williams, *J. Chem. Eng. Data* **3**, 216–219 (1958).
- 1958SCH/WAG K. Schafer and U. Wagner, *Z. Elektrochem.* **62**, 328 (1958).
- 1958SCO/MCC D. W. Scott, J. P. McCullough, J. F. Messerly, R. E. Pennington, I. A. Hossenlopp, H. L. Finke, and G. Waddington, *J. Am. Chem. Soc.* **80**, 55–59 (1958).
- 1958SER/VOI V. V. Serpinski, S. A. Voitkevich, and N. Yu. Lyuboshits, *Trudy Vsesoyuz. Nauch.-Issledovatel. Inst. Sintet. I. Natural. Dushistykh Veshchestv* **4**, 125–130 (1958).
- 1958SKL/MAR S. I. Sklyarenko, B. I. Markin, and L. B. Belyaeva, *Zh. Fiz. Khim.* **32**, 1916–1921 (1958); *Chem. Abstr.* **53**, 4848f (1959).
- 1958UNG/MCB H. Ungnade and E. T. McBee, *Chem. Rev.* **58**, 249–320 (1958).
- 1958VAR M. C. P. Varma, *J. Appl. Chem.* **8**, 117 (1958).
- 1959AIH A. Aihara, *Bull. Chem. Soc. Jpn.* **32**, 1242–1248 (1959).
- 1959ARO/KAS Kh.A. Aronovich, L. P. Kastorskii, and K. F. Fedorova, *Zh. Fiz. Khim.* **41**, 20 (1959).
- 1959BIS/FIN E. R. Bissell and M. Finger, *J. Org. Chem.* **24**, 1259–1261 (1959).
- 1959BRA/DRU R. S. Bradley and T. Drury, *Trans. Faraday Soc.* **55**, 1844–1847 (1959).
- 1959BRO/SMI I. Brown and F. Smith, *Aust. J. Chem.* **12**, 407–412 (1959).
- 1959CHA/VAN P. Chaiyavech and M. Van Winkle, *J. Chem. Eng. Data* **4**, 53–57 (1959).
- 1959DAV/JON M. Davies and A. H. Jones, *Trans. Faraday Soc.* **55**, 1329–1332 (1959).
- 1959DAV/JON2 M. Davies, A. H. Jones, and G. H. Thomas, *Trans. Faraday Soc.* **55**, 1100–1108 (1959).
- 1959DEA/EVA G. H. Deal, H. D. Evans, E. D. Oliver, and M. N. Papadopoulos, *Pet. Ref.* **38**, 185 (1959).
- 1959EME/SMI H. J. Emeleus and J. D. Smith, *J. Chem. Soc.* **1959**, 375–381.
- 1959EVA/SKI F. W. Evans and H. A. Skinner, *Trans. Faraday Soc.* **55**, 255–259 (1959).
- 1959FLE/MOR S. E. Fletcher, C. T. Mortimer, and H. D. Springall, *J. Chem. Soc.* **1959**, 580–584.
- 1959GOO/DOU W. D. Good, D. R. Douslin, D. W. Scott, A. George, J. L. Lacina, J. P. Dawson, and G. Waddington, *J. Phys. Chem.* **63**, 1133–1138 (1959).
- 1959HAR N. Harutada, *Takamine Kenkyusho Nempo* **11**, 66–75 (1959); *Chem. Abstr.* **55**, 10026e (1961).
- 1959HIL/MCD D. L. Hildenbrand and R. A. McDonald, *J. Phys. Chem.* **68**, 1521–1523 (1959).
- 1959HIL/SIN D. L. Hildenbrand, G. C. Sinke, R. A. McDonald, and W. R. Kramer, *J. Chem. Phys.* **31**, 650–654 (1959).
- 1959KAE/STO H. D. Kaesz and F. G. A. Stone, *J. Org. Chem.* **24**, 635 (1959).
- 1959KOL/PAU V. P. Kolesov, I. E. Paukov, S. M. Skuratov, and E. A. Seregin, *Dokl. Akad. Nauk SSSR* **128**, 130 (1959).
- 1959MCC/DOU J. P. McCullough, D. R. Douslin, W. N. Hubbard, S. S. Todd, J. F. Messerly, I. A. Hossenlopp, F. R. Frow, J. P. Dawson, and G. Waddington, *J. Am. Chem. Soc.* **81**, 5884–5890 (1959).
- 1959MCC/PEN J. P. McCullough, R. E. Pennington, J. C. Smith, I. A. Hossenlopp, and G. Waddington, *J. Am. Chem. Soc.* **81**, 5880–5883 (1959).
- 1959MCD/SHR R. A. McDonald, S. A. Shrader, and D. R. Stull, *J. Chem. Eng. Data* **4**, 311–313 (1959).
- 1959SCO/DOU D. W. Scott, D. R. Douslin, J. F. Messerly, S. S. Todd, I. A. Hossenlopp, T. C. Kincheloe, and J. P. McCullough, *J. Am. Chem. Soc.* **81**, 1015–1020 (1959).
- 1959SEE/BAL F. Seel and K. Ballreich, *Chem. Ber.* **92**, 344 (1959).
- 1959SEP/PAU M. Seprakova, J. Paulech, and J. Dykyj, *Chem. Zvesti* **313–316** (1959).
- 1959STE/GRE J. H. Stern and N. W. Gregory, *J. Phys. Chem.* **63**, 556–559 (1959).
- 1959TAK/CHI S. Takagi, H. Chihara, and S. Seki, *Bull. Chem. Soc. Jpn.* **32**, 84–88 (1959).
- 1959TAK/SHI S. Takagi, R. Shintani, H. Chihara, and S. Seki, *Bull. Chem. Soc. Jpn.* **32**, 137–142 (1959); *Chem. Abstr.* **54**, 1958g (1960).
- 1959TER/BR I. E. Terres, L. Brinkmann, D. Fischer, D. Hüllstrung, W. Loz, and G. Weisbrod, *Brennst.-Chem.* **40**, 279–280 (1959).
- 1959URB L. Urbancova, *Chem. Zvesti* **13**, 224–227 (1959).
- 1959USA/DEM M. Usanovich and A. I. Dembitskii, *Zh. Obshch. Khim.* **29**, 1781–1785 (1959).
- 1959USA/DEM2 M. Usanovich and A. I. Dembitskii, *Zh. Obshch. Khim.* **29**, 1771–1781 (1959).
- 1959VAC/STA J. Vacek and J. Stanek, *Chem. Prum.* **9**, 286 (1959).
- 1959YEN/REE L. C. Yen and T. M. Reed III, *J. Chem. Eng. Data* **4**, 102–107 (1959).
- 1960AIH A. Aihara, *Bull. Chem. Soc. Jpn.* **33**, 194–200 (1960).
- 1960AIH2 A. Aihara, *Bull. Chem. Soc. Jpn.* **33**, 1188–1194 (1960).
- 1960AND/BID R. J. L. Andon, D. P. Biddiscombe, J. D. Cox, R. Handley, D. Harrop, E. F. G. Herington, and J. F. Martin, *J. Chem. Soc.* **1960**, 5246–5255.
- 1960BUD S. Budurov, *Izv. Khim. Inst., Bulg. Akad. Nauk.* **7**, 281–301 (1960).
- 1960BUR/SLO A. B. Burg and P. J. Slota, Jr., *J. Am. Chem. Soc.* **82**, 2148 (1960).
- 1960CAM/ROS D. L. Camin and F. D. Rossini, *J. Chem. Eng. Data* **5**, 368–372 (1960).
- 1960CHA/WES S. S. Chang and E. F. Westrum, *J. Phys. Chem.* **94**, 1547–1551 (1960).
- 1960CLA/FOW A. P. Claydon, P. A. Fowell, and C. T. Mortimer, *J. Chem. Soc.* **1960**, 3284–3287.
- 1960DAV/THO M. Davies and G. H. Thomas, *Trans. Faraday Soc.* **56**, 185–192 (1960).

- 1960DIN/PAC R. E. Dininny and E. L. Pace, *J. Chem. Phys.* **32**, 805 (1960).
- 1960DYK/PAU J. Dykyj, J. Paulech, and M. Seprakova, *Chem. Zvesti* **14**, 327-333 (1960).
- 1960EME/NAB H. J. Emeleus and S. N. Nabi, *J. Chem. Soc.* **1960**, 1103-1108.
- 1960EME/PUG H. J. Emeleus and H. Pugh, *J. Chem. Soc.* **1960**, 1108-1112.
- 1960FRA J. W. Frazer, *J. Inorg. Nucl. Chem.* **16**, 63-66 (1960).
- 1960GIA/OTT W. F. Giauque and J. B. Ott, *J. Am. Chem. Soc.* **82**, 2689-2695 (1960).
- 1960GLE D. N. Glew, *Can. J. Chem.* **38**, 208-211 (1960).
- 1960GRE J. H. S. Green, *Chem. Ind. (London)* 1215-1216 (1960).
- 1960GRI/HAZ C. E. Griffin and R. N. Hazeldine, *J. Chem. Soc.* **1960**, 1398-1406.
- 1960HIR/STE R. C. Hirt, J. E. Steger, and G. L. Simard, *J. Polym. Sci.* **43**, 319-323 (1960); *Chem. Abstr.* **54**, 16968b (1960).
- 1960JON A. H. Jones, *J. Chem. Eng. Data* **5**, 196-200 (1960).
- 1960KLY/MIS M. L. Klyueva, K. P. Mischenko, and M. K. Fedorov, *Zh. Prikl. Khim.* **3**, 473-475 (1960); *Chem. Abstr.* **54**, 11616g (1960).
- 1960LYN/WIL E. J. Lynch and C. R. Wilke, *J. Chem. Eng. Data* **5**, 300 (1960).
- 1960MAC/MAY H. Mackle, R. G. Mayrick, and J. J. Rooney, *Trans. Faraday Soc.* **56**, 115-117 (1960).
- 1960MAL/MAL N. A. Malafeev, V. A. Malyusov, N. N. Umnik, I. V. Podgornaya, and V. M. Zhavoronkov, *Dokl. Akad. Nauk SSSR* **135**, 659 (1960); *Chem. Abstr.* **56**, 5115 (1962).
- 1960MCK/SAG R. A. Mckay and B. H. Sage, *J. Chem. Eng. Data* **5**, 21-24 (1960).
- 1960MUE/IGN C. R. Mueller and J. Ignatowski, *J. Chem. Phys.* **32**, 1430-1434 (1960).
- 1960MUN/KOH R. J. Munn and F. Kohler, *Monatsh. Chem.* **91**, 381 (1960).
- 1960NEG/MIK H. Negoro, T. Miki, and S. Ueda, *Yakugaku Zasshi* **80**, 665-669 (1960); *Chem. Abstr.* **54**, 20424f (1960).
- 1960NEG/MIK2 H. Negoro, T. Miki, S. Ueda, T. Sanada, and R. Okada, *Yakugaku Zasshi* **80**, 670-673 (1960).
- 1960NIC G. R. Nicholson, *J. Chem. Soc.* 2377-2378 (1960).
- 1960NOV/MAT J. Novak, J. Matous, and J. Pick, *Collect. Czech. Chem. Commun.* **25**, 583-584 (1960).
- 1960NOV/MAT2 J. Novak, J. Matous, and J. Pick, *Collect. Czech. Chem. Commun.* **25**, 2405-2413 (1960).
- 1960SCH/LEG K. Schwabe and C. Legler, *Z. Elektrochem.* **64**, 902-905 (1960).
- 1960SKL/STR A. A. Sklyankin and P. G. Strelkov, *Zh. Prikl. Mekh. Tekh. Fiz.* **2**, 100 (1960).
- 1960THO L. H. Thomas, *J. Chem. Soc.* **1960**, 4906-4914 as quoted in [2000BRU/DEL].
- 1960TRE/MIL F. M. Trent, F. D. Miller, and G. H. Brown, *J. Chem. Eng. Data* **5**, 110-111 (1960).
- 1960VAN/CAD W. P. Van Meter and G. H. Cady, *J. Am. Chem. Soc.* **82**, 6005-6008 (1960).
- 1960WAD I. Wadso, *Acta Chem. Scand.* **14**, 566-572 (1960).
- 1960WAD/KIS T. Wada, E. Kishida, Y. Tomiie, H. Suga, S. Seki, and I. Nitta, *Bull. Chem. Soc. Jpn.* **33**, 1317-1318 (1960).
- 1960WEY/KLI F. Weygand, G. Klipping, and D. Palm, *Chem. Ber.* **93**, 2619-2625 (1960).
- 1960WOO/MUR A. L. Woodman, W. L. Murbach, and M. H. Kaufman, *J. Phys. Chem.* **64**, 658-660 (1960).
- 1960YAR/KAY R. M. Yarrington and W. B. Kay, *J. Chem. Eng. Data* **5**, 24-29 (1960).
- 1961BAN/GIN R. E. Banks, A. E. Ginsberg, and R. N. Haszeldine, *J. Chem. Soc.* **1961**, 1740-1743.
- 1961BAR/HAS D. A. Barr, R. N. Haszeldine, and C. J. Willis, *J. Chem. Soc.* **1961**, 1351-1362.
- 1961BER/SCO W. T. Berg, D. W. Scott, W. N. Hubbard, S. S. Todd, J. F. Messerly, I. A. Hossenlopp, A. Osborn, D. R. Douslin, and J. P. McCullough, *J. Phys. Chem.* **65**, 1425-1430 (1961).
- 1961BUR/GRI A. B. Burg and J. E. Griffiths, *J. Am. Chem. Soc.* **83**, 4333-4335 (1961).
- 1961BUS/IVI W. K. Busfield, K. J. Ivin, H. Mackle, and P. A. G. O'Hare, *Trans. Faraday Soc.* 1058-1063 (1961).
- 1961CAS/RAY J. R. Case, N. H. Ray, and H. L. Roberts, *J. Chem. Soc.* **1961**, 2070-2075.
- 1961CAS/RAY2 J. R. Case, N. H. Ray, and H. L. Roberts, *J. Chem. Soc.* **1961**, 2066-2070.
- 1961DAV/MAL M. Davies and V. E. Malpass, *J. Chem. Soc.* **1961**, 1048-1055.
- 1961DYK/SEP J. Dykvy, M. Seprakova, and J. Paulech, *Chem. Zvesti* **15**, 465-468 (1961); *Chem. Abstr.* **56**, 10930b (1962).
- 1961FRO/LOG A. F. Frolov, M. A. Loginova, and M. M. Kiseleva, *Zh. Phys. Khim.* **35**, 1784-1788 (1961).
- 1961GLA/TIM A. R. Glasgow and J. Timmerman, *Bull. Soc. Chem. Belg.* **70**, 599 (1961).
- 1961GOO/LAC W. D. Good, J. L. Lacina, and J. P. McCullough, *J. Phys. Chem.* **65**, 2229-2231 (1961).
- 1961HEI/ILA J. Heinrich, J. Ilavsky, and J. Surovy, *Chem. Zvesti* **15**, 414-418 (1961).
- 1961HES/WHI P. Hestermans and D. White, *J. Phys. Chem.* **65**, 362-365 (1961).
- 1961HUF/GRO H. M. Huffman, M. E. Gross, D. W. Scott, and J. P. McCullough, *J. Phys. Chem.* **65**, 495-503 (1961).
- 1961KOZ V. M. Kozhin, *Zh. Strukt. Khim.* **2**, 46 (1961).
- 1961LAB/GRE A. Labbauf, J. B. Greenshields, and F. D. Rossini, *J. Chem. Eng. Data* **6**, 261-263 (1961).
- 1961LI/ROS J. C. M. Li and F. D. Rossini, *J. Chem. Eng. Data* **6**, 268-270 (1961).
- 1961MAL S. Malanowski, *Bull. Acad. Pol. Sci., Ser. Sci. Chim.* **9**, 71-76 (1961).
- 1961MAL2 S. Malanowski, *Bull. Acad. Pol. Sci., Ser. Sci. Chim.* **9**, 83 (1961).
- 1961MAT/MCK J. F. Mathews and J. J. McKetta, *J. Phys. Chem.* **65**, 758-762 (1961).
- 1961MCC/FIN J. P. McCullough, H. L. Finke, W. N. Hubbard, S. S. Todd, J. F. Messerly, D. R. Douslin, and G. Waddington, *J. Phys. Chem.* **65**, 784-791 (1961).
- 1961MCC/MES J. P. McCullough and J. F. Messerly, *Bull. Bur. Mines* 596 (1961).
- 1961NIC/KOB J. K. Nickerson, K. A. Kobe, and J. J. McKetta, *J. Phys. Chem.* **65**, 1037-11043 (1961).
- 1961PAC/BOB E. L. Pace and R. J. Bobka, *J. Chem. Phys.* **35**, 454-457 (1961).
- 1961ROS/SUP A. Rose and W. R. Supina, *J. Chem. Eng. Data* **6**, 173-179 (1961).
- 1961SCH/BOT I. M. Schiopu, O. Bot, and V. Onu, *Bull. Inst. Politeh. Iasi.* **7**, 115-118 (1961); *Chem. Abstr.* **58**, 10793c (1963).
- 1961SHR/CAD J. M. Shreeve and G. H. Cady, *J. Am. Chem. Soc.* **83**, 4521 (1961).
- 1961SMU/BON E. J. Smutny and A. Bondi, *J. Phys. Chem.* **65**, 546-550 (1961).
- 1961SPE A. Sperandio, Ph.D. thesis, University of Zurich, 1961.
- 1961STU/SIN D. R. Stull, G. C. Sinke, R. A. McDonald, W. E. Hatton, and D. L. Hildenbrand, *Pure Appl. Chem.* **2**, 315 (1961).
- 1961VAN G. Van dyke Tiers, *J. Org. Chem.* **26**, 2538-2539 (1961).
- 1961WAL/SMI P. N. Walsh and N. O. Smith, *J. Chem. Eng. Data* **6**, 33-35 (1961).
- 1961WAR/PET R. W. Warfield and M. C. Petree, *J. Polym. Sci.* **55**, 497 (1961).
- 1961WES E. F. Westrum, Jr., *Phys. Chem. Solids* **18**, 835 (1961).
- 1961ZIM/GEI H. Zimmermann and H. Geisenfelder, *Z. Electrochem.* **65**, 368-371 (1961).
- 1962BAN/CHE R. E. Banks, W. M. Cheng, and R. N. Haszeldine, *J. Chem. Soc.* **1962**, 3407.
- 1962BAU/GUN A. Bauder and H. H. Gunthard, *Helv. Chim. Acta* **45**, 1698-1702 (1962).
- 1962BER/MCK N. S. Berman and J. J. McKetta, *J. Phys. Chem.* **66**, 1444-1448 (1962).
- 1962BIR/BLO J. M. Birchall, A. J. Bloom, P. N. Haszeldine, and C. J. Willis, *J. Chem. Soc.* **1962**, 3021.
- 1962BIT/KAU H.-J. Bittrich and E. Kauer, *Z. Phys. Chem.* **219**, 224-238 (1962).
- 1962BIT/KAU2 H.-J. Bittrich, E. Kauer, M. Kraft, G. Schoeppe, W. Soell, and A. Ullrich, *J. Prakt. Chem.* **17**, 250-262 (1962).
- 1962CAD/ROD H. H. Cady and W. H. Rodgers, U.S. Atomic Energy Commission Report LA-2696, U.S. Atomic Energy Commission, 1962, p. 16.

- 1962DAI/EVA F. S. Dainton, D. M. Evans, F. E. Hoare, and T. P. Melia, *Polymer* **3**, 271 (1962).
- 1962DAV/SUN J. V. Davies and S. Sunner, *Acta Chem. Scand.* **16**, 1870 (1962).
- 1962DOW A. J. Downs, *J. Chem. Soc.* **1962**, 4361–4366.
- 1962EME/PAC H. J. Emeleus, K. H. Packer, and N. Welcman, *J. Chem. Soc.* 2529–2531 (1962).
- 1962GEI/QUI3 G. Geiseler, K. Quitzsch, R. Gesemann, and H. J. Gesemann, *Z. Phys. Chem.* **35**, 10 (1962).
- 1962GOO/DOU W. D. Good, D. R. Douslin, and J. P. McCullough, *J. Phys. Chem.* **66**, 958–959 (1962).
- 1962GRI/BUR J. E. Griffiths and A. B. Burg, *J. Am. Chem. Soc.* **84**, 3442–3450 (1962).
- 1962HAT/HIL W. E. Hatton, D. L. Hildenbrand, G. C. Sinke, and D. R. Stull, *J. Chem. Eng. Data* **7**, 229–231 (1962).
- 1962HEN/WEB V. P. Hennings and U. V. Weber, *J. Prakt. Chem.* **18**, 91 (1962).
- 1962JON H. E. Jones, *J. Chem. Eng. Data* **7**, 13 (1962).
- 1962KOL/PAU V. P. Kolesov, J. Ye. Paukov, and S. M. Skuratov, *Zh. Fiz. Khim.* **36**, 770 (1962).
- 1962KRA/BER M. Kraus, L. Beranek, K. Kochloeff, and V. Bazant, *Chem. Prum.* **12**, 649–652 (1962); *Chem. Abstr.* **58**, 10746c (1963).
- 1962KRE A. Kreglewski, *Bull. Acad. Pol. Sci., Ser. Sci. Chim.* **10**, 629–633 (1962).
- 1962LEB/MIR Y. A. Lebedev, E. A. Miroshnichenko, and A. M. Chaikin, *Dokl. Akad. Nauk SSSR* **145**, 1288–1289 (1962); *Chem. Abstr.* **58**, 2906g (1963).
- 1962MAC/MAY H. Mackle and R. G. Mayrick, *Trans. Faraday Soc.* **58**, 33–39 (1962).
- 1962MAC/MAY2 H. Mackle and R. G. Mayrick, *Trans. Faraday Soc.* **58**, 230–237 (1962).
- 1962MAC/MAY3 H. Mackle and R. G. Mayrick, *Trans. Faraday Soc.* **58**, 238–243 (1962).
- 1962MAN/SUN M. Mansson and S. Sunner, *Acta Chem. Scand.* **16**, 1863–1869 (1962).
- 1962MAR J. J. Martin, *J. Chem. Eng. Data* **7**, 68–72 (1962).
- 1962PAS/THO G. J. Pasek and G. L. Thodes, *J. Chem. Eng. Data* **7**, 21–26 (1962).
- 1962ROS/HEI G. R. Ross and W. G. Heideger, *J. Chem. Eng. Data* **7**, 505–507 (1962).
- 1962ROS/MUE R. M. Rosenberg and E. L. Muetterties, *Inorg. Chem.* **1**, 756 (1962).
- 1962SCO/DOU D. W. Scott, D. R. Douslin, H. L. Finke, W. N. Hubbard, J. F. Messerly, I. A. Hossenlopp, and J. P. McCullough, *J. Phys. Chem.* **66**, 1334–1341 (1962).
- 1962SCO/GOO D. W. Scott, W. D. Good, S. S. Todd, J. F. Messerly, W. T. Berg, I. A. Hossenlopp, J. L. Lucina, A. G. Osborn, and J. P. McCullough, *J. Chem. Phys.* **36**, 406–412 (1962).
- 1962SCO/MES D. W. Scott, J. F. Messerly, S. S. Todd, I. A. Hossenlopp, D. R. Douslin, and J. P. McCullough, *J. Chem. Phys.* **37**, 867 (1962).
- 1962SEL/SUN P. Sellers and S. Sunner, *Acta Chem. Scand.* **16**, 46–52 (1962).
- 1962SIN/HIL G. C. Sinke and D. L. Hildenbrand, *J. Chem. Eng. Data* **7**, 74 (1962).
- 1962STE/DOR J. H. Stern and F. H. Dorer, *J. Phys. Chem.* **66**, 97–99 (1962).
- 1962SUN/MEI W. Sundermeyer and W. Meise, *Z. Anorg. Allg. Chem.* **317**, 334 (1962).
- 1962TJE J. Tebbes, *Acta Chem. Scand.* **16**, 916–921 (1962).
- 1962TJE2 J. Tebbes, *Acta Chem. Scand.* **16**, 953–957 (1962).
- 1962VAL/BRO R. H. Valentini, G. E. Brodale, and W. R. Giauque, *J. Phys. Chem.* **66**, 392–395 (1962).
- 1962VOH/KAN S. P. Vohra, T. L. Kang, K. A. Kobe, and J. J. McKetta, *J. Chem. Eng. Data* **7**, 150–155 (1962).
- 1962VON/AYM A. J. Von Arvia, P. J. Aymonino, and H. J. Schumacher, *Z. Anorg. Allg. Chem.* **316**, 327–334 (1962).
- 1962WAD/SMI G. Waddington, J. C. Smith, K. D. Williamson, and D. W. Scott, *J. Phys. Chem.* **66**, 1074–1077 (1962).
- 1962WEB/KIL L. A. Weber and J. E. Kilpatrick, *J. Chem. Phys.* **36**, 829 (1962).
- 1962WIL/CAD S. M. Williamson and G. H. Cady, *Inorg. Chem.* **1**, 673–677 (1962).
- 1963AMB/TOW D. Ambrose and R. J. Townsend, *J. Chem. Soc.* **1963**, 3614–3625.
- 1963AND/COU R. J. L. Andon, J. F. Counsell, and J. F. Martin, *Trans. Faraday Soc.* **59**, 1555 (1963).
- 1963AND/COU2 R. J. L. Andon, J. F. Counsell, E. F. G. Herington, and J. F. Martin, *Trans. Faraday Soc.* **59**, 830 (1963).
- 1963BAR/WES C. M. Barber and E. F. Westrum, Jr., *J. Phys. Chem.* **67**, 2373 (1963).
- 1963BEN/MCK E. T. Benyon, Jr. and J. J. McKetta, *J. Phys. Chem.* **67**, 2761–2765 (1963).
- 1963BID/COL D. P. Biddiscombe, R. R. Collerson, R. Handley, E. F. G. Herington, J. F. Martin, and C. H. S. Sprake, *J. Chem. Soc.* **1963**, 1954–1957.
- 1963BID/HAN D. P. Biddiscombe, R. Handley, D. Harrop, A. J. Head, G. B. Lewis, J. F. Martin, and C. H. S. Sprake, *J. Chem. Soc.* **1963**, 5764–5768.
- 1963BON A. Bondi, *J. Chem. Eng. Data* **8**, 371–381 (1963).
- 1963BOT/SEI G. A. Bottomley and G. H. F. Seiffow, *J. Appl. Chem.* **13**, 399–409 (1963).
- 1963BOY R. H. Boyd, *J. Chem. Phys.* **38**, 2529–2535 (1963).
- 1963BRO J. A. Brown, *J. Chem. Eng. Data* **8**, 106–108 (1963).
- 1963BUL/SER S. S. Bull, I. I. Seregrennaja, and P. R. Tsherbakora, *Khim. Prom. (Moscow)* **7**, 507–509 (1963).
- 1963CAP/FRI A. Capkova and V. Fried, *Collect. Czech. Chem. Commun.* **28**, 2235–2239 (1963).
- 1963DAN/FLU W. Dannhauser and A. F. Fluechking, *J. Chem. Phys.* **38**, 69–72 (1963).
- 1963EME/HAA H. J. Emeleus and A. Haas, *J. Chem. Soc.* **1963**, 1272–1275.
- 1963GIL/CAD W. P. Gilbreath and G. H. Cady, *Inorg. Chem.* **2**, 496–499 (1963).
- 1963GOO/DOU W. D. Good, D. R. Douslin, and J. P. McCullough, *J. Phys. Chem.* **67**, 1312–1314 (1963).
- 1963GOO/TOD W. D. Good, S. S. Todd, J. F. Messerly, J. L. Lacina, J. P. Dawson, D. W. Scott, and J. P. McCullough, *J. Phys. Chem.* **67**, 1306–1311 (1963).
- 1963HAL/COX J. L. Hales, J. D. Cox, and E. B. Lees, *Trans. Faraday Soc.* **59**, 1544–1554 (1963).
- 1963HIR/HIL H. Hiraoka and J. H. Hildebrand, *J. Phys. Chem.* **67**, 916–918 (1963).
- 1963HOL/WAG R. R. Holmes and R. P. Wagner, *Inorg. Chem.* **2**, 384–388 (1963).
- 1963HOR/WEN G. R. Horton and W. W. Wendlandt, *J. Inorg. Nucl. Chem.* **25**, 241–245 (1963).
- 1963KOR/GEL N. G. Koral'nik and P. E. Geller, *Zh. Prikl. Khim.* **36**, 1627 (1963); *Chem. Abstr.* **59**, 81936 (1963).
- 1963MCC/LAI K. G. McCurdy and K. J. Laidler, *Can. J. Chem.* **41**, 1867–1871 (1963).
- 1963MEY P. Meyer, D.E.S. dissertation, University of Aix-Marseille, France, 1963.
- 1963MIL G. A. Miller, *J. Chem. Eng. Data* **8**, 69–72 (1963).
- 1963MOR/SUN E. Morawetzer and S. Sunner, *Acta Chem. Scand.* **17**, 473 (1963).
- 1963NOB/REE P. Noble, Jr., W. I. Reed, C. J. Hoffman, J. A. Gallagher, and F. G. Borgardt, *AIAA J.* **1**, 395–397 (1963); *Chem. Abstr.* **58**, 13701b (1963).
- 1963OET F. L. Oetting, *J. Phys. Chem.* **67**, 2757 (1963).
- 1963QUI/NOW K. Quitzsch, C. Nowak, P. Winkler, and G. Geiseler, *J. Prakt. Chem.* **20**, 92–98 (1963).
- 1963RAS/NIG R. P. Rastogi, R. P. Nigam, R. N. Sharma, and H. L. Girdhar, *J. Chem. Phys.* **39**, 3042–3045 (1963).
- 1963ROS/SCH A. Rose and V. N. Schrodt, *J. Chem. Eng. Data* **8**, 9–13 (1963).
- 1963SCO/GOO D. W. Scott, W. D. Good, G. B. Gutherie, S. S. Todd, I. A. Hossenlopp, A. G. Osborn, and J. P. McCullough, *J. Phys. Chem.* **67**, 685–689 (1963).
- 1963SCO/HUB D. W. Scott, W. N. Hubbard, J. F. Messerly, S. S. Todd, I. A. Hossenlopp, W. D. Good, D. R. Douslin, and J. P. McCullough, *J. Phys. Chem.* **67**, 680–685 (1963).
- 1963SCO/MES D. W. Scott, J. F. Messerly, S. S. Todd, I. A. Hossenlopp, A. Osborn, and J. P. McCullough, *J. Chem. Phys.* **38**, 532–539 (1963).

- 1963SOK/ZHI V. V. Sokolov, L. P. Zhilina, and K. P. Mischenko, *Zh. Prikl. Khim.* **36**, 750–754 (1963).
- 1963TRO/WES J. C. Trowbridge and E. F. Westrum, Jr., *J. Phys. Chem.* **67**, 2381 (1963).
- 1963VIN/MAR C. G. Vinson, Jr. and J. J. Martin, *J. Chem. Eng. Data* **8**, 74–75 (1963).
- 1963VLA/GRA O. N. Vlasov, V. A. Granzhan, and L. M. Savenko, *Zh. Prikl. Khim.* **36**, 2311–2313 (1963).
- 1963VOI S. A. Voitkevich, *Tr. Vses. Nauchn.-Issled. Inst. Sintetich. i Natural'n Dushistykh Veshchestv.* 91–92 (1963); *Chem. Abstr.* **61**, 13121e (1964).
- 1963WOJ J. G. Wojtasinski, *J. Chem. Eng. Data* **8**, 381–385 (1963).
- 1963WOO/ADI A. L. Woodman and A. Adicoff, *J. Chem. Eng. Data* **8**, 241–242 (1963).
- 1963WUL/WES C. A. Wulff and E. F. Westrum, Jr., *J. Phys. Chem.* **67**, 2376–2381 (1963).
- 1964AMB/TOW D. Ambrose and R. Townsend, *Trans. Faraday Soc.* **60**, 1025–1029 (1964).
- 1964BAN/CHE R. E. Banks, W. M. Cheng, and R. N. Haszeldine, *J. Chem. Soc.* 2485–2486 (1964).
- 1964BER/LAR N. S. Berman, C. W. Larkam, and J. J. McKetta, *J. Chem. Eng. Data* **9**, 218–219 (1964).
- 1964BON/JOR O. D. Bonner, C. F. Jordan, and K. W. Bunzl, *J. Phys. Chem.* **68**, 2450 (1964).
- 1964CAV R. G. Cavell, *J. Chem. Soc.* **1964**, 1992–1995.
- 1964CAV/EME R. G. Cavell and H. J. Emeleus, *J. Chem. Soc.* **1964**, 5825–5832.
- 1964CAV/EME2 R. G. Cavell and H. J. Emeleus, *J. Chem. Soc. Suppl.* 5896–5897 (1964).
- 1964CLY/SVE D. D. Clyde and H. Svec, U.S. Atomic Energy Commission Report IS-790, U.S. Atomic Energy Commission (1964); *Chem. Abstr.* **61**, 1293b (1964).
- 1964DAV D. J. David, *Anal. Chem.* **36**, 2162 (1964).
- 1964DUN/CAD L. C. Duncan and G. H. Cady, *Inorg. Chem.* **3**, 850–852 (1964).
- 1964DUN/CAD2 L. C. Duncan and G. H. Cady, *Inorg. Chem.* **3**, 1045–1047 (1964).
- 1964EME/TAT H. J. Emeleus and B. W. Tattershall, *Z. Anorg. Allg. Chem.* **327**, 147 (1964).
- 1964EPS/DUR Yu. V. Epshtein, L. I. Durygina, and A. S. Pashinkin, *Zh. Prikl. Khim.* **37**, 2543–2545 (1964).
- 1964FAW/LIP F. S. Fawcett and R. D. Lipscomb, *J. Am. Chem. Soc.* **86**, 2576–2579 (1964).
- 1964FIS/BUC G. Fisher and A. S. Buchanan, *Aust. J. Chem.* **17**, 481 (1964).
- 1964FRI/STA K. Friedrich and K. Stambach, *J. Chromatogr.* **16**, 22–28 (1964).
- 1964FUR/REI G. T. Furukawa, M. L. Reilly, H. H. Piccirelli, and M. J. Tenenbaum, *J. Res. Natl. Bur. Stand., Sect. A* **68**, 367–379 (1964).
- 1964GEI/KON G. Geiseler and W. Konig, *Z. Phys. Chem. (Leipzig)* **227**, 81–90 (1964).
- 1964GOL/GOR N. A. Goldberg, V. A. Gorbushchenkov, and Z. G. Teplova, *Zh. Prikl. Khim.* **37**, 745–747 (1964).
- 1964GUB/FER A. N. Gubkov, N. A. Fermor, and N. I. Smirnov, *Zh. Prikl. Khim.* **37**, 2204–2210 (1964).
- 1964HAN/HAR R. Handley, D. Harrop, J. F. Martin, and C. H. S. Sprake, *J. Chem. Soc.* **1964**, 4404–4406.
- 1964KLE A. V. Kletskii, *Inzh. Fiz. Zh. Akad. Nauk. Beldrussk. SSR* **7**, 40–43 (1964).
- 1964KLI/FRI V. Kliment, V. Fried, and J. Pick, *Collect. Czech. Chem. Commun.* **29**, 2008–2015 (1964).
- 1964MAC/MCC H. Mackle and R. T. B. McClean, *Trans. Faraday Soc.* **60**, 817–821 (1964).
- 1964MAL/WEC B. Malanowska and J. Weccsile, *Bull. de L'Acad. Polon. des Sci.* **12**, 239 (1964).
- 1964MCE/KIL D. M. McEachern, Jr. and J. E. Kilpatrick, *J. Chem. Phys.* **41**, 3127 (1964).
- 1964MUR K. P. Murphy, *J. Chem. Eng. Data* **9**, 259–260 (1964).
- 1964NIX J. F. Nixon, *J. Chem. Soc.* 2469 (1964).
- 1964OET F. L. Oetting, *J. Chem. Phys.* **41**, 149 (1964).
- 1964PAT/PRO C. R. Patrick and G. S. Prosser, *Trans. Faraday Soc.* **60**, 700–704 (1964).
- 1964PET/BUR L. K. Peterson and A. B. Burg, *J. Am. Chem. Soc.* **86**, 2587–2591 (1964).
- 1964RAS/BAS R. P. Rastogi and P. S. Bassi, *J. Phys. Chem.* **68**, 2398 (1964).
- 1964RAT/SHR C. T. Ratcliffe and J. M. Shreeve, *Inorg. Chem.* **3**, 631–633 (1964).
- 1964ROB H. L. Roberts, *J. Chem. Soc.* **1964**, 4538.
- 1964SER/GOR E. A. Seregin, N. N. Goroshko, V. P. Kolesov, N. A. Belikova, S. M. Skuratov, and A. F. Plate, *Dokl. Akad. Nauk SSSR* **159**, 1381 (1964).
- 1964SER/TIM L. A. Serafimov, V. S. Timofeev, M. P. Strukova, and S. V. L'vov, *Russ. J. Phys. Chem.* **38**, 1018–1019 (1964).
- 1964SEV/SOK N. N. Sevrugova, V. A. Sokorskii, and Zhavoronkov, *Zh. Prikl. Khim. (Leningrad)* **37**, 1989–1993 (1964).
- 1964TRO/WES J. C. Trowbridge and E. F. Westrum, Jr., *J. Phys. Chem.* **68**, 255 (1964).
- 1964WUL/WES C. A. Wulff and E. F. Westrum, Jr., *J. Phys. Chem.* **68**, 430 (1964).
- 1965AYL/PET B. J. Aylett and L. K. Peterson, *J. Chem. Soc.* **1965**, 4043–4048.
- 1965BAN/BAR R. E. Banks, M. G. Barlow, and R. N. Haszeldine, *J. Chem. Soc.* **1965**, 6149–6163.
- 1965BAN/BUR R. E. Banks and E. D. Burling, *J. Chem. Soc.* **1965**, 6077.
- 1965BAN/HAS R. E. Banks, R. N. Haszeldine, and D. R. Taylor, *J. Chem. Soc.* **1965**, 5602.
- 1965BUR/GOS A. B. Burg and K. Gosling, *J. Am. Chem. Soc.* **87**, 2113 (1965).
- 1965BUR/HEN A. B. Burg and J. Heners, *J. Am. Chem. Soc.* **87**, 3092–3096 (1965).
- 1965CAR/WES H. G. Carlson and E. F. Westrum, Jr., *J. Chem. Eng. Data* **10**, 134–135 (1965).
- 1965CAR/WES2 H. G. Carlson and E. F. Westrum, Jr., *J. Phys. Chem.* **68**, 1524 (1965).
- 1965CLA/PES L. B. Clark, G. G. Peschel, and I. Tinoco, *J. Phys. Chem.* **69**, 3615–3618 (1965).
- 1965CLE/WON H. L. Clever, W.-K. Wong, and E. F. Westrum, Jr., *J. Phys. Chem.* **69**, 1209 (1965).
- 1965CLE/WUL H. L. Clever, C. A. Wulff, and E. F. Westrum, Jr., *J. Phys. Chem.* **69**, 1983 (1965).
- 1965CLI/KOB A. F. Clifford and C. S. Kobayashi, *Inorg. Chem.* **4**, 571 (1965).
- 1965COL/COU R. R. Collerson, R. Handley, J. F. Martin, and C. H. S. Sprake, *J. Chem. Soc.* **1965**, 3697–3700.
- 1965COU/GRE J. F. Counsell, J. H. S. Green, J. L. Hales, and J. F. Martin, *Trans. Faraday Soc.* **61**, 212–218 (1965).
- 1965COU/HAL J. F. Counsell, J. L. Hales, and J. F. Martin, *Trans. Faraday Soc.* **61**, 1869–1875 (1965).
- 1965DAV/KYB M. Davies and B. Kybett, *Trans. Faraday Soc.* **61**, 1608–1617 (1965); **61**, 1893–1896 (1965).
- 1965DIN/HAS A. H. Dinwoodie and R. N. Haszeldine, *J. Chem. Soc.* 2266 (1965).
- 1965DIN/HAS2 A. H. Dinwoodie and R. N. Haszeldine, *J. Chem. Soc.* **1965**, 1675.
- 1965DIN/HAS3 A. H. Dinwoodie and R. N. Haszeldine, *J. Chem. Soc.* **1965**, 1681.
- 1965DOU/OSB D. R. Douslin and A. Osborn, *Rev. Sci. Instrum.* **42**, 369–373 (1965).
- 1965DRE/MER R. D. Dresdner, J. Merritt, and J. P. Royal, *Inorg. Chem.* **4**, 1228 (1965).
- 1965FIN/HOS H. L. Finke, I. A. Hossenlopp, and W. T. Berg, *J. Phys. Chem.* **69**, 3030–3031 (1965).
- 1965FIN/MES H. L. Finke, J. F. Messerly, and S. S. Todd, *J. Phys. Chem.* **69**, 2094–2100 (1965).
- 1965FRA/SHR G. W. Fraser and J. M. Shreeve, *Inorg. Chem.* **4**, 1497–1498 (1965).
- 1965FRE/MAR H. M. Frey, D. C. Marshall, and R. F. Skinner, *Trans. Faraday Soc.* **61**, 861 (1965).
- 1965GAK/BAB I. J. Gakh and E. P. Babin, *Russ. J. Phys. Chem.* **39**, 924 (1965).
- 1965HAS/TIP R. N. Haszeldine and A. E. Tipping, *J. Chem. Soc.* **1965**, 6141–6149.
- 1965HEI/SUR J. Heinrich, J. Surovy, and J. Dojcansky, *Chem. Zvesti* **19**, 462–464 (1965).

- 1965HUL/REI H. S. Hull, A. F. Reid, and A. G. Turnbull, *Aust. J. Chem.* **18**, 249–252 (1965).
- 1965KAL/ROZ L. A. Kalashnikova, E. G. Rozantsev, and A. M. Chaikin, *Izv. Akad. Nauk SSSR* 800–805 (1965); *Chem. Abstr.* **63**, 4972c (1965).
- 1965KAR/KYB H. A. Karnes, B. Kybett, M. H. Wilson, J. L. Margrave, and M. S. Newman, *J. Am. Chem. Soc.* **87**, 5554–5558 (1965).
- 1965KIL/BIT H. Kilian and H. J. Bittrich, *Z. Phys. Chem.* **230**, 383 (1965).
- 1965KUD/SAV I. V. Kudryashov and R. I. Savechenko, *Izv. Vysh. Ucheb. Zav. Khim. Khim. Tekhnol.* **8**, 602 (1965).
- 1965LIN/FRI J. Linek, V. Fried, and J. Pick, *Collect. Czech. Chem. Commun.* **30**, 1358–1365 (1965).
- 1965LUS/RUF M. Lustig and J. K. Ruff, *Inorg. Chem.* **4**, 1441 (1965).
- 1965LUT/KOL N. V. Lutugina, V. N. Kolbina, and L. I. Reshetova, *Zh. Prikl. Khim.* **38**, 1541–1546 (1965).
- 1965MAR P. Martin, *J. Chem. Eng. Data* **10**, 292–294 (1965).
- 1965MAR/SUS A. N. Marinichev and M. P. Susarev, *Zh. Prikl. Khim.* **38**, 378–383 (1965).
- 1965MCD/KIL L. A. Mcdougall and J. E. Kilpatrick, *J. Chem. Phys.* **42**, 2311–2321 (1965).
- 1965MCD/KIL2 L. A. Mcdougall and J. E. Kilpatrick, *J. Chem. Phys.* **42**, 2307 (1965).
- 1965MER/POL I. Mertl and J. Polak, *Collect. Czech. Chem. Commun.* **30**, 3526–3528 (1965).
- 1965MES/TOD J. F. Messerly, S. S. Todd, and H. L. Finke, *J. Phys. Chem.* **69**, 353 (1965).
- 1965MES/TOD2 J. F. Messerly, S. S. Todd, and H. L. Finke, *J. Phys. Chem.* **69**, 4304 (1965).
- 1965NAR P. A. Naro, *J. Chem. Eng. Data* **10**, 86 (1965).
- 1965NIS/LAP L. A. Nisel'son and I. I. Lapivus, *Russ. J. Phys. Chem.* **39**, 80–83 (1965).
- 1965NIS/LAP2 L. A. Nisel'son and I. I. Lapivus, *Russ. J. Phys. Chem.* **39**, 931–932 (1965).
- 1965NIX J. F. Nixon, *J. Inorg. Nucl. Chem.* **27**, 1281–1287 (1965).
- 1965NOF/CAD R. Nofle and G. H. Cady, *Inorg. Chem.* **4**, 1010–1012 (1965).
- 1965OET F. L. Oetting, *J. Chem. Eng. Data* **10**, 122 (1965).
- 1965PES/NAS S. V. Pestrikov and N. Z. Nasrtdinova, *Zh. Prikl. Khim.* **38**, 1623 (1965).
- 1965PUT/MCE W. E. Putnam, D. M. McEachern, and J. E. Kiplatrck, *J. Chem. Phys.* **42**, 749–755 (1965).
- 1965RON/HAR R. E. Rondeau and L. A. Harrah, *J. Chem. Eng. Data* **10**, 84–85 (1965).
- 1965SER/BYK I. I. Serebryannaya and S. Sh. Byk, *Khim. Prom.* **23**, 828–829 (1965).
- 1965SHR/DUN J. M. Shreeve, L. C. Duncan, and G. H. Cady, *Inorg. Chem.* **4**, 1516–1517 (1965).
- 1965SOM/COO G. Somsen and J. Coops, *Recl. Trav. Chim.* **84**, 985 (1965).
- 1965SVE/CLY H. Svec and D. D. Clyde, *J. Chem. Eng. Data* **10**, 151–152 (1965).
- 1965SWA/VAN P. A. Swamy and M. J. Van Winkle, *J. Chem. Eng. Data* **10**, 214–215 (1965).
- 1965WAD I. Wadso, *Acta Chem. Scand.* **9**, 1079–1087 (1965).
- 1965WAR/PET R. W. Warfield and M. C. Petree, *Die Makromol. Chem.* **84**, 1 (1965).
- 1966BAN/BAR R. W. Banks, M. G. Barlow, W. R. Deem, R. N. Haszeldine, and D. R. Taylor, *J. Chem. Soc. C* **1966**, 981–984.
- 1966BAN/HAS R. E. Banks, G. M. Haslam, R. N. Haszeldine, and A. Peppin, *J. Chem. Soc. C* **1966**, 1171.
- 1966BAN/MOO R. E. Banks and G. J. Moore, *J. Chem. Soc. C* **1966**, 2304.
- 1966BEA/CLE R. H. Beaumont, B. Clegg, G. Gee, J. B. M. Herbert, D. J. Marks, R. C. Roberts, and D. Sims, *Polymer* **7**, 401 (1966).
- 1966BOR/NAK B. Börjesson, Y. Nakase, and S. Sunner, *Acta Chem. Scand.* **20**, 803–810 (1966).
- 1966BOT/ADL T. R. Bott and H. N. Adler, *J. Chem. Eng. Data* **11**, 25–30 (1966).
- 1966BRO/FRA D. H. Brown, G. W. Fraser, and G. W. A. Sharp, *J. Chem. Soc. A* **1966**, 171–174.
- 1966BUR A. B. Burg, *J. Am. Chem. Soc.* **88**, 4298–4299 (1966).
- 1966BUR/JOS A. B. Burg, K. K. Joshi, and J. F. Nixon, *J. Am. Chem. Soc.* **88**, 31 (1966).
- 1966CAR/STE J. L. Carson, R. C. Stewart, and A. G. Williamson, *J. Chem. Eng. Data* **11**, 231–233 (1966).
- 1966COH/MAC B. Cohen and A. G. MacDiarmid, *J. Chem. Soc.* **1966**, 1780.
- 1966DEL/SHR J. J. Delfino and J. M. Shreeve, *Inorg. Chem.* **5**, 308–309 (1966).
- 1966DES/CAD D. D. DesMarteau and G. H. Cady, *Inorg. Chem.* **5**, 169–171 (1966).
- 1966DOB R. C. Dobbie, *J. Chem. Soc. A* **1966**, 1555–1556.
- 1966DOB/EME R. C. Dobbie and H. J. Emeleus, *J. Chem. Soc. A* **1966**, 933–936.
- 1966DOB/EME2 R. C. Dobbie and H. J. Emeleus, *J. Chem. Soc. A* **1966**, 367.
- 1966DWO/GUI A. Dworkin and M. Guillamin, *J. Chim. Phys. Phys.-Chim. Biol.* **63**, 53 (1966).
- 1966EAR/HIL B. L. Earl, B. K. Hill, and J. M. Shreeve, *Inorg. Chem.* **5**, 2184–2186 (1966).
- 1966EME/ONA H. J. Emeleus and T. Onak, *J. Chem. Soc. A* **1966**, 1291–1292.
- 1966EME/TAT H. J. Emeleus and B. W. Tattershall, *J. Inorg. Nucl. Chem.* **28**, 1823–1827 (1966).
- 1966EVA/TIL F. D. Evans and P. F. Tiley, *J. Chem. Soc. B* **1966**, 134–136.
- 1966FOX/FRA W. B. Fox and G. Franz, *Inorg. Chem.* **5**, 946 (1966).
- 1966GAN/SEM V. A. Ganzhan, S. V. Semenko, and O. G. Kirillova, *Zh. Prikl. Khim.* **39**, 1399 (1966); *Chem. Abstr.* **65**, 9820f (1966).
- 1966GEI/FRU G. Geiseler, J. Fruwert, and R. Huetting, *Chem. Ber.* **99**, 1594–1601 (1966).
- 1966GEI/QUI G. Geiseler, K. Quitzsch, H.-J. Rauh, H. Schaffernicht, and H. Walther, *Ber. Bunsenges Phys. Chem.* **70**, 551–556 (1966).
- 1966GOO/DEP W. D. Good and B. L. DePrater, *J. Phys. Chem.* **70**, 3606–3609 (1966).
- 1966HAS/TIP R. N. Haszeldine and A. E. Tipping, *J. Chem. Soc. C* **1966**, 1236–1241.
- 1966JEN/SCH D. J. Jensen and E. D. Schall, *J. Agric. Food Chem.* **14**, 123–126 (1966).
- 1966KRE J. Kresta, *Chem. Prum.* **16**, 94 (1966).
- 1966KYB/CAR B. D. Kybett, S. Carroll, P. Natalis, D. W. Bonnell, J. L. Margrave, and J. L. Franklin, *J. Am. Chem. Soc.* **88**, 626 (1966).
- 1966LEB/ROS Y. A. Lebedev, E. G. Rosantsev, L. A. Kalashnikova, V. P. Lebedev, M. B. Nieman, and Y. A. Apin, *Dokl. Acad. Nauk SSSR* **168**, 104 (1966) [Engl. Ed. 460].
- 1966LIU/ZIE K. F. Liu and W. T. Ziegler, *J. Chem. Eng. Data* **11**, 187 (1966).
- 1966LUS M. Lustig, *Inorg. Chem.* **5**, 1317 (1966).
- 1966MAN/SUN M. Mansson and S. Sunner, *Acta Chem. Scand.* **20**, 845–848 (1966).
- 1966MAT/RAS A. Matejick and J. Raska, *Chem. Prum.* **16**, 82 (1966).
- 1966MEA/ROS W. H. Mears, E. Rosenthal, and J. V. Sinka, *J. Chem. Eng. Data* **11**, 338–342 (1966).
- 1966MEY/FRA M. D. Meyers and S. Frank, *Inorg. Chem.* **5**, 1455–1457 (1966).
- 1966MEY/MET R. Meyer and J. C. R. Metzger, *Acad. Sci. Paris Ser. C* **263**, 1333–1335 (1966).
- 1966MEY/WAG E. F. Meyer and R. E. Wagner, *J. Phys. Chem.* **70**, 3162–3168 (1966).
- 1966MOR/TAM H. L. Morris, M. Tamres, and S. Searles, *Inorg. Chem.* **5**, 2156–2160 (1966).
- 1966OSB/DOU A. N. Osborn and D. R. Douslin, *J. Chem. Eng. Data* **11**, 502–509 (1966).
- 1966PIR J. Pirsch, *Monatsh. Chem.* **97**, 260–270 (1966).
- 1966REI/SHE R. C. Reid and T. K. Sherwood, *The Properties of Gases and Liquids, Their Estimation and Correlation* (McGraw Hill, New York, 1966).
- 1966RIN/ONE M. A. Ring, H. E. O'Neal, A. H. Kadhim, and F. J. Jappe, *Organomet. Chem.* **5**, 124–129 (1966).
- 1966THO/MEA L. M. Thomas and R. Meatyard, *J. Chem. Soc. A* **1966**, 92–96.

- 1966WAD I. Wadso, *Acta Chem. Scand.* **20**, 544–552 (1966).
- 1966WAD2 I. Wadso, *Acta Chem. Scand.* **20**, 536 (1966).
- 1966WAG/WIL R. I. Wagner and C. O. Wilson, Jr., *Inorg. Chem.* **5**, 1009 (1966).
- 1966WIE/RUF R. A. Wiesboeck and J. K. Ruff, *Inorg. Chem.* **5**, 1629 (1966).
- 1966ZIM/ROB M. F. Zimmer, R. A. Robb, and G. A. Carpenter, *J. Chem. Eng. Data* **11**, 577–579 (1966).
- 1967AND/COU R. J. L. Andon, J. F. Counsell, E. B. Lees, J. F. Martin, and C. J. Mash, *Trans. Faraday Soc.* **63**, 1115 (1967).
- 1967AND/FOX L. R. Anderson and W. B. Fox, *J. Am. Chem. Soc.* **89**, 4313 (1967).
- 1967AND/HAM M. L. Anderson and R. N. Hammer, *J. Chem. Eng. Data* **12**, 442–447 (1967).
- 1967BAB/SHR D. P. Babb and J. M. Shreeve, *Inorg. Chem.* **6**, 351 (1967).
- 1967BAN/HAS R. E. Banks, R. N. Haszeldine, and R. Hatton, *J. Chem. Soc. C* **1967**, 427–430.
- 1967BER/WES H. A. Berman and E. D. West, *J. Chem. Eng. Data* **12**, 197–199 (1967).
- 1967BOY/GUH R. H. Boyd, K. R. Guha, and R. Wuthrich, *J. Phys. Chem.* **71**, 2187–2191 (1967).
- 1967BRA/SZI W. K. Bratton, I. Szilard, and C. A. Cupas, *J. Org. Chem.* **32**, 2019–2022 (1967).
- 1967BUC/COX E. Buckley and J. D. Cox, *Trans. Faraday Soc.* **63**, 895–901 (1967).
- 1967CAV R. G. Cavell, *Can. J. Chem.* **45**, 1309 (1967).
- 1967CHI/SIM Y. T. Chia and H. E. Simmons, *J. Am. Chem. Soc.* **89**, 2638–2643 (1967).
- 1967CRO/TAY G. A. Crowder, Z. L. Taylor, T. M. Reed III, and J. A. Young, *J. Chem. Eng. Data* **12**, 481–484 (1967).
- 1967CRU/CUT A. J. B. Cruickshank and A. J. B. Cutler, *J. Chem. Eng. Data* **12**, 326–329 (1967).
- 1967DAN/GOL S. M. Danov and Y. D. Golubev, *Tr. Khim. Khim. Tekhnol.* **52–55** (1967); *Chem. Abstr.* **68**, 95253a (1968).
- 1967DEM/KEN G. C. Demitras, R. A. Kent, and R. G. MacDiarmid, *Inorg. Chem.* **6**, 1903 (1967).
- 1967DES/PAN D. D. Deshpande and M. V. Pandya, *Trans. Faraday Soc.* **63**, 2149 (1967).
- 1967ERM/SKR N. V. Ermakov and V. P. Skripov, *Zh. Fiz. Khim.* **41**, 77–81 (1967).
- 1967FRA/SHR G. W. Fraser and J. M. Shreeve, *Inorg. Chem.* **6**, 1711 (1967).
- 1967FRI/GAL V. Fried, P. Gallant, and G. B. Schneier, *J. Chem. Eng. Data* **12**, 504–508 (1967).
- 1967GEI/SCH G. Geiseler, H. Schaffernicht, and H. Walther, *Ber. Bunsenges Phys. Chem.* **71**, 196–199 (1967).
- 1967GLE/BIE O. Glemser, U. Biermann, and M. Fild, *Chem. Ber.* **100**, 1082–1086 (1967).
- 1967GLE/BIE2 O. Glemser and U. Biermann, *Inorg. Nucl. Chem. Lett.* **3**, 223 (1967).
- 1967GLE/BIE3 O. Glemser, U. Biermann, and A. Hoff, *Z. Naturforsch. Anorg. Chem. B* **22**, 893 (1967).
- 1967GOE/SCH K. H. Goebel, J. Schaffenger, and G. Opel, *Chem. Technol.* **19**, 307–308 (1967).
- 1967HAC/MAT M. Haccuria and M. P. Mathieu, *Ind. Chim. Belge* **32**, 165–167 (1967).
- 1967HAL/LEE J. L. Hales, E. B. Lees, and D. J. Ruxton, *Trans. Faraday Soc.* **63**, 1876–1879 (1967).
- 1967HAS/TIP R. N. Haszeldine and A. E. Tipping, *J. Chem. Soc. C* **1967**, 1241.
- 1967HER A. J. Herbert, *Trans. Faraday Soc.* **63**, 555–560 (1967).
- 1967HIR/SUD M. Hirata and S. Suda, *Kagaku Kogaku* **31**, 339–342 (1967).
- 1967HYN/BIS J. B. Hynes, B. C. Bishop, and L. A. Bigelow, *Inorg. Chem.* **6**, 417 (1967).
- 1967KHO/BYK A. S. Khorevskaya and S. Sh. Byk, *Zh. Prikl. Khim.* **40**, 464 (1967).
- 1967KIS A. Kisza, *Rocz. Chim.* **41**, 351 (1967).
- 1967KLE/PET A. B. Kletshii and L. E. Petric, *Zh. Fiz. Khim.* **41**, 1183–1184 (1967).
- 1967KON/ZHU I. I. Konstantinov, E. Z. Zhuravlev, and Z. G. Teplova, *Zh. Prikl. Khim.* **40**, 1084–1087 (1967).
- 1967LEB/RAB B. V. Lebedev, I. B. Rabinovich, and V. A. Budarina, *Polym. Sci. U.S.S.R.* **9**, 545 (1967).
- 1967LES/OGO T. M. Lesteva, S. K. Ogorodnikov, and A. I. Morozova, *Zh. Prikl. Khim. (Leningrad)* **40**, 891–894 (1967).
- 1967LUS M. Lustig, *Inorg. Chem.* **6**, 1064–1065 (1967).
- 1967MEE/GOL A. C. Meeks and I. J. Goldfarb, *J. Chem. Eng. Data* **12**, 196 (1967).
- 1967MES/GUT J. F. Messerly, G. B. Guthrie, S. S. Todd, and H. L. Finke, *J. Chem. Eng. Data* **12**, 338 (1967).
- 1967MES/TOD J. F. Messerly, S. S. Todd, and G. B. Guthrie, *J. Chem. Eng. Data* **12**, 426 (1967).
- 1967MIR/LEB E. A. Miroshnichenko, Y. A. Lebendev, S. A. Shevelev, V. I. Gulevskaya, A. A. Fainzil'berg, and A. Y. Apin, *Zh. Fiz. Khim.* **41**, 1477–1479 (1967); *Russ. J. Phys. Chem.* **41**, 783–785 (1967).
- 1967MUL/MUK F. I. Mullayanov, R. K. Mukhutdinov, M. F. Mazitov, M. F. Buz'ko, V. P. Borschenko, and V. N. Krashennikov, *Khim. Prom. (Moscow)* **43**, 505–506 (1967); *Chem. Abstr.* **68**, 113943 (1968).
- 1967MUR/KIV J. Murto and A. Kivinen, *Suom. Kemistil. B* **40**, 258–264 (1967).
- 1967NIK/RAB P. N. Nikolaev and I. B. Rabinovich, *Zh. Fiz. Khim.* **49**, 2191–2194 (1967).
- 1967NIK/RAB2 P. N. Nikolaev, I. B. Rabinovich, and B. V. Lebedev, *Zh. Fiz. Khim.* **41**, 1294 (1967).
- 1967PAC P. Pacor, *Anal. Chim. Acta* **37**, 200 (1967).
- 1967PAC/PLA E. L. Pace and A. C. Plaush, *J. Chem. Phys.* **47**, 38–43 (1967).
- 1967PIH/HEI K. Pihlaja and J. Heikkila, *Acta Chem. Scand.* **21**, 2430–2434 (1967).
- 1967PIN/WIL P. E. Pincock, K. R. Wilson, and T. E. Kiovsky, *J. Am. Chem. Soc.* **89**, 6890–6897 (1967).
- 1967PLA/PAC A. C. Plaush and E. L. Pace, *J. Chem. Phys.* **47**, 44–48 (1967).
- 1967QUI K. Quitzsch, *Z. Phys. Chem. (Leipzig)* **236**, 241 (1967).
- 1967QUI/HOF K. Quitzsch, H. P. Hofmann, R. Pfestorf, and G. Geiseler, *Z. Phys. Chem. (Leipzig)* **235**, 99 (1967).
- 1967RIB/WES A. Ribner and E. F. Westrum, Jr., *J. Phys. Chem.* **71**, 1208–1215 (1967).
- 1967SCO/BER D. W. Scott, W. T. Berg, I. A. Hossenlopp, W. N. Hubbard, J. F. Messerly, S. S. Todd, D. R. Douslin, J. P. McCullough, and G. Waddington, *J. Phys. Chem.* **71**, 2263–2270 (1967).
- 1967SHA R. L. Shak, *J. Chem. Eng. Data* **12**, 474–480 (1967).
- 1967SIM/KNO M. Simon, C. M. Knobler, and A. G. Duncan, *Cryogenics* **7**, 138–140 (1967).
- 1967SIV/MAT M. Sivokova, A. Matejcek, and F. Juracka, *Chem. Prum.* **17**, 213–214 (1967).
- 1967TSE/GOD M. A. Tseneva and Yu. K. Godovskii, *Zh. Fiz. Khim.* **41**, 1827 (1967).
- 1967VAN W. A. Van Hook, *J. Chem. Phys.* **46**, 1907–1918 (1967).
- 1967VAN/SOC H. C. Van Ness, C. A. Soczek, G. L. Peloquin, and R. L. Machado, *J. Chem. Eng. Data* **12**, 217–223 (1967).
- 1967WES/RIB E. F. Westrum and A. Ribner, *J. Phys. Chem.* **71**, 1216–1224 (1967).
- 1968ADA/SUG K. Adachi, H. Suga, and S. Seki, *Bull. Chem. Soc. Jpn.* **41**, 1073–1087 (1968).
- 1968AMB D. Ambrose, *J. Chem. Soc.* **1968**, 1381–1383.
- 1968AND/COU R. J. L. Andon, J. F. Counsell, J. L. Hales, E. B. Lees, and J. F. Martin, *J. Chem. Soc. A* **1968**, 2357–2361.
- 1968AND/COU2 R. J. L. Andon, J. F. Counsell, and J. F. Martin, *J. Chem. Soc. A* **1968**, 1894.
- 1968BAC/NOV D. P. Baccanari, J. A. Novinski, Y.-C. Pan, M. M. Yevitz, and H. A. Swain, *Trans. Faraday Soc.* **64**, 1201–1205 (1968).
- 1968BAN/BRA R. E. Banks, A. Braithwaite, R. N. Haszeldine, and D. R. Taylor, *J. Chem. Soc. C* **1968**, 2593.
- 1968BAR/CAR E. E. Baroody, G. A. Carpenter, R. A. Robb, and M. F. Zimmer, *J. Chem. Eng. Data* **13**, 215–217 (1968).
- 1968BRI/PRI A. R. Briden, D. Price, and H. Sutcliffe, *J. Chem. Soc. B* **1968**, 387.
- 1968CAB/CON S. Cabani, G. Conti, and L. Lepori, *Ric. Sci.* **38**, 1039 (1968).

- 1968CHA/CAV T. L. Charlton and R. G. Cavell, *Inorg. Chem.* **7**, 2195 (1968).
- 1968CHE/TUR E. L. Cherkasskaya, A. M. Tur, Z. F. Petrenkova, and V. I. Lyubomilov, *Zh. Prikl. Khim.* **41**, 2553–2554 (1968).
- 1968CIH/VOJ M. Cihova, J. Vojtko, and M. Hrusovsky, *Zb. Pr. Chemicko-otechnol. Fak. SVST (Slov. Vys. SK. Tech.)* 135–138 (1968); *Chem. Abstr.* **72**, 136676u (1970).
- 1968CIH/VOJ2 M. Cihova, J. Vojtko, and M. Hrusovsky, *Chem. Zvesti* **22**, 599 (1968).
- 1968COU/HAL J. F. Counsell, J. L. Hales, E. B. Lees, and J. F. Martin, *J. Chem. Soc. A* **1968**, 2994–2996.
- 1968COU/HAL2 J. F. Counsell, J. L. Hales, and J. F. Martin, *J. Chem. Soc. A* **1968**, 2042.
- 1968COU/LEE J. F. Counsell, E. B. Lees, and J. F. Martin, *J. Chem. Soc. A* **1968**, 1819–1823.
- 1968DAV/BAT Zh. V. Davydova, P. S. Bataev, I. A. Makolkin, and M. E. Yanitskaya, *Tr., Mosk. Inst. Nar. Khoz.* **46**, 32 (1968).
- 1968DES/WIL P. D. Desai, R. C. Wilhoit, and B. J. Zwolinski, *J. Chem. Eng. Data* **13**, 334–335 (1968).
- 1968ELL/CHR J. H. Elliott and M. D. Chris, *J. Chem. Eng. Data* **13**, 475 (1968).
- 1968FLO W. Z. Florian, *Phys. Chem. (Frankfurt am Main)* **61**, 319–321 (1968); *Chem. Abstr.* **70**, 81136u (1969).
- 1968FOW/TRU L. Fowler, W. N. Trump, and C. E. Vogler, *J. Chem. Eng. Data* **13**, 209–210 (1968).
- 1968FRE/TIP J. Freear and A. E. Tipping, *J. Chem. Soc. C* **1968**, 1096–1103.
- 1968GAR/BOV Yu. N. Garber and R. A. Bovkun, *Zh. Prikl. Khim.* **41**, 318 (1968).
- 1968GAW/SWI W. J. Gaw and F. L. Swinton, *Trans. Faraday Soc.* **64**, 637–647 (1968).
- 1968GAW/SWI2 W. J. Gaw and F. L. Swinton, *Trans. Faraday Soc.* **64**, 2023–2034 (1968).
- 1968GEI/HOF G. Geiseler and J. Hoffmann, *Z. Phys. Chem. (Frankfurt am Main)* **57**, 318–330 (1968).
- 1968GIR/WES H. L. Girdhar, E. F. Westrum, Jr., and C. A. Wulff, *J. Chem. Eng. Data* **13**, 239 (1968).
- 1968GLE/VON O. Glemser and S. P. von Halasz, *Z. Naturforsch. B* **23**, 743–745 (1968).
- 1968GLE/VON2 O. Glemser, S. P. von Halasz, and U. Biermann, *Z. Naturforsch. B* **23**, 1381–1382 (1968).
- 1968GOP/RIZ F. Gopal and S. A. Rizvi, *J. Indian Chem. Soc.* **45**, 13–16 (1968).
- 1968GOS/BUR K. Gosling and A. B. Burg, *J. Am. Chem. Soc.* **90**, 2011 (1968).
- 1968GOU/WES P. Goursot and E. F. Westrum, Jr., *C. R. Acad. Sci. Paris Ser. C* **266**, 667–668 (1968).
- 1968GOU/WES2 P. Goursot and E. F. Westrum, Jr., *C. R. Acad. Sci. Paris Ser. C* **266**, 590–592 (1968).
- 1968HAM/FAG J. V. Hamilton and T. F. Fagley, *J. Chem. Eng. Data* **13**, 523–527 (1968).
- 1968HAS/TIP R. N. Haszeldine and A. E. Tipping, *J. Chem. Soc. C* **1968**, 398–405.
- 1968HOH/SHR F. A. Hohorst and J. M. Shreeve, *Inorg. Chem.* **7**, 624 (1968).
- 1968KAC/NEM R. V. Kachalova and M. S. Nemtsov, *Zh. Prikl. Khim. (Leningrad)* **41**, 2315–2319 (1968).
- 1968KAR/RAB N. V. Karyakin, I. B. Rabinovich, and L. G. Pakhomov, *Russ. J. Phys. Chem.* **42**, 954–955 (1968).
- 1968KHO/BYK A. S. Khorevskaya and S. S. Byk, *Zh. Prikl. Khim. (Leningrad)* **41**, 2566–2568 (1968); *Chem. Abstr.* **70**, 61317a (1969).
- 1968KUS/MIS V. V. Kushchenko and K. P. Mishchenko, *Zh. Prikl. Khim.* **41**, 646–648 (1968); *Chem. Abstr.* **68**, 117314a (1968).
- 1968LAP/NIS I. I. Lapidus and L. A. Nisel'son, *Russ. J. Phys. Chem.* **42**, 733–734 (1968).
- 1968LUC/LEW C. A. Lucchesi and W. T. Lewis, *J. Chem. Eng. Data* **13**, 389–391 (1968).
- 1968MAK Y. Y. Maksimov, *Russ. J. Phys. Chem.* **42**, 1550–1552 (1968).
- 1968MAL/MEU P. F. Malbrunot, P. A. Meunier, G. M. Scatena, W. H. Mears, K. P. Murphy, and J. V. Sinka, *J. Chem. Eng. Data* **13**, 16–21 (1968).
- 1968MAN/NAK M. Mansson, Y. Nakase, and S. Sunner, *Acta Chem. Scand.* **22**, 171–174 (1968).
- 1968MAS/RAE R. Mason and A. I. M. Rae, *Proc. R. Soc. A* **304**, 501–512 (1968).
- 1968MILMER I. Mertl, *Chem. Listy* **62**, 584–587 (1968).
- 1968MOR E. Morawetz, *Acta Chem. Scand.* **22**, 1509–1531 (1968).
- 1968NAS/BAB L. L. Nash, D. P. Babb, J. J. Couville, and J. M. Shreeve, *J. Inorg. Nucl. Chem.* **30**, 3373–3375 (1968).
- 1968NOF R. E. Nofle, *Inorg. Chem.* **7**, 2167 (1968).
- 1968NOF/SHR R. E. Nofle and J. M. Shreeve, *Inorg. Chem.* **7**, 687 (1968).
- 1968OSB/DOU A. G. Osborn and D. R. Douslin, *J. Chem. Eng. Data* **13**, 534–537 (1968).
- 1968PAC/REN E. L. Pace and M. A. Reno, *J. Chem. Phys.* **48**, 1231–1235 (1968).
- 1968PEP/MIR V. I. Pepekin, E. A. Miroshnichenko, Y. A. Levedev, and A. Y. Apin, *Russ. J. Phys. Chem.* **42**, 1583–1584 (1968).
- 1968PLA/WIL R. D. Place and S. M. Williamson, *J. Am. Chem. Soc.* **90**, 2550–2556 (1968).
- 1968RAT/SHR C. Ratcliffe and J. M. Shreeve, *J. Am. Chem. Soc.* **90**, 5403–5408 (1968).
- 1968RAV/DAN A. A. Ravdel and V. V. Danilov, *Izv. Vyssbikh. Uchebnykh. Zaved., Khim. Khimichesk. Tekhnol.* **11**, 642–645 (1968); *Chem. Abstr.* **69**, 90232 (1968).
- 1968REN/PRA H. Renon and J. M. Prasunitz, *Ind. Eng. Chem. Process Des. Dev.* **7**, 220 (1968).
- 1968ROE H. W. Roesky, *Angew. Chem.* **7**, 218 (1968).
- 1968SMI/SMI L. H. Smith, H. Smith, and R. Meatyard, *J. Sci. Instrum.* **2**, 1119 (1968).
- 1968TUR/HUL A. G. Turnbull and H. S. Hull, *Aust. J. Chem.* **21**, 1789 (1968).
- 1968WAD I. Wadso, *Acta Chem. Scand.* **22**, 2438–2444 (1968).
- 1968ZHU/KON E. Z. Zhuravlev and I. I. Konstantinov, *Zh. Prikl. Khim.* **41**, 1170–1172 (1968).
- 1969AND/BRA D. N. Andreeskii, M. M. Brazhnikov, and V. N. Il'nychik, *Vest. Beloruss Univ.* 3–5 (1969); *Chem. Abstr.* **73**, 113607 (1970).
- 1969BAN/BAR R. E. Banks, M. G. Barlow, W. D. Davies, R. N. Haszeldine, and D. R. Taylor, *J. Chem. Soc. C* **1969**, 1104.
- 1969BAN/HAS R. E. Banks, R. N. Haszeldine, and W. D. Morton, *J. Chem. Soc. C* **1969**, 1947.
- 1969BRE/HAG W. Bremser, R. Hagen, E. Heilbronner, and E. Vogel, *Helv. Chim. Acta* **52**, 418–431 (1969).
- 1969BRO/FOC I. Brown, W. Fock, and F. Smith, *J. Chem. Thermodyn.* **1**, 273–291 (1969).
- 1969BUR/MIS A. B. Burg and I. B. Mishra, *Inorg. Chem.* **8**, 1199 (1969).
- 1969CAL/VAL G. C. Calero, M. M. Valle, and C. G. Losa, *Rev. Acad. Cienc. Exactas, Fis., Quim. Nat. Zaragoza* **24**, 137–158 (1969).
- 1969CHA/STE R. Chastel, F. Steckel, and H. Tachoire, *Proceedings of the First International Conference on Calorimetry Thermodynamics Paper 5/2* (Polish Scientific Publishers, Warsaw, 1969); as cited in [1982COL/JIM].
- 1969CID/POL J. Cidlinsky and J. Polak, *Collect. Czech. Chem. Commun.* **34**, 1317–1321 (1969).
- 1969CIH/VOJ M. Cihova, J. Vojtko, and M. Hrusovsky, *Chem. Zvesti* **4**, 270 (1969).
- 1969CLE/MEL G. A. Clegg and T. P. Melia, *Makromol. Chem.* **123**, 194 (1969).
- 1969CLE/MEL2 G. A. Clegg and T. P. Melia, *Polymer* **10**, 912 (1969).
- 1969CLE/MEL3 G. A. Clegg and T. P. Melia, *Makromol. Chem.* **130**, 258 (1969).
- 1969COR/FRA P. Corradini, A. Frasci, and E. Martuscelli, *J. Chem. Soc. D* **1969**, 778–780.
- 1969COR/GOO J. M. Corkill, J. F. Goodman, and J. R. Tate, *Trans. Faraday Soc.* **65**, 1742 (1969).
- 1969COX/GUN J. D. Cox, H. A. Gundry, D. Harrop, and A. J. Head, *J. Chem. Thermodyn.* **1**, 77–87 (1969).
- 1969CRI F. T. Crimmons, U.S. Atomic Energy Commission Report No. UCRL-50704, 1969; *Chem. Abstr.* **72**, 70876a (1970).
- 1969DAN/MAT S. M. Danov, V. B. Matin, P. V. Efremov, and N. K. Slashtshina, *Zh. Fiz. Khim.* **43**, 733–736 (1969); *Chem. Abstr.* **71**, 6729g (1969).

