Enthalpies of Vaporization of Organic and Organometallic Compounds, 1880–2002

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A compendium of vaporization enthalpies published within the period 1910–2002 is reported. A brief review of temperature adjustments of vaporization enthalpies from temperature of measurement to the standard reference temperature, 298.15 K, is included as are recently suggested reference materials. Vaporization enthalpies are included for organic, organo-metallic, and a few inorganic compounds. This compendium is the third in a series focusing on phase change enthalpies. Previous compendia focused on fusion and sublimation enthalpies. Sufficient data are presently available for many compounds that thermodynamic cycles can be constructed to evaluate the reliability of the measurements. A protocol for doing so is described. © *2003 American Institute of Physics.* [DOI: 10.1063/1.1529214]

Key words: compendium; enthalpies of condensation; evaporation; organic compounds; vaporization enthalpy.

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1. Introduction

Vaporization enthalpies are important thermodynamic properties of the condensed phase. Vaporization enthalpies are used frequently in adjusting enthalpies of formation of liquids to the standard state and in evaluating environmental transport properties.[1,2] To the chemical engineer, the magnitude of this property needs to be taken into consideration in designing equipment for chemical processing and synthesis. Thus vaporization enthalpy data are of interest at a variety of temperatures. As a consequence, there is a wealth of information in the literature that covers measurements over a broad range of temperatures. The data covered by this compendium include as much of the spectrum as was available to us.

Our interest in vaporization enthalpies goes back nearly two decades. Our primary focus in measuring vaporization enthalpies was as a means of adjusting enthalpies of formation of liquids to the standard state and in conjunction with fusion enthalpies to adjust solids in a similar fashion.[3] Since then we have focused our attention on their estimation,[4] and assessment.[5] In parallel studies, compilations of available sublimation and fusion enthalpies were also initiated.[6,7] A

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TABLE 1. Recommended reference standards for vaporization enthalpy measurements

	Substance	T/K range	Vapor pressure range/Pa	$\Delta_{vap}H_m$ (298.15 K) kJ mol^{-1}	Classification
C_3H_8O	1-propanol[a,d]	333–378	20 E+3–135 E+3	47.45±0.1	Primary
C_5H_{12}	pentane[b,d]	269–315	2.0 E+4–1.2 E+5	26.42±0.1	Primary
C_6F_6	hexafluorobenzene[a,d]	290–377	7.5 E+3–2.1 E+5	35.71±0.07	Primary
C_6H_6	benzene[a,c,d]	286–383	7.0 E+3–2.3 E+5	33.83±0.07	Primary
C_6H_{14}	hexane[b,d]	286–343	1.2 E+4–1.0 E+5	31.52±0.13	Primary
C_7H_{16}	heptane[b,d]	299–372	6.4 E+3–1.0 E+5	36.57±0.15	Primary
C_8H_{18}	octane[b,d]	326–400	7.7 E+3–1.0 E+5	41.56±0.17	Primary
C_9H_{20}	nonane[b,d]	344–425	6.4 E+3–1.0 E+5	46.55±0.19	Primary
$C_{10}H_8$	naphthalene[d]	353–434	1.0 E+3–2.3 E+4	55.65±2.8	Secondary
$C_{10}H_{22}$	decane[b,d]	268–348	1.7 E+1–3.2 E+3	51.42±0.21	Primary
$C_{11}H_{24}$	undecane[b,d]	294–382	4.1 E+1–6.4 E+3	56.58±0.57	Primary
$C_{12}H_{26}$	dodecane[b,d]	313–403	5.8 E+1–7.3 E+3	61.52±0.62	Primary
$C_{13}H_{28}$	tridecane[b,d]	323–402	4.7 E+1–3.7 E+3	66.68±0.67	Primary
$C_{14}H_{30}$	tetradecane[b,d]	344–422	7.6 E+1–4.4 E+3	71.73±0.72	Primary
$C_{16}H_{32}$	hexadecane[b,d]	364–452	5.5 E+1–4.7 E+3	81.35±0.81	Primary
$C_{18}H_{38}$	octadecane[b,d]	312–590	1.0 E−1–1.0 E+5	91.44±1.83	Primary
$C_{20}H_{42}$	eicosane[b,d]	344–380	4.1 E−1–9.1 E+0	101.81±2.0	Primary
H_2O	water[d]	273–373	6.1 E+1–1.0 E+5	43.99±0.07	Primary

[a]Reference 12.
[b]Reference 13.
[c]Cancer suspect agent.
[d]Reference 5.

reasonably exhaustive version of these databases covering the literature to the present has recently been published and is also available on line at http://webbook.nist.gov/chemistry/. Combined with fusion and sublimation enthalpies appropriately adjusted to $T=298.15$ K, vaporization enthalpies $\Delta_{vap}H_m(298.15\,\mathrm{K})$, complete a thermochemical cycle that can be used to assess the quality of the available data. Application of this thermochemical cycle is illustrated below. A goal of the present contribution has been to provide an exhaustive coverage of the literature from about 1880 to 2002; regrettably however, this compilation is probably still incomplete.

2. Reference Materials for Vaporization Enthalpy Measurements

Calibration is a fundamental requirement in every thermochemical measurement of vaporization enthalpy. Regardless of which technique is used, the measurement ultimately depends either directly or indirectly on vapor pressure. Vapor pressures of liquids vary over many orders of magnitude. An experimental technique calibrated with a standard in one pressure or temperature regime does not in itself guarantee the same accuracy in another. Substantial variations in vaporization enthalpy are revealed in the tables that follow. This variance clearly establishes the importance of documenting the accuracy of the measurements through the use of appropriate reference materials that approximate the temperature and pressure regimes of the measurements of interest.

A series of compounds have been recently proposed as reference materials for vaporization enthalpy.[5] These have been classified as primary, secondary, or tertiary reference materials, on the basis of various criteria. The materials classified as primary and secondary reference materials are listed in Table 1. The temperature range, the corresponding vapor pressures, and the recommended molar vaporization enthalpies at $T=298.15$ K are also included in the table. Some of these reference materials are solids at $T=298.15$ K and therefore the vaporization enthalpies are hypothetical values. The reader should consult the literature cited at the bottom of the table to obtain the vaporization enthalpy at the temperature of interest.

3. Heat Capacity Adjustments

Vaporization enthalpies, like their sublimation counterparts, are measurements based on mass transport and as such are directly or indirectly dependent upon vapor pressure. The vapor pressure of different liquids at a given temperature can vary many orders of magnitude. In order to obtain a reasonable amount of mass transport, it is frequently necessary to conduct these measurements at temperatures that differ substantially from the standard reference temperature, 298.15 K. The actual temperature of measurement depends on the sensitivity of the instrument or apparatus and the properties of the substance of interest. Vaporization enthalpy measurements are often conducted as a function of temperature.

The magnitude of the vaporization enthalpy is dependent on temperature. Figure 1 and Eqs. (1) and (2) illustrate the origin of this temperature dependence in terms of a thermodynamic cycle. If the heat capacities of the liquid and gas phase are known, C_{p_l} and C_{p_g}, respectively, then the vaporization enthalpy at $T=298.15$ K can be related to the experimental measurements by using Eq. (1). This equation, generally referred to as Kirchhoff's equation, can be used to adjust sublimation enthalpy measurements to any reference temperature. The term T_m represents either the temperature

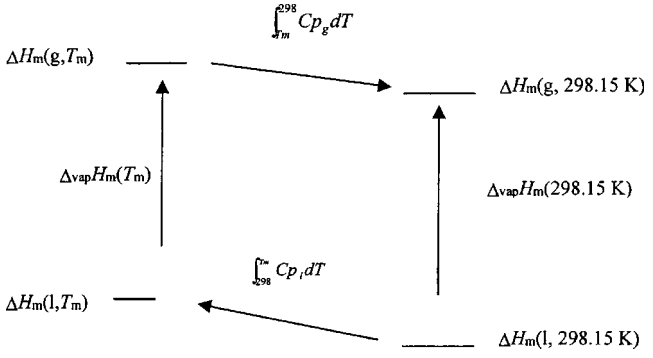


FIG. 1. A thermodynamic cycle for adjusting vaporization enthalpies to $T = 298.15$ K.

of measurement for calorimetric measurements or the mean temperature of measurement for experiments conducted

$$\Delta_{vap}H_m\ (298.15\ K) = \Delta_{vap}H_m(T_m) + \int_{298.15}^{T_m} (C_{p_l} - C_{p_g})dT \quad (1)$$

$$\Delta_{vap}H_m\ (298.15\ K) \approx \Delta_{vap}H_m(T_m) + (C_{p_l} - C_{p_g})(T_m - 298.15) \quad (2)$$

over narrow ranges of temperature. Treating the heat capacities of the two phases as independent of temperature and integrating Eq. (1) results in Eq. (2). Since the magnitude of the heat capacity of the gas phase is usually smaller than that of the liquid phase (l), vaporization enthalpies increase with decreasing temperature.

Experimental heat capacities for many liquids at $T = 298.15$ K are available.[8] Experimental gas phase heat capacities for compounds that are liquids at $T = 298.15$ K are unavailable and generally need to be estimated. Gas phase heat capacities can be calculated from statistical mechanics or estimated by group additivity methods. A number of group additivity methods have been developed to estimate gas phase heat capacities.[9,10] However, group values for some functional groups are not available. Equation (3) is an example of an attempt to circumvent the lack of sufficient group values.[11] The term $C_{p_l}(298.15\ K)$ refers to the heat capacity of the liquid at $T = 298.15$ K. This term may either be estimated or experimental values may be used if available. The uncertainty associated with the term in brackets in Eq. (3) is $\pm 30\ J\,mol^{-1}$ ($\pm 2\sigma$)

$$(C_{p_l} - C_{p_g})\{T_m - 298.15\} = [10.58 + 0.26C_{p_l}\ (298.15\ K)](T_m - 298.15). \quad (3)$$

The vaporization enthalpies reported in this compendium have not been adjusted to $T = 298.15$ K unless done so by the authors reporting the measurements. The vaporization enthalpies are reported at the mean temperature of measurement wherever possible. This allows the reader to verify the reported data and to adjust for temperature in a consistent manner. Authors have applied different methods to adjust for temperature. In some cases experimental data have been used for C_{p_l} and in other cases both C_{p_l} and C_{p_g} have been estimated. The reader is encouraged to refer to the original literature for details. In an effort to provide some assistance to the reader in this regard, a brief discussion of one of the group additivity methods that are available for estimating the heat capacity of liquids is included below. This is followed by an illustration of how this value can be used in conjunction with Eq. (3) to provide temperature adjustments.

4. Group Additivity Values for $C_{p_l}(298.15\ K)$ Estimations

Tables 2A and 2B lists a set of group values that can be used in estimations of $C_{p_l}(298.15\ K)$. The groups and their corresponding values are identified by italics. A hypothetical molecule is given in Fig. 2 that identifies each hydrocarbon group. The functional groups listed in Table 2B are self explanatory. The *R* terms in this table represent variable groups and are not included in the value. Values in brackets should be considered as tentative assignments. The use of these group values is illustrated with the examples in Table 3. Estimations of $C_{p_c}(298.15\ K)$ for these compounds follow the same protocol.

Groups are defined on the basis of their substitution and hybridization patterns. These groups are further subdivided into cyclic, acyclic and aromatic categories. The estimation of $C_{p_l}(298.15\ K)$ for propionic acid illustrates how directly C_p values can be estimated. Identification of the appropriate group is important. Although not shown in Table 3, the same protocol is used for estimating $C_{p_c}(298.15\ K)$. Estimation of the heat capacity of piperadine is similar. In this case it is important to use the appropriate cyclic group. Once the proper groups are identified, the estimation is direct. Di-*t*-butyl ether is estimated in a similar fashion. Benzothiazole illustrates the estimation of an aromatic molecule containing a heterocyclic ring. The aromatic ring carbons are selected based on their substitution pattern; the sulfur and nitrogen atoms of the thiazole ring are identified as cyclic atoms; the nitrogen atom is identified on the basis of its hybridization and substitution pattern. 2-Methylcyclohexanone is another example of an estimation of a cyclic molecule. This estimation includes the contributions of a cyclic carbonyl, four cyclic methylene groups, a methyl, and a cyclic tertiary methine group. The estimation of limonene illustrate an example of a molecule that contains both cyclic and acyclic double bonds. Additional examples can be found in the literature.[4,11]

Heat capacities calculated according to the protocol just described have been used when necessary in conjunction with Eqs. (4)–(6) to adjust vaporization, sublimation, and fusion enthalpies to 298.15 K. These temperature adjustments are necessary in illustrating the thermochemical cycle described below. Equations (4)–(6) have been used in those cases where the measurements were referenced to some other temperature

TABLE 2. Group values Γ_l and Γ_c for estimating C_{p_l}(298.15 K) and C_{p_c}(298.15 K)

(A) Group values for estimating the C_{p_l}(298.15 K) and C_{p_c}(298.15 K) of hydrocarbons.[a]

Hydrocarbon groups

Aliphatic groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
primary sp^3 C	$-CH_3$	34.9	36.6
secondary sp^3 C	$-CH_2-$	31.9	26.9
tertiary sp^3 C	$-CHR-$	22.4	9
quaternary sp^3 C	$-CR_3$	14.0	−5

Cyclic aliphatic and olefinic groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
cyclic secondary sp^3 C	$-C_cH_2-$	25.9	24.6
cyclic tertiary sp^3 C	$-C_cHR-$	20.6	11.7
cyclic quaternary sp^3 C	$-C_cR_2-$	18.0	6.1
cyclic tertiary sp^2 C	$-C_cHR-$	21.8	15.9
cyclic quaternary sp^2 C	$-C_cR_2-$	21.2	[4.7]

Olefinic and acetylenic groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
secondary sp^2 C	$=CH_2$	25.8	46
tertiary sp^2 C	$=CH-$	27.8	21.4
quaternary sp^2 C	$=C-$	21.7	6.9
tertiary sp C	$\equiv C-H$	34.3	37.1
quaternary sp C	$\equiv C-$	28.9	15.5

Aromatic groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
tertiary aromatic sp^2 C	$=C_aH-$	21.8	17.5
quaternary aromatic sp^2 C	$=C_aR-$	15.3	8.5
internal quaternary aromatic C	$=C_aR-$	[16]	[9.1]

(B) Group values Γ_l and Γ_c of various functional groups.[b]

Monodentate functional groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
alcohols, phenols	$-OH$	53.1	23.5
fluorine	$-F$	16.2	[24.8]
chlorine	$-Cl$	30.8	28.7
bromine	$-Br$	34.6	32.4
iodines	$-I$	39.1	[27.9]
nitrile	$-CN$	47.7	42.3
carboxylic acid	$-CO_2H$	87.4	53.1
acid chloride	$-COCl$	[62.8]	[60.2]
aldehyde	$-(C=O)H$	57.7	[84.5]
isocyanate	$-NCO$	[58.2]	[52.7]
nitro group	$-NO_2$	58.6	56.1
secondary sp^3 nitrogen	$-NH_2$	51.0	21.6
primary amides	$-CONH_2$	54.4	54.4
thiols	$-SH$	49.0	[51.9]
sulfonamide	$-SO_2NH_2$	104	104
substituted urea	$-NHCONH_2$	82.8	82.8

Acyclic bidentate functional groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
ketones	$-CO-$	51.5	28
ester	$-CO_2R$	63.2	40.3
ether	$-O-$	29.8	49.8
secondary sp^3 N	$-NH-$	[51]	−0.3
secondary amide	$-CONH-$	79.9	44.4
carbamates	$-OCONH-$		76.1
sulfides	$-S-$	40.3	[116]
disulfides	$-S-S-$	[74.5]	41
sulfoxides	$-SO-$	[83.7]	47.7
sulfones	$-SO_2-$		88.7

Acyclic tridentate functional groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
tertiary sp^3 N	$-NR_2$	22.0	[31.5]
tertiary sp^2 N	$=N-$	[44.4]	10.7
phosphine oxide	$-(PO)R-$		28.5

Acyclic tetradentate functional groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
quaternary silicon	$-SiR_2-$	30.9	32.4
quaternary tin	$-SnR_2-$	[58.6]	[77.2]
quaternary germanium	Ge	[48.1]	[18.9]

Cyclic functional groups

Description of group	Formula	J mol^{-1} K^{-1} Γ_l	J mol^{-1} K^{-1} Γ_c
cyclic ketones	$-(CO)_c-$	[46.4]	34.3
lactones	$-CO_2-$	[67.4]	45.2
cyclic carbonates	$-OCO_2-$	[92]	[68.2]
cyclic anhydrides	$-CO_2CO-$		80.3
cyclic ether	$-Oc-$	24.6	9.7
cyclic sec. sp^3 N	$-N_cH-$	46.0	23.9

TABLE 2. Group values Γ_l and Γ_c for estimating $C_{p_l}(298.15\,\mathrm{K})$ and $C_{p_c}(298.15\,\mathrm{K})$—Continued

Cyclic functional groups			
		$\mathrm{J\,mol^{-1}\,K^{-1}}$	
Description of group	Formula	Γ_l	Γ_c
cyclic tertiary sp^3 N	$-N_cR-$	28.6	1.2
cyclic tertiary sp^2 N	$=N_c-$	20.7	13.9
cyclic urea	–NHCONH–		63.6
cyclic sec. amide	–CONH–	[92]	46.4
cyclic tertiary amide	–CONR–	[170]	52.7
cyclic imide	–CONHCO–		74.1
cyclic sulfides	$-S_c-$	33.8	20.3

[a]See Ref. 19.
[b]Values reported in brackets are tentative assignments.

$$\Delta_{\mathrm{vap}}H_m\ (298.15\ \mathrm{K})/\mathrm{J\ mol^{-1}} \approx \Delta_{\mathrm{vap}}H_m(T_m)+[10.58+0.26C_{p_l}(298.15\ \mathrm{K})]\times(T_m-298.15), \quad (4)$$

$$\Delta_{\mathrm{sub}}H_m\ (298.15\ \mathrm{K})/\mathrm{J\ mol^{-1}} \approx \Delta_{\mathrm{sub}}H_m(T_m)+[0.75+0.15C_{p_c}(298.15\ \mathrm{K})]\times(T_m-298.15), \quad (5)$$

$$\Delta_{\mathrm{fus}}H_m\ (298.15\ \mathrm{K})/\mathrm{J\ mol^{-1}} \approx \Delta_{\mathrm{fus}}H_m(T_{\mathrm{fus}})+\{[0.75+0.15C_{p_c}(298.15\ \mathrm{K})]\times(T_m-298.15)-[10.58+0.26C_{p_l}(298.15\ \mathrm{K})]\times(T_m-298.15). \quad (6)$$

An uncertainty ($\pm 2\ \sigma$) of one third the temperature adjustment has been associated with the use of Eqs. (5) and (6) in Table 4. The uncertainty has been assigned arbitrarily.

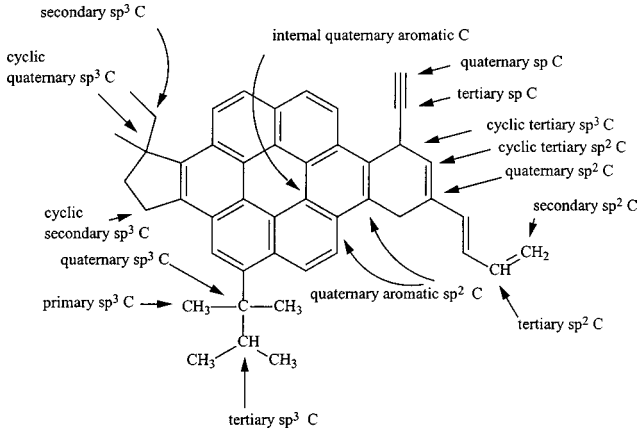


FIG. 2. A hypothetical molecule illustrating the different hydrocarbon groups in estimating C_p.

5. A Thermochemical Cycle: Sublimation, Vaporization, and Fusion Enthalpies

The use of a thermochemical cycle is an extremely effective manner of evaluating the quality of enthalpy data associated with phase changes. It should be emphasized at the start that internal consistency within a cycle does not guarantee that all the data are necessarily of high quality. Sublimation enthalpy is related to the sum of the fusion and vaporization enthalpies, Eq. (7), provided all are referenced to the same temperature. Vaporization enthalpy is the larger of

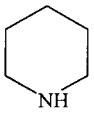
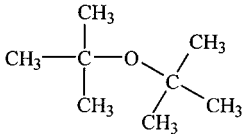
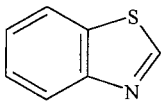
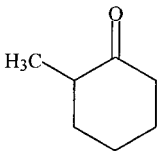
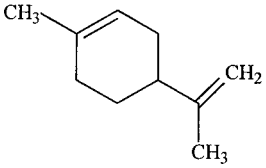
$$\Delta_{\mathrm{sub}}H_m\ (298.15\ \mathrm{K}) = \Delta_{\mathrm{vap}}H_m(298.15\ \mathrm{K}) + \Delta_{\mathrm{fus}}H_m(298.15\ \mathrm{K}) \quad (7)$$

the two enthalpies on the right hand side of the equation. Since fusion enthalpies of solids usually decrease when adjusted to 298.15 K, the latter contributes a smaller amount to the sublimation enthalpy, particularly if the melting point of the material is high. Thus an accurate vaporization enthalpy can tolerate a less accurately determined fusion enthalpy. This is fortunate since as discussed below, there is a physical basis for variance in fusion enthalpy.

Many solids exhibit polymorphism or undergo solid-solid phase transitions. These may occur unnoticed. Solid-solid phase transitions occurring below $T=298.15\,\mathrm{K}$ generally do not pose a problem if the vaporization and sublimation enthalpy measurements are conducted at temperatures above the phase change. Enthalpic differences between polymorphic forms generally tend to be small in relation to solid-gas, liquid-gas transitions. Since the smaller $\Delta_{\mathrm{fus}}H_m(298.15\,\mathrm{K})$ term in Eq. (7) is the one affected by polymorphism, this phenomena should not have a large effect on the quality of the thermochemical cycle, even if the sublimation and fusion enthalpy measurements are conducted on different polymorphic forms. In many cases the sublimation enthalpy measured directly should compare favorably with the sum of the fusion and vaporization enthalpy. Yet often this is not the case.