- 1969DAV/MAK Z. V. Davydova, I. A. Makolkin, and P. S. Bataev, *Zh. Obshch. Khim.* **39**, 1668–1669 (1969).
- 1969DAV/SMI R. R. Davidson and W. H. Smith, *Chem. Eng. Sci.* **24**, 1589 (1969).
- 1969DEV/ONE J. A. Devore and H. E. O'Neal, *J. Phys. Chem.* **73**, 2644–2648 (1969).
- 1969ENO/SHI H. Enokido, T. Shinoda, and Y. Mashiko, *Bull. Chem. Soc. Jpn.* **42**, 3415 (1969).
- 1969ERM/SKR G. V. Ermakov and V. P. Skripov, *Russ. J. Phys. Chem.* **43**, 726 (1969).
- 1969FIN T. J. V. Findlay, *J. Chem. Eng. Data* **14**, 229–231 (1969).
- 1969FRA/WAT F. Franks and B. Watson, *Trans. Faraday Soc.* **65**, 2339–2349 (1969).
- 1969FRE/SOL H. M. Frey and R. K. Solly, *Trans. Faraday Soc.* **65**, 1372 (1969).
- 1969FRE/TIP J. Freear and A. E. Tipping, *J. Chem. Soc. C* **1969**, 411–416.
- 1969FRE/TIP2 J. Freear and A. E. Tipping, *J. Chem. Soc. C* **1969**, 1955.
- 1969GLE/MEW2 O. Glemser, R. Mews, and S. P. Von Halasz, *Inorg. Nucl. Chem. Lett.* **5**, 321 (1969).
- 1969GLE/VON O. Glemser and S. P. Von Halasz, *Inorg. Nucl. Chem. Lett.* **5**, 393–398 (1969).
- 1969GOU/AND D. E. Gould, L. R. Anderson, D. E. Young, and W. B. Fox, *J. Am. Chem. Soc.* **91**, 1310 (1969).
- 1969GOU/WES P. Goursot and E. F. Westrum, *J. Chem. Eng. Data* **14**, 1 (1969).
- 1969KEM/KRE R. H. Kemme and S. I. Kreps, *J. Chem. Eng. Data* **14**, 98–102 (1969).
- 1969KON/PRO J. Konicek, M. Prochazka, V. Krestanova, and M. Smisek, *Collect. Czech. Chem. Commun.* **34**, 2249–2257 (1969).
- 1969KRE/WOO W. Kreis and R. H. Wood, *J. Chem. Thermodyn.* **1**, 523–525 (1969).
- 1969KUD/REE A. P. Kudchadker, C. O. Reed, Jr., L. J. Clague, and B. J. Zwolinski, *Tex. J. Sci.* **20**, 367 (1969).
- 1969LAM/PER R. Lamantine and R. Perrin, *Bull. Soc. Chim. Fr.* 443–445 (1969).
- 1969LEB/DNE N. D. Lebedeva, A. S. Dneprovskii, and Y. A. Katin, *Russ. J. Phys. Chem.* **43**, 770–773 (1969).
- 1969LES/MOR T. M. Lesteva, A. I. Morozova, V. I. Morozova, S. K. Ogorodnikov, and T. M. Tyvina, *Zh. Prikl. Khim.* **42**, 533–538 (1969).
- 1969MAC/MCN H. Mackle, D. V. McNally, and W. V. Steele, *Trans. Faraday Soc.* **65**, 2060–2068 (1969).
- 1969MAC/MCN2 H. Mackle and D. V. McNally, *Trans. Faraday Soc.* **65**, 1738–1741 (1969).
- 1969MAC/STE H. Mackle and W. V. Steele, *Trans. Faraday Soc.* **65**, 2069–2077 (1969).
- 1969MAC/STE2 H. Mackle and W. V. Steele, *Trans. Faraday Soc.* **65**, 2053 (1969).
- 1969MAN M. Mansson, *J. Chem. Thermodyn.* **1**, 141–151 (1969).
- 1969MAN/MOR M. Mansson, E. Morawetz, Y. Nakase, and S. Sunner, *Acta Chem. Scand.* **23**, 56–60 (1969).
- 1969MAS J. Mason, *J. Chem. Soc. A* **1969**, 1587–1592.
- 1969MAY/THO F. G. J. May, B. W. Thorpe, and W. Connick, *J. Cryst. Growth* **5**, 312 (1969).
- 1969MEL/MER T. P. Melia and R. Merrifield, *J. Appl. Chem. (London)* **19**, 79–82 (1969).
- 1969MES S. Meszaros, *Period. Polytech., Chem. Eng. (Budapest)* **13**, 79–88 (1969); *Chem. Abstr.* **72**, 66308z (1970).
- 1969MIR/LEB E. A. Miroshnichenko and Y. A. Lebedev, *Khim. Geterotsikl. Soedin.* **5**, 963–964 (1969).
- 1969OSB/DOU A. G. Osborn and D. R. Douslin, *J. Chem. Eng. Data* **14**, 208–209 (1969).
- 1969OTO/BES P. P. Otopkov, N. A. Bessarab, Ya. I. Rotshtein, and R. V. Dzhagatspanyan, *Zh. Priklad. Khim.* **42**, 2367 (1969).
- 1969PAU/GLU I. E. Paukov and L. K. Glukhikh, *Russ. J. Phys. Chem.* **43**, 120 (1969).
- 1969PAU/LAV I. E. Paukov, M. N. Lavrent'eva, and M. P. Anisimov, *Zh. Fiz. Khim.* **43**, 2941 (1969).
- 1969PAU/LAV2 L. E. Paukov, M. N. Lavrent'eva, and M. P. Anisimov, *Zh. Fiz. Khim.* **43**, 785 (1969).
- 1969PAU/LAV3 L. E. Paukov and M. N. Lavrent'eva, *Zh. Fiz. Khim.* **43**, 2938 (1969).
- 1969PIH/HEI K. Pihlaja and J. Heikkila, *Acta Chem. Scand.* **23**, 1053 (1969); *Suom. Kemistil.* 148 (1972) (as quoted in [2003CHO/DHA]).
- 1969PLA/GLA C. Plato and A. R. Glasgow, Jr., *Anal. Chem.* **41**, 330–336 (1969).
- 1969ROS J. M. Rosen, *Microscope (London)* **117**, 141–144 (1969).
- 1969ROS/DIC J. M. Rosen and C. Dickinson, *J. Chem. Eng. Data* **14**, 120–124 (1969).
- 1969ROS/HOL J. M. Rosen, J. R. Holden, and H. T. Simmons, *Mol. Cryst. Liq. Cryst.* **6**, 205–210 (1969).
- 1969RUE B. G. Rueben, *J. Chem. Eng. Data* **14**, 235–236 (1969).
- 1969SCH/MAY C. J. Schack and W. Maya, *J. Am. Chem. Soc.* **91**, 2902 (1969).
- 1969SHE/LAN R. J. Sheehan and S. H. Langer, *J. Chem. Eng. Data* **14**, 248–250 (1969).
- 1969SMI/PAC J. H. Smith and E. L. Pace, *J. Phys. Chem.* **73**, 4232–4236 (1969).
- 1969SOU/GOU M. A. Soulie, P. Goursot, A. Peneloux, and J. Metzger, *J. Chim. Phys. Physicochim. Biol.* **66**, 607–610 (1969).
- 1969SOU/GOU2 M. A. Soulie, P. Goursot, A. Peneloux, and J. Metzger, *J. Chim. Phys. Physicochim. Biol.* **66**, 603–606 (1969).
- 1969STU/WES D. R. Stull, E. F. Westrum, Jr., and G. C. Sinke, *The Chemical Thermodynamics of Organic Compounds* (John Wiley, New York, 1969).
- 1969VOJ/CIH J. Vojtko, M. Cihova, and M. Hrusovsky, *Zb. Pr. Chem.-Tech. Fak. Svst.* **179** (1969); *Chem. Abstr.* **76**, 76492b (1972).
- 1969WAD I. Wadso, *Acta Chem. Scand.* **23**, 2061–2064 (1969).
- 1969WOO/ADI A. L. Woodman and A. Adicoff, *J. Chem. Eng. Data* **14**, 479–480 (1969).
- 1970AMB/COU D. Ambrose, J. F. Counsell, and A. J. Davenport, *J. Chem. Thermodyn.* **2**, 283–294 (1970).
- 1970AMB/SPR D. Ambrose and C. H. S. Sprake, *J. Chem. Thermodyn.* **2**, 631–645 (1970).
- 1970AND/BRA D. N. Andreevskii and M. M. Brazhnikov, *Vestn. Beloruss. Univ.* **2**, 14–18 (1970); *Chem. Abstr.* **76**, 158651s (1972).
- 1970AND/COU R. J. L. Andon, J. F. Counsell, E. B. Lees, and J. F. Martin, *J. Chem. Soc. A* **1970**, 833.
- 1970BAN/BRI R. E. Banks, M. Bridge, R. N. Haszeldine, D. W. Roberts, and N. I. Tucker, *J. Chem. Soc. C* **1970**, 2531.
- 1970BON/CAT D. Bonderman, E. D. Cater, and W. Bennett, *J. Chem. Eng. Data* **15**, 396–400 (1970).
- 1970BUR/KAN A. B. Burg and D.-K. Kang, *J. Am. Chem. Soc.* **92**, 1901–1908 (1970).
- 1970BUR/PAR A. B. Burg and D. M. Parker, *J. Am. Chem. Soc.* **92**, 1898–1901 (1970).
- 1970CAR/ZIM G. A. Carpenter, M. F. Zimmer, E. E. Baroody, and R. A. Robb, *J. Chem. Eng. Data* **15**, 553–556 (1970).
- 1970CHA/BOU N. B. Chanh, Y. Bouillaud, and P. Lencrerat, *J. Chim. Phys. Phys.-Chim. Biol.* **67**, 1198 (1970).
- 1970CHA/CAV T. L. Charlton and R. G. Cavell, *Inorg. Chem.* **9**, 379 (1970).
- 1970CHA/MCN S.-J. Chang, D. McNally, S. Sharry-Tehrany, M. J. Hickey, and R. H. Boyd, *J. Am. Chem. Soc.* **92**, 3109–3118 (1970).
- 1970CHA/WES E. T. Chang and E. F. Westrum, *J. Phys. Chem.* **74**, 2528 (1970).
- 1970CLE/WES H. L. Clever and E. F. Westrum, Jr., *J. Phys. Chem.* **74**, 1309 (1970).
- 1970COU/FEN J. F. Counsell, J. O. Fenwick, and E. B. Lees, *J. Chem. Thermodyn.* **2**, 367–372 (1970).
- 1970COX/PIL J. D. Cox and G. Pilcher, *Thermochemistry of Organic and Organometallic Compounds* (Academic Press, London, 1970).
- 1970DES D. D. Des Marteau, *Inorg. Chem.* **9**, 2179 (1970).
- 1970DUN L. C. Duncan, *Inorg. Chem.* **9**, 987 (1970).
- 1970DYK J. Dykyj, *J. Petrochemica* **10**, 51–59 (1970); *J. Petrochemica* **10**, 123–146 (1970); *J. Petrochemica* **10**, 187–206 (1970).
- 1970DYK/VAN J. Dykyj and A. Vanko, *Petrochemica* **10**, 3–22 (1970).
- 1970EIS/ORA O. Eisen and A. Orav, *Eesti Tead. Akad. Toim., Keem. Geol.* **19**, 202–205 (1970).

- 1970ELN/EME Y. O. El Nigumi and H. J. Emelius, *J. Inorg. Nucl. Chem.* **32**, 3213 (1970).
- 1970EME/SPA H. J. Emelius, P. M. Spaziante, and S. M. Williamson, *J. Inorg. Nucl. Chem.* **32**, 3219 (1970).
- 1970FET/EFR Yu. M. Fetisov, A. A. Efremov, Yu. I. Levin, and Ya. D. Zel'venskii, *Tr. Inst. - Mosk. Khim.-Tekhnol. Inst. im. D. I. Mendeleeva* **67**, 34–37 (1970); *Chem. Abstr.* **75**, 80864 (1971).
- 1970FIN/MCC H. L. Finke, J. P. McCullough, J. F. Messerly, G. B. Guthrie, and D. R. Douslin, *J. Chem. Thermodyn.* **2**, 27 (1970).
- 1970GEN/DUV B. Genot and X. Duval, *J. Chim. Phys. Physicochim. Biol.* **67**, 1332–1335 (1970).
- 1970GOO/MOO W. D. Good and R. T. Moore, *J. Chem. Eng. Data* **15**, 150–153 (1970).
- 1970HAR/HEA D. Harrop, A. J. Head, and G. B. Lewis, *J. Chem. Thermodyn.* **2**, 203–210 (1970).
- 1970HAS/KEE R. N. Haszeldine, D. W. Keen, and A. E. Tipping, *J. Chem. Soc. C* **1970**, 414.
- 1970HER R. Herchl, *Can. Anaesth. Soc. J.* **17**, 541 (1970).
- 1970HOW/WAD P. B. Howard and I. Wadso, *Acta Chem. Scand.* **24**, 145–152 (1970).
- 1970IRV/WAD R. J. Irving and I. Wadso, *Acta Chem. Scand.* **24**, 589–593 (1970).
- 1970KOI/OUC E. Koizumi and S. Ouchi, *Nippon Kagaku Zasshi* **91**, 501–503 (1970); *Chem. Abstr.* **74**, 46115x (1971).
- 1970KON/WAD J. Konicek and I. Wadso, *Acta Chem. Scand.* **24**, 2612–2616 (1970).
- 1970KRI/LIC G. Krien, H. H. Licht, and F. Trimborn, *Explosivstoffe* **18**, 203 (1970).
- 1970KUS/WAD K. Kusano and I. Wadso, *Acta Chem. Scand.* **24**, 2037–2042 (1970).
- 1970LAW E. W. Lawless, *Inorg. Chem.* **9**, 2796 (1970).
- 1970LEN/VEL C. Lenchitz and R. Velicky, *J. Chem. Eng. Data* **15**, 401–403 (1970).
- 1970LIN/SIL D. C.-K. Lin, I. H. Silberberg, and J. J. McKetta, *J. Chem. Eng. Data* **15**, 483–492 (1970).
- 1970LUS M. Lustig, *Inorg. Chem.* **9**, 104 (1970).
- 1970MAN/RAP M. Mansson, N. Rapport, and E. F. Westrum, Jr., *J. Am. Chem. Soc.* **92**, 7296–7299 (1970).
- 1970MAT/TAN A. Matsuda, Y. Tanaka, and T. Munakata, *Kyushu Univ. Fukuoka Jpn. Kogaku Shuho-Kyushu Daigaku* **43**, 834–841 (1970).
- 1970MAY/VEN J. N. Maycock and V. R. P. Venecker, *Thermochim. Acta* **1**, 191–198 (1970).
- 1970MEL/MER T. P. Melia and R. Merrifield, *J. Inorg. Nucl. Chem.* **32**, 1489–1493 (1970).
- 1970MES/FIN J. F. Messerly and H. L. Finke, *J. Chem. Thermodyn.* **2**, 867 (1970).
- 1970MES/TOD J. F. Messerly, S. S. Todd, and G. B. Guthrie, *J. Chem. Eng. Data* **15**, 227 (1970).
- 1970MOI/ANT V. D. Moisev and N. D. Antonova, *Zh. Fiz. Khim.* **44**, 2912–2913 (1970); *Chem. Abstr.* **74**, 80487e (1971).
- 1970MUL/GAL F. I. Mullayanov, G. V. Galagan, M. F. Buz'ko, Y. V. Churkin, and A. A. Shiryayeva, *Tr. Nauch-Issled. Inst. Neftekhim. Proizvod.* **2**, 95–97 (1970); *Chem. Abstr.* **74**, 91930v (1971).
- 1970MUR/BRE E. Murrill and L. Breed, *Thermochim. Acta* **1**, 239–246 (1970).
- 1970MUR/BRE2 E. Murrill and L. W. Breed, *Thermochim. Acta* **1**, 409 (1970).
- 1970NOF R. E. Nofle, *Inorg. Nucl. Chem. Lett.* **6**, 579 (1970).
- 1970POL/MUR J. Polak, S. Murakami, V. T. Lam, and G. C. Benson, *J. Chem. Eng. Data* **15**, 323–328 (1970).
- 1970PRO/KRE M. Prochazka, V. Krestanova, J. Konicek, and M. Smisek, *Collect. Czech. Chem. Commun.* **35**, 727–732 (1970).
- 1970QUI/HOF K. Quitzsch, H. P. Hofmann, D. Hering, R. Salzer, and G. Geiseler, *Z. Phys. Chem. (Leipzig)* **243**, 321–339 (1970).
- 1970ROB/ROS P. M. Robinson, H. J. Rossell, and H. G. Scott, *Mol. Cryst. Liq. Cryst.* **10**, 61 (1970).
- 1970SCO D. W. Scott, *J. Chem. Thermodyn.* **2**, 833–837 (1970).
- 1970SEL P. Sellers, *Acta Chem. Scand.* **24**, 2453–2458 (1970).
- 1970SEL2 P. Sellers, *J. Chem. Thermodyn.* **2**, 211–219 (1970).
- 1970SHA/MCG F. Shafizadeh, G. D. McGinnis, R. A. Susott, and C. W. Philpot, *Carbohydr. Res.* **15**, 165–178 (1970).
- 1970SIL/RUD L. Silver and R. Rudman, *J. Phys. Chem.* **74**, 3134 (1970).
- 1970SMI/THO E. D. Smith and W. L. Thornsberry, *J. Chem. Eng. Data* **15**, 296–297 (1970).
- 1970SPE/CLI W. F. Spencer and M. M. Cliath, *J. Agric. Food Chem.* **18**, 529–530 (1970).
- 1970VAL/KIL A. J. Valerja and J. E. Kilpatrick, *J. Chem. Phys.* **52**, 4545–4549 (1970).
- 1970VAR/BEL R. M. Varushchenko, N. A. Belikova, S. M. Skuratov, and A. F. Plate, *Zh. Fiz. Khim.* **44**, 3022–3025 (1970).
- 1970VOJ/CIH J. Vojtko, M. Cihova, and M. Hrusovsky, *Chem. Zvesti* **24**, 173–176 (1970).
- 1970VON/GLE S. P. Von Halasz and O. Glemser, *Chem. Ber.* **103**, 553–560 (1970).
- 1970VON/GLE2 S. P. Von Halasz and O. Glemser, *Chem. Ber.* **103**, 594–602 (1970).
- 1970VON/WIL P. R. von Schleyer, J. E. Williams, and K. R. Blanchard, *J. Am. Chem. Soc.* **92**, 2377–2386 (1970).
- 1970WES/WON E. F. Westrum, Jr., W. E. Wong, and E. Morawetz, *J. Phys. Chem.* **74**, 2542–2547 (1970).
- 1970WIE/WAU A. G. Wiedemann and H. P. Waughna, 3rd Proc. Toronto Symp. Therm. Anal. 233 (1970); as quoted in [1999ZIE/PER].
- 1970WON/WES W.-K. Wong and E. F. Westrum, Jr., *J. Phys. Chem.* **74**, 1303 (1970).
- 1970ZAB/SHR L. M. Zaborowski and J. M. Shreeve, *J. Am. Chem. Soc.* **92**, 3665–3668 (1970).
- 1971ADA/SUG K. Adachi, H. Suga, and S. Seki, *Bull. Chem. Soc. Jpn.* **44**, 78 (1971).
- 1971AND/CON R. J. L. Andon, J. E. Connett, J. F. Counsell, E. B. Lees, and J. F. Martin, *J. Chem. Soc. A* **1971**, 661–664.
- 1971ASH S. J. Ashcroft, *Thermochim. Acta* **2**, 512–514 (1971).
- 1971BAG/MAL A. Baghdoyan, J. Malik, and V. Fried, *J. Chem. Eng. Data* **16**, 96–97 (1971).
- 1971BEE/LIN G. Beech and R. M. Lintonbon, *Thermochim. Acta* **2**, 86–88 (1971).
- 1971BER/GIR G. Bertholon, M. Giray, R. Perrin, and M. F. Vincent-Falquet-Berny, *Bull. Soc. Chem. Fr.* 3180–3187 (1971).
- 1971BER/HOH P. A. Bernstein, F. A. Hohorst, and D. D. DesMarteau, *J. Am. Chem. Soc.* **93**, 3882 (1971).
- 1971BOY/SAN R. H. Boyd, S. N. Sanwal, S. Shary-Tehrany, and D. McNally, *J. Phys. Chem.* **75**, 1264–1271 (1971).
- 1971BUT/CAR R. S. Butler, A. S. Carson, P. G. Laye, and W. V. Steele, *J. Chem. Thermodyn.* **3**, 277–280 (1971).
- 1971CAR/WES H. G. Carlson and E. F. Westrum, Jr., *J. Phys. Chem.* **54**, 1464 (1971).
- 1971CAR/ZIM G. A. Carpenter, M. F. Zimmer, E. E. Baroody, and R. A. Robb, *J. Chem. Eng. Data* **16**, 46 (1971).
- 1971CAV/CHA R. G. Cavell, T. L. Charlton, and W. Sim, *J. Am. Chem. Soc.* **93**, 1130 (1971).
- 1971CHI/THO M. C. Chick and B. W. Thorpe, *Aust. J. Chem.* **24**, 181 (1971).
- 1971CHO/JON J. K. Choi and M. J. Joncich, *J. Chem. Eng. Data* **16**, 87–90 (1971).
- 1971COU/LEE J. F. Counsell, D. A. Lee, and J. F. Martin, *J. Chem. Soc. A* **1971**, 313–316.
- 1971DEM/SHR R. A. De Marco and J. M. Shreeve, *Inorg. Chem.* **10**, 911–913 (1971).
- 1971DIN/STA R. H. Dinegar and M. Stammier, *Explosivstoffe* **1**, 14 (1971).
- 1971DYK J. Dykyj, *Petrochemia* **11**, 27–45 (1971).
- 1971EON/POM C. Eon, C. Pommier, and G. Guiochon, *J. Chem. Eng. Data* **16**, 408–410 (1971).
- 1971GEL/SIM Z. I. Geller, V. D. Simonov, M. V. Lyubarskii, E. A. Brakhfogel, L. M. Meizler, and I. A. Paramonov, *Izv. Uyssh. Ucheb. Zaved., Nept. Gaz* **7**, 71–74 (1971).
- 1971GET/WAR F. W. Getzen and T. M. Ward, *Ind. Eng. Chem. Proc. Res. Dev.* **10**, 122 (1971).
- 1971GOO/MOO W. D. Good and R. T. Moore, *J. Chem. Thermodyn.* **3**, 701–705 (1971).
- 1971HAL P. G. Hall, *Trans. Faraday Soc.* **67**, 556 (1971).

- 1971HAL/BAL H. K. Hall, Jr. and J. H. Baldt, *J. Am. Chem. Soc.* **93**, 140–145 (1971).
- 1971HAM/WIT W. S. Hamilton and L. C. Witt, *J. Chem. Eng. Data* **16**, 234–235 (1971).
- 1971HOD P. E. Hodge, Ph.D. dissertation, Case Western Reserve, 1971; *Diss. Abstr.* **32**, 1482 (1971).
- 1971JAC/HUN W. Jackson, T. S. Hung, and H. P. Hopkins, Jr., *J. Chem. Thermodyn.* **3**, 347–353 (1971).
- 1971KOL/VOL V. P. Kolesov and V. N. Vorob'ev, *Zh. Fiz. Khim.* **45**, 1293 (1971).
- 1971KUS/WAD K. Kusano and I. Wadso, *Acta Chem. Scand.* **25**, 219–224 (1971).
- 1971KUS/WAD2 K. Kusano and I. Wadso, *Bull. Chem. Soc. Jpn.* **44**, 1705–1707 (1971).
- 1971LEB/GUT N. D. Lebedeva, N. M. Gutner, and V. L. Ryadnenko, *Russ. J. Phys. Chem.* **45**, 561 (1971).
- 1971LEB/KAT N. D. Lebedeva, Y. A. Katin, and G. Y. Akhmedova, *Russ. J. Phys. Chem.* **45**, 1192–1193 (1971).
- 1971LEB/KAT2 N. D. Lebedeva, Y. A. Katin, and G. Y. Akhmedova, *Russ. J. Phys. Chem.* **45**, 771–772 (1971).
- 1971LEB/RAB B. V. Lebedev and I. B. Rabinovich, *Tr. Khim. Khim. Tekhnol.* **1**, 12 (1971).
- 1971LEB/RAB2 B. V. Lebedev and I. B. Rabinovich, *Tr. Khim. Khim. Tekhnol.* **1**, 8 (1971).
- 1971LEB/RYA N. D. Lebedeva, V. L. Ryadnenko, and I. N. Kuznetsova, *Russ. J. Phys. Chem.* **45**, 549 (1971).
- 1971LEN/VEL C. Lenchitz, R. W. Velicky, G. Silvestro, and L. P. Schlosberg, *J. Chem. Thermodyn.* **3**, 689–692 (1971).
- 1971LES/KHR T. M. Lesteva, E. I. Khrapkov, V. A. Gil'mutdinova, and E. M. Sire, *Zh. Priklad. Khim.* **44**, 2594 (1971).
- 1971LET/BAY T. M. Letcher and J. W. Bayles, *J. Chem. Eng. Data* **16**, 266 (1971).
- 1971MAN/RIN M. Mansson, B. Ringner, and S. Sunner, *J. Chem. Thermodyn.* **3**, 547–551 (1971).
- 1971MAS/CHE W. L. Masterton, C. H. Chen, C. E. Waring, R. Oksala, L. Beatty, and A. Krause, *J. Chem. Thermodyn.* **3**, 243 (1971).
- 1971MAT/PEP Y. N. Matyushin, V. I. Pepekin, S. P. Golova, T. I. Godovikova, and L. I. Khmel'nitskii, *Bull. Acad. Sci. USSR, Div. Chem. Sci.* **20**, 162–164 (1971).
- 1971MES/FIN J. F. Messerly and H. L. Finke, *J. Chem. Thermodyn.* **3**, 675 (1971).
- 1971MEY/REN E. F. Meyer, T. A. Renner, and K. S. Stec, *J. Phys. Chem.* **76**, 642–648 (1971).
- 1971MIT/IMA I. Mita, I. Imai, and I. Kambe, *Thermochim. Acta* **2**, 337–344 (1971).
- 1971MOR E. Morawetz, *Chem. Scr.* **1**, 103–111 (1971).
- 1971MOR2 E. Morawetz, Dissertation, University of Lund, 1971; see [1983DEW/VAN].
- 1971PAR/ROC G. H. Parsons, C. H. Rochester, and C. E. C. Wood, *J. Chem. Soc. B* **1971**, 533–536.
- 1971PAU I. E. Paukov, *Zh. Fiz. Khim.* **45**, 1293 (1971).
- 1971PAU2 I. E. Paukov, *Zh. Fiz. Khim.* **45**, 1297 (1971).
- 1971PIH/TUO K. Pihlaja and M. -L. Tuomi, *Acta Chem. Scand.* **25**, 465–469 (1971).
- 1971PIN/TON R. E. Pincock, M. -M. Tong, and K. R. Wilson, *J. Am. Chem. Soc.* **93**, 1669–1672 (1971).
- 1971POL/BEN J. Polak and G. C. Benson, *J. Chem. Thermodyn.* **3**, 235–242 (1971).
- 1971PRI V. P. Privalko, *Russ. J. Phys. Chem.* **45**, 900 (1971).
- 1971PRY/EFR R. O. Pryanikova and G. D. Efremova, *Tr. Nauch-Issled. Proekt. Inst. Azotn. Prom. Prod. Org. Sln.* **12**, 112 (1971).
- 1971RAD L. G. Radchenko, *Zh. Fiz. Khim.* **45**, 1310–1311 (1971); *Chem. Abstr.* **75**, 122104f (1971).
- 1971RAP/WES N. J. Rapport, E. F. Westrum, Jr., and J. T. S. Andrews, *J. Am. Chem. Soc.* **93**, 4363–4374 (1971).
- 1971RAT/HAR C. T. Ratcliffe, C. V. Hardin, L. R. Anderson, and W. B. Fox, *J. Am. Chem. Soc.* **93**, 3886 (1971).
- 1971RIN/SUN B. Ringner, S. Sunner, and H. Watanabe, *Acta Chem. Scand.* **25**, 141–146 (1971).
- 1971ROS/HOL J. M. Rosen, J. R. Holden, and H. T. Simmons, Sr., *Microscope* **19**, 151–156 (1971).
- 1971SAU/SHR D. T. Sauer and J. M. Shreeve, *J. Fluorine Chem.* **1**, 1–11 (1971).
- 1971SAU/SHR2 D. T. Sauer and J. M. Shreeve, *Inorg. Chem.* **10**, 358–362 (1971).
- 1971SAU/SHR3 D. T. Sauer and J. M. Shreeve, *Z. Anorg. Allgem. Chem.* **385**, 113 (1971).
- 1971SEL2 P. Sellers, *Acta Chem. Scand.* **25**, 2194–2198 (1971); *Acta Chem. Scand.* **25**, 2291–2294 (1971).
- 1971SEL3 P. Sellers, *Acta Chem. Scand.* **25**, 2189–2193 (1971).
- 1971SUN/EIS C. Sunwoo and H. Eisen, *J. Pharm. Sci.* **60**, 238–244 (1971).
- 1971SWI/ZAB F. Swindell, L. M. Zaborowski, and J. M. Shreeve, *Inorg. Chem.* **10**, 1635–1638 (1971).
- 1971WEE/GAR P. Weeks and G. L. Gard, *J. Fluorine Chem.* **1**, 295 (1971).
- 1971WIL/ZWO R. C. Wilhoit and B. J. Zwolinski, "Handbook of vapor pressures and heats of vaporization of hydrocarbons and related compounds," in *API 44-TRC Publications in Science and Engineering* (API, College Station, TX, 1971).
- 1971WON/WES W. -K. Wong and E. F. Westrum, Jr., *J. Chem. Thermodyn.* **3**, 105–124 (1971).
- 1971WU/HSU P. -J. Wu, L. Hsu, and D. A. Dows, *J. Chem. Phys.* **54**, 2714–2721 (1971).
- 1971YAK/BLY A. M. Yakubson, L. I. Blyakhman, M. Ya Mel'nichenko, Z. V. Efimova, and V. I. Trofimov, *Zh. Fiz. Khim.* **44**, 1198 (1971).
- 1971ZAB/SHR L. M. Zaborowski and J. M. Shreeve, *Inorg. Chem.* **10**, 407–409 (1971).
- 1972ACK/HAL M. N. Ackermann, M. R. Hallmark, S. K. Hammond, and N. Roe, *Inorg. Chem.* **11**, 3076 (1972).
- 1972ADA/SUG K. Adachi, H. Suga, and S. Seki, *Bull. Chem. Soc. Jpn.* **45**, 1960 (1972).
- 1972AHM/EAD A. M. I. Ahmed and R. G. Eades, *J. Chem. Soc., Faraday Trans. 2* **68**, 1623–1633 (1972).
- 1972AHM/EAD2 A. M. I. Ahmed and R. G. Eades, *J. Chem. Soc., Faraday Trans. 2* **68**, 2017–2022 (1972).
- 1972ALV/BOR T. Alvik, G. Borgen, and J. Dale, *Acta Chem. Scand.* **126**, 1805–1816 (1972).
- 1972AMB/SPR D. Ambrose, C. H. S. Sprake, and R. Townsend, *J. Chem. Thermodyn.* **4**, 247–254 (1972).
- 1972AMI/VAK A. V. Amitin, E. A. Vakurova, V. K. Katunin, and N. S. Afanas'eva, *Zh. Fiz. Khim.* **46**, 1054 (1972); *Chem. Abstr.* **77**, 66425p (1972).
- 1972ARE/VAN J. G. Arentsen and J. C. van Miltenburg, *J. Chem. Thermodyn.* **4**, 789 (1972).
- 1972ARN/JON P. R. Arnold and F. Jones, *Mol. Cryst. Liq. Cryst.* **19**, 133–140 (1972).
- 1972BOO/HAU H. J. Booss and K. R. Hauschildt, *Fresenius' Z. Anal. Chem.* **261**, 32 (1972).
- 1972BOU/AIM T. Boublik and K. Aim, *Collect. Czech. Chem. Commun.* **37**, 3513–3521 (1972).
- 1972BYR/CUR S. R. Byrn, D. Y. Curtin, and I. C. Paul, *J. Am. Chem. Soc.* **94**, 890–898 (1972).
- 1972CHA/HAG N. B. Chanh, Y. Haget, and J. Bedouin, *J. Bull. Soc. Fr. Mineral. Cristallogr.* **95**, 281 (1972).
- 1972COL/LAY M. Colomina, J. L. Laynez, R. Perez-Ossorio, and C. Turrion, *J. Chem. Thermodyn.* **4**, 499–506 (1972).
- 1972COL/MON M. Colomina, C. Monzon, C. Turrion, and J. Laynez, *Paper presented at the the Fifth Experimental Thermodynamics Conference* (Lancaster, 1972); as cited in [1982COL/JIM].
- 1972COU/LEE J. F. Counsell and D. A. Lee, *J. Chem. Thermodyn.* **4**, 915–917 (1972).
- 1972DEM/SHR R. A. De Marco and J. M. Shreve, *J. Fluorine Chem.* **1**, 269–276 (1972).
- 1972DES D. D. DesMarteau, *Inorg. Chem.* **11**, 193 (1972).
- 1972DUB/DEV C. Dubois and C. Devin, C. R. Seances l'Acad. Sci. Ser. C **274**, 1289 (1972).
- 1972DYK J. Dykyj, *J. Petrochemia* **12**, 13–31 (1972); *Petrochemia* **12**, 34–63 (1972).
- 1972FIN/MCC H. L. Finke, J. P. McCullough, J. F. Messerly, A. Osborn, and D. R. Douslin, *J. Chem. Thermodyn.* **4**, 477–494 (1972).

- 1972FIN/MES H. L. Finke, J. F. Messerly, and S. S. Todd, *J. Chem. Thermodyn.* **4**, 359–374 (1972).
- 1972GAR/HUS P. J. Gardner and K. S. Hussain, *J. Chem. Thermodyn.* **4**, 819–827 (1972).
- 1972GEI/RAU G. Geiseler and H. J. Rauh, *Z. Phys. Chem. (Leipzig)* **249**, 376–382 (1972).
- 1972GEI/SAW G. Geiseler and J. Sawistowsky, *Z. Phys. Chem (Leipzig)* **250**, 43–48 (1972).
- 1972GOO W. D. Good, *J. Chem. Eng. Data* **17**, 158–162 (1972).
- 1972GRA/SAL V. A. Granzhan and E. A. Salganikov, *Tr. Nauch.-Issled. Proekt. Inst. Azotn. Prom. Prod. Org. Sin.* **85** 87 (1972); *Chem. Abstr.* **79**, 118908m (1973).
- 1972HAM/WIT W. S. Hamilton and L. C. Witt, *J. Chem. Eng. Data* **17**, 138–139 (1972).
- 1972HU/SIN A. T. Hu, G. C. Sinke, and M. J. Mintz, *J. Chem. Thermodyn.* **4**, 239 (1972).
- 1972INO/LIA P. P. Inozemtsev, A. G. Liakumovich, and Z. D. Gracheva, *Russ. J. Phys. Chem.* **46**, 914 (1972).
- 1972IRV R. J. Irving, *J. Chem. Thermodyn.* **4**, 793–794 (1972).
- 1972JAK/VAN G. Jakli and W. A. van Hook, *J. Chem. Thermodyn.* **4**, 857–864 (1972).
- 1972KOL/VOR V. P. Kolesov and V. N. Vorob'ev, *Dokl. Akad. Nauk SSSR* **203**, 116 (1972).
- 1972KOZ/TIM M. P. Kozina, L. P. Timofeeva, S. M. Pimenova, V. A. Aleshina, N. A. Belikova, A. A. Bobyleva, and A. F. Plate, *Zh. Fiz. Khim.* **46**, 2959 (1972); *Chem. Abstr.* **78**, 63105 (1973).
- 1972KRE/PRI M. Krech, S. J. W. Price, and W. F. Yared, *Can. J. Chem.* **50**, 2935–2938 (1972).
- 1972LAY/WAD J. Laynez and I. Wadso, *Acta Chem. Scand.* **26**, 3148–3152 (1972).
- 1972LEB/KAT N. D. Lebedeva and Y. A. Katin, *Zh. Fiz. Khim.* **46**, 1060–1061 (1972) [Engl. Ed. 623].
- 1972LEB/KAT2 N. D. Lebedeva and Y. Katin, *Zh. Fiz. Khim.* **46**, 1088–1089 (1972).
- 1972LES/CHE T. M. Lesteva and V. I. Chernaya, *Zh. Priklad. Khim.* **45**, 459 (1972).
- 1972MAN M. Mansson, *J. Chem. Thermodyn.* **4**, 865–871 (1972).
- 1972MAN2 M. Mansson, *Acta Chem. Scand.* **26**, 1707–1708 (1972).
- 1972MCF/SOM F. R. McFeely and G. A. Somorjee, *J. Phys. Chem.* **76**, 914–918 (1972).
- 1972MET/SHR S. G. Metcalf and J. M. Shreeve, *Inorg. Chem.* **11**, 1631–1634 (1972).
- 1972MIL G. D. Mills, *Diss. Abstr. Int. B* **33**, 1485 (1972); *Chem. Abstr.* **78**, 42653f (1973).
- 1972MOR E. Morawetz, *J. Chem. Thermodyn.* **4**, 455–460 (1972).
- 1972NAK/TOY K. Nakanishi and O. Toyama, *Bull. Chem. Soc. Jpn.* **45**, 3210–3211 (1972).
- 1972NEE/HAL W. C. Neely and T. D. Hall, *J. Chem. Eng. Data* **17**, 294–295 (1972).
- 1972NIS/HAK M. Nishimura, M. Hakayama, and T. Yano, *J. Chem. Eng. Jpn.* **5**, 223–226 (1972); *Chem. Abstr.* **78**, 48659j (1973).
- 1972PAC/HOD E. L. Pace and P. E. Hodge, *J. Chem. Thermodyn.* **4**, 441–447 (1972).
- 1972PEP/MAT V. I. Pepekin, Y. N. Matyushin, G. G. Rozantsev, S. A. Shevelev, and A. Y. Apin, *Izv. Akad. Nauk SSSR Ser. Khim.* **21**, 2703–2705 (1972) [Engl. Ed. 2634–2636].
- 1972PIN/CAV A. A. Pinkerton and R. G. Cavell, *J. Am. Chem. Soc.* **94**, 1870 (1972).
- 1972PLA C. Plato, *Anal. Chem.* **44**, 1531–1534 (1972).
- 1972PRY/GOO R. Prydz and R. D. Goodwin, *J. Chem. Thermodyn.* **4**, 123–127 (1972).
- 1972REG J. Regnier, *J. Chim. Phys. Physicochim. Biol.* **69**, 942–944 (1972).
- 1972ROG/ORT R. N. Rogers and L. W. Ortiz, *Thermochim. Acta* **3**, 379 (1972).
- 1972ROM/SUK B. C. Romanov, B. I. Sukkhorukov, E. A. Miroshnichenko, and Y. A. Lebedev, *Fourth Int. Biophys. Congr. Abstr.* **E7**, a4/7 (1972); as quoted in [2000BRU/PIA].
- 1972SAB/CHA R. Sabbah, R. Chastel, and M. Laffitte, *Thermochim. Acta* **5**, 117–127 (1972).
- 1972SAU/SHR D. T. Sauer and J. M. Shreeve, *Inorg. Chem.* **11**, 238–242 (1972).
- 1972SOK/TSY N. M. Sokolov, L. N. Tsygankova, M. I. Shtrom, and N. M. Zhavoronkov, *Sov. Chem. Ind.* **48**, 427 (1972).
- 1972STR/NOV Y. A. Strepikheev, O. P. Novikova, and A. L. Chimishkyan, *Khim. Prom. (Moscow)* **48**, 230–231 (1972); *Chem. Abstr.* **69**, 145717t (1972).
- 1972SWI/BAB R. F. Swindell, D. B. Babb, T. J. Ouellette, and J. M. Shreeve, *Inorg. Chem.* **11**, 242–245 (1972).
- 1972SWI/SHR R. F. Swindell and J. M. Shreeve, *J. Am. Chem. Soc.* **94**, 5713–5718 (1972).
- 1972URB/JAN S. Urban, J. A. Janik, J. Lenik, J. Mayer, T. Baluga, and S. Wrobel, *Phys. Status Solidi A* **10**, 271–280 (1972).
- 1972VAN J. C. van Miltenburg, *J. Chem. Thermodyn.* **4**, 773 (1972).
- 1972VAR/DRU R. M. Varuschenko and A. I. Druzhinina, *Zh. Fiz. Khim.* **46**, 1313 (1972).
- 1972VOR/KOL Y. N. Vorob'ev, V. P. Kolesov, V. M. Kuznets, and T. A. Babushkina, *Zh. Obshch. Khim.* **42**, 391 (1972).
- 1972WAU/GET R. D. Wauchope and F. W. Getzen, *J. Chem. Eng. Data* **17**, 38 (1972).
- 1972WIE H. G. Wiedemann, *Thermochim. Acta* **3**, 355–366 (1972).
- 1972WOL G. Wolf, *Helv. Chim. Acta* **55**, 1446–1458 (1972).
- 1972ZOR/HUR T. A. Zordan, D. G. Hurkot, M. Peterson, and L. G. Hepler, *Thermochim. Acta* **5**, 21 (1972).
- 1973ABE/SHR T. Abe and J. M. Shreeve, *J. Fluorine Chem.* **3**, 17–26 (1973).
- 1973ABE/SHR2 T. Abe and J. M. Shreeve, *J. Fluorine Chem.* **3**, 187–196 (1973).
- 1973AMB/SPR D. Ambrose, C. H. S. Sprake, and R. J. Townsend, *J. Chem. Soc., Faraday Trans. 1* **69**, 839–841 (1973).
- 1973AND/COU R. J. L. Andon, J. F. Counsell, D. A. Lee, and J. F. Martin, *J. Chem. Soc., Faraday Trans. 1* **69**, 1721–1726 (1973).
- 1973AND/MAR R. J. L. Andon and J. F. Martin, *J. Chem. Soc., Faraday Trans. 1* **69**, 761–770 (1973).
- 1973AND/MAR2 J. L. Andon and J. F. Martin, *J. Chem. Soc., Faraday Trans. 1* **69**, 871 (1973).
- 1973BAR/MOR2 D. S. Barnes, C. T. Mortimer, and E. Mayer, *J. Chem. Thermodyn.* **5**, 481–483 (1973).
- 1973BEH/GAT W. Behrendt and G. Gattow, *Z. Anorg. Allgem. Chem.* **398**, 198–206 (1973).
- 1973BER/DES P. A. Bernstein and D. D. DesMarteau, *J. Fluorine Chem.* **2**, 315–321 (1973).
- 1973CAR/KOB G. F. Carruth and R. Kobayashi, *J. Chem. Eng. Data* **18**, 115–126 (1973).
- 1973CAS/VEC F. Casellato, C. Vecchi, A. Girell, and B. Casu, *Thermochim. Acta* **6**, 361–368 (1973).
- 1973COU/LEE J. F. Counsell and D. A. Lee, *J. Chem. Thermodyn.* **5**, 583–589 (1973).
- 1973DAW/SIL P. D. Dawson, Jr., I. M. Silberberg, and J. J. McKetta, *J. Chem. Eng. Data* **18**, 7–15 (1973).
- 1973DEK/OON C. G. DeKruif and H. A. Oonk, *J. Chem. Eng. Technol.* **45**, 455–461 (1973); *Chem. Abstr.* **78**, 152198u (1973).
- 1973DEM/LEH G. R. De Mare, T. Lehman, and M. Termonia, *J. Chem. Thermodyn.* **5**, 829–832 (1973).
- 1973DEM/SHR R. A. De Marco and J. M. Shreeve, *Inorg. Chem.* **12**, 1896–1899 (1973).
- 1973DIE/MAR E. A. Dietz and D. R. Martin, *J. Inorg. Nucl. Chem.* **35**, 3681–3684 (1973).
- 1973DYK/REP J. Dykyj and M. Repas, *Petrochemia* **13**, 179–198 (1973).
- 1973FEL/SAV I. N. Fel'dman, V. V. Savko, U. I. Mamai, and M. F. Finkel'shtein, *Russ. J. Phys. Chem.* **47**, 1531 (1973).
- 1973FIN/MES H. L. Finke and J. F. Messerly, *J. Chem. Thermodyn.* **5**, 247 (1973).
- 1973FRA/KRZ H. P. Frank, K. Krzemicki, and H. Voellenkle, *Chem.-Ztg.* **97**, 206 (1973).
- 1973GEI/QUI G. Geiseler, K. Quitzsch, H.-P. Hofmann, and R. Z. Pfestorf, *Z. Phys. Chem. (Leipzig)* **252**, 170–176 (1973).
- 1973GOT/MEN F. A. Gothard, D. C. Mentienu, D. G. Breban, and C. I. Cristea, *J. Chem. Eng. Data* **18**, 381–384 (1973).
- 1973HAL/SMI H. K. Hall, C. D. Smith, and J. H. Baldt, *J. Am. Chem. Soc.* **95**, 3197–3201 (1973).
- 1973HAM/AYE J. V. Hamilton and D. A. Ayers, *J. Chem. Eng. Data* **18**, 366–367 (1973).

- 1973HAM/MIT J. V. Hamilton and G. M. Mitchell, *J. Chem. Eng. Data* **18**, 38–39 (1973).
- 1973HOH/DES F. A. Hohorst, D. D. DesMariseau, L. R. Anderson, D. E. Gould, and W. B. Fox, *J. Am. Chem. Soc.* **95**, 3866 (1973).
- 1973KIS/SUG K. Kishimoto, H. Suga, and S. Seki, *Bull. Chem. Soc. Jpn.* **46**, 3020 (1973).
- 1973KON J. Konicek, *Acta Chem. Scand.* **27**, 1496–1502 (1973).
- 1973KRE/PRI M. J. Krech, S. J. W. Price, and W. F. Yared, *Can. J. Chem.* **51**, 3662–3664 (1973).
- 1973KRI/LIC G. Krien, H. H. Licht, and J. Zierath, *Thermochim. Acta* **6**, 465–472 (1973).
- 1973LEB/KAT N. D. Lebedeva and Y. A. Katin, *Zh. Fiz. Khim.* **47**, 1620 (1973); *Russ. J. Phys. Chem. (Engl. Trans.)* **47**, 922–923 (1973).
- 1973LEB/KAT2 N. D. Lebedeva and Y. A. Katin, *J. Appl. Chem. USSR* **46**, 2131 (1973).
- 1973LIN/CEN E. L. Lines and L. F. Centofanti, *Inorg. Chem.* **12**, 598 (1973).
- 1973LIN/WIC J. Linek and I. Wichterle, *Collect. Czech. Chem. Commun.* **38**, 1846–1852 (1973).
- 1973MAJ/SHR A. Majid and J. M. Shreeve, *J. Org. Chem.* **38**, 4028–4031 (1973).
- 1973MAL/GIG L. Malaspina, R. Gigli, and G. Bardi, *J. Chem. Phys.* **59**, 387–394 (1973).
- 1973MAL/GIG2 L. Malaspina, R. Gigli, G. Bardi, and G. DeMaria, *J. Chem. Thermodyn.* **5**, 699–706 (1973).
- 1973MCE/SAN D. M. McEachern and O. Sandoval, *J. Phys. E: Sci. Instrum.* **6**, 155–161 (1973).
- 1973MEY/HOT E. F. Meyer and R. D. Hotz, *J. Chem. Eng. Data* **18**, 359–362 (1973).
- 1973MOR/KAU K. Morke, E. Kauer, J. Kornig, and H.-J. Bittrich, *Z. Phys. Chem. Leipzig* **252**, 323 (1973).
- 1973PEP/GAF V. I. Pepekin, R. G. Gafurov, Y. A. Lebedev, L. T. Eremenko, E. M. Sogomonyan, and A. Y. Apin, *Izv. Akad. Nauk SSSR Ser. Khim.* **22**, 318–322 (1973) [Engl. Ed. 304].
- 1973PEP/LEB V. I. Pepekin, Y. A. Lebedev, and A. Y. Apin, *Dokl. Phys. Chem.* **208**, 35–37 (1973).
- 1973PHI/JAM R. Philippe, C. Jambon, and P. Clechet, *J. Chem. Thermodyn.* **5**, 431 (1973).
- 1973RAU/GEI H.-J. Rauh and G. Geiseler, *Z. Phys. Chem. (Leipzig)* **252**, 395–397 (1973).
- 1973RAU/GEY H.-J. Rauh, W. Geyer, H. Schmidt, and G. Geiseler, *Z. Phys. Chem. (Leipzig)* **253**, 43–48 (1973).
- 1973ROC/SYM D. H. Rochester and J. R. Symonds, *J. Chem. Soc., Faraday Trans. 1* **1973**, 1267–1273.
- 1973ROG/QUA F. E. Rogers and S. W. Quan, *J. Phys. Chem.* **77**, 828–831 (1973).
- 1973SCH/PIL C. J. Schack, D. Pilipovich, and J. F. Hon, *Inorg. Chem.* **12**, 897–900 (1973).
- 1973SPR/WRI G. H. Sprenger, K. J. Wright, and J. M. Shreeve, *Inorg. Chem.* **12**, 2890–2893 (1973).
- 1973SVO/VES V. Svoboda, F. Vesely, R. Holub, and J. Pick, *Collect. Czech. Chem. Commun.* **38**, 3539–3543 (1973).
- 1973VAS/KOR I. A. Vasil'ev and A. D. Korkhov, *Zh. Fiz. Khim.* **47**, 2710 (1973).
- 1973WAN/SHR C. S.-C. Wang and J. M. Shreeve, *Inorg. Chem.* **12**, 81–83 (1973).
- 1973WAR/SKU W. Waradzin and P. Skubla, *Chem. Prum.* **23**, 556–557 (1973); *Chem. Abstr.* **80**, 112780n (1974).
- 1973WIL/ZWO R. C. Wilhoit and B. J. Zwolinski, *J. Phys. Chem. Ref. Data 2 Suppl.* **1**, 1–420 (1973); Note: The authors report Antoine constants for numerous alcohols that were calculated from vapor pressure data taken from the published literature. For several of the alcohols, the authors had only a very limited number of experimental data points that were pooled from several sources.
- 1973WRI/SHR K. J. Wright and J. M. Shreeve, *Inorg. Chem.* **12**, 77–80 (1973).
- 1974AMB/ELL D. Ambrose and J. H. Ellender, *J. Chem. Thermodyn.* **6**, 909–914 (1974).
- 1974AMB/SPR D. Ambrose and C. H. S. Sprake, *J. Chem. Thermodyn.* **6**, 453–456 (1974).
- 1974AMB/SPR2 D. Ambrose, C. H. S. Sprake, and R. J. Townsend, *J. Chem. Thermodyn.* **6**, 693–700 (1974).
- 1974AND/COU R. J. L. Andon, J. F. Counsell, D. A. Lee, and J. F. Martin, *J. Chem. Soc., Faraday Trans. 1* **70**, 1914 (1974).
- 1974AND/MAR R. J. L. Andon and J. F. Martin, *J. Chem. Soc., Faraday Trans. 1* **70**, 605 (1974).
- 1974ARS M. R. Arshadi, *J. Chem. Soc., Faraday Trans. 1* **70**, 1569–1571 (1974).
- 1974BEA/MUE P. Beak, D. S. Mueller, and J. Lee, *J. Am. Chem. Soc.* **96**, 3867–3874 (1974).
- 1974BEH/HAA E. Behrend and A. Haas, *J. Fluorine Chem.* **4**, 83 (1974).
- 1974BES/CHE N. A. Bessarab, F. S. Chernoglazova, and Y. M. Martynov, *Zh. Fiz. Khim.* **48**, 235–236 (1974); *Chem. Abstr.* **80**, 112833g (1974).
- 1974BLA/LEV R. L. Blaine and P. Levy, *Anal. Calorim.* **3**, 185–198 (1974).
- 1974BLA/OGO Y. M. Blazhin, S. K. Ogorodnikov, A. I. Morzova, S. V. Kazakova, and L. N. Volkova, *Zh. Prikl. Khim.* **47**, 184 (1974).
- 1974BOR G. Borgen, *Acta Chem. Scand.* **28B**, 13–17 (1974).
- 1974BRY/CAZ C. E. Bryson III, V. Cazarra, and L. L. Levenson, *J. Chem. Eng. Data* **19**, 107–110 (1974).
- 1974CAF/SIC L. F. R. Cafferata and J. E. Sicre, *Inorg. Chem.* **13**, 242 (1974).
- 1974CIN/BER A. Cingolani and G. Berchiesi, *J. Therm. Anal.* **6**, 87 (1974).
- 1974CLA/MCK T. Clark, M. A. McKerverey, H. Mackle, and J. Rooney, *J. Chem. Soc., Faraday Trans. 1* **70**, 1279–1291 (1974).
- 1974COL/ROU2 M. Colomina, M. V. Roux, and C. Turrion, *J. Chem. Thermodyn.* **6**, 571–576 (1974).
- 1974COX C. D. Cox, *Pure Appl. Chem.* **40**, 399–450 (1974).
- 1974DOJ/HEI J. Dojcansky and J. Heinrich, *Chem. Zvesti* **28**, 157–159 (1974); *Chem. Abstr.* **82**, 64723p (1975).
- 1974ENG/WOO P. S. Engel, J. L. Wood, J. A. Sweet, and J. L. Margrave, *J. Am. Chem. Soc.* **96**, 2381–2387 (1974).
- 1974GIB/CRE H. F. Gibbard and J. L. Creek, *J. Chem. Eng. Data* **19**, 308–310 (1974).
- 1974GOL/PEP O. F. Golovanova, V. I. Pepekin, B. L. Korsunskii, R. G. Gafurov, L. T. Eremenko, and F. I. Dubovitskii, *Izv. Akad. Nauk SSSR Ser. Khim.* 1495 (1974).
- 1974GOO/MOO W. D. Good, R. T. Moore, A. G. Osborn, and D. R. Douslin, *J. Chem. Thermodyn.* **6**, 303–310 (1974).
- 1974GUS/REN J. L. Gustin and H. Renon, *Bull. Soc. Chim. Fr.* 2719–2722 (1974).
- 1974HIN/KLU J. Hine and A. W. Klueppet, *J. Am. Chem. Soc.* **96**, 2924 (1974).
- 1974HOH/DES F. A. Hohorst and D. D. DesMariseau, *Inorg. Chem.* **13**, 715 (1974).
- 1974JAC A. W. Jackowski, *J. Chem. Thermodyn.* **6**, 49–52 (1974).
- 1974KIV/NAD N. N. Kiva, S. I. Nadutkina, L. V. Ivanova, and V. S. Bogdanov, *Russ. J. Phys. Chem.* **148**, 297 (1974).
- 1974KOL/VOR V. P. Kolesov, V. N. Vorob'ev, E. A. Ssrzhina, Yu. A. Pentin, and Yu. D. Timoshenkova, *J. Chem. Thermodyn.* **6**, 613 (1974).
- 1974KOZ/BYC M. P. Kozina, L. V. Bychikhina, G. L. Gal'chenko, A. N. Kalinichenko, A. A. Bobileva, N. A. Belikova, and A. F. Plate, *Zh. Fiz. Khim.* **48**, 2075–2077 (1974); *Chem. Abstr.* **81**, 159978u (1974).
- 1974KUS/SAI K. Kusano and Y. Saito, Preprints, 10th Conf. Chem. Thermodyn. Therm. Anal. Jpn. 155 (1974); as quoted in [1985MAJ/SVO].
- 1974LET/MAR T. M. Letcher and F. Marsicano, *J. Chem. Thermodyn.* **6**, 509–514 (1974).
- 1974LIN/CEN E. L. Lines and L. F. Centofanti, *Inorg. Chem.* **13**, 1517 (1974).
- 1974LIO/HOP C. L. Liotta, H. P. Hopkins, Jr., and T. P. Kasudia, *J. Am. Chem. Soc.* **96**, 7153 (1974).
- 1974LOG/FRO M. A. Loginova, A. F. Frolov, L. N. Bol'shakova, N. A. Simanov, and L. V. Ob'edkova, *Zh. Priklad. Khim.* **47**, 99–102 (1974).

- 1974MAJ/SHR A. Majid and J. M. Shreeve, *Inorg. Chem.* **13**, 2710–2714 (1974).
- 1974MAN M. Mansson, *Acta Chem. Scand. Ser. B* **28**, 905–908 (1974).
- 1974MAN/LOG G. D. Mant'yukov, M. A. Loginova, B. N. Bychkov, and S. S. Rozhkov, *Zh. Priklad. Khim.* **47**, 2585 (1974).
- 1974MAN2 M. Mansson, *Acta Chem. Scand. Ser. B* **28**, 895–899 (1974).
- 1974MAN3 M. Mansson, *Acta Chem. Scand. Ser. B* **28**, 677–680 (1974).
- 1974MAN4 M. Mansson, *J. Chem. Thermodyn.* **6**, 1153–1159 (1974).
- 1974MES/FIN J. F. Messerly, H. L. Finke, and S. S. Todd, *J. Chem. Thermodyn.* **6**, 635–657 (1974).
- 1974MOZ/KOL L. V. Mozhginskay and L. E. Kolysko, *Zh. Fiz. Khim.* **48**, 1506–1507 (1974).
- 1974MUR/TUD R. A. Murogova, G. L. Tudorovskaya, V. V. Laufer, V. D. Koxlova, and L. A. Seraphimov, *Zh. Prikl. Khim.* **47**, 2024–2027 (1974).
- 1974MYA/SCH L. F. Myasnikova, V. A. Schmelev, I. L. Vaisman, V. I. Bushinskii, and D. A. Novokhatka, *Zh. Prikl. Khim. (Leningrad)* **47**, 2604–2606 (1974).
- 1974OSB/DOU A. G. Osborn and D. R. Douslin, *J. Chem. Eng. Data* **19**, 114–117 (1974).
- 1974PEP/LEB V. I. Pepekin, V. P. Lebedev, A. A. Balepin, and Y. A. Lebedev, *Dokl. Akad. Nauk SSSR* **221**, 1118–1121 (1974).
- 1974PEP/MAT V. I. Pepekin, Y. N. Matyushin, and Y. A. Lebedev, *Izv. Akad. Nauk SSSR Ser. Khim.* **23**, 1786–1790 (1974) [Engl. Ed. 1707].
- 1974PEP/NAT V. I. Pepekin, F. Ya. Natsibullin, L. T. Eremenko, and Yu. A. Lebedev, *Izv. Akad. Nauk SSSR Ser. Khim.* 925 (1974).
- 1974PET/SHR K. E. Peterman and J. M. Shreeve, *Inorg. Chem.* **13**, 2705–2709 (1974).
- 1974RAD/KAT L. G. Radchenko and A. I. Kataigorodskii, *Zh. Fiz. Khim.* **48**, 2702–2074 (1972) [Engl. Ed. 1595–1597 (1974)].
- 1974ROG/RAP F. E. Rogers and R. J. Rapiejko, *J. Phys. Chem.* **78**, 599 (1974).
- 1974SAB/CHA R. Sabbah, R. Chastel, and M. Laffite, *Can. J. Chem.* **52**, 2201–2205 (1974).
- 1974SAS/KON Y. Sassa, R. Konishi, and T. Katayama, *J. Chem. Eng. Data* **19**, 44–48 (1974).
- 1974SIN G. C. Sinke, *J. Chem. Thermodyn.* **6**, 311–316 (1974).
- 1974SPR/SHR G. H. Sprenger and J. M. Shreeve, *J. Fluorine Chem.* **4**, 201–205 (1974).
- 1974SUN/WUL S. Sunner and C. A. Wulff, *J. Chem. Thermodyn.* **6**, 287–292 (1974).
- 1974TEP/SUK A. B. Teplitskii, L. F. Sukhodub, and I. K. Yanson, *Fiz. Kondens. Sostoyanuja* **32**, 68–73 (1974); *Chem. Abstr.* **84**, 170535e (1976).
- 1974VAN/HOU A. J. G. Van Diemen, C. J. M. Houten, and H. N. Stein, *J. Chem. Thermodyn.* **6**, 805 (1974).
- 1974VAN/OON J. C. van Miltenburg and H. A. J. Oonk, *Mol. Cryst. Liq. Cryst.* **28**, 167 (1974).
- 1974VAR/BUL R. M. Varushchenko and L. L. Bulgakova, *Tr. Khim. Khim. Tekhnol.* **1**, 69–74 (1974).
- 1974VAR/DRU R. M. Varushchenko, A. I. Druzhimina, O. Y. Kovner, E. M. Mil'vitskaya, A. A. Bobyleva, N. A. Belikova, and G. L. Gal'chenko, *Russ. J. Phys. Chem.* **48**, 1121 (1974).
- 1974VAS/KOR I. A. Vasil'ev and A. D. Korkhov, *Tr. Khim. Khim. Tekhnol.* **103** (1974); *Chem. Abstr.* **82**, 65233r (1975).
- 1974VOI/SHC S. A. Voitkevich, M. M. Shchedrina, K. K. Prilepskaya, and T. A. Rudol'fi, *Masiozhirovanya Prom.* 29 (1974).
- 1974VOR/KOL V. N. Vorob'ev, V. P. Kolesov, E. A. Sarzhina, G. M. Kuramshina, and Yu. A. Pentin, *Zh. Fiz. Khim.* **48**, 239 (1974).
- 1974YAN/VER I. K. Yanson, B. I. Verkin, O. I. Shlyarevskii, and A. B. Teplitskii, *Stud. Biophys.* **46**, 29–44 (1974); *Chem. Abstr.* **83**, 8884a (1975).
- 1974ZHU/MON E. Z. Zhuravlev, N. M. Moncharzh, and V. G. Vodop'yanov, *Tr. Khim. Khim. Tekhnol.* 102–105 (1974).
- 1975ADE/BRO F. A. Adedeji, D. L. S. Brown, J. A. Connor, M. L. Leung, I. M. Paz-Andrade, and H. A. Skinner, *J. Organomet. Chem.* **97**, 221–228 (1975).
- 1975AMB/CON D. Ambrose, J. E. Connett, J. H. S. Green, J. L. Hales, A. J. Head, and J. F. Martin, *J. Chem. Thermodyn.* **7**, 1143–1157 (1975).
- 1975AMB/ELL D. Ambrose, J. H. Ellender, E. B. Lees, C. H. S. Sprake, and R. J. Townsend, *J. Chem. Thermodyn.* **7**, 453–472 (1975).
- 1975AMB/ELL2 D. Ambrose, J. W. Ellender, C. H. S. Sprake, and R. I. Townsend, *J. Chem. Soc., Faraday Trans.* **71**, 35–41 (1975).
- 1975AMB/LAW D. Ambrose, I. J. Lawrenson, and C. H. S. Sprake, *J. Chem. Thermodyn.* **7**, 1173–1176 (1975).
- 1975ANA/GRO S. C. Anand, J.-P. E. Grolier, O. Kiyohara, C. J. Halpin, and G. C. Benson, *J. Chem. Eng. Data* **20**, 184–189 (1975).
- 1975AND/COU R. J. L. Andon, J. F. Counsell, D. A. Lee, and J. F. Martin, *J. Chem. Thermodyn.* **7**, 587 (1975).
- 1975AND/MAR R. J. L. Andon and J. F. Martin, *J. Chem. Thermodyn.* **7**, 593 (1975).
- 1975ANT/CAR M. E. Anthoney, A. S. Carson, and P. G. Laye, 4th Conf. Int. Thermodyn. Chim. [C.R.] **1**, 99–103 (1975).
- 1975ARR/MEL J. Arro, L. Melder, and H. Tamvelius, *Tr. Tallin. Inst. Toimetict.* 37–43 (1975).
- 1975BAG/AND G. V. Bagrov, S. N. Andreev, M. F. Smirnova, and L. A. Vol'f, *Deposited Doc. VINITI* **1196** (1975); *Chem. Abstr.* **87**, 59208y (1977).
- 1975BAR/PIL D. S. Barnes and G. Pilcher, *J. Chem. Thermodyn.* **7**, 377–382 (1975).
- 1975BER/CIN G. Berchiesi, A. Cingolani, and D. Leonesi, *J. Therm. Anal.* **8**, 427 (1975).
- 1975BER/OLO S. Bergstrom and G. Olofsson, *J. Solution Chem.* **4**, 535–555 (1975).
- 1975BOG/BER K. A. Bogdanova, A. A. Berlin, V. Z. Kompanets, G. V. Rakova, E. A. Miroshnichenko, Y. A. Lebedev, and N. S. Enikolopyan, *Vysokomol. Soedin. Ser. A* **17**, 658–664 (1975); *Chem. Abstr.* **83**, 43841f (1975).
- 1975BOR G. Borgen, *Acta Chem. Scand.* **29B**, 265–272 (1975).
- 1975BRA/AND M. M. Brazhnikov, D. N. Andreevskii, A. I. Sachek, and A. D. Peshchenko, *Zh. Prikl. Khim. (Leningrad)* **48**, 2181–2185 (1975).
- 1975BUC/DOM H. Buchowski, U. Domanska, A. Ksiazczak, and A. Maczynski, *Rocz. Chem.* **49**, 1889 (1975).
- 1975BUC/JOD H. Buchowski, W. Jodziewicz, R. Milek, W. Ufnalski, and A. Maczynski, *Rocz. Chem.* **49**, 1879 (1975).
- 1975CAB/CON S. Cabani, G. Conti, D. Giannesi, and L. Lepori, *J. Chem. Soc. Faraday Trans. I* **71**, 1154–1160 (1975).
- 1975CAB/CON2 S. Cabani, G. Conti, V. Mollica, and L. Lepori, *J. Chem. Soc., Faraday Trans. I* **71**, 1943–1945 (1975).
- 1975CAS/VEC F. Casellato, C. Vecchi, A. Girelli, and P. G. Farrell, *Thermochim. Acta* **13**, 37 (1975).
- 1975CHI J. S. Chickos, *J. Chem. Educ.* **52**, 134–136 (1975).
- 1975CHU/DRU K. W. Chun, J. C. Drummond, W. H. Smith, and R. R. Davison, *J. Chem. Eng. Data* **20**, 58–61 (1975).
- 1975CLA/KNO T. Clark, T. Knox, H. Mackle, M. A. McKervey, and J. J. Rooney, *J. Chem. Soc., Faraday Trans. I* **71**, 2107–2110 (1975).
- 1975CUC A. Cuccuru, *Thermochim. Acta* **13**, 96–99 (1975).
- 1975CUC2 A. Cuccuru, *Thermochim. Acta* **11**, 247–251 (1975).
- 1975DEK/VAN C. G. DeKruif, C. H. D. van Ginkel, and J. Voogd, 4th Conf. Int. Thermodyn. Chim. [C.R.] **8**, 11–18 (1975), as cited in [1982COL/JIM].
- 1975DEM/KOV R. A. De Marco, T. A. Kovacina, and W. B. Fox, *J. Fluorine Chem.* **5**, 221–230 (1975).
- 1975DEM/KOV2 R. A. De Marco, T. A. Kovacina, and W. B. Fox, *J. Fluorine Chem.* **6**, 93–104 (1975).
- 1975FEN/HAR J. O. Fenwick, D. Harrop, and A. J. Head, *J. Chem. Thermodyn.* **7**, 943–954 (1975).
- 1975FRE/ADA H. K. Frensdorff and R. K. Adams, *J. Chem. Eng. Data* **20**, 13–15 (1975).
- 1975GAR/STY V. I. Garanin, G. F. Sytchinskii, and O. D. Sinyakina, *Neftepererab. Neftekhim.* 39 (1975); *Chem. Abstr.* **84**, 50413.
- 1975GOM/SEE W. Gombler and F. Seel, *Z. Naturforsch.* **30B**, 169 (1975).

- 1975GOO/MES W. D. Good, J. F. Messerly, A. G. Osborn, and D. R. Douslin, *J. Chem. Thermodyn.* **7**, 285–291 (1975).
- 1975GRO H. A. J. Grovers, *Acta Cryst. A* **31**, 380–385 (1975).
- 1975HOE/HOE C. Hoerner, A. Hoepfner, and B. Schmeiser, *Ber. Bunsenges Phys. Chem.* **79**, 222–225 (1975).
- 1975HOE/PAR A. Hoepfner, N. Parekh, C. Hoerner, and A. Abdel-Hamid, *Ber. Bunsenges Phys. Chem.* **79**, 216–222 (1975).
- 1975IRV/RIB R. J. Irving and M. A. V. Ribeiro da Silva, *J. Chem. Soc., Dalton Trans.* **1975**, 798–800.
- 1975IWA/DAT H. Iwasaki and K. Date, *Koatsu Gasu* **12**, 374–380 (1975).
- 1975KIR/LAS R. L. Kirchmeier, U. I. Lasouris, and J. M. Shreeve, *Inorg. Chem.* **14**, 592–596 (1975).
- 1975KON/SEL I. I. Konstantinov, V. D. Selivanov, and T. I. Melent'eva, *Zh. Fiz. Khim.* **49**, 1058–1060 (1975).
- 1975KOR/VIA A. I. Korovin and O. N. Viasov, *Zh. Fiz. Khim.* **49**, 2149 (1975).
- 1975KUN/LIL H. Kundel, U. Lille, and N. Kaidas, *Tr. Tallin. Politekh. Inst.* **390**, 107–115 (1975).
- 1975KUS/SAI K. Kusano and Y. Saito, Preprints, 33rd Annu. Meeting Chem. Soc., Jpn. **1**, 123 (1975), as quoted in [1985MAJ/SVO].
- 1975LEB/TSV B. V. Lebedev, L. Y. Tsvetkova, E. G. Kiparisova, and N. K. Lebedev, *Russ. J. Phys. Chem.* **49**, 1265 (1975).
- 1975LEE/SLU W. Y. Lee and L. J. Slutsky, *J. Phys. Chem.* **79**, 2602–2604 (1975).
- 1975MAN/KOR J. Manczinger and G. Kortum, *Z. Phys. Chem. Neue Folge* **95**, 177 (1975).
- 1975MAS/SCO J. F. Masi and R. B. Scott, *J. Res. Natl. Bur. Stand. Sect. A* **79**, 619–628 (1975).
- 1975MCE/SAN D. M. McEachern, O. Sandoval, and J. C. Iniguez, *J. Chem. Thermodyn.* **7**, 299–306 (1975).
- 1975MES/BAE U. Messow, J. Baer, K. Quitzsch, and G. Geiseler, *J. Prakt. Chem.* **317**, 114–122 (1975).
- 1975MES/FIN J. F. Messerly, H. L. Finke, A. G. Osborn, and D. R. Douslin, *J. Chem. Thermodyn.* **7**, 1029–1046 (1975).
- 1975PAU L. E. Paukov, *Russ. J. Phys. Chem.* **49**, 265 (1975).
- 1975PEP/MAT V. I. Pepekin, Y. N. Matyushin, A. D. Nikolaeva, A. P. Kirsanov, L. V. Platonova, and Y. A. Lebedev, *Izv. Akad. Nauk SSSR Ser. Khim.* 1870–1871 (1975).
- 1975PET/SAN V. M. Petrov and L. Sandler, *Zh. Fiz. Khim.* **49**, 2797–2800 (1975).
- 1975PET/SHR K. E. Peterman and J. M. Shreeve, *Inorg. Chem.* **14**, 1106–1110 (1975).
- 1975PET/SHR2 K. E. Peterman and J. M. Shreeve, *Inorg. Chem.* **14**, 1223–1228 (1975).
- 1975PET/SHR3 K. E. Peterman and J. M. Shreeve, *J. Fluorine Chem.* **6**, 83–92 (1975).
- 1975PIS/ROZ V. V. Pisarev, A. M. Rozhnov, R. M. Varushchenko, and A. G. Sarkisov, *Russ. J. Phys. Chem.* **49**, 1450–1451 (1975).
- 1975PIS/ROZ2 V. V. Pisarev, A. M. Rozhnov, R. M. Varushchenko, and A. G. Sarkisov, *Russ. J. Phys. Chem.* **49**, 1605 (1975).
- 1975RAK/GUT S. S. Rakhmenkulov, S. A. Gutov, and I. E. Paulov, *Zh. Fiz. Khim.* **49**, 2722 (1975).
- 1975RIV F. Rivenq, *Bull. Soc. Chim. Fr.* 2433–2434 (1975).
- 1975SOU/BAR M. A. Soulie, D. A. Bares, and J. Metzger, *C. R. Seances Acad. Sci., Ser. C* **281**, 341 (1975).
- 1975SUB/ZWO D. J. Subach and B. J. Zwolinski, *J. Chem. Eng. Data* **20**, 232–234 (1975).
- 1975TEP/YAN A. B. Teplitskii and I. K. Yanson, *Biofizik* **20**, 189–193 (1975); *Chem. Abstr.* **83**, 16712h (1975).
- 1975URB/TOM S. Urban, Z. Tomkowicz, J. Mayer, and T. Waluga, *Acta Phys. Pol., A* **48**, 61 (1975).
- 1975VAN/DEK C. H. D. van Ginkel, G. C. DeKruif, and F. E. B. DeWaal, *J. Phys. E: Sci. Instrum.* **8**, 490–492 (1975).
- 1975VAR/DRU R. M. Varushchenko and A. I. Druzhinina, *Zh. Fiz. Khim.* **49**, 2446 (1975).
- 1975VIL/PER R. Vilcu, S. Perisanu, and I. Ciocazanu, 4th Conf. Int. Thermodyn. Chim. [C.R.] **1**, 105–112 (1975).
- 1975WAL/DES N. S. Walker and D. D. DesMarteau, *J. Fluorine Chem.* **5**, 127–133 (1975).
- 1975WAL/DES2 N. S. Walker and D. D. DesMarteau, *J. Fluorine Chem.* **5**, 135–139 (1975).
- 1975YAN/TEP I. K. Yanson and A. B. Teplitskii, *Zh. Fiz. Khim.* **49**, 736–738 (1975) [Engl. Ed. 428–429 (1975)].
- 1976AMB/ELL D. Ambrose, J. H. Ellender, C. H. S. Sprake, and R. J. Townsend, *J. Chem. Thermodyn.* **8**, 165–178 (1976).
- 1976AMB/SPR D. Ambrose and C. H. S. Sprake, *J. Chem. Thermodyn.* **8**, 601–602 (1976).
- 1976AMM/BUL M. M. Ammar, L. L. Bulgakova, and R. M. Varushchenko, *Russ. J. Phys. Chem.* **50**, 1466–1467 (1976).
- 1976ANT/CAR M. E. Anthoney, A. S. Carson, and P. G. Laye, *J. Chem. Soc., Perkin Trans. 2* **1976**, 1032–1036.
- 1976ANT/CAR2 M. E. Anthoney, A. S. Carson, P. G. Laye, and M. Yurekli, *J. Chem. Thermodyn.* **8**, 1009–1110 (1976).
- 1976ASH S. J. Ashcroft, *J. Chem. Eng. Data* **21**, 397–398 (1976).
- 1976ATA/CHI T. Atake and H. Chihara, *Chem. Lett.* **1976**, 683–688.
- 1976BAR/BOU M. A. Barnard, Y. Boukari, and F. Busnot, *Thermochim. Acta* **16**, 267–275 (1976).
- 1976BER/BOU M. A. Bernard, Y. Boukari, and F. Busnot, *Thermochim. Acta* **16**, 267 (1976).
- 1976BOR/CHU G. K. Borisov and S. G. Chugunova, *Russ. J. Phys. Chem.* **50**, 1791 (1976).
- 1976BRA/PES M. M. Brazhnikov, A. D. Peshchenko, and O. V. Ral'ko, *Zh. Prikl. Khim.* (Leningrad) **49**, 1041–1044 (1976).
- 1976BUR/SHR C. A. Burton and J. M. Shreeve, *J. Am. Chem. Soc.* **98**, 6545–6547 (1976).
- 1976CIH/HYN J. Cihlar, V. Hynek, V. Svoboda, and R. Holub, *Collect. Czech. Chem. Commun.* **41**, 1–6 (1976).
- 1976COL/JIM M. Colomina, P. Jimenez, R. Perez-Ossorio, and C. Turrión, *J. Chem. Thermodyn.* **8**, 439–444 (1976).
- 1976CON/COU J. E. Connett, J. F. Counsell, and D. A. Lee, *J. Chem. Thermodyn.* **8**, 1199–1203 (1976).
- 1976DAV/FIN R. H. Davies, A. Finch, P. J. Gardner, A. Hameed, and M. Stephens, *J. Chem. Soc., Dalton Trans.* **1976**, 556–558.
- 1976DEP R. S. DePablo, *J. Chem. Eng. Data* **21**, 141–143 (1976).
- 1976DWO/FIG A. Dworkin, P. Figuiere, M. Ghelfenstein, and H. Szwarc, *J. Chem. Thermodyn.* **8**, 835 (1976).
- 1976ENG/MEL P. S. Engel, R. A. Melaugh, M. Mansson, J. W. Timberlake, A. Garner, and F. D. Rossini, *J. Chem. Thermodyn.* **8**, 607–621 (1976).
- 1976FAL/DES E. R. Falardeau and D. D. DesMarteau, *J. Fluorine Chem.* **7**, 185–195 (1976).
- 1976FAL/DES2 E. R. Falardeau and D. D. DesMarteau, *J. Fluorine Chem.* **7**, 409–414 (1976).
- 1976FAL/DES3 E. R. Falardeau and D. D. DesMarteau, *J. Am. Chem. Soc.* **98**, 3529 (1976).
- 1976FER/PIA D. Ferro, V. Piacente, R. Gigli, and G. D'Ascenzo, *J. Chem. Thermodyn.* **8**, 1137–1143 (1976).
- 1976FIN/MES H. L. Finke, J. F. Messerly, and D. R. Douslin, *J. Chem. Thermodyn.* **8**, 965 (1976).
- 1976GEI/WOL G. Geipel and G. Wolf, *Z. Phys. Chem.* **257**, 587 (1976).
- 1976HA/MOR H. Ha, J. A. Morrison, and E. L. Richards, *J. Chem. Soc., Faraday Trans. 1* **72**, 1051–1057 (1976).
- 1976HAM/THO W. S. Hamilton, P. Thomsson, and S. Pustejovsky, *J. Chem. Eng. Data* **21**, 428–429 (1976).
- 1976HON/SIN H. C. Hon, R. P. Singh, and A. P. Kudchadker, *J. Chem. Eng. Data* **21**, 430–431 (1976).
- 1976HOP/DES M. J. Hopkinson and D. D. DesMarteau, *J. Fluorine Chem.* **7**, 501–510 (1976).
- 1976KOL/SLA V. P. Kolesov, G. M. Slavutskaya, and L. N. Dityat'eva, *J. Chem. Thermodyn.* **8**, 907–914 (1976).
- 1976KOZ/ALE M. P. Kozina, V. A. Aleshina, G. L. Gal'chenko, E. F. Buinova, and I. I. Bardyshev, *Vestsi Akad. Navuk BSSR Ser. Khim. Vavuk* **14** (1976); *Chem. Abstr.* **85**, 33197 (1976).
- 1976KOZ/BYC M. P. Kozina, L. V. Bychikhina, G. V. Gal'chenko, E. M. Milwitskaya, M. Ordubade, and A. F. Plate, *Dokl. Akad. Nauk SSSR* **226**, 1105–1108 (1976) [Engl. Ed. 143 (1976)].
- 1976KUS/SAI Joint meeting Kyushu, Chungoku and Skikoku Branches of Chem. Soc. Jpn. **60**, (1976).
- 1976KUZ/MIR V. P. Kuznetsova, E. A. Miroshinichenko, A. Z. Zelenetskii, G. V. Rokova, Y. A. Lebedev, and N. S. Enikolopyan, *Dokl. Phys. Chem.* **226**, 147–150 (1976).

- 1976LEC/COL M. Leclercq, A. Collet, and J. Jacques, *Tetrahedron* **32**, 821–828 (1976).
- 1976MEY/HOT E. F. Meyer and C. A. Hotz, *J. Chem. Eng. Data* **21**, 274–279 (1976).
- 1976MIR/LEB E. A. Miroshnichenko and Y. A. Lebedev, *Vzaimod-eistvie Konform. Mol. Tezisy Dokl. Vses. Simp. 3rd* **40** 41 (1976), in *Mezhnol.; Chem. Abstr.* **91**, 56104 h (1979).
- 1976MIS/RIE S. Miskiewicz, K. Rieser, and T. Dorfmueller, *Ber. Bunsen-ges. Phys. Chem.* **80**, 395–405 (1976).
- 1976MOR/RIC J. A. Morrison and E. J. Richards, *J. Chem. Thermodyn.* **8**, 1033 (1976).
- 1976PEL P. A. Pella, *Anal. Chem.* **48**, 1632–1637 (1976).
- 1976RAO/CHI K. V. Rao and C. Chiranjivi, *J. Chem. Eng. Data* **21**, 393–394 (1976).
- 1976STA/MEW I. Stahl, R. Mews, and O. Glemser, *J. Fluorine Chem.* **7**, 55–64 (1976).
- 1976STE/POL K. Steele, B. E. Poling, and D. B. Manley, *J. Chem. Eng. Data* **21**, 399–403 (1976).
- 1976STR G. Stridh, *J. Chem. Thermodyn.* **8**, 193–194 (1976).
- 1976STR3 G. Stridh, *J. Chem. Thermodyn.* **8**, 901–906 (1976).
- 1976TAY/CRO J. W. Taylor and R. J. Crookes, *J. Chem. Soc., Faraday Trans. 1* **72**, 723–729 (1976).
- 1976VAR/BUL R. M. Varushchenko and L. L. Bulgakova, *Tr. Khim. Khim. Tekhnol.* **3**, 29–33 (1976).
- 1976VOG/PIT G. J. Vogt and K. S. Pitzer, *J. Chem. Thermodyn.* **8**, 1011 (1976).
- 1977ALE/KOZ V. A. Aleshina, M. P. Kozina, and G. L. Gal'chenko, *Vses. Konf. Kalorim. [Rasshir. Tezisy Dokl.] 7th* **1**, 85–91 (1977); *Chem. Abstr.* **92**, 94582r (1980).
- 1977BIG/FUK J. Bigeleisen, S. Fuks, S. W. Ribnikar, and Y. Yato, *J. Chem. Phys.* **66**, 1689 (1977).
- 1977BOL/MAK N. I. Boldenkov and Y. Y. Maksimov, *Zh. Fiz. Khim.* **51**, 1502–1504 (1977).
- 1977BUR A. B. Burg, *Inorg. Chem.* **16**, 379 (1977).
- 1977BUR/SHR C. A. Burton and J. M. Shreeve, *Inorg. Chem.* **16**, 1039–1042 (1977).
- 1977BUR/SHR2 C. A. Burton and J. M. Shreeve, *Inorg. Chem.* **16**, 1408–1411 (1977).
- 1977CAM/SCH H. K. Cammenga, F. W. Schulze, and W. Theuerl, *J. Chem. Eng. Data* **22**, 131–134 (1977).
- 1977CAR/LAY A. S. Carson, P. G. Laye, and M. Yurkeli, *J. Chem. Ther-modyn.* **9**, 827–829 (1977).
- 1977CAS/VEC F. Casellato, C. Vecchi, and A. Girelli, *Thermochim. Acta* **21**, 195–199 (1977).
- 1977CLA/KNO T. Clark, T. M. O. Knox, H. Mackle, and M. A. McKervey, *J. Chem. Soc. Faraday Trans. 1* **73**, 1224–1231 (1977).
- 1977DAS/REE T. R. Das, C. O. Reed, Jr., and P. T. Eubank, *J. Chem. Eng. Data* **22**, 3–9 (1977).
- 1977DAS/REE2 T. R. Das, C. O. Reed, Jr., and P. T. Eubank, *J. Chem. Eng. Data* **22**, 9–15 (1977).
- 1977DAS/REE3 T. R. Das, C. O. Reed, Jr., and P. T. Eubank, *J. Chem. Eng. Data* **22**, 16–21 (1977).
- 1977DEK/VAN C. G. DeKruif and C. H. D. van Ginkel, *J. Chem. Ther-modyn.* **9**, 725–730 (1977).
- 1977DIT/KOL L. N. Dityat'eva and V. P. Kolesov, *Vses. Konf. Kalorim. [Rasshir. Tezisy Dokl.] 7th* **1**, 95–97 (1977); *Chem. Abstr.* **92**, 58009a (1980).
- 1977FEL/PET I. N. Fel'dman, D. S. Petrenko, V. O. Avilov, G. S. Stuchkov, M. Kh. Aizenshtadt, and V. S. Freger, *Zh. Fiz. Khim.* **51**, 1002 (1977).
- 1977FRA J. Franklin, Ph.D. thesis, University of Leeds, 1977.
- 1977GAF/PIE J. S. Gaffney, R. C. Pierce, and L. Friedman, *J. Am. Chem. Soc.* **99**, 4293–4298 (1977).
- 1977GOM W. Gombler, *Angew. Chem., Int. Ed. Engl.* **16**, 723 (1977).
- 1977HAI/SUG O. Haida, H. Suga, and S. Seki, *Bull. Chem. Soc. Jpn.* **50**, 802 (1977).
- 1977KIM/KIM B. C. Kim and D. H. Kim, *Hwahak Kwa Hwahak Kongop* **20**, 232–234 (1977); *Chem. Abstr.* **88**, 95565s (1978).
- 1977KIS K. Kishore, *Propellants, Explos., Pyrotech.* **2**, 78 (1977).
- 1977KIT/SHR T. Kitazume and J. M. Shreeve, *Inorg. Chem.* **16**, 1818–1819 (1977).
- 1977KIT/SHR2 T. Kitazume and J. M. Shreeve, *J. Am. Chem. Soc.* **99**, 3690–3695 (1977).
- 1977KIT/SHR3 T. Kitazume and J. M. Shreeve, *J. Am. Chem. Soc.* **99**, 4194–4196 (1977).
- 1977KOR/VAS A. D. Korkhov and I. A. Vasil'ev, *Termodin. Org. Soedin.* **34** (1977).
- 1977KOZ/BYC M. P. Kozina, V. L. Bychikhina, and G. L. Gal'chenko, *Zh. Fiz. Khim.* **51**, 2142 (1977) [Engl. Ed. 1258–1259].
- 1977KRE/PRI M. J. Krech, S. W. Price, and H. Sapiano, *Can. J. Chem.* **55**, 4222–4226 (1977).
- 1977LEB/LIT B. V. Lebedev and V. Ya Lityagov, *Vysokomol. Soedin.* **B19**, 558 (1977).
- 1977LEB/NAZ N. D. Lebedeva, L. F. Nazarova, and Y. Katin, *Termodin. Org. Soedin.* **6**, 72–73 (1977).
- 1977LEB/RYA N. D. Lebedeva, V. L. Ryadnenko, N. N. Kiseleva, and L. F. Nazarova, *Vses. Konf. Kalorim. [Rasshir. Tezisy Dokl.] 7th* **1**, 91–95 (1977); *Chem. Abstr.* **92**, 75617q (1980).
- 1977LYU/SMO M. V. Lyubarskii and R. I. Smolyanets, *Vses. Konf. Kalorim. [Rasshir. Tezisy Dokl.] 7th* **1**, 119–121 (1977); *Chem. Abstr.* **92**, 75619s (1980).
- 1977MAN/SEL M. Mansson, P. Sellers, G. Stridh, and S. Sunner, *J. Chem. Thermodyn.* **9**, 91–97 (1977).
- 1977MEI/BLO E. L. Meijer, J. G. Blok, J. Kroon, and H. A. J. Oonk, *Thermochim. Acta* **20**, 325 (1977).
- 1977MEY/GEN E. F. Meyer and T. H. Gens, *J. Chem. Eng. Data* **22**, 30–31 (1977).
- 1977NAB/SAB M. Nabavian, R. Sabbah, R. Chastel, and M. Laffitte, *J. Chim. Phys. Phys.-Chim.* **74**, 115–126 (1977).
- 1977NGA/SAB S. N. Ngauv, R. Sabbah, and M. Laffitte, *Thermochim. Acta* **20**, 371–380 (1977).
- 1977NOF/FOX R. E. Nofle and W. B. Fox, *J. Fluorine Chem.* **9**, 219 (1977).
- 1977NOV/NOV N. Novakova and J. Novak, *J. Chromatogr.* **135**, 13–24 (1977).
- 1977PAR/STE W. Parker, W. V. Steele, and I. Watt, *J. Chem. Thermodyn.* **9**, 307–310 (1977).
- 1977PEA/FUC L. A. Peacock and R. Fuchs, *J. Am. Chem. Soc.* **99**, 5524–5525 (1977).
- 1977PED/RYL J. B. Pedley and J. Rylance, *N. P. L. Computer Anal-ysed Thermochemical Data: Organic and Organometallic Compounds* (School of Molecular Sciences, University Of Sussex, Brighton, UK, 1977).
- 1977PEL P. A. Pella, *J. Chem. Thermodyn.* **9**, 301–305 (1977).
- 1977PIS/ROZ V. V. Pisarev, A. M. Rozhnov, and A. G. Sarkisov, *Russ. J. Phys. Chem.* **51**, 323–324 (1977).
- 1977RAO/VIU J. J. Rao and D. S. Viuswanath, *J. Chem. Eng. Data* **22**, 36–38 (1977).
- 1977SAB/NAB R. Sabbah, M. Nabavian, and M. Laffitte, *C. R. Hebd. Seances Acad. Ser. C* **284**, 953–954 (1977); *Chem. Abstr.* **87**, 151519y (1977).
- 1977SEL P. Sellers, *J. Chem. Thermodyn.* **9**, 139–142 (1977).
- 1977STE W. V. Steele, *J. Chem. Thermodyn.* **9**, 311–314 (1977).
- 1977STE2 H. Steinwandter, *Chemosphere* **6**, 59–65 (1977); *Chem. Abstr.* **87**, 17285r (1977).
- 1977STRI/SUN G. Stridh, S. Sunner, and C. Svenson, *J. Chem. Thermo-dyn.* **9**, 1005–1010 (1977).
- 1977SVO/MAJ V. Svoboda, V. Majer, F. Vesely, and J. Pick, *Collect. Czech. Chem. Commun.* **42**, 1755–1760 (1977).
- 1977SVO/VES V. Svoboda, F. Vesely, R. Holub, and J. Pick, *Collect. Czech. Chem. Commun.* **42**, 943–951 (1977).
- 1977VAR/AMM R. M. Varushchenko, M. M. Ammar, and L. L. Bulgakova, *Zh. Fiz. Khim.* **51**, 278–279 (1977).
- 1977VAR/AMM2 R. M. Varushchenko, M. M. Ammar, and L. L. Bulgakova, *Russ. J. Phys. Chem.* **51**, 167–168 (1977).
- 1977VAS/KOT T. F. Vasil'eva and V. I. Kotov, *Vses. Konf. Kalorim. [Rasshir. Tezisy Dokl.] 7th* **1**, 102–106 (1977); *Chem. Abstr.* **92**, 58010u (1980).
- 1977VAS/PET T. F. Vasil'eva and V. M. Petrov, *Termodin. Org. Soedin.* **6**, 74 (1977).
- 1977VOI/SHC S. A. Voitkevich, M. M. Shchedrina, K. K. Prilepskaya, N. P. Solov'eva, T. M. Tsirkel, and T. A. Rudol'fi, *Maslozhir. Prom-st.* **23** (1977).

- 1977VOI/SHC2 S. A. Voitkevich, M. M. Shchedrina, K. K. Prilepskaya, N. P. Solov'eva, T. M. Tsirkel, and T. A. Rudol'fi, *Maslozhir. Prom-st.* **35** (1977).
- 1977ZHU/MEL E. Z. Zhuravlev, T. L. Melent'eva, P. V. Mulyanov, A. I. Kormushechkina, T. M. Bogdanova, and I. I. Konstantinov, *Zh. Prikl. Khim. (Leningrad)* **50**, 2032–2035 (1977).
- 1978AND/CAR J. T. S. Andrews, R. E. Carpenter, T. M. Martinko, R. C. Fort, R. C. Jr., T. A. Flood, and M. G. Adlington, *Mol. Cryst. Liq. Cryst.* **41**, 257–261 (1978).
- 1978ARO/STE M. Arora and W. V. Steele, *J. Chem. Thermodyn.* **10**, 403–407 (1978).
- 1978BEA/LEE P. Beak, J.-K. Lee, and J. M. Zeigler, *J. Org. Chem.* **43**, 1536 (1978).
- 1978BER/SPI C. V. Berney and D. Spickerman, *J. Chem. Thermodyn.* **10**, 637–640 (1978).
- 1978BOU/LEC D. Bougeard, N. A. Le Calve, A. Novak, and B. C. Nguyen, *Mol. Cryst. Liq. Cryst.* **44**, 113–123 (1978).
- 1978CAB/MOL S. Cabani, V. Mollica, and L. Lepori, *J. Chem. Soc., Faraday Trans. 1* **74**, 2667 (1978).
- 1978CAL/CAL C. D. H. Calis-Van Ginkel, G. H. M. Calis, C. W. M. Timmermans, C. G. DeKruif, and H. A. J. Oonk, *J. Chem. Thermodyn.* **10**, 1083–1088 (1978).
- 1978CAN S. Cantor, *Thermochim. Acta* **26**, 39–47 (1978).
- 1978CAV/CHA S. D. Cave, A. Chainese, and A. Prantera, *J. Chem. Eng. Data* **23**, 279–281 (1978).
- 1978CHI/SHE J. S. Chickos and D. E. Sherwood, *J. Org. Chem.* **43**, 1146–1150 (1978).
- 1978COL/JIM M. Colomina, P. Jimenez, M. V. Roux, and C. Turrión, *J. Chem. Thermodyn.* **10**, 661–665 (1978).
- 1978COR/PER R. P. Corbally, M. J. Perkins, A. S. Carson, P. G. Laye, and W. V. Steele, *J. Chem. Soc., Chem. Commun.* **1978**, 778–779.
- 1978CUN/PAL R. B. Cundall, T. F. Palmer, and C. E. C. Wood, *J. Chem. Soc., Faraday Trans. 1* **74**, 1339–1345 (1978).
- 1978DEM/FOX R. A. De Marco and W. B. Fox, *J. Fluorine Chem.* **12**, 137–151 (1978).
- 1978DEP R. S. DePablo, *J. Phys. D: Appl. Phys.* **11**, 193–199 (1978).
- 1978DOZ/FUJ Y. Dozen, H. Fujishima, and H. Shingu, *Thermochim. Acta* **25**, 209–216 (1978).
- 1978ECK/MUL T. Eckert and J. Muller, *Arch. Pharm.* **311**, 31 (1978).
- 1978ENG/MON P. S. Engel, R. L. Montgomery, M. Mansson, R. A. Leckonby, H. L. Foyt, and F. D. Rossini, *J. Chem. Thermodyn.* **10**, 205–211 (1978).
- 1978FUC/PEA R. Fuchs and L. A. Peacock, *Can. J. Chem.* **56**, 2493–2498 (1978).
- 1978GOD/RAC M. Godleweka and M. Rachwalska, *Rap.-Inst. Fiz. Jad (Krakow)* **997/PS**, 1–14 (1978).
- 1978GOD/RAC2 M. Godleweka and M. Rachwalska, *Phys. Status Solidi A* **47**, 661 (1978).
- 1978GRO/SPE R. Grover, W. F. Spencer, W. J. Farmer, and T. D. Shoup, *Weed Sci.* **26**, 505–508 (1978).
- 1978GUN/HEA H. A. Gundry and A. J. Head, *J. Chem. Thermodyn.* **10**, 195 (1978).
- 1978HAM/BEN W. S. Hamilton, S. Benton, J. French, D. McCormick, S. Pustejovsky, and P. J. Thomspson, *J. Chem. Eng. Data* **23**, 201–203 (1978).
- 1978HEA/HEF G. A. Heath, G. T. Hefter, and W. V. Steele, *J. Chem. Thermodyn.* **10**, 395–401 (1978).
- 1978IND/STO D. Indritz, J. Stone, and F. Williams, *J. Chem. Eng. Data* **23**, 6–7 (1978).
- 1978KAC/SOL A. J. Kacmarek, I. J. Solomon, and M. Lustig, *J. Inorg. Nucl. Chem.* **40**, 574 (1978).
- 1978KAR/RAB N. V. Karyakin, I. B. Rabinovich, and N. G. Pal'tseva, *Vysok. Soedin. Ser. A* **20**, 2025 (1978).
- 1978KIS/SUG K. Kishimoto, H. Suga, and S. Seki, *Bull. Chem. Soc. Jpn.* **51**, 1691–1696 (1978).
- 1978KIT/SHR T. Kitazume and J. M. Shreeve, *Inorg. Chem.* **17**, 2173–2176 (1978).
- 1978KOL/DIT V. P. Kolesov and L. N. Dityat'eva, *Termodin. Org. Soedin.* **7**, 44–47 (1978); *Chem. Abstr.* **92**, 75657c (1980).
- 1978KOS/KOL E. A. Kosarukina, V. P. Kolesov, V. N. Vorob'ev, and L. Fogel, *Zh. Fiz. Khim.* **52**, 509 (1978).
- 1978LEB/RAB2 B. V. Lebedev, I. B. Rabinovich, V. I. Milov, and V. Ya Lityagov, *J. Chem. Thermodyn.* **10**, 321 (1978).
- 1978LEB/TSV B. V. Lebedev, L. Y. Tsvetkova, and I. B. Rabinovich, *J. Chem. Thermodyn.* **10**, 809–815 (1978).
- 1978LEB/TSV2 B. V. Lebedev, L. Y. Tsvetkova, I. B. Rabinovich, E. S. Finkel'shtein, and B. S. Strel'chick, *Termodin. Org. Soedin.* **7**, 3–7 (1978); *Chem. Abstr.* **92**, 83507u (1980).
- 1978LUK/MAK V. M. Luk'yanets, R. G. Makitra, and A. Yas'kovyay, *Ukr. Khim. Zhur.* **44**, 392 (1978).
- 1978MAR/CIO D. I. Marchidan and M. Ciopec, *Rev. Roum. Chim.* **23**, 19 (1978).
- 1978MAR/CIO2 D. I. Marchidan and M. Ciopec, *J. Therm. Anal.* **14**, 131 (1978).
- 1978MAT/TRA N. B. Matin, V. I. Tranchenko, E. Grigoryan, S. M Danov, and E. N. Zil'berman, *Zh. Priklad. Khim.* **51**, 1900 (1978).
- 1978MCC/HAM D. G. McCormick and W. S. Hamilton, *J. Chem. Thermodyn.* **10**, 275–278 (1978).
- 1978MON/ENG R. L. Montgomery, P. S. Engel, R. A. Leckonby, F. D. Rossini, M. Mansson, S. Szilagyi, and J. W. Timberlake, *J. Chem. Eng. Data* **23**, 129–131 (1978).
- 1978MOS/RAB E. M. Moseeva, I. B. Rabinovich, G. I. Busygina, V. A. Safonov, and E. Yu Ovchinnikov, *Termodin. Org. Soedin.* **7**, 8 (1978).
- 1978MOU A. H. N. Mousa, *J. Chem. Eng. Data* **23**, 133–134 (1978).
- 1978NOW/SZC M. J. Nowak, K. Szczepaniak, A. Barski, and D. Z. Shugar, *Natureforsch. C: Biosci.* **33C**, 876–883 (1978).
- 1978RIB/IRV M. A. V. Ribeiro da Silva and R. G. Irving, *Rev. Port. Quim.* **20**, 36–46 (1978); *Chem. Abstr.* **90**, 211054s (1979).
- 1978ROD/HIL R. C. Rodgers and G. E. Hill, *Br. J. Anaesth.* **50**, 415 (1978).
- 1978SAB/LAF R. Sabbah and M. Laffite, *Bull. Soc. Chem. France, Ptie 1*, 50–52 (1978).
- 1978SEK/TSU K. Sekiguchi, Y. Tsuda, M. Kanke, E. Suzuki, and M. Iwatsuru, *Chem. Pharm. Bull.* **26**, 1279 (1978).
- 1978SMI/RAE J. H. Smith and A. I. M. Rae, *J. Phys. C: Solid State Phys.* **11**, 1771 (1978).
- 1978SMI/ZEL G. E. Smirnova, Ya. D. Zel'venski, V. A. Shalygin, G. A. Sukhorukova, and T. X. Dzhekseneva, *Mosk. Khim.-Teknol. Inst. Mockov USSR VINITI* **3298-78**, 9 (1978).
- 1978STA/MEW I. Stahl, R. Mews, and O. J. Glemser, *Fluorine Chem.* **11**, 455–465 (1978).
- 1978STE W. V. Steele, *J. Chem. Thermodyn.* **10**, 585–590 (1978).
- 1978STE2 W. V. Steele, *J. Chem. Thermodyn.* **10**, 919–927 (1978).
- 1978STR/ROG R. Stryjek, M. Rogalski, T. Treszczanowicz, and M. Luszczuk, *Bull. Acad. Pol. Sci., Ser. Sci. Chim.* **26**, 327 (1978).
- 1978SUN/VIS S. Sundaram and D. S. Viswanath, *J. Chem. Eng. Data* **23**, 63–64 (1978).
- 1978TRI/VOO L. E. Trimble and R. J. H. Voorhoeve, *Analyst* **103**, 759–765 (1978).
- 1978VIL R. Vilcu, *Bull. Inst. Politek "Gheorghe Gheorghiu-Dej" Bucuresti Ser. Chim.-Metal* **40**, 2 (1978).
- 1978VIL/PER R. Vilcu, S. Perisanu, and I. Ciocazanu, *Bull. Inst. Politek "Gheorghe Gheorghiu-Dej" Bucuresti Ser. Chim.-Metal* **40**, 9–12 (1978); *Chem. Abstr.* **91**, 28258t (1979).
- 1979ARM/JAM N. A. Armstrong, K. C. James, and C. K. Wong, *J. Pharm. Pharmacol.* **31**, 627–631 (1979).
- 1979ARN/CHA E. M. Arnett and B. Chawla, *J. Am. Chem. Soc.* **101**, 7141 (1979).
- 1979BAL/FRI M. Balish and V. J. Fried, *Chem. Eng. Data* **24**, 91–92 (1979).
- 1979BER/ANG G. Berthon, V. Angot, V. Beden, and O. Enea, *J. Chem. Thermodyn.* **11**, 539–546 (1979).
- 1979BLU/BAE V. I. Bludilina, A. K. Baev, V. K. Matveev, I. L. Gaidym, and E. I. Shcherbina, *Zh. Fiz. Khim.* **53**, 1052–1053 (1979); *Chem. Abstr.* **91**, 9585f (1979).
- 1979BOT/CAM H. Bothe and H. K. Cammenga, *J. Therm. Anal.* **16**, 267–275 (1979).

- 1979BRI/VAN W. J. Briels and J. C. van Miltenburg, *J. Chem. Phys.* **70**, 1064 (1979).
- 1979CAV/HIL K. J. Cavell, J. O. Hill, and R. J. Magee, *Thermochim. Acta* **33**, 155–160 (1979).
- 1979CAV/PIN R. G. Cavell, A. A. Pinkerton, W. Sim, and A. Tomlinson, *Inorg. Chem.* **18**, 2901 (1979).
- 1979CLA/KNO T. Clark, T. M. Knox, M. A. McKervey, H. Mackle, and J. Rooney, *J. Am. Chem. Soc.* **101**, 2404–2410 (1979).
- 1979COL/JIM2 M. Colomina, P. Jimenez, M. V. Roux, and C. Turrión, *An. Quim.* **75**, 620–624 (1979); *Chem. Abstr.* **92**, 75685k (1980).
- 1979DAA/VAN H. Daamen, H. Van der Poel, D. J. Stufkens, and A. Oskam, *Thermochim. Acta* **34**, 69–83 (1979).
- 1979DAS/DHA D. Das, S. R. Dharwadkar, and M. S. Chandrasekharaiah, *Thermochim. Acta* **30**, 371–376 (1979).
- 1979DEK/OON C. G. De Kruif and H. A. Oonk, *J. Chem. Thermodyn.* **11**, 287–290 (1979).
- 1979DEK/VOO C. G. DeKruif, J. Voogd, and J. C. A. Offringa, *J. Chem. Thermodyn.* **11**, 651–656 (1979).
- 1979DUM J. P. Dumas, *J. Phys. C: Solid State Phys.* **12**, 2225 (1979).
- 1979FAR/SHA R. G. Farrell, F. Shahidi, F. Casellato, C. Vecchi, and A. Girelli, *Thermochim. Acta* **33**, 275 (1979).
- 1979FUC/PEA R. Fuchs and L. A. Peacock, *Can. J. Chem.* **57**, 2302–2304 (1979).
- 1979GAR/LAW R. G. Garza, Lawrence Livermore National Laboratory UCRL, 1979; study referenced in [2008RAI/BHA].
- 1979GON/CHA A. S. Goncalves, A. P. Chagas, and C. Airoidi, *J. Chem. Soc., Dalton Trans.* **1979**, 159–161.
- 1979JAK/TZI G. Jakli, P. Tzias, and W. A. Van Hook, *Acta Chim. Acad. Sci. Hung.* **99**, 121–125 (1979).
- 1979KHE/LAL S. C. Khetarpal, K. Lal, and H. L. Bhainagar, *Aust. J. Chem.* **32**, 49 (1979).
- 1979KUD/KUD A. P. Kudchadker, S. A. Kudchadker, R. P. Shukla, and P. R. J. Patnaik, *J. Phys. Chem. Ref. Data* **8**, 499–513 (1979).
- 1979KUD/KUD2 S. A. Kudchadker, A. P. Kudchadker, and B. J. Zwolinski, *J. Chem. Thermodyn.* **11**, 1051–1059 (1979).
- 1979LET/ORC T. M. Letcher, S. W. Orchard, and M. J. Albers, *J. Chem. Thermodyn.* **11**, 173–175 (1979).
- 1979LIN J. Linek, *Collect. Czech. Chem. Commun.* **44**, 3501 (1979).
- 1979MAC/PRA A. B. Macknick and J. M. Prausnitz, *J. Chem. Eng. Data* **24**, 175–178 (1979).
- 1979MAH/SMI P. J. Maher and B. D. Smith, *J. Chem. Eng. Data* **24**, 16–22 (1979).
- 1979MAH/SMI2 P. J. Maher and B. D. Smith, *J. Chem. Eng. Data* **24**, 363 (1979).
- 1979MAJ/SVO V. Majer, V. Svoboda, S. Hala, and J. Pick, *J. Collect. Czech. Chem. Commun.* **44**, 637–651 (1979).
- 1979MAJ/SVO2 V. Majer, V. Svoboda, J. Koubek, and J. Pick, *J. Collect. Czech. Chem. Commun.* **44**, 3521–3528 (1979).
- 1979MAN/LAU C. Mandec, J. Lauransan, C. Garrigou-Lagrange, J. Housty, and N. B. Chanh, *C. R. Acad. Sci. Paris C* **289**, 413 (1979).
- 1979MAR/SAC V. S. Markovnik, A. I. Sачek, A. D. Peshchenko, O. V. Shvaro, D. N. Andreevskii, and N. M. Olizarevich, *Termodin. Org. Soedin.* 107–110 (1979).
- 1979MJO C. C. Mjojo, *J. Chem. Soc., Faraday Trans. 2* **75**, 692–703 (1979).
- 1979NIS/BAB V. P. Nistratov, A. G. Babinkov, K. G. Shvetsova, and S. A. Lapteva, *Termodin. Org. Soedin.* 33 (1979).
- 1979OLO G. Olofsson, in *Combustion Calorimetry*, edited by S. Sunner and M. Mansson (Pergamon, New York, 1979), Chap. 6.
- 1979PET/MAJ L. Petros, V. Majer, J. Koubek, V. Svoboda, and J. Pick, *Collect. Czech. Chem. Commun.* **44**, 3533–3540 (1979).
- 1979PRI/SAP S. J. W. Price and H. J. Sapiano, *Can. J. Chem.* **57**, 685–688 (1979).
- 1979RIC/SAV M. J. Richardson and N. G. Savill, *Thermochim. Acta* **30**, 327 (1979).
- 1979SAB R. Sabbah, *Bull. Soc. Chem. Fr.* 434–437 (1979).
- 1979SAL/PEA P. P. S. Saluja, L. A. Peacock, and R. Fuchs, *J. Am. Chem. Soc.* **101**, 1958–1962 (1979).
- 1979SAN/EPS D. J. Sandman, A. J. Epstein, J. S. Chickos, J. Ketchum, J. S. Fu, and H. A. Scheraga, *J. Chem. Phys.* **70**, 305–313 (1979).
- 1979SCH/OFF R. C. F. Schaaake, J. C. A. Offringa, G. J. K. van der Berg, and J. C. van Miltenburg, *J. R. Neth. Chem. Soc.* **98**, 408 (1979).
- 1979SCO/OSB D. W. Scott and A. G. Osborn, *J. Phys. Chem.* **83**, 2714–2723 (1979).
- 1979SEK/DES A. Sekiya and D. D. DesMarteau, *J. Fluorine Chem.* **14**, 289–297 (1979).
- 1979SEV C. Sevansson, *J. Chem. Thermodyn.* **11**, 593–596 (1979).
- 1979SPE/SHO W. F. Spencer, T. D. Shoup, M. M. Cliath, W. J. Farmer, and R. J. Hague, *J. Agric. Food Chem.* **27**, 273–278 (1979).
- 1979SUK/VLA S. I. Sukhova, O. N. Vlasov, and L. V. Li, *Nov. Khim. Sredstva Azsch Rast.* 51–52 (1979); *Chem. Abstr.* **92**, 83359x (1980).
- 1979SUN/SVE2 S. Sunner, C. Svensson, and A. S. Zelepuga, *J. Chem. Thermodyn.* **11**, 491–495 (1979).
- 1979SUN/VIS S. Sundaram and D. S. Viswanath, *Can. J. Chem. Eng.* **57**, 233 (1979).
- 1979THO/MEA L. H. Thomas, R. Meatyard, H. Smith, and G. H. Davies, *J. Chem. Eng. Data* **24**, 159–161 (1979).
- 1979YAN/TEP I. K. Yanson, A. B. Teplitsky, and L. F. Sukhodub, *Biopolymers* **18**, 1149–1170 (1979).
- 1979ZHO/KOS D. Yu. Zhogin, E. A. Kosarukina, V. P. Kolesov, I. I. Baburina, Y. A. Pentin, and I. V. Izmet'sev, *Zh. Obshch. Khim.* **49**, 629 (1979).
- 1980ABE/SHR T. Abe and J. M. Shreeve, *Inorg. Chem.* **19**, 3063–3067 (1980).
- 1980AMB/GUN D. Ambrose and H. A. Gundry, *J. Chem. Thermodyn.* **12**, 559 (1980).
- 1980AND/CON R. J. L. Andon and J. E. Connert, *Thermochim. Acta* **42**, 241 (1980).
- 1980AND/PIL F. Andruzzi, G. Pilcher, J. M. Hacking, and S. Cavell, *Makromol. Chem.* **181**, 923–929 (1980); *Chem. Abstr.* **93**, 8632y (1980).
- 1980ARS M. R. Arshadi, *J. Chem. Thermodyn.* **12**, 903–906 (1980).
- 1980BAL/LEB A. A. Balepin, V. P. Lebedev, A. A. Kuznetsova, K. K. Venter, M. A. Trusule, D. O. Lolya, and Y. A. Lebedev, *Isvest. Akad. Nauk. S.S.S.R. Ser. Khim.* **4**, 848 (1980).
- 1980BAR/BEN G. Bardi, L. Bencivenni, D. Ferro, B. Martini, C. S. Nunziante, and R. Teghil, *Thermochim. Acta* **40**, 275–282 (1980).
- 1980BYS K. Bystrom, *J. Chem. Soc., Faraday Trans. 1* **76**, 1986–1990 (1980).
- 1980CES/STA A. Cesaro and G. Starec, *J. Phys. Chem.* **84**, 1345 (1980).
- 1980COL/JIM M. Colomina, P. Jimenez, M. V. Roux, and C. Turrión, *J. Calorim. Anal. Therm.* **11**, 1–6 (1980); *Chem. Abstr.* **95**, 121878n (1981), see [1981COL/JIM].
- 1980DAV/FIN R. H. Davies, A. Finch, and P. G. Gardner, *J. Chem. Thermodyn.* **12**, 291–296 (1980).
- 1980DEK C. G. DeKruif, *J. Chem. Thermodyn.* **12**, 243–248 (1980).
- 1980DEK/GOV C. G. DeKruif and H. A. J. Govers, *J. Chem. Phys.* **73**, 553–555 (1980).
- 1980DEP R. S. DePablo, *J. Phys. D: Appl. Phys.* **13**, 313–319 (1980).
- 1980DIA/CRE M. Diaz-Pena, A. Crespo-Colin, A. Compositzo, and I. Escuder, *J. Chem. Eng. Data* **25**, 17 (1980).
- 1980DYA/VAS G. N. D'yakova and I. A. Vasil'ev, *Neftepererab. Neftekhim. (Moscow)* 51 (1980); *Chem. Abstr.* **92**, 170269m (1980).
- 1980FAL B. Falk, *J. Chem. Thermodyn.* **12**, 967 (1980).
- 1980FAR/YAN W. J. Farmer, M. S. Yang, J. Letey, and W. F. Spencer, *Soil Sci. Soc. Am. J.* **44**, 676–680 (1980).
- 1980FER/BEN D. Ferro, L. Bencivenni, R. Teghil, and R. Mastromarino, *Thermochim. Acta* **42**, 75–83 (1980).
- 1980FER/BEN2 D. Ferro, L. Bencivenni, R. Teghil, and M. Pelino, *J. Indian Chem. Soc.* **57**, 629–632 (1980).
- 1980FRA/CAS R. Francesconi, C. Castellari, A. Arcelli, and F. Comelli, *Can. J. Chem. Eng.* **58**, 113–115 (1980).

- 1980FUC/PEA R. Fuchs and L. A. Peacock, *Can. J. Chem.* **58**, 2796–2799 (1980).
- 1980JAR/AFA N. L. Jarim-Agaev, L. D. Afanasienko, V. P. Kalinichenko, and G. B. Tolmacheva, *Ukr. Khim. Zhur.* **46**, 1331–1333 (1980).
- 1980KRA/PIG A. Krajewska and K. Pigon, *Thermochim. Acta* **41**, 187–197 (1980).
- 1980LEB/DOB N. D. Lebedeva, S. L. Dobychin, V. B. Stepanov, Yu. A. Katin, and N. M. Kozlova, *Zh. Prikl. Khim.* **53**, 803 (1980).
- 1980LEB/KAL N. D. Lebedeva, Y. A. Kalin, V. L. Raydenko, V. B. Stapanov, and N. M. Kozlova, *Zh. Prikl. Khim. (Leningrad)* **53**, 2588–2590 (1980); *Chem. Abstr.* **94**, 156270q (1981).
- 1980LEB/NAZ N. D. Lebedeva, L. F. Nazarova, and Y. A. Katin, *Zh. Prikl. Khim. (Leningrad)* **53**, 1394–1395 (1980).
- 1980MAH/SMI P. J. Maher and B. D. Smith, *J. Chem. Eng. Data* **25**, 61 (1980).
- 1980MAJ/SVA V. Majer, L. Svab, and V. Svoboda, *J. Chem. Thermodyn.* **12**, 843–847 (1980).
- 1980MAJ/SVO V. Majer, V. Svoboda, A. Posta, and J. Pick, *Collect. Czech. Chem. Commun.* **45**, 3063–3069 (1980).
- 1980MAJ/WAG V. Majer, Z. Wagner, V. Svoboda, and V. Cadek, *J. Chem. Thermodyn.* **12**, 387–391 (1980).
- 1980MEY/AWE E. F. Meyer, M. J. Awe, and R. E. Wagner, *J. Chem. Eng. Data* **25**, 371–374 (1980).
- 1980MUR/CAV J. P. Murray, K. J. Cavell, and J. O. Hill, *Thermochim. Acta* **36**, 97–101 (1980).
- 1980NAK/SUG N. Nakamura, H. Suga, and H. S. Seki, *Bull. Chem. Soc. Jpn.* **53**, 2755–2761 (1980).
- 1980NAS/HWA P. Nasir, S. C. Hwang, and R. Kobayashi, *J. Chem. Eng. Data* **25**, 298–301 (1980).
- 1980OSB/SCO A. G. Osborn and D. W. Scott, *J. Chem. Thermodyn.* **12**, 429–438 (1980).
- 1980PAT/TOM C. R. Patrick and F. J. Tomes, *Fluorine Chem.* **15**, 267–278 (1980).
- 1980PEL/FER M. Pelino, D. Ferro, and V. Piacente, *Thermochim. Acta* **41**, 297 (1980).
- 1980PIT/KIS V. S. Pityugin, T. L. Kislitsyna, R. F. Shakirov, L. N. Sharif'yanova, and E. N. Maslennikov, *Khim. Prom-st. Ser. Khlornaya Prom-st.* 11–14 (1980).
- 1980RAD/RAD M. Radomska and R. Radomski, *Thermochim. Acta* **40**, 405 (1980).
- 1980SAB R. Sabbah, *Thermochim. Acta* **35**, 73–77 (1980).
- 1980SAB/KOM R. Sabbah and S. Komorowski, *Thermochim. Acta* **41**, 379–381 (1980).
- 1980SAB/SKO R. Sabbah and S. Skoulika, *Thermochim. Acta* **36**, 179–187 (1980).
- 1980SAB2 R. Sabbah, *Thermochim. Acta* **41**, 33–40 (1980).
- 1980SAC/HIL J. Sachinides and J. O. Hill, *Thermochim. Acta* **35**, 59–66 (1980).
- 1980SAT/SAK T. Sato-Toshima, M. Sakiyama, and S. Saki, *Bull. Chem. Soc. Jpn.* **53**, 2762–2767 (1980).
- 1980SHA/SAD L. N. Sharif'yanova, F. M. Sadykova, and S. G. Akhmerova, *Khim. Prom-st. Ser. Khlornaya Prom-st.* 16–18 (1980).
- 1980SVO/UCH V. Svoboda, V. Uchtylova, V. Majer, and J. Pick, *Collect. Czech. Chem. Commun.* **45**, 3233–3240 (1980).
- 1980SWA/KWA H. A. Swain, Jr., Y. C.-Y. Kwan, and H.-N. Sung, *J. Phys. Chem.* **84**, 1347–1349 (1980).
- 1980TEP/YAN A. B. Teplitskii, I. K. Yanson, O. T. Glukhova, A. Zielenkiewicz, W. Zielenkiewicz, and K. L. Wierzchowski, *Biophys. Chem.* **11**, 17–21 (1980).
- 1980THO/SMI L. H. Thomas, H. Smith, and G. H. Davis, *J. Chem. Technol. Biotechnol.* **30**, 476–480 (1980).
- 1980URB/GIG M. Urbani, R. Gigli, and V. Picente, *J. Chem. Eng. Data* **25**, 97–100 (1980).
- 1980VAN/PRA C. Van de Rostyne and J. M. Prausnitz, *J. Chem. Eng. Data* **25**, 1–3 (1980).
- 1980VAR/PIS R. M. Varushchenko, V. V. Pisarev, and T. A. Kotel'nikova, *Zh. Fiz. Khim.* **54**, 2666 (1980).
- 1980VIL/PER R. Vilcu and S. Perisanu, *Rev. Roum. Chim.* **25**, 619–624 (1980).
- 1980VOG/SCH L. Vogel and H. Schuberth, *Chem. Technol. (Leipzig)* **32**, 143 (1980).
- 1980WIE/KOB S. A. Wieczorek and R. Kobayashi, *J. Chem. Eng. Data* **25**, 302 (1980).
- 1980YEV/LEB A. A. Yevstropov, B. V. Lebedev, Y. G. Kiparisova, V. A. Alekseyev, and G. A. Stashina, *Polym. Sci. USSR* **22**, 2685–2692 (1980).
- 1980ZHO/KOS D. Yu. Zhogin, E. A. Kosarukina, and V. P. Kolesov, *Zh. Obshch. Khim.* **50**, 249 (1980).
- 1981ABE/SHR T. Abe and J. M. Shreeve, *Inorg. Chem.* **20**, 2894–2899 (1981).
- 1981ABE/SHR2 T. Abe and J. M. Shreeve, *Inorg. Chem.* **20**, 2432–2434 (1981).
- 1981AMB/ELL D. Ambrose, J. H. Ellender, H. A. Gundry, D. A. Lee, and R. J. Townsend, *J. Chem. Thermodyn.* **13**, 795–802 (1981).
- 1981AMB/ELL2 D. Ambrose and J. H. Ellender, *J. Chem. Thermodyn.* **13**, 901 (1981).
- 1981AMB/HAL D. Ambrose and D. J. Hall, *J. Chem. Thermodyn.* **13**, 61–66 (1981).
- 1981BRO/MCE W. Brostow, D. M. McEachern, and J. A. Valdez, *Mater. Chem.* **6**, 187–195 (1981).
- 1981BYS K. Bystrom, *J. Chem. Thermodyn.* **13**, 139–145 (1981).
- 1981CHA/HAG N. B. Chanh, Y. Haget, A. Meresse, D. Louer, and R. Shirley, *J. Phys. Chem. Solids* **42**, 217 (1981).
- 1981CHI/GAR J. S. Chickos, D. L. Garin, M. Hitt, and G. Schilling, *Tetrahedron* **37**, 2255–2259 (1981).
- 1981CHI/HYM J. S. Chickos, A. S. Hyman, L. H. Ladon, and J. F. Liebman, *J. Org. Chem.* **46**, 4294–4296 (1981).
- 1981COL/JIM M. Colomina, P. Jimenez, M. V. Roux, and C. Turrión, *An. Quim. Ser. A* **77**, 114 (1981).
- 1981DEK/KUI C. G. De Kruijff, T. Kuipers, J. C. van Miltenburg, R. C. F. Schaake, and G. Stevens, *J. Chem. Thermodyn.* **13**, 1081–1086 (1981).
- 1981DEK/SMI C. G. De Kruijff, E. J. Smit, and H. A. Gover, *J. Chem. Phys.* **74**, 5838–5841 (1981).
- 1981DEK/VAN C. G. De Kruijff, A. C. G. Van Genderen, J. C. W. G. Bink, and H. A. J. Oonk, *J. Chem. Thermodyn.* **13**, 457–463 (1981).
- 1981DEP R. S. DePablo, *J. Chem. Eng. Data* **26**, 237–239 (1981).
- 1981DIT/SKO V. E. Ditsent, I. I. Skorokhodov, M. N. Zolotareva, V. I. Savuskina, and B. N. Tabenko, *Zh. Prikl. Khim. (Leningrad)* **54**, 1617–1619 (1981).
- 1981DYA/KOR G. N. D'yakova, G. L. Korichev, A. D. Korkhova, T. F. Vasil'eva, and I. A. Vasil'ev, *Zh. Prikl. Khim. (Leningrad)* **54**, 1644–1646 (1981).
- 1981EDW/PRA D. R. Edwards and J. M. Prausnitz, *J. Chem. Eng. Data* **26**, 121–124 (1981).
- 1981FER/PIA D. Ferro, V. Piacente, and M. Pelino, *Rev. Roum. Chim.* **26**, 9–15 (1981).
- 1981FIN/MES H. L. Finke, J. F. Meserly, and S. H. Lee-Bechtold, *J. Chem. Thermodyn.* **13**, 345 (1981).
- 1981GAT/STR G. D. Gatta, L. Stradella, and P. Venturello, *J. Solution Chem.* **10**, 209–220 (1981).
- 1981HAL/COG J. L. Hales, R. C. Cogman, and W. J. Frith, *J. Chem. Thermodyn.* **13**, 591–601 (1981).
- 1981HOS/SCO I. A. Hossenlopp and D. W. Scott, *J. Chem. Thermodyn.* **13**, 405–414 (1981).
- 1981HOS/SCO2 I. A. Hossenlopp and D. W. Scott, *J. Chem. Thermodyn.* **13**, 415–421 (1981).
- 1981HOS/SCO3 I. A. Hossenlopp and D. W. Scott, *J. Chem. Thermodyn.* **13**, 423–428 (1981).
- 1981INO/ARA M. Inoue, Y. Arai, S. Saito, and J. Suzuki, *J. Chem. Eng. Data* **26**, 287–293 (1981).
- 1981JOO/ARL H.-J. Joo and W. Arlt, *J. Chem. Eng. Data* **26**, 138–140 (1981).
- 1981KHA/KHE M. S. Khanna, S. C. Khetarpal, K. Lal, and H. L. Bhatnagar, *Ind. J. Chem. A* **20**, 544 (1981).
- 1981KOL/KOS V. P. Kolesov, E. A. Kosarukina, D. Yu. Zhogin, M. E. Poloznikova, and Yu. A. Pentin, *J. Chem. Thermodyn.* **13**, 115 (1981).
- 1981MAJ/SVO V. Majer, V. Svoboda, A. Posta, and J. Pick, *Collect. Czech. Chem. Commun.* **46**, 817–822 (1981).

- 1981MAN/SUN M. Mansson and S. Sunner, *J. Chem. Thermodyn.* **13**, 671–675 (1981).
- 1981MAR/SAC V. S. Markovnik, A. I. Sachek, A. D. Peshchenko, O. V. Shvaro, and D. N. Andreevskii, *Termodin. Org. Soedin. Gor'kii* **10**, 54–57 (1981).
- 1981MAS/OLE T. N. Masalitinova, T. P. Oleinikova, V. L. Ryadnenko, N. N. Kiseleva, and N. D. Lebedeva, *Zh. Prikl. Khim. (Leningrad)* **54**, 1799–1802 (1981).
- 1981NAV/HAU P. Navard and J. M. Haudin, *J. Therm. Anal.* **22**, 107–118 (1981).
- 1981PAP/ERA T. S. Papina, P. A. Erastov, and V. P. Kolevsov, *J. Chem. Thermodyn.* **13**, 683 (1981).
- 1981PAV/BES F. Pavese and L. M. Besley, *J. Chem. Thermodyn.* **13**, 1095 (1981).
- 1981SAB/MIN R. Sabbah and C. Minadakis, *Thermochim. Acta* **43**, 269–277 (1981).
- 1981SHC/RUD M. M. Shchedrina, T. A. Rudol'fi, L. O. Mindlin, and K. K. Prilepskaya, *Maslozhirovays Prom.* **10**, 33–40 (1981).
- 1981SHI/SAI M. Shimizu, Y. Saito, and K. Kusano, *Preprints, 17th Conference on Chemical Thermodynamics and Thermal Analysis, Japan* (1981), p. 50 as quoted in [1985MAJ/SVO].
- 1981SVO/CHA V. Svoboda, V. Charvatova, V. Majer, and J. Pick, *Collect. Czech. Chem. Commun.* **46**, 2983–2988 (1981).
- 1981TEK/MAJ V. Tekac, V. Majer, V. Svoboda, and V. Hynek, *J. Chem. Thermodyn.* **13**, 659–662 (1981).
- 1981VAR/BUL R. M. Varushchenko, L. L. Bulgakova, P. S. Minzabekyants, and K. N. Makarov, *Russ. J. Phys. Chem.* **55**, 1480–1482 (1981).
- 1981VAR/BUL2 R. M. Varushchenko, L. L. Bulgakova, and M. M. Ammar, *Vestnik Moskov. Univer. Ser. 2 Khim.* **22**, 54 (1981).
- 1981WIE/KOB S. A. Wieczorek and P. Kobayashi, *J. Chem. Eng. Data* **26**, 8–11 (1981); **26**, 11–13 (1981).
- 1981WIL/JOH G. M. Wilson, R. H. Johnston, S.-C. Hwang, and C. Tsouopoulos, *Ind. Eng. Chem., Process Des. Dev.* **20**, 94–104 (1981).
- 1981YAR/KAL N. L. Yarym-Agaev and V. P. Kalinichenko, *Zh. Prikl. Khim.* **54**, 1172 (1982).
- 1981ZHO/KOS D. Yu. Zhogin, E. A. Kosarukina, V. P. Kolesov, I. P. Prokudin, and B. A. Mel'nichenko, *Zh. Fiz. Khim.* **55**, 98 (1981).
- 1981ZHO/KOS2 D. Yu. Zhogin, E. A. Kosarukina, and V. P. Kolesov, *Zh. Fiz. Khim.* **55**, 1955 (1981).
- 1982AIR/CHA C. Airoldi, A. P. Chagas, and F. P. Assuncao, *Can. J. Chem.* **60**, 2132–2136 (1982).
- 1982APP/VAN G. T. Appleton and W. A. Van Hook, *J. Chem. Eng. Data* **27**, 363 (1982).
- 1982BAL/MRA M. Balty, S. Mraw, L. A. K. Staveley, A. H. Overs, M. C. Owen, R. K. Thomas, and J. W. White, *Mol. Phys.* **45**, 1015–1034 (1982).
- 1982BYS K. Bystrom, *J. Chem. Thermodyn.* **14**, 865–870 (1982).
- 1982BYS/MAN K. Bystrom and J. Mansson, *J. Chem. Soc., Faraday Trans. 2* **1982**, 565–569.
- 1982CAM/REY M. Campos-Valette, M. Rey-Lafon, and R. Lagnier, *Chem. Phys. Lett.* **89**, 189 (1982).
- 1982CAS/FRA C. Castellari, R. Francesconi, and F. Comelli, *J. Chem. Eng. Data* **27**, 156–158 (1982).
- 1982COL/JIM M. Colomina, P. Jimenez, and C. Turrion, *J. Chem. Thermodyn.* **14**, 779–784 (1982).
- 1982CUE/SOL M. A. Cuevas, X. Solans, and L. Artus, *Afinidad* **39**, 406–408 (1982).
- 1982DEK/BLO C. G. Dekruif and J. G. Blok, *J. Chem. Thermodyn.* **14**, 201–206 (1982).
- 1982DEK/SCH G. C. Dekruif, R. C. F. Schaake, J. C. Van Meltenburg, K. Van der Klauw, and J. G. Blok, *J. Chem. Thermodyn.* **14**, 791–798 (1982).
- 1982DEM/FOX R. A. De Marco and W. B. Fox, *J. Org. Chem.* **47**, 3772–3773 (1982).
- 1982DWO/FUC A. Dworkin, A. H. Fuchs, M. Ghelfenstein, and H. Szwarc, *J. Phys., Lett.* **43**, L21–L27 (1982).
- 1982DZH/KAR O. I. Dzharfarov, K. A. Karasharli, and A. M. Kuliev, *Azerb. Khim. Zh.* **111** (1982).
- 1982FUC/HAL R. Fuchs, J. H. Hallman, and M. O. Perlman, *Can. J. Chem.* **60**, 1832–1835 (1982).
- 1982FUC/PEA R. Fuchs, L. A. Peacock, and W. K. Stephenson, *Can. J. Chem.* **60**, 1953–1958 (1982).
- 1982FUR/SAK J. Furukawa, M. Sakiyama, S. Seki, Y. Saito, and K. Kusano, *Bull. Chem. Soc. Jpn.* **55**, 3329–3330 (1982).
- 1982GRA/FOS B. T. Grayson and L. A. Fosbraey, *Pestic. Sci.* **13**, 269–278 (1982).
- 1982GUT/KNA B. Gutsche and H. Knapp, *Fluid Phase Equilib.* **8**, 285–300 (1982).
- 1982HON/WAK G. S. Hong, R. Waksalak, H. Finston, and V. Fried, *J. Chem. Eng. Data* **27**, 146–148 (1982).
- 1982INA/MUR S. Inagaki, S. Murata, and M. Sakiyama, *Bull. Chem. Soc. Jpn.* **55**, 2808–2813 (1982).
- 1982INI/LOP J. C. Iniguez, M. E. Lopez, and D. M. McEachern, *Rev. Soc. Quim. Mex.* **26**, 122–124 (1982); *Chem. Abstr.* **97**, 144252 j (1982).
- 1982INV C. Invernizzi, *Termotecnica* **4**, 78–85 (1982).
- 1982JOC/DEK R. Jochems, H. Dekker, C. Mosselman, and G. Somsen, *J. Chem. Thermodyn.* **14**, 395–398 (1982).
- 1982JOC/DEK2 R. Jochems, H. Dekker, C. Mosselman, and G. Somsen, *J. Chem. Thermodyn.* **14**, 799–800 (1982).
- 1982JOH/KAT K. K. Hohri, Y. Katsuhara, and D. D. Desmarteau, *J. Fluorine Chem.* **19**, 227 (1982).
- 1982KAR/SHV N. V. Karyakin, K. G. Shvetsova, and E. S. Dzhari-mova, *Termodin. Org. Soedin.* **33** (1982); *Chem. Abstr.* **99**, 129172f (1983).
- 1982KAR/SHV2 N. V. Karyakin and K. G. Shvetsova, *Deposited Doc. SPSTL* 861, 1982, p. 14..
- 1982KOS/KOL E. A. Kosarukina, V. P. Kolesov, G. M. Kuramshina, and Y. A. Pentin, *Termodin. Org. Soedin.* **11** (1982).
- 1982KOS/ZHO E. A. Kosarukina, D. Yu. Zhogin, V. P. Kolesov, G. M. Kuramshina, Yu. A. Pentin, I. V. Izmet'ev, and A. V. Danilov, *Zh. Fiz. Khim.* **56**, 1892 (1982).
- 1982KUL/LEB T. G. Kulagina, B. V. Lebedev, E. G. Kiparisova, E. B. Lyudvig, and I. G. Barskaya, *Vysokom. Soedin. Ser. A* **24**, 1496 (1982).
- 1982LEB/BYK B. V. Lebedev, T. A. Bykova, N. N. Smirnova, and T. G. Kulagina, *Zh. Obshch. Khim.* **52**, 2630–2636 (1982).
- 1982LEB/KUL B. V. Lebedev, T. G. Kulagina, Ye. B. Lyudvig, and T. N. Ovchinnikova, *Vysokomol. Soedin.* **24A**, 1490 (1982).
- 1982MAR/AND J. F. Martin and R. J. L. Andon, *J. Chem. Thermodyn.* **14**, 679–688 (1982).
- 1982MEN J. Menacourt, *J. Chim. Phys. Phys.-Chim. Biol.* **79**, 531–535 (1982).
- 1982MIN/SAB C. Minadakis and R. Sabbah, *Thermochim. Acta* **55**, 147–159 (1982).
- 1982MUR/SAK S. Murata, M. Sakiyama, and S. Seki, *J. Chem. Thermodyn.* **14**, 707–721 (1982); **14**, 723–731 (1982).
- 1982PIL/SKI G. Pilcher and H. A. Skinner, in *The Chemistry of the Metal-Carbon Bond*, edited by F. R. Hartley and S. Patai (John Wiley Sons, New York, 1982).
- 1982POE/FAN G. Poeti, E. Faneli, and M. Braghetti, *J. Therm. Anal.* **24**, 273–279 (1982).
- 1982ROO F. L. Rook, *J. Chem. Eng. Data* **27**, 72–73 (1982).
- 1982SAB/TOR R. Sabbah and L. A. Torres Gomez, *Thermochim. Acta* **52**, 285–295 (1982).
- 1982SAC/PES A. I. Sachek, A. D. Peshchenko, V. S. Markovnik, O. V. Ral'ko, D. N. Andreevskii, and A. A. Leont'eva, *Termodin. Org. Soedin.* **94–98** (1982).
- 1982SCH/VAN R. C. F. Schaake, J. C. van Miltenberg, and C. G. De Kruij, *J. Chem. Thermodyn.* **14**, 771 (1982).
- 1982SCH/VAN2 R. C. F. Schaake, J. C. van Miltenberg, and C. G. De Kruij, *J. Chem. Thermodyn.* **14**, 763 (1982).
- 1982SUR/SAI S. Suradi, N. El Saiad, G. Pilcher, and H. A. Skinner, *J. Chem. Thermodyn.* **14**, 45–50 (1982).
- 1982SVO/CHA V. Svoboda, V. V. Charvatova, V. Majer, and V. Hynek, *Collect. Czech. Chem. Commun.* **47**, 543–549 (1982).
- 1982TOR/SAB L. A. Torres Gomez and R. Sabbah, *Thermochim. Acta* **57**, 67–81 (1982).
- 1982TOR/SAB2 L. A. Torres Gomez and R. Sabbah, *Thermochim. Acta* **58**, 311–315 (1982).

- 1982TOU/OKA H. Touhara, S. Okazaki, F. Okino, H. Tanaka, K. Ikari, and K. Nakanishi, *J. Chem. Thermodyn.* **14**, 145–156 (1982).
- 1982TRE/VAU C. Treiner, C. Vaution, and G. N. Cave, *J. Pharm. Pharmacol.* **34**, 539 (1982).
- 1982VAN/MUL A. A. Van Dooren and B. W. Muller, *Thermochim. Acta* **54**, 115 (1982).
- 1982VAR/PUC R. M. Varushchenko, S. S. Puchkov, and A. I. Druzina, *Zh. Fiz. Khim.* **56**, 2934–2937 (1982).
- 1982WRE/VIK D. J. Wren and A. C. Vikis, *J. Chem. Thermodyn.* **14**, 435–437 (1982).
- 1983ALT/PIL G. Al-Takhin, G. Pilcher, J. Bickerton, and A. A. Zaki, *J. Chem. Soc., Dalton Trans.* **1983**, 2657.
- 1983AN/MAN X.-W. An and M. Mansson, *J. Chem. Thermodyn.* **15**, 287 (1983).
- 1983BAR/BEC W. Barbe, H.-D. Beckhaus, H. J. Lindner, and C. Rüchardt, *Chem. Ber.* **116**, 1017 (1983).
- 1983BEN/BIE R. Bender, V. Bieling, and G. Mauer, *J. Chem. Thermodyn.* **15**, 585 (1983).
- 1983BRO/GAM J. P. Bros, M. Gambino, M. Gaune-Escard, and N. T. Huu, *Calorim. Anal. Therm.* **14**, 92 (1983).
- 1983BYK/LEB T. A. Bykova and B. V. Lebedev, *Fiz.-Khim. Osnovy Sintezy i Pererab. Polimerov* **39** (1983).
- 1983CHA/HAL J. Chao, K. R. Hall, and J.-M. Yao, *Thermochim. Acta* **64**, 1354 (1983).
- 1983CLA/COR R. M. Clay, S. Corr, G. Keenan, and W. V. Steele, *J. Am. Chem. Soc.* **105**, 2070 (1983).
- 1983COL/JIM M. Colomina, P. Jimenez, C. Turrion, M. Kaminski, and W. Zielenkiewicz, *Thermochim. Acta* **68**, 371 (1983).
- 1983DEW/BOW H. G. M. Dewit, J. G. Bowstra, and C. G. Dekruif, *J. Chem. Phys.* **78**, 1470 (1983).
- 1983DEW/DEK H. G. M. Dewit, C. G. De Kruij, and J. C. Van Miltenburg, *J. Chem. Thermodyn.* **15**, 891 (1983).
- 1983DEW/OFF H. G. M. Dewit, J. C. A. Offringa, C. G. Dekruif, and J. C. Miltenburg, *Thermochim. Acta* **65**, 43 (1983).
- 1983DEW/VAN H. G. M. Dewit, J. C. Van Miltenburg, and C. G. Dekruif, *J. Chem. Thermodyn.* **15**, 651 (1983).
- 1983ELV/KUU A. Elvelt, M. Kuus, and L. S. Kudryavtseva, *Eesti NSV Tead. Akad. Toim. Keem.* **32**, 172 (1983).
- 1983FOK/VAN J. G. Fokkens, J. G. M. Van Amelsfoort, C. J. De Blaey, C. G. De Kruij, and J. Wiltig, *Int. J. Pharm.* **14**, 79 (1983).
- 1983FUC/HAL R. Fuchs and J. H. Hallman, *Can. J. Chem.* **61**, 503 (1983).
- 1983GEI/NUR Kh. I. Geidarov, G. G. Nurullaev, M. S. Salakhov, Z. Guseinov, and K. A. Karasharli, *Azerb. Khim. Zh.* **120** (1983).
- 1983HAL/STE J. H. Hallman, W. K. Stepenson, and R. Fuchs, *Can. J. Chem.* **61**, 2044 (1983).
- 1983HOL M. R. Holdiness, *Thermochim. Acta* **68**, 375 (1983).
- 1983KHA F. I. Khattab, *Thermochim. Acta* **61**, 253 (1983).
- 1983KHA/KHE M. S. Khanna, S. C. Khetarpal, K. Lal, and H. L. Bhatnagar, *Indian J. Pure Appl. Phys.* **20**, 503 (1983).
- 1983KHU/MUN J. R. Khurma, S. Munjal, and B. D. Smith, *J. Chem. Eng. Data* **28**, 100 (1983).
- 1983LEB/YEV B. V. Lebedev and A. A. Yevstropov, *J. Chem. Thermodyn.* **15**, 115 (1983).
- 1983MAC V. Machat, Ph.D. thesis, Utzcht Institut of Chemical Technology, Prague, 1983.
- 1983MAJ/AZZ J. R. Majer and A. S. P. Azzouz, *J. Chem. Soc., Faraday Trans. 1* **79**, 675 (1983).
- 1983MAR/SHV V. S. Markovnik, O. V. Shvaro, A. I. Sacheck, and A. D. Peshchenko, *Izvest. Vyssh. Ucheb. Zaved. Khim. Khim. Technol.* **26**, 698 (1983).
- 1983NAT/VIS G. Natarajan and D. S. Viswanath, *Rev. Sci. Instrum.* **54**, 1175 (1983).
- 1983OI/SHU T. Oi, J. Shulman, A. Popowicz, and T. Ishida, *J. Phys. Chem.* **87**, 3153 (1983).
- 1983PAL/CHO M. Palczewska-Tulinska, J. Cholinski, A. M. Szafranski, and D. Wyrzkowska-Stankiewicz, *Fluid Phase Equilib.* **11**, 233 (1983).
- 1983PRI/WOO J. G. Priest, E. M. Wooley, J. B. Ott, and J. R. Goates, *J. Chem. Thermodyn.* **15**, 357 (1983).
- 1983RAB/KHL I. B. Rabinovich, T. B. Khlyustova, A. N. Mochalov, and N. Y. Kokurina, *Zh. Fiz. Khim.* **57**, 2867 (1983).
- 1983RED/MUR G. Om. Reddy, B. K. M. Murali, and A. K. Chatterjee, *Propellants, Explos., Pyrotech.* **8**, 29 (1983).
- 1983SCH/STR T. Schmeling and R. Strey, *Ber. Bunsen-Ges. Phys. Chem.* **87**, 871 (1983).
- 1983SEK/TSU K. Sekiguchi, Y. Tsuda, K. Chihara, and E. Suzuki, *Yakugaku Zasshi* **103**, 213 (1983).
- 1983SKO/SAB S. Skoulika and R. Sabbah, *Thermochim. Acta* **61**, 203 (1983).
- 1983SON/ZOL W. J. Sonnefeld, W. H. Zoller, and W. E. May, *Anal. Chem.* **55**, 275 (1983).
- 1983SPE/CLI W. F. Spencer and M. M. Cliath, *Residue Rev.* **85**, 57 (1983).
- 1983TAM/DRA A. Tamir, C. Dragoescu, A. Apelblat, and J. Wisniak, *Fluid Phase Equilib.* **10**, 9 (1983).
- 1983TSO/WIL C. Tsonopoulos and G. M. Wilson, *AIChE J.* **29**, 990 (1983).
- 1983UCH/MAJ V. Uchytlova, V. Majer, V. Svoboda, and V. Hynek, *J. Chem. Thermodyn.* **15**, 853 (1983).
- 1983VAN/JAC P. J. Van Ekeren, M. H. G. Jacobs, J. C. A. Offringa, and C. G. J. Dekruif, *J. Chem. Thermodyn.* **15**, 409 (1983).
- 1983VAN/KAC Yu. Ya. Van-Chin-Syan, N. S. Kachurina, G. A. Petrovskaya, and S. K. Chuchmarev, *Russ. J. Phys. Chem.* **57**, 1751 (1983).
- 1983VAS T. F. Vassel'eva, in *Teplofiz*, edited by G. I. Cherednichenko (Svoistva Uglevodororov Nefteprod, USSR, 1983), pp. 85–94.
- 1983WEA *CRC Handbook of Chemistry and Physics*, 64th ed., edited by R. C. Weast (CRC Press, Boca Raton, FL, 1983).
- 1983ZIE/ZIE A. Zielenkiewicz, W. Zielenkiewicz, M. Colomina, P. Jimenez, E. Cesari, A. Sanahiya, and V. Torra, *An. Chim. Ser. A* **79/3**(Suppl. 2), 677 (1983); *Chem. Abstr.* **101**, 22920f (1984).
- 1984BEC/RUC H.-D. Beckhaus, C. Rüchardt, and M. Smisek, *Thermochim. Acta* **79**, 149 (1984).
- 1984BIC/MIN J. Bickerton, M. E. Minas da Piedade, and G. Pilcher, *J. Chem. Thermodyn.* **16**, 661 (1984).
- 1984BIC/PIL J. Bickerton, G. Pilcher, and G. Al-Takhin, *J. Chem. Thermodyn.* **16**, 373 (1984).
- 1984BOS/TUR S. R. Bosco and A. G. Turner, *J. Chem. Eng. Data* **29**, 242 (1984).
- 1984BOU/FRI T. Boublik, V. Fried, and E. Hala, *The Vapour Pressures of Pure Substances: Selected Values of the Temperature Dependence of the Vapour Pressures of Some Pure Substances in the Normal and Low Pressure Region*, Second Revised Edition (Elsevier, Amsterdam, 1984), Note: The vaporization enthalpies were calculated from the vapor pressures obtained from the Antoine constants reported in this compendium. In cases where the Antoine constant $C = 0$ the Antoine Equation ($\log_{10}P = A B/(C + T)$) reduces to the integrated form of the Clausius Clapeyron equation directly. This was the case for many vaporization enthalpies. In those cases where $C \neq 0$, the vaporization enthalpy was calculated as $Dv_{\text{vap}}(T) = 2303 R B/[T(T + C)]^2$.
- 1984BRU/REI S. Bruns, J. Reichelt, and H. K. Cammenga, *Thermochim. Acta* **72**, 31 (1984).
- 1984BUR/MOR P. M. Burkinshaw and C. T. Mortimer, *J. Chem. Soc., Dalton Trans.* **1984**, 75.
- 1984CAR A. S. Carson, *J. Chem. Thermodyn.* **16**, 427 (1984).
- 1984CAS/FRA C. Castellari, R. Francesconi, and F. Comelli, *J. Chem. Eng. Data* **29**, 126 (1984).
- 1984CAS/FRA2 C. Castellari, R. Francesconi, and F. Comelli, *J. Chem. Eng. Data* **29**, 90 (1984).
- 1984CAS/FRA3 C. Castellari, R. Francesconi, F. Comelli, and S. Ottani, *J. Chem. Eng. Data* **29**, 283 (1984).
- 1984CER/BOU I. Cervenkova and T. Boublik, *J. Chem. Eng. Data* **29**, 425 (1984).
- 1984CHO/GO K. Y. Chow, J. Go, M. Mehdizadeh, and D. J. W. Grant, *Int. J. Pharm.* **20**, 3 (1984).
- 1984COL/JIM M. Colomina, P. Jimenez, M. V. Roux, and C. Turrion, *J. Chem. Thermodyn.* **16**, 379 (1984).
- 1984COL/JIM2 M. Colomina, P. Jimenez, M. V. Roux, and C. Turrion, *J. Chem. Thermodyn.* **16**, 1121 (1984).

- 1984DOM/EVA E. S. Domalski, W. H. Evans, and E. D. Hearing, *J. Phys. Chem. Ref. Data* **13**(Suppl. 1), 1–286 (1984).
- 1984EBE/FRA H. Ebeling and E. U. Franck, *Ber. Bunsen-Ges. Phys. Chem.* **88**, 862 (1984).
- 1984ENG/SAN R. Eng and S. I. Sandler, *J. Chem. Eng. Data* **29**, 156 (1984).
- 1984EUB/CED P. T. Eubank, L. E. Cediell, J. C. Holste, and K. R. Hall, *J. Chem. Eng. Data* **29**, 389 (1984).
- 1984FER/DEL E. Fernandez-Fassnacht and F. Del Rio, *J. Chem. Thermodyn.* **16**, 469 (1984).
- 1984GOL/KOL Y. G. Golovanova and V. P. Kolesov, *Vestn. Mosk. Univ. Ser. 2 Khim.* **24**, 244 (1984).
- 1984HES/WIS W. Hessler, *Wiss. Z. Wilhelm-Pieck-Univ. Rostich* **33**, 9 (1984).
- 1984HUL/LU D. M. Hull and B.C.-Y. Lu, *J. Chem. Eng. Data* **29**, 417 (1984).
- 1984KAT/HAR H. Katayama and Y. Harada, *J. Chem. Eng. Data* **29**, 373 (1984).
- 1984KAU/RUT W. F. Kaukler and J. Rutter, *Mater. Sci. Eng.* **65**, L1 (1984).
- 1984KIM/WOO Y. H. Kim, J. E. Woodrow, and J. N. Seiber, *J. Chromatogr.* **314**, 37 (1984).
- 1984KOZ/TIM M. P. Kozina, L. P. Timofeeva, G. L. Gal'chenko, E. S. Balenkova, and M. D. Ordubadi, *Vestn. Mosk. Univ. Ser. 2 Khim.* **25**, 364 (1984); *Chem. Abstr.* **101**, 190955q (1984).
- 1984LEB/GUT N. D. Lebedeva, N. M. Gutner, N. M. Katin, Yu. A. Yu, N. M. Kozlova, N. N. Kiseleva, E. F. Machinya, and S. L. Dobychin, *Zh. Prikl. Khim. (Leningrad)* **57**, 2297 (1984).
- 1984LEB/GUT2 N. V. Lebedeva, N. M. Gutner, Yu. A. Katin, N. M. Kozlova, N. N. Kiseleva, E. F. Makhina, and S. L. Dobychin, *J. Appl. Chem. (USSR)* **57**, 2118 (1984).
- 1984MAJ/SVO V. Majer, V. Svoboda, and V. Hynek, *J. Chem. Thermodyn.* **16**, 1059 (1984).
- 1984MAJ/SVO2 V. Majer, V. Svoboda, and M. Lencka, *J. Chem. Thermodyn.* **16**, 1019 (1984).
- 1984MAJ/SVO3 V. Majer, V. Svoboda, J. Pechacek, and S. Hala, *J. Chem. Thermodyn.* **16**, 567 (1984).
- 1984MAJ/UCH V. Majer, V. Uchytlova, V. Svoboda, and A. Posta, *J. Chem. Thermodyn.* **16**, 761 (1984).
- 1984MIC/JOS M.-A. Michou-Saucet, J. Jose, C. Michou-Saucet, and J. C. Merlin, *Thermochim. Acta* **75**, 85 (1984).
- 1984MIL/GHO M. M. Miller, S. Ghodbane, S. P. Wasik, Y. B. Tewari, and D. E. Martire, *J. Chem. Eng. Data* **29**, 184 (1984).
- 1984MOU A. H. N. Mousa, *J. Fluorine Chem.* **25**, 165 (1984).
- 1984NUR/MEK G. G. Nurullaev, S. A. Mekhtiev, K. A. Karasharli, N. F. Musaeva, and M. S. Salakhov, *Azerb. Khim. Zh.* **132** (1984).
- 1984PAL/CHO M. Palczewska-Tulinska, J. Cholinski, A. M. Szafranski, and D. Wyrzkowska-Stankiewicz, *Fluid Phase Equilib.* **15**, 295 (1984).
- 1984PIN/POS N. Pingel, U. Poser, and A. Wurflinger, *J. Chem. Soc., Faraday Trans. 1* **80**, 3221 (1984).
- 1984PUT/IVA S. Putcha, R. V. Ivanturi, and R. Machiraju, *J. Chem. Eng. Data* **29**, 135 (1984).
- 1984RIB/RIB2 M. D. M. C. Ribeiro Da Silva, M. A. V. Ribeiro Da Silva, and G. Pilcher, *J. Chem. Thermodyn.* **16**, 1149 (1984).
- 1984SAC/MAR A. I. Sachek, V. S. Markovnik, A. D. Peshchenko, A. V. Shvaro, and D. N. Andreevskii, *Khim. Prom.-St. (Moscow)* **337** (1984).
- 1984SHA/BAS B. L. Sharma and P. S. Bassi, *Ind. J. Chem. A* **23**, 303 (1984).
- 1984SHC/KAP A. E. Shcherbina, L. M. Kaporovskii, and E. A. Shcherbina, *Zh. Prikl. Khim. (Leningrad)* **57**, 1910 (1984); *Chem. Abstr.* **101**, 177895a (1984).
- 1984SIP/WIE J. T. Sipowska and S. A. Wieczorek, *J. Chem. Thermodyn.* **16**, 693 (1984).
- 1984STA/WAD P. Starzewski, I. Wadso, and W. Zielenkiewicz, *J. Chem. Thermodyn.* **16**, 331 (1984).
- 1984TSE/YAO W. S. Tse, Y. D. Yao, and W. W. Lin, *Annu. Rep. Inst. Phys., Acad. Sin.* **14**, 65 (1984).
- 1984UCH/MAJ V. Uchytlova, V. Majer, V. Svoboda, and I. Hemer, *J. Chem. Thermodyn.* **16**, 475 (1984).
- 1984VAS/PET I. A. Vasil'ev and V. M. Petrov, *Thermodynamic Properties of Oxygen-Containing Organic Compounds (Leningrad Khimya Linengradscoe, Soedinenii, 1984)*.
- 1984WEI/LEF D. I. Weinstein, A. J. Leffler, and J. A. Currie, *Mol. Cryst. Liq. Cryst.* **104**, 95 (1984).
- 1984WIS/TAM J. Wisniak and A. Tamir, *J. Chem. Eng. Data* **29**, 19 (1984).
- 1984ZIE/ZIE A. Zielenkiewicz, W. Zielenkiewicz, L. F. Sukhodub, O. T. Glukhova, A. B. Teplitsky, and K. L. Wierzchowski, *J. Solution Chem.* **13**, 757 (1984).
- 1984ZIE/ZIE2 A. Zielenkiewicz, W. Zielenkiewicz, and S. Malanowski, *Thermochim. Acta* **74**, 95 (1984).
- 1985APP/MEN E. H. Appelman, M. H. Mendelsohn, and H. Kim, *J. Am. Chem. Soc.* **107**, 6515 (1985).
- 1985BAR/CAS G. Barone, G. Castronuovo, G. Della Gatta, V. Elia, and A. Iannone, *Fluid Phase Equilib.* **21**, 157 (1985).
- 1985BRO/INI W. Brostow, J. C. Iniguez, M. A. Shmorhun, and J. A. Valdez, *Mater. Chem. Phys.* **12**, 557 (1985).
- 1985CAO/BAC J.-R. Cao and R. A. Back, *Can. J. Chem.* **63**, 2945 (1985).
- 1985COL/JIM M. Colomina, P. Jimenez, M. V. Roux, and C. Turrion, *J. Chem. Thermodyn.* **17**, 1091 (1985).
- 1985DEA J. A. Dean, *Lange's Handbook of Chemistry*, 13th ed. (McGraw-Hill, New York, 1985).
- 1985DOB/CRA B. M. Dobratz and P. L. Crawford, *Explosives Handbook: Principles of Chemical Explosives and Explosive Simulants (Lawrence Livermore National Laboratory, Livermore, CA, 1985)*.
- 1985DOM/HOF U. Domańska and T. Hofman, *J. Solution Chem.* **14**, 531 (1985).
- 1985FER/PIA D. Ferro and V. Piacente, *Thermochim. Acta* **90**, 387 (1985).
- 1985FIG/SZW P. Figuier, H. Szwarc, M. Oguni, and H. Suga, *J. Chem. Thermodyn.* **17**, 949 (1985).
- 1985FRA/COM R. Francesconi and P. Comelli, *J. Chem. Eng. Data* **30**, 352 (1985).
- 1985GLU/ARK O. T. Glukhova, N. M. Arkhangelova, A. B. Teplitsky, L. F. Sukhodub, I. K. Yanson, and M. Kaminski, *Thermochim. Acta* **95**, 133 (1985).
- 1985HAN Y. P. Handa, *Can. J. Chem.* **63**, 68 (1985).
- 1985KAI/HAD E. Kaiserberger, W. Hadrich, and W.-D. Emmerich, *Thermochim. Acta* **95**, 331 (1985).
- 1985KAM/ZIE M. Kaminski and W. Zielenkiewicz, *Calorim. Anal. Therm.* **16**, 281 (1985); *Chem. Abstr.* **104**, 96844t (1986).
- 1985KAR/ABD M. K. Karabaev, T. P. Abduzhaminov, M. M. Kenisarin, and A. A. Saidov, *Izv. Akad. Nauk Uzb. SSR Ser. Fiz.-Mat. Nauk* **74** (1985).
- 1985KIS/VEI V. D. Kiselev, E. A. Veisman, B. N. Solomonov, and A. I. Konovalov, *Zh. Obsh. Khim.* **55**, 1965 (1985).
- 1985KUS K. Kusano, *Thermochim. Acta* **88**, 109 (1985).
- 1985LEB/BYK B. V. Lebedev, T. A. Bykova, E. G. Kiparisova, Y. A. Chernomordik, A. S. Kurapov, and V. A. Sergeev, *Bull. Acad. Sci. USSR, Div. Chem. Sci.* **34**, 274 (1985).
- 1985MAJ/SVO V. Majer and V. Svoboda, *Enthalpies of Vaporization of Organic Compounds: A Critical Review and Data Compilation (Blackwell Scientific Publishers, Oxford, 1985)*.
- 1985MAJ/SVO2 V. Majer, V. Svoboda, and M. Lencka, *J. Chem. Thermodyn.* **17**, 365 (1985).
- 1985MAJ/SVO3 V. Majer, V. Svoboda, V. Uchytlova, and M. Finke, *Fluid Phase Equilib.* **20**, 111 (1985).
- 1985MAR/MAN K. N. Marsh and M. Mansson, *J. Chem. Thermodyn.* **17**, 995 (1985).
- 1985MAR/WU A. Martin, P. L. Wu, and T. Velasquez, *J. Pharm. Sci.* **74**, 277 (1985).
- 1985MAT/KUW2 N. Matsubara and T. Kuwamoto, *Thermochim. Acta* **83**, 193 (1985).
- 1985MOU A. H. N. Mousa, *J. Fluorine Chem.* **30**, 29 (1985).
- 1985MUK/CHA R. Mukhopadhyay, S. L. Chaplot, and K. R. Rao, *Phys. Status Solidi A* **92**, 467 (1985).
- 1985MUR/SAK S. Murata, M. Sakiyama, and S. Seki, *Thermochim. Acta* **88**, 121 (1985).