The results given in Table 4 illustrate some of the situations that can arise when constructing a thermochemical

TABLE 3. Some estimations of C_{p_l} (298.15 K) and C_{p_c} (298.15 K) using group values

$CH_3CH_2CO_2H$	Cp_l (298.15 K) = 34.9+31.9+87.4 = 154.2 J mol^{-1} K^{-1} (152.8)[a] Cp_c (298.15 K) = 116.6 J mol^{-1} K^{-1}
	Cp_l (298.15 K) = 5*25.9+28.6 = 175.5 J mol^{-1} K^{-1} (179.9)[b] Cp_c (298.15 K) = 146.9 J mol^{-1} K^{-1}
	Cp_l (298.15 K) = 6*34.9+2*14.0+29.8 = 267.2 J mol^{-1} K^{-1} (278.2)[b] Cp_c (298.15 K) = 259.4 J mol^{-1} K^{-1}
	Cp_l (298.15 K) = 4*21.8+2*15.3+33.8+20.7+21.8= 194.1 J mol^{-1} K^{-1} (189.5)[b] Cp_c (298.15 K) = 137.1 J mol^{-1} K^{-1}
	Cp_l (298.15 K) = 4*25.9+34.9+20.6 +46.4 = 205.5 J mol^{-1} K^{-1} (204.6)[b] Cp_c (298.15 K) = 181 J mol^{-1} K^{-1}
	Cp_c (298.15 K) = 2*34.9+3*25.9+25.8+21.7+21.8+21.2+20.6 = 258.6 J mol^{-1} K^{-1} (249.0)[b] Cp_c (298.15 K) = 232.2 J mol^{-1} K^{-1}

[a]See Ref. 8.
[b]See Ref. 14.

cycle based on phase changes. The sublimation enthalpy of *p*-nitroaniline has been measured frequently and reproducibly. The value of (100.9±1.0) kJ mol^{-1} is the mean value of nine measurements. Two measurements of the fusion and vaporization enthalpy are also available. Both fusion enthalpies are in good agreement with each other; the mean value is reported in Table 4. Comparison of the vaporization enthalpies at T=298.15 K results in values with a 12 kJ mol^{-1} discrepancy. In this instance the experimental sublimation enthalpy falls halfway between the two values calculated by Eq. (7). The experimental data suggest a vaporization enthalpy of 85.5 kJ mol^{-1}. This is an instance where the vaporization enthalpies are in disagreement; disagreement between sublimation enthalpies is the more common occurrence.

Data for 1,6-hexanedioic acid represents results that are more typical. The fusion and vaporization enthalpies have been measured once while the sublimation enthalpy has been reported three times. In this instance good agreement is observed between three of the four sublimation values.

Acetanilide provides a different but similar example. The sublimation enthalpies calculated using Eq. (6) are slightly larger than the two direct measurements. The data suggest a vaporization enthalpy of 73.9 and a sublimation enthalpy of 90 kJ mol^{-1} at T=298.15 K.

The vaporization and sublimation enthalpies of 4-chlorobiphenyl have been reported a number of times. One set of sublimation enthalpies cluster around 83 kJ mol^{-1} and the other around 75 kJ mol^{-1}. A distinction between these two possibilities is possible by examining the vaporization enthalpies of the isomeric 2- and 3-chlorobiphenyls (see Table 6). The vaporization enthalpies of these isomeric materials would be expected to be similar. On this basis, a vaporization of around 72 kJ mol^{-1} and a sublimation enthalpy of approximately 83 kJ mol^{-1} for 4-chlorobiphenyl at T =298.15 K is selected for 4-chlorobiphenyl.

Benzil is a case where all the available data appear to be

TABLE 4. A comparison of experimental sublimation enthalpies and those calculated using Eq. (6); enthalpies in kJ mol^{-1}; C_p in J mol^{-1} K^{-1} [a]

		$\Delta_{fus}H_m$ (T_{fus})	T_{fus}/K	$\Delta_{vap}H_m$ (T_m/K)	T_m/K	$\Delta_{sub}H_m$ (T_m)	T_m/K	C_{p_l}	C_{p_c}	$\Delta_{fus}H_m$ (298 K)	$\Delta_{vap}H_m$ (298 K)	$\Delta_{sub}H_m$ (298 K) [Eq. (6)]	$\Delta_{sub}H_m$ (298 K)[a]
$C_6H_6N_2O_2$	4-nitroaniline	21.1	420.7	77.9	488	100.7	298	235.8	164.7	15.4±1.9	91.5±4.5	106.9±4.9	100.9
				70	430						79.5±3.2	94.9±3.7	
$C_6H_{10}O_4$	1,6-hexanedioic acid	34.85	426.4	92	447	133.6	298	302.4	213.8	27.6±2.4	105.3±3.5	132.9±4.3	133.6
						129.3	383						132.1±0.9
						140	306.5						140.3±0.1
C_8H_9NO	acetanilide	21.65	387.5	64.8	488	80.6	313.5	239.1	177.0	17.6±1.3	78.6±4.6	96.2±4.7	81.0±0.1
				66.3	402	87.2	326.5				73.9±2.4	91.4±2.8	88.0±0.3
$C_{12}H_9Cl$	4-chlorobiphenyl	13.32	348.6	71.6	298	86	278	272.9	211.7	10.8±0.8	71.6	82.4±0.8	85.3±0.2
				66.8	368	73.7	326				72.5±1.7	83.3±1.9	74.6±0.3
				59	384						66.0±2.1	76.8±2.2	
				65.9	466						79.6±4.0	90.4±4.1	
$C_{14}H_{10}O_2$	benzil	23.1	368	69.2	416	98.4	329	351.6	248.0	18.6±1.5	81.2±2.8	99.8±2.2	99.62.0
$C_{14}H_{22}O$	2,6-di-t-butylphenol	16.57	310.7	60.4	401	84.6	298	401.8	311.1	15.7±0.3	72.2±2.4	88.0±2.5	84.6
						81.5	298						81.5
						110.9	298						110.9
$C_{16}H_{10}$	fluoranthene	18.8	383.3	62.3	518	98.3	298	310.5	226.6	14.0±1.6	82.4±5.3	96.4±5.5	98.3
				86.2	495	84.6	303				104.2±4.7	118.2±5.0	84.8±0.1
				77.4	398	99.2	298				86.5±2.4	100.5±2.9	99.2
						102.1	340						103.6±0.5
						102.6	328						103.6±0.3
$C_{17}H_{34}O_2$	methylhexadecanoate	68.16	307.2	69.6	302	152.3	296	579.6	490.1	67.4±0.3	70.2±0.1	137.6±0.3	152.±0.1
				82.4	426					54.7±0.2	103.0±3.1	170.6±3.1	
				82.6	393						97.9±2.3	165.3±2.3	
				71.4	437						93.8±3.3	161.2±3.3	
		55.35	305.2									125.0±0.2	
												157.8±3.1	
												152.6±2.3	
												148.5±3.3	

[a]See Ref. 7. $\Delta_{fus}H_m(T_{fus})$ and $\Delta_{vap}H_m(T_m)$ refer to the fusion and vaporization enthalpy at the melting point and mean temperaure of measurement; fusion enthalpies are from Chickos *et al.*[6] and Domalski and Hearing[14]; sublimation enthalpies from Chickos and Acree;[7] vaporization enthalpies from Table 6; uncertainties in fusion and vaporization enthalpies (±2 σ) are those associated with the temperature adjustment only.

internally consistent. The fusion enthalpy reported is the average of two literature values.[14] Similarly with 2,6-di-*t*-butylphenol and fluoranthene. The sublimation enthalpies measured directly and those calculated by Eq. (7) agree within ±4.0 kJ mol^{-1}, which is the accuracy typical of many experimental sublimation and vaporization enthalpy measurements.

The scatter of data obtained for methyl hexadecanoate illustrate another common situation that can arise when data from the literature are examined. Two fusion enthalpies and several vaporization enthalpies have been reported which are not in particularly good agreement. Using the value of the sublimation enthalpy as a guide, consistent results are obtained if the fusion enthalpy of 54.7 kJ mol^{-1} (298.15 K) is combined with the mean of the last three vaporization enthalpies, 98.3±5.3 kJ mol^{-1}, resulting in a sublimation enthalpy of 152.9±5.4 kJ mol^{-1}.

6. Estimation of Vaporization Enthalpies

Vaporization enthalpy is a property that is successfully modeled by various computational methods. Many estimation methods in the chemical engineering literature have been developed to provide vaporization enthalpies near or at the boiling point and are accurate to a few %. Some require critical constants and other parameters that may have to be estimated themselves. A summary of some of the existing methods and their applications can be found in the book edited by Lyman *et al.*[10] (see also Ref. 15). The estimation of vaporization enthalpy at or near the boiling point continues to be a topic of recurring interest.[16–23]

A number of methods and equations for the estimation of vaporization enthalpies at $T = 298.15$ K have also been developed. Some model vaporization enthalpies on concepts of group additivity while some are based on other thermodynamic principles.[24–35] Details on the application of some of these methods in estimating vaporization enthalpies are available.[4,10,25]

7. Vaporization Enthalpy Compendium

Vaporization enthalpies reported from the 1880s to 2002 are included in Tables 6 and 7. Table 5 contains a listing of the acronyms and abbreviations that are used in both tables. Table 6 contains vaporization enthalpy data for organic compounds; Table 7 contains similar information for a selected number of organometallic and inorganic substances. Information in the tables is organized as described below.

TABLE 5. A list of acronyms and abbreviations used in Tables 6 and 7

A	calculated from the vapor pressure data reported by the method of least squares
B	calculated from the difference of the enthalpies of sublimation at temperature T, and fusion at the melting point
BG	Bourdon gauge
C	calorimetric determination
GC	gas chromatography
GCC	gas chromatography-calorimetry
CGC	correlation gas chromatography
DM	diaphram manometer
DSC	differential scanning calorimeter
EB	ebullometry
EST	estimated value
GS	gas saturation, transpiration
HG	Heise gauge
HSA	head space analysis
I	isoteniscope
IPM	inclined piston manometry
ME	mass effusion–Knudsen effusion
MG	McLeod gauge
MM	mercury manometer
NA	not available at the time of publication
OM	oil manometer
RG	Rodebush gauge
SG	spoon gauge
STG	strain gauge
T	tensimeter
TE	torsion effusion
UV	ultraviolet absorption

Compounds are arranged according to molecular formula. The compound's name, occasionally a synonym, and the CAS registry number are included on the first line. The range of temperatures studied is the next entry in the table. For measurements performed at a constant temperature or when not specified, this entry is left blank. The vaporization enthalpy at the mean temperature of measurement, $\Delta_{\mathrm{vap}}H_m(T_m)$, is the next entry followed by the mean temperature (T_m/K), an acronym or abbreviation briefly describing the type of measurement and the reference to the original work. In some cases the type of measurement was not available, or recorded. In these instances this entry was left blank. If the authors of the work have adjusted their results to 298.15 K, then this information along with the reference is entered on the third line. This information is repeated for multiple measurements. The measurements are arranged in reverse chronological order. Entries for compounds with deuterium substitution are listed after the unlabeled parent.

The authors have made an effort to present the data accurately and without error. Much of the earlier data have been retrieved with the aid of existing compendia that have been published over the years. Most of these compendia include references to the original literature. A notable exception is the very useful reference *Handbook of the Thermodynamics of Organic Compounds* by Stephenson and Malanowski published in 1987 by Elsevier Science Publishing Co. Some of the data included in this compendium, notably for the higher *n*-alkanes and haloalkanes, appears to be data that have been estimated.[36,37] Estimated vaporization enthalpies are generally not included in Table 5 unless the data are reported in the Stephenson and Malanowski compendium or the source is identified. The reader should exercise some caution when using data that are not referenced to the primary literature. Additionally, some of the information has originated from non-English language journals with translations occasionally provided by the author's students. These tables, having been complied over a period of twenty years, have gone through numerous revisions. Some errors have been corrected; however it is unlikely that all of them have been detected. The reader is encouraged to consult the original literature when using this data.

Several sources of data contains vapor pressure data represented in the form of the Antoine equation [Eq. (8)], where P represents the vapor pressure, T is the temperature in K, and A, B, and C are the Antoine constants obtained from treatment of the vapor pressure-temperature data

$$\log_{10} P = A - B/(C+T). \tag{8}$$

Vaporization enthalpies were calculated from the Antoine constants in one of two ways. A Lotus macro was written to calculate vapor pressures using the Antoine constants over a 30 K temperature range; the resulting vapor pressure–temperature data were reformulated in terms of the integrated form of the Clausius–Clapeyron equation. $A \ln P$ versus $1/T$ linear regression analysis provided $\Delta_{\mathrm{vap}}H_m(T_m)/R$ at the mean temperature, T_m, of the 30 K range. The 30 K temperature range was chosen closest to $T = 298.15$ K but within the temperature range specified. Alternatively, vaporization enthalpy was calculated using the Antoine constants from the following equation:

$$\Delta_{\mathrm{vap}}H_m(T_m) = 2.303RB[T_m/(T_m+\mathrm{C})]^2. \tag{9}$$

Temperatures were chosen to lie with the range of measurement, often at the mean temperature. In a number of instances, the authors only provide vapor pressure–temperature data. In these instances, a vaporization enthalpy was calculated from the data as described above.

An examination of data in Tables 6 and 7 reveals that many compounds have been measured repeatedly. All the data here are treated equally; there has been no attempt to recommend or identify recommended values. A critical evaluation of the data is beyond the scope of this compendium. However, the reader should be aware of a number of critical reviews that are available. The IUPAC monograph, ''Enthalpies of Vaporization of Organic Compounds by Majer and Svoboda[12] is among the most extensive evaluations available. Others are included in the references associated with Tables 6 and 7. The reader is encouraged to consult these references before deciding on the best value to use.