- 1985NAT/VIS G. Natarajan and D. S. Viswanath, *J. Chem. Eng. Data* **30**, 137 (1985).
- 1985OHM/LIP A. Ohm and B. C. Lippold, *Int. J. Pharm. Tech. Prod. Mfg.* **6**, 1 (1985).
- 1985OZA T. Ozawa, *Thermochim. Acta* **92**, 27 (1985).
- 1985PAS/VAR L. L. Pashchenko and R. M. Varushchenko, *Zh. Obsh. Khim.* **55**, 721 (1985).
- 1985PIA/SCA V. Piacente, P. Scardala, D. Ferro, and R. Gigli, *J. Chem. Eng. Data* **30**, 372 (1985).
- 1985PRI/PUC V. P. Privalko, G. A. Puchkovskaya, E. N. Shermatov, and A. A. Yakubov, *Mol. Cryst. Liq. Cryst.* **126**, 289 (1985).
- 1985RAV/RAO A. Raviprasad and K. V. Rao, *J. Chem. Thermodyn.* **17**, 117 (1985).
- 1985RED/RAO K. D. Reddy, M. V. P. Rao, and M. Ramakrishna, *J. Chem. Eng. Data* **30**, 394 (1985).
- 1985ROR B. F. Rordorf, *Thermochim. Acta* **85**, 435 (1985).
- 1985SCH/BRU A. G. R. Scholz and E. Brunner, *J. Chem. Eng. Data* **30**, 72 (1985).
- 1985SHE/SAN G. S. Shealy and S. I. Sandler, *J. Chem. Eng. Data* **30**, 455 (1985).
- 1985SIN N. Singh, *Bull. Soc. Chim. Fr.* 626 (1985).
- 1985SKI/PIL H. A. Skinner, G. Pilcher, G. Al-Takhin, personal comment to, M. Faour, and T. S. Akasheh, *J. Chem. Soc. Perkin Trans. II* 811 (1985).
- 1985SRI/SMI R. Srivastava and B. D. Smith, *J. Chem. Eng. Data* **30**, 313 (1985).
- 1985SUZ/SHI E. Suzuki, K.-I. Shirotani, Y. Tsuda, and K. Sekiguchi, *Chem. Pharm. Bull.* **33**, 5028 (1985).
- 1985WIB/WAS K. B. Wiberg, D. J. Wasserman, E. J. Martin, and M. A. Murcko, *J. Am. Chem. Soc.* **107**, 6019 (1985).
- 1985WIE/SIP S. A. Wiczorek and J. T. Sipowska, *J. Chem. Thermodyn.* **17**, 255 (1985).
- 1985WOR/YER C. J. Wormald and T. K. Yerlett, *J. Chem. Thermodyn.* **17**, 1171 (1985).
- 1985YAN/GU H. K. Yan, J. K. Gu, and R. H. Fu, *Wuli Huaxue Xuebao* **1**, 543 (1985).
- 1985ZAR A. P. Zارايسكii, *Zh. Fiz. Khim.* **59**, 2087 (1985).
- 1986AIR/SIL C. Airoldi, M. L. C. P. Silva, and A. P. Chagas, *J. Chem. Soc., Dalton Trans.* **1986**, 1913.
- 1986ALL/JOS N. Allemand, J. Jose, and J. C. Merlin, *Thermochim. Acta* **105**, 79 (1986).
- 1986BAL/GNA V. Baliah and K. Gnanasekaran, *Indian J. Chem.* **25A**, 673 (1986).
- 1986BAR/FER G. Barone, D. Ferro, P. Fiorani, C. A. Mattia, and R. Puliti, *Journ. Calorim., Anal. Therm. Thermodyn. Chim.* **17**, 471 (1986).
- 1986CAL/SUL J. E. Callanan, S. A. Sullivan, and D. F. Vecchia, *J. Res. Natl. Bur. Stand.* **91**, 123 (1986).
- 1986CHA/DEM A. Chuvet, G. De Maury, A. Terol, and J. Masse, *Thermochim. Acta* **97**, 143 (1986).
- 1986COL/JIM M. Colomina, P. Jimenez, M. V. Roux, and C. Turrión, *An. Quim.* **82**, 126 (1986).
- 1986DMI/KAC Yu. G. Dmitriev, N. S. Kachurina, C. H. Wang, and V. V. Kouchukei, *Vestn. L'vov. Politekh. Inst.* **201**, 29 (1986).
- 1986EMO/NAU H. H. Emons, R. Naumann, K. Jahn, and H.-J. Flammersheim, *Thermochim. Acta* **104**, 127 (1986).
- 1986GON/SZW A. Gonthier-Vassal and H. Szwarc, *Chem. Phys. Lett.* **129**, 5 (1986).
- 1986HES/LIC W. Hessler and W. Lichtenstein, *Wiss. Z. Wilhelm-Pieck- Univ. Rostich* **35**, 27 (1986).
- 1986JIM/ROU P. Jimenez, M. V. Roux, C. Turrión, and F. Gomis, *Journ. Calorim., Anal. Therm. Thermodyn. Chim.* **17**, 469 (1986).
- 1986KOZ/DAL A. A. Kozyro, S. V. Dalidovich, and A. P. Krausulin, *Zh. Prikl. Khim.* **59**, 1456 (1986).
- 1986KRA/KOZ A. P. Krasulin, A. A. Kozyro, and S. V. Dalidovich, *Zh. Fiz. Khim.* **60**, 2580 (1986).
- 1986KRA/KOZZ A. P. Krasulin and A. A. Kozyro, *Proceedings of the 11th All-Union Conference on Calorimetry and Chemical Thermodynamics* (Institute of Neorganicheskoi Khimii, Novosibirsk, 1986), Vol. 17, p. 129, as quoted in [1990PIA/FER].
- 1986KRE/PRA D. H. Krevor and J. M. Prausnitz, *J. Chem. Eng. Data* **31**, 349 (1986).
- 1986MEY/MEY E. F. Meyer and J. J. Meyer, *J. Chem. Eng. Data* **31**, 273 (1986).
- 1986MIC/JOS M.-A. Michou-Saucet, J. Jose, and C. Michou-Saucet, *Thermochim. Acta* **102**, 271 (1986).
- 1986NIL/WAD S.-O. Nilsson and I. Wadso, *J. Chem. Thermodyn.* **18**, 673 (1986).
- 1986NOV/RAB N. V. Novoselova, I. B. Rabinovich, L. Ya. Tsvetkova, E. M. Moseeva, and A. G. Babinkov, *Zh. Fiz. Khim.* **60**, 1627 (1986).
- 1986NUN/BAR L. Nunez, L. Barral, L. S. Gavelanes, and G. Pilcher, *J. Chem. Thermodyn.* **18**, 575 (1986).
- 1986OBR/LAM R. A. O'Brien, W. Y. Lam, and D. D. Desmarreau, *J. Org. Chem.* **51**, 4466 (1986).
- 1986PAU/KRU H.-I. Paul, J. Krug, and H. Knapp, *Thermochim. Acta* **108**, 9 (1986).
- 1986PAV/PES A. L. Pavlov, A. D. Peschenko, and V. I. Zubkov, *Termodin. Org. Soedin. Gorky* **85**, 77 (1986).
- 1986PED/NAY J. P. Pedley, R. D. Naylor, and S. P. Kirby, *Thermochemical Data of Organic Compounds*, 2nd ed. (Chapman and Hall, New York, 1986).
- 1986PIM/DOM S. M. Pimenova, I. N. Domnin, A. M. Lakshin, and V. V. Takhistov, *Abstract of Papers XI All-Union Conference on Calorimetry and Thermodynamics* (Novosibirsk, 1986), Vol. 2, p. 41.
- 1986RAB/NOV I. B. Rabinovich, I. V. Novoselova, E. M. Moiseeva, A. T. Babinkov, and A. T. Tsvetkova, *Zh. Fiz. Khim.* **60**, 545 (1986).
- 1986RIB/RIB M. D. M. C. Ribeiro Da Silva, M. A. V. Ribeiro Da Silva, and G. Pilcher, *J. Chem. Thermodyn.* **18**, 295 (1986).
- 1986ROR/SAR B. F. Rordorf, L. P. Sarna, and G. R. B. Webster, *Chemosphere* **15**, 2073 (1986).
- 1986SAT/INO N. Sato, H. Inomata, K. Arai, and S. Saito, *J. Chem. Eng. Jpn.* **19**, 145 (1986).
- 1986SIN/KUM N. B. Singh and P. Kumar, *J. Chem. Eng. Data* **31**, 406 (1986).
- 1986STA H. W. Starkweather, Jr., *Macromolecules* **19**, 1131 (1986).
- 1986TSV/NAZ V. S. Tsvetkov, A. G. Nazmutdinov, K. S. Sharonov, and A. M. Rozhnov, *Termodin. Org. Soedin.* 71 (1986).
- 1986VAR R. M. Varushchenko, *Zh. Fiz. Khim.* **60**, 291 (1986).
- 1986WEN/SCH U. Wenzel and G. M. Schneider, *Thermochim. Acta* **109**, 111 (1986).
- 1986WIS/LEN B. Wisniewska, M. Lencka, and M. Rogalski, *J. Chem. Thermodyn.* **18**, 703 (1986).
- 1986YER/WOR Y. K. Yerlett and C. J. Wormald, *J. Chem. Thermodyn.* **18**, 719 (1986).
- 1986YER/WOR2 T. K. Yerlett and C. J. Wormald, *J. Chem. Thermodyn.* **18**, 371 (1986).
- 1987ALL/FIN P. H. Allot, A. Finch, G. Pilcher, L. Numez, and L. Barral, *J. Chem. Thermodyn.* **19**, 771 (1987).
- 1987ALN/ALS H. Al-Najjar and D. Al-Sammerrai, *J. Chem. Tech. Biotechnol.* **37**, 145 (1987).
- 1987AMB/GHI D. Ambrose and N. B. Ghiassee, *J. Chem. Thermodyn.* **19**, 911 (1987).
- 1987AMB/GHI2 D. Ambrose and N. B. Ghiassee, *J. Chem. Thermodyn.* **19**, 903 (1987).
- 1987AMB/GHI3 D. Ambrose and N. B. Ghiassee, *J. Chem. Thermodyn.* **19**, 505 (1987).
- 1987AN/HU O. An, R. Hu, H. Wang, M. Wu, and Y. Zou, *Acta Phys.-Chim. Sin.* **3**, 668 (1987).
- 1987AN/ZHU X. An, I. Zhu, and R. Hu, *Thermochim. Acta* **121**, 473 (1987).
- 1987ATI/SAI Z. Atik, Y. Saito, and K. Kusano, *J. Chem. Thermodyn.* **19**, 99 (1987).
- 1987AZA E. C. Azandegbe, *Analisis* **15**, 370 (1987).
- 1987CHI J. S. Chickos, in *Molecular Structure and Energetics, Volume 2, Physical Measurements*, edited by J. F. Liebman and A. Greenberg (VCH Publishers, New York, 1987).
- 1987COL/JIM M. Colomina, P. Jimenez, R. Perez-Ossorio, M. V. Roux, and C. Turrión, *J. Chem. Thermodyn.* **19**, 155 (1987).

- 1987COL/JIM2 M. Colomina, P. Jimenez, M. V. Roux, and C. Turrion, *J. Chem. Thermodyn.* **19**, 1139 (1987).
- 1987CUR/ASR S. A. Curran and J. Asrar, *Mol. Cryst. Liq. Cryst.* **148**, 255 (1987).
- 1987DAU/JAL T. E. Daubert, J. W. Jalowka, and V. Goren, *AIChE Symp. Ser.* **83**, 128 (1987).
- 1987DEL/FER G. Della Gatta and D. Ferro, *Thermochim. Acta* **122**, 143 (1987).
- 1987EBI/ASK Y. Ebisuzaki, L. H. Askari, A. M. Bryan, and M. F. Nicol, *J. Chem. Phys.* **87**, 6659 (1987).
- 1987EDE/WUR R. Edelmann and A. Wurflinger, *Mol. Cryst. Liq. Cryst.* **148**, 249 (1987).
- 1987ELS N. I. El-Sayed, *Indian J. Technol.* **25**, 28 (1987).
- 1987FER/DEL D. Ferro and G. Della Gatta, *Thermochim. Acta* **122**, 189 (1987).
- 1987FER/DEL2 D. Ferro, G. Della Gatta, and V. Piacente, *J. Chem. Thermodyn.* **19**, 915 (1987).
- 1987FER/PIL M. L. C. C. H. Ferrao and G. Pilcher, *J. Chem. Thermodyn.* **19**, 543 (1987).
- 1987FIO/FER P. Fiorani and D. Ferro, *Thermochim. Acta* **112**, 387 (1987).
- 1987FUC/CHA R. Fuchs, E. J. Chambers, and W. K. Stepenson, *Can. J. Chem.* **65**, 2624 (1987).
- 1987GAM/GAU M. Gambino, P. Gaune, M. Habavian, M. Gaune-Escard, and J. P. Bros, *Thermochim. Acta* **111**, 37 (1987).
- 1987GAR/TRE F. Garcia-Sanchez and A. Trejo, *J. Chem. Thermodyn.* **19**, 359 (1987).
- 1987GOA/BOE J. R. Goates, J. Boerio-Goates, S. R. Goates, and J. B. Ott, *J. Chem. Thermodyn.* **19**, 103 (1987).
- 1987HAU/WU T. Hauschild, H. S. Wu, and S. I. Sandler, *J. Chem. Eng. Data* **32**, 226 (1987).
- 1987JIM/ROU P. Jimenez, M. V. Roux, C. Turrion, and F. Gomis, *J. Chem. Thermodyn.* **19**, 985 (1987).
- 1987KAF/DOR V. V. Kafarov, I. N. Dorokhov, V. N. Vetokhin, and L. P. Volkov, *Dokl. Phys. Chem.* **298**, 77 (1987).
- 1987KAM/ZIE M. Kaminski and W. Zielenkiewicz, *Bull. Pol. Acad. Sci., Chem.* **35**, 583 (1987).
- 1987KAN/OI A. Kanungo, T. Oi, A. Popowicz, and T. Ishida, *J. Phys. Chem.* **91**, 4198 (1987).
- 1987KHO/BUG M. G. Khodzhaeva, Yu. V. Bugakov, and T. S. Ismailov, *Khim.-Farm. Zh.* **21**, 760 (1987).
- 1987KLA/MOH S. M. Klara, R. S. Mohamed, D. M. Dempsey, and G. D. Holder, *J. Chem. Eng. Data* **32**, 143 (1987).
- 1987KNE/ZON P. Kneisi and J. W. Zondio, *J. Chem. Eng. Data* **21**, 11 (1987).
- 1987KRA/KOZ A. P. Krasulin, A. A. Kozyro, and G. Ya. Kabo, *Zh. Prikl. Khim.* **60**, 104 (1987).
- 1987MEI/DOG M. Meier, B. Dogan, H. D. Beckhaus, and C. Ruchardt, *New J. Chem.* **11**, 1 (1987).
- 1987MIH/BAS P. Mihailovic, P. Bassoul, and J. Simon, *Chem. Phys. Lett.* **141**, 462 (1987).
- 1987MIL/FEN P. L. Mills and R. L. Fenton, *J. Chem. Eng. Data* **32**, 266 (1987).
- 1987OTT/WOO J. B. Ott, B. F. Woodfield, C. Guanquan, J. Boerio-Goates, and J. R. Goates, *J. Chem. Thermodyn.* **19**, 177 (1987).
- 1987OYU/BRI Y. Oyumi and T. B. Brill, *Thermochim. Acta* **116**, 125 (1987).
- 1987SAL/SAI S. R. Salman, E. Z. Said, and K. F. Abas, *Thermochim. Acta* **111**, 21 (1987).
- 1987SHI/OHK T. Shimizu, S. Ohkubo, M. Kimura, I. Tabata, and T. Hori, *J. Soc. Dyers Colour.* **103**, 132 (1987).
- 1987SMI/TER G. G. Smirnova, G. F. Tereshchenko, and M. A. Blagushina, *Zh. Prikl. Khim.* **62**, 182 (1987).
- 1987STE/MAL R. M. Stephenson and S. Malanowski, *Handbook of the Thermodynamics of Organic Compounds* (Elsevier, New York, 1987). Note: The data in this listing was obtained directly from this compendium which does not contain literature references. The sublimation enthalpies were calculated from the vapor pressures obtained from the Antoine constants reported in this compendium. In cases where the Antoine constant C = 0 the Antoine Equation ($\log_{10}P = A - B/(C + T)$) reduces to the integrated form of the Clausius Clapeyron equation directly. This was the case for most sublimation enthalpies. In those cases where this condition was not met, vapor pressures were calculated over a 30 K temperature range closest to T = 298 K and the temperature dependence was reformulated in terms of the integrated form of the Clausius Clapeyron equation.
- 1987TAN/YE Z. Tan, J. Ye, A. Yin, S. Chen, and W. Wang, *Kexue Tongbao* **32**, 240 (1987).
- 1987TRE/LU T. Treszczanowicz and B. C.-Y. Lu., *J. Chem. Thermodyn.* **19**, 391 (1987).
- 1987VAN/KAC Yu. Ya. Van-Chin-Syan and N. S. Kachurina, *Russ. J. Phys. Chem.* **61**, 622 (1987).
- 1987VAN/VAN J. C. van Miltenburg, G. J. K. van den Berg, and M. J. van Bommel, *J. Chem. Thermodyn.* **19**, 1129 (1987).
- 1987VAR/LOS R. M. Varushchenko, O. L. Loseva, and A. I. Druzhinina, *Zh. Fiz. Khim.* **61**, 31 (1987).
- 1987VAR/LOS2 R. M. Varushchenko, O. L. Loseva, and A. I. Druzhinina, *Zh. Fiz. Khim.* **61**, 638 (1987).
- 1987YAN/GU H. Yan, J. Gu, X. An, and R.-H. Hu, *Huaxue Xuebao* **45**, 1184 (1987).
- 1988AFZ/BUT M. Afzal, P. K. Butt, and M. J. Iqbal, *Pak. J. Sci. Ind. Res.* **31**, 404-407 (1988).
- 1988AMB/GHI2 D. Ambrose and N. B. Ghiassee, *J. Chem. Thermodyn.* **20**, 765-766 (1988).
- 1988AMB/GHI3 D. Ambrose, N. B. Ghiassee, and R. Tuckerman, *J. Chem. Thermodyn.* **20**, 767-768 (1988).
- 1988ASH S. J. Ashcroft, *J. Chem. Eng. Data* **33**, 73 (1988).
- 1988ASK/DAU C. F. Askonas and T. E. Daubert, *J. Chem. Eng. Data* **33**, 225-229 (1988).
- 1988BAG/GUR A. K. Baglay, L. L. Gurarly, and G. G. Kuleshov, *J. Chem. Eng. Data* **33**, 512-518 (1988).
- 1988BAS/NIL M. Bastos, S. O. Nilsson, M. D. M. C. Ribeiro Da Silva, M. A. V. Ribeiro Da Silva, and J. Wadso, *J. Chem. Thermodyn.* **20**, 1353-1359 (1988).
- 1988DAV/EWI D. R. M. Davies, B. Ewing, J. A. Hugill, and M. L. McGlashan, *Can. J. Chem.* **66**, 760-762 (1988).
- 1988DON/LIN J.-Q. Dong, R.-S. Lin, and W.-H. Yen, *Can. J. Chem.* **66**, 783-790 (1988).
- 1988FER/DEL D. Ferro, G. Della Gatta, and G. Barone, *Therm. Anal.* **34**, 835-841 (1988).
- 1988GAL/GON F. Galan-Estella, J. Gonzalez-Julian, and P. Aquado-Rodriguez, *Phytochemistry* **27**, 3069-3073 (1988); *Chem. Abstr.* **110**, 102153h (1989).
- 1988GAM/BRO M. Gambino and J. P. Bros, *Thermochim. Acta* **127**, 223 (1988).
- 1988GOL/SIT O. F. Golovanova, G. V. Sitonina, V. I. Pepekin, and F. I. Korsunskii, *Izv. Akad. Nauk. SSSR Ser. Khim.* 1012-1016 (1988); *Chem. Abstr.* **110**, 38466j (1989).
- 1988HOS/ARC I. A. Hossenlopp and D. G. Archer, *J. Chem. Thermodyn.* **20**, 1061-1068 (1988).
- 1988IMA/MUR A. Imamura, S. Murata, and M. Sakiyama, *J. Chem. Thermodyn.* **20**, 389-396 (1988).
- 1988ISM/GAB T. S. Ismailov, N. R. Gabzailova, and Kh. M. Makhkamov, *Uzbekskii Khim. Zh.* **4**, 48-50 (1988).
- 1988KAT2 H. Katayama, *J. Chem. Eng. Data* **33**, 75-77 (1988).
- 1988KHU V. L. Khudyakov, *Russ. J. Phys. Chem.* **62**, 1743-1744 (1988).
- 1988KNA/SAB P. Knauth and R. Sabbah, *Bull. Soc. Chem. Fr.* 834-836 (1988).
- 1988LEB/BYK B. V. Lebedev, T. A. Bykova, E. G. Kiparisova, M. Frenkel, A. M. Fainleib, and V. A. Pankratov, *Bull. Acad. Sci. USSR, Div. Chem. Sci.* **37**, 1082 (1988).
- 1988LEB/KUL B. V. Lebedev, T. G. Kulagina, and N. N. Smirnova, *J. Chem. Thermodyn.* **20**, 1383-1396 (1988).
- 1988LEB/VAS B. V. Lebedev and V. G. Vasil'ev, *Zh. Fiz. Khim.* **62**, 3099 (1988).
- 1988LET/SEW T. M. Letcher, J. Sewry, and S. W. Orchard, *J. Chem. Thermodyn.* **20**, 1231-1232 (1988).
- 1988LIC/RIT H. H. Licht and H. Ritter, *Propellants, Explos., Pyrotech.* **13**, 25-29 (1988).
- 1988LUS/RUB V. N. Lushnikov, Y. I. Rubstov, L. T. Dremenko, and A. M. Korolev, *Zh. Fiz. Khim.* **62**, 1209 (1988).

- 1988MES/FIN J. F. Messerly, H. L. Finke, W. D. Good, and B. Gammon, *J. Chem. Thermodyn.* **20**, 485–501 (1988).
- 1988MES/TOD J. F. Messerly, S. S. Todd, H. L. Finke, W. D. Good, and B. E. Gammon, *J. Chem. Thermodyn.* **20**, 209 (1988).
- 1988MIR/KOR E. A. Miroshnichenko, L. I. Korchatova, V. P. Shelaputina, S. A. Zyuz'kevich, and Yu. A. Lebedev, *Bull. Acad. Sci. USSR, Div. Chem. Sci.* **37**, 1778 (1988).
- 1988NUN/BAR L. Nunez, L. Barral, and G. Pilcher, *J. Chem. Thermodyn.* **20**, 1211–1216 (1988).
- 1988PAR/KAW R. M. Paroli, N. T. Kawai, I. S. Butler, and D. F. R. Gilson, *Can. J. Chem.* **66**, 1973–1978 (1988).
- 1988PAU/KRU H. I. Paul, J. Krug, and H. Knapp, *J. Chem. Eng. Data* **33**, 435–460 (1988).
- 1988PES/SHV A. D. Peschenko, O. V. Shvaro, and V. I. Zubkov, *Termodin. Org. Soedin. (Gorky)* 39–41 (1988).
- 1988PET/TSY N. N. Petropavlov, I. G. Tsygankova, and L. A. Teslenko, *Sov. Phys. Crystallogr.* **33**, 853 (1988).
- 1988RIB/REI M. A. V. Ribeiro Da Silva, A. M. Reis, and G. Pilcher, *Thermochim. Acta* **124**, 319–328 (1988).
- 1988RIB/RIB M. A. V. Ribeiro Da Silva, M. D. M. C. Ribeiro Da Silva, and G. Pilcher, *J. Chem. Thermodyn.* **20**, 969–974 (1988).
- 1988SAB/ELW R. Sabbah and L. El Watik, *Bull. Soc. Chim. Fr.* 626–630 (1988).
- 1988SAL/ABA S. R. Salman and K. F. Abas, *Thermochim. Acta* **136**, 81 (1988).
- 1988SHA/DIE R. H. Shay, B. N. Diel, D. M. Schubert, and A. D. Norman, *Inorg. Chem.* **27**, 2378–2382 (1988).
- 1988SHA/PIL L. Shaofeng and G. Pilcher, *J. Chem. Thermodyn.* **20**, 463–465 (1988).
- 1988STE/ARC W. V. Steele, D. G. Archer, R. D. Chirico, W. B. Collier, I. A. Hossenlopp, A. Nguyen, K. N. Smith, and B. E. Gammon, *J. Chem. Thermodyn.* **20**, 1233–1264 (1988).
- 1988TOR/BAR L. A. Torres-Gomez, G. Barreiro-Rodriguez, and A. Galarza-Mondragon, *Thermochim. Acta* **124**, 229–233 (1988).
- 1988VAN/VAN M. J. Van Bommel, J. C. Van Miltenburg, and A. Schuijij, *J. Chem. Thermodyn.* **20**, 397 (1988).
- 1988VAR/LOS R. M. Varushchenko, O. L. Loseva, A. I. Druzhinina, and E. F. Zorina, *Zh. Fiz. Khim.* **62**, 1776–1780 (1988).
- 1988WHI/PER M. A. White and A. Perrott, *Can. J. Chem.* **66**, 729–733 (1988).
- 1988ZHA/ZOU A. Zhang, H. Zou, and M. Yang, *Gaodeng Xuexia Huaxue Suebao* **9**, 1085 (1988).
- 1989ABB/JIM J.-L. Abboud, P. Jimenez, M. V. Roux, C. Turrion, and C. Lopez-Mardomingo, *J. Chem. Thermodyn.* **21**, 859–865 (1989).
- 1989ALL/GED J. R. Allan, W. C. Geddes, C. S. Hindle, and A. E. Orr, *Thermochim. Acta* **153**, 249 (1989).
- 1989AN/HU X. An and H. Hu, *Wuli Huaxue Xuebao* **5**, 565–571 (1989); *Chem. Abstr.* **112**, 118206f (1990).
- 1989AN/ZHE X. An and X. Zheng, *Wuli Hauxue Xuebao* **5**, 487–491 (1989).
- 1989AN/ZHE2 X.-W. An and X.-L. Zheng, *Acta Phys.-Chim. Sin.* **5**, 487–491 (1989).
- 1989AZA E. C. Azandegbe, *Analisis* **17**, 285–289 (1989).
- 1989BRA/RYT B. K. Braxton and J. H. Rytting, *Thermochim. Acta* **154**, 27–47 (1989).
- 1989BRE/LIC P. Bret-Dibat and A. Lichanot, *Thermochim. Acta* **147**, 261–271 (1989).
- 1989BRO/CON J. M. Brown, A. D. Conn, G. Pilcher, M. L. P. Leitao, and M. Y. J. Yang, *J. Chem. Soc., Chem. Commun.* 1817–1819 (1989).
- 1989CAT/CAB J. Catalan, P. Cabildo, J. Elguero, J. Gomez, and J. Laynez, *J. Phys. Org. Chem.* **2**, 646 (1989).
- 1989CEP/GON E. Cepeda, C. Gonzalez, and J. M. Resa, *J. Chem. Eng. Data* **34**, 270–273 (1989).
- 1989CHA/DEM A. Chauvet, A. De Maury, and J. Masse, *Thermochim. Acta* **147**, 17–32 (1989).
- 1989CHI/GRO M. P. Chiarelli and M. L. Gross, *Anal. Chem.* **61**, 1895–1900 (1989).
- 1989CHI/NGU R. D. Chirico, A. Nguyen, W. V. Steele, M. M. Strube, and C. Tsonopoulos, *J. Chem. Eng. Data* **34**, 149–156 (1989).
- 1989COL/JIM M. Colomina, P. Jimenez, M. V. Roux, and C. Turrion, *J. Chem. Thermodyn.* **21**, 275–281 (1989).
- 1989COX/WAG J. D. Cox, D. D. Wagman, and V. A. Medvedev, *CODATA Key Values for Thermodynamics* (Hemisphere, New York, 1989).
- 1989DOM U. Domanska, *J. Solution Chem.* **18**, 1153 (1989).
- 1989GON/KRA T. Gondova, P. Kralik, and J. Gonda, *Thermochim. Acta* **156**, 147–155 (1989).
- 1989HAN M. I. Hansford, Ph.D. thesis, Durham University, 1989, as quoted in [2000BRO/DU].
- 1989HIL/MOU F. R. Hilgeman, F. Y. N. Mouroux, D. Mok, and M. K. Holan, *J. Chem. Eng. Data* **34**, 220 (1989).
- 1989IMA/TAK A. Imamura, K. Takahashi, S. Murata, and M. Sakiyama, *J. Chem. Thermodyn.* **21**, 237–246 (1989).
- 1989JIM/ROU P. Jimenez, M. V. Roux, and C. Turrion, *J. Chem. Thermodyn.* **21**, 759–764 (1989).
- 1989LUB/JAN J. Lubkowski, T. Janiak, J. Czerminski, and J. Blazejowski, *Thermochim. Acta* **155**, 7–28 (1989).
- 1989NEA/FLY S. H. Neau, G. L. Flynn, and S. H. Yalkowsky, *Int. J. Pharm.* **49**, 223 (1989).
- 1989NIK/TRI R. Nikolic, J. Tripkovic, and D. H. Kerridge, *Thermochim. Acta* **146**, 353 (1989).
- 1989OZA/MAT R. Ozawa and M. Matsuoka, *J. Cryst. Growth* **98**, 411 (1989).
- 1989PAR/GME S. J. Park and J. Gmehling, *J. Chem. Eng. Data* **34**, 399–401 (1989).
- 1989RAI/MAN U. S. Rai, K. D. Mandal, and N. P. Singh, *J. Therm. Anal.* **35**, 1687 (1989).
- 1989RIB/MON M. A. V. Ribeiro Da Silva, M. J. S. Monte, and M. A. R. Matos, *J. Chem. Thermodyn.* **21**, 159–166 (1989).
- 1989RIB/RIB M. A. V. Ribeiro Da Silva, M. D. M. C. Ribeiro Da Silva, J. A. S. Teixeira, J. M. Bruce, P. M. Guyan, and G. Pilcher, *J. Chem. Thermodyn.* **21**, 265–274 (1989).
- 1989RIB/SOU M. D. M. C. Ribeiro Da Silva, P. Souza, and G. Pilcher, *J. Chem. Thermodyn.* **21**, 173–178 (1989).
- 1989ROR/RUT B. F. Rordorf, S. Rutschmann, and P. Schiess, *Int. J. Mass Spectrom. Ion Processes* **95**, 211–222 (1989).
- 1989SAK/IMA M. Sakiyama and A. Imamura, *Thermochim. Acta* **142**, 365 (1989).
- 1989SAL/ABA S. R. Salman and K. F. Abas, *Thermochim. Acta* **152**, 381–386 (1989).
- 1989SAL/ABA2 S. R. Salman and K. F. Abas, *Thermochim. Acta* **142**, 245–249 (1989).
- 1989SHI/SHI Y. Shibutani and K. Shinra, *Bull. Chem. Soc. Jpn.* **62**, 1477–1481 (1989).
- 1989STE/CHI2 W. V. Steele, R. D. Chirico, A. Nguyen, I. A. Hossenlopp, and N. K. Smith, *AIChE Symp. Ser.* **85**, 140–162 (1989).
- 1989STE/CHI3 W. V. Steele, R. D. Chirico, I. A. Hossenlopp, A. Nguyen, N. K. Smith, and B. E. Gammon, *J. Chem. Thermodyn.* **21**, 1121–1149 (1989).
- 1989SUZ/SHI E. Suzuki, K. Shimomura, and K. Sekiguchi, *Chem. Pharm. Bull.* **37**, 493–497 (1989).
- 1989TAN/SOR Z.-C. Tan, M. Sorai, and H. Suga, *Sci. China, Ser. B* **32**, 1194 (1989).
- 1989UTS/GAE H. Utschick, R. Gaedeke, and H. Sohr, *Z. Chem.* **29**, 257 (1989).
- 1989VAR/PAS R. M. Varushchenko and L. L. Pashchenko, *Russ. J. Phys. Chem.* **63**, 964–967 (1989).
- 1989VAR/SOM B. Varughese and J. T. Sommerfeld, *J. Chem. Eng. Data* **34**, 25–26 (1989).
- 1989VAR/SOM2 B. Varughese and J. T. Sommerfeld, *J. Chem. Eng. Data* **34**, 21–25 (1989).
- 1989VAS/LEB V. G. Vasil'ev and B. V. Lebedev, *Zh. Obshch. Khim.* **59**, 2415–2420 (1989).
- 1989VIN/WOR M. D. Vine and C. J. Wormald, *J. Chem. Thermodyn.* **21**, 1151–1157 (1989).
- 1989VOR/KLY M. G. Voronkov, V. A. Klyuchnikov, S. N. Kolabin, G. N. Shvets, P. I. Varushin, E. N. Deryagina, N. A. Korchevin, and S. I. Tsvetnitskaya, *Dokl. Phys. Chem.* **307**, 650–653 (1989).
- 1989WAN/YIN K. Wang, X.-G. Ying, M.-S. Xia, J.-Z. Xia, and Y. Hu, *J. Chem. Eng. Data* **34**, 126–130 (1989).

- 1989WOJ/MAR G. Wojcik and Y. Marqueton, *Mol. Cryst. Liq. Cryst.* **168**, 247 (1989).
- 1989WU/SAN H. S. Wu and S. I. Sandler, *J. Chem. Eng. Data* **34**, 209–213 (1989).
- 1989ZHA/HUA X. Zhang, W. Huang, F. Tan, G. Xu, and Z. Wu, *Chin. Sci. Bull.* **34**, 1844 (1989).
- 1989ZHA/YAN Z. Y. Zhang and M. L. Yang, *Thermochim. Acta* **156**, 157–161 (1989).
- 1990AMB/EWI D. Ambrose, M. B. Ewing, N. B. Ghiassae, and J. C. S. Ochoa, *J. Chem. Thermodyn.* **22**, 589 (1990).
- 1990AMB/GHI D. Ambrose and N. B. Ghiassae, *J. Chem. Thermodyn.* **22**, 307 (1990).
- 1990AN/HE X. An, J. He, and R.-H. Hu, *Thermochim. Acta* **169**, 331 (1990).
- 1990BAD/KUL V. G. Badelin, O. V. Kulikov, V. S. Vatagin, E. Udzig, A. Zielenkiewicz, W. Zielenkiewicz, and G. A. krestov, *Thermochim. Acta* **169**, 81 (1990).
- 1990BAR/DEL G. G. Barone, Della Gatta, D. Ferro, and V. Piacente, *J. Chem. Soc., Faraday Trans.* **86**, 75 (1990).
- 1990BAT/JAK G. Bator, R. Jakubas, Z. Malarski, Z. Galewski, J. Matuszewski, and A. Miniewicz, *J. Mol. Struct.* **240**, 39 (1990).
- 1990BEC/DOG H. D. Beckhaus, B. Dogan, J. Pakusch, S. P. Verevkin, and C. Ruchardt, *Chem. Ber.* **123**, 2153 (1990).
- 1990BET/GIO G. Bettinetti, F. Giordano, G. Fronza, A. Italia, R. Pellegata, M. Villa, and P. Ventura, *J. Pharm. Sci.* **79**, 470 (1990).
- 1990BHA/LAL D. V. Bhalla and J. K. Lalla, *Drug Dev. Ind. Pharm.* **16**, 115 (1990).
- 1990CAB/BEL J. L. Cabezas and S. Beltran, *J. Chem. Eng. Data* **35**, 389 (1990).
- 1990CEO/SZW R. Ceolin, H. Szwarc, and F. Lepage, *Thermochim. Acta* **158**, 347 (1990).
- 1990CHA/GAD J. Chao, N. A. M. Gadalla, B. E. Gammon, K. N. Marsh, A. S. Rodgers, G. R. Somayajulu, and R. C. Wilhoit, *J. Phys. Chem. Ref. Data* **19**, 1547 (1990).
- 1990CHI/ARC R. D. Chirico, D. G. Archer, I. A. Hossenlopp, A. Nguyen, W. V. Steele, and B. E. Gammon, *J. Chem. Thermodyn.* **22**, 665 (1990).
- 1990CHI/HOS J. S. Chickos, S. Hosseini, D. G. Hesse, and J. F. Liebman, *Struct. Chem.* **4**, 271–278 (1993).
- 1990DAU/HUT T. E. Daubert and G. Hutchison, *AIChE Symp. Ser.* **279**, 93 (1990).
- 1990DAV/FIN R. H. Davies, A. Finch, and K. Salem, *Thermochim. Acta* **170**, 213 (1990).
- 1990DOM/HEA E. S. Domalski and E. D. Hearing, *J. Phys. Chem. Ref. Data* **19**, 881 (1990).
- 1990DON/DRE J. R. Donnelly, L. A. Drewes, R. L. Johnson, W. D. Munslow, K. K. Knapp, and G. W. Sovocool, *Thermochim. Acta* **167**, 155 (1990).
- 1990DUT/KAH N. V. Dutt, A. P. Kahol, P. J. Reddy, and K. S. Raghunandan, *J. Chem. Eng. Data* **35**, 114 (1990).
- 1990FIN/PAY A. Finch and J. Payne, *Thermochim. Acta* **164**, 55 (1990).
- 1990FRI/DOG K. Fritsch, B. Dogan, H.-D. Beckhaus, and C. Rucuardt, *Thermochim. Acta* **160**, 147 (1990).
- 1990HAI/GIL J. Haines and D. F. R. Gilson, *J. Chem. Soc., Faraday Trans.* **86**, 2617 (1990).
- 1990HAI/GIL2 J. Haines and D. F. R. Gilson, *Can. J. Chem.* **68**, 604 (1990).
- 1990HIN/BID2 H. D. Hinckley, T. F. Bidleman, W. T. Foreman, and J. R. Tuschall, *J. Chem. Eng. Data* **35**, 232 (1990).
- 1990HWA/TAM D.-R. Hwang, M. Tamura, T. Yoshida, N. Tanaka, and F. Hosoya, *J. Energ. Mater.* **8**, 85–98 (1990).
- 1990HWA/YOS D. R. Hwang, F. Yoshizawa, and M. Tamura, *Anzen Kagaku* **29**, 168 (1990); *Chem. Abstr.* **115**, 186382x (1991).
- 1990KAB/MIR G. Y. Kabo, E. A. Miroshnichenko, M. L. Frenkel, A. A. Kozyro, V. V. Simirskii, A. P. Krasulin, V. P. Vorob'eva, and Y. A. Lebedev, *Izv. Akad. Nauk SSSR Ser. Khim.* **39**, 750 (1990).
- 1990KAB/MIR2 G. Y. Kabo, E. A. Miroshnichenko, M. L. Frenkel, A. A. Kozyro, V. V. Simirskii, A. P. Krasulin, V. P. Vorob'eva, and Y. A. Lebedev, *Bull. Acad. Sci. USSR, Div. Chem. Sci.* **39**, 662 (1990).
- 1990KNA/SAB P. Knauth and R. Sabbah, *Can. J. Chem.* **68**, 731 (1990).
- 1990KNA/SAB2 P. Knauth and R. Sabbah, *Struct. Chem.* **1**, 43 (1990).
- 1990KNA/SAB3 P. Knauth and R. Sabbah, *Thermochim. Acta* **164**, 145 (1990).
- 1990KOZ/SIM A. A. Kozyro, V. V. Simirskii, A. P. Krasulin, V. M. Sevruck, G. Y. Kabo, M. L. Frenkel, P. N. Gaponik, and Y. V. Grigor'ev, *Russ. J. Phys. Chem.* **64**, 348 (1990).
- 1990KOZ/SIM2 A. A. Kozyro, V. V. Simirskii, G. Y. Kabo, M. L. Frenkel, A. P. Krasulin, V. M. Sevruck, and N. A. Sokolov, *Zh. Fiz. Khim.* **64**, 2360 (1990).
- 1990KOZ/SIM3 A. A. Kozyro, V. V. Simirskii, A. P. Krasulin, V. M. Sevruck, G. Y. Kabo, M. L. Frenkel, P. N. Gaponik, and Y. V. Grigor'ev, *Zh. Fiz. Khim.* **64**, 656 (1990).
- 1990LEI/PIL M. L. P. Leitaó, G. Pilcher, W. E. Acree, Jr., A. I. Zvaigzne, S. A. Tucker, and M. D. M. C. Ribeiro Da Silva, *J. Chem. Thermodyn.* **22**, 923 (1990).
- 1990LEI/PIL2 M. L. P. Leitaó, G. Pilcher, Y. Meng-Yan, J. M. Brown, and A. D. Conn, *J. Chem. Thermodyn.* **22**, 885 (1990).
- 1990LEN M. Lenka, *J. Chem. Thermodyn.* **22**, 473 (1990).
- 1990LYM/REE J. D. Birkett, in *Handbook of Chemical Property Estimation Methods*, edited by W. J. Lyman, W. F. Reehl, and D. H. Rosaenblatt (American Chemical Society, 1990), p. 23-1.
- 1990MAN/AHU R. H. Manzo and A. A. Ahumanda, *J. Pharm. Sci.* **79**, 1109 (1990).
- 1990MAY/RAC J. Mayer, M. Rachwalska, E. Scresinska, and J. Sciesinski, *J. Phys.* **51**, 857 (1990).
- 1990MEN/PIL Y. Meng-Yan and G. Pilcher, *J. Chem. Thermodyn.* **22**, 893 (1990).
- 1990MES/TOD J. F. Messerly, S. S. Todd, H. L. Finke, S. H. Lee-Bechtold, G. B. Guthrie, W. V. Steele, and R. D. R. D. Chirico, *J. Chem. Thermodyn.* **22**, 1107 (1990).
- 1990MEV/LIC I. M. Meva'a and A. Lichanot, *Thermochim. Acta* **158**, 335 (1990).
- 1990MID/KAT Y. Mido, H. Katano, T. Isono, M. Hashimoto, and H. Matsuura, *J. Phys. Chem.* **94**, 8070 (1990).
- 1990MIH/BAS P. Mihailovic, P. Bassoul, and J. Simon, *J. Phys. Chem.* **94**, 2815 (1990).
- 1990NEA/FLY S. H. Neau and G. L. Flynn, *Pharm. Res.* **7**, 1157 (1990).
- 1990NES/NAZ T. N. Nesterova, A. G. Nazmutdinov, V. S. Tsvetkov, A. M. Rozhnov, and I. Yu. Roshchupkina, *J. Chem. Thermodyn.* **22**, 365 (1990).
- 1990ORT/SUS J. Ortego, P. Susial, and C. de Alfonso, *J. Chem. Eng. Data* **35**, 216 (1990).
- 1990PIA/FER V. Piacente, D. Ferro, and G. Della Gatta, *Thermochim. Acta* **158**, 79 (1990).
- 1990PUL/MAT R. Puliti, C. A. Mattia, G. Barone, G. Della Gatta, and D. Ferro, *Thermochim. Acta* **162**, 229 (1990).
- 1990RAM/KUD D. H. S. Ramkumar and A. P. Kudchadker, *Fluid Phase Equilib.* **55**, 207 (1990).
- 1990RIB/MAT M. A. V. Ribeiro Da Silva, M. A. R. Matos, and M. J. S. Monte, *J. Chem. Thermodyn.* **22**, 609 (1990).
- 1990RIB/MON M. A. V. Ribeiro Da Silva and M. J. S. Monte, *Thermochim. Acta* **171**, 169 (1990).
- 1990RIB/RIB M. A. V. Ribeiro Da Silva, M. D. M. C. Ribeiro Da Silva, M. C. S. S. Rangel, G. Pilcher, M. J. Akello, A. S. Carson, and E. H. Jamea, *Thermochim. Acta* **160**, 267 (1990).
- 1990RIC/YAN M. F. Richardson, O.-C. Yang, E. Novotny-Bregger, and J. D. Dunitz, *Acta Crystallogr., Sect. B* **46**, 653 (1990).
- 1990ROZ/BAR A. M. Rozhnov, V. I. Barkov, K. G. Sharonov, and V. S. Tsvetkov, *J. Chem. Thermodyn.* **22**, 327 (1990).
- 1990SIN/GLI N. B. Singh and M. E. Glicksman, *Thermochim. Acta* **159**, 93 (1990).
- 1990SIN/GUP R. N. Singh, J. P. Gupta, N. Singh, N. P. Singh, O. P. Singh, N. B. Singh, R. H. Hopkins, and R. Mazelsky, *Thermochim. Acta* **165**, 297 (1990).
- 1990SMI N. O. Smith, *J. Chem. Eng. Data* **35**, 387 (1990).
- 1990SOL/KAB T. V. Soldatova, G. Y. Kabo, A. A. Kozyro, and M. L. Frenkel, *Russ. J. Phys. Chem.* **64**, 177 (1990).
- 1990SUE/MAT K. Suenaga, T. Matsuo, and H. Suga, *Thermochim. Acta* **163**, 263 (1990).
- 1990SUH/MAN M. Suhara and K. Mano, *Z. Naturforsch., A* **45**, 339 (1990).

- 1990VAN/PAV Y. Y. Van-Chin-Syan, Y. P. Pavlovskii, N. S. Kachurina, M. A. Dikii, Y. V. Panchenko, and G. A. Petrovskaya, *Russ. J. Phys. Chem.* **64**, 295 (1990).
- 1990VAN/VAN H. A. Van Doren, R. van der Geest, R. M. Kellog, and H. Wynberg, *Recl. Trav. Chim. Pays-Bas* **109**, 197 (1990).
- 1990VOR/ZVE V. M. Vorotyntsev, Y. B. Zverev, and D. A. Shamrakov, *Vysokochist Veshchestra* **123** (1990).
- 1990YAW/YAN C. L. Yaws, H. C. Yang, and W. A. Cowley, *Hydrocarbon Process., Int. Ed.* **69**, 87 (1990).
- 1990YIN/LIN Z. Z. Ying and Y. M. Lin, *J. Chem. Thermodyn.* **22**, 617 (1990).
- 1990ZHA/YAN Z. Zhang and M. L. Yang, *Thermochim. Acta* **169**, 263 (1990).
- 1991ACR W. E. Acree, Jr., *Thermochim. Acta* **189**, 37 (1991), and references therein.
- 1991ACR/TUC W. E. Acree, Jr., S. A. Tucker, A. I. Zvaigzne, Y. Meng-Yan, G. Pilcher, and M. D. M. C. Ribeiro Da Silva, *J. Chem. Thermodyn.* **23**, 31 (1991).
- 1991AUE/WEB D. H. Aue, H. M. Webb, W. R. Davidson, P. Toure, H. P. Hopekins, Jr., S. P. Moulik, and D. V. Jahagirdar, *J. Am. Chem. Soc.* **113**, 1770-1780 (1991).
- 1991BAS/SVO P. Basarova and V. Svoboda, *Fluid Phase Equilib.* **68**, 13 (1991).
- 1991BED/BOO A. D. Bedells, C. Booth, and K. Viras, *Makromol. Chem.* **192**, 2099 (1991).
- 1991BER/MAR V. Berbenni, A. Marini, V. Massarotti, D. Capsoni, R. Riccardi, C. Margheritis, and M. Conte, *Thermochim. Acta* **181**, 315 (1991).
- 1991BYK/KIP T. A. Bykova, Y. G. Kiparisova, B. V. Lebedev, K. A. Mager, and Y. G. Gololobov, *Polym. Sci. U.S.S.R.* **33**, 537 (1991).
- 1991CHI/BRA J. S. Chickos, C. M. Braton, D. G. Hesse, and J. F. Liebman, *J. Org. Chem.* **56**, 927 (1991), and references and supplementary material therein.
- 1991CHI/KN12 R. D. Chirico, S. E. Knipmeyer, A. Nguyen, and W. V. Steele, *J. Chem. Thermodyn.* **23**, 759 (1991).
- 1991DIK/KAB V. V. Dikii and G. Ya. Kabo, *Dokl. Akad. Nauk BSSR* **35**, 158 (1991); *Chem. Abstr.* **114**, 206233j (1991).
- 1991ELG/YRA J. Elguero, G. I. Yranzo, J. Laynez, P. Jimenez, M. Menendez, J. Catalan, J. L. G. de Paz, F. Anvia, and R. W. Taft, *J. Org. Chem.* **56**, 3942 (1991).
- 1991ELI L. Elias, *Conference on International Civil Aviation Organization paper AH-DE/5-WP/17*, Montreal, 23-27 September 1991, as quoted in [2002JON/LIG].
- 1991ELW/SAB L. El Watik and R. Sabbah, *Bull. Soc. Chim. Fr.* **128**, 344 (1991).
- 1991EWI/GOO M. B. Ewing and A. R. H. Goodwin, *J. Chem. Thermodyn.* **23**, 1163 (1991).
- 1991FUK/MAT M. Fukai, T. Matsuo, and H. Suga, *Thermochim. Acta* **183**, 215 (1991).
- 1991HEN/TSC F. Hentrich, C. Tschierske, and H. Zaszke, *Angew. Chem., Int. Ed. Engl.* **30**, 440 (1991).
- 1991HOR T. Hori, *Shikizai Kyokaiishi* **64**, 83 (1991).
- 1991KAW/GIL N. T. Kawai, D. F. R. Gilson, and I. S. Butler, *Can. J. Chem.* **69**, 1758 (1991).
- 1991KIS/PIN I. Kishimoto, J. J. Pinvidic, T. Matsuo, and H. Suga, *Proc. Jpn. Acad., Ser. B* **67**, 66 (1991).
- 1991KOL/ROZ M. Kol, S. Rozen, and E. Appelman, *J. Am. Chem. Soc.* **113**, 2648 (1991).
- 1991LAB/WES A. K. Labban, E. F. Westrum, Jr., and J. A. R. Cheda, *Can. J. Chem.* **69**, 1796 (1991).
- 1991LEF/GUI C. Lefebvre, F. Guillaume, R. Bouche, R. Bouaziz, and J. C. Guyot, *Pharm. Acta Helv.* **66**, 90 (1991).
- 1991LIU/GUO Z. Z. Liu, X. D. Guo, L. E. Straub, G. Erdos, R. J. Prankerd, R. J. Gonzalez-Rothi, and H. Schreier, *Drug Des. Discovery* **8**, 57 (1991).
- 1991LUK/TIM V. A. Luk'yanova, L. P. Timofeeva, M. P. Kozina, V. N. Kirin, and A. V. Tarakanova, *Russ. J. Phys. Chem.* **65**, 439 (1991).
- 1991MON/HOU D. Mondieig, J. R. Housty, Y. Haget, M. A. Cuevas-Diarte, and H. A. J. Oonk, *Thermochim. Acta* **177**, 169 (1977).
- 1991PIC/RYL M. Pickering, J. Rylance, R. W. H. Small, and D. Stubley, *Acta Crystallogr., Sect. B* **47**, 782 (1991).
- 1991RAD/RAD M. Radomska and R. Radomski, *J. Therm. Anal.* **37**, 693 (1991).
- 1991RAI/GEO U. S. Rai and S. George, *Cryst. Res. Technol.* **26**, 511 (1991).
- 1991ROZ/SAF A. M. Rozhnov, V. V. Safronov, S. P. Verevkin, K. G. Sharonov, and V. I. Alenin, *J. Chem. Thermodyn.* **23**, 629 (1991).
- 1991SAB/AN R. Sabbah and X. W. An, *Thermochim. Acta* **178**, 339 (1991).
- 1991SAB/AN2 R. Sabbah and X. W. An, *Thermochim. Acta* **179**, 81 (1991).
- 1991SAB/BUL R. Sabbah and E. N. L. E. Buluku, *Can. J. Chem.* **69**, 481 (1991).
- 1991SAB/HIR R. Sabbah and H. Hirtz, *Bull. Soc. Chim. Fr.* **26** (1991).
- 1991SHA/MIS K. G. Sharonov, Y. B. Mishentseva, A. M. Rozhnov, E. A. Miroshnichenko, and L. I. Korchatova, *J. Chem. Thermodyn.* **23**, 636 (1991).
- 1991STE/CHI2 W. V. Steele, R. D. Chirico, A. Nguyen, I. A. Hossenlopp, and N. K. Smith, U.S. DOE Report NIPER-514 (1991), pp. 1-80.
- 1991VAN/VER J. C. van Miltenburg and M. L. Verdonk, *J. Chem. Thermodyn.* **23**, 273 (1991).
- 1991VAS/BYK V. G. Vasil'ev, T. A. Bykova, and B. V. Lebedev, *Zh. Fiz. Khim.* **65**, 51 (1991).
- 1991WHI/PER M. A. White and A. Perrott, *J. Solid State Chem.* **90**, 87 (1991).
- 1991WIB/HAO K. B. Wiberg and S. Hao, *J. Org. Chem.* **56**, 5108 (1991).
- 1991WIB/WAL K. B. Wiberg and R. F. Waldron, *J. Am. Chem. Soc.* **113**, 7697 (1991).
- 1991WIL/WIL W. V. Wilding, L. C. Wilson, and G. M. Wilson, *AIChE Data Ser.* **1**, 6 (1991).
- 1991WU/LOC H. S. Wu, W. E. Locke III, and S. I. Sandler, *J. Chem. Eng. Data* **36**, 127 (1991).
- 1991WU/PIV H. S. Wu, K. A. Pivaldi, and S. I. Sandler, *J. Chem. Eng. Data* **36**, 418 (1991).
- 1991WU/XIO S. Wu and W. Xiong, Xibei Daxue Xuebao, *Ziran Kexueban* **21**, 39 (1991).
- 1991WYR/PAL D. Wyrzykowska-Stankiewicz and M. Palczewska-Tulinska, *Thermochim. Acta* **190**, 209 (1991).
- 1991ZHA/HUA X. Zhang, W. Huang, F. Tan, G. Xu, and Z. Wu, *Acta Phys.-Chim. Sin.* **1**, 106 (1991).
- 1992ACR/SIM W. E. Acree, Jr., V. V. Simirsky, A. A. Kozyro, A. P. Krasulin, G. J. Kabo, and M. L. Frenkel, *J. Chem. Eng. Data* **37**, 131 (1992).
- 1992ACR/TUC W. E. Acree, Jr., S. A. Tucker, and G. Pilcher, *J. Chem. Thermodyn.* **24**, 213 (1992).
- 1992BAB/HWA M. W. Babich, S. W. Hwang, and R. D. Mounts, *Thermochim. Acta* **210**, 83 (1992).
- 1992BAB/HWA2 M. W. Babich, S. W. Hwang, and R. D. Mounts, *Thermochim. Acta* **210**, 77 (1992).
- 1992BAR/GIA G. Barone, C. Giancola, T. H. Lilley, C. A. Mattia, and R. Puliti, *J. Therm. Anal.* **38**, 2771 (1992).
- 1992ELS/PRA M. Elsabee and R. Prankerd, *Int. J. Pharm.* **86**, 211 (1992), Note: Experimental fusion enthalpy (in J g⁻¹) was taken from graph.
- 1992GRA/SAN M. Gracia, F. Sanchez, P. Perez, J. Valero, and C. Gutierrez-Losa, *J. Chem. Thermodyn.* **24**, 463 (1992).
- 1992HE/AN J. He, X.-W. An, and R.-H. Hu, *Acta Chim. Sin.* **50**, 943 (1992).
- 1992HEA/SIN E. A. Heath, P. Singh, and Y. Ebisuzaki, *Acta Crystallogr., Sect. C* **48**, 1960 (1992).
- 1992JAD/FRA R. Jadot and M. Fraiha, *J. Chem. Eng. Data* **37**, 509 (1992).
- 1992JIM/ROU P. Jimenez, M. V. Roux, and C. Turron, *J. Chem. Thermodyn.* **24**, 1145 (1992).
- 1992KAB/KOZ G. J. Kabo, A. A. Kozyro, V. S. Krouk, V. M. Sevruk, I. A. Yursha, V. V. Simirsky, and V. I. Gogolinsky, *J. Chem. Thermodyn.* **24**, 1 (1992).
- 1992KAM M. Kaminski, *Bull. Pol. Acad. Sci., Chem.* **40**, 149 (1992).
- 1992KAT H. Katayama, *J. Chem. Eng. Jpn.* **25**, 366 (1992).
- 1992KAW/GIL N. T. Kawai, D. F. R. Gilson, and I. S. Butler, *Mol. Cryst. Liq. Cryst.* **211**, 59 (1992).

- 1992KIM/SZY W. Kimizuka and J. Szydowski, *Fluid Phase Equilib.* **77**, 261 (1992).
- 1992KOZ/KAB A. A. Kozyro, G. J. Kabo, V. S. Krouk, M. S. Sheiman, I. A. Yursha, V. V. Simirsky, A. P. Krasulin, V. M. Sevruck, and V. I. Gogolinsky, *J. Chem. Thermodyn.* **24**, 883 (1992).
- 1992LEB/KUL B. V. Lebedev and T. G. Kulagina, *J. Chem. Thermodyn.* **24**, 751 (1992).
- 1992LEB/SMI B. Lebedev, N. Smirnova, Y. Kiparisova, and K. Makovetsky, *Makromol. Chem.* **193**, 1399 (1992).
- 1992LEE/CHE C.-H. Lee, Q. Chen, R. S. Mohamed, and G. D. Holder, *J. Chem. Eng. Data* **37**, 179 (1992).
- 1992LEE/DEM C.-H. Lee, D. M. Dempsey, R. S. Mohamed, and G. D. Holder, *J. Chem. Eng. Data* **37**, 183 (1992).
- 1992MAK Yu. Ya. Maksimov, *Zh. Fiz. Khim.* **66**, 540 (1992).
- 1992MAN K. D. Mandal, *Pol. J. Chem.* **66**, 1673 (1992).
- 1992NGU/KAS J. N'Guimbi, H. Kasehgari, I. Mokbel, and J. Jose, *Thermochim. Acta* **196**, 367 (1992).
- 1992OGU/YAM K. Oguchi, M. Yamagishi, and A. Murano, *Fluid Phase Equilib.* **80**, 131 (1992).
- 1992OKA/OGU N. Okamoto, M. Oguni, and H. Suga, *Thermochim. Acta* **202**, 215 (1992).
- 1992PAP/PIM T. S. Papina, S. M. Pimenova, V. Yu. Zakharov, and V. P. Kolesov, *Zh. Khim. Termodin.* **1**, 207 (1992).
- 1992RAA/BRO J. D. Raal and C. J. Brouchart, *Fluid Phase Equilib.* **74**, 253 (1992).
- 1992RAH/GME U. Rahm and E. Gmelin, *J. Therm. Anal.* **38**, 335 (1992).
- 1992RAI/GEO U. S. Rai and S. George, *Can. J. Chem.* **70**, 2869 (1992).
- 1992REI/HAN H. Reinke, M. Hans, and H. Dehne, *Mikrochim. Acta* **108**, 143 (1992).
- 1992RIB/MAT M. A. V. Ribeiro Da Silva, A. R. Matos, Y. Meng-Yan, and G. Pilcher, *J. Chem. Thermodyn.* **24**, 107 (1992).
- 1992RIB/MON M. A. V. Ribeiro Da Silva and M. J. S. Monte, *J. Chem. Thermodyn.* **24**, 1219 (1992).
- 1992RIB/MON2 M. A. V. Ribeiro Da Silva and M. J. S. Monte, *J. Chem. Thermodyn.* **24**, 715 (1992).
- 1992RIB/REI M. A. V. Ribeiro Da Silva, A. M. V. Reis, M. J. S. Monte, M. S. F. Bartolo, and J. A. Rodrigues, *J. Chem. Thermodyn.* **24**, 653 (1992).
- 1992SAB/ELW3 R. Sabbah and L. El Watik, *J. Therm. Anal.* **38**, 855 (1992).
- 1992SAB/WAT R. Sabbah and L. E. Watik, *J. Therm. Anal.* **38**, 803 (1992).
- 1992SAL/WAN M. Salvi-Narkhede, B.-H. Wang, J. L. Adcock, and W. H. Van Hook, *J. Chem. Thermodyn.* **24**, 1065 (1992).
- 1992SHA/SHA B. L. Sharma, N. K. Sharma, and M. Rambal, *Thermochim. Acta* **206**, 71 (1992).
- 1992SMI/LEB N. N. Smirnova, B. V. Lebedev, E. G. Kiparisova, K. L. Makovetskii, and L. I. Gorbacheva, *Polym. Sci. U.S.S.R.* **34**, 72 (1992).
- 1992STE/CHI2 W. V. Steele, R. D. Chirico, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Thermodyn.* **24**, 499 (1992).
- 1992SVO/KUB V. Svoboda, V. Kubes, and P. Basarova, *J. Chem. Thermodyn.* **24**, 333 (1992).
- 1992SVO/KUB2 V. Svoboda, V. Kubes, and P. Basarova, *J. Chem. Thermodyn.* **24**, 555 (1992).
- 1992VER/BEC S. P. Verevkin, H.-D. Beckhaus, and C. Ruchardt, *Thermochim. Acta* **197**, 27 (1992).
- 1992WEB L. A. Weber, *Fluid Phase Equilib.* **80**, 141 (1992).
- 1992WHI/WAS M. A. White, R. E. Wasylshen, P. E. Eaton, Y. Xiong, K. Pramod, and N. Nodari, *J. Phys. Chem.* **96**, 421 (1992).
- 1992ZHU/WU M.-S. Zhu, J. Wu, and Y.-D. Fu, *Fluid Phase Equilib.* **80**, 99 (1992).
- 1993ABB/JIM J.-L.M. Abboud, P. Jimenez, M. V. Roux, C. Turrion, and C. Lopez-Mardomingo, *Calorim. Anal. Therm.* **24**, 181 (1993).
- 1993ACR W. E. Acree, Jr., *Thermochim. Acta* **219**, 97 (1993), and references therein.
- 1993ACR/SEV W. E. Acree, Jr., V. M. Sevruck, A. A. Kozyro, A. P. Krasulin, G. J. Kabo, and M. L. Frenkel, *J. Chem. Eng. Data* **38**, 101 (1993).
- 1993ACR/TUC2 W. E. Acree, Jr., S. A. Tucker, G. Pilcher, A. Chowdhary, M. D. C. Ribeiro Da Silva, and M. J. S. Monte, *J. Chem. Thermodyn.* **25**, 1253 (1993).
- 1993AN/XIE X.-W. An and Y.-D. Xie, *Thermochim. Acta* **220**, 17 (1993).
- 1993AUC/BUR A. Aucejo, M. C. Burguet, R. Munoz, and M. I. Vazquez, *J. Chem. Eng. Data* **38**, 379 (1993).
- 1993AUC/MON A. Aucejo, J. B. Monton, R. Munoz, and M. Sanchotello, *J. Chem. Eng. Data* **38**, 160 (1993).
- 1993BEC/QUA G. Becket, S. B. Quah, and J. O. Hill, *J. Therm. Anal.* **40**, 537 (1993).
- 1993BRU/MON M. C. Burguet, J. B. Monton, M. Sanchotello, and M. I. Vazquez, *J. Chem. Eng. Data* **38**, 328 (1993).
- 1993CHI/HOS J. S. Chickos, S. Hosseini, D. G. Hesse, and J. F. Liebman, *Struct. Chem.* **4**, 261 (1993), Note: Heat capacity corrections to 298 K were estimated by the procedure outlined in the article.
- 1993CHI/HOS2 J. S. Chickos, S. Hosseini, D. G. Hesse, and J. F. Liebman, *Struct. Chem.* **4**, 261–269 (1993).
- 1993CHI/KN1 R. D. Chirico, S. E. Knipmeyer, A. Nguyen, and W. V. Steele, *J. Chem. Thermodyn.* **25**, 1461 (1993).
- 1993DEM/BUC D. De Marco, R. Bucci, and C. Gallo, *J. Therm. Anal.* **39**, 239 (1993).
- 1993DIK/KAB V. V. Diky, G. J. Kabo, A. A. Kozyro, A. P. Krasulin, and V. M. Sevruck, *J. Chem. Thermodyn.* **25**, 1169 (1993).
- 1993ELM/CHA A. El Moussaoui, A. Chauvet, and J. Masse, *J. Therm. Anal.* **39**, 373 (1993).
- 1993FAR/WIC J. Farkova and I. Wichterle, *Fluid Phase Equilib.* **90**, 143 (1993).
- 1993FER/MOR N. C. Ferreira, C. A. Moreira dos Santos, and I. C. C. Calegao, *Ecl. Quim. Sao Paulo* **18**, 49 (1993).
- 1993FUJ/OGU H. Fujimori and M. Oguni, *J. Phys. Chem. Solids* **54**, 607 (1993).
- 1993FUJ/OGU2 H. Fujimori and M. Oguni, *J. Phys. Chem. Solids* **54**, 271 (1993).
- 1993HAK G. Hakvoort, *Calorim. Anal. Therm.* **24**, 177 (1993).
- 1993HE/AN J. He, X. An, and R. Hu, *Huaxue Xuebao* **51**, 1059 (1993); *Chem. Abstr.* **120**, 87930w (1994).
- 1993IGA/LOP J. M. Igartua, A. Lopez-Echarri, T. Breczewski, and I. Ruiz-Larrea, *Phase Transitions* **46**, 47 (1993).
- 1993KAB/KOZ G. J. Kabo, A. A. Kozyro, A. P. Krasulin, V. M. Sevruck, and L. S. Ivashkevich, *J. Chem. Thermodyn.* **25**, 485 (1993).
- 1993KAS/MOK H. Kasehgari, I. Mokbel, C. Viton, and J. Jose, *Fluid Phase Equilib.* **87**, 133 (1993).
- 1993KOZ/KAB A. A. Kozyro, G. J. Kabo, A. P. Krasulin, V. M. Sevruck, V. V. Simirsky, M. S. Sheiman, and M. L. Frenkel, *J. Chem. Thermodyn.* **25**, 1409 (1993).
- 1993LEB/VAS B. Lebedev, V. Vasil'yev, and N. Novosyolova, *Makromol. Chem.* **194**, 739 (1993).
- 1993LEE/HOL C.-H. Lee and G. D. Holder, *J. Chem. Eng. Data* **38**, 320 (1993).
- 1993NAD/BER M. H. Nadais and M. G. Bernardo-Gil, *Fluid Phase Equilib.* **91**, 321 (1993).
- 1993OIS/HOR T. Oishi, H. Horie, and H. Shuyama, *Polym. J.* **25**, 781 (1993).
- 1993OVC/SOB V. V. Ovchinnikov, A. A. Sobanov, and A. N. Pudovik, *Dokl. Phys. Chem.* **333**, 483 (1993).
- 1993PIA/FER V. Piacente, D. Ferro, and G. Della Gatta, *Thermochim. Acta* **223**, 65 (1993).
- 1993PIL/PAR G. Pilcher, O. G. Parchment, I. H. Hillier, F. Heatley, D. Fletcher, M. A. V. Ribeiro Da Silva, M. L. C. C. H. Ferrao, M. J. S. Monte, and F. Jiye, *J. Phys. Chem.* **97**, 243 (1993).
- 1993RAN/LAK H. S. Randhawa and R. Lakhani, *J. Therm. Anal.* **39**, 437–445 (1993).
- 1993REI/SAN R. Reich and V. Sanhueza, *J. Chem. Eng. Data* **38**, 341 (1993).
- 1993RIB/FER M. A. V. Ribeiro Da Silva, M. L. C. C. H. Ferrao, and A. J. M. Lopes, *J. Chem. Thermodyn.* **25**, 229 (1993).
- 1993RIB/MAT M. A. V. Ribeiro Da Silva, M. A. R. Matos, M. J. S. Monte, M. C. B. Alves, and J. M. A. P. Vieira, *J. Chem. Thermodyn.* **25**, 579 (1993).
- 1993RIB/RIB M. A. V. Ribeiro Da Silva, M. D. M. C. Ribeiro Da Silva, J. P. A. Paiva, I. M. C. S. Nogueira, A. M. Damas, J. V. Barley, M. M. Harding, M. J. Akello, and G. Pilcher, *J. Chem. Soc., Perkin Trans. 2* **1993**, 1765.

- 1993SAB/LE R. Sabbah and T. H. D. Le, *Can. J. Chem.* **71**, 1378 (1993).
- 1993SAB/PEM R. Sabbah and O. Pemenzi, *C. R. Acad. Sci. Paris Ser. II* **317**, 575 (1993).
- 1993SCH/BEC R. Schulze, H.-D. Beckhaus, and C. Rüchardt, *Chem. Ber.* **126**, 1031 (1993).
- 1993SIL/WEB A. M. Silva and L. A. Weber, *J. Chem. Eng. Data* **38**, 644 (1993).
- 1993SIN/CAR M. Siniti, J. Carre, J. M. Letoffe, J. P. Bastide, and P. Claudy, *Thermochim. Acta* **224**, 97 (1993).
- 1993STR/ARG L. Stradella and M. Argeniero, *Thermochim. Acta* **219**, 315 (1993).
- 1993SUS/ORT P. Susial and J. Ortego, *J. Chem. Eng. Data* **38**, 434 (1993).
- 1993SUS/ORT2 P. Susial and J. Ortego, *J. Chem. Eng. Data* **38**, 647 (1993).
- 1993SZA/CZA M. Szafanski, P. Czarnecki, W. Dollhopf, G. W. H. Hone, G. Brackenhofer, and W. Nawrocik, *J. Phys.: Condens. Matter* **5**, 7425 (1993).
- 1993TIE G. V. D. Tiers, *Thermochim. Acta* **226**, 317 (1993).
- 1993TIE/FRA G. V. D. Tiers and C. V. Francis, *Thermochim. Acta* **226**, 311 (1993).
- 1993VAR/PUC R. M. Varushchenko, G. A. Puchkova, and A. I. Druzhinina, *Zh. Fiz. Khim.* **67**, 897 (1993).
- 1993WEB/GOO L. A. Weber and A. R. H. Goodwin, *J. Chem. Eng. Data* **38**, 254 (1993).
- 1993WOL/KIM H. Wolff, W. Kimizuka, and J. Szydowski, *Fluid Phase Equilib.* **90**, 163 (1993).
- 1993XIE/CHE R. Xie and C. J. Chen, *J. Chem. Eng. Chin. Univ.* **7**, 267 (1993).
- 1994ACR/TUC W. E. Acree, Jr., S. A. Tucker, G. Pilcher, and G. Toole, *J. Chem. Thermodyn.* **26**, 85 (1994).
- 1994AIM K. Aim, *J. Chem. Eng. Data* **39**, 591 (1994).
- 1994AIM2 K. Aim, *J. Chem. Thermodyn.* **26**, 977 (1994).
- 1994ANT/SAN M. Antosik and S. I. Sandler, *J. Chem. Eng. Data* **39**, 584 (1994).
- 1994AUC/BUR A. Aucejo, M. C. Burguet, J. B. Monton, R. Munoz, M. Sanchotello, and M. I. Vazquez, *J. Chem. Eng. Data* **39**, 578 (1994).
- 1994BLA/BEL B. Blanco, S. Beltran, J. L. Cabezas, and J. Coca, *J. Chem. Eng. Data* **39**, 23 (1994).
- 1994BLU/PRA D. Blunk, K. Praefcke, and G. Legler, *Liq. Cryst.* **17**, 841 (1993).
- 1994CAR/LAY A. S. Carson, P. G. Laye, J. B. Pedley, A. M. Welsby, J. S. Chickos, and S. Hosseini, *J. Chem. Thermodyn.* **26**, 1103 (1994).
- 1994CHI/HOS R. D. Chirico, I. A. Hossenlopp, B. E. Gammon, S. E. Knipmeyer, and W. V. Steele, *J. Chem. Thermodyn.* **26**, 1187 (1994).
- 1994CHI/HOS2 R. D. Chirico, I. A. Hossenlopp, B. E. Gammon, S. E. Knipmeyer, and W. V. Steele, *J. Chem. Thermodyn.* **26**, 1219 (1994).
- 1994CUN/JON *Experimental Results for DIPPR 1990-1991 Projects on Phase Equilibria and Pure Component Properties*, edited by J. R. Cunningham and D. K. Jones, DIPPR Data Series (AIChE, New York, NY, 1994), Vol. 2, p. 154.
- 1994DIK/KAB V. V. Diky, G. J. Kabo, A. A. Kozyro, A. P. Krasulin, and V. M. Sevruk, *J. Chem. Thermodyn.* **26**, 1001 (1994).
- 1994DOU/FUE S. Q. Dou, H. Fuess, W. Schmahl, R. Strauss, and A. Weiss, *Z. Naturforsch.* **49A**, 594 (1994).
- 1994FER/MAR D. Ferro, R. Martino, and G. Della Gatta, *J. Chem. Thermodyn.* **26**, 183 (1994).
- 1994FON/MUN J. Font and J. Muntasell, *Mater. Res. Bull.* **29**, 1091 (1994).
- 1994FON/MUN2 J. Font and J. Muntasell, *Thermochim. Acta* **246**, 57 (1994).
- 1994FUJ/OGU H. Fujimori and M. Oguni, *J. Chem. Thermodyn.* **26**, 367 (1994).
- 1994GRA/PER M. Gracia, P. Perez, and J. Valero, *Fluid Phase Equilib.* **97**, 147 (1994).
- 1994HEN/DIE F. Hentrich, S. Diele, and C. Tschierske, *Liq. Cryst.* **17**, 827 (1994).
- 1994HUA/CHE W. Huang, S. Chen, F. Tan, and Z. Yang, *Wuli Huaxue Xuebao* **10**, 151 (1994).
- 1994KIM/LEE K.-J. Kim, C.-H. Lee, and S.-K. Ryu, *J. Chem. Eng. Data* **39**, 228 (1994).
- 1994KOU/HOS B. Koutek, M. Hoskovec, P. Vrkova, K. Konecny, and L. Feltl, *J. Chromatogr. A* **679**, 307 (1994).
- 1994KRA/GME M. A. Krähenbühl and J. Gmehling, *J. Chem. Eng. Data* **39**, 759 (1994).
- 1994KUH/BUR M. Kuhnert-Brandstatter, A. Burger, and R. Vollenkle, *Sci. Pharm.* **62**, 307 (1994).
- 1994LAR/MAR S. Larsen and K. Marthi, *Acta Crystallogr., Sect. B* **50**, 373 (1994).
- 1994LEB/SMI B. Lebedev and N. Smirnova, *Macromol. Chem. Phys.* **195**, 35 (1994).
- 1994LEB/SMI3 B. V. Lebedev, N. N. Smirnova, V. G. Yasil'ev, E. G. Kiparisova, and V. I. Kleiner, *Polym. Sci. USSR Ser. A* **36**, 1171 (1994).
- 1994LEE/LIE M.-J. Lee, P.-J. Lien, and W.-K. Huang, *Ind. Eng. Chem. Res.* **33**, 2853 (1994).
- 1994LIU/DIC K. Liu and R. M. Dickhut, *Chemosphere* **29**, 581 (1994).
- 1994LOP/VAN D. O. Lopez, J. Van Braak, J. L. L. Tamarit, and H. A. J. Oonk, *Calphad* **18**, 387 (1994).
- 1994ORT/GAL J. Ortego and S. Galvan, *J. Chem. Eng. Data* **39**, 907 (1994).
- 1994PIA/FER V. Piacente, D. Ferro, and G. Della Gatta, *Thermochim. Acta* **232**, 317 (1994); **235**, 292 (1994).
- 1994RAK/VER K. Rakus, S. P. Verevkin, H.-D. Beckhaus, and C. Rüchardt, *Chem. Ber.* **127**, 2225 (1994).
- 1994RIB/FER2 M. A. V. Riberio Da Silva, M. L. C. C. H. Ferrao, J. H. Fang, and F. Jiye, *J. Chem. Thermodyn.* **26**, 839 (1994).
- 1994RUZ/MAJ K. Ruzicka and V. Majer, *J. Phys. Chem. Ref. Data* **23**, 1 (1994).
- 1994RUZ/ZAB V. Ruzicka, Jr., M. Zabransky, K. Ruzicka, and V. Majer, *Thermochim. Acta* **245**, 121 (1994).
- 1994SAB/GOU R. Sabbah and M. Gouali, *Aust. J. Chem.* **47**, 1651 (1994).
- 1994SAB/TAB R. Sabbah, D. Tabet, and S. T. Belaadi, *Thermochim. Acta* **247**, 193 (1994).
- 1994SIR/MAM G. Siracusa, A. Mamo, and M. Bellomo, *Thermochim. Acta* **244**, 105 (1994).
- 1994SMI/MAT S. P. Smirnov, Y. N. Matiushin, and I. Z. Akmetov, *Conference on International Civil Aviation Organization paper AH-DE/8-WP/12*, Montreal, 14-18 February 1994, as quoted in [2002JON/LIG].
- 1994SPI/LUI W. Spieksma, R. Luijk, and H. A. J. Govers, *J. Chromatogr. A* **672**, 141 (1994).
- 1994STE/CHI W. V. Steele, R. D. Chirico, A. Nguyen, and S. E. Knipmeyer, *J. Chem. Thermodyn.* **26**, 515 (1994).
- 1994STE/CHI2 W. V. Steele, R. D. Chirico, I. A. Hossenlopp, S. E. Knipmeyer, A. Nguyen, and N. K. Smith, "Determination of ideal-gas phase enthalpies of formation for key compounds," in *Experimental Results for DIPPR 1990-1991 Projects on Phase Equilibria Pure Component Properties*, edited by J. R. Cunningham and D. K. Jones (AIChE, New York, 1994), pp. 188-215.
- 1994TAN/SAB Z. C. Tan and R. Sabbah, *Sci. China, Ser. B: Chem., Life Sci., Earth Sci.* **37**, 641 (1994).
- 1994TAN/SAB2 Z. C. Tan and R. Sabbah, *Thermochim. Acta* **231**, 109 (1994).
- 1994TAN/SAB3 Z. C. Tan and R. Sabbah, *J. Therm. Anal.* **41**, 1577 (1994).
- 1994TAN/SAB4 Z. C. Tan and R. Sabbah, *Chin. Sci. Bull.* **39**, 1003 (1994).
- 1994TER/PIA L. Terenzi and V. Piacenti, *Thermochim. Acta* **235**, 61 (1994).
- 1994TIP/JIM A. E. Tipping, P. Jimenez, E. Ballesteros, J.-L. M. Abboud, M. Yanez, M. Esseffar, and J. Elguero, *J. Org. Chem.* **59**, 1039 (1994).
- 1994TOR/HER L. A. Torres, I. Hernandez-Contreras, J. A. Guardado, and M. G. Gonzalez, *Meas. Sci. Technol.* **5**, 51 (1994).
- 1994WAN/KUO C.-C. Wang, J.-F. Kuo, and C.-Y. Chen, *Macromol. Chem. Phys.* **195**, 1493 (1994).
- 1994WAN/SHU F. Wania, W.-Y. Shui, and D. Mackay, *J. Chem. Eng. Data* **39**, 572 (1994).
- 1994WEL/VER F. Welle, S. P. Verevkin, M. Keller, H.-D. Beckhaus, and C. Rüchardt, *Chem. Ber.* **127**, 697 (1994).