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$CBrClF_2$	bromochlorodifluoromethane				[353-59-3]
	(268–324)	23.0	(283)	A	[87/5]
	(194–287)	23.1	(272)	A	[87/5]
	(321–403)	22.4	(336)	A	[87/5]
	(403–427)	23.1	(415)	A	[87/5]
	(178–283)	26.0	(193)		[79/12]
	(178–283)	18.7	(268)		[60/16][84/9]
$CBrCl_3$	bromotrichloromethane				[75-62-7]
	(273–387)	35.0	(288)		[79/12]
	(294–443)	36.1	(309)	A	[87/5][70/16]
$CBrF_3$	bromotrifluoromethane				[75-63-8]
	(276–340)	17.8	(291)	A	[87/5]
	(160–267)	17.7	(252)	A	[87/5]
	(165–216)	19.1	(180)		[79/12]
CBrFO	carbonic bromide fluoride				[753-56-0]
	(197–256)	22.9	(241)	A	[87/5]
CBrN	cyanogen bromide				[506-68-3]
	(273–313)	45.9	(288)		[54/14][84/9]
$CBrN_3O_6$	bromotrinitromethane				[560-95-2]
	(318–335)	47.8	(326)	A	[87/5][70/10]
CBr_2F_2	dibromodifluoromethane				[75-61-6]
	(247–297)	26.1	(282)	A	[87/5][59/1] [79/12][70/16]
	(156–218)	18.6	(203)		[48/7]
CBr_3F	tribromofluoromethane				[353-54-8]
	(315–380)	34.4	(330)	A	[87/5][48/7]
CBr_4	carbon tetrabromide				[558-13-4]
	(375–463)	48.3	(390)		[79/12]
	(369–463)	48.2	(384)	A	[87/5][47/5]
CClFO	carbonic chloride fluoride				[353-49-1]
	(165–211)	22.7	(196)	A	[87/5][64/3]
	(157–227)	22.0	(192)		[48/17]
$CClF_2NO$	difluorocarbamoyl chloride				[16847-30-6]
	(189–234)	25.8	(219)	A	[87/5]
$CClF_3$	chlorotrifluoromethane				[75-72-9]
	(268–302)	16.0	(283)	A	[87/5]
	(133–185)	17.0	(170)	A	[87/5]
	(184–246)	15.7	(231)	A	[87/5]
	(243–271)	15.7	(257)	A	[87/5]
	(145–192)	16.8	(177)	A	[87/5][79/12]
	(124–191)	17.1	(177)	A	[47/5]
	(134–298)	NA			[41/13]
$CClF_3O$	trifluoromethyl hypochlorite				[22082-78-6]
	(160–226)	21.2	(211)	A	[87/5]
	(142–219)	19.6	(204)	A	[87/5]
$CClF_3O_2$	peroxyhypochlorous acid, trifluoromethyl ester				[32755-26-3]
	(163–296)	23.4	(281)	A	[87/5]
$CClF_3O_3S$	fluorosulfuric acid, chlorodifluoromethyl ester				[6069-31-4]
	(227–309)	32.1	(243)		[99/16]
	(228–310)	34.6	(243)	A	[87/5][66/15]
$CClF_3S$	trifluoromethanesulfenyl chloride				[421-17-0]
	(247–272)	24.5	(260)	A	[87/5][99/16]
$CClF_4N$	difluoro(difluorochloromethyl)amine				[13880-71-2]
	(209–277)	26.6	(262)	A	[87/5]
$CClF_4NO_2S$	chloro(trifluoromethyl) sulfamoyl fluoride				[19419-95-5]
	(253–288)	28.8	(273)	A	[87/5][99/16]
$CClF_4NO_{12}S_4$	fluorosulfuric acid, *bis*[[(flurosulfonyl)oxy]amino]chloromethylene ester				[53684-03-0]
		42.6	(424)		[75/21]
$CClF_7S$	chlorotetrafluoro (trifluoromethyl) sulfur				[42179-04-4]
	(293–353)	25.9	(323)		[99/16]
CClN	cyanogen chloride				[506-77-4]
	(196–286)	32.2	(271)		[47/5]
CCl_2FNO	dichlorocarbamic fluoride				[32751-02-3]
		40.7			[72/40]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
CCl_2F_2	dichlorodifluoromethane				[75-71-8]
	(282–345)	20.0	(297)	A	[87/5]
	(173–244)	21.4	(229)	A	[87/5]
	(173–240)	21.6	(225)	A	[87/5]
	(236–285)	20.4	(270)	A	[87/5]
	(341–385)	20.5	(356)	A	[87/5]
	(172–279)	22.9	(187)		[79/12]
	(154–243)	21.5	(228)		[47/5]
CCl_2F_3N	N,N-difluoro-1,1-dichloro-1-fluoromethylamine				
	(209–277)	27.0	(262)	I	[70/15]
CCl_2F_3N	N,N-dichloro-1,1,1-trifluoromethylamine				[13880-73-4]
	(226–291)	25.8	(276)	A	[87/5]
CCl_2F_3N	N,1-dichloro-N,1,1-trifluoromethylamine				
	(226–291)	26.4	(258)		[71/17]
CCl_2F_3NS	(trifluoromethyl)imidosulfurous dichloride				[10564-47-3]
	(284–344)	35.4	(298)		[99/16]
	(283–362)	33.7	(298)	A	[87/5]
CCl_2F_3P	(trifluoromethyl)dichlorophosphine				[421-58-9]
	(208–276)	29.2	(260)		[64/4]
CCl_2F_3PS	dichloro(trifluoromethylthio)phosphine				[18799-78-5]
	(293–363)	31.7	(308)	A	[87/5][99/16] [60/25]
CCl_2O	phosgene				[75-44-5]
	(280–341)	24.5	(295)	A	[87/5]
	(240–281)	25.7	(266)	A	[87/5]
	(338–410)	24.5	(353)	A	[87/5]
	(406–455)	24.4	(421)	A	[87/5]
	(215–248)	27.0	(233)		[48/2]
	(180–273)	25.8	(258)		[47/5]
CCl_3F	trichlorofluoromethane				[75-69-4]
	(213–301)	28.5	(228)	A	[87/5]
	(213–249)	28.2	(234)	A	[87/5]
	(295–363)	25.6	(310)	A	[87/5]
	(357–429)	24.7	(372)	A	[87/5]
	(424–468)	25.1	(439)	A	[87/5]
	(237–293)	27.3	(251)		[79/12]
	(237–293)	27.1	(276)		[41/4]
		25.2	(290)	C	[41/4]
	(244–334)	26.4	(259)		[40/1]
CCl_3F_2N	N,N-difluoro-1,1,1-trichloromethylamine				
	(252–325)	33.4	(267)	I	[87/5][70/15]
CCl_3F_2N	N,1,1-trichloro-N,1-difluoromethylamine				
	(273–319)	27.8	(296)		[71/17]
CCl_3F_2P	difluoro(trichloromethyl)phosphine				[1112-03-4]
	(289–313)	32.5	(301)	A	[87/5]
CCl_3NO	trichloronitrosomethane				[3711-49-7]
	(253–333)	32.4	(268)	A	[87/5]
CCl_3NO_2	trichloronitromethane				[76-06-2]
	(273–333)	39.3	(288)	A	[87/5]
	(301–449)	38.5	(316)	A	[87/5][70/16]
	(247–385)	40.0	(262)		[47/5]
CCl_4	carbon tetrachloride				[56-23-5]
	(349–416)	30.4	(364)	A	[87/5]
	(412–497)	29.2	(427)	A	[87/5]
	(494–555)	30.6	(509)	A	[87/5]
		32.4	(298)	C	[80/1]
	(262–349)	33.7	(277)	A, EB	[87/5][72/6]
	(293–351)	32.3	(308)		[59/2]
	(313–338)	31.7	(325)		[53/1]
CFIO	carbonyl fluoride iodide				
	(230–292)	26.1	(277)	A	[87/5]
CFN	cyanogen fluoride				[1495-50-7]
	(201–227)	22.4	(214)	A	[87/5][64/25] [70/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$CFNO_3S$	sulfuryl fluoride isocyanate				[1495-51-8]
	(294–335)	36.5	(309)	A	[87/5][99/16]
$CFNO_6S_2$	pyrosulfuryl fluoride isocyanate				[27931-74-4]
	(330–405)	40.9	(345)	A	[87/5][99/16]
CFN_3O_6	fluorotrinitromethane				[1840-42-2]
	(274–358)	34.2	(289)	A, T	[87/5][66/13]
CF_2N_2OS	cyanoimidosulfuryl fluoride				[19073-57-5]
	(262–354)	37.2	(277)	A	[87/5][99/16]
$CF_2N_2O_4$	difluorodinitromethane				[1185-11-1]
	(283–310)	41.4	(296)	A	[87/5][73/25]
CF_2N_2S	N-cyano-S,S-difluorosulfilimine				[14453-41-9]
	(271–320)	44.1	(286)	A	[87/5][99/16]
CF_2O	carbonyl fluoride				[353-50-4]
	(159–189)	20.0	(174)	A	[87/5]
CF_2O_4S	fluoroformyl fluorosulfate				[7519-54-2]
	(250–296)	27.3	(281)	A	[87/5][99/16]
CF_2S	thiocarbonyl fluoride				[420-32-6]
	(133–211)	19.2	(196)	A	[87/5][70/16]
	(178–211)	17.4	(196)	A	[87/5][99/16] [62/33]
CF_3I	iodotrifluoromethane				[2314-97-8]
	(188–296)	22.5	(281)	A	[87/5][70/16] [48/7]
CF_3NO	(difluoroamino) carbonyl fluoride				[2368-32-3]
	(143–217)	21.6	(202)	A, MM	[87/5][65/23]
CF_3NO	trifluoronitrosomethane				[334-99-6]
	(141–174)	17.1	(159)	A	[87/5]
CF_3NOS	S,S,-difluoro-N-(fluoroformyl)-sulfimine				[3855-41-2]
	(220–323)	37.3	(235)	A	[87/5][99/16]
CF_3NOS	trifluoromethyl thionitrite				
	(196–215)	25.8	(205)	T	[69/32]
CF_3NOS	(N-sulfinyl)-trifluoromethylamine				[10564-49-5]
	(239–289)	27.0	(274)	A	[87/5][99/16]
CF_3NO_2	trifluoronitromethane				[335-02-4]
	(238–243)	21.6	(240)	A	[87/5]
CF_3NO_4	(trifluoromethyl) peroxynitrate				[50311-48-3]
	(193–247)	24.8	(232)	A	[87/5]
$CF_3NO_6S_2$	N-(fluoroformyl)-N,O-*bis*(fluorosulfonyl) hydroxylamine				[19252-48-3]
	(325–392)	36.3	(340)	A	[87/5][99/16]
CF_4	carbon tetrafluoride				[75-73-0]
	(195–227)	12.1	(212)	A	[87/5]
	(89–163)	12.3	(148)	A	[87/5]
	(160–197)	11.9	(182)	A	[87/5]
	(116–146)	12.4	(131)		[69/6]
	(93–146)	12.8	(131)		[33/1][87/5]
CF_4N_2O	fluoro(trifluoromethyl) diimidoxide				[815-10-1]
	(233–267)	27.7	(252)	A	[87/5]
$CF_4N_2O_3S_2$	carbonyl*bis*(imidosulfuryl fluoride)				[25523-80-2]
	(316–331)	41.3	(323)	A	[87/5][99/16]
CF_4O	hypofluorous acid trifluoromethyl ester				[373-91-1]
	(153–194)	15.5	(179)	A	[87/5][48/1]
	[Note: The table in Ref. [48/1] 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 Ref. [87/5].]				
CF_4OS	trifluoromethyl sulfinyl fluoride				[812-12-4]
	(204–271)	22.7	(256)	A, I	[87/5][68/15] [70/16][99/16]
CF_4O_2	hydroperoxyfluoric acid trifluoromethyl ester				[34511-13-2]
	(156–203)	18.7	(188)	A	[87/5]
CF_4O_2S	trifluoromethane sulfonyl fluoride				[335-05-7]
	(226–249)	23.4	(237)	A	[87/5][99/16]
CF_4O_2S	trifluoromethyl fluorosulfonate				
	(194–269)	25.6	(231)		[60/15]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
CF_4O_4S	trifluoromethylperoxyfluorosulfonate				
	(233–286)	27.7	(259)		[60/15]
$CF_4O_5S_2$	fluorosulfonic acid trifluoromethane sulfonic acid anhydride				[21595-44-8]
	(308–338)	32.9	(323)	A	[87/5][99/16]
$CF_4O_6S_2$	trifluoromethyl fluorodisulfate				
	(292–351)	34.4	(321)		[60/15]
CF_5NO	pentafluoromethoxyamine				[4217-93-0]
	(167–210)	18.5	(195)	A	[87/5][65/19]
CF_5OPS	phosphorothionic difluoride, S-trifluoromethyl ester				[52752-66-6]
	(293–353)	23.1	(323)		[99/16]
CF_5OPS	trifluoromethylthiosphoryl difluoride				
		23.0			[74/38]
CF_5O_3P	trifluoromethoxyphosphoryl difluoride				
	(225–264)	27.4	(245)		[73/37]
CF_5O_3P	difluoroperoxyphosphoric acid trifluoromethyl ester				[39125-42-3]
	(241–280)	32.0	(265)	A	[87/5][73/37]
CF_5PS	trifluoromethyl thiodifluorophosphine				
		24.3			[74/38]
$CF_6N_2O_2S_2$	N,N′-(difluoromethylene)*bis*imidosulfuryl fluoride				[20094-83-1]
	(283–308)	36.0	(295)		[68/21]
$CF_6N_2S_2$	difluoromethane *bis*(S,S-difluorosulfilimine)				[17686-45-2]
	(230–313)	36.0	(245)	A	[87/5][99/16]
CF_6PS	difluoro(trifluoromethylthio)phosphine				[52752-65-5]
	(293–353)	22.3	(323)		[99/16]
CF_8OS	pentafluoro(trifluoromethoxy) sulfur				[1873-23-0]
	(217–262)	24.4	(247)	A	[87/5][64/18]
CF_8S	trifluoro(pentafluorothio)methane				[373-80-8]
	(223–252)	20.2	(253)	I	[01/22]
	(205–262)	23.8	(247)	A	[87/5][99/16]
CF_9NOS	tetrafluoro(difluoroamino)(trifluoromethoxy) sulfur				
	(257–298)	28.7	(272)	A	[87/5][64/19]
$CF_{10}O_5S_2$	[μ-(carbonodiperoxato)]decafluoro disulfur				[60672-59-5]
		38.1			[76/31]
CIN	cyanogen iodide				[506-78-5]
	(419–426)	40.0	(423)	A	[87/5]
	(298–414)	58.3	(313)		[47/5]
CN_4O_8	tetranitromethane				[509-14-8]
	(286–373)	43.1	(301)	A	[87/5]
	(313–373)	42.9	(328)	A	[87/5][84/9]
					[52/15]
	(273–313)	46.6	(288)		[87/5][84/9]
					[49/19]
CO	carbon monoxide				[630-08-0]
	(68–108)	6.0	(93)	A	[87/5]
	(69–83)	6.0	(81)		[32/3]
		6.0	(81)	C	[32/3]
COS	carbonyl sulfide				[463-58-1]
	(161–284)	20.4	(176)		[99/16]
	(284–379)	18.3	(299)		[99/16]
	(140–224)	19.5	(209)	A	[87/5]
		19.0±0.1	(214)		[39/5]
	(162–224)	19.5	(209)		[37/2]
CO_2	carbon dioxide				[124-38-9]
	(273–304)	16.7	(288)	A	[87/5]
	(216–273)	16.4	(258)	A	[87/5]
	(267–303)	16.5	(282)		[72/6]
	(179–198)	25.9	(188)		[56/1]
CS_2	carbon disulfide				[75-15-0]
	(255–354)	28.7	(270)		[99/16]
	(354–552)	27.1	(369)		[99/16]
	(260–353)	28.5	(275)	A	[87/5]
	(338–408)	27.4	(353)	A	[87/5]
	(388–497)	27.0	(403)	A	[87/5]
	(490–533)	28.7	(505)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(255–318)	28.7	(270)	EB	[72/6][87/5]
	(277–353)	28.1	(292)	EB	[62/2]
		28.1±0.1	(282)	C	[62/2]
		27.5±0.1	(298)	C	[62/2]
		26.7±0.1	(319)	C	[62/2]
		27.7	(298)		[61/25]
	(303–358)	27.6	(318)		[46/4]
$CHBrF_2$	bromodifluoromethane				[1511-62-2]
	(194–259)	24.0	(244)	A	[87/5]
	(194–288)	24.7	(209)		[79/12]
$CHBr_3$	tribromomethane				[75-25-2]
		46.1±0.1	(298)	C	[72/41]
	(320–412)	42.3	(335)	EB	[72/6][79/12]
	(303–373)	44.0	(318)		[41/7][84/9]
$CHClF_2$	chlorodifluoromethane				[75-45-6]
	(275–327)	20.0	(290)	A	[87/5]
	(170–233)	21.3	(218)	A	[87/5]
	(230–275)	20.4	(260)	A	[87/5]
	(324–366)	20.1	(339)	A	[87/5]
	(194–310)	21.8	(209)		[79/12]
	(229–236)	21.0	(232)		[64/2]
		20.2	(232)	C	[57/18]
$CHCl_2F$	dichlorofluoromethane				[75-43-4]
	(225–282)	26.1	(267)	A	[87/5]
	(279–344)	25.3	(294)	A	[87/5]
	(341–399)	24.2	(356)	A	[87/5]
	(397–450)	24.1	(412)	A	[87/5]
	(229–236)	U20.9	(233)		[64/2]
	(181–282)	26.2	(267)		[47/5]
	(244–317)	36.7	(259)		[40/1]
$CHCl_2FO_3S$	fluorosulfuric acid, dichloromethyl ester				[42016-50-2]
	(275–293)	36.2	(284)	A	[87/5][99/16]
$CHCl_3$	chloroform				[67-66-3]
	(306–427)	30.8	(321)		[95/16]
	(227–269)	31.8	(254)	A	[87/5]
	(333–416)	30.4	(348)	A	[87/5]
	(410–481)	28.9	(425)	A	[87/5]
	(479–523)	30.1	(494)	A	[87/5]
		31.1	(298)	C	[80/1]
	(260–333)	32.5	(275)	EB	[72/6]
	(215–334)	35.0	(230)		[47/5]
	(308–333)	30.9	(320)		[38/5]
$CHFI_2$	diiodofluoromethane				[1493-01-2]
	(299–332)	32.9	(314)	A	[87/5][79/12] [70/16]
$CHFN_2O_4$	fluorodinitromethane				[7182-87-8]
	(298–338)	43.6	(313)	A	[87/5]
CHFO	formyl fluoride				[1493-02-3]
	(178–235)	24.4	(220)	A	[87/5][64/3] [70/16]
CHF_2I	difluoroiodomethane				[1493-03-4]
	(227–287)	26.0	(272)	A	[87/5][79/12] [70/16]
CHF_3	trifluoromethane				[75-46-7]
	(138–190)	18.1	(175)	A	[87/5]
	(198–298)	16.8	(213)	A	[87/5]
	(146–192)	18.0	(177)		[62/1]
CHF_3O_2	trifluoromethyl hydroperoxide				[16156-36-8]
	(248–285)	30.9	(270)	A	[87/5]
CHF_3O_3S	trifluoromethylsulfonic acid				[1493-13-6]
	(354–435)	47.7	(369)	A	[87/5][99/16]
CHF_3S	trifluoromethanethiol				[1493-15-8]
	(167–236)	21.8	(183)		[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(167–236)	21.0	(221)	A	[87/5][99/16]
CHF_7S	(difluoromethyl) sulfur pentafluoride				[420-67-7]
	(221–292)	27.5	(237)		[99/16]
	(221–293)	25.6	(278)	A	[87/5][99/16]
CHN	hydrogen cyanide				[74-90-8]
	(259–299)	28.1	(274)	A	[87/5]
	(298–457)	27.8	(313)	A	[87/5]
	(257–315)	28.1	(272)		[75/10]
	(259–294)	28.0	(277)		[34/5]
	(257–319)	28.1	(272)		[26/1]
	(265–300)	27.8	(282)		[26/8]
	(256–319)	27.2	(303)	MM	[26/9]
CDN	deuterium cyanide				[3017-23-0]
	(182–282)	26.2	(267)		[47/5]
	(265–293)	27.6	(279)		[34/5]
CHNO	cyanic acid				[420-05-3]
	(233–268)	30.7	(253)	A	[87/5]
	(197–267)	NA			[38/2]
CHNS	thiocyanic acid				[463-56-9]
	(278–396)	28.0	(293)	A	[87/5]
CHN_3O_6	trinitromethane				[517-25-9]
	(290–317)	32.6	(303)	A	[87/5][67/25]
CH_2BrCl	bromochloromethane				[74-95-7]
	(226–341)	42.0	(241)	A	[87/5]
	(289–341)	33.5	(304)		[59/1][79/12]
CH_2Br_2	dibromomethane				[74-95-3]
		37.0±0.1	(298)	C	[72/41]
	(273–373)	36.5	(288)		[79/12]
	(290–409)	37.2	(305)	A, EST	[87/5][56/16] [70/16]
	(238–371)	37.8	(253)		[47/5]
CH_2ClF	chlorofluoromethane				[593-70-4]
	(140–264)	23.3	(249)	A	[87/5][70/16]
CH_2Cl_2	dichloromethane				[75-09-2]
		30.6±0.1	(298)	C	[89/10]
	(311–383)	29.0	(326)	A	[87/5]
		28.8	(298)	C	[80/1]
	(264–311)	30.3	(279)	EB	[72/6]
	(303–313)	29.2	(308)		[60/3]
	(233–313)	30.2	(248)		[48/5]
		NA			[46/17]
	(186–312)	29.4			[27/2]
CH_2F_2	difluoromethane				[75-10-5]
	(256–321)	19.9	(271)	A	[87/5]
	(191–222)	21.2	(207)	A	[87/5]
	(191–258)	20.3	(243)	A	[87/5]
	(316–351)	20.3	(331)	A	[87/5]
	(191–221)	21.2	(206)		[68/5]
	(191–242)	20.6	(227)		[68/5]
CH_2F_3NS	1,1,1-trifluoromethanesulfenamide				[1512-33-0]
	(218–291)	34.1	(276)	A	[87/5][99/16] [60/24]
CH_2I_2	diiodomethane				[75-11-6]
		45.6	(298)	GC	[94/19]
		49.0	(298)	C	[87/4]
	(293–455)	48.8	(307)		[79/12]
	(356–505)	45.4	(371)	A	[87/5][70/16]
CH_2O	formaldehyde				[50-00-0]
	(184–251)	24.3	(236)	A	[87/5]
	(173–251)	24.2	(236)		[35/1][87/5]
CH_2O_2	formic acid				[64-18-6]
	(300–392)	35.2	(315)	EB	[87/9]
	(283–384)	36.0	(298)	A	[87/5]
monomer		20.1±0.1	(298)	C	[70/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		46.3±0.5	(298)	C	[70/8]
	(310–374)	35.2	(325)		[49/1]
		19.9	(298)		[41/10]
		29.6	(303)		[34/8]
	(273–373)	20.3	(315)		[30/8]
	(273–373)	20.9	(338)		[30/8]
		20.4	(315)	C	[30/8]
		21.1	(338)	C	[30/8]
	(273–307)	36.8	(288)		[1894/1]
	(295–374)	47.7	(374)		[1883/1]
CH_3Br	methyl bromide				[74-83-9]
	(223–278)	25.8	(238)		[79/12]
	(201–296)	24.6	(281)	A, EST	[87/5][61/13]
	(203–277)	25.2	(262)		[47/1]
	(203–278)	25.3	(263)		[38/3]
CH_3Cl	methyl chloride				[74-87-31]
	(247–310)	22.0	(262)	A	[87/5]
	(368–416)	21.8	(383)	A	[87/5]
	(308–373)	21.0	(323)	A	[87/5]
	(198–278)	22.0	(263)		[48/5]
	(183–250)	22.7	(235)		[47/1]
	(191–249)	23.5	(206)		[46/4]
	(192–249)	22.6	(234)		[40/2]
		20.1	(293)	C	[26/6]
CH_3Cl_2P	dichloromethyl phosphine				[676-83-5]
	(229–297)	35.5	(282)	A	[87/5][63/29]
CH_3F	methyl fluoride				[593-53-3]
	(205–242)	16.9	(227)	A	[87/5]
	(240–288)	16.9	(273)	A	[87/5]
	(141–208)	17.1	(193)	A, EST	[87/5][61/13] [70/16]
	(165–217)	16.4	(202)		[87/5][48/15] [84/9]
	(170–197)	17.7	(183)	A	[87/5][19/1] [84/9]
CH_3F_2N	N,N-difluoromethylamine				[753-58-2]
	(203–257)	23.5	(242)	A	[87/5]
		22.9	(257)		[60/19]
CH_3F_2NS	methylimidosulfurous difluoride				[758-20-3]
	(194–258)	28.7	(226)		[99/16]
	(194–258)	28.6	(243)	A	[87/5][99/16]
CH_3F_2P	difluoromethyl phosphine				[753-59-3]
	(174–236)	23.4	(221)	A	[87/5]
CH_3F_2OPS	difluorothiophosphoric, S-methyl ester				[25237-37-0]
	(236–298)	31.2	(251)	A	[87/5][99/16]
$CH_3F_2PS_2$	difluorodithiophosphoric acid, methyl ester				[21348-13-0]
	(253–298)	39.0	(268)	A	[87/5][99/16]
$CH_3F_4NP_2S_2$	N,N-*bis*(difluorothiophosphoryl) N-methylamine				[25741-62-2]
	(273–325)	38.7	(288)	A	[87/5][99/16]
CH_3I	methyl iodide				[74-88-4]
	(228–337)	30.4	(243)	A	[87/5]
	(315–502)	26.5	(330)	A	[87/5]
	(208–227)	31.1	(217)		[82/17]
	(259–314)	29.2	(274)	EB	[72/6][79/12]
	(218–315)	30.4	(233)		[47/5]
	(273–307)	28.2	(288)		[36/2]
CH_3NO	formamide				[75-12-7]
	(293–377)	70.8	(308)	A	[87/5]
	(415–466)	61.2	(430)	A	[87/5]
		60.2	(298)	A	[85/7][85/6]
	(343–483)	64.0	(358)		[47/5]
CH_3NOS	N-sulfinyl methanamine				[4291-05-8]
	(252–277)	31.8	(264)	A	[87/5][99/16]
CH_3NO_2	methyl nitrite				[624-91-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(218–273)	22.1	(258)	A	[87/5]
	(154–225)	26.2	(190)		[82/2]
		22.6±0.2			[58/19]
CH_3NO_2	nitromethane				[75-52-2]
	(313–353)	37.2	(298)	CGC	[95/21]
	(405–476)	35.2	(420)	A	[87/5][67/12]
	(328–410)	36.8	(343)	A	[87/5][54/2]
		37.2±0.1	(318)	C	[54/2]
		36.3±0.1	(335)	C	[54/2]
		35.2±0.1	(353)	C	[54/2]
		34.0±0.1	(374)	C	[54/2]
		38.3±0.1	(298)	C	[47/11]
CH_3NO_3	methyl nitrate				[598-58-3]
	(273–303)	34.8	(288)	A	[87/5]
CH_4	methane				[74-82-8]
	(90–120)	8.6	(105)	A	[87/5]
	(115–149)	8.4	(134)	A	[87/5]
	(148–189)	8.7	(174)	A	[87/5]
	(91–127)	8.6	(112)		[72/5][84/9]
	(91–190)	8.5	(175)		[72/5]
		8.1	(137)		[71/28]
	(100–190)	8.6	(175)		[70/4]
		8.2	(112)	C	[61/31]
		7.5	(130)	C	[61/31]
		5.9	(160)	C	[61/31]
		4.0	(180)	C	[61/31]
	(109–189)	8.5	(149)		[61/31]
		8.5±0.1	(99)		[39/5]
	(92–110)	8.6	(101)		[21/1][84/9]
CH_4F_2NPS	difluorothiophosphoric acid, N-methylamide				[31411-30-0]
	(273–325)	39.1	(288)	A	[87/5][99/16]
CH_4N_2	ammonium cyanide				[12211-52-8]
	(222–305)	47.1	(237)		[47/5]
CH_4N_2	methyl diazene				[26981-93-1]
	(195–236)	27.5	(221)	A	[87/5]
$CH_4N_2O_2$	ammonium carbamate				
	(247–331)	54.1	(262)		[47/5]
CH_4O	methanol				[67-56-1]
		34.3			[99/32]
	(175–273)	39.2	(258)	A	[87/5]
	(338–487)	36.9	(353)	A	[87/5]
	(188–228)	43.7	(213)	A	[87/5]
	(224–290)	38.9	(275)	A	[87/5]
	(285–345)	38.3	(300)	A	[87/5]
	(335–376)	37.0	(350)	A	[87/5]
	(373–458)	36.1	(388)	A	[87/5]
	(453–513)	35.1	(468)	A	[87/5]
		32.7	(373)	C	[86/17]
		28.1	(423)	C	[86/17]
		20.6	(473)	C	[86/17]
		7.4	(510)	C	[86/17]
	(316–336)	37.5	(331)	EB	[84/26]
	(243–303)	37.8	(298)		[83/14]
	(288–337)	38.3	(303)		[74/9][84/9]
	(337–383)	37.0	(352)		[73/26]
		37.4±0.1	(298)	C	[73/13]
		36.7±0.1	(313)	C	[73/13]
		36.2±0.1	(323)	C	[73/13]
		35.6±0.1	(333)	C	[73/13]
		35.3±0.1	(338)	C	[73/13]
		34.7±0.1	(343)	C	[73/13]
		35.2±0.1	(338)	C	[73/3]
		35.6±0.1	(331)	C	[73/3]
		36.2±0.1	(321)	C	[73/3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		37.0±0.1	(306)	C	[73/3]
	(275–336)	38.7	(290)	EB	[72/6][87/5]
		37.43±0.02	(298)	C	[71/27]
	(288–357)	38.3	(303)	EB	[70/2]
	(353–483)	36.3	(368)		[67/38]
		37.3±0.1	(298)	C	[66/2]
		37.7±0.1	(298)	C	[63/2]
	(278–323)	38.4	(293)		[60/5]
CH_4O_2	methyl hydroperoxide				[3031-73-0]
	(253–313)	37.7	(268)	A	[87/5][51/10]
CH_4O_3S	methanesulfonic acid				[75-75-2]
	(395–440)	73.9	(410)	A	[87/5][99/16]
CH_4S	methyl mercaptan				[74-93-1]
	(208–298)	27.2	(223)		[99/16]
	(267–359)	25.2	(359)	A	[87/5]
	(221–283)	25.7	(268)	A	[87/5]
	(345–424)	23.7	(360)	A	[87/5]
	(414–470)	24.2	(429)	A	[87/5]
		23.8	(298)		[71/28]
	(222–279)	25.8	(264)		[87/5][42/1]
CH_5N	methylamine				[74-89-5]
	(319–381)	24.8	(334)	A	[87/5]
	(373–430)	23.5	(388)	A	[87/5]
	(263–329)	26.1	(278)	A	[87/5]
	(223–273)	27.2	(258)	A	[87/5][70/16]
	(190–267)	27.4	(252)		[37/10][84/9]
CH_5NO	N-methylhydroxylamine				[593-77-1]
	(293–338)	49.7	(308)	A	[87/5][70/16]
	(313–338)	49.3	(325)	A	[87/5][57/4]
					[84/9]
CH_5NO	O-methylhydroxylamine				[67-62-9]
	(228–322)	36.9	(243)	A	[87/5]
	(210–321)	38.0	(225)		[57/4][84/9]
CH_6ClN	methylamine hydrochloride				[593-51-1]
	(518–593)	114.5	(533)	A	[87/5]
CH_6N_2	methylhydrazine				[60-33-4]
	(274–299)	41.8	(286)	A	[87/5][51/1]
$C_2BrCl_2F_3O_4$	perchloric acid, 1,2,2-trifluoro-1-chloro-2-bromoethyl ester				[38217-36-6]
	(273–294)	42.5	(283)	A	[87/5][73/19]
C_2BrCl_3O	trichloroacetyl bromide				[34069-94-8]
	(265–416)	42.6	(280)	A	[87/5][47/5]
C_2BrF_3	bromotrifluoroethylene				[598-73-2]
	(260–340)	25.0	(275)	A	[87/5]
$C_2BrF_5O_3S$	2-bromotetrafluoroethyl fluorosulfate				
	(273–298)	33.2	(285)		[63/17]
C_2BrF_9S	pentafluoro(1-bromo-1,2,2,2-tetrafluoroethyl) sulfur				[63011-81-4]
	(294–330)	30.7	(309)	A	[87/5][99/16]
$C_2Br_2ClF_3$	2-chloro-1,2-dibromo-1,1,2-trifluoroethane				[354-51-8]
	(343–428)	31.4	(358)	A	[87/5]
		35.0±0.1	(298)	C	[81/13]
		34.2±0.1	(313)	C	[81/13]
		33.5±0.1	(328)	C	[81/13]
		32.6±0.1	(343)	C	[81/13]
		31.6±0.1	(358)	C	[81/13]
$C_2Br_2F_4$	1,2-dibromotetrafluoroethane				[124-73-2]
	(283–357)	28.5	(298)	A	[87/5]
	(354–443)	26.9	(369)	A	[87/5]
	(440–488)	27.1	(455)	A	[87/5]
		28.4±0.1	(298)	C	[81/13]
		27.5±0.1	(313)	C	[81/13]
		26.5±0.1	(328)	C	[81/13]
	(246–295)	30.0	(280)		[87/5][70/16]
C_2ClFN_2	*cis* chloro(fluoroimino)acetonitrile				[30915-40-3]
	(254–320)	31.7	(269)	A	[87/5][71/19]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_2ClFN_2	*trans* chloro(fluoroimino)acetonitrile				[30915-39-0]
	(257–320)	32.7	(272)	A	[87/5][71/19]
$C_2ClF_2NO_2$	chloro(fluorocarbonyl)carbamic fluoride				[42016-33-1]
		36.8	(376)		[73/21]
C_2ClF_3	chlorotrifluoroethylene				[79-38-9]
	(206–262)	21.8	(247)	A	[87/5]
	(298–379)	20.2	(313)	A	[87/5]
	(206–263)	21.7	(248)		[51/2]
	(195–250)	21.9	(235)		[33/2]
$C_2ClF_3O_2$	chloroformic acid, trifluoromethyl ester				[23213-83-4]
	(195–273)	24.1	(258)	A	[87/5]
$C_2ClF_3O_4S$	difluorochloroacetic acid, fluorosulfuric acid anhydride				[6069-32-5]
	(265–352)	39.8	(280)	A	[87/5][66/15]
					[99/16]
C_2ClF_4NO	chloro(trifluoromethyl)carbamic fluoride				[42016-31-9]
		28.9	(310)		[73/21]
$C_2ClF_4NO_4S$	fluorosulfuric acid, chloro(trifluoromethyl)carbamic acid anhydride				[42016-34-2]
		28.5	(398)		[73/21]
C_2ClF_5	chloropentafluoroethane				[76-15-3]
	(262–317)	19.7	(277)	A	[87/5]
	(234–265)	20.1	(250)	A	[87/5]
	(312–353)	19.7	(327)	A	[87/5]
	(178–234)	20.9	(219)		[66/4]
	(176–235)	20.9	(220)	A	[87/5][55/1]
		19.4±0.1	(234)	C	[55/1]
C_2ClF_5O	hypochlorous acid, pentafluoroethyl ester				[22675-67-8]
	(193–248)	25.0	(233)	A	[87/5][73/22]
C_2ClF_5OS	pentafluoroethanesulfinyl chloride				[39937-08-1]
	(273–338)	32.7	(288)	A	[87/5][64/22]
					[99/16]
$C_2ClF_5O_3S$	2-chlorotetrafluoroethyl fluorosulfate				
	(248–330)	32.9	(289)		[63/17]
$C_2ClF_5O_6S_2$	1,2,2-trifluoro-1-chloro-1,2-ethanediol *bis*(fluorosulfate)				[1957-17-1]
	(308–406)	53.2	(323)	A	[87/5][99/16]
C_2ClF_6NOS	(pentafluoroethyl)imidosulfurous chloride fluoride				[74366-11-3]
		35.6	(326)	I	[80/10]
C_2ClF_6P	*bis*(trifluoromethyl) chlorophosphine				[650-52-2]
	(193–273)	27.8	(258)		[64/4][84/9]
$C_2ClF_6PS_2$	chloro *bis*(trifluoromethylthio)phosphine				
	(293–373)	33.0	(333)		[60/25]
C_2ClF_9NP	[*bis*(trifluoromethyl)amino]trifluorochlorophosphorous(V)				
	(223–273)	26.4	(248)		[66/23]
C_2ClF_9S	2-chlorotetrafluoroethylsulfur pentafluoride				[646-63-9]
		28.3	(320)		[61/21][99/16]
$C_2Cl_2F_2$	1,2-dichloro-1,2-difluoroethylene				[598-88-9]
	(191–294)	27.9	(279)	A	[87/5]
	(240–294)	27.2	(279)		[33/3]
$C_2Cl_2F_2N_2$	dichloro(difluoroamino)acetonitrile				[30913-21-4]
	(238–341)	26.8	(253)	A	[87/5][71/19]
$C_2Cl_2F_2O$	fluorodichloroacetyl fluoride				[354-18-7]
	(208–273)	21.8	(258)	A	[87/5]
$C_2Cl_2F_3NO$	N,N′-dichloro-2,2,2-trifluoroacetamide				[32751-03-4]
		40.9			[72/40]
$C_2Cl_2F_3NOS$	S,S-dichloro-N-(trifluoroacetyl) sulfilimine				[24433-67-8]
	(306–333)	44.2	(319)	A	[87/5][69/22]
					[99/16]
$C_2Cl_2F_3NO_2S$	(trifluoromethyl)sulfonyl carbonimidic dichloride				[51587-33-8]
	(312–405)	44.1	(327)	A	[87/5][99/16]
$C_2Cl_2F_4$	1,1-dichloro-1,2,2,2-tetrafluoroethane				[374-07-2]
	(231–373)	23.5	(246)	A	[87/5][70/16]
		23.2	(233)	BG	[55/20]
		22.5	(273)	BG	[55/20]
		20.8	(313)	BG	[55/20]
		17.7	(353)	BG	[55/20]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_2Cl_2F_4$	1,2-dichloro-1,1,2,2-tetrafluoroethane				[76-14-2]
	(277–391)	24.3	(292)	A	[87/5]
	(210–277)	25.1	(262)	A	[87/5]
	(178–277)	25.3	(261)		[47/5]
$C_2Cl_2F_4O_4$	perchloric acid, 1,1,2,2-tetrafluoro-2-chloroethyl ester				[38126-28-2]
	(249–294)	32.6	(279)	A	[87/5][73/19]
$C_2Cl_2F_5NS$	S,S-dichloro-N-(pentafluoroethyl) sulfilimine				[10564-48-4]
	(297–375)	37.4	(312)	A	[87/5][99/16]
$C_2Cl_2F_8NP$	[*bis*(trifluoromethyl)amino]difluorodichlorophosphorous (V)				
	(262–305)	32.9	(293)		[66/33]
$C_2Cl_3F_3$	1,1,1-trichloro-2,2,2-trifluoroethane				[354-58-5]
		28.1±0.1	(298)	C	[80/9]
		27.2±0.1	(313)	C	[80/9]
		26.3±0.1	(328)	C	[80/9]
	(297–319)	28.9	(308)		[80/9]
	(286–310)	29.2	(298)	A	[87/5][63/6]
$C_2Cl_3F_3$	1,1,2-trichloro-1,2,2-trifluoroethane				[76-13-1]
	(273–319)	28.3	(288)	A	[87/5]
	(238–364)	30.9	(253)	A	[87/5]
	(360–473)	26.9	(375)	A	[87/5]
	(297–317)	28.8	(307)	A	[87/5]
		28.4±0.1	(298)	C	[80/9]
		27.5±0.1	(313)	C	[80/9]
		26.6±0.1	(328)	C	[80/9]
		28.2±0.4	(298)		[74/5]
	(273–318)	28.2	(288)		[63/6]
	(248–356)	30.8	(263)		[40/1]
	(243–353)	NA			[39/7]
$C_2Cl_3F_3$	trichlorotrifluoroethane				
	(248–352)	30.5	(263)		[38/4]
$C_2Cl_3F_3O_4$	perchloric acid, 1,2,2-trifluoro-1,2-dichloroethyl ester				[38126-27-1]
	(273–296)	26.9	(284)	A	[87/5]
C_2Cl_3N	trichloroacetonitrile				[545-06-2]
	(289–357)	35.1	(304)	A	[87/5][70/16]
	(289–356)	34.7	(304)		[54/4]
C_2Cl_4	tetrachloroethylene				[127-18-4]
	(307–393)	38.4	(322)		[95/13]
	(310–393)	38.7	(325)	A	[87/5][72/6]
	(300–380)	38.9	(315)		[70/3][84/9]
	(333–373)	37.6	(348)		[67/30]
		39.6±0.1	(298)	C	[60/1]
$C_2Cl_4F_2$	1,2-difluorotetrachloroethane				[76-12-0]
		34.6±0.1	(308)	C	[92/11]
		34.1±0.1	(315)	C	[92/11]
		33.6±0.1	(323)	C	[92/11]
		33.1±0.1	(330)	C	[92/11]
		32.6±0.1	(338)	C	[92/11]
	(301–365)	36.6	(316)	A	[87/5]
	(235–293)	36.4	(278)	A	[87/5]
	(312–362)	34.0	(327)	A	[87/5]
	(283–364)	32.7	(298)		[33/4]
$C_2Cl_4F_2O_3S$	2-fluorotetrachloroethyl fluorosulfate				
	(311–437)	42.0	(329)		[63/17]
$C_2Cl_4F_2O_4$	perchloric acid, 1,2-difluoro-1,2,2-trichloroethyl ester				[38126-29-3]
	(273–294)	30.2	(283)	A	[87/5][73/19]
$C_2Cl_4F_4N_2$	1,2-*bis*(dichloroamino)tetrafluoroethane				
		43.1			[72/40]
$C_2Cl_4F_6OS$	pentafluoro(2-fluoro-1,1,2,2-tetrachloroethoxy)sulfur				[762-90-3]
	(314–418)	42.8	(329)	A	[87/5][62/19]
C_2Cl_4O	tetrachloroethylene oxide				[16650-10-5]
	(308–348)	36.9	(323)	A	[87/5]
C_2Cl_4O	trichloroacetyl chloride				[76-02-8]
	(305–393)	38.3	(320)	A	[87/5][59/1] [70/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_2Cl_6	hexachloroethane				[67-12-11]
	(460–513)	40.3	(475)	A	[87/5]
	(345–460)	51.2	(360)	A	[87/5][70/16]
	(305–458)	53.7	(320)		[47/5]
C_2D_4O	ethylene oxide—d_4 oxide				[6552-57-4]
	(230–273)	27.6	(258)		[52/2][84/9]
C_2FNO_2	fluorocarbonyl isocyanate				[15435-14-0]
	(228–264)	33.5	(249)	A	[87/5][67/31]
$C_2F_2N_2O$	difluorocarboncyamidic amide				[32837-63-1]
		29.7	(383)		[73/23]
$C_2F_2N_2O_2$	difluorocarbonisocyantidic amide				[32837-64-2]
		33.9	(327)		[73/23]
$C_2F_2N_4O_8$	1,2-difluoro-1,1,2,2-tetranitroethane				[20165-39-3]
	(297–323)	62.8	(310)	A	[87/5][73/25]
$C_2F_2O_2$	oxalyl fluoride				[359-40-0]
	(264–272)	29.7	(268)		[87/5]
$C_2F_2O_4$	*bis*(fluorocarbonyl)peroxide				[692-74-0]
	(226–266)	30.6	(251)		[62/3][84/9]
C_2F_3N	trifluoroacetonitrile				[353-85-5]
	(151–206)	19.3	(191)	A	[87/5]
	(141–203)	19.2	(188)	A	[87/5]
	(197–241)	18.5	(226)	A	[87/5]
	(282–336)	17.4	(309)	A	[87/5]
	(272–311)	17.4	(287)	A	[87/5]
	(142–206)	19.2	(191)		[61/2]
C_2F_3NO	trifluoromethyl isocyanate				[460-49-1]
	(195–228)	22.5	(213)	A	[87/5]
C_2F_3NO	trifluoronitrosoethylene				[2713-04-4]
	(247–250)	25.7	(248)	A	[87/5]
C_2F_3NOS	trifluoromethanesulfinyl cyanide				[61951-27-7]
		40.2	(352)	I	[77/17]
C_2F_3NOS	trifluoromethylsulfenyl isocyanate				[691-03-2]
	(231–293)	27.9	(278)	A	[87/5][99/16] [63/42]
$C_2F_3NO_2S$	2,2,2-trifluoro-N-sulfinylacetamide				[26454-68-2]
	(267–302)	36.4	(282)	A	[87/5][99/16]
$C_2F_3NO_2S_2$	trifluoromethanesulfonyl isothiocyanate				[51587-30-5]
	(297–385)	41.0	(312)	A	[87/5][99/16]
$C_2F_3NO_3S$	trifluoromethanesulfonyl isocyanate				[30227-06-6]
	(275–345)	36.9	(290)	A	[87/5][99/16]
C_2F_3NS	thiocyanic acid, trifluoromethyl ester				[690-24-4]
	(226–294)	32.6	(279)	A	[87/5][99/16] [63/42]
$C_2F_3N_3O_6$	1,1,2-trifluoro-1,2,2-trinitroethane				[20165-38-2]
	(313–353)	57.7	(328)	A	[87/5][73/25]
C_2F_4	tetrafluoroethylene				[116-14-3]
	(197–273)	16.8	(258)	A	[87/5]
	(273–306)	16.6	(288)	A	[87/5]
	(142–208)	18.6	(193)	A	[87/5][53/2] [84/9]
$C_2F_4N_2$	tetrafluoroaminoacetic, nitrile				[5131-88-4]
	(193–238)	23.9	(223)	A	[87/5]
$C_2F_4N_2O_3$	1,1,2,2-tetrafluoro-1-nitro-2-nitrosoethane				[679-08-3]
	(233–293)	28.8	(278)	A	[87/5]
$C_2F_4N_2O_4$	1,1,2,2-tetrafluoro-1,2-dinitroethane				[356-16-1]
	(303–343)	67.8	(323)		[73/25]
	(259–333)	34.7	(274)	A, I	[87/5][57/19]
$C_2F_4N_2O_6S_2$	1,2-*bis*(fluoroformyl)-1,2-*bis*(fluorosulfonyl)hydrazine				[19252-50-7]
	(273–296)	49.8	(284)	A	[87/5][99/16]
C_2F_4O	trifluoroacetyl fluoride				[354-34-7]
	(161–215)	20.9	(200)	A	[87/5][72/2]
$C_2F_4O_2S$	trifluoroethylene sulfonyl fluoride				[684-106]
	(270–313)	27.0	(285)	A	[87/5][99/16]
$C_2F_4O_3$	fluoroperoxyformic acid, trifluoromethyl ester				[16118-40-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(194–249)	27.3	(234)	A	[87/5]
$C_2F_4O_4S$	trifluoroacetyl fluorosulfate				[5762-53-8]
	(262–321)	34.3	(277)	A	[87/5][66/17]
	(250–320)	34.9	(265)		[66/4]
$C_2F_4S_2$	perfluoro-1-3-dithietane				