- 1994WIB/MOR K. B. Wiberg, K. M. Morgan, and H. Maltz, *J. Am. Chem. Soc.* **116**, 11067 (1994).
- 1994ZIE/ZIE W. Zielenkiewicz, A. Zielenkiewicz, and K. L. Wierzchowski, *J. Solution Chem.* **23**, 1125 (1994).
- 1995ABB/JIM J.-L. M. Abboud, P. Jimenez, M. V. Roux, C. Turron, C. Lopez-Mardomingo, A. Podosenin, D. W. Rogers, and J. F. Liebman, *J. Phys. Org. Chem.* **8**, 15 (1995).
- 1995ACR/TUC W. E. Acree, Jr., S. A. Tucker, M. D. M. C. Ribeiro Da Silva, M. A. R. Matos, J. M. Goncalves, M. A. V. Ribeiro Da Silva, and G. Pilcher, *J. Chem. Thermodyn.* **27**, 391 (1995).
- 1995ALM/FIN H. M. A. Al-Maydama, A. Finch, P. J. Gardner, and A. J. Head, *J. Chem. Thermodyn.* **27**, 575 (1995).
- 1995ALM/FIN2 H. M. A. Al-Maydama, A. Finch, P. J. Gardner, and A. J. Head, *J. Chem. Thermodyn.* **27**, 273 (1995).
- 1995ARC/BLA A. Arce, A. Blanco, J. Martinez-Ageitos, and A. Soto, *J. Chem. Eng. Data* **40**, 515 (1995).
- 1995AUC/GON A. Aucejo, V. Gonzalez-Alfaro, J. B. Monton, and M. I. Vazquez, *J. Chem. Eng. Data* **40**, 332 (1995).
- 1995BAH/DUP A. Bah and N. Dupont-Pavlovsky, *J. Chem. Eng. Data* **40**, 869 (1995).
- 1995BAR/LOP M. Barrio, D. O. Lopez, J. Ll. Tamarit, and Y. Haget, *Mater. Res. Bull.* **30**, 659 (1995).
- 1995BEC/RUC H.-D. Beckhaus, C. Ruchardt, S. I. Kozhushkov, V. N. Belov, S. P. Verevkin, and A. de Meijere, *J. Am. Chem. Soc.* **117**, 11854 (1995).
- 1995BEL/AIT F. B. Belaribi, A. Ait-Kaci, and J. Jose, *J. Therm. Anal.* **44**, 1177 (1995).
- 1995CHE/WAN G.-H. Chen, Q. Wang, Z.-M. Ma, X.-H. Yan, and S.-J. Han, *J. Chem. Eng. Data* **40**, 361 (1995).
- 1995CHI/HES J. S. Chickos, D. G. Hesse, S. Hosseini, J. F. Liebman, G. D. Mendenhall, S. P. Verevkin, K. Rakus, H.-D. Beckhaus, and C. Ruchardt, *J. Chem. Thermodyn.* **27**, 693 (1995).
- 1995CHI/HOS J. S. Chickos, S. Hosseini, and D. G. Hesse, *Thermochim. Acta* **249**, 41 (1995).
- 1995DEJ/BUR A. Dejoz, M. C. Burguet, R. Munoz, and M. Sanchoello, *J. Chem. Eng. Data* **40**, 290 (1995).
- 1995DEL/SAB P. Del Vecchio, R. Sabbah, L. Abate, G. Garone, and G. Della Gatta, *Calorim. Anal. Therm.* **26**, 158 (1995).
- 1995DIO/MIN H. P. Diogo, M. E. Minas da Piedade, J. A. Martinho Simoes, and Y. Nagana, *J. Chem. Thermodyn.* **27**, 597 (1995).
- 1995DIO/SAN H. P. Diogo, R. C. Santos, P. M. Nunes, and M. E. Minas da Piedade, *Thermochim. Acta* **249**, 113 (1995).
- 1995FER/DEL P. Ferloni and G. Della Gatta, *Thermochim. Acta* **266**, 203 (1995).
- 1995FON/MUN J. Font and J. Muntassell, *J. Mater. Chem.* **5**, 1137 (1995).
- 1995GAB/MAR C. Gabaldon, P. Marzal, and J. B. Monton, *J. Chem. Eng. Data* **40**, 190 (1995).
- 1995GON/ORT E. Gonzales and J. Ortega, *J. Chem. Eng. Data* **40**, 1178 (1995).
- 1995GUT/LIU J. P. Guthrie and Z. Liu, *Can. J. Chem.* **73**, 1395 (1995).
- 1995JAB/LET S. Jabrane, J. M. Letoffe, and P. Claudy, *Thermochim. Acta* **258**, 33 (1995).
- 1995JON/AUG D. E. G. Johnes, R. A. Augsten, K. P. Murnaghan, Y. P. Handa, and C. I. Ratcliffe, *J. Therm. Anal.* **44**, 547 (1995).
- 1995KAB/KOZ2 G. J. Kabo, A. A. Kozyro, V. V. Diky, and V. V. Simirsky, *J. Chem. Eng. Data* **40**, 371 (1995).
- 1995KOB/OGU K. Kobashi and M. Oguni, *J. Chem. Thermodyn.* **27**, 979 (1995).
- 1995KOL K. P. Kolesov, *Thermochim. Acta* **226**, 129 (1995).
- 1995KRI/VES A. Kristl and G. Vesnaver, *J. Chem. Soc., Faraday Trans.* **91**, 995 (1995).
- 1995KSI/NAG A. Ksiazczak and I. Nagata, *Thermochim. Acta* **254**, 31 (1995).
- 1995LEB/BYK B. V. Lebedev, T. A. Bykova, E. A. Kiparisova, B. G. Velen'kaya, and V. N. Filatova, *Polym. Sci. USSR Ser. A* **37**, 126 (1995).
- 1995LEB/BYK2 B. V. Lebedev, T. A. Bykova, N. V. Novoselova, N. G. Senchenya, and K. A. Mager, *Polym. Sci. USSR Ser. A* **37**, 886 (1995).
- 1995LEB/CHI L. P. Lebedev, V. V. Chironov, A. N. Kizin, I. F. Falyakhov, I. Sh. Saifullin, O. R. Klyuchnikov, Y. D. Orlov, and A. Y. Lebedev, *Izv. Akad. Nauk SSSR Ser. Khim.* **4**, 660 (1995).
- 1995LEB/KUL B. V. Lebedev, T. G. Kulagina, N. N. Smirnova, E. G. Kiparisova, and N. V. Novoselova, *Russ. J. Phys. Chem.* **69**, 525 (1995).
- 1995LEB/KUL2 B. V. Lebedev, T. G. Kulagina, V. I. Telnoy, and V. G. Vasil'ev, *Macromol. Chem. Phys.* **196**, 3487 (1995).
- 1995LUK/KOZ2 V. A. Luk'yanova and M. P. Kozina, *Zh. Fiz. Khim.* **69**, 2094 (1995); *Chem. Abstr.* **124**, 68127f (1996).
- 1995MAC/JOY J. I. Macnab and J. A. Joy, *Thermochim. Acta* **259**, 31 (1995).
- 1995MAR/COS T. M. R. Maria, F. S. Costa, M. L. P. Leitao, and J. S. Redinha, *Thermochim. Acta* **269-270**, 405 (1995).
- 1995MAR/GAB P. Marzal, C. Gabaldon, A. Seco, and J. B. Monton, *J. Chem. Eng. Data* **40**, 589 (1995).
- 1995MOK/PAU I. Mokbel, V. Pauchon, and J. Jose, *ELDATA: Int. Electron. J. Phys.-Chem. Data* **1**, 53 (1995).
- 1995NAS/LEN K. Nass, D. Lenoir, and A. Kettrup, *Angew. Chem., Int. Ed. Engl.* **34**, 1735 (1995).
- 1995OHT/YAM T. Ohta, O. Yamamuro, and T. Matsuo, *J. Phys. Chem.* **99**, 2403 (1995).
- 1995ORT/GAL J. Ortego and S. Galvan, *J. Chem. Eng. Data* **40**, 699 (1995).
- 1995PAP/PIM T. S. Papina, S. M. Pimenova, V. A. Luk'yanova, and V. P. Kolesov, *Zh. Fiz. Khim.* **69**, 2148 (1995); *Chem. Abstr.* **124**, 68148p (1996).
- 1995RAK/VER K. Rakus, S. P. Verevkin, M. Keller, H.-D. Beckhaus, and C. Ruchardt, *Liebigs Ann.* **1995**, 1483.
- 1995RAK/VER2 K. Rakus, S. P. Verevkin, W.-H. Peng, H.-D. Beckhaus, and C. Ruchardt, *Liebigs Ann.* **1995**, 2059.
- 1995RIB/FER M. A. V. Ribeiro Da Silva, M. L. C. C. H. Ferrao, and F. Jiye, *J. Chem. Eng. Data* **40**, 426 (1995).
- 1995RIB/MAT M. A. V. Ribeiro Da Silva, M. A. R. Matos, and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **27**, 565 (1995).
- 1995RIB/MAT2 M. A. V. Ribeiro Da Silva, M. A. R. Matos, and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **27**, 1187 (1995).
- 1995RIB/MAT4 M. A. V. Ribeiro Da Silva, M. A. R. Matos, and V. M. F. Morais, *J. Chem. Soc., Faraday Trans.* **91**, 1907 (1995).
- 1995RIB/MOR M. A. V. Ribeiro Da Silva, V. M. F. Morais, M. A. R. Matos, and C. M. A. Rio, *J. Org. Chem.* **60**, 5291 (1995).
- 1995SAB/AGU R. Sabbah and A. R. Aguilár, *Can. J. Chem.* **73**, 1538 (1995).
- 1995SAK/UEO A. Sakoguchi, R. Ueoka, Y. Kato, and Y. Arai, *Kagaku Kogaku Ronbunshu* **21**, 219 (1995).
- 1995SCH/PUS J. Schmelzer and J. Pusch, *Fluid Phase Equilib.* **110**, 183 (1995).
- 1995SCI/MAY J. Sciesinski, J. Mayer, T. Wasiutynski, E. Sciesinska, and J. Wojtowicz, *Phase Transitions* **54**, 15 (1995).
- 1995SKA/GOL S. A. Skackelford and J. F. Goldman, *Propellants, Explos., Pyrotech.* **20**, 1 (1995).
- 1995STE/CHI2 W. V. Steele, R. D. Chirico, A. Nguyen, and S. E. Knipmeyer, *J. Chem. Thermodyn.* **27**, 311 (1995).
- 1995STR/ARG L. Stradella and M. Argentero, *Thermochim. Acta* **268**, 1 (1995).
- 1995TAK/YAM S. Takahara, O. Yamamuro, and T. Matsuo, *J. Phys. Chem.* **99**, 9589 (1995).
- 1995VAR/DRO R. M. Varushchenko and A. I. Droujinina, *J. Chem. Thermodyn.* **27**, 355 (1995).
- 1995VER/BEC S. P. Verevkin, H.-D. Beckhaus, and C. Ruchardt, *Thermochim. Acta* **249**, 1 (1995).
- 1995VER/DOG S. P. Verevkin, B. Dogan, J. Hadrich, H.-D. Beckhaus, and C. Ruchardt, *J. Prakt. Chem.* **337**, 93 (1995).
- 1995VIE/DEQ E. F. S. Vieira, J. C. de Queiroz, and F. S. Dias, *Thermochim. Acta* **256**, 249 (1995).
- 1995WOJ/TOU G. Wojcik, L. Toupet, C. Gors, and M. Foulon, *Phys. Status Solidi A* **147**, 99 (1995).
- 1995WOL/LAN H. Wolff, H. Landeck, H.-P. Frerichs, and E. Wolff, *Fluid Phase Equilib.* **109**, 245 (1995).
- 1995XUW/DAJ A. Xu-Wu and G. Da-Jun, *Thermochim. Acta* **253**, 235 (1995).
- 1995YAM/KIT K. Yamamoto, H. Kitamura, M. Momota, and K. Narita, *Thermochim. Acta* **267**, 313 (1995).

- 1995YAS/TAK K. Yase, Y. Takahashi, N. Ara-kato, and A. Kawazu, *Jpn. J. Appl. Phys., Part 1* **34**, 636 (1995).
- 1995YIN/LIU C.-M. Yin, Z.-R. Liu, Y.-H. Kong, C.-L. Jia, and X.-M. Guo, *Thermochim. Acta* **262**, 185 (1995).
- 1996ACR/BOT W. E. Acree, Jr., S. G. Bott, S. A. Tucker, M. D. M. C. Ribeiro Da Silva, M. A. R. Matos, and G. Pilcher, *J. Chem. Thermodyn.* **28**, 673 (1996).
- 1996BAC/GRZ D. D. Back, L. R. Grzyll, and M. Corrigan, *Thermochim. Acta* **272**, 53 (1996).
- 1996BAU A. Bauer-Brandl, *Int. J. Pharm.* **140**, 195 (1996).
- 1996BEL/UFN B. Belhachemi, W. Ufnalsky, and Z. Derriche, *J. Chim. Phys.* **93**, 1117 (1996).
- 1996BOE/MAR A. Boehncke, K. Martin, M. G. Muller, and H. G. Cam-menga, *J. Chem. Eng. Data* **41**, 543 (1996).
- 1996BUR/MON M. C. Burguet, J. B. Monton, R. Munoz, J. Wisniak, and H. Segura, *J. Chem. Eng. Data* **41**, 1191 (1996).
- 1996CEO/AGA R. Ceolin, V. Agafonov, D. Louer, V. A. Dzyabchenko, S. Toscani, and J. M. Cense, *J. Solid State Chem.* **122**, 186 (1996).
- 1996CHA/EMM P. Chassot and F. Emmenegger, *Inorg. Chem.* **35**, 5931 (1996).
- 1996CHI/SAB J. S. Chickos, R. Sabbah, S. Hosseini, and J. F. Liebman, *Struct. Chem.* **7**, 391 (1996).
- 1996CHI/STE R. D. Chirico, W. V. Steele, A. Nguyen, T. D. Klots, and S. E. Knipmeyer, *J. Chem. Thermodyn.* **28**, 797 (1996).
- 1996CIO/MEL I. Ciocazan and V. Meltzer, *J. Therm. Anal.* **47**, 1755 (1996).
- 1996DAH/WIC O. Dahmani, I. Wichterle, and A. Ait-Kaci, *Fluid Phase Equilib.* **124**, 135 (1996).
- 1996DOM/HEA E. S. Domalski and E. D. Hearing, *J. Phys. Chem. Ref. Data* **25**, 1 (1996), and references therein.
- 1996DOM/MOO U. Domanska, W. C. Moollan, and T. M. Letcher, *J. Chem. Eng. Data* **41**, 261 (1996).
- 1996DOU/FUE S.-Q. Dou, H. Fuess, R. Straub, and A. Weiss, *Z. Naturforsch.* **51A**, 777 (1996).
- 1996FIE/JOH C. Fiege, R. Joh, M. Petri, and J. Gmehling, *J. Chem. Eng. Data* **41**, 1431 (1996).
- 1996FON/ROS L. Fontana, L. Rosati, A. Sala, and L. Dobbetti, *Pharm. Acta Helv.* **71**, 341 (1996).
- 1996GAL/BOU H. E. Gallis, F. Bougrioua, H. A. J. Oonk, P. J. van Ekeren, and J. C. van Miltenburg, *Thermochim. Acta* **274**, 231 (1996).
- 1996GAL/VAN2 H. E. Gallis, J. C. van Miltenburg, H. A. J. Oonk, and J. P. van der Eerden, *Thermochim. Acta* **286**, 307 (1996).
- 1996GAL/VAN3 H. E. Gallis and J. C. van Miltenburg, *Thermochim. Acta* **274**, 223 (1996).
- 1996GIL/WIL N. F. Giles, H. L. Wilson, and W. V. Wilding, *J. Chem. Eng. Data* **41**, 1223 (1996).
- 1996GOV/RUT H. A. J. Govers, E. Ruts, F. W. M. van der Wielen, and A. G. van Haelst, *Polycyclic Aromat. Compd.* **9**, 75 (1996).
- 1996GRA B. Granzow, *J. Mol. Struct.* **381**, 127 (1996).
- 1996JIM/ROU P. Jimenez, M. V. Roux, J. Kulhanek, and O. Exner, *Struct. Chem.* **7**, 375 (1996).
- 1996KAM/ZIE M. Kaminski and W. Zielenkiewicz, *J. Chem. Thermodyn.* **28**, 153 (1996).
- 1996KEE/VAN E. M. D. Keegstra, V. van der Mieden, J. W. Zwikker, L. W. Jenneskens, A. Schouten, H. Kooijman, N. Veldman, and A. L. Spek, *Chem. Mater.* **8**, 1092 (1996).
- 1996KOU/HOS B. Koutek, M. Hoskovec, P. Vrkočová, K. Konecny, L. Feltl, and J. Vrkoč, *J. Chromatogr. A* **719**, 391 (1996).
- 1996LEB/SMI B. Lebedev, N. Smirnova, and V. Telnoy, *Macromol. Chem. Phys.* **197**, 3807 (1996).
- 1996LIN/WIC J. Linek, I. Wichterle, and K. Marsh, *J. Chem. Eng. Data* **41**, 1212 (1996).
- 1996LUE/MAG T. O. Lueddecke and J. W. Magee, *Int. J. Thermophys.* **17**, 823 (1996).
- 1996MIR/ORL E. A. Miroshinchenko, Yu. D. Orlov, L. I. Korchatova, V. P. Vorob'eva, and Yu. A. Lebedev, *Zh. Fiz. Khim.* **70**, 1583 (1996).
- 1996OLS J. D. Olson, *Fluid Phase Equilib.* **116**, 414 (1996).
- 1996POL/GUE M. Polednicek, T. Guetachew, J. Jose, V. Ruzicka, V. Rohac, and M. Zabransky, *ELDATA: Int. Electron. J. Phys.-Chem. Data* **2**, 41 (1996).
- 1996PUL/BAR R. Puliti, G. Barone, C. Giancola, and C. A. Mattia, *J. Mol. Struct.* **382**, 197 (1996).
- 1996RIB/MOR M. A. V. Ribeiro Da Silva, V. M. F. Morais, M. A. R. Matos, C. M. A. Rio, and C. M. G. S. Piedade, *Struct. Chem.* **7**, 329 (1996).
- 1996RIB/RIB M. A. V. Ribeiro Da Silva, M. D. M. C. Ribeiro Da Silva, M. F. B. M. Monteiro, M. L. A. C. N. Gomes, J. S. Chickos, A. P. Smith, and J. F. Liebman, *Struct. Chem.* **7**, 367 (1996).
- 1996ROD/BER M. F. Rodrigues and M. G. Bernardo-Gil, *J. Chem. Eng. Data* **41**, 581 (1996).
- 1996ROU/JIM2 M. V. Roux, P. Jimenez, J. Z. Davalos, O. Castano, M. T. Molina R. Notario, M. Herreros, and J. L. M. Abboud, *J. Am. Chem. Soc.* **118**, 12735 (1996).
- 1996SAB/GOU R. Sabbah and M. Gouali, *Can. J. Chem.* **74**, 500 (1996).
- 1996SCH F. P. Schwarz, *J. Solution Chem.* **25**, 471 (1996).
- 1996STE/CHI W. V. Steele, R. D. Chirico, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **41**, 1255 (1996).
- 1996STE/CHI2 W. V. Steele, R. D. Chirico, S. E. Knipmeyer, A. Nguyen, and N. K. Smith, *J. Chem. Eng. Data* **41**, 1285 (1996).
- 1996STE/CHI3 W. V. Steele, R. D. Chirico, S. E. Knipmeyer, A. Nguyen, N. K. Smith, and I. R. Tasker, *J. Chem. Eng. Data* **41**, 1269 (1996).
- 1996STE/REV S. G. Stepanian, I. D. Reva, E. D. Radchenko, and G. C. Sheina, *Vib. Spectrosc.* **11**, 123-133 (1996).
- 1996STR/BRA R. Strauss, S. Braun, S.-Q. Dou, H. Fuess, and A. Weiss, *Z. Naturforsch.* **51A**, 871 (1996).
- 1996SUS/SMI S. R. Susay, M. A. Smith, and G. G. Lockwood, *Anesth. Analg.* **83**, 864 (1996).
- 1996TOG/TOG R. K. Toghiani, H. Toghiani, and G. Verkateswarlu, *Fluid Phase Equilib.* **122**, 157 (1996).
- 1996ULB/KLU P. Ulbig, M. Klüppel, and S. Schulz, *Thermochim. Acta* **271**, 9 (1996).
- 1996USH/SED V. S. Ushakov, S. M. Sedov, B. A. Knyazev, and B. I. Kuchkaev, *Zh. Fiz. Khim.* **70**, 1573 (1996).
- 1996VAN/ALV J. C. van Miltenburg, A. Alvarez-Larena, M. Labrador, L. Palacios, J. Rodriguez-Romero, E. Tauler, and E. Estop, *Thermochim. Acta* **273**, 31 (1996).
- 1996VAN/YU Yu. Ya. Van-Chin-Syan, V. V. Kochubei, V. V. Sergeev, Yu. A. Raevskii, S. I. Gerasimchuk, and Kh. Z. Kotovich, *J. Sov. Phys. Chem. (Engl. Transl.)* **70**, 1789 (1996).
- 1996VAR/DRU R. M. Varushchenko, A. I. Druzhinina, and I. L. Pashchenko, *Fluid Phase Equilib.* **126**, 93 (1996).
- 1996VAR/PAS R. M. Varushchenko, L. L. Pashchenko, and A. I. Druzhinina, *Russ. J. Phys. Chem.* **70**, 208 (1996).
- 1996VER/BEC S. P. Verevkin, H.-D. Beckhaus, R. S. Belen'kaya, K. Rakus, and C. Rüchardt, *Thermochim. Acta* **279**, 47 (1996).
- 1996VER/PEN S. P. Verevkin, W.-H. Peng, H.-D. Beckhaus, and C. Rüchardt, *Struct. Chem.* **7**, 397 (1996).
- 1996VER/ZUF S. P. Verevkin, S. Züffle, H.-D. Beckhaus, and C. Rüchardt, *Thermochim. Acta* **285**, 1 (1996).
- 1996VIT/CHA C. Viton, M. Chavret, and J. Jose, *ELDATA: Int. Electron. J. Phys.-Chem. Data* **2**, 103 (1996).
- 1996WEB/DEF L. A. Weber and D. R. Defibaugh, *J. Chem. Eng. Data* **41**, 1477 (1996).
- 1996WEB/DEF2 L. A. Weber and D. R. Defibaugh, *J. Chem. Eng. Data* **41**, 382 (1996).
- 1996ZAB/RUZ M. Zabransky, V. Ruzicka, Jr., V. Majer, and E. S. Domalski, *J. Phys. Chem. Ref. Data, Monogr.* **6**, 1-1596 (1996).
- 1996ZHA/HU J. Zhang, R. Hu, C. Zhu, F. Geng, and Q. Long, *Theory Pract. Energ. Mater. [Proceedings of the International Autumn Seminar on Propellants, Explosives and Pyrotechnics]*, Beijing, Oct. 7-10, 1996 (1996), 133-138; *Chem. Abstr.* **126**, 133206p (1997).
- 1997ABA/PAL L. Abate, B. Palecz, C. Giancola, and G. D. Gatta, *J. Chem. Thermodyn.* **29**, 359 (1997).
- 1997ACR/POW W. E. Acree, Jr., J. R. Powell, S. A. Tucker, M. D. M. C. Ribeiro Da Silva, M. A. R. Matos, J. M. Goncalves, L. M. N. B. F. Santos, V. M. F. Morais, and G. Pilcher, *J. Org. Chem.* **62**, 3722 (1997).
- 1997ART/LAF H. Artigas, C. Lafuente, P. Cea, F. M. Royo, and J. S. Urieta, *J. Chem. Eng. Data* **42**, 132 (1997).

- 1997BAE A. E. Baev, *Russ. J. Inorg. Chem.* **42**, 587 (1997).
- 1997BLA/BEL B. Blanco, S. Beltran, J. L. Cabezas, and J. Coca, *J. Chem. Eng. Data* **42**, 938 (1997).
- 1997BLO/KAB A. V. Blokhin, G. K. Kabo, A. A. Kozyro, L. S. Ivashkevich, A. P. Krasulin, V. V. Diky, V. Yu, and V. Vaksimuk, *Thermochim. Acta* **292**, 19 (1997).
- 1997BUS/HAM D. Busing, F. Hamann, and A. Wurfli, *Thermochim. Acta* **299**, 33 (1997).
- 1997CAL/FIL J. C. G. Calado, E. J. M. Filipe, and J. N. C. Lopes, *J. Chem. Thermodyn.* **29**, 1435 (1997).
- 1997CHE/LIA J. Chen, Y. Liang, and P. Ma, *Huagong Xuebao (Chin. Ed.)* **48**, 622 (1997).
- 1997DEF/CAR D. R. Defibaugh, E. Carrillo-Nava, J. J. Hurly, M. R. Moldover, J. W. Schmidt, and L. A. Weber, *J. Chem. Eng. Data* **42**, 488 (1997).
- 1997DEJ/GON A. Dejoz, V. Gonzalez-Alfaro, F. J. Llopis, P. J. Migue, and M. I. Vazquez, *Fluid Phase Equilib.* **134**, 151 (1997).
- 1997DEL A. Delle Site, *J. Phys. Chem. Ref. Data* **26**, 157 (1997).
- 1997DOM/GON U. Domanska and J. A. Gonzalez, *Fluid Phase Equilib.* **129**, 139, (1997), Secondary reference.
- 1997DUA/HWA H. A. Duarte-Garza, C.-A. Hwang, S. A. Kellerman, R. C. Miller, K. R. Hall, J. C. Holste, K. N. Marsh, and G. E. Gammon, *J. Chem. Eng. Data* **42**, 497 (1997).
- 1997ELD J. P. Elder, *J. Therm. Anal.* **49**, 897 (1997).
- 1997FIN/GAR A. Finch, P. J. Gardner, A. J. Head, and W. Xiaoping, *Thermochim. Acta* **298**, 191 (1997).
- 1997HAL/WAN M. Hallquist, I. Wangberg, and E. Ljungstrom, *Environ. Sci. Technol.* **31**, 3166 (1997).
- 1997HER/ORT P. Hernández and J. Ortega, *J. Chem. Eng. Data* **42**, 1090 (1997).
- 1997JEN/SAN M. Jenau, M. Sandmann, A. Wurfli, and J. L. Tamarit, *Z. Naturforsch.* **52A**, 493 (1997).
- 1997KLE A. Klein, "Thermodynamics of liquid mixtures with lactones," *Fortschr.-Beric VDI Reihe 3: Verfahrenstechnik* **479**, 1-206 (1997).
- 1997KOP/BEU R. Kopitzky, M. Beuleke, G. Balzer, and H. Willner, *Inorg. Chem.* **36**, 1994 (1997).
- 1997KOR/API B. L. Korsounskii and T. A. Apina, *Int. Annu. Conf. ICT* **28**(1), 46 (1997); *Chem. Abstr.* **127**, 163997k (1997).
- 1997KOU/HOS B. Koutek, M. Hoskovec, P. Vrkokova, and L. Feltl, *J. Chromatogr. A* **759**, 93 (1997).
- 1997KUL/LEB T. T. Kulagina and B. V. Lebedev, *Russ. J. Phys. Chem.* **71**, 520 (1997).
- 1997KUL/LEB2 T. G. Kulagina and B. V. Lebedev, *Russ. J. Phys. Chem.* **71**, 709 (1997).
- 1997LEE/CHA M.-J. Lee, Y.-K. Chang, H.-M. Lin, and C.-H. Chen, *J. Chem. Eng. Data* **42**, 349 (1997).
- 1997LIM/TUN L.-T. Lim and M. A. Tung, *J. Food Sci.* **62**, 1061 (1997).
- 1997LOH/JOH J. Lohmann, R. Joh, and J. Gmehling, *J. Chem. Eng. Data* **42**, 1170 (1997).
- 1997MIN/BEH L. M. G. Minier and R. Behrens, Jr., *Propellants, Explos., Pyrotech.* **22**, 23 (1997).
- 1997MON/BUR J. B. Monton, M. C. Burguet, R. Munoz, J. Wisniak, and H. Segura, *J. Chem. Eng. Data* **42**, 1195 (1997).
- 1997PEY/LET L. Peyrot, J. M. Letoffe, M. Elkhatib, J. P. Scharff, and H. Delalu, *Calorim. Anal. Therm.* **28**, 298 (1997).
- 1997PFE/SAB G. Pfefer, R. Sabbah, and R. Boistelle, *J. Appl. Crystallogr.* **30**, 527 (1997).
- 1997PUL/DES R. Puliti, C. De Sena, and C. Giancola, *J. Therm. Anal.* **48**, 1249 (1997).
- 1997REU/BUS J. Reuter, D. Büsing, J. L. Tamarit, and A. Würflinger, *J. Mater. Chem.* **7**, 41 (1997).
- 1997RIB/GON M. A. V. Ribeiro Da Silva, J. M. Goncalves, and G. Pilcher, *J. Chem. Thermodyn.* **29**, 253 (1997).
- 1997RIB/MAT M. A. V. Ribeiro Da Silva, M. A. R. Matos, and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **29**, 1545 (1997).
- 1997RIB/MAT2 M. A. V. Ribeiro Da Silva, M. A. R. Matos, and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **29**, 1535 (1997).
- 1997RIB/MAT5 M. A. V. Ribeiro Da Silva, M. A. R. Matos, and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **29**, 295 (1997).
- 1997RIB/SAN M. A. V. Ribeiro Da Silva, L. M. N. B. F. Santos, and G. Pilcher, *J. Chem. Thermodyn.* **29**, 757 (1997).
- 1997ROU/JIM M. V. Roux, P. Jimenez, M. A. Martin-Luengo, J. Z. Davalos, Z. Sun, R. S. Hosmane, and J. F. Liebman, *J. Org. Chem.* **62**, 2732 (1997).
- 1997SAB/PER R. Sabbah and L. Perez, *Can. J. Chem.* **75**, 357 (1997).
- 1997SAK/HOR T. Sako, S. Horiguchi, H. Ichimaru, and S. Nakagawa, *J. Chem. Eng. Data* **42**, 169 (1997).
- 1997SCH/VER F. Schaffer, S. P. Verevkin, H.-J. Rieger, H.-D. Beckhaus, and C. Rüchardt, *Liebigs Ann.* **1997**, 1333.
- 1997SMI/LEB N. N. Smirnova, B. V. Lebedev, E. G. Kiparisova, K. L. Makovetskii, and I. Y. Ostrovskaya, *Polym. Sci. USSR Ser. A* **39**, 893 (1997).
- 1997STE/CHI W. V. Steele, R. D. Chirico, A. B. Cowell, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **42**, 1053 (1997).
- 1997STE/CHI2 W. V. Steele, R. D. Chirico, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **42**, 1008 (1997).
- 1997STE/CHI3 W. V. Steele, R. D. Chirico, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **42**, 1021 (1997).
- 1997STE/CHI4 W. V. Steele, R. D. Chirico, S. E. Knipmeyer, A. Nguyen, and N. K. Smith, *J. Chem. Eng. Data* **42**, 1037 (1997).
- 1997UKR/SOL E. A. Ukrainseva, D. V. Soldatov, and Yu. A. Dyadin, *Zh. Neorgan. Khim.* **42**, 283 (1997).
- 1997URY/MOC V. F. Ur'yash, A. N. Mochalov, V. F. Kupriyanov, A. G. Smirnov, T. M. Kuleshova, and V. I. Samashkin, *Russ. J. Gen. Chem.* **67**, 550 (1997).
- 1997VAR/DRU R. M. Varushchenko, A. I. Druzhinina, and E. L. Sorkin, *J. Chem. Thermodyn.* **29**, 623 (1997).
- 1997VAR/PAS R. M. Varushchenko, L. L. Pashchenko, V. M. Yuldasheva, and A. P. Orlov, *Russ. J. Phys. Chem.* **71**, 539 (1997).
- 1997VER S. P. Verevkin, *J. Chem. Thermodyn.* **29**, 891 (1997).
- 1997VER/MOR S. P. Verevkin, J. Morgenthaler, and C. Rüchardt, *J. Chem. Thermodyn.* **29**, 1175 (1997).
- 1997VER3 S. P. Verevkin, *Thermochim. Acta* **307**, 17 (1997).
- 1997WEL/VER F. M. Welle, S. P. Verevkin, H.-D. Beckhaus, and C. Rüchardt, *Liebigs Ann.* **1997**, 155.
- 1997YUA/ZHA J. Yuan, G.-L. Zhang, D.-Y. Huang, and H. Z. Zhang, *Liq. Cryst.* **22**, 693 (1997).
- 1997ZEM S. Zeman, *Thermochim. Acta* **302**, 11 (1997).
- 1997ZHA/HU J. Zhang, R. Hu, C. Zhu, G. Feng, and Q. Long, *Thermochim. Acta* **298**, 31 (1997).
- 1997ZHA/TAN J.-B. Zhang, Z.-C. Tan, S.-H. Meng, S.-H. Li, and L.-M. Zhang, *Thermochim. Acta* **307**, 11 (1997).
- 1998ABD/MEI M. A. Abdi and A. Meisen, *J. Chem. Eng. Data* **43**, 133 (1998).
- 1998AUC/LOR A. Aucejo, S. Loras, R. Munoz, P. Reich, and H. Segura, *J. Chem. Eng. Data* **43**, 973 (1998).
- 1998BLA/KLI W. Blanke, G. Klingenberg, and F. Weber, *Int. J. Thermophys.* **19**, 653 (1998).
- 1998BOL/WIE A. Boller and H. G. Wiedemann, *J. Therm. Anal.* **53**, 431 (1998).
- 1998BUS/ROM P. Bustamante, S. Romero, A. Pena, B. Escalera, and A. Reillo, *J. Pharm. Sci.* **87**, 1590 (1998).
- 1998CHI/HES J. S. Chickos, D. Hesse, S. Hosseini, G. Nichols, and P. Webb, *Thermochim. Acta* **313**, 101 (1998).
- 1998DEJ/GON A. Dejoz, V. Gonzalez-Alfaro, F. J. Llopis, and M. I. Vazquez, *Fluid Phase Equilib.* **145**, 287 (1998).
- 1998DOM U. Domanska, *Pol. J. Chem.* **72**, 925 (1998).
- 1998DRO/TOM K. G. Drouillard, G. T. Tomy, D. C. G. Muir, and K. Friesen, *J. Environ. Toxicol. Chem.* **17**, 1252 (1998).
- 1998EWI/SAN M. B. Ewing and J. C. Sanchez Ochoa, *J. Chem. Thermodyn.* **30**, 189 (1998).
- 1998GEO/YOU M. A. George, K. M. Young, E. A. Robertson III, S. E. Beck, and G. Voloshin, *J. Chem. Eng. Data* **43**, 60 (1998).
- 1998GIU/BRU A. Giustini, B. Brunetti, and V. Piacenti, *J. Chem. Eng. Data* **43**, 447 (1998).
- 1998GON/SZW A. Gonthier-Vassal and H. Szwarc, *Thermochim. Acta* **320**, 141 (1998).
- 1998GUD/TOR R. Gudino, L. A. Torres, R. L. Santillan, and N. Farfan, *J. Chem. Thermodyn.* **30**, 671 (1998).
- 1998HAT/SUZ T. Hatanaka, R. Suzuki, K. Katayama, and T. Koizumi, *Int. J. Pharm.* **168**, 199 (1998), Note: Experimental enthalpies of fusion and melting point temperatures were obtained through correspondence with the authors.

- 1998HEL/OWE H. C. Helgeson, C. E. Owens, A. M. Knox, and L. Richard, *Geochim. Cosmochim. Acta* **62**, 985 (1998).
- 1998ISS/ELA Y. M. Issa, A. L. El-Ansary, and W. Selim, *Anal. Lett.* **31**, 131 (1998).
- 1998JAB/LET S. Jabrane, J. M. Letoffe, and P. Claudy, *Thermochim. Acta* **311**, 121 (1998).
- 1998JAM/PAL M. E. Jamroz, M. Palczewska-Tulinska, D. Wyrzykowska-Stankiewicz, A. M. Szafranski, J. Polaczek, J. C. Dobrowolski, M. H. Jamroz, and A. P. Mazurek, *Fluid Phase Equilib.* **152**, 307 (1998).
- 1998KAB/BLO G. J. Kabo, A. V. Blokhin, A. A. Kozyro, V. V. Diky, L. S. Ivashkevich, A. P. Krasulin, V. M. Sevruck, and M. Frenkel, *Thermochim. Acta* **313**, 111 (1998).
- 1998KIS/KAS V. D. Kiselev, E. A. Kashaeva, and A. I. Konovalov, *Russ. J. Gen. Chem.* **68**, 1246 (1998).
- 1998KOB/KYO K. Kobashi, T. Kyomen, and M. Oguni, *J. Phys. Chem. Solids* **59**, 667 (1998).
- 1998KOL/PIM V. P. Kolesov, S. M. Pimenova, V. A. Lukyanova, T. S. Kuznetsova, and M. P. Kozina, *J. Chem. Thermodyn.* **30**, 1455 (1998).
- 1998LEB/CHI V. P. Lebedev, V. V. Chirnonov, V. P. Vorob'eva, and Yu. N. Matyushin, *Khim. Fiz.* **17**, 54 (1998).
- 1998LEB/KUL B. V. Lebedev and T. G. Kulagina, *J. Therm. Anal. Calorim.* **54**, 731 (1998).
- 1998LIN/BEC A. Linden, H.-D. Beckhaus, S. P. Verevkin, C. Ruchardt, B. Ganguly, and B. Fuchs, *J. Org. Chem.* **63**, 8205 (1998).
- 1998LOB/BOH S. Löbbecke, M. A. Bohn, A. Pfeil, and H. Krause, *Proceedings of the 29th International Annual Conference of ICT*, Karlsruhe, 1998.
- 1998LUS/OLI Z. Lus, L. Olivier, R. Poupko, K. Muller, C. Krieger, and H. Zimmerman, *J. Am. Chem. Soc.* **120**, 5526 (1998).
- 1998MAG J. W. Magee, *Int. J. Thermophys.* **19**, 1397 (1998).
- 1998MAK/KAB Y. V. Maksimuk, G. J. Kabo, V. V. Simirsky, A. A. Kozyro, and V. M. Sevruck, *J. Chem. Eng. Data* **43**, 293 (1998).
- 1998MCK/FLO R. L. McKenney, Jr., T. G. Floyd, W. E. Stevens, T. G. Archibald, A. P. Marchand, G. V. M. Sharma, and S. G. Bott, *J. Energ. Mater.* **16**, 1 (1998).
- 1998MOR/KOP K. M. Morgan and D. A. Kopp, *J. Chem. Soc., Perkin Trans. 2* **1998**, 2759.
- 1998MUR/BET P. Mura, G. P. Bettinetti, M. T. Faucci, and P. L. Parrini, *Thermochim. Acta* **321**, 59 (1998).
- 1998NOL/VAL O. Noll, A. Valtz, D. Richon, T. Getachew-Sawaya, I. Mokbel, and J. Jose, *ELDATA: Int. Electron. J. Phys.-Chem. Data* **4**, 105 (1998).
- 1998OLS J. D. Olson, *Fluid Phase Equilib.* **150-151**, 713 (1998).
- 1998OON/VAN H. A. J. Oonk, P. R. van der Linde, J. Huinink, and J. G. Blok, *J. Chem. Thermodyn.* **30**, 897 (1998).
- 1998PAR/GIL R. M. Paroli, D. F. R. Gilson, and I. S. Butler, *Can. J. Chem.* **76**, 1365 (1998). Note: Authors report only an entropy of transition and a temperature range for the first two transitions. The temperature that is listed is the midpoint of the reported temperature range, and the transition enthalpy is computed as the product of the reported transition entropy times transition temperature as defined above.
- 1998PAR/GIL2 R. M. Paroli, D. F. R. Gilson, and I. S. Butler, *J. Solid State Chem.* **136**, 16 (1998).
- 1998PRI/HAW D. M. Price and M. Hawkins, *Thermochim. Acta* **315**, 19 (1998).
- 1998RAI/RAI U. S. Rai and R. N. Rai, *J. Therm. Anal.* **53**, 883 (1998).
- 1998RAI/RAI2 U. S. Rai and R. N. Rai, *Asian J. Chem.* **10**, 421 (1998).
- 1998RIB/CAR M. A. V. Ribeiro Da Silva, A. P. S. M. C. Carvalho, M. J. S. Monte, and E. Giera, *J. Chem. Thermodyn.* **30**, 815 (1998).
- 1998RIB/MAT M. D. M. C. Ribeiro Da Silva, M. A. R. Matos, M. C. Vas, L. M. N. B. F. Santos, G. Pilcher, W. E. Acree, Jr., and J. R. Powell, *J. Chem. Thermodyn.* **30**, 869 (1998).
- 1998RIB/MAT2 M. D. M. C. Ribeiro Da Silva, M. A. R. Matos, G. Pilcher, and W. E. Acree, Jr., *J. Chem. Thermodyn.* **30**, 271 (1998).
- 1998ROH/RUZ V. Rohac, V. Ruzicka, K. Ruzicka, and K. Aim, *J. Chem. Eng. Data* **43**, 770 (1998).
- 1998ROU/JIM M. V. Roux, P. Jimenez, J. Z. Davalos, C. Turrión, H. Y. Afeefy, and J. F. Liebman, *J. Chem. Soc., Faraday Trans.* **94**, 887 (1998).
- 1998SAB/DAS R. Sabbah and M. E. da Silva Eusebio, *Can. J. Chem.* **76**, 18 (1998).
- 1998SAB/HEV R. Sabbah and R. Hevia, *Thermochim. Acta* **313**, 131 (1998).
- 1998SAB/HEV2 R. R. Sabbah, Hevia, and D. Tabet, *Thermochim. Acta* **316**, 1 (1998).
- 1998SAB/KUA R. Sabbah, D. N. Kuakivi, and L. Perez, *Thermochim. Acta* **316**, 137 (1998).
- 1998SAB/TAB R. Sabbah, D. Tabet, and M. E. S. Eusebio, *Thermochim. Acta* **315**, 93 (1998).
- 1998SEM/WIL B. Semeniuk and H. Wilczura-Wachnik, *Fluid Phase Equilib.* **152**, 337 (1998).
- 1998SOR/KIM M. Sorai, K. Kimura, A. Weiss, and R. Strauss, *J. Chem. Thermodyn.* **30**, 1441 (1998).
- 1998STO/NG L. D. Stockton, T. L. Ng, N. Maung, I. B. Poole, J. O. Williams, A. C. Wright, D. R. Foster, and D. J. Cole-Hamilton, *J. Cryst. Growth* **183**, 95 (1998).
- 1998SVO/HYN V. V. Svoboda, Hynek, and B. Koutek, *J. Chem. Thermodyn.* **30**, 1411 (1998).
- 1998VAR/DRU R. M. Varushchenko and A. I. Druzhinina, *J. Chem. Thermodyn.* **30**, 697 (1998).
- 1998VAS/LEB V. G. Vasil'ev and B. V. Lebedev, *Polym. Sci. Ser. A* **40**, 464 (1998).
- 1998VER S. P. Verevkin, *J. Chem. Thermodyn.* **30**, 1029 (1998).
- 1998VER/BEC2 S. P. Verevkin, H.-D. Beckhaus, C. Ruchardt, R. Haag, S. I. Kozhushkov, T. Zywiets, A. De Meijere, H. Jiao, and P. v. R. Schleyer, *J. Am. Chem. Soc.* **120**, 11130 (1998).
- 1998VER/KUM S. P. Verevkin, M. Kümmerlin, H.-D. Beckhaus, C. Galli, and C. Ruchardt, *Eur. J. Org. Chem.* **1998**, 579.
- 1998VER/PEN S. P. Verevkin, W.-H. Peng, H. D. Beckhaus, and C. Rücuardt, *Eur. J. Org. Chem.* **1998**, 2323.
- 1998VER/WEL S. P. Verevkin and F. M. Welle, *Struct. Chem.* **9**, 215 (1998).
- 1998VER2 S. P. Verevkin, *J. Chem. Thermodyn.* **30**, 1069 (1998).
- 1998VER3 S. P. Verevkin, *Struct. Chem.* **9**, 375 (1998).
- 1998VER4 S. P. Verevkin, *Thermochim. Acta* **310**, 229 (1998).
- 1998VER6 S. P. Verevkin, *Struct. Chem.* **9**, 113 (1998).
- 1998WIL/LIU G. O. Williams III and J. Liu, *Int. J. Pharm.* **166**, 99 (1998).
- 1998ZHA/MO X. Zhang, H. Mo, K. Yang, and F. An, *Huanjing Huaxue* **17**, 50 (1998); *Chem. Abstr.* **128**, 318311d (1998), Value is referred to as a vaporization enthalpy.
- 1998ZIE/WSZ A. Zielenkiewicz, M. Wszelaka-Rylik, J. Poznanski, and W. Zielenkiewicz, *J. Solution Chem.* **27**, 235 (1998).
- 1999AHL/LOH J. Ahlers, J. Lohmann, and J. Gmehling, *J. Chem. Eng. Data* **44**, 727 (1999).
- 1999ANT/FRA M. Antosik, Z. Frasz, and S. K. Malanowski, *J. Chem. Eng. Data* **44**, 368 (1999).
- 1999AUC/LOR A. Aucejo, S. Loras, R. Munoz, and L. M. Ordonez, *Fluid Phase Equilib.* **156**, 173 (1999).
- 1999BAU/MAR A. Bauer-Brandl, E. Marti, A. Geoffroy, A. Poso, J. Surkuusk, E. Wappler, and K. H. Bauer, *J. Therm. Anal. Calorim.* **57**, 7 (1999).
- 1999BRU/PIA B. Brunetti and V. Piacenti, *J. Chem. Eng. Data* **44**, 809 (1999).
- 1999CHI/KN I R. D. Chirico, S. E. Knipmeyer, A. Nguyen, and W. V. Steele, *J. Chem. Thermodyn.* **31**, 339 (1999).
- 1999COS/EUS F. S. Costa, M. E. Eusebio, J. S. Redinha, and M. L. P. Leitao, *J. Chem. Thermodyn.* **31**, 895 (1999).
- 1999DAV/FLO J. Z. Davalos, H. Flores, P. Jimenez, R. Notano, M. V. Roux, E. Juaristi, R. S. Hosmane, and J. F. Liebman, *J. Org. Chem.* **64**, 9328 (1999).
- 1999DEF R. F. de Farias, *Quim. Nova* **22**, 509 (1999).
- 1999DEF/DEO R. F. de Farias, O. A. de Oliveira, J. V. Medeiros, and C. Airoidi, *Thermochim. Acta* **328**, 241 (1999).
- 1999DEL/BAR P. Del Vecchio, B. Barone, R. Sabbah, G. Della Gatta, and L. Abate, *J. Chem. Thermodyn.* **31**, 1001 (1999).
- 1999DIA/GUE M. A. E. Diaz, T. Guetachew, P. Landy, J. Jose, and A. Voilley, *Fluid Phase Equilib.* **157**, 257 (1999).

- 1999DOL/LEC G. Dollo, P. Le Corre, M. Chollet, F. Chevanne, M. Bertault, J.-L. Burgot, and R. Le Verge, *J. Pharm. Sci.* **88**, 889 (1999).
- 1999DRU/VAR A. I. Druzhinina and R. M. Varushchenko, *Russ. J. Phys. Chem.* **73**, 1367 (1999).
- 1999DUT/TAK R. Dutt, Y. Takahashi, and M. Iijima, *Jpn. J. Appl. Phys., Part 2* **38**, L687–L690 (1999).
- 1999DYK/SVO J. Dykyj, J. Svoboda, R. C. Wilhoit, M. L. Frenkel, and K. R. Hall, *Vapor Pressure of Chemicals: Part A. Vapor Pressure and Antoine Constants for Hydrocarbons and Sulfur, Selenium, Tellurium and Hydrogen Containing Organic Compounds* (Springer, Berlin, 1999), Note: The vaporization enthalpies were calculated from the vapor pressures obtained from the Antoine constants reported in this compendium. In cases where the Antoine constant $C = 0$ the Antoine Equation ($\log_{10}P = A/B/(C + T)$) reduces to the integrated form of the Clausius Clapeyron equation directly. This was the case for many vaporization enthalpies. In those cases where this condition was not met the vaporization enthalpy was calculated as $Dvaphm(T) = 2303 R B/[T/(T + C)]^2$.
- 1999ESC/SAN G. N. Escobedo-Alvarado and S. I. Sandler, *J. Chem. Eng. Data* **44**, 319 (1999).
- 1999FAT D. Fatu, *J. Therm. Anal. Calorim.* **56**, 739 (1999).
- 1999FLO/DAV H. Flores, J. Z. Davalos, J. L. M. Abboud, O. Castano, R. Gomperts, P. Jimenez, R. Notario, and M. V. Roux, *J. Phys. Chem. A* **103**, 7555 (1999).
- 1999GAR/AND R. Garriga, A. C. Andres, P. Perez, and M. Gracia, *J. Chem. Eng. Data* **44**, 296 (1999).
- 1999GIO/BET F. Giordano, R. Bettini, C. Donini, A. Gazzaniga, M. R. Caira, G. G. Z. Zhang, and D. J. W. Grant, *J. Pharm. Sci.* **88**, 1210 (1999).
- 1999GIR/PIE D. Giron, P. Piechon, C. Goldbronn, and S. Pfeffer, *J. Therm. Anal. Calorim.* **57**, 61 (1999).
- 1999GON/ORT C. G. Gonzalez, J. P. Ortega, P. Hernandez, and S. Galvan, *J. Chem. Eng. Data* **44**, 772 (1999).
- 1999GOT/BUH A. Gotze, C. Buhmester, I. Svoboda, and H. Fuess, *Croat. Chim. Acta* **72**, 443 (1999).
- 1999GRI/AUE U. J. Griesser, M. E. Auer, and A. Burger, *Sci. Pharm.* **67**, 319 (1999).
- 1999GRI/SZE U. J. Griesser, M. Szelagiewicz, U. Ch. Hofmeier, C. Pitt, and S. Ciaferani, *J. Therm. Anal. Calorim.* **57**, 45 (1999).
- 1999HAM/WUR F. Hamann and A. Wurflinger, *Z. Phys. Chem.* **211**, 85 (1999).
- 1999HAN/ZHU N. Han, L. Zhu, and R. Fu, *Sep. Purif. Technol.* **16**, 175 (1999).
- 1999HEI/FIS A. Heine, K. Fischer, and J. Gmehling, *J. Chem. Eng. Data* **44**, 373 (1999).
- 1999JON/FEN D. E. G. Jones, H. T. Feng, R. A. Austen, and R. C. Fouchard, *J. Therm. Anal. Calorim.* **55**, 9 (1999); *Chem. Abstr.* **132**, 182729u (2000).
- 1999KAB/KOZ G. J. Kabo, A. A. Kozyro, M. Frenkel, and A. V. Blokhin, *Mol. Cryst. Liq. Cryst.* **326**, 333 (1999).
- 1999KOB/OGU K. Kobashi and M. Oguni, *J. Phys. Chem. B* **103**, 7687 (1999).
- 1999LEB/KUL B. V. Lebedev, T. G. Kulagina, and E. G. Kiparisova, *Russ. J. Phys. Chem.* **73**, 521 (1999).
- 1999LEI/WAN Y. D. Lei, F. Wania, and W. Y. Shiu, *J. Chem. Eng. Data* **44**, 577 (1999).
- 1999LEI/WAN2 Y. D. Lei, F. Wania, W. Y. Shiu, and D. G. B. Boocock, *J. Chem. Eng. Data* **44**, 200 (1999).
- 1999LI/TAN L. Li, Z. C. Tan, S. H. Meng, and Y. J. Song, *Thermochim. Acta* **342**, 53 (1999).
- 1999LI/ZEL Z. J. Li, M. T. Zell, E. J. Munson, and D. J. W. Grant, *J. Pharm. Sci.* **88**, 337 (1999).
- 1999LIM/PAR J. S. Lim, Y.-Y. Park, B.-G. Lee, Y.-W. Lee, and J.-D. Kim, *J. Chem. Eng. Data* **44**, 1226 (1999).
- 1999LOR/AUC S. Loras, A. Aucejo, and R. Munoz, *Fluid Phase Equilib.* **156**, 185 (1999).
- 1999MAR/BAS G. Marchionni, M. Bassi, G. Fontana, P. Maccone, and G. Ajroldi, *J. Fluorine Chem.* **98**, 41 (1999).
- 1999MAT/PEP Y. N. Matyushin, V. I. Pepekin, V. P. Lebedev, V. V. Chironov, L. M. Kostikova, Y. O. Inozemtcev, T. S. Pivina, and A. B. Sheremetev, *Int. Annu. Conf. ICT* **30**, 77/1 (1999).
- 1999MCK/STE R. L. McKenney, Jr., W. E. Stevens, and T. G. Floyd, *J. Energ. Mater.* **17**, 113–140 (1999).
- 1999MEN/LIA S. H. Meng, P. Liang, Z. C. Tan, Y. J. Song, L. Li, and L. Wang, *Thermochim. Acta* **342**, 47 (1999).
- 1999MIC/NEG F. Michaud, Ph. Negrier, D. Mikailitchenko, A. Marbeuf, Y. Haget, M. Cuevas-Diarte, and H. A. J. Oonk, *Mol. Cryst. Liq. Cryst.* **326**, 409 (1999).
- 1999MIK/MAR D. Mikailitchenko, A. Marbeug, and H. A. J. Oonk, *Chem. Mater.* **11**, 2866 (1999).
- 1999MIR/VOR E. A. Miroshnichenko and V. P. Vorob'eva, *Russ. J. Phys. Chem.* **73**, 349 (1999).
- 1999MIR/VOR2 E. A. Miroshnichenko and V. P. Vorob'eva, *Zh. Fiz. Khim.* **73**, 419 (1999).
- 1999MO/YAN O. Mo, M. Yanez, M. V. Roux, P. Jimenez, J. Z. Davalos, M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, M. A. R. Matos, L. M. P. F. Amaral, A. Sanchez-Migallon, P. Cabildo, R. Claramunt, J. Elguero, and J. F. Liebman, *J. Phys. Chem. A* **103**, 9336 (1999); Erratum, *J. Phys. Chem. A* **117**, 10569 (2013).
- 1999MOK/PRC L. Mokbel, S. Pcedda, T. Guetachew, B. Marongiu, and J. Jose, *ELDATA: Int. Electron. J. Phys.-Chem. Data* **5**, 79 (1999).
- 1999MON/DEL J. B. Monton, J. de la Torre, M. C. B. urguet, R. Munoz, and S. J. Loras, *J. Chem. Eng. Data* **44**, 1158 (1999).
- 1999MON/HIL M. J. S. Monte and D. M. Hillesheim, *J. Chem. Thermodyn.* **31**, 1433 (1999).
- 1999MUN/LEE S. Y. Mun and H. Lee, *J. Chem. Eng. Data* **44**, 1231 (1999).
- 1999NGU/BER J. N'Guimbi, C. Berro, I. Mokbel, E. Rauzy, and J. Jose, *Fluid Phase Equilib.* **162**, 143 (1999).
- 1999OJA/SUU V. Oja and E. M. Suuberg, *J. Chem. Eng. Data* **44**, 26 (1999).
- 1999ORT/HER J. Ortega and P. Hernandez, *J. Chem. Eng. Data* **44**, 757 (1999).
- 1999PAR/BAR L. C. Pardo, M. Barrio, J. Ll. Tamarit, D. O. Lopez, J. Salud, P. Negrier, and D. Mondieig, *Chem. Phys. Lett.* **308**, 204 (1999).
- 1999PRI/BAS D. M. Price, S. Bashir, and P. R. Derrick, *Thermochim. Acta* **327**, 167 (1999).
- 1999RAI/RAI U. S. Rai and R. N. Rai, *J. Mater. Res.* **14**, 1299 (1999).
- 1999RAI/SHE U. S. Rai and H. Shekhar, *Asian J. Chem.* **11**, 453 (1999).
- 1999RAR/HOR J. Rarey, S. Horstmann, and J. Gmehling, *J. Chem. Eng. Data* **44**, 532 (1999).
- 1999RIB/MAT M. A. V. Ribeiro da Silva, M. A. R. Matos, M. J. S. Monte, D. M. Hillesheim, M. C. P. O. Marques, and N. F. T. G. Vieira, *J. Chem. Thermodyn.* **31**, 1429 (1999).
- 1999RIB/MAT2 M. A. V. Ribeiro da Silva, M. A. R. Matos, V. M. F. Moraes, and M. S. Miranda, *J. Org. Chem.* **64**, 8816 (1999).
- 1999RIB/MON M. A. V. Ribeiro da Silva, M. J. S. Monte, and J. R. Ribeiro, *J. Chem. Thermodyn.* **31**, 1093 (1999).
- 1999RIB/RIB M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, M. A. R. Matos, P. Jimenez, M. V. Roux, J. Elguero, R. Claramunt, P. Cabildo, and A. Sanchez-Migallon, *J. Chem. Thermodyn.* **31**, 129 (1999).
- 1999ROH/MUS V. Rohac, J. E. Musgrove, K. Ruzicka, V. Ruzicka, M. Zabransky, and K. Aim, *J. Chem. Thermodyn.* **31**, 971 (1999).
- 1999ROH/RUZ V. Rohac, V. Ruzicka, K. Ruzicka, M. Polednicek, K. Aim, J. Jose, and M. Zabransky, *Fluid Phase Equilib.* **157**, 121 (1999).
- 1999ROU/DAV M. V. Roux, J. Z. Davalos, P. Jimenez, H. Flores, J. L. Saiz, J. L. M. Abboud, and E. Juaristi, *J. Chem. Thermodyn.* **31**, 635 (1999).
- 1999ROU/JIM M. V. Roux, P. Jimenez, J. Z. Davalos, R. Notaro, and J.-L. M. Abboud, *J. Chem. Thermodyn.* **31**, 1457 (1999).
- 1999SAB/IDE R. Sabbah and S. Ider, *Can. J. Chem.* **77**, 249 (1999).
- 1999SAB/PER R. Sabbah and L. Perez, *Aust. J. Chem.* **52**, 235 (1999).
- 1999SAB/PER2 R. Sabbah and L. Perez, *Can. J. Chem.* **77**, 1508 (1999).
- 1999SAL/LOP J. Salud, D. O. Lopez, M. Barrio, and J. Ltamarit, *J. Mater. Chem.* **9**, 909 (1999).
- 1999SHA/BUD S. D. Sharma, D. Buddhi, and R. L. Sawhney, *Sol. Energy* **66**, 483 (1999).

- 1999SHE/KAM M. S. Sheiman, G. P. Kamelova, I. A. Zelyaev, and V. M. Sheiman, *Russ. J. Phys. Chem.* **73**, 512 (1999).
- 1999SUG S. Suga, *Thermochim. Acta* **328**, 9 (1999).
- 1999TOC/AKI K. Tochigi, K. Akimoto, K. Ochi, F. Liu, and Y. Kawase, *J. Chem. Eng. Data* **44**, 588 (1999).
- 1999VER S. P. Verevkin, *J. Chem. Thermodyn.* **31**, 1397 (1999).
- 1999VER/EBE S. P. Verevkin and J. Ebenhoch, *Struct. Chem.* **10**, 401 (1999).
- 1999VER/HEI S. P. Verevkin and A. Heintz, *J. Chem. Eng. Data* **44**, 1240 (1999).
- 1999VER2 S. P. Verevkin, *J. Chem. Thermodyn.* **31**, 559 (1999).
- 1999VER4 S. P. Verevkin, *J. Chem. Eng. Data* **44**, 1245 (1999).
- 1999VER6 S. P. Verevkin, *Thermochim. Acta* **326**, 17 (1999).
- 1999VER7 S. P. Verevkin, *Phys. Chem. Chem. Phys.* **1**, 127 (1999).
- 1999VER8 S. P. Verevkin, *Thermochim. Acta* **332**, 27 (1999).
- 1999WAT/IJY A. Watanabe, T. Iiyama, and K. Kaneko, *Chem. Phys. Lett.* **305**, 71 (1999).
- 1999WEB F. Weber, *PTB-Mitteilungen* **109**, 469 (1999).
- 1999WEL/DRU D. Wells and C. J. Drummond, *Langmuir* **15**, 4713 (1999).
- 1999ZAR/CHA M. I. Zaretskii, E. M. Chartov, L. A. Pushkina, and V. V. Elkin, *Russ. J. Appl. Chem.* **72**, 1702 (1999).
- 1999ZAR/CHA2 M. I. Zaretskii, E. M. Chartov, L. A. Pushkina, V. V. Elkin, and V. V. Rusak, *Zh. Prikl. Khim.* **72**, 1436 (1999).
- 1999ZHE/KAT V. P. Zhelezny, Y. A. Katchurka, and M. V. Pybnikov, *High Temp.-High Pressures* **31**, 169 (1999).
- 1999ZIE/GOL W. Zielenkiewicz, B. Golankiewicz, G. L. Pelovich, and M. Kozbial, *J. Sol. Chem.* **28**, 731 (1999).
- 1999ZIE/PER W. Zielenkiewicz, G. L. Perlovich, and M. Wszelak-Rylik, *J. Therm. Anal. Calorim.* **57**, 225 (1999).
- 2000AGU/GUA A. R. Aguilar and E. O. Guareno, *J. Chem. Thermodyn.* **32**, 767 (2000).
- 2000ATA/KAW T. Atake, H. Kawaji, T. Tojo, K. Kawasaki, Y. Ootsuka, M. Katou, and Y. Koga, *Bull. Chem. Soc. Jpn.* **73**, 1987 (2000).
- 2000BEL/BEL B. F. Belaribi, G. Belaribi-Boukais, A. A. Kaci, and J. Jose, *J. Therm. Anal. Calorim.* **61**, 787 (2000).
- 2000BOB/CAM S. Bobbo, R. Camporese, and R. Stryjek, *J. Chem. Thermodyn.* **32**, 1647 (2000).
- 2000BOU/YE E. Bourret-Courchesne, Q. Ye, D. W. Peters, J. Arnold, M. Ahmed, S. J. C. Irvine, R. Kanjolia, L. M. Smith, and S. A. Rushworth, *J. Cryst. Growth* **217**, 47 (2000).
- 2000BRO/DU S. Brownridge, H. Du, S. A. Fairhurst, R. C. Haddon, H. Oberhammer, S. Parson, J. Passmore, M. J. Schriver, L. H. Sutcliffe, and N. P. C. Westwood, *J. Chem. Soc., Dalton Trans.* **2000**, 3365.
- 2000BRU/DEL B. Brunetti, G. Della Gatta, and V. Piacente, *J. Chem. Eng. Data* **45**, 237 (2000).
- 2000BRU/PIA B. Brunetti, V. Piacente, and G. Portalone, *J. Chem. Eng. Data* **45**, 242 (2000).
- 2000CHA/SOS C. Chaimbault, J. J. Sosc, J. M. Leger, P. Negrier, F. Capelle, and C. Jarry, *J. Pharm. Sci.* **89**, 1496 (2000).
- 2000DEL/JOZ G. Della Gatta, M. Jozwiak, B. Brunetti, and L. Abate, *J. Chem. Thermodyn.* **32**, 979 (2000).
- 2000DI/LI Y.-Y. Di, S. Li, S.-H. Meng, Z.-C. Tan, and S.-S. Qu, *Huaxue Xuebao* **58**, 1380 (2000); *Chem. Abstr.* **134**, 10187r (2001).
- 2000DI/TAN Y. Y. Di, Z.-C. Tan, X.-M. Xu, S.-H. Meng, and S.-S. Qu, *Thermochim. Acta* **356**, 143 (2000).
- 2000GAL/VAN H. E. Gallis, J. C. van Miltenburg, and H. A. J. Oonk, *Phys. Chem. Chem. Phys.* **2**, 5619 (2000).
- 2000GAN/BOG R. B. Gandhi, J. B. Bogardus, D. E. Bugay, R. K. Perrone, and M. A. Kaplan, *Int. J. Pharm.* **201**, 221 (2000).
- 2000GRI/AUE U. J. Griesser, M. E. Auer, and A. Burger, *Microchem. J.* **65**, 283 (2000).
- 2000HAN/BOT E. Handelsman-Benory, M. Botoshansky, M. Greenberg, V. Shteiman, and M. Kaftory, *Tetrahedron* **56**, 6887 (2000).
- 2000HAN/PAR B. C. Hancock and M. Parks, *Pharm. Res.* **17**, 397 (2000).
- 2000JAR/MAR S. Jarmelo, T. M. R. Maria, M. L. P. Leitao, and R. Fausto, *Phys. Chem. Chem. Phys.* **2**, 1155 (2000).
- 2000JOH/PYK G. P. Johari and D. Pyke, *Phys. Chem. Chem. Phys.* **2**, 5479 (2000).
- 2000KAB/BLO G. J. Kabo, A. V. Blokhin, M. B. Charapennikau, A. G. Kabo, and V. M. Sevruk, *Thermochim. Acta* **345**, 125 (2000).
- 2000KAN/SAM S. K. Kang and E. T. Samulski, *Liq. Cryst.* **27**, 371 (2000).
- 2000KIR D. Kirklin, *J. Chem. Thermodyn.* **32**, 701 (2000).
- 2000KOZ/MAK A. A. Kozyro, Yu. V. Maksimuk, and G. Ya. Kabo, *Zh. Prikl. Khim.* **73**, 199 (2000).
- 2000LAR/LER L. Larachi, M. Leroux, S. Hamoudi, A. Bernis, and A. Sayari, *J. Chem. Eng. Data* **45**, 404 (2000).
- 2000LIS/JAM Z. Lisicki and M. E. Jamroz, *J. Chem. Thermodyn.* **32**, 1335 (2000).
- 2000MAR/MIK A. Marbeuf, D. Mikailitchenko, P. Negrier, M.-A. Cuevas-Diarte, and T. Calvet-Pallas, *Chem. Mater.* **12**, 3280 (2000).
- 2000MAT/MIR M. A. R. Matos, M. S. Miranda, and V. M. F. Morais, *J. Phys. Chem. A* **104**, 9260 (2000).
- 2000MOK/RUZ I. Mokbel, K. Ruzicka, V. V. Majer, Ruzicka, M. Ribeiro, J. Jose, and M. Zabransky, *Fluid Phase Equilib.* **169**, 191 (2000).
- 2000MON/HIL M. J. S. Monte and D. M. Hillesheim, *J. Chem. Thermodyn.* **32**, 1727 (2000).
- 2000MON/HIL2 M. J. S. Monte and D. M. Hillesheim, *J. Chem. Eng. Data* **45**, 1088 (2000).
- 2000NIC/ORF G. Nichols, J. Orf, S. M. Reiter, J. Chickos, and G. W. Gokel, *Thermochim. Acta* **346**, 15 (2000).
- 2000OON/VAN H. A. J. Oonk, A. C. G. van Genderen, J. G. Blok, and P. R. van der Linde, *Phys. Chem. Chem. Liq.* **2**, 5614 (2000).
- 2000OVA/KOU P. V. Ova, B. Koultek, and M. Hoskovec, in *Practice Oriented Results on Use and Production of Neem-Ingredients and Pheromones VI*, edited by H. Kleeberg and C. P. W. Zebitz (Druck and Graphic, Giessen, 2000), pp. 211–218.
- 2000PAL/SZA M. Palczewska-Tulinska and A. M. Szafranski, *J. Chem. Eng. Data* **45**, 988 (2000).
- 2000REI/CAR R. Reich, M. Cartes, H. Segura, and J. Wisniak, *Phys. Chem. Liq.* **38**, 217 (2000).
- 2000RES/GON J. M. Resa, C. Gonzalez, S. Ortiz de Landaluce, and J. Lanz, *J. Chem. Eng. Data* **45**, 867 (2000).
- 2000RIB/GON M. D. M. C. Ribeiro da Silva, J. M. Goncalves, and W. E. Acree, Jr., *J. Chem. Thermodyn.* **32**, 1071 (2000).
- 2000RIB/MAT M. A. V. Ribeiro da Silva, M. A. R. Matos, C. M. A. Rio, M. S. Miranda, and V. M. F. Morais, *J. Phys. Chem. A* **104**, 6644 (2000).
- 2000RIB/MON M. A. V. Ribeiro da Silva, M. J. S. Monte, and J. R. Ribeiro, *J. Chem. Eng. Data* **45**, 756 (2000).
- 2000RIB/RIB2 M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, M. A. R. Matos, P. Jimenez, M. V. Roux, M. A. Martin-Luengo, J. Elguero, R. Claramut, and P. Cabildo, *J. Chem. Thermodyn.* **32**, 237 (2000).
- 2000ROD/ART S. Rodriguez, H. Artigas, C. Lafuente, A. M. Mainar, and F. M. Royo, *Thermochim. Acta* **362**, 153 (2000).
- 2000ROD/VEC F. Rodante, S. Vecchio, G. Catalani, and M. Guidotti, *J. Therm. Anal. Calorim.* **60**, 605 (2000).
- 2000TAM/LOP J. Li. Tamarit, D. O. Lopez, X. Alcobe, M. Barrio, J. Salud, and L. C. Pardo, *Chem. Mater.* **12**, 555 (2000).
- 2000TOZ/AKU Y. Tozuka, H. Akutsu, Y. Yamamura, K. Saito, and M. Sorai, *Bull. Chem. Soc. Jpn.* **73**, 2279 (2000).
- 2000URY/KUP V. F. Ur'yash, V. F. Kupriyanov, N. Y. Kokurina, A. G. Smirnov, and T. M. Kuleshova, *Russ. J. Gen. Chem.* **70**, 719 (2000).
- 2000VAN/OON J. C. van Miltenburg, H. A. J. Oonk, and G. J. K. van den Berg, *J. Chem. Eng. Data* **45**, 704 (2000).
- 2000VER S. P. Verevkin, *J. Chem. Thermodyn.* **32**, 207 (2000).
- 2000VER/HEI S. P. Verevkin and A. Heintz, *J. Chem. Thermodyn.* **32**, 1169 (2000).
- 2000VER/SCH S. P. Verevkin and C. Schick, *J. Chem. Eng. Data* **45**, 946 (2000).
- 2000VER/WAN S. P. Verevkin, D. Wandschneider, and A. Heintz, *J. Chem. Eng. Data* **45**, 618 (2000).
- 2000VER2 S. P. Verevkin, *J. Chem. Eng. Data* **45**, 953 (2000).
- 2000VER3 S. P. Verevkin, *J. Chem. Thermodyn.* **32**, 247 (2000).
- 2000WOR/FEN C. J. Wormald and D. P. Fennell, *Int. J. Thermophys.* **21**, 767 (2000).

- 2000WOR/JAM C. J. Wormald and G. F. James, *J. Chem. Eng. Data* **45**, 348 (2000).
- 2000WOR/VIN C. J. Wormald and M. D. Vine, *J. Chem. Thermodyn.* **32**, 329 (2000).
- 2000WOR/VIN2 C. J. Wormald and M. D. Vine, *J. Chem. Thermodyn.* **32**, 659–669 (2000).
- 2000YAM/TAN M. Yamazaki, M. Tanaka, T. Inoue, Y. Suzuki, Y. Nibu, H. Shimada, and R. Shimadu, *Bull. Chem. Soc. Jpn.* **73**, 837 (2000).
- 2000ZIE W. Zielenkiewicz, *J. Chem. Eng. Data* **45**, 626 (2000).
- 2001AHN/HAR S. Ahn, K. D. M. Harris, B. M. Kariuki, and D. M. S. Zin, *J. Solid State Chem.* **156**, 10 (2001).
- 2001ALB K. C. Albyn, *J. Chem. Eng. Data* **46**, 1415 (2001).
- 2001ALB/HAH M. Albert, I. Hahnenstein, H. Hasse, and G. Maurer, *J. Chem. Eng. Data* **46**, 897 (2001).
- 2001BAE A. K. Baev, *Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol.* **44**, 3 (2001).
- 2001BER/WIC S. Bernatova and I. Wichterle, *Fluid Phase Equilib.* **189**, 111 (2001).
- 2001BLO/VAN J. G. Blok, A. C. G. van Genderen, P. R. van der Linde, and H. A. J. Oonk, *J. Chem. Thermodyn.* **33**, 1097 (2001).
- 2001CAL/MEL M. Calligaris, A. Melchior, and S. Geremia, *Inorg. Chim. Acta* **323**, 89 (2001).
- 2001CEN/LIP M. Censky, M. Lipovska, H.-G. Schmidt, V. Ruzicka, and G. Wolf, *J. Therm. Anal. Calorim.* **63**, 879 (2001).
- 2001CHA/DOL K. Chatterjee, D. Dollimore, and K. Alexander, *Instrum. Sci. Technol.* **29**, 133 (2001); *Chem. Abstr.* **135**, 16629t (2001), reported values are referred to as enthalpies of vaporization.
- 2001CHA/TOB S. Chattopadhyay, H. J. Tobias, and P. J. Ziemann, *Anal. Chem.* **73**, 3797 (2001).
- 2001CHE/HUA Y. Cheng, Y. Huang, K. Alexander, and D. Dollimore, *Thermochim. Acta* **367/368**, 23 (2001).
- 2001CHY/FRA K. Chylinski, Z. Fras, and S. K. Malanowski, *J. Chem. Eng. Data* **46**, 29 (2001).
- 2001DI/SUN2 Y.-Y. Di, X.-H. Sun, Z.-C. Tan, Y.-F. Liu, S.-H. Meng, S.-L. Gao, and S.-S. Qu, *Thermochim. Acta* **369**, 25 (2001).
- 2001ESP/CEO P. Espeau and R. Ceolin, *J. Phys. IV* **11**, 207 (2001).
- 2001FOR/HEM A. Forster, J. Hempenstall, I. Tucker, and T. Rades, *Int. J. Pharm.* **226**, 147 (2001).
- 2001HE/STO X. He, J. G. Stowell, K. R. Morris, R. R. Pfeiffer, H. Li, P. Stahly, and S. R. Byrn, *Cryst. Growth Des.* **1**, 305 (2001).
- 2001HEI/VER A. Heintz and S. P. Verevkin, *Fluid Phase Equilib.* **179**, 85 (2001).
- 2001HOR/GAR S. Horstmann, H. Gardeler, K. Fischer, F. Köster, and J. Gmehling, *J. Chem. Eng. Data* **46**, 337 (2001).
- 2001JAM/DOB M. E. Jamroz, J. C. Dobrowolski, J. Placzek, A. M. Szafranski, J. K. Kazimirski, and Z. Lisicki, *J. Chem. Thermodyn.* **33**, 565 (2001).
- 2001KAM/SUE R. Kamae, K. Suenaga, T. Matsuo, and H. Suga, *J. Chem. Thermodyn.* **33**, 471 (2001).
- 2001KIY/MIN T. Kiyobayashi and M. E. Minas da Piedade, *J. Chem. Thermodyn.* **33**, 11 (2001).
- 2001KOZ/BLO A. A. Kozyro, A. V. Blokhin, G. J. Kabo, and Y. U. Paulechka, *J. Chem. Thermodyn.* **33**, 305 (2001).
- 2001KUL/DES I. Kul, D. D. DesMarteau, and A. L. Beyerlein, *Fluid Phase Equilib.* **185**, 241 (2001).
- 2001KUL/VER D. Kulikov, S. P. Verevkin, and A. Heintz, *J. Chem. Eng. Data* **46**, 1593 (2001).
- 2001KUL/VER2 D. Kulikov, S. P. Verevkin, and A. Heintz, *Fluid Phase Equilib.* **192**, 187 (2001).
- 2001LAG/DIO A. L. C. Lagoa, H. P. Diogo, M. P. Dias, M. E. Minas de Piedade, L. M. P. E. Amaral, M. A. V. Ribeiro da Silva, J. A. M. Simoes, R. C. Guedes, B. J. Costa Cabral, K. Schwarz, and M. Eppli, *Chem. Eur. J.* **7**, 483 (2001).
- 2001LOR/AUC S. Loras, A. Aucejo, J. B. Monton, J. Wisniak, and H. Segura, *J. Chem. Eng. Data* **46**, 1351 (2001).
- 2001MAR/GOM F. Martinez and A. Gomez, *J. Sol. Chem.* **30**, 909 (2001).
- 2001MAT/LEB Y. N. Matyushin, V. P. Lebedev, E. A. Miroshnichenko, L. M. Kostikova, and Y. O. Inosemzev, *Int. Annu. Conf. ICT* **32**, 102/1 (2001).
- 2001MON/HIL M. J. S. Monte and D. M. Hillesheim, *J. Chem. Eng. Data* **46**, 1601 (2001).
- 2001MON/HIL2 M. J. S. Monte and D. M. Hillesheim, *J. Chem. Thermodyn.* **33**, 745 (2001).
- 2001MON/HIL3 M. J. S. Monte and D. M. Hillesheim, *J. Chem. Thermodyn.* **33**, 103 (2001).
- 2001MON/HIL4 M. J. S. Monte and D. M. Hillesheim, *J. Chem. Thermodyn.* **33**, 837 (2001).
- 2001MON/HIL5 M. J. S. Monte and D. M. Hillesheim, *J. Chem. Thermodyn.* **33**, 849 (2001).
- 2001MUN/KRA L. A. L. Munoz and M. A. Krahenbuhl, *J. Chem. Eng. Data* **46**, 120 (2001).
- 2001ORT/GON J. Ortega, C. Gonzalez, and S. Galvan, *J. Chem. Eng. Data* **46**, 904 (2001).
- 2001OXL/SMI J. C. Oxley, J. L. Smith, J. Zhang, and C. Bedford, *J. Phys. Chem. A* **105**, 579 (2001). Note: Authors report that compounds exhibit melting endotherm well below their decomposition exotherm.
- 2001PER/BAU G. L. Perlovich and A. Bauer-Brandl, *J. Therm. Anal. Calorim.* **63**, 653 (2001).
- 2001PER/HAN G. L. Perlovich, L. K. Hansen, and A. Bauer-Brandl, *J. Therm. Anal. Calorim.* **66**, 699 (2001).
- 2001PUR/CHI S. Puri, J. S. Chickos, and W. Welsh, *J. Anal. Chem.* **73**, 1480 (2001).
- 2001REH/SHE M. Rehman, B. Y. Skekunov, P. York, and P. Colthorpe, *J. Pharm. Sci.* **90**, 1570 (2001).
- 2001RIB/FER M. D. M. C. Ribeiro da Silva, S. C. C. Ferreira, I. A. P. Rodrigues, L. C. M. da Silva, W. E. Acree, Jr., S. Pandey, and L. E. Roy, *J. Chem. Thermodyn.* **33**, 1227 (2001).
- 2001RIB/GON M. D. M. C. Ribeiro da Silva, J. M. Goncalves, S. C. C. Ferreira, L. C. M. da Silva, M. J. Sottomayor, G. Pilcher, W. E. Acree, Jr., and L. E. Roy, *J. Chem. Thermodyn.* **33**, 1263 (2001).
- 2001RIB/MON2 M. A. V. Riberio da Silva, M. J. S. Monte, and J. R. Ribeiro, *J. Chem. Thermodyn.* **33**, 23 (2001).
- 2001RIB/RIB M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, L. C. M. da Silva, F. Dietze, E. Hoyer, L. Beyer, B. Schröder, A. M. Damas, and J. F. Liebman, *J. Chem. Soc., Perkin Trans. 2* **2001**, 2174.
- 2001RIT L. Rittfeldt, *Anal. Chem.* **73**, 2405 (2001).
- 2001ROJ/ORO A. Rojas-Aguilar, E. Orozco-Guareno, and M. Martinez-herra, *J. Chem. Thermodyn.* **33**, 1405 (2001).
- 2001ROL/KRA M. P. Rolemberg and M. A. Krahnbuhl, *J. Chem. Eng. Data* **46**, 256 (2001).
- 2001ROT/GLA M. K. Rotich, B. D. Glass, and M. E. Brown, *J. Therm. Anal. Calorim.* **64**, 681 (2001).
- 2001ROU/JIM M. V. Roux, P. Jimenez, J. Z. Davalos, R. Notario, and E. Juaristi, *J. Org. Chem.* **66**, 5343 (2001).
- 2001ROU/JIM2 M. V. Roux, P. P. Jimenez, A. Mayorga, J. Z. Davalos, S. Böhm, and O. Exner, *J. Phys. Chem. A* **105**, 7926 (2001).
- 2001SEG/LAM H. Segura, E. Lam, R. Reich, and J. Wisniak, *Phys. Chem. Liq.* **39**, 43 (2001).
- 2001UUS/POK P. Uusi-Kyyny, J.-P. Pokki, J. Aittaman, and S. Liukkonen, *J. Chem. Eng. Data* **46**, 1244 (2001).
- 2001VAN/OON J. C. van Miltenburg, H. A. J. Oonk, and B. J. K. Van den Berg, *J. Chem. Eng. Data* **46**, 84 (2001).
- 2001VAR/DRU R. M. Varushchenko, A. I. Druzhinina, A. Yu. Churkina, and Z.-C. Tan, *Russ. J. Phys. Chem.* **75**, 1223 (2001).
- 2001VER/HEI S. P. Verevkin and A. Heintz, *J. Chem. Eng. Data* **46**, 984 (2001).
- 2001VER/VAZ E. Vercher, M. I. Vazquez, and A. Martinez-Andreu, *J. Chem. Eng. Data* **46**, 1584 (2001).
- 2001XIE/CHE R. Xie and Y. Cheng, *Huagong Xuebao (Chin. Ed.)* **52**, 650 (2001).
- 2001ZAB/RUZ M. Zábbranský, V. Růžicka, Jr., and E. S. Domalski, *J. Phys. Chem. Ref. Data* **30**, 1199–1689 (2001).
- 2001ZHU/LI L. Zhu, H. Li, C. Wang, and S. Han, *J. Chem. Eng. Data* **46**, 1231 (2001).
- 2001ZOR/COS H. E. Zorel, Jr., A. G. C. Costalonga, M. S. Crespi, and C. A. Ribiero, *Quim. Nova* **24**, 599 (2001).
- 2002ABB/CAS J.-L. M. Abboud, O. Castao, J. Z. Davalos, P. Jimenez, R. Gomperts, P. Muller, and M. V. Roux, *J. Org. Chem.* **67**, 1057 (2002).
- 2002ANT/FRA M. Antosik, Z. Fras, and S. K. Malanowski, *J. Chem. Eng. Data* **47**, 757 (2002).

- 2002BAT I. Batiu, *Fluid Phase Equilib.* **198**, 111 (2002).
- 2002BLO/PAU A. V. Blokhin, Y. U. Paulechka, G. J. Kabo, and A. A. Kozyro, *J. Chem. Thermodyn.* **34**, 29 (2002).
- 2002BOB/ART S. Bobbo, G. Artico, L. Fedele, M. Scattolini, and R. Camporese, *J. Chem. Eng. Data* **47**, 839 (2002).
- 2002BOB/FED S. Bobbo, L. Fedele, M. Scattolini, and R. Camporese, *J. Chem. Eng. Data* **47**, 179 (2002).
- 2002BOU/SAI M. Bouvet and H. Said, *Phys. Chem. News* **8**, 79 (2002); *Chem. Abstr.* **138**, 344563 (2002).
- 2002BRU/POR B. Brunetti, G. Portalone, and V. Piacente, *J. Chem. Eng. Data* **47**, 17 (2002).
- 2002CHA/DOL K. Chatterjee, D. Dollimore, and K. S. Alexander, *Thermochim. Acta* **392-393**, 107 (2002).
- 2002CHA/MAN D. Chandra, H. Mandalia, W.-M. Chien, D. W. Lindle, and R. Rudman, *Z. Phys. Chem. (Muenchen)* **216**, 1389 (2002).
- 2002CHI/HIL J. S. Chickos, D. M. Hillesheim, G. Nichols, and M. J. Zehe, *J. Chem. Thermodyn.* **34**, 1647 (2002).
- 2002CHI/KN I R. D. Chirico, S. E. Knipmeyer, and W. V. Steele, *J. Chem. Thermodyn.* **34**, 1873 (2002).
- 2002CON/WIC D. Constantinescu and I. Wichterle, *Fluid Phase Equilib.* **203**, 71 (2002).
- 2002DAH/MOK A. Dahmani, I. Mokbel, and J. Jose, *Fluid Phase Equilib.* **202**, 193 (2002).
- 2002DAL/DEL L. Dall'acqua, G. Della Gatta, B. Nowicka, and P. Ferloni, *J. Chem. Thermodyn.* **34**, 1 (2002).
- 2002DAS/ZAL Z. Daszkiewicz, J. Zaleski, E. M. Nowakowska, and J. B. Kyziol, *Pol. J. Chem.* **76**, 1113 (2002).
- 2002DEN/LI D. Deng, H. Li, and S. Han, *J. Chem. Thermodyn.* **34**, 1431 (2002).
- 2002DIN/PAS G. Di Nicola and G. Passerini, *J. Chem. Eng. Data* **47**, 882 (2002).
- 2002DOM/KOZ U. Domanska, M. K. Kozłowska, and M. Rogalski, *J. Chem. Eng. Data* **47**, 456 (2002).
- 2002DOM/KOZ2 U. Domanska, M. K. Kozłowska, and M. Rogalski, *J. Chem. Eng. Data* **47**, 8 (2002).
- 2002FAR/KAD D. Faroonsarg, N. Kadejinda, and A. Sunthornpit, *AAPS PharmSciTech* **1**, 23 (2002).
- 2002GRA/RAS S. Gracin and A. C. Rasmuson, *J. Chem. Eng. Data* **47**, 1379 (2002).
- 2002HAZ/DOL A. Hazra, D. Dollimore, and K. Alexander, *Thermochim. Acta* **392/393**, 221 (2002).
- 2002JIM/ROU2 P. Jimenez, M. V. Roux, J. Z. Davalos, and M. Temprado, *Thermochim. Acta* **394**, 25 (2002).
- 2002JON/COO S. O. Jonsdottir, S. A. Cooke, and E. A. Macedo, *Carbohydrate Res.* **337**, 1563 (2002).
- 2002JON/LIG D. E. G. Jones, P. D. Lightfoot, R. C. Fouchard, and Q. S. M Kwok, *Thermochim. Acta* **388**, 159 (2002).
- 2002KOS/MIR L. M. Kostikova, E. A. Miroshnichenko, Y. N. Matyushin, A. B. Vorob'ev, and J. O. Inozemtsev, *Int. Annu. Conf. ICT* **33**, 86/1 (2002).
- 2002KRA/VAS E. L. Krasnykh, T. V. Vasil'tsova, S. P. Verevkin, and A. Heintz, *J. Chem. Eng. Data* **47**, 1372 (2002).
- 2002LAG/DIO A. L. C. Lagoa, H. P. Diogo, M. E. Minas da Piedade, L. M. P. F. Amaral, R. C. Guedes, B. J. C. Cabral, D. V. Kulikov, S. P. Verevkin, M. Siedler, and M. Epple, *J. Phys. Chem.* **106**, 9855 (2002).
- 2002LEI/CHA Y. D. Lei, R. Chankalal, A. Chan, and F. Wania, *J. Chem. Eng. Data* **47**, 801 (2002).
- 2002LI/SHI X.-W. Li, E. Shibata, E. Kasai, and T. Nakamura, *Mater. Trans.* **43**, 2903 (2002).
- 2002LIP/SCH M. Lipovska, H.-G. Schmidt, V. Rohac, V. Ruicka, G. Wolf, and M. Zabranska, *J. Therm. Anal. Calorim.* **68**, 753 (2002).
- 2002LOR/AUC S. Loras, A. Aucejo, J. B. Monton, J. Wisniak, and H. Segura, *J. Chem. Eng. Data* **47**, 1256 (2002).
- 2002LUB/BAN M. Lubomska, A. Banas, and S. K. Malanowski, *J. Chem. Eng. Data* **47**, 1466 (2002).
- 2002MAN J. A. Manion, *J. Phys. Chem. Ref. Data* **31**, 123 (2002).
- 2002MAR/GOM F. Martinez and A. Gomez, *Phys. Chem. Liq.* **40**, 411 (2002).
- 2002MAR/OLI I. M. Marrucho, N. S. Oliveira, and R. Dohrn, *J. Chem. Eng. Data* **47**, 554 (2002).
- 2002MAT/LEB Y. N. Matyushin, V. P. Lebedev, E. A. Miroshnichenko, V. P. Vorob'eva, V. V. Chironov, L. M. Kostikova, and J. O. Inozemtsev, *Int. Annu. Conf. ICT* **33**, 84/1 (2002).
- 2002MEN/DOL D. Menon, D. Dollimore, and K. S. Alexander, *Thermochim. Acta* **392/393**, 237 (2002).
- 2002MIR/LEB E. A. Miroshnichenko, V. P. Lebedev, and Y. N. Matyushin, *Dokl. Akad. Nauk* **382**, 497 (2002).
- 2002MIR/LEB2 E. A. Miroshnichenko, V. P. Lebedev, and Yu. N. Matyushin, *Dokl. Russ. Chem.* **382**, 40 (2002).
- 2002MUR/YAM J. Murata, S. Yamashita, M. Akiyama, S. Katayama, T. Hiaki, and A. Sekiya, *J. Chem. Eng. Data* **47**, 911 (2002).
- 2002MUS/RAZ A. M. Musuc, D. Razus, and D. Oancea, *An. Univ. Bucuresti, Chim.* **11**, 147 (2002).
- 2002PFO/RIE O. Pfohl, C. Riebesell, and R. Dohrn, *Fluid Phase Equilib.* **202**, 289 (2002).
- 2002POK/UUS J.-P. Pokki, P. Uusi-Kyyny, J. Aittamaa, and S. Liukkonen, *J. Chem. Eng. Data* **47**, 371 (2002).
- 2002RAI/PAN U. S. Rai, P. Pandey, and R. N. Rai, *Mater. Lett.* **53**, 83 (2002).
- 2002RIB/AMA M. A. V. Ribeiro da Silva, L. M. P. F. Amaral, and I. M. C. L. Ferreira, *J. Chem. Thermodyn.* **34**, 119 (2002).
- 2002RIB/RIB M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, L. C. M. da Silva, and F. Dietze, *J. Chem. Thermodyn.* **34**, 155 (2002).
- 2002ROC/GRI G. D. Rockwell, T. B. Grindley, K. C. Smith, and M. A. White, *J. Phys. Chem. B* **106**, 12311 (2002).
- 2002ROD/CAN A. Rodriguez, J. Canosa, A. Dominguez, and J. Tojo, *Fluid Phase Equilib.* **198**, 95 (2002).
- 2002ROD/CAN2 A. Rodriguez, J. Canosa, A. Dominguez, and A. Tojo, *J. Chem. Eng. Data* **47**, 1098 (2002).
- 2002ROU/DAV M. V. Roux, J. Z. Davalos, and P. Jimenez, *Thermochim. Acta* **394**, 19 (2002).
- 2002ROY/RIG S. Roy, A. T. Riga, and K. S. Alexander, *Thermochim. Acta* **392/393**, 399 (2002).
- 2002SAW/SHI Y. Sawanoi, Y. Shimbo, I. Tabata, K. Hisada, and T. Hori, *Dyes Pigm.* **52**, 29 (2002).
- 2002SCH/LEN E. Schnitzler, K. Lencone, and M. Kobelnik, *Exact Soil Sci., Agrarian S. Eng.* **8**, 91 (2002).
- 2002SEG/GAL H. Segura, G. Galindo, R. Reich, J. Wisniak, and S. Loras, *Phys. Chem. Liq.* **40**, 277 (2002).
- 2002SEG/WIS H. Segura, J. Wisniak, G. Galindo, and R. Reich, *Phys. Chem. Liq.* **40**, 67 (2002).
- 2002SII/KIR E. Siimer, H. Kirrs, M. Kuus, and L. Kudryavtseva, *Proc. Est. Acad. Sci., Chem.* **51**, 19 (2002).
- 2002SII/KIR2 E. Siimer, H. Kirrs, M. Kuus, and L. Kudryavtseva, *J. Chem. Eng. Data* **47**, 52 (2001).
- 2002SOR/DOL T. V. Sorokina, D. Dollimore, and K. S. Alexander, *Thermochim. Acta* **392/393**, 315 (2002).
- 2002SOU/DAV P. O. Souillac, P. Dave, and J. H. Rytting, *Int. J. Pharm.* **231**, 185 (2002).
- 2002STE/CHI W. V. Steele, R. D. Chirico, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **47**, 648 (2002).
- 2002STE/CHI2 W. V. Steele, R. D. Chirico, A. B. Cowell, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **47**, 667 (2002).
- 2002STE/CHI3 W. V. Steele, R. D. Chirico, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **47**, 689 (2002).
- 2002STE/CHI4 W. V. Steele, R. D. Chirico, A. B. Cowell, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **47**, 700 (2002).
- 2002STE/CHI5 W. V. Steele, R. D. Chirico, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **47**, 715 (2002).
- 2002STE/CHI6 W. V. Steele, R. D. Chirico, A. B. Cowell, S. E. Knipmeyer, and A. Nguyen, *J. Chem. Eng. Data* **47**, 725 (2002).
- 2002SU C. C. Su, M.S. thesis, National Taiwan University of Science and Technology, Taipei, 2002.
- 2002SWI/MAL B. E. Swiatek and S. K. Malanowski, *J. Chem. Eng. Data* **47**, 478 (2002).
- 2002SZT/KAM P. Szterner, M. Kaminski, and A. Zielenkiewicz, *J. Chem. Thermodyn.* **34**, 1005 (2002).
- 2002TAN/SUN Z.-C. Tan, L.-X. Sun, S.-H. Meng, L. Li, F. Xu, P. Yu, B.-P. Liu, and J.-B. Zhang, *J. Chem. Thermodyn.* **34**, 1417 (2002).

- 2002TAT/DOL A. S. Tatavarti, D. Dollimore, and K. S. Alexander, *Pharm. Sci.* **4**, 1 (2002).
- 2002TEM/ROU M. Temprado, M. V. Roux, P. Jimenez, J. Z. Davalos, and R. Notario, *J. Phys. Chem. A* **106**, 11173 (2002).
- 2002VAL/COQ A. Valtz, C. Coquelet, A. Baba-Ahmed, and D. Richon, *Fluid Phase Equilib.* **202**, 29 (2002).
- 2002VAN/PAR A. van Roon, J. R. Parsons, and H. A. J. Govers, *J. Chromatogr. A* **955**, 105 (2002).
- 2002VAN/VAN A. C. G. van Genderen, J. C. van Miltenburg, J. G. Blok, M. J. van Bommel, P. J. van Ekeren, G. J. K. van den Berg, and H. A. J. Oonk, *Fluid Phase Equilib.* **202**, 109 (2002).
- 2002VAN/VAN2 J. C. van Miltenburg and P. J. van Ekeren, *Thermochim. Acta* **385**, 11 (2002).
- 2002VAN/VAN3 J. C. van Miltenburg, G. J. K. van den Berg, and A. C. G. Genderen, *Thermochim. Acta* **383**, 13 (2002).
- 2002VAR/AIT R. M. Varushchenko, C. A. Aitkeeva, A. I. Druzhinina, Y. A. Myshenseva, and L. L. Pashchenko, *Russ. J. Phys. Chem.* **76**, 724–728 (2002).
- 2002VAR/DRU R. M. Varushchenko and A. I. Druzhinina, *Fluid Phase Equilib.* **199**, 109 (2002).
- 2002VAR/PAS R. M. Varushchenko, L. L. Pashchenko, A. Y. Churkina, and A. V. Shabanova, *Russ. J. Phys. Chem.* **76**, 915 (2002).
- 2002VAR/PAS2 R. M. Varushchenko, L. L. Pashchenko, A. I. Druzhinina, A. Yu. Churkina, I. I. Vorob'ev, and S. N. Kravhun, *Russ. J. Phys. Chem.* **76**, 546–551 (2002).
- 2002VER S. P. Verevkin, *J. Chem. Eng. Data* **47**, 1071 (2002).
- 2002VER/KUM S. P. Verevkin, M. Kummerlin, E. Hickl, H.-D. Beckhaus, C. Rüchardt, S. I. Kozhushkov, R. Haag, R. Boese, J. Benet-Buchholz, K. Nordhoff, and A. de Meijere, *Eur. J. Org. Chem.* 2280 (2002).
- 2002VER2 S. P. Verevkin, *J. Chem. Thermodyn.* **34**, 263 (2002).
- 2002WIL/VON G. M. Wilson, D. M. Von Niederhausern, and N. F. Giles, *J. Chem. Eng. Data* **47**, 761 (2002).
- 2002ZHO/PEN C.-R. Zhou, G.-S. Peng, Y.-D. Zhang, D. G. Jiang, F. Wang, J.-J. Li, and X.-Q. Shen, *Gaoxiao Huaxue Gongcheng Xuebao* **16**, 237 (2002); *Chem. Abstr.* **137**, 316567d (2002).
- 2003ABR/SMI V. K. Abrosimov, V. I. Smirnov, V. A. Kuznetsov, T. M. Okhrimenko, and E. P. Efremova, *Russ. J. Phys. Chem.* **77**, 1191 (2003).
- 2003ARA/STO A. A. S. Araujo, S. Storpirtis, L. P. Mercuri, F. M. S. Carvalho, M. dos Santos Filho, and J. R. Matos, *Int. J. Pharm.* **260**, 303 (2003).
- 2003CAC/BAU C. Cacula, A. Baudot, M. L. Duarte, A. M. Matos-Beja, M. R. Silva, J. A. Paixo, and R. Fausto, *J. Mol. Struct.* **649**, 143 (2003).
- 2003CAR/DES L. Carpentier, S. Desprex, and M. Descamps, *J. Therm. Anal. Calorim.* **73**, 577 (2003).
- 2003CEN/RUZ M. Censky, K. Ruzicka, Z. Ruzicka, and M. Zabransky, *Thermochim. Acta* **408**, 45 (2003).
- 2003CHA/BLO M. B. Charapennikau, A. V. Blokhin, A. G. Kabo, and G. J. Kabo, *J. Chem. Thermodyn.* **35**, 145 (2003).
- 2003CHA/BLO2 M. B. Charapennikau, A. V. Blokhin, G. J. Kabo, V. M. Sevruk, and A. P. Krasulin, *Thermochim. Acta* **405**, 85 (2003).
- 2003CHI/ACR J. S. Chickos and W. E. Acree, Jr., *Thermochim. Acta* **395**, 59 (2003).
- 2003CHI/KN I R. D. Chirico, S. E. Knipmeyer, and W. V. Steele, *J. Chem. Thermodyn.* **35**, 1059 (2003).
- 2003CHO/DHA S. P. Chopade, A. D. Dhale, A. M. Clark, C. W. Kiesling, L. K. Myrant, J. E. Jackson, and D. J. Miller, *J. Chem. Eng. Data* **48**, 44 (2003).
- 2003CLO/JAN K. Clou, J. F. Janssens, N. Blaton, A. T. H. Lenstra, and H. O. Desseyn, *Thermochim. Acta* **298**, 47 (2003).
- 2003DER/MIC S. O. Derawi, M. L. Michelsen, G. M. Kontogeorgis, and E. H. Stenby, *Fluid Phase Equilib.* **209**, 163 (2003).
- 2003DIK/FRE V. V. Diky, M. Frenkel, and L. S. Karpushenkava, *Thermochim. Acta* **408**, 115 (2003).
- 2003EUS/LOP E. M. Eusebio, A. J. Lopes Jesus, M. S. C. Cruz, M. L. P. Leitao, and R. J. Simoes, *J. Chem. Thermodyn.* **35**, 123 (2003).
- 2003EWI/OCH M. B. Ewing and J. C. S. Ochoa, *Fluid Phase Equilib.* **210**, 277 (2003).
- 2003GOB/RAT C. Gobble, N. Rath, and J. Chickos, *J. Chem. Eng. Data* **58**, 2600–2009 (2013).
- 2003GOM/SZA A. Gombas, P. Szabo-Revesz, G. Regdon, Jr., and I. Eros, *J. Therm. Anal. Calorim.* **73**, 615 (2003).
- 2003HUA C.-Y. Huang, M.S. thesis, Chin Culture University, Taipei, 2003.
- 2003JIA/LI H. Jiang, H. Li, C. Wang, T. Tan, and S. Han, *J. Chem. Thermodyn.* **35**, 1567 (2003).
- 2003KON/TAN L.-G. Kong, Z.-C. Tan, J. Xu, S.-H. Meng, and X.-H. Bao, *J. Chem. Thermodyn.* **35**, 1897 (2003).
- 2003LEE/CHO M.-J. Lee, Y.-H. Chou, and H.-M. Lin, *Ind. Eng. Chem. Res.* **42**, 3434 (2003).
- 2003LEI/LI Y. Lei, H. Li, L. Zhu, and S. Han, *Fluid Phase Equilib.* **206**, 87 (2003).
- 2003MAR/AVI F. Martinez, C. M. Avila, and A. Gomez, *J. Braz. Chem. Soc.* **4**, 803 (2003).
- 2003MAT/MIR M. A. R. Matos, M. S. Miranda, and V. M. F. Morais, *J. Chem. Eng. Data* **48**, 669 (2003).
- 2003MAT/MIR2 M. A. R. Matos, M. S. Miranda, V. M. F. Morais, and J. F. Liebman, *Org. Biomol. Chem.* **1**, 2566 (2003).
- 2003MAT/MIR3 M. A. R. Matos, M. S. Miranda, V. M. F. Morais, and J. F. Liebman, *Org. Biomol. Chem.* **1**, 2930 (2003).
- 2003MCK/KRA R. L. McKenney, Jr. and T. R. Krawietz, *Energy Mater.* **21**, 141 (2003).
- 2003MIR/LEB E. A. Miroshnichenko, V. P. Lebedev, L. M. Kostikova, V. P. Vorob'eva, A. B. Vorob'ev, and J. O. Inozemtcev, *Int. Annu. Conf. ICT* **34**, 122/1 (2003).
- 2003MOR/MIR V. M. F. Morais, M. S. Miranda, and M. A. R. Matos, *Org. Biomol. Chem.* **1**, 4329 (2003).
- 2003ORT/ESP J. Ortega, F. Espiau, and M. Postigo, *J. Chem. Eng. Data* **48**, 916 (2003).
- 2003ORT/ESP2 J. Ortega, F. Espiau, J. Togo, J. Canosa, and A. Rodriguez, *J. Chem. Eng. Data* **48**, 1183 (2003).
- 2003PAG/BEN S. Pagola, A. Benavente, A. Raschi, E. Romano, M. A. A. Molina, and P. W. Stephens, *AAPS PharmSciTech* **5**, 1 (2003).
- 2003PEN/RIB R. Pena, J. P. Ribet, J. L. Mural, L. Valat, F. Lacouloncha, and A. Chauvet, *Thermochim. Acta* **408**, 85 (2003).
- 2003PER/BAU G. L. Perlovich and A. Bauer-Brandl, *Pharm. Res.* **20**, 471 (2003). Note: Authors calculated the ideal mole fraction solubility of $x = 0.0311$ at 298.2 K using their previously published enthalpy of fusion data, which was presumably reported previously. [2001PER/BAU] The referenced paper does not contain the experimental enthalpy of fusion data. The enthalpy of fusion value for acetylsalicylic acid was calculated using the thermodynamic relationship: $\ln x = -\Delta_{\text{fus}}H_{\text{m}}(T)/(\Delta_{\text{fus}}H_{\text{m}}(T_{\text{fus}}) - 298.2) + (8.314 \times 298.2^2)/\Delta_{\text{fus}}H_{\text{m}}(T_{\text{fus}})$.
- 2003RIB/LIM M. A. V. Ribeiro da Silva, L. M. S. S. Lima, L. M. P. F. Amaral, A. I. M. C. L. Ferreira, and J. R. B. Gomes, *J. Chem. Thermodyn.* **35**, 1343 (2003).
- 2003RIB/SAN M. D. M. C. Ribeiro da Silva, L. M. N. B. F. Santos, A. L. R. Silva, O. Fernandez, and W. E. Acree, Jr., *J. Chem. Thermodyn.* **35**, 1093 (2003).
- 2003ROJ/ORO A. Rojas and E. Orozco, *Thermochim. Acta* **405**, 93 (2003).
- 2003ROM/LEI J. M. Romero, L. C. Leiva, N. L. Jorge, M. E. Gomez Vara, and E. A. Castro, *Acta Chim. Slov.* **50**, 579 (2003).
- 2003ROU/JIM M. V. Roux, P. Jimenez, J. Z. Davalos, M. Temprado, and J. F. Liebman, *J. Chem. Thermodyn.* **35**, 803 (2003).
- 2003ROU/TEM M. V. Roux, M. Temprado, P. Jimenez, J. Z. Davalos, C. Foces-Foces, M. V. Garcia, and M. I. Redondo, *Thermochim. Acta* **404**, 235 (2003).
- 2003ROU/TEM2 M. V. Roux, M. Temprado, P. Jimenez, R. Guzman, E. Juaristi, and J. S. Chickos, *Thermochim. Acta* **406**, 9 (2003).
- 2003ROU/TEM3 M. V. Roux, M. Temprado, P. Jimenez, J. Perez-Parajon, and R. Notario, *J. Phys. Chem. A* **107**, 11460 (2003).
- 2003RUT/SAL M. A. Rute, J. Salud, P. Negrier, D. O. Lopez, J. Ll. Tamarit, R. Puertas, M. Barrio, and D. Mondieig, *J. Phys. Chem. B* **107**, 5914 (2003).

- 2003SHA/KAN B. L. Sharma, R. Kant, R. Sharma, and S. Tandon, *Mater. Chem. Phys.* **82**, 216 (2003).
- 2003SPI/WAN D. Spitzer, B. Wanders, M. R. Schafer, and R. Welter, *J. Mol. Struct.* **644**, 37 (2003).
- 2003STE/CHI W. V. Steele, R. D. Chirico, A. B. Cowell, A. Nguyen, and S. E. Knipmeyer, *J. Chem. Thermodyn.* **35**, 1253 (2003).
- 2003SUC/RAJ M. Suceska, M. Rajic, S. Matecic-Musanic, S. Zeman, and Z. Jalovy, *J. Therm. Anal. Calorim.* **74**, 853 (2003).
- 2003SUN/SON X.-H. Sun, J.-R. Song, Z.-C. Tan, Y.-Y. Di, H.-X. Ma, M.-H. Wang, and L.-X. Sun, *Huaxue Xuebao* **61**, 1897 (2003).
- 2003TAN Y. Tan, *Wuxi Qinggong Daxue Xuebao* **22**, 102 (2003).
- 2003TEO/WIL M. Teodorescu, M. Wilken, R. Wittig, and J. Gmehling, *Fluid Phase Equilib.* **204**, 267 (2003).
- 2003VAN/GAB J. C. van Miltenburg, H. Gabrielova, and K. Ruzicka, *J. Chem. Eng. Data* **48**, 1323 (2003).
- 2003VER S. P. Verevkin, *J. Chem. Thermodyn.* **35**, 1237 (2003).
- 2003VER/KRA S. P. Verevkin, E. L. Krasnykh, T. V. Vasil'tsova, and A. Heintz, *J. Chem. Eng. Data* **48**, 591 (2003).
- 2003VER/KRA2 S. P. Verevkin, E. L. Krasnykh, T. V. Vasil'tsova, B. Koutek, J. Doubsky, and A. Heintz, *Fluid Phase Equilib.* **206**, 331 (2003).
- 2003VER/SCH S. P. Verevkin and C. Schick, *Fluid Phase Equilib.* **211**, 161 (2003).
- 2003WAN/LI C. Wang, H. Li, L. Ma, and S. Han, *J. Chem. Thermodyn.* **35**, 131 (2003).
- 2003WIL/WIL D. Williams, D. Wilson, R. Storey, and P. Basford, "Vapour pressure determination of pharmaceutical powders," in *7th International Conference/Workshop on Pharmacy and Applied Physical Chemistry* (European Society for Applied Physical Chemistry, Innsbruck, 2003).
- 2003ZAI/KAB Dz. Zaitsau, G. J. Kabo, A. A. Kozyro, and V. M. Sevruc, *Thermochim. Acta* **406**, 17 (2003).
- 2003ZAI/VER D. H. Zaitsau, S. P. Verevkin, Y. U. Paulechka, G. J. Kabo, and V. M. Sevruc, *J. Chem. Eng. Data* **48**, 1393 (2003).
- 2003ZHO/ZHA C. Zhou, Y. Zhang, and D. Jiang, *Chin. J. Chem. Eng.* **11**, 598 (2003).
- 2003ZIE/SZT W. Zielonkiewicz, P. Szterner, and M. Kaminski, *J. Chem. Eng. Data* **48**, 1132 (2003).
- 2004AHM/BAR A. Ahmed, B. W. Barry, A. C. Williams, and A. F. Davis, *J. Pharm. Biomed. Anal.* **34**, 945 (2004).
- 2004AHM/GIE S. Ahmad, R. Giesen, and K. Lucas, *J. Chem. Eng. Data* **49**, 826 (2004).
- 2004ANT/GAL M. Antosik, M. Galka, and S. K. Malanowski, *J. Chem. Eng. Data* **49**, 11 (2004).
- 2004BAR/PAR M. Barrio, L. C. Pardo, J. Li. Tamarit, P. Negrier, D. O. Lopez, J. Salad, and D. Mondieig, *J. Phys. Chem. B* **108**, 11089–11096 (2004).
- 2004BAS/CHI A. Bashir-Hashemi, J. S. Chickos, W. Hanshaw, H. Zhao, B. S. Farivar, and J. F. Liebman, *Thermochim. Acta* **424**, 91 (2004).
- 2004BOL/DRE E. V. Boldyreva, V. A. Drebuschchak, I. E. Paukov, Y. A. Kovalevskaya, and T. N. Drebuschchak, *J. Therm. Anal. Calorim.* **77**, 607 (2004).
- 2004BYK/SMI T. A. Bykova, N. N. Smirnova, L. V. Nikishchenkova, G. P. Belova, and E. V. Novikova, *Russ. J. Phys. Chem.* **78**, 1712 (2004).
- 2004CER/PER L. Cerioni, S. Perez, and A. Wolfenson, *J. Phys. Chem. Solids* **65**, 1133 (2004).
- 2004CHE/CLE Y. Chernyak and J. H. Clements, *J. Chem. Eng. Data* **49**, 1180 (2004).
- 2004CHE/MA M. Chen and P. Ma, *J. Chem. Eng. Data* **49**, 756 (2004); Secondary reference.
- 2004CHI/STE R. D. Chirico and W. V. Steele, *J. Chem. Thermodyn.* **36**, 633 (2004).
- 2004CHY/FRA K. Chylinski, Z. Fras, and S. K. Malanowski, *J. Chem. Eng. Data* **49**, 2 (2004).
- 2004CHY/FRA2 K. Chylinski, Z. Fras, and S. K. Malanowski, *J. Chem. Eng. Data* **49**, 18 (2004).
- 2004CLI/RAM C. L. Clifford, D. Ramjugernath, and J. D. Raal, *J. Chem. Eng. Data* **49**, 1189 (2004).
- 2004COV/MOK M. Covarrubias-Cervantes, I. Mokbel, A. Champion, J. Jose, and A. Voilley, *Food Chem.* **85**, 221 (2004).
- 2004DIA/CAC A. M. A. Dias, A. I. Caco, J. A. P. Coutinho, L. M. N. B. F. Santos, M. M. Pineiro, L. F. Vega, M. F. Costa Gomes, and I. M. Manucho, *Fluid Phase Equilib.* **225**, 39 (2004).
- 2004DIN M. S. Ding, *J. Chem. Eng. Data* **49**, 276 (2004).
- 2004DOR/YAN D. V. Dorofeeva, V. S. Yangman, R. M. Varushehenko, and A. I. Druzhinina, *Int. J. Thermophys.* **25**, 1097 (2004).
- 2004EWI/SAN M. B. Ewing and J. C. Sanchez Ochoa, *J. Chem. Eng. Data* **49**, 486 (2004).
- 2004FLO/AMA H. Flores and P. Amador, *J. Chem. Thermodyn.* **36**, 1019 (2004).
- 2004FRI/KAP N. Fridman, M. Kapon, Y. Sheynin, and M. Kaftory, *Acta Crystallogr., Sect. B* **60**, 97 (2004).
- 2004FUJ/TOD H. Fujimori, A. Todoroki, T. Asaji, and M. Oguni, *AIP Conf. Proc.* **708**, 685 (2004).
- 2004GEN/PEI Z. Geng-qu, C. Pei, H. Rong-zu, L. Yang, Z. Zhi-zhong, Z. Yan-shui, Y. Xu-wu, G. Yin, G. Sheng-li, and S. Qu-zhen, *J. Hazard. Mater.* **113**, 67 (2004).
- 2004GRA/RAS S. Gracin and A. C. Rasmuson, *Cryst. Growth Des.* **4**, 1013 (2004).
- 2004GUP/SIN R. K. Gupta and R. A. Singh, *J. Cryst. Growth* **267**, 340 (2004).
- 2004HAN/BEY A. R. Hansen and K. D. Beyer, *J. Phys. Chem. A* **108**, 3457 (2004).
- 2004HOR/FIS S. Horstman, K. Fisher, and J. Gmehling, *J. Chem. Eng. Data* **49**, 1494 (2004).
- 2004INO/HIS2 T. Inoue, Y. Hisatsugu, M. Suzuki, Z. Wang, and L. Zeng, *Chem. Phys. Lipids* **132**, 225 (2004).
- 2004KAO/SIE C.-P. C. Kao, A. C. Sievert, M. Schuller, and J. F. Sturgis, *J. Chem. Eng. Data* **49**, 532 (2004).
- 2004KIM/KES Y. Kim, K. I. Keskinen, and J. Aittamaa, *J. Chem. Eng. Data* **49**, 1273 (2004).
- 2004KON/TAN L. G. Kong, Z. C. Tan, W. Zhang, F. Xu, M. H. Wang, X. H. Bao, T. Zhang, and L. X. Sun, *Chem. Pap.* **58**, 295 (2004).
- 2004KON/TAN2 L.-G. Kong, Z.-C. Tan, J.-T. Mei, L.-X. Sun, and X.-H. Bao, *Thermochim. Acta* **414**, 131 (2004).
- 2004KUR/MAE H. Kuramochi, K. Maeda, and K. Kawamoto, *Environ. Toxicol. Chem.* **23**, 1386 (2004).
- 2004KUR/MAE2 H. Kuramochi, K. Maeda, and K. Kawamoto, *J. Chem. Eng. Data* **49**, 720 (2004).
- 2004LAU/HIL K. H. Lau, D. L. Hildenbrand, S. Crouch-Baker, and A. Sanjurjo, *J. Chem. Eng. Data* **49**, 544 (2004).
- 2004LEE/SU M.-J. Lee, C.-C. Su, and H.-M. Lin, *J. Chem. Eng. Data* **49**, 588 (2004).
- 2004LU/TAN X.-C. Lu, Z.-C. Tan, Y.-Y. Di, Q. Shi, L.-X. Shi, L.-X. Sun, and T. Zhang, *J. Chem. Thermodyn.* **36**, 787 (2004).
- 2004LUB/MAL M. Lubomska and S. K. Malanowski, *J. Chem. Eng. Data* **49**, 1488 (2004).
- 2004MA/LIU X.-B. Ma, X.-G. Liu, Z.-H. Li, and G.-H. Xu, *Fluid Phase Equilib.* **221**, 51 (2004).
- 2004MAR/KAI E. Marti, E. Kaisersberger, and W.-D. Emmerich, *J. Therm. Anal. Calorim.* **77**, 905 (2004).
- 2004MAS/NAK M. Massalska-Arodz, T. Nakamoto, T. Wasiutynski, J. Mayer, J. Krawczyk, and M. Sorai, *J. Chem. Thermodyn.* **36**, 877 (2004).
- 2004MAT/MIR M. A. R. Matos, M. S. Miranda, V. M. F. Morais, and J. F. Liebman, *Org. Biomol. Chem.* **2**, 1647 (2004).
- 2004MAT/MIR3 M. A. R. Matos, M. S. Miranda, V. M. F. Morais, and J. F. Liebman, *Eur. J. Org. Chem.* **2004**, 3340.
- 2004MAT/MON M. A. R. Matos, M. J. S. Monte, C. C. S. Sousa, A. R. R. P. Almeida, and V. M. F. Morais, *Org. Biomol. Chem.* **2**, 908 (2004).
- 2004MIR/MOR M. S. Miranda, V. M. F. Morais, and M. A. R. Matos, *J. Chem. Thermodyn.* **36**, 431 (2004).
- 2004MON/ALM M. J. S. Monte, A. R. R. P. Almeida, and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **36**, 385 (2004).
- 2004MON/RAJ D. Mondieig, F. Rajabalee, V. Metivaud, H. A. J. Oonk, and M. A. Cuevas-Diarte, *Chem. Mater.* **16**, 786 (2004).
- 2004MON/VAN L. Montinaro and J. C. van Miltenburg, *The Chemical Thermodynamics Group* (University of Utrecht, Utrecht, 2004), as quoted in [2014FUL/RUZ].
- 2004MOR/MAT V. M. F. Morais, M. A. R. Matos, M. S. Miranda, and J. F. Liebman, *Mol. Phys.* **102**, 525 (2004).

- 2004MOR/MIR V. M. F. Morais, M. S. Miranda, and M. A. R. Matos, *J. Chem. Thermodyn.* **36**, 377 (2004).
- 2004NAN/TAN Z. D. Nan and Z. C. Tan, *J. Therm. Anal. Calorim.* **76**, 955 (2004).
- 2004NAS/ZIM K. Nasirzadeh, D. Zimin, R. Neueder, and W. Kunz, *J. Chem. Eng. Data* **49**, 607 (2004).
- 2004PAU/ZAI Y. U. Paulechka, Dz. H. Zaitsau, and G. J. Kabo, *J. Mol. Liq.* **115**, 105 (2004).
- 2004PRO/RAS V. M. Profir and A. C. Rasmuson, *Cryst. Growth Des.* **4**, 315 (2004).
- 2004RAI R. N. Rai, *J. Mater. Res.* **19**, 1348 (2004).
- 2004RIB/GOM M. D. M. C. Ribeiro da Silva, J. R. B. Gomes, J. M. Gancalves, E. A. Sousa, S. Pandey, and W. E. Acree, Jr., *Org. Biomol. Chem.* **2**, 2507 (2004).
- 2004RIB/GOM2 M. D. M. C. Ribeiro da Silva, J. R. B. Gomes, J. M. Gancalves, E. A. Sousa, S. Pandey, and W. E. Acree, Jr., *J. Org. Chem.* **69**, 2785 (2004).
- 2004RIB/MAT M. D. M. C. Ribeiro da Silva, M. A. R. Matos, M. S. Miranda, V. M. F. Morais, and W. E. Acree, Jr., *J. Chem. Thermodyn.* **36**, 107 (2004).
- 2004RIB/RIB M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, L. M. P. F. Amaral, P. Jimenez, M. V. Roux, J. Z. Davalos, M. Temprado, P. Cabildo, R. M. Claramunt, J. Elguero, O. M6, and M. Y6nez, *J. Chem. Thermodyn.* **36**, 533 (2004).
- 2004RIB/SAN2 M. A. V. Ribeiro da Silva, L. M. N. B. F. Santos, B. Schroder, F. Dietze, and L. Beyer, *J. Chem. Thermodyn.* **36**, 491 (2004).
- 2004RIB/SAN3 M. A. V. Ribeiro da Silva and L. M. N. B. F. Santos, *J. Chem. Thermodyn.* **36**, 447 (2004).
- 2004ROJ/FOR A. Rojas-Aguilar, H. Fores-Lara, M. Martinez-Herrera, and F. Ginez-Carbajal, *J. Chem. Thermodyn.* **36**, 453 (2004).
- 2004ROM/BUS S. Romero, P. Bustamante, B. Escalera, M. Cirri, and P. Mura, *J. Therm. Anal. Calorim.* **77**, 541 (2004).
- 2004ROU/TEM M. V. Roux, M. Temprado, R. Notario, S. P. Verevkin, V. N. Emel'yanenko, D. Demasters, and J. F. Liebman, *Mol. Phys.* **102**, 1909 (2004).
- 2004ROU/TEM2 M. V. Roux, M. Temprado, P. Jimenez, C. Foces-Foces, M. V. Garcia, and M. I. Redondo, *Thermochim. Acta* **420**, 59 (2004).
- 2004ROU/TEM3 M. V. Roux, M. Temprado, P. Jimenez, R. Notario, R. Guzman-Mejia, and E. Juaristi, *J. Org. Chem.* **69**, 1670 (2004).
- 2004ROU/TEM4 M. V. Roux, M. Temprado, P. Jimenez, J. Z. Davalos, R. Notario, G. Martin-Valcarret, L. Garrido, R. Guzman-Hejia, and E. Juaristi, *J. Org. Chem.* **69**, 5454 (2004).
- 2004SAW/MOK T. Sawaya, I. Mokbel, E. Rauzy, J. Saab, C. Berro, and J. Jose, *Fluid Phase Equilib.* **226**, 283 (2004).
- 2004SHA/JAM B. L. Sharma, R. Jamwal, and R. Kant, *Cryst. Res. Technol.* **39**, 454 (2004).
- 2004SHA/TAN B. L. Sharma, S. Tandon, R. Kant, and R. Sharma, *Thermochim. Acta* **421**, 161 (2004).
- 2004SMI/MAR N. N. Smirnova, A. V. Markin, K. V. Kandeov, H. Hocker, and H. Keul, *Thermochim. Acta* **409**, 55 (2004).
- 2004STE/SUN F. Steyer and K. Sundmacher, *J. Chem. Eng. Data* **49**, 1675 (2004).
- 2004STU/WIT L. Sturz, V. T. Witusiewicz, U. Hecht, and S. Rex, *J. Cryst. Growth* **270**, 273 (2004).
- 2004TAN/LI T. Tan, H. Li, C. Wang, H. Jiang, and S. Han, *Fluid Phase Equilib.* **224**, 279 (2004).
- 2004UUS/POK P. Uusi-Kyyny, J.-P. Pokki, Y. Khim, and J. Aittamaa, *J. Chem. Eng. Data* **49**, 251 (2004).
- 2004VAN/VAN J. C. Van Miltenburg and G. J. K. Van den Berg, *J. Chem. Eng. Data* **49**, 735 (2004).
- 2004VEC/CAT S. Vecchio, A. Catalani, V. Rossi, and M. Tomassetti, *Thermochim. Acta* **420**, 99 (2004).
- 2004VER/EME S. P. Verevkin and V. E. Emel'yanenko, *J. Phys. Chem. A* **108**, 6575 (2004).
- 2004VER/SCH S. P. Verevkin and C. Schick, *Thermochim. Acta* **415**, 35 (2004).
- 2004VER/VAS S. P. Verevkin and T. V. Vasiltsova, *J. Chem. Eng. Data* **49**, 1717 (2004).
- 2004VER2 S. P. Verevkin, *Fluid Phase Equilib.* **224**, 23 (2004).
- 2004WAN/TAN2 M.-H. Wang, Z.-C. Tan, X.-H. Sun, F. Xu, Y.-F. Liu, L.-X. Sun, and T. Zhang, *Thermochim. Acta* **414**, 25 (2004).
- 2004WAN/TAN3 S. X. Wang, Z. C. Tan, Y. Y. Di, F. Xu, M. H. Wang, L. X. Sun, and T. Zhang, *J. Therm. Anal. Calorim.* **76**, 335 (2004).
- 2004WAN/TAN4 S.-X. Wang, Z.-C. Tan, Y.-Y. Di, F. Xu, H.-T. Zhang, L.-X. Sun, and T. Zhang, *J. Chem. Thermodyn.* **36**, 393 (2004).
- 2004WAN/WAN L.-C. Wang and F. A. Wang, *Fluid Phase Equilib.* **226**, 289 (2004).
- 2004WAN/WIE X. Wang, H. Wiehler, and C. B. Ching, *Chirality* **16**, 220 (2004).
- 2004WOL/KSI T. Wolszakiewicz, A. Ksiazek, and T. Ksiqzczak, *J. Therm. Anal. Calorim.* **77**, 353 (2004).
- 2004XIN/TAN J. Xing, Z.-C. Tan, Y.-Y. Di, X.-H. Sun, L.-X. Sun, and Z. Tao, *Huaxue Xuebao* **62**, 2415 (2004).
- 2004XU/SUN2 F. Xu, L.-X. Sun, Z.-C. Tan, J.-G. Liang, D.-H. Zhou, Y.-Y. Di, X. Z. Lan, and T. Zhang, *Wuli Huaxue Xuebao* **20**, 50 (2004); *Chem. Abstr.* **141**, 42690 (2004).
- 2004XUE/WAN B. Xue, Y.-Y. Wang, Z.-C. Tan, S.-W. Lu, and S.-H. Meng, *J. Therm. Anal. Calorim.* **76**, 965 (2004).
- 2004ZAB/RUZ M. Z6bransk6y and V. R6zi6cka, Jr., *J. Phys. Chem. Ref. Data* **33**, 1071-1081 (2004).
- 2004ZIE/SZT W. Zielenkiewicz and P. Szterner, *J. Chem. Eng. Data* **49**, 1197 (2004).
- 2005BAZ/BLO A. B. Bazyleva, A. V. Blokhin, G. J. Kabo, A. G. Kabo, and Y. U. Paulechka, *J. Chem. Thermodyn.* **37**, 643 (2005).
- 2005BAZ/KAB A. B. Bazyleva, G. J. Kabo, Y. U. Paulechka, D. H. Zait-sau, A. V. Blokhin, and V. M. Sevruck, *Thermochim. Acta* **436**, 56 (2005).
- 2005BEN/AIT H. Ben-Makhlof-Hakem, A. Ait-Kaci, and J. Jose, *Fluid Phase Equilib.* **232**, 189 (2005).
- 2005BOE/HOP J. A. Boerio-Goates, S. D. Hopkins, R. A. R. Monteiro, M. D. M. C. Ribeiro da Silva, M. A. V. Ribeiro da Silva, and R. N. Goldberg, *J. Chem. Thermodyn.* **37**, 1239-1249 (2005).
- 2005CHA/ZIE S. Chattopadhyay and P. Ziemann, *J. Aerosol Sci. Technol.* **39**, 1085 (2005).
- 2005CHE/TAN Y.-P. Chen, M. Tang, and J.-C. Kuo, *Fluid Phase Equilib.* **232**, 182 (2005).
- 2005CHI/STE R. D. Chirico and W. V. Steele, *J. Chem. Eng. Data* **50**, 697 (2005).
- 2005CON/CHI J. Contineanu, L. Chivu, and S. Perisanu, *Rev. Chim.* **56**, 719 (2005).
- 2005DES/COR M. Descamps, N. T. Correia, P. Derollez, F. Danede, and F. Capet, *J. Phys. Chem. B* **109**, 16092 (2005).
- 2005DIA/GON A. M. A. Dias, C. M. B. Goncalves, A. I. Caco, L. M. N. B. F. Santos, M. M. Pineiro, L. F. Vega, J. A. P. Coutinho, and I. M. Marrucho, *J. Chem. Eng. Data* **50**, 1328 (2005).
- 2005DOM/LAC U. Domanska and J. Lachwa, *J. Chem. Thermodyn.* **37**, 692 (2005).
- 2005DOM/MAR U. Domanska and M. Marciniak, *Fluid Phase Equilib.* **235**, 30 (2005).
- 2005EME/STR V. N. Emel'yanenko, A. Strutynska, and S. P. Verevkin, *J. Phys. Chem. A* **109**, 4375 (2005).
- 2005EME/VER V. N. Emel'yanenko, S. P. Verevkin, B. Koutek, and J. Doubsky, *J. Chem. Thermodyn.* **37**, 73 (2005).
- 2005EME/VER2 V. N. Emel'yanenko and S. P. Verevkin, *J. Phys. Chem. A* **109**, 3960 (2005).
- 2005ERB/DEL M. F. Erben, C. O. Della Vedova, H. Willner, F. Trautner, H. Oberhammer, and R. Boese, *Inorg. Chem.* **44**, 7070 (2005).
- 2005GOM/AMA J. R. B. Gomes, L. M. P. F. Amaral, and M. A. V. Ribeiro da Silva, *Chem. Phys. Lett.* **406**, 154 (2005).
- 2005GRE/KLA A. Grenner, M. Klauk, and J. Schmelzer, *Fluid Phase Equilib.* **233**, 170 (2005).
- 2005HAS/TAJ M. Hashimoto, T. Tajima, K. Eda, K. Yamamura, and T. Okazaki, *J. Mol. Struct.* **734**, 23 (2005).
- 2005HOS/GRY M. Hoskovec, D. Grygarova, J. Cvacka, L. Strinz, J. Zima, S. P. Verevkin, and B. Koutek, *J. Chromatogr. A* **1083**, 161 (2005).
- 2005HUA/SIM D. Huang, S. L. Simon, and G. B. McKenna, *J. Chem. Phys.* **122**, 084907 (2005).

- 2005HUA/TAN C.-Y. Huang, M. Tang, and Y.-P. Chen, *J. Chem. Eng. Data* **50**, 40 (2005). Note: Numerical values of the enthalpy of fusion obtained through correspondence with Y.-P. Chen.
- 2005KAP/SLO S. Kapteina, K. Slowik, S. P. Verevkin, and A. Heintz, *J. Chem. Eng. Data* **50**, 398 (2005).
- 2005KLO/BRO M. G. Klous, G. M. Bronner, B. Nuijen, J. M. van Ree, and J. H. Beijnen, *J. Pharm. Biomed. Anal.* **39**, 944 (2005).
- 2005LEE/SU M.-J. Lee, C.-C. Su, and H.-M. Lin, *J. Chem. Eng. Data* **50**, 1535 (2005).
- 2005LOP/TOM A. J. Lopes Jesus, L. I. N. Tomé, M. E. Eusébio, and J. S. Redinha, *J. Phys. Chem. B* **109**, 18055 (2005).
- 2005LU/TAN X.-C. Lu, Z.-C. Tan, Q. Shi, H.-T. Zhang, L.-X. Sun, and T. Zhang, *J. Chem. Eng. Data* **50**, 932 (2005).
- 2005LUC/FER S. Lucas, D. Ferry, B. Demirdjian, and J. Suzanne, *J. Phys. Chem. B* **109**, 18103 (2005).
- 2005MAR/AVA G. Marchionni, M. Avataneo, U. De Patto, P. Maccone, and G. Pezzin, *J. Fluorine Chem.* **126**, 465 (2005).
- 2005MAR/ZAT S. A. Markarian, A. L. Zatikyan, V. V. Grigoryan, and G. S. Grigoryan, *J. Chem. Eng. Data* **50**, 23 (2005).
- 2005MAT/MIR M. A. R. Matos, M. S. Miranda, V. M. F. Morais, and J. F. Liebman, *Mol. Phys.* **103**, 221 (2005).
- 2005MAT/MOR M. A. R. Matos, V. M. F. Morais, M. D. M. C. Ribeiro da Silva, M. C. F. Margues, E. A. Sousa, J. P. Castieiras, C. P. Santos, and W. E. Acree, Jr., *J. Chem. Eng. Data* **50**, 1184 (2005).
- 2005MON/MUN J. B. Monton, R. Munoz, M. C. Burguet, and J. de la Torre, *Fluid Phase Equilib.* **227**, 19 (2005).
- 2005MON/SOU M. J. S. Monte and C. A. D. Sousa, *J. Chem. Eng. Data* **50**, 2101 (2005).
- 2005MUN/MON R. Munoz, J. B. Monton, M. C. Burguet, and J. de la Torre, *Fluid Phase Equilib.* **232**, 62 (2005).
- 2005NAS/NEU K. Nasirzadeh, R. Neueder, and W. Kunz, *J. Chem. Eng. Data* **50**, 26 (2005).
- 2005ORT/ESP J. Ortega, F. Espiau, and M. Postigo, *J. Chem. Eng. Data* **50**, 444 (2005).
- 2005OXL/SMI J. C. Oxley, J. L. Smith, K. Schinde, and J. Moran, *Propellants, Explos., Pyrotech.* **30**, 127 (2005).
- 2005PEN/MUR S. Pena-Tejedor, R. Murga, M. T. Sanz, and S. Beltran, *Fluid Phase Equilib.* **230**, 197 (2005).
- 2005PER/ROD G. L. Perlovich, S. V. Rodionov, and A. Bauer-Brandl, *Eur. J. Pharm. Sci.* **24**, 25 (2005).
- 2005PIN/DIO S. S. Pinto, H. P. Diogo, R. C. Guedes, B. J. C. Cabral, M. E. Minas de Piedade, and J. A. M. Simoes, *J. Phys. Chem. A* **109**, 9700 (2005).
- 2005RES/GON J. M. Resa, C. Gonzalez, S. Ortiz de Landaluce, and J. M. Goenaga, *J. Chem. Eng. Data* **50**, 319 (2005).
- 2005RIB/FON M. A. V. Ribeiro da Silva, J. M. S. Fonseca, R. P. B. M. Carvalho, and M. J. S. Monte, *J. Chem. Thermodyn.* **37**, 271 (2005).
- 2005RIB/GOM M. A. V. Ribeiro da Silva, J. R. B. Gomes, and A. I. M. C. L. Ferreira, *J. Phys. Chem. B* **109**, 13356 (2005).
- 2005RIB/MAT M. A. V. Ribeiro da Silva, M. A. R. Matos, and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **37**, 1312 (2005).
- 2005RIB/MIR M. D. M. C. Ribeiro da Silva, M. S. Miranda, C. M. V. Vaz, M. A. R. Matos, and W. E. Acree, Jr., *J. Chem. Thermodyn.* **37**, 49 (2005).
- 2005ROG/PIS G. N. Roganov, P. N. Pisarev, V. N. Emel'yanenko, and S. P. Verevkin, *J. Chem. Eng. Data* **50**, 1114 (2005).
- 2005ROJ/GIN A. Rojas-Aguilar, F. Ginez-Carbajal, E. Orozco-Guareno, and H. Flores-Sejura, *J. Therm. Anal. Calorim.* **79**, 95 (2005).
- 2005RON/GU H.-R. Rong and H. Gu, *Thermochim. Acta* **428**, 19 (2005).
- 2005ROU/TEM M. V. Roux, M. Temprado, and J. S. Chickos, *J. Chem. Thermodyn.* **37**, 941 (2005).
- 2005SAI/IKI H. Saitoh, S. Ikeuchi, and K. Saito, *J. Therm. Anal. Calorim.* **81**, 511 (2005).
- 2005SMI/KAN N. N. Smirnova, K. V. Kandeev, and T. A. Bykova, *Russ. J. Phys. Chem.* **79**, 857 (2005).
- 2005STE/SUN F. Steyer and K. Sundmacher, *J. Chem. Eng. Data* **50**, 1277 (2005).
- 2005STR/SPO A. Strutynska, A. Sporzynski, J. Serwatowski, and S. P. Verevkin, *Fluid Phase Equilib.* **227**, 283 (2005).
- 2005SUN/LIU3 X.-H. Sun, F.-Y. Liu, Z.-C. Tan, P.-J. Ji, and M.-H. Wang, *Chin. J. Chem.* **23**, 1490 (2005).
- 2005TEM/CHI M. Temprado and J. S. Chickos, *Thermochim. Acta* **435**, 49 (2005).
- 2005TEM/ROU M. Temprado, M. V. Roux, P. Umnahanant, H. Zhao, and J. S. Chickos, *J. Phys. Chem. B* **109**, 12590 (2005).
- 2005TIA/TAN Q.-F. Tian, Z.-C. Tan, Q. Shi, F. Xu, L.-X. Sun, and T. Zhang, *Thermochim. Acta* **430**, 53 (2005).
- 2005TOM/CAT M. Tomassetti, A. Catalani, V. Rossi, and S. Vecchio, *J. Pharm. Biomed. Anal.* **37**, 949 (2005).
- 2005TUR/VAC R. Turcotte, M. Vachon, Q. S. M. Kwok, R. Wang, and D. E. G. Jones, *Thermochim. Acta* **433**, 105 (2005).
- 2005VAL/QUI E. Valez, J. Quijano, J. Vaviria, M. V. Roux, P. Jimenez, M. Temprado, G. Martin-Valcarcel, J. Perez-Parajon, and R. Notario, *J. Phys. Chem. A* **109**, 7832 (2005).
- 2005VAN/VAN P. R. van der Linde, J. C. van Miltenburg, G. J. K. van den Berg, and H. A. J. Oonk, *J. Chem. Eng. Data* **50**, 164 (2005).
- 2005VAS/VER T. V. Vasiltsova, S. P. Verevkin, E. Bich, A. Heintz, R. Bogel-Lukasik, and U. Domanska, *J. Chem. Eng. Data* **50**, 142 (2005).
- 2005VEC/BRU S. Vecchio and B. Brunetti, *J. Chem. Eng. Data* **50**, 666 (2005). Complete chemical numbers for several of the compounds were obtained through personal correspondence with S. Vecchio.
- 2005VON/GAR S. Von Ahsen, P. Garcia, H. Willner, and G. A. Arguello, *Inorg. Chem.* **44**, 5713 (2005).
- 2005WAN/TAN M.-H. Wang, Z.-C. Tan, X.-H. Sun, L.-X. Sun, Y.-F. Liu, and T. Zhang, *Wuli Huaxue Xuebao* **21**, 573 (2005).
- 2005WAN/TAN2 M.-H. Wang, Z.-C. Tan, X.-H. Sun, H.-T. Zhang, B.-P. Liu, L.-X. Sun, and T. Zhang, *J. Chem. Eng. Data* **50**, 270 (2005).
- 2005WAN/TAN3 S.-X. Wang, Z.-C. Tan, Q. Shi, Y.-Y. Di, H.-T. Zhang, F. Xu, L.-X. Sun, and T. Zhang, *J. Chem. Thermodyn.* **37**, 349 (2005).
- 2005YI/WAN W. Yi, C. Wang, H. Li, and S. Han, *J. Chem. Eng. Data* **50**, 1837 (2005).
- 2005ZIE/SZT W. Zielenkiewicz and P. Szterner, *J. Chem. Eng. Data* **50**, 1139 (2005).
- 2006ACE/AGA J. M. Aceves-Hernandez, E. Agacino-Valdes, M. Paz, and J. Hinojosa-Torres, *J. Mol. Struct.* **786**, 1 (2006).
- 2006ACR/CHI W. E. Acree, Jr. and J. S. Chickos, *J. Phys. Chem. Ref. Data* **35**, 1051 (2006).
- 2006BAD/DEL E. Badae, G. Della Gata, D. D. Angelo, B. Brunetti, and Z. Reckova, *J. Chem. Thermodyn.* **38**, 1546 (2006).
- 2006BAZ/BLO A. B. Bazyleva, A. V. Blokhin, G. J. Kabo, A. G. Kabo, and V. M. Sevruck, *Thermochim. Acta* **451**, 65 (2006).
- 2006BOL/NER M. F. Bolotnikov and Yu. A. Neruchev, *Fluid Phase Equilib.* **243**, 121 (2006).
- 2006BOL/NER2 M. F. Bolotnikov and Yu. A. Neruchev, *Russ. J. Phys. Chem.* **80**, 1191 (2006).
- 2006BOU/BEL G. Boukais-Belaribi, B. F. Belaribi, A. Ait-Kaci, and J. Jose, *Fluid Phase Equilib.* **248**, 181 (2006).
- 2006BUC/BUE J. H. Buchaman, L. C. Buettner, and D. E. Trevault, *J. Chem. Eng. Data* **51**, 1331 (2006).
- 2006BUH/MIE C. Buhrmester, G. Miehe, H. Ehrenberg, and H. Fuess, *Cryst. Res. Technol.* **41**, 48 (2006).
- 2006CAM A. G. Camacho, Doctoral thesis, Universidad Nacional de Tucuman, Tucuman, Argentina, 2006.
- 2006CAM/MAR A. G. Camacho, A. Mariano, L. Mussari, and M. A. Postigo, *J. Chem. Eng. Data* **51**, 1536 (2006).
- 2006CHE/OJA X. Chen, V. Oja, W. G. Chan, and M. R. Hajaligol, *J. Chem. Eng. Data* **51**, 386 (2006).
- 2006DAB/SPO A. Dabrowska, A. Sporzynski, and S. P. Verevkin, *Fluid Phase Equilib.* **249**, 115 (2006).
- 2006DEB/MED A. L. F. de Barros, A. Medina, F. Zappa, J. M. Pereira, E. Bessa, M. H. P. Martins, L. F. S. Coelho, W. Wolff, and N. V. de Castro Faria, *Nucl. Instrum. Methods Phys. Res., Sect. A* **560**, 219 (2006).
- 2006DIV/CHE S. Divi, R. Chellappa, and D. Chandra, *J. Chem. Thermodyn.* **38**, 1312 (2006).
- 2006DOM/MOR U. Domanska, P. Morawski, and R. Wierzbicki, *Fluid Phase Equilib.* **242**, 154 (2006).

- 2006DRE/KOV V. A. Drebuschak, Yu. A. Kovalevskaya, I. E. Paukov, and E. V. Boldyreva, *J. Therm. Anal. Calorim.* **85**, 485 (2006).
- 2006DRU/DOR A. I. Druzhinina, O. V. Dorofeeva, R. M. Varushchenko, and E. L. Krasnykh, *J. Chem. Thermodyn.* **38**, 10 (2006).
- 2006DRU/KRO A. I. Druzhinina, O. V. Krol, A. A. Efimova, R. M. Varushchenko, and L. L. Gervits, *Russ. J. Phys. Chem.* **80**, 1742 (2006).
- 2006EME/KAB V. N. Emel'yanenko, G. J. Kabo, and S. P. Verevkin, *J. Chem. Eng. Data* **51**, 79 (2006).
- 2006FUJ/MAT H. Fujimori, K. Matsuda, A. Todoroki, T. Asaji, and M. Oguni, *J. Non-Cryst. Solids* **352**, 4790 (2006).
- 2006GAO/CHE S. Gao, W. Chen, G. Wang, and J. Chen, *J. Cryst. Growth* **297**, 361 (2006).
- 2006GAO/ZHA H.-X. Gao, F.-Q. Zhao, R.-Z. Hu, Q. Pan, B.-Z. Wang, X.-W. Yang, Y. Gao, S.-L. Gao, and Q.-Z. Shi, *Chin. J. Chem.* **24**, 177 (2006).
- 2006HAF/PAR J. J. H. Haftka, J. R. Parsons, and H. A. J. Govers, *J. Chromatogr. A* **1135**, 91 (2006).
- 2006HOS/NAG S. M. A. Hosseini, H. Naghibi, M. H. Peikar, and E. Jamalizadeh, *Asian J. Chem.* **18**, 351 (2006).
- 2006HUO/ZEN W.-L. Huo, Z.-X. Zeng, and W.-L. Xue, *J. Chem. Eng. Data* **51**, 2110 (2006).
- 2006KHI/DAH K. Khimeche and A. Dahmani, *J. Therm. Anal. Calorim.* **84**, 47 (2006).
- 2006KHI/DAH2 K. Khimeche and A. Dahmani, *J. Chem. Eng. Data* **51**, 382 (2006).
- 2006KRA/VER E. L. Krasnykh, S. P. Verevkin, B. Koutek, and J. Doubsky, *J. Chem. Thermodyn.* **38**, 717 (2006).
- 2006LAH/PAA A. Lahtinen, J. Paasivirta, and V. A. Nikiforov, *Thermochim. Acta* **447**, 5 (2006).
- 2006LUS/MAL M. Luszczuk and S. K. Malanowski, *J. Chem. Eng. Data* **51**, 1735 (2006).
- 2006MAN/CUT A. Mandanici, M. Cutroni, A. Triolo, V. Rodriguez-Mora, and M. A. Ramos, *J. Chem. Phys.* **125**, 054514 (2006).
- 2006MAT/MIR M. A. R. Matos, M. S. Miranda, V. M. F. Morais, and J. F. Liebman, *Mol. Phys.* **104**, 1833 (2006).
- 2006MIR/MOR M. S. Miranda, V. M. F. Morais, and M. A. R. Matos, *J. Chem. Thermodyn.* **38**, 559 (2006).
- 2006MOR/MIR V. M. F. Morais, M. S. Miranda, and M. A. R. Matos, *J. Chem. Thermodyn.* **38**, 450 (2006).
- 2006MOR/MIR2 V. M. F. Morais, M. S. Miranda, M. A. R. Matos, and J. F. Liebman, *Mol. Phys.* **104**, 325 (2006).
- 2006NAS/NEU K. Nasurzadeh, R. Neueder, and W. Kunz, *J. Chem. Eng. Data* **51**, 7 (2006).
- 2006NIC/KWE G. Nichols, S. Kweskin, M. Frericks, S. Reiter, G. Wang, J. Orf, B. Carvallo, D. Hillesheim, and J. S. Chickos, *J. Chem. Eng. Data* **51**, 475 (2006).
- 2006NOR/RAS F. L. Nordstrom and A. C. Rasmuson, *J. Chem. Eng. Data* **51**, 1775 (2006).
- 2006NOR/RAS2 F. L. Nordstrom and A. C. Rasmuson, *J. Pharm. Sci.* **95**, 748 (2006).
- 2006PAL/ORA M. Palczewska-Tuliuska and P. Oracz, *J. Chem. Eng. Data* **51**, 639 (2006).
- 2006PIN/DIO S. P. Pinto and H. P. Diogo, *J. Chem. Thermodyn.* **38**, 1515 (2006).
- 2006PRO/RAS V. M. Profir and A. C. Rasmuson, *Cryst. Growth Des.* **6**, 1143 (2006).
- 2006RIB/AMA M. A. V. Ribeiro da Silva, L. M. P. F. Amaral, and J. R. B. Gomes, *J. Phys. Chem. B* **110**, 9301 (2006).
- 2006RIB/AMA3 M. A. V. Ribeiro da Silva, L. M. P. F. Amaral, A. F. L. O. M. Santos, and J. R. B. Gomes, *J. Chem. Thermodyn.* **38**, 748 (2006).
- 2006RIB/CAB M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Chem. Eng. Data* **51**, 1556 (2006).
- 2006RIB/CAB2 M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Chem. Eng. Data* **51**, 767 (2006).
- 2006RIB/CAB3 M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Chem. Thermodyn.* **38**, 1008 (2006).
- 2006RIB/CAB4 M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Chem. Thermodyn.* **38**, 1461 (2006).
- 2006RIB/CAB5 M. A. V. Ribeiro da Silva, J. I. T. A. Cabral, P. Gomes, and J. R. B. Gomes, *J. Org. Chem.* **71**, 3677 (2006).
- 2006RIB/CAB6 M. A. V. Ribeiro da Silva, J. I. T. A. Cabral, and J. R. B. Gomes, *J. Chem. Thermodyn.* **38**, 1072 (2006).
- 2006RIB/FER M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, and J. R. B. Gomes, *Bull. Chem. Soc. Jpn.* **79**, 1852 (2006).
- 2006RIB/FER2 M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, and J. R. B. Gomes, *Chem. Phys. Lett.* **422**, 565 (2006).
- 2006RIB/MAT M. A. V. Ribeiro da Silva, M. A. R. Matos, and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **38**, 49 (2006).
- 2006RIB/MON M. A. V. Ribeiro da Silva, M. J. S. Monte, and L. M. N. B. F. Santos, *J. Chem. Thermodyn.* **38**, 778 (2006).
- 2006RIB/SAN M. A. V. Ribeiro da Silva, C. P. F. Santos, M. J. S. Monte, and C. A. D. Sousa, *J. Therm. Anal. Calorim.* **83**, 533 (2006).
- 2006ROD/GIN S. Rodriguez, B. Giner, M. Haro, S. Martin, and H. Artigas, *Phys. Chem. Liq.* **44**, 275 (2006).
- 2006ROU/TEM M. V. Roux, M. Temprado, P. Jimenez, R. Notario, R. Guzman-Mejia, and E. Juaristi, *J. Org. Chem.* **71**, 2581 (2006).
- 2006SED/MAI Z. Sedlakova, I. Majjevska, K. Rehak, and P. Vrbka, *Collect. Czech. Chem. Commun.* **71**, 1350 (2006).
- 2006SMI/KAN N. N. Smirnova, K. V. Kandeev, T. A. Bykova, and T. G. Kulagina, *J. Chem. Thermodyn.* **38**, 376 (2006).
- 2006TEM/ROU M. Temprado, M. V. Roux, P. Jimenez, R. Guzman-Mejia, and E. Juaristi, *Thermochim. Acta* **441**, 20 (2006).
- 2006TEO/BAR M. Teodorescu, A. Barhala, and D. Dragoescu, *J. Chem. Thermodyn.* **38**, 1432 (2006).
- 2006UMN/KWE P. Umnahanant, S. Kweskin, G. Nichols, M. J. Dunn, H. Smart-Ebinne, and J. S. Chickos, *J. Chem. Eng. Data* **51**, 2246 (2006).
- 2006VAN/VAN P. J. van Ekeren, A. C. G. van Genderen, and G. J. K. van den Berg, *Thermochim. Acta* **446**, 33 (2006).
- 2006VAS/VER T. V. Vasiltsova, S. P. Verevkin, E. Bich, A. Heintz, R. Bogel-Lukasik, and U. Domanska, *J. Chem. Eng. Data* **51**, 213 (2006).
- 2006VER S. P. Verevkin, *J. Chem. Thermodyn.* **38**, 1111 (2006).
- 2006VER/KOZ S. P. Verevkin, S. A. Kozlova, V. N. Emel'yanenko, E. D. Nikitin, A. P. Popov, and E. L. Krasnykh, *J. Chem. Eng. Data* **51**, 1896 (2006).
- 2006WAN/FAN Z. Wang, W. Fang, R. Lin, Y. Guo, and X. Zhou, *Fuel* **85**, 1794 (2006).
- 2006WAN/NAN X.-R. Wang, Z.-D. Nan, and Z.-C. Tan, *Chin. J. Chem.* **24**, 1301 (2006).
- 2006WAS/HOL C. M. Wassvik, A. G. Holmen, C. A. S. Bergstrom, I. Zamora, and P. Artursson, *Eur. J. Pharm. Sci.* **29**, 294 (2006).
- 2006WOJ/MOS G. Wojcik and I. Mossakowska, *Acta Crystallogr., Sect. B* **62**, 143 (2006).
- 2006XU/SUN F. Xu, L. X. Sun, Z. C. Tan, J. G. Liang, and T. Zhang, *J. Therm. Anal. Calorim.* **83**, 187 (2006).
- 2006ZAI/PAU D. H. Zaitsau, Y. U. Paulechka, G. J. Kabo, A. N. Kolpikau, V. N. Emel'yanenko, A. Heintz, and S. P. Verevkin, *J. Chem. Eng. Data* **51**, 130 (2006).
- 2006ZAK/LAZ D. V. Zakharychev, S. N. Lazarev, Z. A. Bredikhina, and A. A. Bredikhin, *Russ. Chem. Bull.* **55**, 230 (2006).
- 2006ZHO/LI C.-R. Zhou, J. Li, X.-H. Shi, and H.-F. Wang, *Zhengzhou Daxue Xuebao, Gongxueban* **27**, 29 (2006).
- 2007BAD/BLA E. Badae, I. Blanco, and G. Della Gatta, *J. Chem. Thermodyn.* **39**, 1392 (2007).
- 2007BAR/COZ F. Barontini and V. Cozzani, *J. Therm. Anal. Calorim.* **89**, 309 (2007).
- 2007BER/MIN C. E. S. Bernardes, M. E. Minas da Piedade, L. M. P. F. Amaral, A. I. M. C. L. Ferreira, M. A. V. Ribeiro da Silva, H. P. Diogo, and B. J. C. Cabral, *J. Phys. Chem. A* **111**, 1713 (2007).
- 2007BLA R. L. Blaine, *Proc. NATAS Annu. Conf. Therm. Anal. Appl.* **35**, 1-7 (2007); *Chem. Abstr.* **148**, 223167 (2007).
- 2007BOU/BEL G. Boukais-Belaribi, B. F. Belaribi, J. Lohmann, and J. Jose, *Fluid Phase Equilib.* **262**, 180 (2007).
- 2007CAM/MAG L. Campanella, A. L. Magri, M. Tomassetti, V. Rossi, and S. Vecchio, *Drug Develop. Ind. Pharm.* **33**, 830 (2007).
- 2007CAM/MOL A. G. Camacho, J. M. Moll, S. Canzonieri, and M. A. Postigo, *J. Chem. Eng. Data* **52**, 871 (2007).