		29.2			[73/38]
C_2F_5I	pentafluoroiodoethane				[354-64-3]
	(248–283)	20.8	(268)	A	[87/5]
C_2F_5NO	pentafluoroacetamide				[32822-49-4]
		23.8	(252)	HG	[71/18]
C_2F_5NO	pentafluoronitrosoethane				[354-72-3]
	(193–227)	20.9	(212)	A	[87/5]
C_2F_5NOS	carbamothioic acid, difluoro-S-(trifluoromethyl) ester				[32837-66-4]
		23.0	(315)		[73/23]
C_2F_5NOS	S,S-difluoro-N-(trifluoroacetyl) sulfilimine				[24433-65-6]
	(240–282)	34.4	(267)	A	[87/5][69/22] [99/16]
C_2F_5NOS	1,1,1-trifluoro-N-(fluoroformyl)methanesulfinimidyl fluoride				[28103-61-9]
	(276–323)	38.9	(291)	A	[87/5][99/16]
C_2F_5NOS	1,1,2,2,2-pentafluoro-N-sulfinyl ethylamine				[10564-50-8]
	(245–303)	29.0	(260)	A	[87/5][99/16]
$C_2F_5NO_4S$	(fluorosulfonyl)(trifluoromethoxy)carbamoyl fluoride				[19252-49-4]
	(277–290)	30.3	(283)		[99/16]
$C_2F_5N_3O_3$	fluoro(1,1,2,2-tetrafluoro-2-nitroethyl)-2-diimide oxide				[755-68-0]
	(257–350)	38.0	(272)	A	[87/5]
C_2F_6	hexafluoroethane				[76-16-4]
	(172–200)	17.3	(186)	A	[87/5]
	(180–196)	17.1	(188)		[48/3]
C_2F_6IN	N-iodo-*bis*(trifluoromethyl)amine				[5764-87-4]
	(261–318)	28.5	(276)	A	[87/5]
C_2F_6IP	*bis*(trifluoromethyl)phosphinous iodide				[359-64-8]
	(273–320)	33.2	(288)		[64/4][84/9]
$C_2F_6N_2$	hexafluoroazomethane				[372-63-4]
	(205–242)	22.9	(227)	A	[87/5]
$C_2F_6N_2O$	hexafluoroazoxymethane				[371-56-2]
	(274–281)	27.2	(277)	A	[87/5]
$C_2F_6N_2O_2$	1,1,1-trifluoro-N-(nitrosooxy)-N-(trifluoromethyl)methanamine				[359-75-1]
	(245–285)	26.8	(270)	A	[87/5]
$C_2F_6N_2O_2$	N-nitroso-O,N-*bis*(trifluoromethyl)hydroxylamine				
	(272–283)	25.4	(277)	A	[87/5]
C_2F_6OS	*bis*(trifluoromethyl)sulfoxide				[30341-37-8]
	(248–303)	27.9	(263)	A	[87/5][99/16]
C_2F_6OS	pentafluoroethyl sulfinyl fluoride				[20621-31-2]
	(234–293)	28.5	(278)	A, I	[87/5][68/15] [99/16]
$C_2F_6OS_2$	S-trifluoromethyl-(trifluoromethyl)thiosulfinate				[63548-94-7]
	(293–353)	30.7	(323)		[99/16]
$C_2F_6OS_2$	methanesulfonothioic acid, trifluoro-S-(trifluoromethyl) ester				
		27.8	(329)	I	[76/18]
$C_2F_6O_2S$	perfluoroethyl fluorosulfate				
	(250–300)	28.8	(275)		[63/17]
$C_2F_6O_3$	*bis*(trifluoromethyl) trioxide				[17118-18-9]
	(193–248)	24.3	(233)	A	[87/5]
$C_2F_6O_3S$	trifluoromethanesulfonic acid, trifluoromethyl ester				[3582-05-6]
	(238–294)	29.4	(252)		[99/16]
	(238–294)	27.6	(279)	A	[87/5][65/18]
$C_2F_6O_4S$	*bis*(trifluoromethyl)sulfate				
	(219–304)	28.7	(262)		[60/15]
$C_2F_6O_5S$	peroxysulfuric acid, *bis*(trifluoromethyl) ester				[41765-14-4]
	(253–319)	32.0	(268)		[99/16]
$C_2F_6O_6S_2$	tetrafluoroethylene glycol, *bis*(fluorosulfate)				[1479-53-4]
	(295–378)	43.7	(310)	A	[87/5][70/16] [99/16]
$C_2F_6O_7S_2$	*bis*(trifluoromethyl) disulfate				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(328–357)	38.3	(342)		[60/15]
C_2F_6S	*bis*(trifluoromethyl) sulfide				[371-78-8]
		23.6			[52/22]
$C_2F_6S_2$	*bis*(trifluoromethyl) disulfide				[372-64-5]
		28.8			[52/22]
C_2F_7N	perfluorodimethylamine				[359-62-6]
	(199–230)	21.4	(215)	A	[87/5]
	(203–233)	18.6	(218)	A	[87/5][49/27]
C_2F_7N	perfluoroethylamine				[354-80-3]
	(171–236)	20.8	(221)	A	[87/5][70/16]
C_2F_7NOS	(pentafluoroethyl)imidosulfuryl fluoride				[59617-28-6]
		30.7			[76/29]
$C_2F_7NO_3S$	fluorosulfuric acid, 1,1,2,2-tetrafluoro-2-(difluoroamino)ethyl ester				[4188-34-5]
	(276–326)	31.1	(291)	A	[87/5][99/16]
$C_2F_7NO_{12}S_4$	fluorosulfuric acid, 1-[*bis*[(fluorosulfonyl)oxo]amino]-2,2,2-trifluoro-ethylidene ester				[53684-02-9]
		43.4	(418)		[75/21]
C_2F_8NOP	[*bis*(difluoromethyl)amino] difluorophosphine oxide				
	(233–278)	30.4	(255)		[66/33]
C_2F_8NOP	phosphorous *bis*(trifluoromethyl)nitroxide difluoride				
		28.0	(288)		[73/24]
C_2F_8OS	difluorooxo-*bis*-(trifluoromethyl) sulfur				[33716-15-3]
	(239–299)	22.4	(254)	A	[87/5][99/16]
		28.4			[71/34]
C_2F_8OS	pentafluoro(trifluoroacetyl) sulfur				[82390-51-0]
	(162–290)	26.6	(177)		[99/16]
$C_2F_8O_3S$	pentafluoro (trifluoroethaneperoxoato) sulfur				[60672-61-9]
		28.0			[76/31]
C_2F_8S	trifluorovinyl sulfur pentafluoride				[1186-51-2]
		25.1	(292)		[61/21]
C_2F_8S	difluoro *bis*(trifluoromethyl) sulfur				[30341-38-9]
		28.8			[71/34]
$C_2F_{10}OS$	pentafluoro(pentafluoroethoxy) sulfur				
	(245–287)	27.6	(272)	A	[87/5][62/19]
$C_2F_{10}O_2S$	tetrafluoro*bis*(trifluoromethoxy) sulfur				[2004-38-8]
	(246–302)	29.9	(261)	A	[87/5][64/18]
$C_2F_{10}O_3S$	(trifluoromethoxy)[(trifluoromethyl)dioxy] sulfur tetrafluoride				[41938-43-6]
	(255–317)	32.5	(270)		[99/16]
$C_2F_{10}O_3S_2$	pentafluoro[1,2,2,2-tetrafluoro-1-[(fluorosulfonyl)oxy]ethyl] sulfur				[68010-32-2]
		34.8			[78/23]
$C_2F_{10}S$	*trans* tetrafluoro*bis*(trifluoromethyl) sulfur				[42179-02-2]
	(233–293)	23.3	(278)	A	[87/5][99/16]
$C_2F_{11}NS$	[*bis*(trifluoromethyl)amino] sulfur pentafluoride				[13888-13-6]
	(233–306)	29.3	(248)	A	[87/5][66/21] [99/16]
$C_2F_{12}S_2$	perfluoro-1,3-dithietane octafluoride				
		35.6			[73/38]
C_2N_2	cyanogen				[460-19-5]
	(240–253)	24.5	(246)	A	[87/5]
	(246–273)	23.9	(257)		[25/1]
	(246–273)	23.5	(267)		[25/1]
C_2HBr	bromoacetylene				[593-61-3]
	(214–273)	25.6	(273)	A	[87/5]
$C_2HBrClF_3$	2-bromo-2-chloro-1,1,1-trifluoroethane				[151-67-7]
	(298–323)	30.0	(310)	A	[87/5]
		29.6±0.3	(298)		[81/5]
		29.6±0.1	(298)	C	[80/9]
		28.7±0.1	(313)	C	[80/9]
		27.8±0.1	(328)	C	[80/9]
		26.8±0.1	(343)	C	[80/9]
	(227–318)	34.3	(242)		[65/6]
	(222–329)	33.2	(237)	A	[87/5][63/7] [70/16]
$C_2HBrClF_3$	1-bromo-2-chloro-1,1,2-trifluoroethane				[354-06-3]
		30.0±0.1	(298)	C	[81/13]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		29.0±0.1	(313)	C	[81/13]
		28.1±0.1	(328)	C	[81/13]
		27.2±0.1	(343)	C	[81/13]
C_2HBrF_8S	(1-bromo-2,2,2-trifluoroethyl)sulfur pentafluoride				[82390-50-9]
		32.0			[82/19]
$C_2HBr_2FO_2$	dibromofluoroacetic acid				[353-99-1]
	(403–468)	60.2	(418)	A	[87/5]
C_2HBr_3O	tribromoacetaldehyde				[115-17-3]
	(291–447)	47.8	(306)	A	[87/5][47/5]
C_2HCl	chloroacetylene				[593-63-5]
	(204–238)	21.8	(223)	A	[87/5]
C_2HClF_2	1,1-difluoro-2-chloroethene				[359-10-4]
		23.5	(233)	BG	[55/20]
		21.4	(273)	BG	[55/20]
		18.5	(313)	BG	[55/20]
		14.1	(353)	BG	[55/20]
C_2HClF_6OS	*trans* [(2-chloro-2-fluorovinyl)oxy] sulfur pentafluoride				[20407-78-7]
		36.8			[68/17]
C_2HClF_6OS	*cis* [(2-chloro-2-fluorovinyl)oxy] sulfur pentafluoride				[20407-79-8]
		34.3			[68/17]
C_2HClF_8OS	(2-chloro-1,2,2-trifluoroethoxy) sulfur pentafluoride				[20334-47-8]
		33.3			[68/17]
$C_2HClF_{12}O_2S$	[(2-chloro-2,2-difluoroethylidiene)dioxy]*bis*(pentafluoro)sulfur				[20563-90-0]
		39.0			[68/17]
C_2HClF_8S	(1,1,2-trifluoro-2-chloroethyl) sulfur pentafluoride				[22756-13-4]
	(279–323)	30.2	(294)	A	[87/5][99/16]
$C_2HCl_2F_3$	1,1,1-trifluoro-2,2-dichloroethane				[306-83-2]
		26.6±0.3	(298)		[02/1]
	(243–448)	28.7	(258)	MM	[92/19]
$C_2HCl_2F_3$	1,1,2-trifluoro-1,2-dichloroethane				[354-23-4]
		26.8±0.3	(298)		[02/1]
C_2HCl_3	trichloroethylene				[79-01-6]
	(297–360)	34.2	(313)		[95/14]
		34.5±0.1	(298)	C	[80/1]
	(280–428)	34.6	(295)		[87/5][70/16]
	(290–359)	36.2	(305)		[44/1]
	(298–360)	35.6	(313)		[12/1][84/9]
$C_2HCl_3F_2O_3S$	fluorosulfuric acid, 2-fluoro-1,1,2-trichloroethyl ester				[42087-88-7]
	(317–353)	36.6	(332)	A	[87/5][99/16]
C_2HCl_3O	trichloroacetaldehyde				[75-87-6]
	(235–371)	36.6	(250)	A	[87/5][47/5]
$C_2HCl_3O_2$	trichloroacetic acid				[76-03-9]
	(326–473)	65.0	(341)	A	[87/5][70/16]
	(385–470)	57.2	(400)		[59/1]
C_2HCl_4FS	(dichloromethyl)(fluorodichloromethyl) sulfide				
	(322–352)	46.5	(337)	A	[87/5][99/16]
C_2HCl_5	pentachloroethane				[76-01-7]
	(274–434)	40.9	(289)	A	[87/5]
	(298–435)	45.5	(313)		[30/1]
$C_2HF_3O_2$	trifluoroacetic acid				[76-05-1]
	(285–345)	35.9	(300)	A	[87/5][62/4] [70/16][84/9]
C_2HF_5	pentafluoroethane				[354-33-6]
		22.8	(175)	C	[99/26]
		21.9	(190)	C	[99/26]
		20.9	(205)	C	[99/26]
		20.3	(215)	C	[99/26]
C_2HF_5O	pentafluorodimethyl ether				[3822-68-2]
	(216–238)	22.3	(239)	I	[01/22]
	(229–331)	19.3	(260)	EB	[96/6]
	(229–331)	17.6	(280)	EB	[96/6]
	(229–331)	15.6	(300)	EB	[96/6]
	(240–313)	20.4	(255)	A	[92/12]
C_2HF_6NOS	S,S-*bis*(trifluoromethyl)sulfoximine				[34556-22-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		35.1	(346)	I	[72/25]
$C_2HF_6NS_2$	*bis*(trifluoromethane) sulphenimide				
	(243–293)	36.5	(268)		[60/24]
C_2HF_6OPS	*bis*(trifluoromethyl) thiophospinic acid				[35814-49-4]
	(283–324)	38.3	(298)	A	[87/5]
C_2HF_6PS	*bis*(trifluoromethyl)(mercapto)phosphine				
	(269–304)	30.7	(286)		[64/31]
$C_2HF_6PS_2$	*bis*(trifluoromethyl) thiophosphinous acid				[1486-19-7]
	(217–280)	32.9	(265)	A	[87/5][99/16]
C_2HF_7S	(2,2-difluoroethenyl) pentafluoro sulfur				[58636-78-5]
		27.7			[78/23]
C_2HF_9S	pentafluoro (1,2,2,2-tetrafluoroethyl) sulfur				[63011-80-3]
		28.0			[78/23]
C_2H_2	acetylene				[74-86-2]
	(258–308)	16.3	(273)	A	[87/5]
	(192–308)	16.7	(207)	A	[87/5]
	(192–225)	16.7	(210)	A	[87/5]
		17.0	(214)		[71/28]
	(215–308)	16.4	(230)		[64/15]
	(193–207)	16.8	(200)		[56/1][84/9]
$C_2H_2Br_2$	*cis* 1,2-dibromoethylene				[590-11-4]
	(299–351)	40.6	(314)	A	[87/5][50/2] [70/16]
$C_2H_2Br_2$	*trans* 1,2-dibromoethylene				[590-12-5]
	(277–344)	35.2	(310)	A	[87/5][70/16]
	(277–343)	42.9	(292)		[50/2][84/9]
$C_2H_2Br_2Cl_2$	1,2-dibromo-1,1-dichloroethane				[75-81-0]
	(354–519)	45.9	(369)	A	[87/5][70/16]
$C_2H_2Br_2Cl_2$	1,2-dibromo-1,2-dichloroethane				[683-68-1]
	(320–379)	45.9	(335)	A	[87/5]
$C_2H_2Br_4$	1,1,1,2-tetrabromoethane				[630-16-0]
	(331–473)	61.5	(346)	A	[87/5][47/5]
$C_2H_2Br_4$	1,1,2,2-tetrabromoethane				[79-27-6]
	(413–573)	56.9	(428)	A	[87/5][70/16]
C_2H_2ClFO	chloroacetyl fluoride				[359-14-8]
	(273–333)	38.0	(288)	A, GS	[87/5][48/14] [70/16]
C_2H_2ClFO	fluoroacetyl chloride				[359-06-8]
	(273–333)	36.7	(288)	A, GS	[87/5][48/14] [70/16]
$C_2H_2ClF_3O_2S$	chlorosulfurous acid, 2,2,2-trifluoroethyl ester				[57169-80-9]
		36.0			[75/41]
$C_2H_2ClF_7S$	(2-chloro-2,2-difluoroethyl)pentafluoro sulfur				[68010-35-5]
		32.9			[78/23]
$C_2H_2Cl_2$	1,1-dichloroethylene				[75-35-4]
	(245–305)	28.4	(260)	A	[87/5][59/2] [70/16]
$C_2H_2Cl_2$	*cis* 1,2-dichloroethylene				[156-59-2]
	(332–495)	29.3	(347)	A	[87/5]
	(273–334)	31.5	(288)	A	[87/5][70/16]
	(292–335)	31.6	(307)		[51/3]
	(273–356)	31.8	(288)		[47/4]
$C_2H_2Cl_2$	*trans* 1,2-dichloroethylene				[156-60-5]
	(321–473)	29.0	(336)	A	[87/5]
	(273–319)	30.1	(288)		[83/2]
	(263–323)	30.4	(278)		[87/5][70/16]
	(235–358)	31.4	(250)		[47/4]
$C_2H_2Cl_2F_2$	1,2-dichloro-1,1-difluoroethane				[1649-08-7]
	(323–493)	27.8	(338)	A	[87/5]
$C_2H_2Cl_2F_6OS$	(1,2-dichloro-2-fluoroethoxy)pentafluoro sulfur				[20334-44-5]
	(temperature not given)	38.8			[68/17]
$C_2H_2Cl_2F_6OS$	(2,2-dichloro-2-fluoroethoxy)pentafluoro sulfur				[20334-45-6]
	(temperature not given)	38.5			[68/17]
$C_2H_2Cl_2O$	chloroacetyl chloride				[79-04-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(253–379)	45.0	(268)	A	[87/5][70/16]
	(301–380)	40.8	(316)		[59/1]
	(290–373)	44.1	(305)		[35/5]
$C_2H_2Cl_2O_2$	dichloroacetic acid				[79-43-6]
	(317–468)	55.7	(332)	A	[87/5][47/5]
$C_2H_2Cl_4$	1,1,1,2-tetrachloroethane				[630-20-6]
		45.7±0.1	(298)	C	[80/1]
	(316–447)	40.1	(331)	A	[87/5][70/16]
	(332–403)	39.2	(347)		[49/1]
$C_2H_2Cl_4$	1,1,2,2-tetrachloroethane				[79-34-5]
	(377–419)	40.4	(392)	A	[87/5]
	(371–419)	40.8	(394)		[84/20]
	(377–418)	40.1	(398)		[78/21]
		39.0	(415)		[77/30]
		45.8±0.2	(298)	C	[72/41]
	(328–464)	41.9	(343)	A	[87/5][70/16]
	(298–403)	47.7	(313)		[50/1]
	(304–419)	45.7	(319)		[30/1]
$C_2H_2Cl_4S$	*bis*(dichloromethyl) sulfide				[51174-93-7]
	(355–462)	47.6	(370)	A	[87/5]
C_2H_2FN	fluoroacetonitrile				[503-20-8]
	(273–333)	38.1	(288)	A, GS	[87/5][48/14] [70/16]
$C_2H_2F_2$	1,1-difluoroethene				[75-38-7]
		13.2	(233)	BG	[55/20]
		9.5	(273)	BG	[55/20]
$C_2H_2F_4$	1,1,1,2-tetrafluoroethane				[811-97-2]
	(221–246)	23.7	(249)	I	[01/22]
		26.4	(180)		[98/24]
		25.0	(200)		[98/24]
		23.8	(220)		[98/24]
		22.7	(240)		[98/24]
	(279–363)	22.0	(294)		[92/16]
$C_2H_2F_4O_2S$	fluorosulfurous acid, 2,2,2-trifluoroethyl ester				
		33.6			[75/41]
$C_2H_2F_6P_2$	1,2-*bis*-(trifluoromethyl) diphosphine				[462-57-7]
	(233–292)	33.8	(277)	A, SG	[87/5][58/10]
$C_2H_2F_8S$	pentafluoro (2,2,2-trifluoroethyl) sulfur				[65227-29-4]
		29.3			[78/23]
$C_2H_2I_2$	*cis* 1,2-diiodoethylene				[590-26-1]
	(302–425)	46.5	(317)	A	[87/5][70/16]
	(302–424)	47.3	(317)		[50/2]
$C_2H_2I_2$	*trans* 1,2-diiodoethylene				[590-27-2]
	(350–403)	42.3	(365)	A	[87/5][70/16]
	(350–403)	43.8	(365)		[50/2]
C_2H_2O	ketene				[463-51-4]
	(159–224)	20.4±0.1	(209)	A, MM	[87/5][69/7]
C_2H_3Br	vinyl bromide				[593-60-2]
	(224–319)	27.3	(239)	A	[87/5][70/16]
	(186–289)	24.8	(274)		[37/4][84/9]
	(207–285)	26.9	(270)		[34/1][84/9]
C_2H_3BrO	acetyl bromide				[506-96-7]
	(289–334)	29.5	(304)	A	[87/5]
	(275–333)	31.4	(290)		[69/3]
$C_2H_3BrO_2$	bromoacetic acid				[79-08-3]
	(327–481)	57.2	(342)	A	[87/5]
$C_2H_3Br_3$	1,1,2-tribromoethane				[78-74-0]
	(368–511)	50.5	(383)	A	[87/5][70/16]
	(305–461)	52.9	(321)		[47/5]
C_2H_3Cl	vinyl chloride				[75-01-4]
	(243–288)	22.7	(265)		[67/35]
	(213–273)	22.9	(258)		[67/11]
	(209–260)	23.3	(245)	A	[87/5][59/1] [70/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_2H_3ClF_2$	1-chloro-1,1-difluoroethane				[75-68-3]
	(225–285)	24.2	(240)	EB	[93/6]
	(248–390)	22.7	(263)	A	[87/5][70/16]
		24.0	(233)	BG	[55/20]
		21.9	(273)	BG	[55/20]
		19.2	(313)	BG	[55/20]
		15.4	(353)	BG	[55/20]
$C_2H_3ClF_3N$	N-chloro-N,1,1-trifluoroethanamine				[16276-45-2]
	(220–294)	30.8	(279)	BG	[87/5][67/28]
$C_2H_3ClF_3P$	chloromethyl(trifluoromethyl)phosphine				[4669-76-5]
	(236–294)	30.9	(279)		[87/5]
C_2H_3ClO	acetyl chloride				[75-36-5]
	(273–323)	24.5	(288)	A	[87/5]
	(267–324)	31.5	(282)	A	[87/5][59/1]
					[70/16]
$C_2H_3ClO_2$	chloroacetic acid				[79-11-8]
	(336–463)	61.1	(351)	A	[87/5]
	(377–463)	56.8	(392)	A	[87/5][59/1]
					[70/16]
	(396–460)	55.7	(411)		[49/1]
$C_2H_3Cl_2F$	1,1-dichloro-1-fluoroethane				[1717-00-6]
	(250–450)	28.7	(265)		[97/25]
	(270–312)	27.8	(285)	EB	[92/17]
$C_2H_3Cl_3$	1,1,1-trichloroethane				[71-55-6]
	(295–372)	32.3	(310)	A	[87/5]
	(349–408)	30.5	(364)	A	[87/5]
	(399–487)	29.4	(414)	A	[87/5]
	(479–545)	29.5	(494)	A	[87/5]
		32.5±0.1	(298)	C	[80/1]
		32.4	(344)		[77/30]
	(196–298)	37.6	(211)		[73/7]
		32.5±0.1	(298)	C	[72/41]
	(268–290)	33.4	(279)		[44/2]
		33.4±0.1	(284)	C	[44/2]
$C_2H_3Cl_3$	1,1,2-trichloroethane				[79-00-5]
	(316–384)	38.6	(331)	A	[87/5]
		40.2±0.1	(298)	C	[80/1]
		40.3±0.1	(298)	C	[72/41]
	(302–428)	38.2	(317)		[87/5][70/16]
	(323–386)	38.3	(338)		[49/1]
$C_2H_3Cl_3O_2$	chloral hydrate				[302-17-0]
	(300–348)	38.4	(324)	EB	[94/16]
	(325–370)	49.6	(340)	A	[87/5]
	(263–369)	51.5	(278)		[47/5]
C_2H_3F	vinyl fluoride				[75-02-5]
	(124–201)	16.6	(186)	A	[87/5][47/5]