- 2007CAN/EYL A. I. Canizo, G. N. Eyler, and G. P. Barreto, *Chromatographia* **65**, 21 (2007).
- 2007CAP/LOV C. D. Cappa, E. R. Lovejoy, and A. R. Ravishankara, *J. Phys. Chem. A* **111**, 3099 (2007).
- 2007DAN/MAR A. A. Daniela, P. I. Mariela, R. M. Jorge, J. L. Nelly, G. Vara, E. Manuel, C. A. Eduardo, and J. H. Alicia, *Global J. Mol. Sci.* **2**, 8 (2007).
- 2007DON/LI J.-X. Dong, Q. Li, Z.-C. Tan, Z.-H. Zhang, and Y. Liu, *J. Chem. Thermodyn.* **39**, 108 (2007).
- 2007DRA/JAN L. C. Draucker, M. Janakat, M. J. Lazzaroni, D. Bush, C. A. Eckert, T. C. Frank, and J. D. Olson, *Ind. Eng. Chem. Res.* **46**, 2198 (2007).
- 2007ECK/HUA B. Eckl, Y.-L. Huang, J. Vrabec, and H. Hasse, *Fluid Phase Equilib.* **260**, 177 (2007).
- 2007EFI/PAS A. A. Efimova, L. L. Pashchenko, R. M. Varushchenko, E. Krasnyh, and S. V. Levanova, *J. Chem. Thermodyn.* **39**, 142–147 (2007).
- 2007EME/DAB V. N. Emel'yanenko, A. Dabrowska, S. P. Verevkin, M. O. Hertel, H. Scheuren, and K. Sommer, *J. Chem. Eng. Data* **52**, 468 (2007).
- 2007EME/KOZ V. N. Emel'yanenko, S. A. Kozlova, S. P. Verevkin, and G. N. Roganov, *J. Chem. Thermodyn.* **39**, 10 (2007).
- 2007FER/BAD D. Ferro, E. Badaea, M. Jozwiak, and J. V. Rau, *Thermochim. Acta* **460**, 50 (2007).
- 2007FRE/OLI V. L. S. Freitas, L. I. P. Oliveira, and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.* **39**, 39 (2007).
- 2007GOE/MCC A. Goel, L. L. McConnell, and A. Torrents, *J. Environ. Sci. Health, Part B* **42**, 343 (2007).
- 2007GOM/SOU2 J. R. B. Gomes, E. A. Sousa, P. Gomes, N. Vale, J. M. Goncalves, S. Pandey, W. E. Acree, Jr., and M. D. M. C. Ribeiro da Silva, *J. Phys. Chem. B* **111**, 2075 (2007).
- 2007HAF/MAH S. L. Hafsaoui and R. Mahmoud, *J. Therm. Anal. Calorim.* **88**, 565 (2007).
- 2007HEI/KAP A. Heintz, S. Kapteina, and S. P. Verevkin, *J. Phys. Chem. A* **111**, 6552 (2007).
- 2007HUL/JOH A. T. Hulme, A. Johnston, A. J. Florence, P. Fernandes, K. Shankland, C. T. Bedford, G. W. A. Welch, G. Sadiq, D. A. Haynes, W. D. S. Motherwell, D. A. Toucher, and S. L. Price, *J. Am. Chem. Soc.* **129**, 3649 (2007).
- 2007HWA/HAN H.-C. Hwang, K.-J. Han, and S.-J. Park, *J. Chem. Eng. Data* **52**, 1118 (2007).
- 2007LEE/LAI M.-J. Lee, C.-H. Lai, T.-B. Wang, and H.-M. Lin, *J. Chem. Eng. Data* **52**, 1291 (2007).
- 2007LIU/LIU L.-S. Liu, W.-S. Liu, N. Zhou, X.-N. Fan, H. Song, C. Fu, and Y.-Y. Yang, *Gaoxiao Huaxue Gongcheng Xuebao* **21**, 875 (2007); *Chem. Abstr.* **148**, 222587 (2007).
- 2007LU/WAN J. Lu, X.-J. Wang, X. Yang, and C.-B. Ching, *Cryst. Growth Des.* **7**, 1590 (2007).
- 2007MAL S. K. Malanowski, *J. Chem. Eng. Data* **52**, 239 (2007).
- 2007MAT/MIR M. A. R. Matos, M. S. Miranda, M. J. S. Monte, L. M. N. B. F. Santos, V. M. F. Morais, J. S. Chickos, P. Umnahanant, and J. F. Liebman, *J. Phys. Chem. A* **111**, 11153 (2007).
- 2007MAT/MIR2 M. A. R. Matos, M. S. Miranda, S. M. M. Pereira, V. M. F. Morais, and J. F. Liebman, *J. Phys. Chem.* **111**, 7181 (2007).
- 2007MAT/SOU M. A. R. Matos, C. C. S. Sousa, and V. M. F. Morais, *J. Chem. Eng. Data* **52**, 1089 (2007).
- 2007MIS/MIS2 A. K. Misra, M. Misra, G. M. Panpalia, and A. K. Dorle, *Pharm. Dev. Technol.* **12**, 423 (2007).
- 2007MOK/RAZ M. Mokbel, A. Razzouk, A. Hajjaji, N. Misakni, and J. Jose, *J. Chem. Eng. Data* **52**, 1720 (2007).
- 2007MOR/COR E. Moreno, R. Cordobilla, T. Calvet, M. A. Cuevas-Diarte, G. Gbabode, P. Negrier, D. Mondieig, and H. A. J. Oonk, *New J. Chem.* **31**, 947 (2007).
- 2007MOR/MIR V. M. F. Morais, M. S. Miranda, and M. A. R. Matos, *J. Chem. Eng. Data* **52**, 627 (2007).
- 2007PAL/ORA M. Palczewska-Tulinska and P. Oracz, *J. Chem. Eng. Data* **52**, 645 (2007).
- 2007PAL/ORA2 M. Palczewska-Tuliuska and P. Oracz, *J. Chem. Eng. Data* **52**, 2468 (2007).
- 2007PAN/ANT2 K. Panneerselvam, M. P. Antony, T. G. Srinivasan, and P. R. Vasudeva Rao, *Thermochim. Acta* **466**, 49 (2007).
- 2007PAS/KUZ L. L. Pashchenko and T. S. Kuznetsova, *Russ. J. Phys. Chem. A* **81**, 1238 (2007).
- 2007PER/HAN G. L. Perlovich, L. Kr. Hansen, T. V. Volkova, S. Mirza, A. N. Manin, and A. Bauer-Brandl, *Cryst. Growth Des.* **7**, 2643 (2007).
- 2007PER/VOL2 G. L. Perlovich, T. V. Volkova, and A. Bauer-Brandl, *J. Therm. Anal. Calorim.* **89**, 767 (2007).
- 2007RAU/BEH R. B. Rauch and R. Behrens, *Propellants, Explos., Pyrotech.* **32**, 97 (2007).
- 2007RIB/AMA M. A. V. Ribeiro da Silva, L. M. P. F. Amaral, and J. R. B. Gomes, *J. Phys. Chem. B* **111**, 792 (2007).
- 2007RIB/AMA3 M. A. V. Ribeiro da Silva, L. M. P. F. Amaral, and J. R. B. Gomes, *Pol. J. Chem.* **81**, 865 (2007).
- 2007RIB/ARA M. D. M. C. Ribeiro da Silva and N. R. M. Araujo, *J. Chem. Thermodyn.* **39**, 1372 (2007).
- 2007RIB/CAB2 M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *Thermochim. Acta* **453**, 147 (2007).
- 2007RIB/FER M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, and J. R. B. Gomes, *J. Phys. Chem. B* **111**, 2052 (2007).
- 2007RIB/FER2 M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, and J. R. B. Gomes, *J. Phys. Chem. B* **111**, 6444 (2007).
- 2007RIB/FRE M. D. M. C. Ribeiro da Silva, V. L. S. Freitas, L. M. N. B. F. Santos, M. Fulem, M. J. Sottomayor, M. J. S. Monte, and W. E. Acree, Jr., *J. Chem. Eng. Data* **52**, 580 (2007).
- 2007RIB/MON M. A. V. Ribeiro da Silva, I. M. M. Monteiro, L. M. N. B. F. Santos, and B. Schroder, *J. Chem. Thermodyn.* **39**, 767 (2007).
- 2007RIB/SAN M. A. V. Ribeiro da Silva and A. F. L. O. M. Santos, *J. Therm. Anal. Calorim.* **88**, 7 (2007).
- 2007RIB/SAN3 M. A. V. Ribeiro da Silva, C. P. F. Santos, M. J. S. Monte, and C. A. D. Sousa, *J. Chem. Thermodyn.* **39**, 1363 (2007).
- 2007RIC/BER L. S. Richard, C. E. S. Bernardes, H. P. Diogo, J. P. Leal, and M. E. Minas da Piedade, *J. Phys. Chem. A* **111**, 8741 (2007).
- 2007ROU/NOT M. V. Roux, R. Notario, E. Velez, M. Temprado, A. Guerrero, S. P. Verevkin, J. Quijano, and J. Gaviria, *J. Chem. Thermodyn.* **39**, 1377 (2007).
- 2007ROU/TEM M. V. Roux, M. Temprado, P. Jimenez, R. Notario, J. S. Chickos, A. F. L. O. M. Santos, and M. A. V. Ribeiro da Silva, *J. Phys. Chem. A* **111**, 11084 (2007).
- 2007ROU/TEM2 M. V. Roux, M. Temprado, P. Jimenez, R. Notario, R. Guzman-Mejia, and E. Juaristi, *J. Org. Chem.* **72**, 1143 (2007).
- 2007ROU/TEM3 M. V. Roux, M. Temprado, R. Notario, J. S. Chickos, A. F. L. O. M. Santos, and M. A. V. Ribeiro da Silva, *J. Phys. Chem. A* **111**, 5280 (2007).
- 2007SAP/ZAY E. Sapei, A. Zaytseva, P. Uusi-Kyyny, K. I. Keshinen, and J. Aittamaa, *Fluid Phase Equilib.* **252**, 130 (2007).
- 2007SCH/DOE B. Schmid, M. Doeker, and J. Gmehling, *Fluid Phase Equilib.* **258**, 115 (2007).
- 2007SHE/ZAI M. P. Shevelyova, D. H. Zaitsau, Y. U. Paulechka, A. V. Blokhin, G. J. Kabo, S. P. Verevkin, and A. Heintz, *J. Chem. Eng. Data* **52**, 1360 (2007).
- 2007SHI/TAN Q. Shi, Z.-C. Tan, Y.-Y. Di, B. Tong, Y.-S. Li, and S.-X. Wang, *J. Chem. Eng. Data* **52**, 941 (2007).
- 2007SHI/TAN2 Q. Shi, Z.-C. Tan, Y.-Y. Di, B. Tong, S.-X. Wang, and Y.-Z. Li, *Thermochim. Acta* **463**, 6 (2007).
- 2007SHI/TAN3 Q. Shi, Z.-C. Tan, B. Tong, Y.-Y. Di, Z.-H. Zhang, J.-L. Zeng, L.-X. Sun, and Y.-S. Li, *J. Chem. Thermodyn.* **39**, 817 (2007).
- 2007SID/ATA M. A. Siddiqi and B. Atakan, *Thermochim. Acta* **452**, 128 (2007).
- 2007SIF/AIT H. Sifaoui, A. Ait-Kaci, A. Mondarressi, and M. Rogalski, *Thermochim. Acta* **456**, 114 (2007).
- 2007SMI/TSV N. N. Smirnova, L. Ya. Tsvtkova, T. A. Bykova, and Y. Marcus, *J. Chem. Thermodyn.* **39**, 1508 (2007).
- 2007STR/RUZ M. Straka, K. Ruzicka, and V. Ruzicka, *J. Chem. Eng. Data* **52**, 1375 (2007).
- 2007STR/RUZ2 M. Straka, A. van Genderen, K. Ruzicka, and V. Ruzicka, *J. Chem. Eng. Data* **52**, 794 (2007).
- 2007TOM/ROS L. I. N. Tome, M. T. S. Rosado, S. C. C. Nunes, T. M. R. Maria, J. Canotilho, and M. E. S. Eusebio, *J. Chem. Thermodyn.* **39**, 1354 (2007).

- 2007TON/TAN B. Tong, Z.-C. Tan, X. C. Lv, L. X. Sun, F. Xu, Q. Shi, and Y. S. Li, *J. Therm. Anal. Calorim.* **90**, 217 (2007).
- 2007TON/TAN2 B. Tong, Z.-C. Tan, Q. Shi, Y.-S. Li, D.-T. Yue, and S.-X. Wang, *Thermochim. Acta* **457**, 20 (2007).
- 2007VAR/DRU R. M. Varushchenko, A. I. Druzhinina, G. M. Kuramshina, and O. V. Dorofeeva, *Fluid Phase Equilib.* **256**, 112 (2007).
- 2007VEC/BRU S. Vecchio and B. Brunetti, *J. Chem. Eng. Data* **52**, 1585 (2007).
- 2007VER S. P. Verevkin, *J. Chem. Eng. Data* **52**, 301 (2007).
- 2007VER/EME S. P. Verevkin, V. N. Emel'yanenko, and A. Klamt, *J. Chem. Eng. Data* **52**, 499 (2007).
- 2007VER/GEO S. P. Verevkin, M. Georgieva, and S. V. Melkhanova, *J. Chem. Eng. Data* **52**, 286 (2007).
- 2007VER/SCH S. P. Verevkin and C. Schick, *J. Chem. Thermodyn.* **39**, 758 (2007).
- 2007WAN/ZHA S.-Z. Wang, X.-S. Zhao, Z.-C. Tan, Y.-S. Lu, B. Tong, Q. Shi, and Y. Li, *Wuli Huaxue Xuebao* **23**, 1459 (2007).
- 2007XU/ZEN X.-G. Xu, Z.-X. Zeng, W.-I. Xue, and H. Y. Zhang, *J. Chem. Eng. Data* **52**, 1189 (2007).
- 2007XUE/WAN B. Xue, J. Y. Wang, Z.-C. Tan, and T.-H. Wu, *Chem. Res. Chin. Univ.* **23**, 460 (2007).
- 2008ABA/BAD L. Abate, E. Badea, I. Blando, and G. Della Gatta, *J. Chem. Eng. Data* **53**, 959 (2008).
- 2008BAE A. K. Baev, *Russ. J. Phys. Chem. A* **82**, 1266 (2008).
- 2008BAR/BER I. Barsky and J. Bernstein, *Cryst. Eng. Commun.* **10**, 669 (2008).
- 2008BAR/BER2 I. Barsky, J. Bernstein, P. W. Stephens, and K. H. Stone, *New J. Chem.* **32**, 1747 (2008).
- 2008BAR/BOT C. A. Barton, M. A. Botelho, and M. A. Kaiser, *J. Chem. Eng. Data* **53**, 939 (2008).
- 2008BAS/BOS S. Basavoju, D. Bostrom, and S. Velaga, *Pharm. Res.* **25**, 530 (2008).
- 2008BAZ/BLO A. B. Bazleva, A. V. Blokhin, A. G. Kabo, G. J. Kabo, V. N. Emel'yanenko, and S. P. Verevkin, *J. Chem. Thermodyn.* **40**, 509 (2008).
- 2008BER/MIN C. E. S. Bernardes and M. E. Minas da Piedade, *J. Phys. Chem. A* **112**, 10029 (2008).
- 2008BER/PIE C. E. S. Bernardes, M. F. M. Piedade, and M. E. Minas da Piedade, *Cryst. Growth Des.* **8**, 2419 (2008).
- 2008BIA/CEZ T. F. Biazus, A. M. Cezaro, G. R. Borges, J. P. Bender, E. Franceschi, M. L. Corazza, and V. Oliveira, *J. Chem. Thermodyn.* **40**, 437 (2008).
- 2008BRE/BRE A. A. Bredikhin, Z. A. Bredikhina, V. G. Novikova, A. V. Pashagin, D. V. Zakharychev, and A. T. Gubaidullin, *Chirality* **20**, 1092 (2008).
- 2008CAP/LOV C. D. Cappa, E. R. Lovejoy, and A. R. Ravishankara, *J. Phys. Chem. A* **112**, 3959 (2008).
- 2008CHI/STE R. D. Chirico and W. V. Steele, *J. Chem. Thermodyn.* **40**, 806 (2008).
- 2008DIC/SGH E. Dichi, M. Sghaier, B. Fraisse, F. Bonhomme, and G. Keller, *J. Alloys Compd.* **458**, 595 (2008).
- 2008DOM/MOR U. Domanska, P. Morawski, and M. Piekarska, *J. Chem. Thermodyn.* **40**, 710 (2008).
- 2008EME/KOZ V. N. Emel'yanenko, S. A. Kozlova, S. P. Verevkin, and G. N. Roganov, *J. Chem. Thermodyn.* **40**, 911 (2008).
- 2008EME/TOK V. N. Emel'yanenko, A. V. Toktonov, S. A. Kozlova, S. P. Verevkin, V. Andrushko, N. Andrushko, and A. Borner, *J. Phys. Chem. A* **112**, 4036 (2008).
- 2008EME/VER V. N. Emel'yanenko, S. P. Verevkin, E. N. Burakova, G. N. Roganov, and M. K. Georgieva, *Russ. J. Phys. Chem. A* **82**, 1521 (2008).
- 2008FAV/FRE R. Favaretto, P. H. Fregadolli, V. F. Cabral, O. A. C. Antunes, and L. Cardozo-Filho, *J. Chem. Eng. Data* **53**, 1080 (2008).
- 2008FRE/KEB A. Freedman, P. L. Kebabian, Z. Li, W. A. Robinson, and J. C. Wormhoudt, *Meas. Sci. Technol.* **19**, 125102 (2008).
- 2008FRI/ACR V. L. S. Frietas, W. E. Acree, Jr., and M. D. M. C. Ribeiro da Silva, *J. Chem. Eng. Data* **53**, 1820 (2008).
- 2008GHI/BEA O. R. Ghita, M. A. Beard, J. McCabe, R. Bottom, J. Richmond, and P. E. Evans, *J. Mater. Sci.* **43**, 4988 (2008).
- 2008GOL/SUU2 J. L. Goldfarb and E. M. Suuberg, *J. Chem. Thermodyn.* **40**, 460 (2008).
- 2008KAI/MAR A. Kaizawa, N. Maruoka, A. Kawai, H. Kamano, T. Jozuka, T. Senda, and T. Akiyama, *Heat Mass Transfer* **44**, 763 (2008).
- 2008KHI/DAH K. Khimeche, A. Dahmani, and J. Jose, *J. Chem. Thermodyn.* **40**, 777 (2008).
- 2008KIM/SVE I. Kim, H. F. Svendsen, and E. Borresen, *J. Chem. Eng. Data* **53**, 2521 (2008).
- 2008KOZ/EME S. A. Kozlova, V. N. Emel'yanenko, M. Georgieva, S. P. Verevkin, Y. Chernyak, B. Schaffner, and A. Borner, *J. Chem. Thermodyn.* **40**, 1136 (2008).
- 2008LEV/BAR R. Levit, M. Barrio, N. Beglio, J. Ll. Tamarit, P. Negrier, L. C. Pardo, J. Sanchez-Marcos, and D. Mondieig, *J. Phys. Chem. B* **112**, 13916 (2008).
- 2008LLA/MON E. Lladosa, J. B. Monton, and M. C. Burguet, *J. Chem. Eng. Data* **53**, 1897 (2008).
- 2008LU/GAO X.-C. Lu, X.-H. Gao, Z.-C. Tan, Y.-S. Li, and L.-X. Sun, *J. Therm. Anal. Calorim.* **92**, 523 (2008).
- 2008MAC/SHI A. D. MacKerell, Jr., J. H. Shim, and V. M. Anisimov, *J. Chem. Theory Comput.* **4**, 1307 (2008).
- 2008MAR/EUS T. M. R. Maria and M. E. S. Eusebio, *J. Chem. Eng. Data* **53**, 1316 (2008).
- 2008MAT/IVA V. E. Matulis, O. A. Ivashkevich, P. N. Gaponik, P. D. Elkind, G. T. Sukhanov, A. B. Bazyleva, and D. H. Zaitsau, *J. Mol. Struct.: THEOCHEM* **854**, 18 (2008).
- 2008MAT/MIR M. A. R. Matos, M. S. Miranda, D. A. P. Fonseca, V. M. F. Morais, and J. F. Liebman, *J. Phys. Chem. A* **112**, 10053 (2008).
- 2008MAT/MIR2 M. A. R. Matos, M. S. Miranda, and V. M. F. Morais, *J. Chem. Thermodyn.* **40**, 625 (2008).
- 2008MAT/SOU M. A. R. Matos, C. C. S. Sousa, and V. M. F. Morais, *J. Chem. Thermodyn.* **40**, 1485 (2008).
- 2008MAT/SOU2 M. A. R. Matos, C. C. S. Sousa, and V. M. F. Morais, *J. Phys. Chem.* **112**, 7961 (2008).
- 2008MAT/SOU3 M. A. R. Matos, C. C. S. Sousa, and V. M. F. Morais, *J. Chem. Thermodyn.* **40**, 1552 (2008).
- 2008MEN/FLO J. Mentado, H. Flores, and P. Amador, *J. Chem. Thermodyn.* **40**, 1106 (2008).
- 2008MOG/SEP E. Mogalian, K. Sepassi, and P. B. Myrdal, *Drug Dev. Ind. Pharm.* **34**, 930 (2008).
- 2008MOT/QUE F. L. Mota, A. J. Queimada, S. P. Pinho, and E. A. Macedo, *Ind. Eng. Chem. Res.* **47**, 5182 (2008).
- 2008NIC/BEL S. Nicoli, S. Belzi, P. Santi, M. R. Caira, J. Li, and R. Bettini, *J. Pharm. Sci.* **97**, 4830 (2008).
- 2008OSM/CAT A. Osmont, L. Catoire, and I. Gokalp, *Energy Fuels* **22**, 2241 (2008).
- 2008PER/VOL G. L. Perlovich, T. V. Volkova, A. N. Manin, and A. Bauer-Brandl, *J. Pharm. Sci.* **97**, 3883 (2008).
- 2008PER/VOL2 G. L. Perlovich, T. V. Volkova, A. N. Manin, and A. Bauer-Brandl, *AAPS PharmSciTech* **9**, 205 (2008).
- 2008PIN/DIO S. S. Pinto and H. P. Diogo, *J. Pharm. Sci.* **97**, 5354 (2008).
- 2008RAI/BHA N. Rai, D. Bhatt, J. I. Siepmann, and L. E. Fried, *J. Chem. Phys.* **129**, 194510 (2008).
- 2008RIB/AMA M. A. V. Ribeiro da Silva and L. M. P. F. Amaral, *J. Therm. Anal. Calorim.* **92**, 53 (2008).
- 2008RIB/AMA2 M. A. V. Ribeiro da Silva, L. M. P. F. Amaral, C. R. P. Boaventura, and J. R. B. Gomes, *J. Chem. Thermodyn.* **40**, 1226 (2008).
- 2008RIB/AMA3 M. A. V. Ribeiro da Silva, L. M. P. F. Amaral, and A. F. L. O. M. Santos, *J. Chem. Thermodyn.* **40**, 1588 (2008).
- 2008RIB/CAB M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Therm. Anal. Calorim.* **92**, 59 (2008).
- 2008RIB/CAB2 M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Chem. Thermodyn.* **40**, 829 (2008).
- 2008RIB/CAB3 M. A. V. Ribeiro da Silva, J. I. T. A. Cabral, and J. R. B. Gomes, *J. Phys. Chem.* **112**, 12263 (2008).
- 2008RIB/FER M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Chem. Thermodyn.* **40**, 924 (2008).
- 2008RIB/FER2 M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Chem. Thermodyn.* **40**, 362 (2008).
- 2008RIB/FER3 M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, L. M. S. S. Lima, and S. M. M. Sousa, *J. Chem. Thermodyn.* **40**, 137 (2008).

- 2008RIB/FIG M. A. V. Ribeiro da Silva, D. F. Figueriedo, and J. I. T. A. Cabral, *J. Chem. Thermodyn.* **40**, 369 (2008).
- 2008RIB/RIB M. D. M. C. M. A. V. Ribeiro da Silva, Ribeiro da Silva, V. L. S. Freitas, M. V. Roux, P. Jimenez, M. Temprado, J. Z. Davalos, P. Cabildo, R. M. Claramunt, and J. Elguero, *J. Chem. Thermodyn.* **40**, 386 (2008).
- 2008RIB/RIB2 M. D. M. C. M. A. V. Ribeiro da Silva, Ribeiro da Silva, V. L. S. Freitas, M. V. Roux, P. Jimenez, J. Z. Davalos, P. Cabildo, R. M. Claramunt, and J. Elguero, *J. Chem. Thermodyn.* **40**, 1378 (2008).
- 2008RIB/SAN M. A. V. Ribeiro da Silva and A. F. L. O. M. Santos, *J. Chem. Thermodyn.* **40**, 225 (2008).
- 2008RIB/SAN2 M. A. V. Ribeiro da Silva and A. F. L. O. M. Santos, *J. Chem. Thermodyn.* **40**, 917 (2008).
- 2008RIB/SAN3 M. A. V. Ribeiro da Silva and A. F. L. O. M. Santos, *J. Chem. Thermodyn.* **40**, 1217 (2008).
- 2008RIB/SAN4 M. A. V. Ribeiro da Silva and A. F. L. O. M. Santos, *J. Chem. Thermodyn.* **40**, 1309 (2008).
- 2008RIB/SAN5 M. A. V. Ribeiro da Silva and A. F. L. O. M. Santos, *J. Chem. Thermodyn.* **40**, 1451 (2008).
- 2008ROU/TEM2 M. V. Roux, M. Temprado, R. Notario, C. Foces-Foces, V. N. Emel'yanenko, and S. P. Verevkin, *J. Phys. Chem. A* **112**, 7455 (2008).
- 2008SAG/SAF E. V. Sagadeev and Yu. G. Safina, *Russ. J. Gen. Chem.* **78**, 65–68 (2008).
- 2008SAR/MOK S. Sarraute, I. Mokbel, M. F. Costa Gomes, V. Majer, and J. Jose, *Atmos. Environ.* **42**, 4724 (2008).
- 2008SHA/GUP B. L. Sharma, S. Gupta, S. Tandon, and R. Kant, *Mater. Chem. Phys.* **111**, 423 (2008).
- 2008SHA/WU X.-Z. Shao, J.-S. Wu, G.-Q. Zhang, and L.-S. Wang, *J. Chem. Eng. Data* **53**, 1012 (2008).
- 2008SIN/DAS N. B. Singh, S. S. Das, P. Gupta, and M. K. Dwivedi, *J. Cryst. Growth* **311**, 118 (2008).
- 2008SIN/DAS2 N. B. Singh, S. S. Das, N. P. Singh, and T. J. Agrawal, *Cryst. Growth* **310**, 2878 (2008).
- 2008SIN/MUR L. P. Singh and S. S. N. Murthy, *J. Phys. Chem. B* **112**, 2606 (2008).
- 2008SIN/MUR2 L. P. Singh and S. S. N. Murthy, *J. Chem. Phys.* **129**, 094501 (2008).
- 2008SON/RAM M. Soni, D. Ramjugernath, and J. D. Raal, *J. Chem. Eng. Data* **53**, 745 (2008).
- 2008STU/ROR H. K. Stulzer, P. O. Roriguez, T. M. Cardoso, J. S. R. Matos, and M. A. S. Silva, *J. Therm. Anal. Calorim.* **91**, 323 (2008).
- 2008SZT P. Szterner, *J. Chem. Eng. Data* **53**, 1892–1896 (2008).
- 2008TEM/ROU M. Temprado, M. V. Roux, and J. S. Chickos, *J. Therm. Anal. Calorim.* **94**, 257 (2008).
- 2008TEM/ROU2 M. Temprado, M. V. Roux, P. Jimenez, C. Foces-Foces, and R. Notario, *J. Phys. Chem. A* **112**, 10378 (2008).
- 2008TEM/ROU3 M. Temprado, M. V. Roux, A. R. Parameswar, A. V. Demchenko, J. S. Chickos, and J. F. Liebman, *J. Therm. Anal. Calorim.* **91**, 471 (2008).
- 2008TON/TAN B. Tong, Z.-C. Tan, and S.-X. Wang, *Chin. J. Chem.* **26**, 1561 (2008).
- 2008TON/TAN2 B. Tong, Z. C. Tan, Q. Shi, Y. S. Li, and S. X. Wang, *J. Therm. Anal. Calorim.* **91**, 463 (2008).
- 2008VEN/BAY L. Ventola, L. Bayes, R. Benzges, F. J. Novegil-Anleo, M. A. Cuevas-Diarte, T. Calvet, and D. Mondieig, *Helv. Chim. Acta* **91**, 1286 (2008).
- 2008VER/EME S. P. Verevkin and V. N. Emel'yanenko, *Fluid Phase Equilib.* **266**, 64 (2008).
- 2008VER/KOZ S. P. Verevkin and S. A. Kozlova, *Thermochim. Acta* **471**, 33 (2008).
- 2008VER/TOK S. P. Verevkin, A. V. Toktonov, Y. Chernyak, B. Schaffner, and A. Borner, *Fluid Phase Equilib.* **268**, 1 (2008).
- 2008WAN/TAN S.-X. Wang, Z.-C. Tan, Y.-S. Li, B. Tong, Y. Li, Q. Shi, and J.-N. Zhang, *Chin. J. Chem.* **26**, 2016 (2008).
- 2008WAS/HOL C. M. Wassvik, A. G. Holmen, R. Draheim, P. Artursson, and C. A. S. Bergstrom, *J. Med. Chem.* **51**, 3035 (2008).
- 2008WEI D. Wei, *Thermochim. Acta* **479**, 32 (2008).
- 2008WIS/BER S. Wishkerman and J. Bernstein, *Chem. Eur. J.* **14**, 197 (2008).
- 2008XIA/ZHA Q. Xia, F.-B. Zhang, G.-L. Zhang, J.-C. Ma, and L. Zhao, *J. Chem. Eng. Data* **53**, 838 (2008).
- 2008XUE/LI B. Xue, X.-F. Li, J.-Y. Wang, S.-J. Yu, Z.-C. Tan, and L.-X. Sun, *J. Therm. Anal. Calorim.* **94**, 529 (2008).
- 2008YAN/SUP W. Yan and G. J. Suppes, *J. Chem. Eng. Data* **53**, 2033 (2008).
- 2008ZAI/PAU D. H. Zaitsau, Y. U. Paulechka, G. J. Kabo, A. V. Blokhin, V. N. Emel'yanenko, S. P. Verevkin, and A. J. Heintz, *Chem. Eng. Data* **53**, 694 (2008).
- 2008ZHA/UNH H. Zhao, P. Unhannant, W. Hanshaw, and J. S. Chickos, *J. Chem. Eng. Data* **53**, 1545 (2008).
- 2009AST/DYU A. M. Astakhov, K. P. Dyugaev, A. A. Kuzubov, V. A. Nasluzov, A. D. Vasiliev, and E. S. Buka, *J. Struct. Chem.* **50**, 201 (2009).
- 2009BAR/ESP M. Barrio, P. Espeau, J. L. Tamarit, M.-A. Perrin, N. Veglio, and R. Ceolin, *J. Pharm. Sci.* **98**, 1657 (2009).
- 2009BAR/GAM C. Baraldi, M. C. Gamberini, A. Tinti, F. Palazzoli, and V. Ferioli, *J. Mol. Struct.* **918**, 88 (2009).
- 2009BEL/RAZ A. Belabbaci, A. Razzouk, I. Mokbel, J. Jose, and L. Negadi, *J. Chem. Eng. Data* **54**, 2312 (2009).
- 2009BOO/MAR A. M. Booth, T. Markus, G. McFiggans, C. J. Percival, M. R. McGillen, and D. O. Topping, *Atmos. Meas. Sci.* **2**, 355 (2009).
- 2009BRI H. G. Brittain, *Cryst. Growth Des.* **9**, 2492 (2009).
- 2009BRI2 H. G. Brittain, *Cryst. Growth Des.* **9**, 3497 (2009).
- 2009BUT/BUC A. B. Butrow, J. H. Buchanan, and D. E. Trevault, *J. Chem. Eng. Data* **54**, 1876 (2009).
- 2009CHE/PET E. Y. Cheung and M. L. Peterson, *Thermochim. Acta* **482**, 57 (2009).
- 2009CHE/XIA S. Chen, Q. Xia, D. Li, W.-G. Yan, F.-B. Zhang, and G.-L. Zhang, *J. Chem. Eng. Data* **54**, 1395 (2009).
- 2009CHE/ZHO L.-L. Chen, C.-R. Zhou, and X.-H. Shi, *Gaoxiao Huaxue Gangcheng Xuebao* **23**, 730 (2009).
- 2009CHI/STE R. D. Chirico and W. V. Steele, *J. Chem. Thermodyn.* **41**, 392 (2009).
- 2009CLA/GOM R. A. Clara, A. C. Gomez Marigliano, and H. N. Solimo, *J. Chem. Eng. Data* **54**, 1087 (2009).
- 2009COS/SAR M. C. Costa, M. Sardo, M. P. Rolemberg, J. A. P. Coutinho, A. J. R. Meirelles, P. Ribeiro-Claro, and M. A. Krahenbuhl, *Chem. Phys. Lipids* **160**, 85 (2009).
- 2009DAS/SIN S. S. Das, N. P. Sing, T. Agrawal, P. Gupta, S. N. Tiwari, and N. B. Singh, *Mol. Cryst. Liq. Cryst.* **501**, 107 (2009).
- 2009EFI/DRU A. A. Efimova, A. I. Druzhinina, R. M. Varushchenko, O. V. Dorofeeva, and E. L. Krasnyh, *J. Chem. Eng. Data* **54**, 2457 (2009).
- 2009EME/VER V. N. Emel'yanenko, S. P. Verevkin, E. N. Burakova, G. N. Roganov, and M. K. Georgieva, *Russ. J. Phys. Chem. A* **83**, 598 (2009).
- 2009EME/VER2 V. N. Emel'yanenko, S. P. Verevkin, and A. A. Pimerzin, *Russ. J. Phys. Chem.* **83**, 2013 (2009).
- 2009FLO/CAM H. Flores, E. A. Camarillo, and J. Mentado, *Thermochim. Acta* **493**, 76 (2009).
- 2009FRE/ARA F. D. Freire, C. F. S. Aragao, T. F. A. D. Moura, and F. N. Raffin, *J. Therm. Anal. Calorim.* **97**, 333–336 (2009).
- 2009FRE/GOM2 V. L. S. Freitas, J. R. B. Gomes, and M. D. M. C. Ribeiro da Silva, *J. Therm. Anal. Calorim.* **97**, 827 (2009).
- 2009GIE/KOS P. Gierycz, A. Kosowski, and R. Swietlik, *J. Chem. Eng. Data* **54**, 2996 (2009).
- 2009GOO/ROD D. J. Good and N. Rodriguez-Hornedo, *Cryst. Growth Des.* **9**, 2252 (2009).
- 2009HA/HAN J.-M. Ha, B. D. Hamilton, M. A. Hillmyer, and M. D. Ward, *Cryst. Growth Des.* **9**, 4766 (2009).
- 2009HE/ZHU Q. He, J. Zhu, H. Goma, M. Jennings, and S. Rohani, *J. Pharm. Sci.* **98**, 1835 (2009).
- 2009KEN/FLO A. R. Kennedy, A. J. Florence, F. J. McInnes, and N. J. Wheate, *Dalton Trans.* **2009**, 7695.
- 2009LAH/RAU A. Lahde, J. Raula, J. Malm, E. I. Kauppinen, and M. Karppinen, *Thermochim. Acta* **482**, 17 (2009).
- 2009LEG/BAC B. Legendre, P. Bac, M. German, and Y. Feutelais, *J. Therm. Anal. Calorim.* **98**, 91 (2009).
- 2009LI/FAN D. Li, W. Fang, W. Xie, Y. Wing, Y. Guo, and R. Lin, *Energy Fuels* **23**, 794 (2009).

- 2009LIP/CHI D. Lipkind and J. S. Chickos, "38TH Great Lakes Regional Meeting," **77**, 58 (2009).
- 2009LIP/CHI2 D. Lipkind and J. S. Chickos, *Struct. Chem.* **20**, 49 (2009).
- 2009LIP/HAN D. Lipkind, W. Hanshaw, and J. S. Chickos, *J. Chem. Eng. Data* **54**, 2930 (2009).
- 2009MAR/AUC B. Marrufo, A. Aucejo, M. Sanchoello, and S. Loras, *Fluid Phase Equilib.* **279**, 11 (2009).
- 2009MAR/LLA N. F. Martinez, E. Lladosa, M. C. Burguet, J. B. Monton, and M. Yazimon, *Fluid Phase Equilib.* **277**, 49 (2009).
- 2009MAT/SOU M. A. R. Matos, C. C. S. Sousa, and V. M. F. Morais, *J. Chem. Thermodyn.* **41**, 308 (2009).
- 2009MAT/SOU2 M. A. R. Matos, C. C. S. Sousa, and V. M. F. Morais, *J. Chem. Thermodyn.* **41**, 69 (2009).
- 2009MAT/SOU3 M. A. R. Matos, C. C. S. Sousa, and V. M. F. Morais, *J. Chem. Eng. Data* **54**, 2189 (2009).
- 2009MAT/SOU4 M. A. R. Matos, C. C. S. Sousa, M. S. Miranda, V. M. F. Morais, and J. F. Liebman, *J. Phys. Chem. B* **113**, 11216 (2009).
- 2009MEL/PIN V. Meltzer and E. Pincu, *Rev. Roum. Chim.* **54**, 333 (2009).
- 2009MEN/TAN Q. Meng, Z. Tan, X. Wang, Y. Dong, W. Li, and Q. Shi, *Chin. J. Chem.* **27**, 1225 (2009).
- 2009MEN/ZHA Q.-F. Meng, J.-N. Zhang, Z.-C. Tan, Y.-P. Dong, W. Li, and Q. Shi, *J. Chem. Eng. Data* **54**, 232 (2009).
- 2009MIR/KON E. A. Miroshnichenko, T. S. Kon'kova, Yu. N. Matyushin, and Ya. O. Inozemtsev, *Russ. Chem. Bull. (Int. Ed.)* **58**, 2015 (2009).
- 2009MOK/RAZ I. Mokhel, A. Razzouk, T. Sawaya, and J. Jose, *J. Chem. Eng. Data* **54**, 819–822 (2009).
- 2009MOT/CAR F. L. Mota, A. P. Carneiro, A. J. Queimada, S. P. Pinho, and E. A. Macedo, *Eur. J. Pharm. Sci.* **37**, 499 (2009).
- 2009MUR/BER F. S. Murakami, L. S. Bernardi, R. N. Pereira, B. R. Valente, E. C. Vasconcelos, M. A. S. Carvalho Filho, and M. A. S. Silva, *Pharm. Chem. J.* **43**, 716 (2009).
- 2009NEZ/AER A. Nezzal, L. Aert, M. Verspaille, G. Hendrickx, and A. Redl, *J. Cryst. Growth* **311**, 3863 (2009).
- 2009OXL/SMI J. C. Oxley, J. L. Smith, W. Luo, and J. Brady, *Propellants, Explos., Pyrotech.* **34**, 539 (2009).
- 2009PAN/ANT K. Panneerselvam, M. P. Antony, T. G. Srinivasan, and P. R. V. Rao, *Thermochim. Acta* **495**, 1 (2009).
- 2009PEN/ESC M. A. Pena, A. Escalera, A. Reillo, A. B. Sanchez, and P. Bustamante, *J. Pharm. Sci.* **98**, 1129 (2009).
- 2009PER/MAG R. A. Perkins and J. W. Magee, *J. Chem. Eng. Data* **54**, 2646 (2009).
- 2009PER/OCH R. A. Perkins, J. C. S. Ochoa, and J. W. Magee, *J. Chem. Eng. Data* **54**, 3192 (2009).
- 2009POS/MAR M. A. Postigo, A. B. Mariano, A. F. Jara, and N. Zurakowski, *J. Chem. Eng. Data* **54**, 1575 (2009).
- 2009QUE/MOT A. J. Queimada, F. L. Mota, S. P. Pinho, and E. A. Macedo, *J. Phys. Chem. B* **113**, 3469 (2009).
- 2009RAI/RED R. N. Rai and R. S. B. Reddi, *Thermochim. Acta* **496**, 13 (2009).
- 2009RAZ/HAJ A. Razzouk, A. Hajjaji, I. Mokbel, P. Mougín, and J. Jose, *Fluid Phase Equilib.* **282**, 11 (2009).
- 2009RIB/AMA M. A. V. Ribeiro da Silva and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **41**, 26 (2009).
- 2009RIB/AMA2 M. A. V. Ribeiro da Silva and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **41**, 349 (2009).
- 2009RIB/CAB M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Chem. Thermodyn.* **41**, 355 (2009).
- 2009RIB/CAB2 M. A. V. Ribeiro da Silva, J. I. T. A. Cabral, and J. R. B. Gomes, *J. Chem. Thermodyn.* **41**, 1193 (2009).
- 2009RIB/FER M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Chem. Eng. Data* **54**, 2517 (2009).
- 2009RIB/FER2 M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Chem. Thermodyn.* **41**, 361 (2009).
- 2009RIB/FER3 M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Chem. Thermodyn.* **41**, 499 (2009).
- 2009RIB/FER4 M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Chem. Thermodyn.* **41**, 1096 (2009); Corrigendum, *J. Chem. Thermodyn.* **43**, 1564 (2011).
- 2009RIB/FER5 M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Chem. Thermodyn.* **41**, 1104 (2009).
- 2009RIB/FER6 M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, J. I. T. A. Cabral, A. F. L. O. M. Santos, A. R. G. Moreno, T. L. P. Galvao, I. M. Rocha, P. M. V. Fernandes, S. Q. Salgueiro, V. A. F. de Moura, I. M. S. C. Oliveira, P. C. Coteló, and M. R. A. Ribeiro, *J. Chem. Thermodyn.* **41**, 984 (2009).
- 2009RIB/FER7 M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, and A. R. G. Moreno, *J. Chem. Thermodyn.* **41**, 109 (2009).
- 2009RIB/FER8 M. A. V. Ribeiro da Silva, A. I. M. F. Ferreira, A. F. L. O. M. Santos, and I. M. Rocha, *J. Chem. Thermodyn.* **41**, 1239 (2009).
- 2009RIB/FER9 M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, and A. R. G. Moreno, *J. Chem. Thermodyn.* **41**, 904 (2009).
- 2009RIB/RIB M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, A. I. M. C. L. Ferreira, A. F. L. O. M. Santos, and T. L. P. Galvao, *J. Chem. Thermodyn.* **41**, 1074 (2009).
- 2009RIB/RIB2 M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, A. I. M. C. L. Ferreira, A. F. L. O. M. Santos, and T. L. P. Galvao, *J. Chem. Thermodyn.* **41**, 1247 (2009).
- 2009RIB/RIB3 M. D. M. C. Ribeiro da Silva, M. A. V. Ribeiro da Silva, V. L. S. Freitas, M. V. Roux, P. Jimenez, M. Temprado, J. Z. Davalas, P. Cabildo, R. M. Calamunt, and J. Elguero, *J. Chem. Thermodyn.* **41**, 1400 (2009).
- 2009RIB/SAN M. A. V. Ribeiro da Silva, A. F. L. O. M. Santos, J. R. B. Gomes, M. V. Roux, M. Temprado, P. Jimenez, and R. Notario, *J. Phys. Chem. A* **113**, 11042 (2009).
- 2009RIB/SAN2 M. A. V. Ribeiro da Silva and A. F. L. O. M. Santos, *J. Chem. Thermodyn.* **41**, 926 (2009).
- 2009ROU/TEM M. V. Roux, M. Temprado, P. Jimenez, C. Foces-Foces, R. Notario, A. R. Parameswar, A. V. Demchenko, J. S. Chickos, C. A. Deakynne, A. K. Ludden, and J. F. Liebman, *J. Phys. Chem. A* **113**, 10772 (2009).
- 2009SAL/BED F. Salaun, G. Bedek, E. Devaux, D. Dupont, and D. Deranton, *Int. J. Thermophys.* **30**, 1242 (2009).
- 2009SAN/FIG R. C. Santos, R. M. B. M. Figueira, M. F. M. Piedade, H. P. Diogo, and M. E. Minas da Piedade, *J. Phys. Chem. B* **113**, 14291 (2009).
- 2009SAN/GOM A. F. L. O. M. Santos, J. R. B. Gomes, and M. A. V. Ribeiro da Silva, *J. Phys. Chem. A* **113**, 3630 (2009).
- 2009SAN/RIB A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Phys. Chem. A* **113**, 9741 (2009).
- 2009SAP/UUS E. Sapei, P. Uusi-Kyyny, K. I. Keskinen, and J. Aittamaa, *Fluid Phase Equilib.* **279**, 81 (2009).
- 2009SEL/RAG J. Selvakumar, V. S. Raghunathan, and K. S. Nagaraja, *J. Phys. Chem. C* **113**, 19011 (2009).
- 2009SHA/TAN B. L. Sharma, S. Tandon, and S. Gupta, *Cryst. Res. Technol.* **44**, 258 (2009).
- 2009SIN/MUR L. P. Singh and S. S. N. Murthy, *Phys. Chem. Chem. Phys.* **11**, 5110 (2009).
- 2009SZT P. Szterner, *J. Therm. Anal. Calorim.* **98**, 337 (2009).
- 2009TAU/SIT P. Taulelle, G. Sitja, G. Pepe, E. Garcia, C. Hoff, and S. Veessler, *Cryst. Growth Des.* **9**, 4706 (2009).
- 2009VEC/BRU S. Vecchio and B. Brunetti, *J. Chem. Thermodyn.* **41**, 880 (2009).
- 2009VEC/TOM S. Vecchio and M. Tomassetti, *Fluid Phase Equilib.* **279**, 64 (2009).
- 2009VER/EME S. P. Verevkin, V. N. Emel'yanenko, E. N. Stepurko, R. V. Rulys, D. H. Zaitsau, and A. Stark, *Ind. Eng. Chem. Res.* **48**, 10087 (2009).
- 2009VER/EME2 S. P. Verevkin, V. N. Emel'yanenko, A. V. Toktonov, A. S. Leolko, J. Duwensee, U. Kragl, and S. M. Sarge, *Ind. Eng. Chem. Res.* **48**, 7388 (2009).
- 2009VER/EME4 S. P. Verevkin, V. N. Emel'yanenko, A. V. Toktonov, P. Goodrich, and C. Hardacre, *Ind. Eng. Chem. Res.* **48**, 9809 (2009).
- 2009VER/KOZ S. P. Verevkin, S. A. Kozlova, V. N. Emel'yanenko, and G. Nell, *J. Chem. Thermodyn.* **41**, 1125 (2009).
- 2009WEI/JIN D. Wei and K. Jin, *J. Chem. Thermodyn.* **41**, 145 (2009).
- 2009WU/MEH W. Wu, S. J. Mehrman, Y. Zhou, S. X. Pu, L. Huang, A. Fermier, and S. Karki, *Cryst. Growth* **311**, 3435–3444 (2009).

- 2009XIN/FAN Y. Xing, W. Fang, D. Li, Y. Guo, and R. Lin, *J. Chem. Eng. Data* **54**, 1865 (2009).
- 2009ZEN/GST N. Zencirci, E. Gstrein, C. Langes, and U. J. Griesser, *Thermochim. Acta* **485**, 33 (2009).
- 2009ZHA/RAY Y. Zhang, A. Ray, and S. Rohani, *Chem. Eng. Sci.* **64**, 192 (2009).
- 2010ACR/CHI W. E. Acree, Jr. and J. S. Chickos, *J. Phys. Chem. Ref. Data* **39**, 1-940 (2010).
- 2010AGA/DRU L. E. Agafonova, A. I. Druzhinina, R. M. Varushchenko, and O. V. Polyakova, *Vestn. Mosk. Univ., Ser. 2: Khim.* **51**, 347 (2010).
- 2010AGR/GUP T. Agrawal, P. Gupta, S. S. Das, A. Gupta, and N. B. Singh, *J. Chem. Eng. Data* **55**, 4206 (2010).
- 2010ALM/MON A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Eng. Data* **55**, 3507 (2010).
- 2010ALM/MON2 A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Eng. Data* **55**, 5230 (2010).
- 2010ARA/DOS A. A. S. Araujo, M. dos Santos Bezerra, S. Storpirtis, and J. do Rosario Matos, *Braz. J. Pharm. Sci.* **46**, 37 (2010).
- 2010AVU/ALE S. G. Avula, K. Alexander, and A. Riga, *J. Therm. Anal. Calorim.* **99**, 655 (2010).
- 2010BAB/KUZ T. S. Bakkina and A. V. Kuznetsov, *J. Therm. Anal. Calorim.* **101**, 33 (2010).
- 2010BAI/VAN J. A. Baird, B. van Eerdenbrugh, and L. S. Taylor, *J. Pharm. Sci.* **99**, 3787 (2010).
- 2010BEL/AHM A. Belabbaci, N. C.-B. Ahmed, I. Mokbel, and L. Negadi, *J. Chem. Thermodyn.* **42**, 1158 (2010).
- 2010BOG/GON R. Bogel-Lukasik, L. M. N. Goncalves, and E. Bogel-Lukasik, *Green Chem.* **12**, 1947 (2010).
- 2010BOO/BAR A. M. Booth, M. H. Barley, D. O. Topping, G. McFiggans, A. Garforth, and C. J. Percival, *Atmos. Chem. Phys.* **10**, 4879 (2010).
- 2010BRA/GRE D. Braga, F. Grepioni, L. Maini, P. P. Mazzeo, and K. Rubini, *Thermochim. Acta* **507/508**, 1 (2010).
- 2010BUS/MEU P. Bustamante, S. Meula, B. Escalera, and A. Pena, *Chem. Pharm. Bull.* **58**, 644 (2010).
- 2010CAB/MON J. I. T. A. Cabral, R. A. R. Monteiro, M. A. A. Rocha, L. M. N. B. F. Santos, W. E. Acree, Jr., and M. D. M. C. Ribeiro da Silva, *J. Therm. Anal. Calorim.* **100**, 431 (2010).
- 2010CAM/MIC L. Campanella, V. Micieli, M. Tomassetti, and S. Vechio, *J. Therm. Anal. Calorim.* **99**, 887 (2010).
- 2010CAS/MAR R. A. E. Castro, T. M. R. Maria, A. O. L. Evora, J. C. Feiteira, M. R. Silva, A. M. Beja, J. Canotilho, and M. E. S. Eusebio, *Cryst. Growth Des.* **10**, 274 (2010).
- 2010CEN/ROH M. Censky, V. Rohac, K. Ruzicka, M. Fulem, and K. Aim, *Fluid Phase Equilib.* **298**, 192 (2010).
- 2010CEN/VRB M. Censky, P. Vrbka, K. Ruzicka, and M. Fulem, *Fluid Phase Equilib.* **298**, 199 (2010).
- 2010CHA/PAP P. Chatzigeorgiou, N. Papakonstantopoulos, N. Togaroulia, E. Pollatos, P. Xynogalas, and K. Viras, *J. Phys. Chem. B* **114**, 1294 (2010).
- 2010CLA/MAR R. A. Clara, A. C. G. Marigliano, D. Morales, and H. N. Solimo, *J. Chem. Eng. Data* **55**, 5862 (2010).
- 2010CON/NEA I. Contineanu, A. Neascu, and S. T. Perisanu, *Thermochim. Acta* **497**, 96 (2010).
- 2010COO/DAV C. L. Cooke, D. J. Davey, S. Black, C. Muryn, and R. G. Prichard, *Cryst. Growth Des.* **10**, 5270 (2010).
- 2010COR/NEG Y. Corvis, P. Negrier, M. Lazerges, S. Massip, J.-M. Leger, and P. Espeau, *J. Phys. Chem. B* **114**, 5420 (2010).
- 2010DEL/UUS C. Dell'Era, P. Uusi-Kyyny, E.-L. Rautama, M. Pakkanen, and V. Alopaeus, *Fluid Phase Equilib.* **299**, 51 (2010).
- 2010EFI/EME A. A. Efimova, V. N. Emel'yanenko, S. P. Verevkin, and Y. Chernyak, *J. Chem. Thermodyn.* **42**, 330 (2010).
- 2010EME/VER V. N. Emel'yanenko, S. P. Verevkin, E. N. Stepurko, G. N. Roganov, and M. K. Georgieva, *Russ. J. Phys. Chem. A* **84**, 356 (2010).
- 2010EME/VER2 V. N. Emel'yanenko, S. P. Verevkin, E. N. Stepurko, G. N. Roganov, and M. K. Georgieva, *Russ. J. Phys. Chem. A* **84**, 1301 (2010).
- 2010EME/VER3 V. N. Emel'yanenko, S. P. Verevkin, S. Schick, E. N. Stepurko, G. N. Roganov, and M. K. Georgieva, *Russ. J. Phys. Chem. A* **84**, 1491 (2010).
- 2010FAN/WAN C. L. Fan and L. S. Wang, *J. Chem. Eng. Data* **55**, 479 (2010).
- 2010FAR/RAJ B. V. Farahani, F. H. Rajabi, B. Hosseindoust, and H. Zenooz, *J. Phase Equilib. Diff.* **31**, 536 (2010).
- 2010FON/SAN J. M. S. Fonseca, L. M. N. B. F. Santos, and M. J. S. Monte, *J. Chem. Eng. Data* **55**, 2238 (2010).
- 2010FRE/GOM3 V. L. S. Freitas, J. R. B. Gomes, L. Gales, A. M. Damas, and M. D. M. C. Ribeiro da Silva, *J. Chem. Eng. Data* **55**, 5009 (2010).
- 2010FUL/RUZ M. Fulem, K. Ruzicka, P. Moravek, J. Pangrac, E. Huličius, B. Kozyrkin, and V. Shatunov, *J. Chem. Eng. Data* **55**, 4780 (2010).
- 2010GAO/LIN G.-Y. Gao and S.-Y. Lin, *J. Pharm. Sci.* **99**, 255 (2010).
- 2010GAO/SHI Z. Gao, Q. Shi, Z.-C. Tan, and X. Lan, *Huaxue Xuebao* **68**, 227 (2010).
- 2010GER/PEL A. P. Gerola, L. S. Peloi, N. Hioka, O. S. Filho, and L. A. Kato, *Quim. Nova* **33**, 482 (2010).
- 2010GON/BER E. M. Goncalves, C. E. S. Bernardes, H. P. Diogo, and M. E. Minas da Piedade, *J. Phys. Chem. B* **114**, 5475 (2010).
- 2010GRI/TSA J. R. Griffiths, J. Tsanaksidis, G. P. Savage, and R. Priefer, *Thermochim. Acta* **499**, 15 (2010).
- 2010GUO/SAD K. Guo, G. Sadiq, C. Seaton, R. Davey, and Q. Yin, *Cryst. Growth Des.* **10**, 268 (2010).
- 2010GUO/WAN2 X.-Z. Guo and L.-S. Wang, *J. Chem. Eng. Data* **55**, 4709 (2011).
- 2010HAH/GRA I. Hahnenkamp, G. Graubner, and J. Gmehling, *Int. J. Pharm.* **388**, 73 (2010).
- 2010HE/ROH Q. He, S. Rohani, J. Zhu, and H. Goma, *Cryst. Growth Des.* **10**, 5136 (2010).
- 2010HEN/CAM A. Hengstermann and L. Cameretti, *J. Chem. Eng. Data* **55**, 4597 (2010).
- 2010HU/CHE Y. Hu, X. Chen, W. Yang, Z. Lei, and C. Zhao, *J. Phys. Chem. Solids* **71**, 170 (2010).
- 2010JI/MEN H.-Z. Ji, X.-C. Meng, and H.-K. Zhao, *J. Chem. Eng. Data* **55**, 2590 (2010).
- 2010JIA/JAN S. Jiang, P. J. Jansen, and J. H. ter Horst, *Cryst. Growth Des.* **10**, 2123 (2010).
- 2010KAN/RED S. Kant, R. S. B. Reddi, and R. N. Rai, *Fluid Phase Equilib.* **291**, 71 (2010).
- 2010KES/AUC V. Kestens, G. Auclair, K. Drozdowska, A. Held, G. Roebben, and T. Linsinger, *J. Therm. Anal. Calorim.* **99**, 245 (2010).
- 2010KHI/DAH K. Khimeche, A. Dahmani, and I. Mokbel, *J. Chem. Thermodyn.* **42**, 829 (2010).
- 2010LEO/PIN L. Leon, M. Pink, J. A. Kaduk, J. M. Delgado, and G. Diaz de Delgado, *J. Chem. Crystallogr.* **40**, 104 (2010).
- 2010LIP/CHI D. Lipkind, J. S. Chickos, and J. F. Liebman, *J. Chem. Eng. Data* **55**, 1628 (2010).
- 2010LIP/PLI D. Lipkind, G. Plienrasri, and J. S. Chickos, *J. Phys. Chem. B* **114**, 16959 (2010).
- 2010MAR/JES T. M. R. Maria, A. J. L. Jesus, and M. E. S. Eusebio, *J. Therm. Anal. Calorim.* **100**, 385 (2010).
- 2010MAR/LOR B. Marrufo, S. Loras, and M. Sanchotello, *J. Chem. Eng. Data* **55**, 62 (2010).
- 2010MAS/KRA A. S. Maslakova, E. L. Krasnykh, and S. V. Levanova, *Russ. J. Phys. Chem.* **84**, 163 (2010).
- 2010MAT/SOU M. A. R. Matos, C. C. S. Sousa, and V. M. F. Morais, *J. Therm. Anal. Calorim.* **100**, 519 (2010).
- 2010MEE/GEU F. Meersman, B. Geukens, M. Wubbenhorst, J. Leys, S. Napolitano, Y. Filinchuk, G. van Assche, B. van Mele, and E. Nies, *J. Phys. Chem. B* **114**, 13944 (2010).
- 2010MEJ/SEG A. Mejia, H. Segura, and M. Cartes, *J. Chem. Eng. Data* **55**, 428 (2010).
- 2010MEK/KHI A. Mekki, K. Khimeche, and A. Dahmani, *J. Chem. Thermodyn.* **42**, 1050 (2010).
- 2010MIN/VON T. L. Minh, J. Von Langermann, H. Lorenz, and A. Seidel-Morgenstern, *J. Pharm. Sci.* **99**, 4084 (2010).
- 2010MIR/MAT M. S. Miranda, M. A. R. Matos, V. M. F. Morais, and J. F. Liebman, *J. Chem. Thermodyn.* **42**, 1101 (2010).
- 2010MIY/KHA Y. Miyako, N. Khalef, K. Matsuzaki, and R. Pinal, *Int. J. Pharm.* **393**, 48 (2010).
- 2010MON/ALM M. J. S. Monte, A. R. R. P. Almeida, and M. A. R. Matos, *J. Chem. Eng. Data* **55**, 419 (2010).

- 2010MON/GON M. J. S. Monte, M. V. Goncalves, and M. D. M. C. Ribeiro da Silva, *J. Chem. Eng. Data* **55**, 2246 (2009).
- 2010MON/SAN M. J. S. Monte, L. M. N. B. F. Santos, J. M. S. Fonesca, and C. A. D. Sousa, *J. Therm. Anal. Calorim.* **100**, 465 (2010).
- 2010MOR/SOU V. M. F. Morais, C. C. S. Sousa, and M. A. R. Matos, *J. Mol. Struct.: THEOCHEM* **946**, 13 (2010).
- 2010MUE/ESC S. Muela, B. Escalera, M. A. Pena, and P. Bustamante, *Int. J. Pharm.* **394**, 93 (2010).
- 2010MUR/PIK2 S. B. Murdande, M. J. Pikal, R. M. Shanker, and R. H. Bogner, *Pharm. Sci.* **99**, 2704 (2010).
- 2010OXL/SMI J. Oxley, J. L. Smith, J. Brady, and S. Naik, *Propellants, Explos., Pyrotech.* **35**, 278 (2010).
- 2010PAN/SAR E. Panteli, P. Saratsioti, H. Stamatis, and E. Voutsas, *J. Chem. Eng. Data* **55**, 745 (2010).
- 2010PAR/LEE K. A. Park, H. J. Lee, and I. K. Hong, *J. Ind. Eng. Chem.* **16**, 490 (2010).
- 2010PAU/KOV I. E. Paukov, Y. A. Kovalevskaya, and E. V. Boldyreva, *J. Therm. Anal. Calorim.* **100**, 295–301 (2010).
- 2010PEE/HUD Z. Peeters, R. L. Hudson, M. H. Moore, and A. Lewis, *Icarus* **210**, 480 (2010).
- 2010PET/REY M. Petitjean, E. Reyes-Perez, D. Perez, Ph. Mariabel, and C. Le Calve, *J. Chem. Eng. Data* **55**, 852 (2010).
- 2010PIC/DIO R. Picciochi, H. P. Diogo, and M. E. Minas da Piedade, *J. Therm. Anal. Calorim.* **100**, 391 (2010).
- 2010RAM/FEL M. L. Ramierz, H. Felix-Rivera, R. A. Sanchez-Cuprill, and S. P. Hernandez-Rivera, *J. Therm. Anal. Calorim.* **202**, 549 (2010).
- 2010RIB/AMA M. A. V. Ribeiro da Silva and L. M. P. F. Amaral, *J. Therm. Anal. Calorim.* **100**, 375 (2010).
- 2010RIB/AMA2 M. A. V. Ribeiro da Silva and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **42**, 1473 (2010).
- 2010RIB/CAB M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Therm. Anal. Calorim.* **100**, 457 (2010).
- 2010RIB/CAB2 M. A. V. Ribeiro da Silva, J. I. T. Cabral, and A. Cimas, *J. Chem. Thermodyn.* **42**, 1240 (2010).
- 2010RIB/FER M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, A. F. L. O. M. Santos, C. M. A. Ferreira, D. C. B. Barros, J. A. C. Reis, J. C. S. Costa, M. M. G. Calvino, S. I. A. Rocha, S. P. Pinto, S. S. L. Freire, S. M. Almeida, V. S. Guimaraes, and V. N. M. Almeida, *J. Chem. Thermodyn.* **42**, 371 (2010).
- 2010RIB/FER2 M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Chem. Thermodyn.* **42**, 182 (2010).
- 2010RIB/FER3 M. A. V. Ribeiro da Silva, A. I. M. C. L. Ferreira, and F. M. Maciel, *J. Chem. Thermodyn.* **42**, 220 (2010).
- 2010RIB/FER4 M. A. V. Ribeiro da Silva, A. I. M. L. Ferreira, A. F. L. O. M. Santos, and I. M. Rocha, *J. Chem. Thermodyn.* **42**, 169 (2010).
- 2010RIB/FER5 M. A. V. Ribeiro da Silva and A. I. M. C. L. Ferreira, *J. Therm. Anal. Calorim.* **100**, 447 (2010).
- 2010RIB/GON M. D. M. C. Ribeiro da Silva, M. V. Goncalves, and M. J. S. Monte, *J. Chem. Thermodyn.* **42**, 472 (2010).
- 2010RIB/MON M. A. V. Ribeiro da Silva, M. J. S. Monte, A. I. M. C. L. Ferreira, J. A. S. A. Oliveira, and A. Cimas, *J. Phys. Chem. B* **114**, 7909 (2010).
- 2010RIB/MON2 M. A. V. Ribeiro da Silva, M. J. S. Monte, A. I. M. C. L. Ferreira, J. A. S. A. Oliveira, and A. Cimas, *J. Phys. Chem. B* **114**, 12914 (2010).
- 2010RIB/RIB M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, A. F. L. O. M. Santos, A. I. M. C. L. Ferreira, and T. L. P. Galvao, *J. Chem. Thermodyn.* **42**, 496 (2010).
- 2010RIB/RIB2 M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, A. F. L. O. M. Santos, M. V. Roux, C. Foces-Foces, R. Notario, R. Guzman-Mejia, and E. Juaristi, *J. Phys. Chem. B* **114**, 16471 (2010).
- 2010RIB/SAN3 M. A. V. Ribeiro da Silva, A. F. L. O. M. Santos, and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **42**, 564 (2010).
- 2010RIB/SAN4 M. A. V. Ribeiro da Silva and A. F. L. O. M. Santos, *J. Therm. Anal. Calorim.* **100**, 403 (2010).
- 2010RIE/BAR I. B. Rietveld, M. Barrio, N. Veglio, P. Espeau, J. Ll. Tamarit, and R. Ceolin, *Thermochim. Acta* **511**, 43 (2010).
- 2010ROU/FOC M. V. Roux, C. Foces-Foces, R. Notario, M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, A. F. L. O. M. Santos, and E. Juaristi, *J. Phys. Chem. B* **114**, 10530 (2010).
- 2010ROU/NOT M. V. Roux, R. Notario, C. Foces-Foces, M. Temprado, F. Ros, V. N. Emel'yanenko, and S. P. Verevkin, *J. Phys. Chem. A* **114**, 3583 (2010).
- 2010ROU/TEM M. V. Roux, M. Temprado, P. Jimenez, C. Foces-Foces, R. Notario, A. R. Parameswar, A. V. Demchenko, J. S. Chickos, C. A. Deakynne, and J. F. Liebman, *J. Phys. Chem. A* **114**, 6336 (2010).
- 2010SAN/RIB A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **42**, 734 (2010).
- 2010SAN/RIB2 A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **42**, 1016 (2010).
- 2010SAN/RIB3 A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **42**, 1079 (2010).
- 2010SAN/RIB4 A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **42**, 1441 (2010).
- 2010SAN/ROC L. M. N. B. F. Santos, M. A. A. Rocha, L. R. Gomes, B. Schroeder, and J. A. P. Coutinho, *J. Chem. Eng. Data* **55**, 2799–2808 (2010).
- 2010SAP/UUS E. Sapei, P. Uusi-Kyyny, K. I. Keskinen, and V. Alopaeus, *Fluid Phase Equilib.* **288**, 155 (2010).
- 2010SAR/SAN B. Sarma, P. Sanphui, and A. Nangia, *Cryst. Growth Des.* **10**, 2388 (2010).
- 2010SET/KHA L. Seton, D. Khamar, I. J. Bradshaw, and G. A. Hutcheon, *Cryst. Growth Des.* **10**, 3879 (2010).
- 2010SHA/REN Y.-H. Shao, X.-N. Ren, and Z.-R. Liu, *J. Therm. Anal. Calorim.* **101**, 1135 (2010).
- 2010SOU/MOR C. C. S. Sousa, V. F. M. Morais, and M. M. Matos, *J. Chem. Thermodyn.* **42**, 1372 (2010).
- 2010SOU/SAT J. Soujanya, B. Satyavathi, and T. E. Vittal Prasad, *J. Chem. Thermodyn.* **42**, 621 (2010).
- 2010SUC/MUS M. Sucekska, S. M. Musanic, and I. F. Houra, *Thermochim. Acta* **510**, 9 (2010).
- 2010SVA/NOR M. Svard, F. L. Nordstrom, T. Jasnobulka, and A. C. Rasmuson, *Cryst. Growth Des.* **10**, 195 (2010).
- 2010SZT/LEG P. Szterner, B. Legendre, and M. Sghaier, *J. Therm. Anal. Calorim.* **99**, 325 (2010).
- 2010TON/LIU B. Tong, R.-B. Liu, C.-G. Meng, F.-Y. Yu, S.-H. Ji, and Z.-C. Tan, *J. Chem. Eng. Data* **55**, 119 (2010).
- 2010TON/TAN B. Tong, Z.-C. Tan, R.-B. Liu, C.-G. Meng, and J.-N. Zhang, *Energy Convers. Manage.* **51**, 1905 (2010).
- 2010TON/YU B. Tong, Y. Yu, Z.-C. Tan, C.-G. Meng, L.-J. Cui, G. Xia, and R.-B. Liu, *Thermochim. Acta* **499**, 117 (2010).
- 2010VAR/ABA M. A. Varfolomeev, D. I. Abaidullina, B. N. Solomonov, S. P. Verevkin, and V. N. Emel'yanenko, *J. Phys. Chem. B* **114**, 16503 (2010).
- 2010VEC S. Vecchio, *Thermochim. Acta* **499**, 27 (2010).
- 2010WAN/LAI T.-C. Wang, T.-Y. Lai, and Y.-P. Chen, *J. Chem. Eng. Data* **55**, 5797 (2010).
- 2010WAN/ZEN Q.-Y. Wang, H. Zeng, H. Song, Q.-S. Liu, and S. Yao, *J. Chem. Eng. Data* **55**, 5271 (2010).
- 2010WEI/WAN D. Wei, L. Wang, F. Yan, and C. Zhang, *Fluid Phase Equilib.* **291**, 66 (2010).
- 2010WID/BRU J. A. Widegren and T. J. Bruno, *Environ. Sci. Technol.* **44**, 388 (2010).
- 2010WID/BRU2 J. A. Widegren and T. J. Bruno, *J. Chem. Eng. Data* **55**, 159 (2010).
- 2010WU/REE H. Wu, N. Reeves-McLaren, J. Pokorny, J. Yarwood, and A. R. West, *Cryst. Growth Des.* **10**, 3141 (2010).
- 2010YAN/LEI W. Yang, Z. Lei, Y. Hu, X. Chen, and S. Fu, *Ind. Eng. Chem. Res.* **49**, 11170 (2010).
- 2010ZAB/KOL M. M. Zabransky, Z. Kolska, V. Ruzicka, Jr., and E. S. Domalski, *J. Phys. Chem. Ref. Data* **39**, 013103 (2010).
- 2010ZEN/LI Z.-X. Zeng, X.-N. Li, W.-L. Xue, C.-S. Zhang, and S.-C. Bian, *Ind. Eng. Chem. Res.* **49**, 5543 (2010).
- 2011AGA/VAR L. E. Agafonova, R. M. Varushchenko, A. I. Druzhinina, O. V. Polyakova, and Yu. S. Kolesov, *Russ. J. Phys. Chem.* **85**, 1516 (2011).
- 2011AHM/NEG N. C.-B. Ahmed, L. Negadi, I. Mokbel, and J. Jose, *J. Chem. Thermodyn.* **43**, 719 (2011).

- 2011ALM/MON A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Eng. Data* **58**, 4862 (2011).
- 2011AMA/PIN P. Amador, B. Pineda, A. Lopez, and H. Flores, *J. Chem. Thermodyn.* **43**, 1414 (2011).
- 2011BAZ/BLO A. B. Bazyleva, A. V. Blokhin, G. J. Kabo, M. B. Chiarpennikau, V. N. Emel'yanenko, S. P. Verevkin, and V. Diky, *J. Phys. Chem. B* **115**, 10064 (2011).
- 2011BEL/MOK A. Belabbaci, I. Mokbel, A. A. Kaci, J. Jose, and L. Negadi, *J. Chem. Thermodyn.* **43**, 17 (2011).
- 2011BEN/KHI M. Benziane, K. Khimeche, I. Mokbel, T. Sawaya, A. Dahmani, and J. Jose, *J. Chem. Eng. Data* **56**, 4736 (2011).
- 2011BIS/GOG M. R. Bissengaliyeva, D. B. Gogol, S. T. Taymasova, and N. S. Bekturganov, *J. Chem. Eng. Data* **56**, 195 (2011).
- 2011BOG/DAO E. Bogdani, R. Daoussi, S. Vessot, J. Jose, and J. Andrieu, *Chem. Eng. Res. Des.* **89**, 2606 (2011).
- 2011BOO/MON A. M. Booth, W. J. Montague, M. H. Barley, D. O. Topping, G. McFiggans, A. Garforth, and C. J. Percival, *Atmos. Chem. Phys.* **11**, 655 (2011).
- 2011CAI/XIA Z. Cairong, S. Xiaohua, C. Lingling, and W. Haifeng, *Fluid Phase Equilib.* **302**, 123 (2011).
- 2011CAS/RIB R. A. E. Castro, J. D. B. Ribeiro, T. M. R. Maria, M. R. Silva, C. Yueste-Vivas, J. Canotilho, and M. E. S. Eusebio, *Cryst. Growth Des.* **11**, 5396 (2011).
- 2011CHE/YAN Z.-G. Chen, W.-G. Yang, Y.-H. Hu, Z.-Y. Lei, Y.-H. Wang, and W.-Q. Wan, *J. Chem. Eng. Data* **56**, 2726 (2011).
- 2011COS/LIM J. C. S. Costa, C. F. R. A. C. Lima, M. A. A. Rocha, L. R. Gomes, and L. M. N. B. F. Santos, *J. Chem. Thermodyn.* **43**, 133 (2011).
- 2011DOM/POB U. Domanska, A. Pobudkowska, P. Pelczarska, and L. Zukowski, *Int. J. Pharm.* **403**, 115 (2011).
- 2011EGO/MAR V. M. Egorov, V. A. Marikhin, and L. P. Myasnikova, *Polym. Sci. Ser. A* **53**, 906 (2011).
- 2011EME/POR V. N. Emel'yanenko, S. V. Portnova, S. P. Verevkin, A. Skrzypczak, and T. Schubert, *J. Chem. Thermodyn.* **43**, 1500 (2011).
- 2011EME/POR2 V. N. Emel'yanenko, S. V. Portnova, S. P. Verevkin, and A. Skrzypczak, *J. Chem. Eng. Data* **56**, 3532 (2011).
- 2011EME/STE V. N. Emel'yanenko, E. N. Stepurko, S. P. Verevkin, and G. N. Roganov, *Russ. J. Phys. Chem.* **85**, 179 (2011).
- 2011EME/VER2 V. N. Emel'yanenko, S. P. Verevkin, M. A. Varfolomeev, V. V. Turovtsev, and Y. D. Orlov, *J. Chem. Eng. Data* **56**, 4183 (2011).
- 2011FAN/LI D. Fan, J. Li, J. Shi, C. Peng, H. Liu, Y. Hu, and P. Paricaud, *J. Chem. Eng. Data* **56**, 1323 (2011).
- 2011FEL/RAM H. Felix-Rivera, M. L. Ramirez-Cedeno, R. A. Sanchez-Cuprill, and S. P. Hernandez-Rivera, *Thermochim. Acta* **514**, 37 (2011).
- 2011FEN/DON C. Feng, J. Dong, and Y. Li, *Fluid Phase Equilib.* **309**, 201 (2011).
- 2011FER/RIB A. I. M. C. L. Ferreira and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **43**, 227 (2011).
- 2011FER/RIB2 A. I. M. C. L. Ferreira and M. A. V. Ribeiro da Silva, *J. Chem. Eng. Data* **56**, 4881 (2011).
- 2011FUL/RUZ M. Fulem, K. Ruzicka, and M. Ruzicka, *Fluid Phase Equilib.* **303**, 205 (2011).
- 2011GIM/TOR B. Gimeno, M. Torcal, A. M. Mainar, and P. Perez, *Fluid Phase Equilib.* **309**, 83 (2011).
- 2011GOR/WOJ A. Gorniak, A. Wojakowska, B. Karolewicz, and J. Pluta, *J. Therm. Anal. Calorim.* **104**, 1195 (2011).
- 2011HAC/MON F. Hacivelioglu, R. Montis, D. B. Davies, A. Kilic, M. B. Hursthouse, and S. J. Coles, *Cryst. Eng. Commun.* **13**, 4102 (2011).
- 2011HER/LEY C. Herman, T. Leyssens, V. Vermynen, V. Halloin, and B. Haut, *J. Chem. Thermodyn.* **43**, 677 (2011).
- 2011JON/MAA M. T. G. Jongmans, J. I. W. Maassen, A. J. Luijks, B. Schuur, and A. B. de Haan, *J. Chem. Eng. Data* **56**, 3510 (2011).
- 2011KAN/RAI S. Kant and R. N. Rai, *Thermochim. Acta* **512**, 49 (2011).
- 2011KHI/DJE K. Khimeche, F. Djellouli, A. Dahmani, and I. Mokbel, *J. Chem. Eng. Data* **56**, 4972 (2011).
- 2011KUM/VEI G. Kumaresan, R. Veiraj, and S. Iniyar, *J. Appl. Sci.* **11**, 3044–3048 (2011).
- 2011LEE/THO J. W. Lee, L. C. Thomas, and S. J. Schmidt, *J. Agric. Food Chem.* **59**, 684 (2011).
- 2011LI/BOU2 J. Li, S. A. Bourne, and M. R. Caira, *Chem. Commun.* **47**, 1530 (2011).
- 2011LIP/KRA S. V. Lipp, E. L. Krasnykh, and S. P. Verevkin, *J. Chem. Eng. Data* **56**, 800 (2011).
- 2011LIP/RAT D. Lipkind, N. Rath, J. S. Chickos, V. A. Pozdeev, and S. P. Verevkin, *J. Phys. Chem. B* **115**, 8785 (2011).
- 2011LOR/VON H. Lorenz, J. von Langermann, G. Sadiq, C. C. Seaton, R. J. Davey, and A. Seidel-Morgenstern, *Cryst. Growth Des.* **11**, 1549 (2011).
- 2011MAG/PYD A. Magon and M. Pyda, *Carbohydr. Res.* **346**, 2558 (2011).
- 2011MAH/PER N. Mahe, M.-A. Perrin, M. Barrio, B. Nicolai, I. B. Rietveld, J.-L. Tamarit, and R. Ceolin, *J. Pharm. Sci.* **100**, 2258 (2011).
- 2011MAS/KRA A. S. Maslakova, E. L. Krasnykh, and S. V. Levanova, *Russ. J. Phys. Chem.* **85**, 1695–1700 (2011).
- 2011MAT/KIM T. Mathuni, J.-I. Kim, and S.-J. Park, *J. Chem. Eng. Data* **56**, 89 (2011).
- 2011MAT/YAM H. Matsuda, H. Yamada, R. Takahashi, A. Koda, K. Kurihara, K. Tochigi, and K. Ochi, *J. Chem. Eng. Data* **56**, 5045 (2011).
- 2011MEJ/SEG A. Mejia, H. Segura, and M. Cartes, *J. Chem. Eng. Data* **56**, 3142 (2011).
- 2011MEL/PIN V. Meltzer and E. Pincu, *J. Chem. Thermodyn.* **23**, 1011 (2011).
- 2011MIR/KON E. A. Miroshnichenko, T. S. Kon'kova, Ya. O. Inozemtsev, and Yu. N. Matyushin, *Russ. Chem. Bull.* **60**, 36 (2011).
- 2011MIR/MAT2 M. S. Miranda, M. A. R. Matos, V. M. F. Morais, and J. F. Liebman, *J. Chem. Thermodyn.* **43**, 635 (2011).
- 2011MIR/MAT3 M. S. Miranda, M. A. R. Matos, V. M. F. Morais, and J. F. Liebman, *J. Phys. Chem. B* **115**, 6616 (2011).
- 2011MIR/MAT4 M. S. Miranda, M. A. R. Matos, V. M. F. Morais, and J. F. Liebman, *J. Chem. Eng. Data* **56**, 4516 (2011).
- 2011NAV/MAC P. S. Navare and J. C. MacDonald, *Cryst. Growth Des.* **11**, 2422 (2011).
- 2011NEG/KAC L. Negadi, A. A. Kaci, A. Negadi, and J. Jose, *Fluid Phase Equilib.* **300**, 135 (2011).
- 2011NOT/ROU R. Notario, M. V. Roux, C. Foces-Foces, M. A. V. Ribeiro da Silva, M. D. M. C. Ribeiro da Silva, A. F. L. O. M. Santos, R. Guzman-Mejia, and E. Juaristi, *J. Phys. Chem. B* **115**, 9401 (2011).
- 2011ORJ/YAN A. Orjuela, A. J. Yanez, J. Evans, A. M. Hassan, D. J. Miller, and C. T. Lira, *Fluid Phase Equilib.* **309**, 121 (2011).
- 2011PAU/KAB Y. U. Paulechka, G. J. Kabo, A. V. Blokhin, and D. S. Firaha, *J. Chem. Eng. Data* **56**, 4891 (2011).
- 2011PIC/DIO R. Picciochi, H. P. Diogo, and M. E. Minas da Piedade, *J. Pharm. Sci.* **100**, 594 (2011).
- 2011POR/KRA S. V. Portnova, E. L. Krasnykh, and S. P. Verevkin, *Fluid Phase Equilib.* **309**, 114 (2011).
- 2011POZ/VER V. A. Pozdeev and S. P. Verevkin, *J. Chem. Thermodyn.* **43**, 1791 (2011).
- 2011RAI/MUD R. N. Rai, S. R. Mudunuri, R. S. B. Reddi, V. S. A. Kumar Satuluri, S. Ganeshmoorthy, and P. K. Gupta, *J. Cryst. Growth* **321**, 72 (2011).
- 2011RED/GAN R. S. Reddi, S. Ganesamoorthy, P. K. Gupta, and R. N. Rai, *Fluid Phase Equilib.* **313**, 121 (2011).
- 2011RIB/AMA M. A. V. Ribeiro da Silva and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **43**, 1 (2011).
- 2011RIB/AMA2 M. A. V. Ribeiro da Silva and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **43**, 255 (2011).
- 2011RIB/AMA4 M. A. V. Ribeiro da Silva and L. M. P. F. Amaral, *J. Chem. Thermodyn.* **43**, 876 (2011).
- 2011RIE/BAR I. B. Rietveld, M. Barrio, J.-L. Tamarit, B. Do, and R. Ceolin, *J. Phys. Chem. B* **115**, 14698 (2011).
- 2011ROU/MAR M. V. Roux, G. Martin-Valcarcel, R. Notario, S. Kini, J. S. Chickos, and J. F. Liebman, *J. Chem. Eng. Data* **56**, 1220 (2011).
- 2011ROU/NOT M. V. Roux, R. Notario, C. Foces-Foces, M. Temprado, F. Rox, V. N. Emel'yanenko, and S. P. Verevkin, *J. Phys. Chem. A* **115**, 3167 (2011).