$C_2H_3FN_2O_5$	2-fluoro-2,2-dinitroethanol				[17003-75-7]
	(313–373)	55.7	(343)		[68/12]
C_2H_3FO	acetyl fluoride				[557-99-3]
	(195–281)	14.3	(266)	A	[87/5]
$C_2H_3F_2O$	acetyl hypofluorite				[78948-09-1]
	(209–253)	35.6±2.4	(231)		[85/16]
$C_2H_3FO_2$	fluoroacetic acid				[144-49-0]
	(293–443)	52.3	(308)	A	[87/5][70/16]
	(293–443)	53.6	(308)	T	[55/2]
$C_2H_3F_3$	1,1,1-trifluoroethane				[420-46-2]
	(236–280)	18.1	(240)	EB	[96/14]
	(236–280)	17.5	(250)	EB	[96/14]
	(236–280)	16.7	(260)	EB	[96/14]
	(236–280)	15.9	(270)	EB	[96/14]
		18.9	(233)	BG	[55/20]
		16.4	(273)	BG	[55/20]
		13.8	(303)	BG	[55/20]
		8.7	(333)	BG	[55/20]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(174–226)	20.5	(211)		[44/3]
		19.2±0.1	(224)	C	[44/3]
$C_2H_3F_3N_2$	1,1,1-trifluoroazomethane				[690-21-1]
	(240–273)	26.4	(258)	A	[87/5]
$C_2H_3F_3O$	trifluoromethyl methyl ether				[421-14-7]
	(233–313)	22.5	(248)	A	[92/12]
$C_2H_3F_3O$	2,2,2-trifluoroethanol				[75-89-8]
	(276–302)	45.9	(289)	A	[87/5]
	(298–328)	44.0	(313)	A	[87/5][70/16]
	(298–328)	41.5	(313)	MM	[73/5]
	(273–298)	44.5	(285)	MM	[67/4]
$C_2H_3F_3O_2S$	methanesulfinic acid, trifluoromethyl ester				[30957-42-7]
		31.8	(346)		[71/20]
$C_2H_3F_5O_3S$	(ethaneperoxoato) pentafluoro sulfur				[60672-60-8]
	(217–377)	36.2	(297)		[99/16][76/31]
$C_2H_3F_5S$	vinylsulfur pentafluoride				
		28.5	(314)		[61/22]
C_2H_3IO	acetyl iodide				[507-02-8]
	(276–302)	37.1	(289)	A	[87/5][69/3]
C_2H_3N	acetonitrile				[75-05-8]
		33.0	(298)		[83/5]
	(288–362)	33.8	(303)		[74/10]
	(314–355)	33.3	(329)	A, EB	[87/5][71/4]
	(299–343)	34.8	(315)	BG	[71/2]
	(273–323)	34.2	(288)		[68/24]
	(280–300)	33.9	(290)		[65/2]
C_2H_3NO	methyl isocyanate				[624-83-9]
	(265–308)	29.9	(280)	A	[87/5]
	(253–310)	31.7	(268)	A	[87/5]
$C_2H_3NO_5$	acetyl nitro peroxide				[2278-22-0]
	(277–330)	34.6	(292)	A	[87/5]
C_2H_3NS	methyl thiocyanate				[556-64-9]
	(259–406)	40.7	(274)	A	[87/5][47/5]
					[99/16]
C_2H_3NS	methyl isothiocyanate				[556-61-6]
	(309–392)	37.4	(324)	A	[87/5][99/16]
	(283–323)	37.3	(298)		[35/3][84/9]
C_2H_4	ethylene				[74-85-1]
	(252–282)	14.0	(267)	A	[87/5]
	(170–273)	13.7	(258)	A	[87/5]
	(120–170)	14.4	(155)	A	[87/5]
	(169–211)	13.7	(196)	A	[87/5]
	(209–254)	13.6	(239)	A	[87/5]
	(120–182)	14.1	(167)	A	[87/5][70/16]
	(150–190)	14.0	(175)		[50/3]
	(148–174)	14.3	(161)		[40/3]
	(124–171)	14.4	(156)		[37/5]
C_2H_4BrCl	1-bromo-1-chloroethane				[593-96-4]
	(290–356)	33.1	(305)	A	[87/5]
	(237–356)	46.7	(252)		[47/5]
C_2H_4BrCl	1-bromo-2-chloroethane				[107-04-0]
		37.6±0.1	(308)	C	[92/11]
		37.3±0.1	(315)	C	[92/11]
		36.9±0.1	(323)	C	[92/11]
		36.6±0.1	(330)	C	[92/11]
		36.4±0.1	(338)	C	[92/11]
	(244–379)	39.5	(259)		[47/5]
$C_2H_4Br_2$	1,1-dibromoethane				[557-91-5]
	(301–421)	39.6	(316)	EST	[87/5][56/16]
					[70/16]
$C_2H_4Br_2$	1,2-dibromoethane				[106-93-4]
		41.7±0.1	(308)	C	[92/11]
		41.7±0.1	(315)	C	[92/11]
		41.6±0.1	(323)	C	[92/11]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		41.5±0.1	(330)	C	[92/11]
		41.4±0.1	(338)	C	[92/11]
	(283–317)	41.8	(298)	A	[87/5]
	(316–488)	40.0	(331)	A	[87/5]
	(404–578)	37.4	(419)	A	[87/5]
	(285–298)	49.6	(291)	MM, A	[57/1]
	(325–404)	39.6	(340)		[49/1]
	(246–404)	31.1	(261)		[47/5]
C_2H_4ClF	1-chloro-2-fluoroethane				[762-50-5]
	(288–327)	32.1	(303)	A	[87/5]
$C_2H_4ClN_3$	1-chloro-2-azidoethane				[53422-48-3]
	(273–333)	43.8	(288)	A	[87/5]
$C_2H_4Cl_2$	1,1-dichloroethane				[75-34-3]
	(326–345)	33.5	(336)		[87/15]
	(323–535)	29.2	(338)	A	[87/5]
	(363–535)	28.2	(378)	A	[87/5]
		30.6±0.1	(298)	C	[72/41]
	(234–290)	31.9	(275)		[56/2]
	(213–330)	34.4	(228)		[47/5]
	(258–365)	32.2	(273)	EST	[87/5][56/16] [70/16]
$C_2H_4Cl_2$	1,2-dichloroethane				[107-06-2]
		34.4	(298)	GC	[94/19]
		35.1±0.1	(298)	C	[89/10]
	(356–558)	31.1	(371)	A	[87/5]
	(279–374)	34.8	(294)	A	[87/5]
	(368–524)	31.1	(383)	A	[87/5]
	(523–561)	40.8	(538)	A	[87/5]
	(301–357)	34.7	(316)		[82/7]
		35.2±0.1	(298)	C	[80/1]
	(279–434)	34.8	(294)		[87/5][70/16]
		34.7			[56/25][38/12]
	(243–372)	37.5	(258)		[29/1]
$C_2H_4Cl_2S$	*bis*(chloromethyl)sulfide				[3592-44-7]
	(320–430)	45.1	(335)	A	[87/5][99/16]
$C_2H_4FNO_3$	2-fluoroethyl nitrate				[763-97-3]
	(273–333)	38.3	(288)	GS	[87/5][48/14] [70/16]
$C_2H_4F_2$	1,1-difluoroethane				[75-37-6]
	(218–248)	22.7	(249)	I	[01/22]
	(303–333)	22.1	(318)		[99/29]
	(219–273)	23.3	(234)	EB	[93/6]
	(250–386)	21.8	(265)	A	[87/5]
	(193–275)	22.1	(260)	A, EST	[87/5][56/16] [70/16]
		21.8	(233)	BG	[55/20]
		20.4	(273)	BG	[55/20]
		17.8	(313)	BG	[55/20]
		12.9	(353)	BG	[55/20]
	(161–247)	23.8	(232)		[47/5]
$C_2H_4F_3NS$	1,1,1-trifluoro-N-methyl methanesulfenamide				[62067-12-3]
	(223–294)	33.6	(279)	A	[87/5][60/24]
$C_2H_4F_3OP$	(trifluoromethyl)phosphinous acid, methyl ester				[6395-71-7]
	(194–291)	29.4	(276)	A	[87/5]
$C_2H_4F_3OP$	methyl(trifluoromethyl)phosphine oxide				[26348-89-0]
	(305–322)	50.7	(313)		[70/26]
$C_2H_4F_6OS$	pentafluoro(2-fluoroethoxy) sulfur				
	(290–364)	39.3	(305)	A	[87/5][62/19] [99/16]
$C_2H_4I_2$	1,2-diiodoethane				[624-73-7]
		49.8	(298)	GC	[94/19]
	(371–526)	47.7	(386)	A	[87/5][70/16]
$C_2H_4N_2O_4$	1,1-dinitroethane				[600-40-8]
	(303–363)	51.0	(318)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_2H_4N_2O_6$	ethylene glycol dinitrate				[628-96-6]
	(283–535)	70.5	(298)	A	[87/5]
	(343–465)	55.3	(358)	A	[87/5]
	(240–298)	68.3	(255)		[87/5][77/6]
	(278–390)	62.3±0.4			[41/1]
	(293–323)	68.6±0.4			[38/1]
C_2H_4O	acetaldehyde				[75-07-0]
	(293–377)	26.0	(308)	A	[87/5]
	(293–345)	26.3	(308)		[77/24]
	(272–294)	27.6	(283)	A	[87/5][70/16]
	(273–307)	27.0	(307)		[50/4]
C_2H_4O	ethylene oxide (oxirane)				[75-21-8]
	(283–385)	25.9	(298)	A	[87/5]
	(239–284)	26.8	(269)	A	[87/5][59/1] [70/16]
	(223–284)	26.8	(269)	A	[87/5][49/4]
	(268–313)	26.9	(290)		[37/7]
C_2D_4O	ethylene oxide-d_4 oxide				[6552-57-4]
	(230–273)	27.6	(258)		[52/2][84/9]
C_2H_4OS	thioacetic acid				[507-09-5]
	(307–360)	35.2	(333)		[99/16]
$C_2H_4O_2$	acetic acid				[64-19-7]
	(345–383)	39.1	(360)	EB	[01/15]
	(391–550)	37.9	(406)	A	[87/5]
	(290–396)	42.0	(305)	A	[87/5]
	(391–447)	38.7	(406)	A	[87/5]
	(437–535)	38.1	(452)	A	[87/5]
	(525–593)	38.8	(540)	A	[87/5]
		43.0	(308)		[83/13]
	(289–392)	41.6	(304)	A	[87/5][70/16]
monomer		23.3±0.1	(298)	C	[70/8]
		51.6±1.6	(298)	C	[70/8]
	(325–391)	40.3	(340)		[59/1]
	(303–399)	41.6	(318)	MM	[54/3]
$C_2H_4O_2$	methyl formate				[107-31-3]
	(279–305)	29.6	(292)	A	[87/5]
	(305–443)	28.4	(320)	A	[87/5]
		28.7±0.1	(293)	C	[76/14]
		27.9±0.1	(305)	C	[76/14]
		27.4±0.1	(313)	C	[76/14]
	(261–305)	30.1	(283)	BG	[71/2]
	(294–304)	52.7	(299)		[28/1][84/9]
$C_2H_4O_2S$	mercaptoacetic acid				[68-11-1]
	(333–427)	56.8	(348)	A	[87/5][99/16]
$C_2H_4O_3$	ethylene ozonide				
	(273–289)	34.8	(281)	A	[87/5][56/18]
$C_2H_4O_3$	hydroxyacetic acid				[79-14-1]
	(350–375)	51.8	(362)	A	[87/5]
$C_2H_4O_3$	peroxyacetic acid				[79-21-0]
	(273–383)	44.2	(288)	A	[87/5][70/16]
C_2H_4S	ethylene sulfide				[420-12-2]
	(291–361)	30.5	(306)	A	[87/5][52/3] [99/16]
		30.3	(298)		[71/28]
C_2H_5Br	ethyl bromide				[74-96-4]
	(334–504)	26.9	(349)	A	[87/5]
	(326–454)	26.6	(341)	A	[87/5]
	(452–503)	31.0	(467)	A	[87/5]
		27.6±0.1	(305)	C	[77/8]
		27.0±0.1	(312)	C	[77/8]
		26.2±0.1	(323)	C	[77/8]
	(225–333)	30.6	(240)	EST	[87/5][61/13] [70/16]
	(301–348)	27.9	(316)		[30/3][84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_2H_5Cl	ethyl chloride				[75-00-3]
	(285–344)	25.1	(300)	A	[87/5]
	(334–413)	24.4	(349)	A	[87/5]
	(403–460)	24.4	(418)	A	[87/5]
	(207–305)	27.8	(222)	A, EST	[87/5][61/13] [70/16]
	(218–285)	25.9	(270)		[48/6]
		24.8	(294)	C	[26/6]
C_2H_5ClO	2-chloroethanol				[107-07-3]
	(328–401)	43.3	(343)	A	[87/5]
	(323–363)	46.9	(338)		[73/9]
	(363–403)	39.1	(378)		[73/9]
	(269–401)	45.7	(284)		[47/5]
C_2H_5ClO	methyl(chloromethyl)ether				[107-30-2]
	(290–332)	32.2	(305)	A	[87/5]
$C_2H_5ClO_2S$	ethane sulfonyl chloride				[594-44-5]
	(349–449)	47.7	(364)		[99/16]
	(233–263)	56.4	(248)	A	[87/5][99/16]
$C_2H_5Cl_2P$	dichloroethyl phosphine				[1498-40-4]
	(313–385)	36.8	(328)	A	[87/5]
$C_2H_5Cl_2OP$	ethylphosphonic dichloride				
		42.7±4.2			[56/23][82/15]
C_2H_5F	ethyl fluoride				[353-36-6]
	(200–235)	20.7	(236)	I	[01/22]
	(275–353)	20.2	(290)	A	[87/5]
	(235–280)	20.5	(265)	A	[87/5]
	(343–375)	20.7	(358)	A	[87/5]
	(170–255)	4.2	(240)		[75/10]
	(173–251)	20.8	(236)	EST	[87/5][61/13] [70/16]
	(156–241)	22.0	(226)		[47/5]
C_2H_5FO	2-fluoroethanol				[371-62-0]
	(273–333)	44.1	(288)	GS	[87/5][48/14] [70/16]
$C_2H_5FO_3S$	ethyl fluorosulfonate				[371-69-7]
	(273–333)	38.5	(288)	GS	[87/5][48/14] [70/16]
$C_2H_5F_2N$	N,N-difluoroethylamine				[758-18-9]
	(241–259)	27.3	(250)	A	[87/5]
		25.7	(288)		[60/19]
$C_2H_5F_3NP$	methyl(trifluoromethyl)phosphinic acid amide				[4669-74-3]
	(238–294)	36.8	(279)		[87/5]
C_2H_5I	ethyl iodide				[75-03-6]
	(313–353)	31.7	(298)	CGC	[95/21]
		31.9±0.1	(298)	C	[68/1]
	(249–369)	33.6	(264)	EST	[87/5][61/13]
	(219–345)	34.7	(234)		[47/5]
	(254–293)	32.0	(278)		[44/4]
	(303–333)	31.7	(318)		[29/2]
C_2H_5N	aziridine				[151-56-4]
	(274–303)	34.9	(288)	A	[87/5]
C_2H_5NO	acetaldehyde oxime				[107-29-9]
	(288–388)	48.0	(303)	A	[87/5]
C_2H_5NO	acetamide				[60-35-5]
	(381–492)	63.8	(396)	A	[87/5]
	(338–495)	60.9	(353)		[47/5]
C_2H_5NO	N-methylformamide				[123-39-7]
	(340–440)	53.8	(355)		[96/28]
	(340–440)	54.4±1.3	(298)		[96/28]
	(310–391)	54.5	(325)	A	[87/5]
		56.2	(298)	A	[85/7][86/5]
	(369–472)	53.4	(384)	A	[87/5][61/3] [70/16]
$C_2H_5NO_2$	ethyl nitrite				[109-95-5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(252–276)	25.7	(264)	A	[87/5][37/3]
		27.8			[34/6]
$C_2H_5NO_2$	methyl carbamate				[598-55-0]
	(333–388)	45.7	(348)	A	[87/5]
$C_2H_5NO_2$	nitroethane				[79-24-3]
	(324–388)	38.6	(339)	EB	[87/5][56/15]
					[70/16]
	(252–387)	41.3	(267)		[47/5]
		38.0			[34/6]
$C_2H_5NO_3$	ethyl nitrate				[625-58-1]
	(273–361)	37.0	(288)	A	[87/5][70/16]
	(273–343)	37.3	(288)		[57/2]
	(273–333)	37.0	(288)		[56/3]
		38.5			[34/6]
$C_2H_5N_3$	azidoethane				[871-31-8]
	(296–320)	31.5	(308)	A	[87/5][70/16]
	(253–298)	28.9	(268)	A	[87/5][64/5]
					[84/9]
$C_2H_5N_3O$	2-azidoethanol				[1517-05-1]
		33.9±1.3			[97/26]
$C_2H_5N_3O_2$	*bis*(nitrosomethyl)amine				
	(276–426)	43.5	(291)		[87/5][47/5]
C_2H_6	ethane				[74-84-0]
	(273–305)	15.3	(288)	A	[87/5]
	(154–185)	15.7	(170)	A	[87/5]
	(95–129)	17.7	(114)	A	[87/5]
	(185–229)	14.9	(214)	A	[87/5]
	(228–274)	14.9	(259)	A	[87/5]
	(91–144)	17.1	(129)		[73/11]
		14.7	(210)		[71/28]
		14.7	(184)		[37/14]
	(136–200)	15.3	(185)		[26/2]
$C_2H_6BrF_4NS$	bromotetrafluoro(N-methylmethanaminato) sulfur				[63324-17-4]
		38.1	(372)	I	[77/15]
$C_2H_6ClF_4NS$	chlorotetrafluoro(N-methylmethanaminato) sulfur				[63324-16-3]
		36.0	(359)	I	[77/15]
C_2H_6ClP	chlorodimethyl phosphine				[811-62-1]
	(273–306)	32.9	(288)	A	[87/5][58/11]
$C_2H_6Cl_2NP$	(dimethylamino)dichlorophosphine				[683-85-2]
		40.8±0.7	(298)	STG	[95/2]
C_2H_6FN	fluorodimethylamine				[14722-43-1]
	(249–273)	29.9	(261)	A	[87/5]
$C_2H_6FO_3P$	dimethylfluorophosphate				[5954-50-7]
	(273–333)	44.4	(288)	A, GS	[87/5][48/14]
$C_2H_6F_2NP$	(dimethylamino)difluorophosphine				
	(263–313)	29.3	(288)	I	[64/30]
$C_2H_6F_3NOS$	(dimethylaminato)trifluorooxo sulfur				[22519-52-4]
	(313–357)	44.9	(335)		[68/22]
$C_2H_6F_3NS$	(dimethylamino) sulfur trifluoride				[3880-03-3]
	(296–327)	40.5	(311)	A	[87/5][99/16]
$C_2H_6F_4NP$	(dimethylamino) tetrafluorophosphorane				
		37.1			[66/31]
$C_2H_6N_2$	azomethane				[503-28-6]
	(195–273)	26.4	(258)	A	[87/5]
	(209–236)	25.3	(222)	A	[87/5]
$C_2H_6N_2$	methylammonium cyanide				
	(251–295)	49.1	(280)	A	[87/5][73/10]
$C_2H_6N_2S$	sulfur diimide, dimethyl				[13849-02-0]
	(248–298)	37.2	(263)	A	[87/5][99/16]
C_2H_6O	dimethyl ether				[115-10-6]
	(183–265)	22.6	(250)	A	[87/5]
	(180–249)	22.8	(234)	A	[87/5]
	(293–360)	21.2	(308)	A	[87/5]
	(349–400)	21.1	(364)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(241–303)	22.2	(256)	A	[87/5]
	(171–248)	18.5	(298)		[76/2]
	(171–248)	21.4	(248)		[76/2]
	(195–248)	22.7	(233)		[41/3]
		21.5±0.1	(248)	C	[41/3]
C_2H_6O	ethanol				[64-17-5]
		38.9			[99/32]
	(323–357)	39.3	(338)		[99/30]
	(309–343)	40.7	(321)	EB	[95/9]
	(309–343)	42.4	(298)	EB	[95/9]
	(342–357)	40.5	(357)		[90/10]
		35.2	(393)	C	[89/15]
		30.6	(423)	C	[89/15]
		25.7	(453)	C	[89/15]
		21.8	(473)	C	[89/15]
		17.3	(493)	C	[89/15]
		14.2	(503)	C	[89/15]
		40.9	(320)	C	[88/19]
		40.4	(328)	C	[88/19]
		40.2	(335)	C	[88/19]
		39.4	(344)	C	[88/19]
		38.8	(351)	C	[88/19]
	(320–359)	41.3	(335)	A	[87/5]
	(210–271)	45.6	(256)	A	[87/5]
	(193–223)	44.0	(208)	A	[87/5]
	(320–359)	41.3	(335)	A	[87/5]
	(349–374)	40.1	(361)	A	[87/5]
	(370–464)	39.1	(385)	A	[87/5]
	(459–514)	36.1	(474)	A	[87/5]
	(292–353)	42.5	(307)	A	[87/5]
	(243–303)	42.3	(298)		[83/14]
	(271–373)	42.9	(286)		[73/26]
		42.26±0.02	(298)	C	[71/27]
		41.0±0.1	(320)	C	[70/20]
		40.0±0.1	(335)	C	[70/20]
		38.7±0.1	(351)	C	[70/20]
	(293–366)	42.5	(308)	A, EB	[87/5][70/2]
	(288–348)	42.4	(303)		[67/10]
		42.3±0.1	(298)	C	[66/2]
		42.2±0.1	(298)	C	[63/2]
	(298–351)	42.2	(313)		[49/5]
		40.0	(351)		[34/7]
	(286–351)	54.1	(301)		[1883/1]
C_2H_6OS	dimethyl sulfoxide				[67-68-5]
	(377–483)	48.6	(392)		[99/16]
	(353–383)	48.1	(368)	TGA	[87/18]
	(305–464)	51.7	(320)	A	[87/5]
	(298–318)	52.3	(308)		[74/36]
	(325–442)	50.6	(340)	MM	[72/8][84/9]
	(303–423)	52.1	(318)		[72/35]
	(293–323)	52.5	(308)		[69/25]
C_2H_6OS	2-mercaptoethanol				[60-24-2]
	(293–440)	54.1	(308)	A	[87/5][70/16]
					[99/16]
$C_2H_6O_2$	ethylene glycol				[107-21-1]
		65.6±0.3	(298)	C	[88/14]
	(363–408)	57.4	(385)	TGA	[87/18]
	(323–473)	65.2	(338)	A	[87/5]
	(363–418)	62.5	(378)	A	[87/5]
	(323–473)	64.0	(338)		[52/5]
	(363–403)	61.1	(383)		[35/4]
	(403–470)	57.3	(436)		[35/4]
	(395–459)	63.5	(410)		[1901/1]
$C_2H_6O_2$	ethyl hydroperoxide				[3031-74-1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(253–363)	64.0	(268)	A	[87/5][51/10] [70/16]
$C_2H_6O_2S$	dimethyl sulfone				[67-71-0]
	(387–523)	56.0	(404)	A	[87/5][70/16] [99/16]
$C_2H_6O_4S$	dimethyl sulfate				[77-78-1]
	(340–470)	46.7	(355)	A	[87/5][99/16]
C_2H_6S	dimethyl sulfide				[75-18-3]
		28.5±0.1			[97/30]
		27.9±0.6	(298)	C	[89/12]
	(268–319)	28.9	(283)	A	[87/5]
	(307–379)	27.7	(322)	A	[87/5]
	(372–453)	26.6	(387)	A	[87/5]
	(447–503)	26.7	(462)	A	[87/5]
		27.5	(298)		[81/12]
		27.7	(298)		[71/28]
		28.8±0.1	(276)	C	[57/10]
		27.9±0.1	(292)	C	[57/10]
		27.0±0.1	(310)	C	[57/10]
	(287–318)	28.2	(302)	EB	[52/9]
	(251–293)	28.9	(278)		[42/2]
		28.9	(310)		[35/2]
C_2H_6S	ethyl mercaptan (ethanethiol)				[75-08-1]
	(273–313)	28.4	(288)	A	[87/5]
	(303–375)	27.5	(318)	A	[87/5]
	(265–448)	26.3	(380)	A	[87/5]
	(442–499)	26.6	(457)	A	[87/5]
		27.3	(298)		[71/28]
	(273–339)	28.4	(288)		[66/5]
	(273–339)	28.4	(288)	A, EB	[87/5][52/6] [66/5]
		28.7	(306)		[35/2]
$C_2H_6S_2$	1,2-ethanedithiol				[540-63-6]
		44.7	(298)		[62/11]
$C_2H_6S_2$	dimethyl disulfide				[624-92-0]
		38.5±0.6	(298)	C	[89/12]
	(297–402)	37.8	(312)	A	[87/5]
		37.8±0.1	(298)	C	[85/2]
		37.8	(298)		[81/12]
		38.4	(298)		[71/28]
		36.0±0.1	(341)	C	[58/8]
		34.9±0.1	(360)	C	[58/8]
		33.7±0.1	(383)	C	[58/8]
	(321–388)	36.7	(336)	EB	[52/9]
	(334–401)	36.2	(349)		[50/5]
	(288–333)	38.2	(303)		[50/5]
C_2H_7N	dimethylamine				[124-40-3]
	(277–360)	27.0	(292)	A	[87/5]
	(358–438)	23.8	(373)	A	[87/5]
	(202–279)	28.4	(264)	A	[87/5][39/1] [84/9]
C_2H_7N	ethyl amine				[75-04-7]
	(213–297)	29.0	(282)	A	[87/5]
	(290–449)	27.2	(305)	A	[87/5]
	(291–387)	27.6	(306)	A	[87/5]
	(377–456)	25.9	(392)	A	[87/5]
	(275–288)	29.1	(281)		[62/5]
	(190–290)	28.9	(275)		[47/5]
C_2H_7NO	N,N-dimethylhydroxyl amine				[5725-96-2]
	(290–363)	45.7	(305)	A	[87/5][57/4] [84/9]
C_2H_7NO	N,O-dimethylhydroxyl amine				[1117-97-1]
	(228–316)	34.3	(243)	A	[87/5][57/4] [84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_2H_7NO	2-aminoethanol				[141-43-5]
	(310–444)	61.7	(325)	A	[87/5]
	(379–443)	54.7	(394)		[59/1]
	(273–301)	U50.8	(287)	A, GS	[57/25]
	(338–443)	58.9	(353)		[50/1][84/9]
$C_2H_7O_3P$	dimethyl phosphite				[868-85-9]
		39.5			[93/20]
	(346–456)	38.7	(361)	A	[87/5][70/16]
C_2H_8ClN	dimethylammonium chloride				[506-59-2]
	(429–533)	95.6	(444)	A	[87/5]
	(533–569)	143.9	(548)	A	[87/5]
C_2H_8ClN	ethylammonium chloride				[557-66-4]
	(382–480)	34.3	(397)	A	[87/5]
$C_2H_8N_2$	1,1-dimethylhydrazine				[57-14-7]
	(267–303)	34.1	(284)		[00/18]
	(238–292)	36.5	(277)	A	[87/5][53/3]
					[84/9]
$C_2H_8N_2$	1,2-dimethylhydrazine				[540-73-8]
	(274–297)	41.0	(286)	A	[87/5][51/15]
					[84/9]
$C_2H_8N_2$	ethylenediamine				[107-15-3]
	(303–391)	43.9	(318)	A	[87/5]
	(284–419)	45.9	(299)	A, IPM	[87/5][75/4]
		45.0±0.1	(298)	C	[69/2]
		46.0±0.2	(298)	IPM	[65/8][70/11]
	(299–390)	45.6	(314)		[34/2][84/9]
$C_3BrClF_6O_4$	perchloric acid, 1,1,2,3,3,3-hexafluoro-2-bromopropyl ester				[38126-26-0]
	(273–293)	38.1	(283)	A	[87/5][73/19]
C_3BrF_5O	2-bromo-2,3,3,3-tetrafluoropropionyl fluoride				[6129-62-0]
	(224–282)	30.2	(267)	A	[87/5]
C_3BrF_6NO	N,N-*bis*(trifluoromethyl) carbamoyl bromide				
	(233–293)	30.7	(278)	A	[87/5]
$C_3BrF_9N_2$	N-bromo-*tris*(trifluoromethyl)hydrazine				
	(283–333)	36.8	(308)		[66/31]
$C_3BrF_{10}NS$	bromotrifluoro[1,1,1,2,3,3,3-heptafluoro-2-propanaminoato(2-)] sulfur				[62977-73-5]
		35.1	(394)	I	[77/15]
$C_3Br_2F_6O$	(trifluoromethyl)(1,2-dibromo-1,2,2-trifluoroethyl) ether				[2356-57-2]
	(299–335)	34.6	(314)	A	[87/5]
$C_3Br_3F_6NO$	1,1,1,1′,1′,1′-hexafluoro-N-(tribromomethoxy)dimethylamine				[29528-78-7]
	(297–338)	28.9	(312)	A	[87/5]
$C_3ClF_4NO_2$	chloro(trifluoroacetyl)carbamic fluoride				[42016-32-0]
		39.3	(371)		[73/21]
C_3ClF_5O	chloropentafluoroacetone				[79-53-8]
	(232–303)	27.3	(247)	A	[87/5][64/6]
					[84/9]
C_3ClF_5O	2-chloro-2,3,3,3-tetrafluoropropionyl fluoride				[28627-00-1]
	(195–273)	23.9	(258)	A	[87/5]
$C_3ClF_6NO_2$	O-(chloroformyl)-N,N-*bis*(trifluoromethyl)hydroxylamine				[15496-01-2]
	(227–286)	34.5	(271)	A	[87/5]
C_3ClF_6NS	chloro(hexafluoroisopylidenimino) sulfur				
		37.7	(368)	I	[72/22]
C_3ClF_7O	heptafluoroisopropyl hypochorite				[22675-68-9]
	(196–287)	26.7	(272)	A	[87/5]
	(194–273)	22.7	(258)	A	[87/5]
C_3ClF_8N	N-chloro-N-1,2,2,2-pentafluoro-1-(trifluoromethyl)ethylamine				[33757-13-0]
	(240–311)	28.8	(255)	A	[87/5][71/17]
C_3ClF_8NOS	(heptafluoropropyl)imidosulfuryl chloride fluoride				[74366-14-6]
		26.7	(346)	I	[80/10]
$C_3ClF_{10}NS$	chlorotrifluoro[1,1,1,2,3,3,3-heptafluoro-2-propanaminoato(2-)] sulfur				[62977-71-3]
		33.5	(391)	I	[77/15]
$C_3Cl_2F_5N$	2,2-difluoro-1,2-dichloro-N-(trifluoromethyl)ethylidenimine				
	(283–318)	31.2	(298)	A	[87/5]
$C_3Cl_2F_6$	1,2-dichlorohexafluoropropane				[661-97-2]
	(296–307)	28.1	(301)		[80/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		26.9±0.1	(298)	C	[80/9]
		25.9±0.1	(313)	C	[80/9]
$C_3Cl_2F_6N_2$	*bis*(trifluoromethyl)aminocarbylamine chloride				
	(267–339)	35.0	(303)		[66/32]
$C_3Cl_2F_6O$	hypochlorous acid, 2-chloro-1,1,2,3,3,3-hexafluoropropyl ester				[22675-69-0]
	(273–293)	29.6	(283)	A	[87/5]
$C_3Cl_2F_7N$	N,N-dichloro-1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethylamine				[32751-04-5]
	(299–344)	32.7	(314)	A	[87/5][71/17]
$C_3Cl_2F_7NS$	S,S-dichloro-N-[tetrafluoro-1-(trifluoromethyl)ethyl]sulfilimine				[26454-66-0]
	(313–347)	39.3	(328)	A	[87/5][70/27]
$C_3Cl_2F_7NS$	$C_3F_7N{=}SCl_2$				
		25.9	(361)	I	[80/10]
$C_3Cl_2F_7P$	dichloro(heptafluoropropyl)phosphine				
	(273–348)	33.5	(310)		[59/21]
$C_3Cl_3F_5O$	chlorodifluoromethyl 2,2-dichloro-1,1,2-trifluoroethyl ether				[37136-24-6]
	(302–350)	33.4	(317)	A	[87/5]
		33.8±0.5	(298)	EB	[76/15]
$C_3Cl_5F_3O$	trichloromethyl 2,2-dichloro-1,1,2-trifluoroethyl ether				[428-73-9]
	(341–423)	42.2	(356)	A	[87/5]
		45.7±0.7	(298)	EB	[76/15]
C_3Cl_6	hexachloropropylene				[1888-71-7]
	(366–510)	54.8±0.4	(298)	EB	[97/7]
	(382–540)	49.3	(397)	A	[87/5][70/16]
$C_3F_3N_2P$	dicyano(trifluoromethyl)phosphine				[58310-46-6]
	(291–334)	45.6	(306)	A	[87/5]
$C_3F_3N_3$	2,4,6-trifluoro-1,3,5-triazine				[675-14-9]
	(277–344)	38.8	(292)	A	[87/5]
C_3F_4	tetrafluoropropyne				[20174-11-2]
	(179–218)	18.8	(203)	A	[87/5]
$C_3F_4O_2S_2$	ethane(dithioperoxoic)acid, fluorooxo-trifluoromethyl ester				[58936-60-0]
		34.9	(385)	I	[76/18]
C_3F_5N	2,2-difluoro-3-(trifluoromethyl)-2*H*-aziridine				[3291-42-7]
	(193–298)	24.0	(283)	A	[87/5]
C_3F_5N	2,3-difluoro-2-(trifluoromethyl)-2*H*-aziridine				[3291-41-6]
	(193–298)	24.3	(283)	A	[87/5]
C_3F_6	perfluoropropene				[116-15-4]
	(233–293)	21.9	(278)	A	[87/5][52/7] [70/16][84/9]
$C_3F_9N_2OS$	N-cyano-S,S-*bis*(trifluoromethyl)sulfoximine				[34556-28-0]
		30.8	(382)	I	[72/25]
C_3F_6O	hexafluorooxetane				[425-82-1]
	(232–313)	22.3	(247)	A	[92/12]
C_3F_6O	perfluoroacetone				[116-16-5]
	(195–246)	23.6	(231)	A	[87/5][67/9] [84/9]
	(240–357)	22.3	(253)		[64/6][84/9]
	(213–245)	23.1	(229)		[55/21]
C_3F_6O	trifluoromethyl trifluorovinyl ether				[1187-93-5]
	(208–241)	22.9	(226)	A	[87/5]
C_3F_6O	pentafluoropropionyl hypofluorite				[5930-63-2]
	(214–248)	25.8	(233)	A	[87/5]
$C_3F_6O_2$	1,3-perfluorodioxolane				
	(234–367)	22.3	(249)	A	[92/12]
$C_3F_6O_4S$	pentafluoropropionic fluorosulfuric acid anhydride				[51689-98-6]
	(252–335)	39.2	(267)	A	[87/5][66/15]
$C_3F_6O_7S_2$	hydroacrylic acid, tetrafluoroanhydride with fluorosulfuric acid, fluorosulfate				[6378-48-9]
	(308–403)	49.4	(323)		[99/16]
$C_3F_7I_2P$	diiodo(heptafluoropropyl)phosphine				
	(313–393)	39.6	(353)		[59/21]
C_3F_7NO	heptafluoropropionamide				[32822-50-7]
		27.2	(279)	HG	[71/18]
C_3F_7NOS	1,1,1,2,3,3,3-heptafluoro-N-sulfinyl-2-propanamine				[26454-67-1]
	(252–280)	34.1	(266)	A	[87/5][99/16] [70/27]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_3F_7NOS	1,1,2,2,3,3,3-heptafluoro-N-sulfinyl-1-propanamine				[74366-13-5]
		26.3	(325)		[80/10]
C_3F_7NS	2,2,2-trifluoro-N-[(trifluoromethyl)thio]ethanimidoyl fluoride				[62067-06-5]
		28.0	(305)	I	[77/18]
$C_3F_7NO_2$	perfluoro-1-nitropropane				[423-33-6]
	(247–296)	28.5	(281)	A	[87/5]
C_3F_8	perfluoropropane				[76-19-7]
	(193–237)	21.6	(222)	A	[87/5][67/5]
	(213–259)	20.9	(244)		[63/4]
$C_3F_8N_2O_2$	N-[[(difluoroamino)carbonxyl]oxy]-1,1,1-trifluoro-N-(trifluoromethyl)-methanamine				[32837-67-5]
		31.4	(310)		[73/23]
C_3F_8OS	pentafluoroethyl trifluoromethyl sulfur				[33622-17-2]
		32.5			[71/34]
C_3F_8S	pentafluoroethyl trifluoromethyl sulfide				[33547-10-3]
		28.8			[71/34]
C_3F_9N	perfluorotrimethylamine				[432-03-1]
	(193–263)	23.9	(248)	A	[87/5]
C_3F_9NO	1,1,1-trifluoro-N-(trifluoromethoxy)-N-(trifluoromethyl)methanamine				[671-63-6]
	(226–268)	27.0	(253)	A	[87/5]
C_3F_9NOS	[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]imidosulfuryl fluoride				[59617-29-7]
		28.7			[76/29]
$C_3F_9NOS_2$	S,S-*bis*(trifluoromethyl)-N-[(trifluoromethyl)thio]sulfoximine				[34556-26-8]
		31.2	(360)	I	[72/25]
$C_3F_9NO_2S_2$	S,S-*bis*(trifluoromethyl)-N-[(trifluoromethyl)sulfinyl]sulfoximine				[34556-27-9]
		37.2	(388)	I	[72/25]
$C_3F_9NO_2S_3$	1,1,1-trifluoro-N,N-*bis*(trifluoromethyl)thio]methanesulfonamide				[29749-02-8]
	(288–403)	43.5	(303)	A	[87/5][99/16]
$C_3F_9N_3O$	nitroso*tris*(trifluoromethyl)hydrazine				[10405-30-8]
	(279–300)	29.5	(289)	A	[87/5]
	(233–294)	33.5	(263)		[66/32]
$C_3F_9N_3O_2$	nitro*tris*(trifluoromethyl)hydrazine				[10405-31-9]
	(293–321)	31.6	(307)	A	[87/5]
C_3F_9P	*tris*(trifluoromethyl)phosphine				[432-04-2]
	(248–285)	24.7	(270)	A	[87/5]
C_3F_9PS	*bis*(trifluoromethyl)trifluoromethylthiophosphine				
	(242–293)	32.5	(267)		[62/32]
C_3F_9PS	*tris*(trifluoromethyl)phosphine sulfide				
	(282–308)	29.1	(295)		[64/32]
$C_3F_9PS_2$	(trifluoromethyl)dithiophosphite acid, *bis*(trifluoromethyl) ester				[36121-49-0]
	(273–296)	37.9	(284)	A	[87/5][99/16]
$C_3F_{10}OS$	difluorooxo(trifluoromethyl)(pentafluoroethyl) sulfur				[33564-24-8]
	(291–324)	30.6	(306)	A	[87/5][99/16]
$C_3F_{10}O_3S$	pentafluoro (pentafluoropropaneperoxoato) sulfur				[60672-62-0]
		34.4			[76/31]
$C_3F_{10}S$	[2,2-difluoro-(1-trifluoromethyl)ethenyl] pentafluoro sulfur				[68010-33-3]
		30.0			[78/23]
$C_3F_{10}S$	difluoro(pentafluoroethyl)(trifluoromethyl) sulfur				[31222-06-7]
		29.2			[71/34]
$C_3F_{11}NO_3S_2$	trifluoro(trifluorosulfato-O)[1,1,1,2,3,3,3-heptafluoro-2-propanaminoato(2-)] sulfur				[65844-08-8]
		33.5	(391)	I	[77/15]
$C_3F_{12}O_3S_2$	pentafluoro [2,2,2-trifluoro-1-(fluorosulfonyl)oxo]-1-(trifluoromethyl)-ethyl] sulfur				[68010-30-0]
		37.2			[78/23]
$C_3HClF_6O_2S$	chlorosulfurous acid, 2,2,2-trifluoro-1-(triflurometh)ethyl ester				[57169-81-0]
		36.7			[75/21]
$C_3HClF_{10}S$	[1-(chlorodifluoromethyl)-2,2,2-trifluoroethyl] pentafluorosulfur				[68010-36-6]
		31.2			[78/23]
C_3HCl_7	1,1,1,2,2,3,3-heptachloropropane				[594-89-8]
	(413–473)	34.8	(428)	A	[87/5][49/10]
					[70/16]
C_3HF_3	3,3,3-trifluoropropyne				[661-54-1]
	(138–213)	21.5	(198)	A	[87/5]
C_3HF_6N	2,2,3-trifluoro-3-fluoromethylaziridine				[3291-64-3]
	(268–298)	30.2	(283)	A	[87/5]
C_3HF_7	1,1,1,2,3,3,3-heptafluoropropane				[431-89-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(278–308)	22.7	(293)		[02/24]
	(293–353)	22.6	(308)		[02/4]
	(237–370)	22.3	(250)		[92/12]
	(237–370)	14.5	(300)		[92/12]
	(237–370)	12.5	(325)		[92/12]
C_3HF_7O	trifluoromethyl 1*H*-pentafluoroethyl ether				[2356-61-8]
	(232–313)	27.3	(247)	A	[92/12]
$C_3HF_7O_2S$	fluorosulfurous acid, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester				[52225-56-6]
		33.8			[75/41]
C_3HF_8NOS	S-(pentafluoroethyl)-S-(trifluoromethyl)sulfoximine				[34556-23-5]
		36.3	(358)	I	[72/25]
$C_3HF_9N_2$	*tris*(trifluoromethyl)hydrazine				
	(238–307)	29.9	(273)		[66/32]
$C_3HF_{11}S$	pentafluoro [2,2,2-trifluoro-1-(1-trifluoromethyl)ethyl] sulfur				[68010-34-4]
		30.1			[78/23]
C_3HN	cyanoacetylene				[1070-71-9]
	(279–315)	28.1	(294)	A	[87/5]
$C_3H_2ClF_5O$	1-chloro-1,2,2-trifluoro-2-(difluoromethoxy)ethane				[13838-16-9]
	(274–351)	33.8	(289)		[88/5]
	(290–329)	32.9	(305)	A	[87/5]
		32.6±0.1	(298)	C	[84/7]
		31.3±0.1	(313)	C	[84/7]
		30.2±0.1	(328)	C	[84/7]
		29.1±0.1	(343)	C	[84/7]
$C_3H_2ClF_5O$	2-chloro-1,1,1-trifluoro-2-(difluoromethoxy)ethane				[26675-46-7]
	(280–344)	31.7	(295)		[88/5]
	(283–312)	31.9	(297)	A	[87/5]
$C_3H_2Cl_2F_4$	3,3-dichloro-1,1,1,3-tetrafluoropropane				[64712-27-2]
	(297–333)	31.7	(312)	A	[87/5]
$C_3H_2Cl_2F_4O$	2-chloro-1,1,2-trifluoroethyl chlorofluoromethyl ether				[37031-38-2]
		37.5±0.1	(298)	C	[84/2]
		36.4±0.1	(313)	C	[84/2]
		35.3±0.1	(328)	C	[84/2]
		34.1±0.1	(343)	C	[84/2]
		32.9±0.1	(353)	C	[84/2]
$C_3H_2Cl_3F_3$	1,1,1-trichloro-3,3,3-trifluoropropane				[7125-84-0]
	(320–365)	35.2	(335)		[87/5]
$C_3H_2Cl_4$	1,1,2,3-tetrachloropropylene				[60320-18-5]
	(347–416)	42.9	(362)	A	[87/5]
$C_3H_2D_5N$	(ring-perdeuterocyclopropyl)amine				[153557-95-0]
	(283–330)	31.7	(298)		[93/22]
C_3H_2FNOS	fluoroacetyl isothiocyanate				[459-71-2]
	(273–353)	49.3	(288)	A	[87/5][70/16] [99/16]
$C_3H_2F_6$	1,1,1,3,3,3-hexafluoropropane				[690-39-1]
	(283–323)	24.5	(303)	A	[00/23]
$C_3H_2F_6N_2S$	amino (hexafluoroisopropylidenimino) sulfur				
		37.7	(388)	I	[72/22]
$C_3H_2F_6N_2S$	2,2,2-trifluoro-N-[(trifluoromethyl)thiol]ethanimidamide				[62067-09-8]
	(322–390)	39.8	(337)	A, I	[87/5][77/18] [99/16]
$C_3H_2F_6O$	2-(difluoromethoxy)-1,1,1,2-tetrafluoroethane				[57041-67-5]
	(274–311)	24.9	(293)	I	[96/16]
$C_3H_2F_6O$	1,1,1,3,3,3-hexafluoro-2-propanol				[920-66-1]
	(294–330)	40.2	(309)	A, MM	[87/5][73/5]
	(294–330)	41.6	(298)	MM	[73/5]
	(273–296)	47.3	(284)		[67/10]
$C_3H_2F_6O_2S$	trifluoromethanesulfinic acid, 2,2,2-trifluoromethyl ester				[30957-44-9]
		36.8	(363)		[71/20]
$C_3H_2F_8N_2S$	S,S-difluoro-N-[1-amino-2,2,2-trifluoro-1-(trifluoromethyl)ethyl] sulfilimine				[2433-66-1]
	(295–313)	38.7	(304)	A	[87/5][69/22] [99/16]
$C_3H_2O_3$	vinylene carbonate				[872-36-6]
	(308–350)	46.9	(323)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(308–400)	41.3		MM	[71/1]
C_3H_3Cl	1-chloro-1-propyne				[7747-84-4]
	(200–289)	28.3	(274)	A	[87/5]
$C_3H_3Cl_2F_3$	1,1-dichloro-3,3,3-trifluoropropane				[460-69-5]
	(301–342)	33.7	(316)	A	[87/5]
$C_3H_3Cl_2F_3O$	2-chloro-1,1,2-trifluoroethyl chloromethyl ether				[428-92-2]
		42.4±0.1	(298)	C	[84/7]
		41.2±0.1	(313)	C	[84/7]
		40.1±0.1	(328)	C	[84/7]
		39.0±0.1	(343)	C	[84/7]
		37.8±0.1	(358)	C	[84/7]
$C_3H_3Cl_3O_2$	methyl trichloroacetate				
		48.3±0.1	(298)	C	[72/41]
$C_3H_3Cl_5$	1,1,2,2,3-pentachloropropane				[16714-68-4]
	(365–447)	46.3	(380)	A	[87/5][70/16]
$C_3H_3F_3$	3,3,3-trifluoro-1-propene				[677-21-4]
	(283–363)	22.0	(298)	A	[87/5]
$C_3H_3F_4I$	1,1,1,2-tetrafluoro-3-iodopropane				[1737-76-4]
	(295–356)	28.4	(310)	A	[87/5]
$C_3H_3F_4I$	1,1,1,3-tetrafluoro-3-iodopropane				[460-74-2]
	(301–356)	31.2	(316)	A	[87/5]
$C_3H_3F_4NO_2$	methoxy (trifluoromethyl)carbamic fluoride				
		27.8			[79/28]
$C_3H_3F_5$	1,1,2,2,3-pentafluoropropane				[679-86-7]
	(258–353)	30.2	(273)	A	[02/25]
$C_3H_3F_5$	1,1,1,2,2-pentafluoropropane				[1814-88-6]
	(232–283)	22.9	(268)	A	[87/5][70/16]
	(233–379)	23.0	(248)		[67/7]
$C_3H_3F_5O$	2,2,3,3,3-pentafluoro-1-propanol				[422-05-9]
	(273–297)	47.0	(285)	A, MM	[87/5][67/4]
					[84/9]
		44.4	(298)	MM	[73/5][67/4]
		41.3	(298)		[67/3]
$C_3H_3F_5O$	1,1,2,2-tetrafluoro-1-(fluoromethoxy)ethane				[37031-31-5]
	(288–317)	33.5	(303)	I	[02/19]
$C_3H_3F_6NOS$	N-methyl-S,S-*bis*(trifluoromethyl)sulfoximine				[34556-25-7]
		30.7	(338)	I	[72/25]
$C_3H_3F_6NS$	N,N-*bis*(trifluoromethyl)methanesulfenamide				
	(269–309)	31.1	(284)	A	[87/5]
$C_3H_3F_6O_2P$	*bis*(trifluromethyl)phosphinic acid, methyl ester				[25439-11-6]
	(258–313)	40.5	(273)	A	[87/5]