- 2011ROU/NOT2 M. V. Roux, R. Notario, M. Segura, R. Guzman-Mejia, E. Juaristi, and J. S. Chickos, *J. Chem. Eng. Data* **56**, 3807 (2011).
- 2011ROU/TEM M. V. Roux, M. Temprado, P. Jimenez, R. Notario, A. R. Parameswar, A. V. Demchenko, J. S. Chickos, C. A. Deakynne, and J. F. Liebman, *J. Chem. Eng. Data* **56**, 4725 (2011).
- 2011SAN/MON L. M. B. F. Santos, A. R. Monteiro, J. M. Goncalves, W. E. Acree, Jr., and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.* **43**, 1044 (2011).
- 2011SAN/RIB A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Phys. Chem. B* **115**, 4939 (2011).
- 2011SAN/RIB2 A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **43**, 1480 (2011).
- 2011SAN/RIB3 A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Phys. Chem. B* **115**, 12549 (2011).
- 2011SAP/POK E. Sapei, J.-P. Pokki, P. Uusi-Kyyny, K. I. Keskinen, and V. Alopaeus, *Fluid Phase Equilib.* **307**, 180 (2011).
- 2011SAP/UUS E. Sapei, P. Uusi-Kyyny, K. I. Keskinen, J.-P. Pokki, and V. Alopaeus, *Fluid Phase Equilib.* **301**, 200 (2011).
- 2011SIN/RAI M. Singh, R. N. Rai, and U. S. Rai, *Am. J. Anal. Chem.* **2**, 953 (2011).
- 2011SOU/MAT C. C. S. Sousa, M. A. R. Matos, and V. M. F. Morais, *J. Chem. Thermodyn.* **43**, 1159 (2011).
- 2011SOU/MAT2 C. C. S. Sousa, M. A. R. Matos, and V. M. F. Morais, *J. Chem. Thermodyn.* **43**, 1435 (2011).
- 2011SOU/NIS K. Sou, K. Nishikawa, Y. Koga, and K.-I. Tozaki, *Chem. Phys. Lett.* **506**, 217 (2011).
- 2011TAN/FUJ N. Tanimoto and H. Fujimori, *J. Non-Cryst. Solids* **357**, 731 (2011).
- 2011TEM/ROU M. Temprado, M. V. Roux, F. Ros, R. Notario, M. Segura, and J. S. Chickos, *J. Chem. Eng. Data* **56**, 263 (2011).
- 2011TOR/GAR M. Torcal, S. Garcia-Abarrio, J. F. Pardo, A. M. Mainar, and J. S. Urieta, *J. Chem. Eng. Data* **56**, 3208 (2011).
- 2011UMN/CHI P. Umhahanant and J. S. Chickos, *J. Pharm. Sci.* **100**, 1847 (2011).
- 2011VEC/BRU S. Vecchio and B. Brunetti, *Thermochim. Acta* **515**, 84 (2011).
- 2011VER/EME S. P. Verevkin, V. N. Emel'yanenko, A. A. Pimerzin, and E. E. Vishnevskay, *J. Phys. Chem. A* **115**, 1992 (2011).
- 2011VER/EME2 S. P. Verevkin, V. N. Emel'yanenko, M. Algarra, J. M. Lopez-Romero, F. Aguiar, J. E. Rodriguez-Borges, and J. C. G. Esteves da Silva, *J. Chem. Thermodyn.* **43**, 1652 (2011).
- 2011VER/EME3 S. P. Verevkin, V. N. Emel'yanenko, A. A. Pimerzin, and E. E. Vishnevskay, *J. Phys. Chem. A* **115**, 12271 (2011).
- 2011VER/TON S. P. Verevkin, B. Tong, U. Welz-Biermann, and Y. Chernyak, *J. Chem. Eng. Data* **56**, 4400 (2011).
- 2011VER/ZAI S. P. Verevkin, D. H. Zaitsau, V. N. Emel'yanenko, Y. U. Paulechka, A. V. Blokhin, A. B. Bazyleva, and G. J. Kabo, *J. Phys. Chem. B* **115**, 4404 (2011).
- 2011WYR/HEB D. Wyrzykowski, E. Hebanowska, G. Nowak-Wicz, M. Makowski, and L. Chmyrzynski, *J. Therm. Anal. Calorim.* **104**, 731 (2011).
- 2011XIN/YAN Y. Xing, X. Yang, W. Fang, Y. Guo, and R. Lin, *Fluid Phase Equilib.* **305**, 192 (2011).
- 2012AGA/MOS E. V. Agafonova, V. Yu. Moshchenskii, and M. L. Tkachenko, *Russ. J. Phys. Chem.* **86**, 1035 (2012).
- 2012AGA/VAR L. E. Agafonova, R. M. Varushchenko, A. I. Druzhinina, and O. V. Polyakova, *J. Chem. Thermodyn.* **47**, 120 (2012).
- 2012AHM/NEG N. C.-B. Ahmed, L. Negadi, I. Mokbel, A. A. Kaci, and J. Jose, *J. Chem. Thermodyn.* **44**, 116 (2012).
- 2012ALM/MAT A. R. R. P. Almeida, M. A. R. Matos, M. J. S. Monte, and V. M. F. Morais, *J. Chem. Thermodyn.* **47**, 81 (2012).
- 2012ALM/MON A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Thermodyn.* **44**, 163 (2012).
- 2012ALM/MON2 A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Thermodyn.* **53**, 100 (2012).
- 2012AMA/RIB L. M. P. F. Amaral and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **48**, 65 (2012).
- 2012BAD/TYU V. G. Badelin, E. Yu. Tyunina, A. V. Krasnov, V. V. Tyunina, N. I. Giricheva, and A. V. Girichev, *Russ. J. Phys. Chem. A* **86**, 457 (2012).
- 2012BAG/RED P. P. Bag and C. M. Reddy, *Cryst. Growth Des.* **12**, 2740 (2012).
- 2012BIT/MEN K. Bitchikh, A.-H. Menial, and W. Louaer, *Energy Procedia* **18**, 1152 (2012).
- 2012BOO/BAN A. M. Booth, T. Bannan, M. R. McGillen, M. H. Barley, D. O. Topping, G. McFiggans, and C. J. Percival, *RSC Adv.* **2**, 4430 (2012).
- 2012BRU/MAI G. Bruni, M. Maietta, L. Maggi, M. Bini, D. Capsoni, S. Ferrari, M. Boiocchi, V. Berbenni, C. Milanese, and A. Marini, *Cryst. Eng. Commun.* **14**, 6035 (2012).
- 2012BUT/MAR C. Butterhof, T. Martin, P. Ectors, D. Zahn, P. Niemietz, J. Senker, C. Nather, and J. Breu, *Cryst. Growth Des.* **12**, 5365 (2012).
- 2012CHA/ARO2 R. Chadha, P. Arora, and S. Bhandari, *ISRN Thermodyn.* **2012**, 671027 (2012).
- 2012CHA/LAY E. L. Charsley, P. G. Laye, and H. M. Markham, *Thermochim. Acta* **539**, 115 (2012).
- 2012DAV/HER J. Z. Davalos, R. Herrero, A. Chana, A. Guerrero, P. Jimenez, and J. M. Santiuste, *J. Phys. Chem. A* **116**, 2261 (2012).
- 2012EME/VER V. N. Emel'yanenko, S. P. Verevkin, R. V. Ralys, V. V. Turovtsev, and V. Yu. Orlov, *Russ. J. Phys. Chem. A* **86**, 1493 (2012).
- 2012FER/RIB A. I. M. C. L. Ferreira and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **48**, 84 (2012).
- 2012FOR/MEL A. Forte, C. I. Melo, R. Bogel-Lukasik, and E. Bogel-Lukasik, *Fluid Phase Equilib.* **318**, 89 (2012).
- 2012GAR/VER I. V. Garist, S. P. Verevkin, J. E. Bara, M. S. Hindman, and S. P. O. Danielson, *J. Chem. Eng. Data* **57**, 1803 (2012).
- 2012GIM/MAR B. Gimeno, S. Martinez, J. S. Urieta, and P. Perez, *J. Chem. Eng. Data* **57**, 3026 (2012).
- 2012GON/MIN E. M. Goncalves and M. E. Minas de Piedade, *J. Chem. Thermodyn.* **47**, 362 (2012).
- 2012GOR/ALE C. H. Gorbitz, F. Alebachew, and V. Petricek, *J. Phys. Chem. B* **116**, 10715 (2012).
- 2012GUP/AGR P. Gupta, T. Agrawal, S. S. Das, and N. B. Singh, *J. Chem. Thermodyn.* **48**, 291 (2012).
- 2012HAN/SOL R. Hani, R. Solimando, L. Negadi, J. Jose, and A. Ait-Kaci, *J. Chem. Thermodyn.* **54**, 83 (2012).
- 2012HAN/ZHO X.-W. Han, C.-R. Zhou, and X.-H. Shi, *J. Therm. Anal. Calorim.* **109**, 441 (2012).
- 2012HAS/DRA D. Hasty, J. Drapekin, T. Subramanian, T. C. Winter, J. S. Chickos, A. A. Samarov, A. V. Yermalayeu, and S. P. Verevkin, *J. Chem. Eng. Data* **57**, 2350 (2012).
- 2012HIK/WEE W. M. Hikal and B. L. Weeks, *J. Therm. Anal. Calorim.* **110**, 955 (2012).
- 2012HUL/BAS R. J. Hulse, R. S. Basu, R. R. Singh, and R. H. P. Thomas, *J. Chem. Eng. Data* **57**, 3581 (2012); Erratum, **59**, 531 (2014).
- 2012JEG/PRA B. Jeganathan and V. Prakya, *Iranian J. Pharm. Sci.* **8**, 83 (2012).
- 2012JOS/BER A. Joseph, C. E. S. Bernardes, and M. E. Minas da Piedade, *J. Chem. Thermodyn.* **55**, 23 (2012).
- 2012KAN/RAI S. Kant, U. S. Rai, and R. N. Rai, *J. Therm. Anal. Calorim.* **110**, 551 (2012).
- 2012KLI/LEI K. Klimova and J. Leitner, *Thermochim. Acta* **550**, 59 (2012).
- 2012KON/MAT T. S. Kon'kova, Yu. N. Matyushin, E. A. Miroshnichenko, S. V. Prokhorova, J. O. Inozemtsev, A. V. Inozemtsev, A. B. Sheremetev, A. M. Kozeev, and L. L. Pasheneno, *Int. Annu. Conf. ICT* **43**, 76/1 (2012).
- 2012LAA/ZAI H. Laavi, A. Zaitseva, J.-P. Pokki, P. Uusi-Kyyny, Y. Kim, and V. Alopaeus, *J. Chem. Eng. Data* **57**, 3092 (2012).
- 2012LIM/JAN J. Lim, S. Jang, M. S. Shin, and H. Kim, *Fluid Phase Equilib.* **332**, 144 (2012).
- 2012LOU/MEL C. Lourenco, C. I. Melo, R. Bogel-Lukasik, and E. Bogel-Lukasik, *J. Chem. Eng. Data* **57**, 1525 (2012).
- 2012MAH/AND C. Maheshwari, V. Andre, S. Reddy, L. Roy, T. Duarte, and N. Rodriguez-Hornedo, *CrystEngComm* **14**, 4801 (2012).
- 2012MAH/RAS A. Maher, A. C. Rasmuson, D. M. Croker, and B. K. Hodnett, *J. Chem. Eng. Data* **57**, 3525 (2012).

- 2012MAH/SEA A. Maher, C. C. Seaton, S. Hudson, D. M. Croker, A. C. Rasmuson, and B. K. Hodnett, *Cryst. Growth Des.* **12**, 6223 (2012).
- 2012MAN/VIL M. S. Manic, D. Villanueva, T. Fornari, A. J. Queimada, E. A. Macedo, and V. Najdanovic-Visak, *J. Chem. Thermodyn.* **48**, 93 (2012).
- 2012MEL/PIN V. Meltzer and E. Pincu, *Central Eur. J. Chem.* **10**, 1584 (2012).
- 2012MIR/MAT M. S. Miranda, M. A. R. Matos, V. M. F. Morais, and J. F. Liebman, *J. Chem. Thermodyn.* **50**, 30 (2012).
- 2012MOK/SAW I. Mokbel, T. Sawaya, M.-L. Zanota, R. A. Naccoul, J. Jose, and C. de Bellefon, *J. Chem. Eng. Data* **57**, 284 (2012).
- 2012PAL/ORA M. Palczewska-Tulinska and P. Oracz, *J. Chem. Eng. Data* **57**, 3176 (2012).
- 2012RAM/ULI L. A. Ramos, S. E. Ulic, R. M. Romano, Y. V. Vishnevskiy, R. J. F. Berger, N. W. Mitzel, H. Beckers, H. Willner, S. Tong, M. Ge, and C. O. Della Vedova, *J. Phys. Chem. A* **116**, 11586 (2012).
- 2012RAN/BHA B. K. Rana, N. V. Bhate, S. M. Mahajani, and S. P. Dabke, *J. Chem. Eng. Data* **57**, 3483 (2012).
- 2012RED/KUM K. R. Reddy, D. B. K. Kumar, G. S. Rao, P. S. S. Sri, and C. Rambabu, *Fluid Phase Equilib.* **336**, 52 (2012).
- 2012RED/SAT R. S. B. Reddi, V. S. A. K. Satuluri, U. S. Rai, and R. N. Rai, *J. Therm. Anal. Calorim.* **107**, 377–385 (2012).
- 2012RIB/CAB M. A. V. Ribeiro da Silva and J. I. T. A. Cabral, *J. Chem. Thermodyn.* **47**, 138 (2012).
- 2012RIB/FRE M. D. M. C. Ribeiro da Silva, V. L. S. Freitas, M. A. A. Vieira, M. J. Sottomayor, and W. E. Acree, Jr., *J. Chem. Thermodyn.* **49**, 146–153 (2012).
- 2012RIB/GAL M. A. V. Ribeiro da Silva, T. L. P. Galvao, I. M. Rocha, and A. F. L. O. M. Santos, *J. Chem. Thermodyn.* **54**, 330 (2012).
- 2012RIB/MON M. A. V. Ribeiro da Silva, M. J. S. Monte, I. M. Rocha, and A. Cimas, *J. Org. Chem.* **77**, 4312 (2012).
- 2012RIO/ORT R. Rios, J. Ortega, and L. Fernandez, *J. Chem. Eng. Data* **57**, 3210 (2012).
- 2012ROD/SOL M. N. Rodnikova, I. A. Solonina, M. R. Kiselev, and S. V. Makaev, *Russ. J. Phys. Chem. A* **86**, 1745 (2012).
- 2012ROU/NOT M. V. Roux, R. Notario, M. Segura, and J. S. Chickos, *J. Chem. Eng. Data* **57**, 249 (2012).
- 2012ROU/NOT2 M. V. Roux, R. Notario, D. H. Zaitsau, V. E. Emel'yanenko, and S. P. Verevkin, *J. Phys. Chem. A* **116**, 4639 (2012).
- 2012ROU/NOT3 M. V. Roux, R. Notario, M. Segura, J. S. Chickos, and J. F. Liebman, *J. Phys. Chem. Org. Chem.* **25**, 916 (2012).
- 2012ROZ/BRU J. Rozmus, I. Brunella, P. Mouglin, and J. C. de Hemptinne, *J. Chem. Eng. Data* **57**, 2915 (2012).
- 2012SAM/NAZ A. A. Samarov, A. G. Nazmutdinov, and S. P. Verevkin, *Fluid Phase Equilib.* **334**, 70 (2012).
- 2012SAN/RIB A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **48**, 194 (2012).
- 2012SHA/LAL B. L. Sharma, P. Lal, M. Sharma, and A. K. Sharma, *J. Therm. Anal. Calorim.* **109**, 447 (2012).
- 2012SHA/RAI K. P. Sharma and R. N. Rai, *Thermochim. Acta* **535**, 66 (2012).
- 2012SHA/RED K. P. Sharma, R. S. B. Reddi, and R. N. Rai, *J. Therm. Anal. Calorim.* **110**, 545 (2012).
- 2012SHA/SHA K. P. Sharma, P. R. Shakyia, and R. Rai, *Sci. World* **10**, 91 (2012).
- 2012SIL/PER V. M. T. M. Silva, C. S. M. Pereira, A. E. Rodrigues, S. P. Verevkin, V. N. Emel'yanenko, I. V. Garist, and J. Gmehling, *Ind. Eng. Chem. Res.* **39**, 12723 (2012).
- 2012SUS/ROD P. Susial, J. J. Rodriguez-Henriquez, J. C. Apolinario, V. D. Castillo, and H. J. Estupinan, *J. Serb. Chem. Soc.* **77**, 1243 (2012).
- 2012UMN/CHI P. Umnahanant and J. Chickos, *J. Chem. Eng. Data* **57**, 1331 (2012).
- 2012UMN/HAS P. Umnahanant, D. Hasty, and J. S. Chickos, *J. Pharm. Sci.* **101**, 2045 (2012).
- 2012VER/CHE S. P. Verevkin and Y. Chernyak, *J. Chem. Thermodyn.* **47**, 328 (2012).
- 2012VER/EME S. P. Verevkin and V. N. Emel'yanenko, *J. Chem. Thermodyn.* **46**, 94 (2012).
- 2012VER/EME4 S. P. Verevkin, V. N. Emel'yanenko, R. Notario, M. V. Roux, J. S. Chickos, and J. F. Liebman, *J. Phys. Chem. Lett.* **3**, 3454 (2012).
- 2012VIV/FRE M. L. F. Viveiros, V. L. S. Freitas, N. Vale, J. R. B. Gomes, P. Gomes, and M. D. M. C. Ribeiro da Silva, *J. Phys. Org. Chem.* **25**, 420 (2012).
- 2012WAN/DEN T.-C. Wang and K.-C. Deng, *J. Chem. Eng. Data* **57**, 78 (2012).
- 2012WAN/HU K. Wang, Y. Hu, W. Yang, Y. Shi, and Y. Li, *Thermochim. Acta* **538**, 79 (2012).
- 2012WAN/LI T.-C. Wang, Y.-J. Li, and Y.-P. Chen, *J. Chem. Eng. Data* **57**, 3519 (2012).
- 2012WIL/CHI J. E. Wilson and J. Chickos, *J. Chem. Eng. Data* **57**, 2281 (2012).
- 2012XIN/ZHA X. Xing, F. Zhao, S. Ma, K. Xu, L. Xiao, H. Gao, T. An, and R. Hu, *Propellants, Explos., Pyrotech.* **37**, 179 (2012).
- 2012YAN/THA H. Yang, J. Thati, and A. C. Rasmuson, *J. Chem. Thermodyn.* **48**, 150 (2012).
- 2012ZAI/NEG L. K. Zaitri, L. Negadi, I. Mokbel, N. Msakni, and J. Jose, *Fuel* **95**, 438 (2012).
- 2012ZEN/CHE Z.-X. Zeng, J. Chen, W.-I. Xue, P. Zhang, and Y. Xie, *Can. J. Chem. Eng.* **90**, 570 (2012).
- 2012ZHA/DU W. Zhang, W. Du, N. Meng, R. Sun, Y. Shao, and C. Li, *Energy Procedia* **16**, 1078 (2012).
- 2013AGA/MOS E. V. Agafonova, Yu. V. Moshchenskii, and M. L. Tkachenko, *Russ. J. Phys. Chem. A* **87**, 1291 (2013).
- 2013ALM/MON A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Thermodyn.* **57**, 160 (2013).
- 2013ALM/MON2 A. R. R. P. Almeida, M. J. S. Monte, M. A. R. Matos, and V. M. F. Morais, *J. Chem. Thermodyn.* **59**, 222 (2013).
- 2013ALM/MON3 A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Thermodyn.* **65**, 150 (2013).
- 2013AMA/RIB L. M. P. F. Amaral and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **57**, 301 (2013).
- 2013AMA/SAN L. M. P. F. Amaral, A. F. L. O. M. Santos, M. D. M. C. Ribeiro da Silva, and R. Notario, *J. Chem. Thermodyn.* **58**, 315 (2013).
- 2013AMA/SZT L. M. P. F. Amaral, P. Szterner, and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **64**, 187 (2013).
- 2013BAR/GIL C. Barreneche, A. Gil, F. Sheth, A. I. Fernandez, and L. F. Cabeza, *Solar Energy* **94**, 344 (2013).
- 2013BEN/KHI2 M. Benziane, K. Khimeche, I. Mokbel, A. Dahmani, and J. Jose, *J. Chem. Eng. Data* **58**, 492 (2013).
- 2013BLO/KOH A. V. Blokhin, S. V. Kohut, G. J. Kabo, E. N. Stepurko, Y. U. Paulechka, and O. V. Voitkevich, *Thermochim. Acta* **565**, 221 (2013).
- 2013BOU/TEY B. Bouillot, S. Teychene, and B. Biscans, *Ind. Eng. Chem. Res.* **52**, 9276 (2013).
- 2013BRA/AMH C. Brandel, Y. Amharar, J. M. Rollinger, U. J. Griesser, Y. Cartigny, S. Petit, and G. Coquerel, *Mol. Pharm.* **10**, 3850 (2013).
- 2013BUR/STR A. U. Burman and K. H. U. Strom, *J. Chem. Eng. Data* **58**, 257 (2013).
- 2013CAR/LUC S. P. Carvalho, E. F. Lucas, G. Gonzalez, and L. S. Spinelli, *J. Braz. Chem. Soc.* **24**, 1998 (2013).
- 2013CAR/RHA L. Carpentier, K. F. Rharrassi, P. Derollez, and Y. Guinet, *Thermochim. Acta* **556**, 63 (2013).
- 2013CHE/XIE Z. Chen, C. Xie, Z. Xu, Y. Wang, H. Zhao, and H. Hao, *J. Chem. Eng. Data* **58**, 143 (2013).
- 2013CHI/DER N. Chialli-Baba-Ahmed, F. Dergal, L. Negadi, and I. Mokbel, *J. Chem. Thermodyn.* **63**, 44 (2013).
- 2013DAV/KIL P. S. Davis and J. E. Kilpatrick, *J. Chem. Thermodyn.* **58**, 134 (2013).
- 2013DOS/MOR A. D. dos Santos, A. R. C. Morais, C. Melo, R. Bogel-Lukasik, and E. Bogel-Lukasik, *Fluid Phase Equilib.* **356**, 18 (2013).
- 2013EME/VER V. N. Emel'yanenko and S. P. Verevkin, *Vest. St. Peter. Ser. Fiz. Khim.* **113** (2013).
- 2013FER/RIB A. I. M. C. L. Ferreira and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **59**, 94 (2013).

- 2013FLO/MEN H. Flores, J. Mentado, E. A. Camarillo, A. Ximello, and M. A. Amador, *Struct. Chem.* **24**, 2083 (2013).
- 2013FUL/VLA A. Fulas, G. Vlase, C. Grigorie, I. Ledeti, P. Albu, M. Bilanin, and T. Vlase, *J. Therm. Anal. Calorim.* **113**, 265 (2013).
- 2013GAL/RIB T. L. P. Galvao, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **62**, 186 (2013).
- 2013GAL/ROC T. L. P. Galvao, I. M. Rocha, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *J. Phys. Chem. C* **117**, 5826 (2013).
- 2013GAN/BAR I. Gana, M. Barrio, B. Do, J.-L. Tamarit, R. Ceolin, and I. B. Rietveld, *Int. J. Pharm.* **456**, 480 (2013).
- 2013GOB/GUT C. Gobble, A. Gutterman, and J. S. Chickos, *Struct. Chem.* **24**, 1903 (2013).
- 2013GOB/RAT C. Gobble, N. Rath, and J. Chickos, *J. Chem. Eng. Data* **58**, 2600 (2013).
- 2013GRI/MAR G. S. Grigoryan and Sh.L.A. Markaryan, *Russ. J. Phys. Chem.* **87**, 191 (2013).
- 2013GUT/RAT A. Gutterman, N. Rath, and J. Chickos, *J. Chem. Eng. Data* **58**, 749 (2013).
- 2013HIK/WEE W. M. Hikal and B. L. Weeks, *Chem. Phys.* **415**, 228 (2013).
- 2013HUA/LU J. Huang, S. Lu, X. Kong, S. Liu, and Y. Li, *Materials* **6**, 4758 (2013).
- 2013HUA/LV G. Huang and C. Lv, *J. Chem. Eng. Data* **58**, 279 (2013).
- 2013HUN/SUT S. Hunter, T. Sutinen, S. F. Parker, C. A. Morrison, D. M. Williamson, S. Thompson, P. J. Gould, and C. R. Pulham, *J. Phys. Chem. C* **117**, 8062 (2013).
- 2013JIA/HU X.-M. Jiang, Y.-H. Hu, W.-G. Yang, Z.-Y. Lei, R.-R. Tang, and F. Shen, *J. Sol. Chem.* **42**, 272 (2013).
- 2013JIA/LI D. Jia, Y. Li, Y. Li, and C. Li, *J. Chem. Eng. Data* **58**, 3183 (2013).
- 2013JUS/ZIE E. Juszyńska-Galazka, P. M. Zielinski, M. Massalska-Arodz, and J. Krawczyk, *Acta Phys. Pol., A* **124**, 917 (2013).
- 2013KAN V. Kant, *Bull. Pharm. Med. Sci.* **1**, 117 (2013).
- 2013KUM/NAN S. S. Kumar and A. Nangia, *Cryst. Eng. Commun.* **15**, 6498 (2013).
- 2013LI/LU Q. Li, F. Lu, Y. Tian, S. Feng, Y. Shen, and B. Wang, *J. Chem. Eng. Data* **58**, 1020 (2013).
- 2013LI/TAN R.-C. Li and Z.-C. Tan, *J. Chem. Eng. Data* **58**, 2137 (2013).
- 2013LI/ZHA Y. Li, H. Zhao, M. Mao, and Z. Yang, *J. Chem. Eng. Data* **58**, 1629 (2013).
- 2013LIM/JAN J. Lim, S. Jang, H. K. Cho, M. S. Shin, and H. Kim, *J. Chem. Thermodyn.* **57**, 295 (2013).
- 2013LIU/ZHA R. Liu, T. Zhang, Y. Liu, L. Yang, and Z. Zhou, *J. Therm. Anal. Calorim.* **112**, 1523 (2013).
- 2013LOM/GIN L. Lomba, B. Giner, C. Lafuente, S. Martin, and H. Artigas, *J. Chem. Eng. Data* **58**, 1193 (2013).
- 2013LOM/LAF L. Lomba, C. Lafuente, M. Garcia-Mardones, I. Gascon, and B. Giner, *J. Chem. Thermodyn.* **65**, 34 (2013).
- 2013MAN/VOR A. N. Manin, A. P. Voronin, and G. L. Perlovich, *Thermochim. Acta* **551**, 17 (2013).
- 2013MEJ/OLI A. Mejia, M. B. Oliveira, H. Segura, M. Cartes, and J. A. P. Coutinho, *Fluid Phase Equilib.* **345**, 60 (2013).
- 2013MEL/BOG C. I. Melo, R. Bogel-Lukasik, M. N. Ponte, and E. Bogel-Lukasik, *Fluid Phase Equilib.* **338**, 209 (2013).
- 2013MIR/MAT M. S. Miranda, M. A. R. Matos, and V. M. F. Morais, *J. Chem. Thermodyn.* **62**, 170 (2013).
- 2013MOR/ELL K. M. Morgan, J. A. Ellis, J. Lee, A. Fulton, S. L. Wilson, P. S. Dupart, and R. Dastorri, *J. Org. Chem.* **78**, 4303 (2013).
- 2013NAT/JES C. Nather, I. Jess, P. G. Jones, C. Taouss, and N. Teschmit, *Cryst. Growth Des.* **13**, 1676 (2013).
- 2013NEG/BAR Ph. Negrier, M. Barrio, J. Ll. Tamarit, D. Mondieig, M. J. Zuriaga, and S. C. Perez, *Cryst. Growth Des.* **13**, 2143 (2013).
- 2013NOT/EME R. Notario, V. N. Emel'yanenko, M. V. Roux, F. Ros, S. P. Verevkin, J. S. Chickos, and J. F. Liebman, *J. Phys. Chem. A* **117**, 244 (2013).
- 2013PAL/MCC K. J. Paluch, T. McCabe, H. Muller-Bunz, O. I. Corrigan, A. M. Healy, and L. Tajber, *Mol. Pharm.* **10**, 3640 (2013).
- 2013PER/BLO2 G. L. Perlovich, S. V. Blokhina, M. V. Ol'khovich, A. V. Sharapova, and A. N. Proshin, *J. Sol. Chem.* **42**, 2057 (2013).
- 2013PER/KAZ G. L. Perlovich, V. P. Kazachenko, N. N. Strakhova, K.-J. Schaper, and O. A. Raevisky, *J. Chem. Eng. Data* **58**, 2659 (2013).
- 2013RED/BEN P. Reddy, T. P. Benecke, and D. Ramjugernath, *J. Chem. Thermodyn.* **58**, 330 (2013).
- 2013RIB/AMA M. A. V. Ribeiro da Silva, L. M. P. F. Amaral, and P. Szterner, *J. Chem. Thermodyn.* **57**, 380 (2013).
- 2013ROC/GAL I. M. Rocha, T. L. P. Galvao, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *Struct. Chem.* **24**, 1935 (2013).
- 2013SAN/AMA A. F. L. O. M. Santos, L. M. P. F. Amaral, M. D. M. C. Ribeiro da Silva, M. V. Roux, and R. Notario, *J. Chem. Thermodyn.* **58**, 29 (2013).
- 2013SAN/RIB A. F. L. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **57**, 454 (2013).
- 2013SAN/RIB2 A. F. L. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **58**, 476 (2013).
- 2013SAN/RIB4 A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Phys. Chem. A* **117**, 5195 (2013).
- 2013SAN/RIB5 A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **67**, 190 (2013).
- 2013SCH/BUC B. J. Schindler, J. H. Buchanan, J. H. Mahle, G. W. Peterson, and T. G. Glover, *J. Chem. Eng. Data* **58**, 1806 (2013).
- 2013SIL/CIM A. L. R. Silva, A. Cimas, and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.* **57**, 212 (2013).
- 2013SIL/CIM2 A. L. R. Silva, A. Cimas, N. Vale, P. Gomes, M. J. S. Monte, and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.* **58**, 158 (2013).
- 2013SIL/CIM3 A. L. R. Silva, A. Cimas, and M. D. M. C. Ribeiro da Silva, *Struct. Chem.* **24**, 1863 (2013).
- 2013SIM/BER R. G. Simoes, C. E. S. Bernardes, H. P. Diogo, F. Agapito, and M. E. Minas da Piedade, *Mol. Pharm.* **10**, 2713–2722 (2013).
- 2013SIM/BER2 R. G. Simoes, C. E. S. Bernardes, and M. E. Minas da Piedade, *Cryst. Growth Des.* **13**, 2803 (2013).
- 2013SIN/PAN M. Singh, P. Pandey, R. N. Rai, and U. S. Rai, *J. Therm. Anal. Calorim.* **113**, 977 (2013).
- 2013SOS/MOR C. C. S. Sosa, V. M. F. Morais, and M. A. R. Matos, *J. Chem. Thermodyn.* **56**, 83 (2013).
- 2013SOU/MAT C. C. S. Sousa, M. A. R. Matos, L. M. N. B. F. Santos, and V. M. F. Morais, *J. Chem. Thermodyn.* **67**, 210 (2013).
- 2013STE/FUL V. Stejfa, M. Fulem, K. Ruzicka, C. Cervinka, M. A. A. Rocha, L. M. N. B. F. Santos, and B. Schroder, *J. Chem. Thermodyn.* **60**, 117 (2013).
- 2013SVA/RAS M. Svard and A. C. Rasmuson, *Cryst. Growth Des.* **13**, 1140 (2013).
- 2013THO/CHI M. Thornton, J. Chickos, I. V. Garist, M. A. Varfolomeev, A. A. Svetlov, and S. P. Verevkin, *J. Chem. Eng. Data* **58**, 2018 (2013).
- 2013TRA/KHI D. Trache, K. Khimeche, R. Benelmir, and A. Dahmani, *Thermochim. Acta* **565**, 8 (2013).
- 2013TYU/BAD E. Yu. Tyunina and V. G. Badelin, *Russ. J. Gen. Chem.* **83**, 708 (2013).
- 2013UUS/DEL P. Uusi-Kyyny, C. Dell'era, A. Penttila, M. Pakkanen, and V. Alopaeus, *Fluid Phase Equilib.* **338**, 164 (2013).
- 2013VEC S. Vecchio, *Struct. Chem.* **24**, 1821 (2013).
- 2013VEC/BRU S. Vecchio and B. Brunetti, *Fluid Phase Equilib.* **338**, 148 (2013).
- 2013VEN/BEN J. G. Venerai, T. Benazzi, M. A. Mazutti, F. A. P. Voll, L. Cardozo-Filho, M. I. Corazza, R. Guirardello, and J. V. Oliveira, *J. Chem. Thermodyn.* **58**, 398 (2013).
- 2013WAN L. Wang, *J. Mol. Liq.* **188**, 55 (2013).
- 2013WAN/GUO Y. Wang, C. Guo, X. Liu, S. Huang, B. Wang, and H. Zheng, *Fluid Phase Equilib.* **342**, 47 (2013).
- 2013WAN/LI H. Wang, L. Li, and C. Ye, *Fluid Phase Equilib.* **342**, 42 (2013).
- 2013WAN/LV L. Wang and T.-T. Lv, *J. Mol. Liq.* **181**, 29 (2013).
- 2013WIL/HUL B. R. Williams, M. S. Hulet, A. Brozena, R. W. Miles, Jr., and D. E. Tavalet, *J. Chem. Eng. Data* **58**, 1679 (2013).

- 2013XU/LI D. Xu, H. Li, and Z. Li, *J. Chem. Eng. Data* **58**, 3110 (2013).
- 2013YE/DON C. S. Ye, J. Dong, and L. Li, *J. Chem. Eng. Chin. Univ.* **27**, 21 (2013).
- 2013ZAI/YER D. H. Zaitsau, A. V. Yermalayeu, V. N. Emel'yanenko, C. Schick, S. P. Verevkin, A. A. Samarov, S. Schlenk, and P. Wasserscheid, *Z. Phys. Chem.* **227**, 205 (2013).
- 2013ZHA/LV Z. Zhang, M. Lv, D. Huang, P. Jia, D. Sun, and W. Li, *J. Chem. Eng. Data* **58**, 3054 (2013).
- 2013ZHA/XIA H. Zhang, Q. Xia, Y. Yang, F.-B. Zhang, and G. L. Zhang, *Ind. Eng. Chem. Res.* **52**, 5230 (2013).
- 2013ZHA/YAN W. Zhang, Z. Q. Yang, J. Lu, and J. Lu, *J. Chem. Eng. Data* **58**, 2307 (2013).
- 2014ACH/EME F. Achraimer, V. N. Emel'yanenko, W. Tantawy, S. P. Verevkin, and H. Zipse, *J. Phys. Chem. B* **118**, 10426 (2014).
- 2014AGA/MOS E. V. Agafonova, Y. V. Moshchenskiy, and M. L. Tkachenko, *Thermochim. Acta* **580**, 1 (2014).
- 2014ALM/CUN A. R. R. P. Almeida, A. F. G. Cunha, M. A. R. Matos, V. M. F. Morais, and M. J. S. Monte, *J. Chem. Thermodyn.* **78**, 43 (2014).
- 2014ALM/MON A. R. R. P. Almeida, M. J. S. Monte, M. A. R. Matos, and V. M. F. Morais, *J. Chem. Thermodyn.* **73**, 12 (2014).
- 2014ALM/MON2 A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Thermodyn.* **77**, 46 (2014).
- 2014AMA/DEC L. M. P. F. Amaral, T. M. T. de Carvalho, J. I. T. A. Cabral, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *J. Therm. Anal. Calorim.* **151**, 803 (2014).
- 2014AMA/MOR L. M. P. F. Amaral, V. M. F. Morais, and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **74**, 22 (2014).
- 2014AMA/RIB L. M. P. F. Amaral and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **73**, 44 (2014).
- 2014AMA/RIB2 L. M. P. F. Amaral and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **78**, 254 (2014).
- 2014AMA/SZT L. M. P. F. Amaral, P. Szterner, M. S. Miranda, and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **75**, 106 (2014).
- 2014BAD/DEL E. Badea, G. Della Gatta, and B. Palecz, *J. Chem. Thermodyn.* **73**, 178 (2014).
- 2014BAD/NOW E. Badea, B. Nowicka, and G. Della Gatta, *J. Chem. Thermodyn.* **68**, 90 (2014).
- 2014BEB/ROS S. V. S. Bebiano, M. T. S. Rosado, R. A. E. Castro, M. Ramos Silva, J. Cantilho, T. M. R. Maria, and M. E. S. Eusebio, *J. Mol. Struct.* **1078**, 10 (2014).
- 2014BEN/AIT H. Ben-Makhlouf-Hakem, A. Ait-Kaci, and J. Jose, *Fluid Phase Equilib.* **373**, 34 (2014).
- 2014BEN/NEG L. Bendiaf, A. Negadi, I. Mokbel, and L. Negadi, *Fuel* **122**, 247 (2014).
- 2014BER/SIM C. E. S. Bernardes, R. G. H. P. Simoes diogo, and M. E. Minas da Piedade, *J. Chem. Thermodyn.* **73**, 140–147 (2014).
- 2014BRE/ZAK A. A. Bredikhin, D. V. Zakharychev, A. T. Gubaidullin, R. R. Fayzullin, A. V. Pashagin, and Z. A. Bredikhina, *Cryst. Growth Des.* **14**, 1676 (2014).
- 2014BRO/BUC A. Brozena, J. H. Buchanan, R. W. Miles, Jr., B. R. Williams, and M. S. Hulet, *J. Chem. Eng. Data* **59**, 2649 (2014).
- 2014BRO/JAN S. Brommer, L. M. Jantunen, T. F. Bidleman, S. Harrad, and M. L. Diamond, *J. Chem. Eng. Data* **59**, 1441 (2014).
- 2014BRO/TEV A. Brozena, D. E. Tevault, and K. Irwin, *J. Chem. Eng. Data* **59**, 307 (2014).
- 2014CAM/MEN E. A. Camarillo, J. Mentado, H. Flores, and J. M. Hernandez-Perez, *J. Chem. Thermodyn.* **73**, 269 (2014).
- 2014CAR/CAS N. D. D. Carareto, T. Castagnaro, M. C. Costa, and A. J. A. Meirelles, *J. Chem. Thermodyn.* **78**, 99 (2014).
- 2014CAR/DOS N. D. D. Carareto, A. O. dos Santos, M. P. Rolemberg, L. P. Cardoso, M. C. Costa, and A. J. A. Meirelles, *Thermochim. Acta* **589**, 137 (2014).
- 2014CHE/LI L. Chen, H.-R. Li, R.-J. Xu, Y. Xiong, T. Xu, B.-Y. Huang, and Y.-J. Shu, *Propellants, Explos., Pyrotech.* **39**, 217 (2014).
- 2014COR/GUI Y. Corvis, N. Guiblin, and P. Espeau, *J. Phys. Chem. B* **118**, 1925 (2014).
- 2014CUD/POD M. F. Cuddy, A. R. Poda, and M. A. Chappell, *Propellants, Explos., Pyrotech.* **39**, 236 (2014).
- 2014DIB/RAE V. N. Dibrivnyl, Yu. A. Raevskii, and V. V. Sergeev, *Russ. J. Gen. Chem.* **84**, 1069 (2014).
- 2014DIC/LEG E. Dichi, B. Legendre, and M. Sghaier, *J. Therm. Anal. Calorim.* **115**, 1551 (2014).
- 2014EME/ALG V. N. Emel'yaneko, M. Algarra, J. C. G. Esteves da Silva, J. Hierrezuelo, J. M. Lopez-Romero, and S. P. Verevkin, *Thermochim. Acta* **597**, 78 (2014).
- 2014FLO/XIM H. Flores, A. Ximello, E. A. Camarillo, and P. Amador, *J. Therm. Anal. Calorim.* **117**, 433 (2014).
- 2014FON/GUS J. M. S. Fonseca, N. Gushterov, and R. Dohrn, *J. Chem. Thermodyn.* **73**, 148 (2014).
- 2014FRE/GOM2 V. L. S. Freitas, J. R. B. Gomes, and M. D. M. C. Ribeiro da Silva, *J. Chem. Eng. Data* **59**, 312 (2014).
- 2014FRE/LEI V. L. S. Freitas, S. Leirosa, R. Notario, and M. D. M. C. Ribeiro da Silva, *J. Org. Chem.* **79**, 11583 (2014).
- 2014FUL/RUZ M. Fulem, K. Ruzicka, C. Cervinka, A. Bazyleva, and G. Della Gatta, *Fluid Phase Equilib.* **371**, 93 (2014).
- 2014GAL/RIB T. L. P. Galvao, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *J. Phys. Chem. A* **118**, 4816 (2014).
- 2014GAL/ROC T. L. P. Galvao, I. M. Rocha, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *J. Phys. Chem. A* **118**, 3360 (2014).
- 2014GAR/AMA M. A. Garcia-Castro, P. Amador, J. M. Hernandez-Perez, A. E. Medina-Vavela, and H. Flores, *J. Phys. Chem. A* **118**, 3820 (2014).
- 2014GOB/CHI C. Gobble, J. Chickos, and S. P. Verevkin, *J. Chem. Eng. Data* **59**, 1353 (2014).
- 2014GON/AGA E. M. Goncalves, F. Agapito, T. S. Almeida, and J. A. M. Simoes, *J. Chem. Thermodyn.* **73**, 90 (2014).
- 2014GUO/YIN Y. Guo, Q. Yin, H. Hao, M. Zhang, Y. Bao, B. Hou, W. Chen, H. Zhang, and W. Cong, *J. Chem. Eng. Data* **59**, 1326 (2014).
- 2014HAS/JIR T. Hasl and I. Jiricek, *Energy Procedia* **46**, 301 (2014).
- 2014HU/ZHA P. Hu, P.-P. Zhao, Y. Jin, and Z.-S. Chen, *Solar Energy* **102**, 91 (2014).
- 2014KHE/MUT A. Khelassi-Sefaoui, F. Mutelet, L. Negadi, and I. Mokbel, *J. Chem. Thermodyn.* **72**, 134 (2014).
- 2014KOZ/GOB M. Kozlovskiy, C. Gobble, and J. S. Chickos, *J. Chem. Thermodyn.* **73**, 262 (2014).
- 2014KRI/RAJ V. Krishnakumar and M. Ragaboopathi, *J. Therm. Anal. Calorim.* **115**, 723 (2014).
- 2014KUR/TAK H. Kuramochi, H. Takigami, M. Scheringer, and S.-I. Sakai, *J. Chem. Eng. Data* **59**, 8 (2014).
- 2014LI/SUN D. Li, X. Sun, L. Li, S. Wang, L. Wang, and X. Liu, *J. Taiwan Inst. Chem. Eng.* **45**, 823 (2014).
- 2014LIM/CRE C. E. Lima de Oliveira and M. A. Cremasco, *Thermochim. Acta* **577**, 1 (2014).
- 2014LIU/ZOU T. Liu, W. Zou, W. Zhao, F.-B. Zhang, G.-L. Zhang, and Q. Xia, *Fluid Phase Equilib.* **374**, 102 (2014).
- 2014LOM/GIN L. Lomba, B. Giner, E. Zuriaga, I. Gascon, and C. La-fuente, *Thermochim. Acta* **575**, 305 (2014).
- 2014LOM/GIN2 L. Lomba, B. Giner, M. C. Lopez, L. Aldea, and C. La-fuente, *J. Chem. Eng. Data* **59**, 329 (2014).
- 2014MAN/MAH D. R. Mantheni, M. P. K. Maheswaram, R. Munigeti, I. Perera, A. Riga, and K. S. Alexander, *J. Therm. Anal. Calorim.* **115**, 2253 (2014).
- 2014MAN/VOR A. N. Manin, A. P. Voronin, and G. L. Perlovich, *Thermochim. Acta* **583**, 72 (2014).
- 2014MAN/VOR2 A. N. Manin, A. P. Voronin, N. G. Manin, M. V. Vener, A. V. Shishkina, A. S. Lermontov, and German L. Perlovich, *J. Phys. Chem. B* **118**, 6803 (2014).
- 2014MBA/KNO J. Mbah, D. Knot, and S. Steward, *Talanta* **129**, 586 (2014).
- 2014MEA/SVA D. Mealey, M. Svärd, and Ake C. Rasmuson, *Fluid Phase Equilib.* **375**, 73–79 (2014).
- 2014MEN/BEJ D. A. Meneses, A. Bejarano, and J. C. de la Fuente, *J. Chem. Thermodyn.* **74**, 16 (2014).
- 2014NEG/BAR P. Negrier, M. Barrio, J. Ll. Tamarit, and D. Mondieig, *J. Phys. Chem. B* **118**, 9595 (2014).
- 2014NEG/MOK L. Negadi, I. Mokbel, N. Chiali-Baba-Ahmed, and L. Kara-Zaitri, *J. Chem. Thermodyn.* **70**, 233 (2014).

- 2014NOG/ILD B. A. Nogueira, G. O. Ildiz, J. Canotilho, E. M. S. Eusebio, and R. Fausto, *J. Phys. Chem. A* **118**, 5994 (2014).
- 2014NOT/ROU R. Notario, M. V. Roux, F. Ros, V. N. Emel'yanenko, and S. P. Verevkin, *J. Chem. Thermodyn.* **74**, 144 (2014).
- 2014NOT/ROU2 R. Notario, M. V. Roux, F. Ros, V. N. Emel'yanenko, D. H. Zaitsau, and S. P. Verevkin, *J. Chem. Thermodyn.* **77**, 151 (2014).
- 2014PEN/UUS A. Penttila, P. Uusi-Kyyny, A. Salminen, J. Seppala, and V. Alopaeus, *Int. J. Greenhouse Gas Control* **22**, 313 (2014).
- 2014PER/KAZ G. L. Perlovich, V. P. Kazachenko, N. N. Strakhova, and O. A. Raevsky, *J. Chem. Eng. Data* **59**, 4217 (2014).
- 2014POB/DOM A. Pobudkowski, U. Domanska, and J. A. Kryska, *J. Chem. Thermodyn.* **79**, 41 (2014).
- 2014RAM/OGI S. L. L. M. Ramos, M. Ogino, and M. Oguni, *J. Therm. Anal. Calorim.* **115**, 1353 (2014).
- 2014RIO/ORT R. Rios, J. Ortega, L. Fernandez, I. de Nuez, and J. Wisniak, *J. Chem. Eng. Data* **59**, 125 (2014).
- 2014ROC/GAL I. M. Rocha, T. L. P. Galvao, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *J. Phys. Chem. A* **118**, 1502 (2014).
- 2014RUZ/FUL K. Ruzicka, M. Fulem, P. B. P. Serra, O. Vlk, and I. Krakovsky, *Thermochim. Acta* **596**, 98 (2014).
- 2014SAI/MUR M. K. Saini and S. S. N. Murthy, *Thermochim. Acta* **575**, 195 (2014).
- 2014SAN/RIB A. F. L. O. M. Santos and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **75**, 1 (2014).
- 2014SAN/SIL A. F. L. O. M. Santos, A. L. R. Silva, O. D. F. Santiago, J. M. Goncalves, S. Pandey, W. E. Acree, Jr., and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.* **73**, 62 (2014).
- 2014SHA/SRE S. Shantikumar, G. Sreekanth, K. V. S. Nath, S. J. Valli, and N. Satheeshkumar, *J. Therm. Anal. Calorim.* **115**, 2423 (2014).
- 2014SII/KAM C. Siitsman, I. Kamenev, and V. Oja, *Thermochim. Acta* **595**, 35 (2014).
- 2014SIL/CIM A. L. R. Silva, A. Cimas, and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.* **73**, 3 (2014).
- 2014SIL/MON A. L. R. Silva, M. J. S. Monte, V. M. F. Morais, and M. D. M. C. Ribeiro da Silva, *J. Chem. Thermodyn.* **74**, 67 (2014).
- 2014SIL/MOR A. L. R. Silva, V. M. F. Morais, and M. D. M. C. Ribeiro da Silva, *J. Mol. Struct.* **1078**, 197 (2014).
- 2014SIM/AGA R. G. Simoes, F. Agapito, H. P. Diogo, and M. E. Minas da Piedade, *J. Phys. Chem. A* **118**, 11026 (2014).
- 2014SOB/VAN I. B. Sobechko, Yu. Ya. Van-Chin-Syan, V. V. Kochubei, R. T. Prokop, N. I. Velychkivska, Yu. I. Gorak, V. N. Dib-rivnyi, and M. D. Obushak, *Russ. J. Phys. Chem.* **88**, 2046 (2014).
- 2014SOU/MAT C. C. S. Sousa, M. A. R. Matos, and V. M. F. Morais, *J. Chem. Thermodyn.* **73**, 101 (2014).
- 2014STE/FUL V. Ch. Stejfa, M. Fulem, K. Ruzicka, and C. Cervinka, *J. Chem. Thermodyn.* **79**, 272 (2014).
- 2014STE/FUL2 V. Ch. Stejfa, M. Fulem, K. Ruzicka, and C. Cervinka, *J. Chem. Thermodyn.* **79**, 280 (2014).
- 2014SUG/KAI K. Sugandha, S. Kaity, S. Mukherjee, J. Isaac, and A. Ghosh, *Cryst. Growth Des.* **14**, 4475 (2014).
- 2014SZT/GAL P. Szterner, T. L. P. Galvao, L. M. P. F. Amaral, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *Thermochim. Acta* **588**, 68 (2014).
- 2014TEM/NOT M. Temprado, R. Notario, M. V. Roux, and S. P. Verevkin, *J. Chem. Thermodyn.* **73**, 97 (2014).
- 2014THO/GOB M. Thornton, C. Gobble, and J. Chickos, *J. Chem. Thermodyn.* **73**, 51 (2014).
- 2014TU/CHE W. Tu, Z. Chen, Y. Gao, Z. Li, Y. Zhang, R. Liu, Y. Tian, and L.-M. Wang, *Phys. Chem. Chem. Phys.* **16**, 3586 (2014).
- 2014TYU/KRA V. V. Tyunina, A. V. Krasnov, E. Y. Tyunina, V. G. Baldelin, and G. V. Girichev, *J. Chem. Thermodyn.* **74**, 221 (2014).
- 2014VER/EME S. P. Verevkin, V. N. Emel'yanenko, M. A. Varfolomeev, B. N. Solomonov, and K. V. Zherikova, *Fluid Phase Equilib.* **380**, 67 (2014).
- 2014VER/EME2 S. P. Verevkin, V. N. Emel'yanenko, M. A. Varfolomeev, B. N. Solomonov, K. V. Zherikova, and S. V. Melkhanova, *J. Phys. Chem. A* **118**, 14479 (2014).
- 2014VIT/AGA J. Vitorino, F. Agapito, M. F. M. Piedade, C. E. S. Bernardes, H. P. Diogo, J. P. Leal, and M. E. Minas da Piedade, *J. Chem. Thermodyn.* **77**, 179 (2014).
- 2014WAN/HUA Y.-S. Wang, N.-R. Huan, B.-H. Xu, B.-Y. Wang, and Z. S. Bai, *J. Chem. Eng. Data* **59**, 494 (2014).
- 2014WEI/HAN D. Wei, S. Han, and B. Wang, *Fluid Phase Equilib.* **373**, 84 (2014).
- 2014WIS/PER J. Wisniak, J. R. Perez-Correa, A. Mejia, and H. Segura, *J. Chem. Eng. Data* **59**, 942 (2014).
- 2014WU/DAN H. Wu, L. Dang, and H. Wei, *Ind. Eng. Chem. Res.* **53**, 1707 (2014).
- 2014XIM/FLO A. Ximello, H. Flores, A. Rojas, E. A. Carmarillo, and M. P. Amador, *J. Chem. Thermodyn.* **79**, 33 (2014).
- 2014XU/ZHA H. Xu, B. Zhang, Z. Yang, G. Yao, and H. Zhao, *J. Chem. Eng. Data* **59**, 1281 (2014).
- 2014YAN/KOU Z.-Q. Yang, L.-G. Kou, W. Mao, J. Lu, W. Zhang, and J. Lu, *J. Chem. Eng. Data* **59**, 157 (2014).
- 2014YAN/RAS H. Yang and A. C. Rasmuson, *Fluid Phase Equilib.* **376**, 69 (2014).
- 2014YAN/WAN W. Yang, C. Wang, Y. Hu, Y. Li, and K. Wang, *Fluid Phase Equilib.* **363**, 276 (2014).
- 2014YAO/YAN G. Yao, Z. Yang, B. Zhang, H. Xu, and H. Zhao, *Fluid Phase Equilib.* **367**, 103 (2014).
- 2014ZEN/GRI N. Zencirci, U. J. Griesser, T. Gelbrich, D. C. Apperley, and R. K. Harris, *Mol. Pharm.* **11**, 338 (2014).
- 2014ZEN/YAN Z. Zeng, Z. Yang, W. Xue, and X. Li, *Chin. J. Chem. Eng.* **22**, 1145 (2014).
- 2014ZHA/QIA X. Zhang, G. Qian, X. Yang, C. Hu, and X. Zhou, *Fluid Phase Equilib.* **363**, 228 (2014).
- 2014ZHA/WEI W. Zhang, Z.-Q. Wei, J. Lu, and J. Lu, *Gaoxiao Xauxue Gongcheng Xuebao* **28**, 449 (2014).
- 2015ALM/OLI A. R. R. P. Almeida, J. A. S. A. Oliveira, and M. J. S. Monte, *J. Chem. Thermodyn.* **82**, 108 (2015).
- 2015ALM/SOU A. R. R. P. Almeida, C. A. D. Sousa, L. M. N. B. F. Santos, and M. J. S. Monte, *J. Chem. Thermodyn.* **86**, 6 (2015).
- 2015AMA/SZT L. M. P. F. Amaral, P. Szterner, V. M. F. Morais, and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **91**, 452 (2015).
- 2015BLO/SHA S. Blokhina, A. Sharapova, M. Ol'khovich, T. Volkova, and G. Perlovich, *J. Therm. Anal. Calorim.* **120**, 1053 (2015).
- 2015BLO/SHA2 S. Blokhina, A. Sharapova, M. Ol'khovich, T. Volkova, and G. Perlovich, *Thermochim. Acta* **622**, 97 (2015).
- 2015BOU/BOU Y. Boumrah, S. Bouanani, K. Khimeche, and A. Dahmani, *J. Therm. Anal. Calorim.* **120**, 583 (2015).
- 2015BOU/NEG Z. Bouzina, A. Negadi, I. Mokbel, J. Jose, and L. Negadi, *J. Chem. Thermodyn.* **84**, 81 (2015).
- 2015BOU/NEG2 Z. Bouzina, A. Negadi, F. Dergal, I. Mokbel, J. Jose, and L. Negadi, *J. Mol. Liq.* **201**, 83 (2015).
- 2015BRU/IRR B. Brunetti, S. Irrera, and G. Portalone, *J. Chem. Eng. Data* **60**, 74 (2015).
- 2015CAR/CON F. Cardoso de Matos, M. Conceicao da Costa, A. J. A. Meirelles, and E. A. C. Batista, *Fluid Phase Equilib.* **464**, 1 (2015).
- 2015CHI/STE R. D. Chirico, W. V. Steele, and A. F. Kazakov, *J. Chem. Thermodyn.* **86**, 106 (2015).
- 2015EME/PIM V. N. Emel'yanenko, A. A. Pimerzin, V. V. Turovtsev, and S. P. Verevkin, *J. Phys. Chem. A* **119**, 2142 (2015).
- 2015EME/TUR V. N. Emel'yanenko, V. V. Turovtsev, and Yu. D. Orlov, *Russ. J. Phys. Chem. A* **89**, 1146 (2015).
- 2015EME/VER V. N. Emel'yanenko and S. P. Verevkin, *J. Chem. Thermodyn.* **85**, 111 (2015).
- 2015EME/VER2 V. N. Emel'yanenko, S. P. Verevkin, and R. Notario, *J. Chem. Thermodyn.* **87**, 129 (2015).
- 2015EME/VER3 V. N. Emel'yanenko and S. P. Verevkin, *Russ. J. Phys. Chem. A* **89**, 1740 (2015).
- 2015EME/ZAI V. N. Emel'yanenko, K. V. Zaitseva, F. Agapito, J. A. Martinho, and S. P. Verevkin, *J. Chem. Thermodyn.* **85**, 155 (2015).
- 2015EME/ZAI2 V. N. Emel'yanenko, D. H. Zaitsau, E. Shoifet, F. Meurer, S. P. Verevkin, C. Schick, and C. Held, *J. Phys. Chem. A* **119**, 9680 (2015).

- 2015FAN/ZHA J. Fang, M. Zhang, P. Zhu, J. Ouyang, J. Gong, W. Chen, and F. Xu, *J. Chem. Thermodyn.* **85**, 202 (2015).
- 2015GAO/XUE X. Gao, W.-L. Xue, Z.-X. Zeng, and X.-R. Fan, *J. Chem. Eng. Data* **60**, 2273 (2015).
- 2015GAU/VAN N. Gautschi, P. Van Hoogevest, and M. Kuentz, *Int. J. Pharm.* **491**, 218 (2015).
- 2015GOB/CHI C. Gobble and J. S. Chickos, *J. Chem. Eng. Data* **60**, 2739 (2015).
- 2015HIK/WEE W. M. Kikal and B. L. Weeks, *J. Therm. Anal. Calorim.* **122**, 1055 (2015).
- 2015HUA/JIA Z. Huang, H. Jiang, L. Li, H. Wang, and T. Qui, *J. Chem. Thermodyn.* **86**, 75 (2015).
- 2015HUA/WAN X. Huang, J. Wang, H. Hao, J. Ouyang, Y. Gao, Y. Bao, Y. Wang, and Q. Yin, *Fluid Phase Equilib.* **394**, 148 (2015).
- 2015JAK/SPO M. Jakubczk, A. Sporznski, V. N. Emel'yanenko, M. A. Varfolomeev, and S. P. Verevkin, *Thermochim. Acta* **615**, 88 (2015).
- 2015KAB/PAU G. J. Kabo, Y. U. Paulechka, O. V. Voitkevich, A. V. Blokhin, E. N. Stepurko, S. V. Kohut, and Y. V. Voznyi, *J. Chem. Thermodyn.* **85**, 101 (2015).
- 2015KOZ/GOB M. Kozlovskiy, C. Gobble, and J. S. Chickos, *J. Chem. Thermodyn.* **86**, 65 (2015).
- 2015LI/DU R.-R. Li, C.-B. Du, S. Han, J. Wang, G.-B. Yao, and H.-K. Zhao, *Fluid Phase Equilib.* **396**, 35 (2015).
- 2015LI/YAN H.-Y. Li, B. Yan, K.-Q. Bai, H. Liu, H.-X. Ma, J.-R. Song, and L. Yan, *J. Chem. Thermodyn.* **91**, 240 (2015).
- 2015MAR/PIN D.-C. Marinescu, E. Pincu, P. Oancea, G. Bruni, A. Marini, and V. Meltzer, *J. Therm. Anal. Calorim.* **120**, 829 (2015).
- 2015MAT/MOR H. Matsuda, K. Mori, M. Tomioka, K. Kariyasu, T. Fukami, K. Kurihara, K. Tochigi, and K. Tomono, *Fluid Phase Equilib.* **406**, 116 (2015).
- 2015MBA/KNO J. Mbah, D. Kno, S. Steward, and D. Cornett, *Int. J. Energ. Mater. Chem. Propul.* **14**, 321 (2015).
- 2015MOR/DAS P. Morgado, G. Das, C. McCabe, and E. J. M. Filipe, *J. Phys. Chem. B* **119**, 1623 (2015).
- 2015OSS/JUS M. D. Ossowska-Chrusciel, E. Juszyńska-Galazka, W. Zajac, A. Rudzki, and J. Chrusciel, *J. Mol. Struct.* **1082**, 103 (2015).
- 2015PAU/SHI A. Paul, L. Shi, and C. W. Bielawski, *Energy Convers. Manage.* **103**, 139 (2015).
- 2015PER/CAS P. S. Pereira Silva, R. A. E. Castro, E. Melro, M. R. Silva, T. M. R. Maria, J. Canotilho, and M. E. S. Eusebio, *J. Therm. Anal. Calorim.* **120**, 667 (2015).
- 2015POB/JUR A. Pobudkowska, B. A. Jurkowska, and M. A. Wiatrowski, *Fluid Phase Equilib.* **406**, 209 (2015).
- 2015PRI D. M. Price, *Thermochim. Acta* **622**, 44 (2015).
- 2015RAM/CHI S. L. L. M. Ramos, A. K. Chigira, and M. Oguni, *J. Phys. Chem. B* **119**, 4076 (2015).
- 2015RAM/MAR M. Ramos-Riesco, F. J. Martinez-Casado, J. A. R. Cheda, M. I. R. Yelamos, A. Fernandez-Mertinez, and S. Lopez-Andres, *Cryst. Growth Des.* **15**, 497 (2015).
- 2015ROT/VRB J. Rotrekl, P. Vrbka, Z. Sedlakova, Z. Wagner, J. Jacquemin, and M. Bendova, *Pure Appl. Chem.* **87**, 453 (2015).
- 2015RUZ/GON V. Ruz, M. M. Gonzalez, D. Winant, Z. Rodriguez, and G. Van den Mooter, *Molecules* **20**, 15175 (2015).
- 2015SHA/GE X. Shao, H. Ge, Z. Li, C. Ren, and J. Wang, *Fluid Phase Equilib.* **390**, 7 (2015).
- 2015SIN/RAI M. Singh, R. N. Rai, and U. S. Rai, *J. Cryst. Growth* **419**, 114 (2015).
- 2015SIN/SIN J. Singh and N. B. Singh, *Fluid Phase Equilib.* **386**, 168 (2015).
- 2015SIN/SIN2 J. Singh and N. B. Singh, *J. Chem. Thermodyn.* **89**, 197 (2015).
- 2015SIN/SIN3 J. Singh and N. B. Singh, *J. Cryst. Growth* **424**, 14 (2015).
- 2015SME/BRU M. M. H. Smets, S. J. T. Brugman, E. R. H. van Eck, A. van den Ende, H. Meekes, and H. M. Cuppen, *Cryst. Growth Des.* **15**, 5157 (2015).
- 2015SOB/VAN I. B. Sobechko, Yu. Ya. Van-Chin-Syan, Yu. I. Gorak, V. V. Kochubei, R. T. Prokop, N. I. Velychkivska, Yu. I. Gorak, V. N. Dibrivnyi, and M. D. Obushak, *Russ. J. Phys. Chem.* **89**, 919 (2015).
- 2015SOL/ROD I. A. Solomina, M. N. Rodnikova, M. P. Kiselev, and A. V. Khoroshilov, *Russ. J. Phys. Chem.* **89**, 910 (2015).
- 2015SOL/VAR B. N. Solomonov, M. A. Varfolomeev, R. N. Nagrimanov, V. B. Norikov, M. A. Ziganshin, A. V. Gerasimov, and S. P. Verevkin, *J. Chem. Eng. Data* **60**, 748 (2015).
- 2015SSON/LI Y. Song, J. Q. Li, X. Sun, Z. Feng, Y. Lin, J. Wang, J. Ding, H. Zhang, and W. Li, *Fluid Phase Equilib.* **388**, 16 (2015).
- 2015STE/DER V. Stejfa, F. Dergal, I. Mokbel, M. Fulem, J. Jose, and K. Ruzicka, *Fluid Phase Equilib.* **406**, 124 (2015).
- 2015STE/FUL V. Stejfa, M. Fulem, K. Ruzicka, and P. Matejka, *Fluid Phase Equilib.* **402**, 18 (2015).
- 2015SUN/YIN X. Sun, Q. Yin, S. Ding, Z. Shen, Y. Bao, J. Gong, B. Hou, H. Hao, Y. Wang, J. Wang, and C. Xie, *J. Chem. Thermodyn.* **85**, 171 (2015).
- 2015SUR/SIM A. O. Surov, A. A. Simagina, N. G. Manin, L. G. Kuzmina, A. V. Churakov, and G. L. Perlovich, *Cryst. Growth Des.* **15**, 228 (2015).
- 2015VER/EME S. P. Verevkin, V. N. Emel'yanenko, M. A. Varfolomeev, B. N. Solomonov, K. V. Zherikova, and S. V. Melkhanova, *Fluid Phase Equilib.* **387**, 160 (2015).
- 2015VER/EME2 S. P. Verevkin, V. N. Emel'yanenko, and I. V. Garist, *J. Chem. Thermodyn.* **87**, 34 (2015).
- 2015VER/EME3 S. P. Verevkin and V. N. Emel'yanenko, *Thermochim. Acta* **608**, 40 (2015).
- 2015VER/SAZ S. P. Verevkin, A. Yu. Sazonova, V. E. Emel'yanenko, D. H. Zaitsau, M. A. Varfolomeev, B. N. Solomonov, and K. V. Zerkikova, *J. Chem. Eng. Data* **60**, 89 (2015).
- 2015VER/ZAI S. P. Verevkin, D. H. Zaitsau, V. E. Emel'yanenko, E. N. Stepurko, and K. S. Zherikova, *Thermochim. Acta* **622**, 18 (2015).
- 2015VER/ZAI2 S. P. Verevkin, D. H. Zaitsau, V. N. Emel'yanenko, and A. A. Zhabina, *Fluid Phase Equilib.* **397**, 87 (2015).
- 2015VER/ZAI3 S. P. Verevkin, K. V. Zaitseva, A. D. Stanton, M. S. Hindman, A. C. Irvin, and J. E. Bara, *Ind. Eng. Chem. Res.* **54**, 9850 (2015).
- 2015VIT/AGA J. Vitorino, F. Agapita, C. E. S. Bernardes, and M. E. Minas da Piedade, *J. Chem. Thermodyn.* **80**, 59 (2015).
- 2015WAN/LI L. Y. Wang, X.-C. Li, L. Zhu, Z.-L. Sha, Y.-F. Wang, and L.-B. Yang, *J. Mol. Liq.* **208**, 211 (2015).
- 2015WAN/WAN C. Wang, Y. Wang, Q. Yin, Z. Xu, Y. Bao, B. Hou, W. Liu, and H. Hao, *J. Chem. Eng. Data* **60**, 3053 (2015).
- 2015ZAI/EME K. V. Zaitseva, V. N. Emel'yanenko, F. Agapito, A. A. Pimerzin, M. A. Varfolomeev, and S. P. Verevkin, *J. Chem. Thermodyn.* **91**, 186 (2015).
- 2015ZAI/PAU D. Zaitsau, E. Paulechka, D. S. Firaha, A. V. Blokhin, F. J. Kabo, A. Bazyleva, A. G. Kabo, M. A. Varfolomeev, and V. M. Sevruk, *J. Chem. Thermodyn.* **91**, 459 (2015).
- 2015ZAI/VER D. H. Zaitsau, S. P. Verevkin, and A. Yu. Sazonova, *Fluid Phase Equilib.* **386**, 140 (2015).
- 2015ZHA/JIN L. Zhang, H. Jing, W. Zhu, F.-B. Zhang, G.-L. Zhang, and Q. Xia, *J. Chem. Thermodyn.* **80**, 142 (2015).
- 2015ZHA/QIA X. Zhang, G. Qian, R. Wang, X. Yang, L. Hao, H. Wei, and X. Zhou, *Fluid Phase Equilib.* **388**, 59 (2015).
- 2015ZHU/WAN L. Zhu, L.-Y. Wang, X.-C. Li, Z. L. Sha, Y.-F. Wang, and L.-B. Yang, *J. Chem. Thermodyn.* **91**, 369 (2015).
- 2016ALM/MON A. R. R. P. Almeida and M. J. S. Monte, *J. Chem. Thermodyn.* **92**, 118 (2016).
- 2016AMA/SZT L. M. P. F. Amaral, P. Szterner, V. M. F. Morais, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **96**, 93 (2016).
- 2016BOU/DER Z. Bouzina, F. Dergal, I. Mokbel, A. Negadi, J. Saab, J. Jose, and L. Negadi, *Fluid Phase Equilib.* **414**, 164 (2016).
- 2016CAR/AMA T. M. T. Carvalho, L. M. P. F. Amaral, V. M. F. Morais, and M. C. Ribeiro da Silva, *J. Chem. Thermodyn.* **97**, 70 (2016).
- 2016CHI/STE R. D. Chirico, W. V. Steele, and A. F. Kazakov, *J. Chem. Thermodyn.* **96**, 41 (2016).
- 2016DAV/LIM J. Z. Davalos, C. F. R. A. C. Lima, A. M. S. Silva, L. M. N. B. F. Santos, R. Erra-Balsells, and M. L. Salum, *J. Chem. Thermodyn.* **95**, 195 (2016).
- 2016EME/YER V. N. Emel'yanenko, A. V. Yermalayeu, M. Voges, C. Held, G. Sadowski, and S. P. Verevkin, *Fluid Phase Equilib.* **422**, 99 (2016).

- 2016FRE/SAN V. L. S. Freitas, C. P. F. Santos, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *J. Chem. Thermodyn.* **96**, 74 (2016).
- 2016HU/WU H.-S. Hu, Y.-L. Wu, and M.-D. Yang, *Fluid Phase Equilib.* **414**, 133 (2016).
- 2016LI/DU K. Li, S. Du, S. Wu, D. Cai, J. Wang, D. Zhang, K. Zhao, P. Yang, B. Yu, B. Gao, D. Li, and J. Gong, *J. Chem. Thermodyn.* **96**, 12 (2016).
- 2016MAR/SMI A. V. Markin, N. V. Smirnova, I. S. Il'ichev, T. I. Dolinsky, and A. B. Radbil, *J. Therm. Anal. Calorim.* **123**, 1451 (2016).
- 2016MAT/INA H. Matsuda, K. Inaba, H. Sumida, K. Kurihara, K. Tochigi, and K. Ochi, *Fluid Phase Equilib.* **420**, 50 (2016).
- 2016MOR/RAT M. Mori, N. Rath, C. Gobble, J. Chickos, A. A. Samarov, and S. P. Verevkin, *J. Chem. Eng. Data* **61**, 370 (2016).
- 2016OKU/PAD M. Okuniewski, K. Padaszynski, and U. Domanska, *Fluid Phase Equilib.* **422**, 66 (2016).
- 2016OST/UUS A. Ostonen, P. Uusi-Kyyny, M. Pakkanen, and V. Olopaus, *Fluid Phase Equilib.* **408**, 79 (2016).
- 2016PER/ORT E. Perez, J. Ortega, L. Fernandez, J. Wisniak, and J. Canosa, *Fluid Phase Equilib.* **412**, 79 (2016).
- 2016SIL/MOR A. L. R. Silva, V. M. F. Morais, M. D. M. C. Ribeiro da Silva, R. G. Simoes, C. E. S. Bernardes, M. F. M. Piedade, and M. E. Minas da Piedade, *J. Chem. Thermodyn.* **95**, 35 (2016).
- 2016SIM/GOB D. Simmons, C. Gobble, and J. Chickos, *J. Chem. Thermodyn.* **92**, 126 (2016).
- 2016SIN/BUR V. P. Sinditskii, A. V. Burzhava, A. N. Chernyi, D. S. Shmelev, V. N. Apalkova, N. V. Palysaeva, and A. B. Sheremetev, *J. Therm. Anal. Calorim.* **123**, 1431 (2016).
- 2016SZT/GAL P. Szterner, T. L. P. Galvao, L. M. P. F. Amaral, M. D. M. C. Ribeiro da Silva, and M. A. V. Ribeiro da Silva, *Thermochim. Acta* **625**, 36 (2016).
- 2016TOS/CEO S. Toscani, R. Ceolin, L. Ter Minassian, M. Barrio, N. Veglio, J.-L. Tamarit, D. Louer, and I. B. Rietveld, *Int. J. Pharm.* **497**, 96 (2016).
- 2016VOL/BLO T. V. Volkova, S. V. Blokhina, A. M. Ryzhakov, A. V. Sharapova, M. V. Ol'khovich, and G. L. Perlovich, *J. Therm. Anal. Calorim.* **123**, 841 (2016).
- 2016VRB/DOH P. Vrbka and V. Dohnal, *Fluid Phase Equilib.* **411**, 59 (2016).
- 2016WAN/YAO D.-C. Wang, S. Yao, Y. Cao, T. Yao, and H. Song, *J. Chem. Thermodyn.* **92**, 55 (2016).
- 2016WAN/YIN Y. Wang, Q. Yin, X. Sun, Y. Bao, J. Gong, B. Hou, Y. Wang, M. Zhang, C. Xie, and H. Hao, *J. Chem. Thermodyn.* **94**, 110 (2016).
- 2016XU/WAN J. Xu, Y. Wang, G. Wang, C. Huang, H. Hao, and Q. Yin, *J. Chem. Thermodyn.* **92**, 12 (2016).
- 2016YAN/WAN X. Yang, J. Wang, H. Song, and W. Zou, *Fluid Phase Equilib.* **409**, 417 (2016).
- 2016ZHA/GUO T. Zhang, F. Guo, Q. Cui, M. Lu, X. Song, H. Tang, and Q. Li, *J. Chem. Eng. Data* **61**, 420 (2016).
- 2016ZHE/SVE K. V. Zherikova, A. A. Svetlov, M. A. Varfolomeev, S. P. Verevkin, and C. Held, *Fluid Phase Equilib.* **409**, 399 (2016).
- 2016ZHU/CHE P. Zhu, Y. Chen, J. Fang, Z. Wang, C. Xie, B. Hou, W. Chen, and F. Xu, *J. Chem. Thermodyn.* **92**, 198 (2016).
- 2016ZHU/CHE2 P. Zhu, Y. Chen, M. Zhang, Y. Bao, C. Xie, B. Hou, J. Gong, and W. Chen, *J. Chem. Thermodyn.* **97**, 9 (2016).
- UR/CHI J. S. Chickos, (unpublished).
- UR/FUC R. H. Fuchs (unpublished).
- UR/MAC H. Mackle, W. V. Steele, and D. V. McNally (unpublished).
- UR/STU D. Stull (unpublished).
- UR/VER S. P. Verevkin, E. Krasnykh, T. Vasiltsova, and A. Heintz (unpublished); as quoted in [2002VER].