$C_3H_3F_6PS$	*bis*(trifluoromethyl) methylthiophosphine				
	(273–321)	36.9	(297)	T	[64/31]
$C_3H_3F_6PS_2$	*bis*(trifluromethyl)dithiophosphinic acid, methyl ester				[18799-79-6]
	(273–344)	41.5	(288)	A	[87/5][99/16]
C_3H_3N	acrylonitrile				[107-13-1]
	(257–352)	33.6	(272)	A	[87/5]
	(283–343)	31.6	(298)	A	[87/5]
	(222–351)	35.5	(237)		[64/9]
	(293–343)	32.9	(308)		[64/7]
	(273–353)	32.6			[45/6]
C_3H_3NO	oxazole				[288-42-6]
	(293–344)	34.6	(308)	A	[87/5]
		32.5±0.1	(298)	C	[78/4]
C_3H_3NO	isoxazole				[288-14-2]
	(314–404)	37.2±0.2	(298)	EB	[96/4]
		36.5±0.1	(298)	C	[78/4]
$C_3H_3NO_2$	cyanoformic acid, methyl ester				[17640-15-2]
	(273–333)	39.3	(288)	A	[87/5][70/16]
C_3H_3NS	thiazole				[288-47-1]
	(333–393)	39.7	(348)	A	[87/5]
	(336–391)	38.9	(351)	A	[87/5][69/4]
C_3H_4	allene				[463-49-0]
	(136–274)	22.6	(259)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(193–246)	19.9	(231)	A	[87/5]
	(153–238)	21.3	(223)		[47/5]
	(138–189)	22.9	(174)		[40/3][84/9]
	(203–236)	20.9	(220)	MM	[30/5]
	(200–260)	21.5	(245)		[21/2][84/9]
C_3H_4	1-propyne				[74-99-7]
	(183–257)	23.0	(242)	A	[87/5]
	(257–402)	20.8	(272)	A	[87/5]
	(303–361)	21.2	(318)	A	[87/5]
	(359–402)	21.9	(374)	A	[87/5]
	(249–306)	23.2	(264)	A	[87/5]
		22.1	(275)		[71/28]
	(162–255)	23.9	(240)		[67/13]
	(323–400)	21.6	(338)		[62/29]
	(194–250)	23.4	(235)		[33/8][84/9]
	(200–260)	21.4	(230)		[21/3]
$C_3H_4Br_2$	2,3-dibromopropylene				[513-31-5]
	(267–415)	43.1	(282)	A	[87/5][47/5]
$C_3H_4Br_4$	1,2,2,3-tetrabromopropane				[54268-02-9]
	(418–580)	57.7	(433)	A	[87/5][70/16]
$C_3H_4ClFO_3$	carbonochloridic acid, 2-fluoroethyl ester				[462-27-1]
	(273–333)	46.6	(288)	GS	[87/5][48/14] [70/16]
$C_3H_4ClF_3$	1-chloro-3,3,3-trifluoropropane				[460-35-5]
	(297–315)	29.9	(306)	A	[87/5]
	(301–341)	33.7	(316)		[72/7]
$C_3H_4ClF_3O$	2-chloro-1,1,2-trifluoroethyl methyl ether				[425-87-6]
		34.4±0.1	(298)	C	[84/2]
		33.4±0.1	(313)	C	[84/2]
		31.1±0.1	(343)	C	[84/2]
$C_3H_4ClF_3O_2S$	trifluoromethanesulfinic acid, 2-chloroethyl ester				[61915-99-9]
	(320–403)	40.5	(335)	I	[87/5][77/17] [99/16]
$C_3H_4Cl_2F_2O$	2,2-dichloro-1,1-difluoro-1-methoxyethane				[76-38-0]
	(279–378)	40.3	(294)	A	[87/5]
$C_3H_4Cl_2O$	1,1-dichloroacetone				[513-88-2]
	(292–382)	35.8	(307)	A	[87/5][70/5]
$C_3H_4Cl_2O$	1,3-dichloroacetone				[534-07-6]
	(348–445)	49.6	(363)	A	[87/5][70/5]
$C_3H_4Cl_2O_2$	methyl dichloroacetate				[116-54-1]
		47.7±0.1	(298)	C	[72/41]
	(331–481)	44.9	(346)	A	[87/5][70/16]
	(276–416)	47.2	(291)		[47/5]
$C_3H_4Cl_4$	1,1,1,2-tetrachloropropane				[812-03-3]
	(331–469)	42.3	(346)	A	[87/5][70/16]
$C_3H_4Cl_4$	1,1,1,3-tetrachloropropane				[1070-78-6]
	(300–377)	57.8	(315)	A	[87/5]
$C_3H_4Cl_4$	1,2,2,3-tetrachloropropane				[13116-53-5]
	(346–415)	42.8	(361)	A	[87/5]
$C_3H_4F_2O_2$	methyl difluoroacetate				[432-53-4]
	(273–333)	41.9	(288)	GS	[87/5][48/14] [70/16]
$C_3H_4F_4O$	2-difluoromethoxy-1,1-difluoroethane				[32778-16-8]
	(288–328)	32.9	(303)	I	[02/19]
$C_3H_4F_4O$	2,2,3,3-tetrafluoro-1-propanol				[76-37-9]
	(303–380)	47.9	(318)	A	[87/5]
	(298–333)	50.3	(313)	MM	[73/5]
	(298–333)	53.6	(298)	MM	[73/5]
C_3H_4O	acrolein				[107-02-8]
	(250–306)	32.3	(265)	A	[87/5]
	(304–325)	30.9	(314)		[79/15]
	(208–326)	33.5	(223)	A	[87/5][47/5]
C_3H_4O	propargyl alcohol (2-propyn-1-ol)				[107-19-7]
	(293–387)	42.0	(308)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_3H_4O_2$	acrylic acid				[79-10-7]
		53.1±4.2	(298)	C	[96/8]
	(341–414)	45.3	(356)	A	[87/5][73/14]
	(293–343)	32.7	(308)		[64/7]
$C_3H_4O_2$	β-propiolactone (2-oxetanone)				[127-17-3]
	(324–435)	46.4	(339)	A	[87/5]
		47.0±0.1	(298)	C	[66/19]
$C_3H_4O_3$	ethylene carbonate				[96-49-1]
	(381–437)	59.6	(396)	A	[87/5]
	(368–449)	60.3	(383)	EB	[82/8]
	(368–449)	56.3	(423)	EB	[82/8]
	(368–433)	55.0	(433)	EB	[82/8]
$C_3H_4O_3$	pyruvic acid				[127-17-3]
	(294–438)	51.4	(309)	A	[87/5][47/5]
$C_3H_4S_3$	trithiocarbonic acid, cyclic ethylene ester				[822-38-8]
	(294–303)	82.9	(298)		[99/16]
C_3H_5Br	allyl bromide				[106-95-6]
	(297–338)	32.2	(312)	A, EB	[87/5][77/8]
		31.7±0.1	(318)	C	[77/8]
		31.0±0.1	(330)	C	[77/8]
		30.4±0.1	(341)	C	[77/8]
C_3H_5Br	*cis* 1-bromopropylene				[590-14-7]
	(257–366)	32.0	(272)	A	[87/5][70/16]
C_3H_5Br	*trans* 1-bromopropylene				[590-14-7]
	(262–372)	32.5	(277)	A	[87/5][70/16]
$C_3H_5Br_3$	1,2,3-tribromopropane				[96-11-7]
	(390–595)	50.8	(405)	A	[87/5]
	(400–478)	50.2	(415)		[49/1][84/9]
C_3H_5Cl	allyl chloride				[107-05-1]
	(203–318)	33.1	(218)	A	[87/5]
	(286–317)	30.0	(301)		[44/5][84/9]
C_3H_5Cl	1-chloropropene				[590-21-6]
	(191–310)	29.5	(206)		[47/5]
C_3H_5Cl	*cis* 1-chloropropene				[16136-84-8]
	(276–332)	27.9	(291)		[01/19]
	(237–338)	29.2	(252)	A	[87/5][70/16]
C_3H_5Cl	*trans* 1-chloropropene				[16136-85-9]
	(277–340)	28.5	(292)		[01/19]
	(241–343)	29.7	(256)	A	[87/5][70/16]
C_3H_5Cl	2-chloropropene				[557-98-2]
	(229–327)	28.0	(244)	A	[87/5][70/16]
C_3H_5ClO	epichlorohydrin				[106-89-8]
	(256–391)	42.9	(272)		[47/5]
C_3H_5ClO	chloroacetone				[78-95-5]
	(316–392)	40.1	(331)	A	[87/5]
$C_3H_5ClO_2$	methyl chloroacetate				[96-34-4]
		46.7±0.1	(298)	C	[72/41]
	(318–402)	45.5	(333)	A	[87/5][67/6] [84/9]
	(298–403)	46.7	(313)		[28/2][84/9]
$C_3H_5ClO_2$	ethylchloroformate				[541-41-3]
	(281–286)	38.7±0.2	(283)	BG	[80/2]
	(281–286)	37.8±0.2	(298)	BG	[80/2]
$C_3H_5Cl_3$	1,1,1-trichloropropane				[7789-89-1]
	(244–382)	38.8	(259)	A	[87/5][47/5]
$C_3H_5Cl_3$	1,1,3-trichloropropane				[20395-25-9]
	(328–464)	41.8	(343)	A	[87/5][70/16]
$C_3H_5Cl_3$	1,2,3-trichloropropane				[96-18-4]
		47.8±0.1	(298)	C	[89/10]
	(337–477)	43.0	(352)	A	[87/5][70/16]
	(282–431)	46.8	(297)		[47/5]
C_3H_5FO	1,2-epoxy-3-fluoropropane				[503-09-3]
	(273–333)	39.9	(288)	A, GS	[87/5][48/14] [70/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_3H_5FO_2$	methyl fluoroacetate				[453-18-9]
	(273–333)	42.7	(288)	A, GS	[87/5][48/14]
					[70/16]
$C_3H_5F_3O$	1,1,2-trifluoro-1-methoxyethane				[428-66-0]
	(276–317)	31.1	(291)	I	[02/19]
$C_3H_5F_3O$	1,1,1-trifluoro-2-propanol				[374-01-6]
	(292–333)	44.2	(307)	A, MM	[87/5][73/5]
					[84/9]
	(294–333)	44.8	(298)	MM	[73/5]
$C_3H_5F_3O_2S$	trifluoromethylsulfinic acid, trifluoromethyl ester				[30957-43-8]
		37.2	(370)		[71/20]
$C_3H_5F_3S_2$	ethyl(trifluoromethyl) disulfide				[691-05-4]
	(253–303)	33.8	(268)	A	[87/5][99/16]
C_3H_5N	propionitrile				[107-12-0]
	(288–371)	36.1	(303)	A	[87/5]
	(308–363)	36.7	(326)	BG	[71/2]
	(189–295)	36.5	(280)		[56/5][84/9]
	(308–370)	35.9	(323)		[49/1][84/9]
C_3H_5NO	acrylamide				[79-06-1]
	(357–413)	61.5	(372)	A	[87/5]
	(373–413)	76.5	(388)	A	[87/5]
C_3H_5NO	methoxyacetonitrile				[1738-36-9]
	(285–316)	41.7±0.6	(298)	GS	[95/11]
C_3H_5NO	2-cyanoethanol				[109-78-4]
	(331–494)	53.4	(346)	A	[87/5]
C_3H_5NO	2-propenal oxime				[5314-33-0]
	(303–381)	42.2	(318)	A	[87/5]
$C_3H_5NO_2$	1-nitropropylene				[3156-70-5]
	(301–373)	37.1	(337)		[84/22]
	(273–333)	44.1	(288)	A	[87/5][70/16]
$C_3H_5NO_2$	2-nitropropylene				[4749-28-4]
	(273–333)	38.2	(288)	A	[87/5][70/16]
C_3H_5NS	ethyl isothiocyanate				[542-85-8]
	(283–404)	40.2	(298)	A	[87/5]
	(283–323)	39.8	(298)		[35/3][84/9]
C_3H_5NS	ethyl thiocyanate				[542-90-5]
	(358–422)	44.2	(373)	A	[87/5][99/16]
$C_3H_5N_3O_9$	glycerol trinitrate				[55-63-0]
	(293–373)	104.5	(308)	A	[87/5]
	(400–524)	58.6	(415)		[47/5]
C_3H_5P	2-propynylphosphine				[114596-02-0]
	(228–273)	36.8	(250)		[88/13]
C_3H_6	cyclopropane				[75-19-4]
	(195–225)	21.8	(210)		[97/19]
	(358–398)	20.4	(373)	A	[87/5]
	(297–359)	19.9	(312)	A	[87/5]
	(188–239)	20.3	(224)	A	[87/5]
	(239–298)	19.9	(254)	A	[87/5]
	(183–241)	21.1	(226)		[46/1][84/9]
C_3H_6	propylene				[115-07-1]
	(297–363)	18.7	(312)	A	[87/5]
	(104–161)	22.2	(146)	A	[87/5]
	(228–271)	18.7	(256)	A	[87/5]
	(270–327)	18.5	(285)	A	[87/5]
	(325–363)	18.8	(340)	A	[87/5]
	(161–242)	19.2	(227)	A	[87/5][70/16]
	(298–423)	18.7	(360)		[53/17]
	(166–226)	19.6	(211)		[39/2]
	(236–283)	19.3	(268)		[21/2][84/9]
C_3H_6BrCl	1-bromo-3-chloropropane				[109-70-6]
	(326–488)	42.0	(341)	A	[87/5][70/16]
C_3H_6BrNO	2-bromo-2-nitrosopropane				[7119-91-7]
	(239–356)	41.0	(254)	A	[87/5][70/16]
$C_3H_6Br_2$	1,1-dibromopropane				[598-17-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(322–449)	42.5	(337)	A, EST	[87/5][56/16] [70/16]
$C_3H_6Br_2$	1,2-dibromopropane				[78-75-1]
	(312–403)	41.4	(327)	A	[87/5]
	(310–400)	42.2	(298)		[91/2][75/16]
		42.3±0.7	(298)	EB	[75/15]
	(329–456)	44.6	(344)	A	[87/5][70/16]
	(266–415)	42.8	(281)		[47/5]
$C_3H_6Br_2$	1,3-dibromopropane				[109-64-8]
		47.6	(298)	GC	[94/19]
		47.3±0.1	(308)	C	[92/11]
		46.7±0.1	(315)	C	[92/11]
		46.1±0.1	(323)	C	[92/11]
		45.5±0.1	(330)	C	[92/11]
		44.8±0.1	(338)	C	[92/11]
	(307–437)	46.6	(322)	A	[87/5]
	(351–487)	47.8	(366)	A	[87/5][70/16]
	(283–440)	45.3	(298)		[47/5]
$C_3H_6Br_2O$	2,3-dibromo-1-propanol				[96-13-9]
	(330–492)	57.3	(345)	A	[87/5][47/5]
$C_3H_6Cl_2$	1,1-dichloropropane				[78-99-9]
	(310–360)	35.2	(298)		[67/11][91/2]
	(282–399)	35.5	(297)	A, EST	[87/5][56/16] [70/16]
$C_3H_6Cl_2$	1,2-dichloropropane				[78-87-5]
	(294–406)	38.4±0.3	(298)	EB	[97/8]
	(300–370)	36.3	(298)		[91/2]
		36.1±0.1	(298)	C	[89/10]
	(239–373)	39.4	(254)	A	[87/5]
	(321–369)	34.7	(336)		[49/1]
	(288–373)	34.3	(303)		[33/5]
$C_3H_6Cl_2$	1,3-dichloropropane				[142-28-9]
		41.0	(298)	GC	[94/19]
	(330–400)	41.0	(298)		[87/11][91/2]
		40.6±0.1	(298)	C	[89/10]
	(307–435)	39.0	(322)	A	[87/5][70/16]
$C_3H_6Cl_2$	2,2-dichloropropane				[594-20-7]
	(295–340)	32.1	(298)	A	[87/11][91/2]
	(267–378)	33.2	(282)	A	[87/5][70/16]
$C_3H_6Cl_2O$	2,3-dichloro-1-propanol				[616-23-9]
	(384-419)	48.5	(399)	A	[87/5]
$C_3H_6Cl_2O$	1,3-dichloro-2-propanol				[96-23-1]
	(301–448)	50.4	(316)	A	[87/5][47/5]
$C_3H_6F_2$	1,1-difluoropropane				[430-81-5]
	(219–311)	27.2	(234)	A, EST	[87/5][56/16] [70/16]
$C_3H_6F_2$	2,2-difluoropropane				[420-45-1]
	(211–302)	25.6	(226)	A	[87/5][70/16]
$C_3H_6F_2O$	1,1-difluoro-2-methoxyethane				[461-57-4]
	(288–322)	31.8	(303)	I	[02/19]
$C_3H_6F_3NS$	N,N-dimethyl-trifluoromethanesulfphenamide				
	(223–295)	30.2	(259)		[60/24]
$C_3H_6F_3NS$	dimethyl(trifluoromethylthio)amine				[62067-13-4]
	(273–329)	31.1	(288)	A	[87/5][99/16]
$C_3H_6F_3OP$	methyl(trifluoromethyl)phosphinous acid, methyl ester				[26348-84-5]
	(232–285)	33.9	(258)		[70/26]
$C_3H_6F_3OP$	dimethyl(trifluoromethyl)phosphine oxide				[26348-91-4]
	(347–360)	52.4	(353)		[70/26]
$C_3H_6F_3O_2P$	(trifluoromethyl)phosphonic acid, dimethyl ester				[684-56-0]
	(237–318)	37.4	(252)	A	[87/5][61/14]
$C_3H_6F_3PS$	methyl(trifluoromethyl)phosphinothious acid, methyl ester				[26348-86-7]
	(273–313)	38.4	(293)		[70/26]
$C_3H_6F_3PS$	dimethyl(trifluoromethyl)phosphine sulfide				[26348-92-5]
	(323–357)	47.2	(340)		[70/26]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_3H_6I_2$	1,3-diiodopropane				[627-31-6]
		54.1	(298)	GC	[94/19]
$C_3H_6N_2O_4$	1,1-dinitropropane				[601-76-3]
	(323–383)	57.9	(338)	A	[87/5]
$C_3H_6N_2O_4$	2,2-dinitropropane				[595-49-3]
	(363–553)	46.3	(378)	A	[87/5]
$C_3H_6N_2O_6$	1,2-propanediol dinitrate				[6423-43-4]
	(288–328)	63.8	(303)	A	[87/5][70/16]
$C_3H_6N_2O_6$	1,3-propanediol dinitrate				[3457-90-7]
	(293–313)	74.3±4.6	(303)	A, GS	[87/5][57/5]
$C_3H_6N_6O_6$	hexahydro-1,3,5-trinitro-1,3,5-triazine				[121-82-4]
	(503–523)	84.4	(513)	A	[87/5]
C_3H_6O	2-propen-1-ol				[107-18-6]
	(323–373)	47.3	(298)	CGC	[95/21]
C_3H_6O	oxetane				[503-30-0]
		29.8	(298)	C	[81/8]
C_3H_6O	acetone				[67-64-1]
	(329–488)	29.9	(344)	A	[87/5]
	(178–243)	32.9	(228)	A	[87/5]
	(203–269)	33.8	(254)	A	[87/5]
	(323–379)	30.6	(338)	A	[87/5]
	(374–464)	29.5	(389)	A	[87/5]
	(457–508)	29.7	(472)	A	[87/5]
		26.1	(373)	C	[86/18]
		21.7	(423)	C	[86/18]
		15.3	(473)	C	[86/18]
		9.2	(498)	C	[86/18]
	(285–329)	31.9	(300)	EB	[86/10]
	(305–333)	31.8	(319)		[84/23]
	(259–351)	32.8	(274)	A	[87/5][74/6]
					[75/8]
		31.3	(298)		[75/8]
	(261–328)	32.7	(276)	A, EB	[87/5][72/6]
	(278–293)	32.6	(285)		[63/25]
	(310–329)	31.1	(319)		[57/3]
	(204–339)	35.0	(253)	MG	[26/7]
	(204–339)	32.1	(293)	MG	[26/7]
	(204–339)	30.7	(313)	MG	[26/7]
C_3H_6O	allyl alcohol				[107-18-6]
	(310–340)	44.6	(325)		[02/45]
	(253–370)	46.7	(268)	A	[87/5]
		NA			[36/2]
	(283–313)	44.8	(298)		[35/3]
C_3H_6O	methyl vinyl ether				[107-25-5]
	(278–412)	23.4	(293)	A	[87/5]
C_3H_6O	propanal				[123-38-6]
	(263–373)	31.5	(278)		[77/24]
	(286–321)	NA	(301)		[74/8]
		28.3	(321)		[72/4]
		29.4	(303)		[72/4]
		30.3	(286)		[72/4]
		29.6	(298)		[72/4]
	(290–322)	30.3	(305)	A	[87/5][70/16]
	(250–330)	31.9	(265)	EB	[87/5][51/8]
C_3H_6O	propylene oxide				[75-56-9]
	(225–308)	31.6	(240)	A	[87/5][70/16]
	(292–345)	28.5	(307)		[66/3]
		27.9	(298)	C	[62/28]
	(249–308)	30.1	(264)		[59/1]
	(285–322)	28.2	(303)		[37/7]
	(243–306)	32.9	(273)		[35/5]
$C_3H_6O_2$	1,3-dioxolane				[646-06-0]
	(305–347)	34.6	(326)		[89/3]
	(280–323)	35.8	(295)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(321–357)	33.7	(339)		[82/3]
	(306–346)	33.7	(326)		[80/18]
	(280–355)	34.1	(296)		[68/2][84/9]
		35.6±0.4			[59/23]
$C_3H_6O_2$	ethyl formate				[109-94-4]
	(300–326)	31.4	(313)		[93/8]
	(327–498)	29.9	(342)	A	[87/5]
		31.6±0.1	(304)	C	[76/14]
		30.9±0.1	(313)	C	[76/14]
		29.8±0.1	(328)	C	[76/14]
	(213–336)	35.8	(228)	A	[87/5][70/16]
$C_3H_6O_2$	methyl acetate				[79-20-9]
	(260–351)	34.1	(275)	A	[87/5]
		32.3±0.1	(298)	C	[80/13]
		29.5±0.1	(343)	C	[80/13]
	(308–338)	31.8	(323)	DTA	[80/8]
		32.6±0.1	(298)	C	[79/1]
		32.2±0.1	(304)	C	[77/12]
		31.6±0.1	(313)	C	[77/12]
		30.5±0.1	(328)	C	[77/12]
		30.3±0.1	(331)	C	[77/12]
		32.5	(295)		[76/8]
		30.2	(330)		[76/8]
	(273–318)	34.5	(296)	BG	[71/2]
	(274–329)	33.4	(289)	A	[87/5][65/3] [70/16]
$C_3H_6O_2$	propionic acid				[79-09-4]
	(353–393)	54.9	(298)	CGC	[95/21]
	(343–419)	47.0	(358)	A	[87/5]
	(414–511)	60.6	(429)	A	[87/5]
	(345–401)	46.4	(360)	A	[87/5]
		56.0	(303)		[83/13]
monomer		31.1±0.1	(298)	C	[70/8]
		55±2	(298)	C	[70/8]
	(328–437)	48.3	(343)		[81/11]
$C_3H_6O_3$	2-methoxyacetic acid				[625-45-6]
	(325–477)	54.5	(340)	A	[87/5][47/5]
$C_3H_6O_3$	methyl glycolate				[96-35-5]
	(326–381)	52.5±6.3	(298)	EB	[96/5]
	(282–425)	47.4	(297)	A	[87/5][47/4]
$C_3H_6O_3$	dimethylcarbonate				[616-38-6]
	(326–411)	36.4	(341)		[02/23]
	(311–397)	37.7±0.2	(298)	EB	[97/7][97/6]
$C_3H_6O_3$	peroxypropionic acid				[4212-43-5]
	(273–393)	43.2	(288)	A	[87/5][51/10] [70/16]
$C_3H_6O_3$	propylene ozonide				
	(261–296)	36.9	(281)	A	[87/5][56/18]
$C_3H_6O_3$	1,3,5-trioxane				[110-88-3]
	(329–386)	40.0	(344)	A	[87/5][65/4]
C_3H_6S	2-methylthiirane				[1072-43-1]
	(272–423)	34.6	(287)		[87/5][70/16] [99/16]
C_3H_6S	thiacyclobutane (thietane)				[287-27-4]
	(275–393)	36.5	(290)		[99/16]
		35.8	(298)		[71/28]
	(321–404)	34.6	(336)	A, EB	[87/5][53/8] [66/5]
C_3H_7Br	1-bromopropane				[106-94-5]
	(301–344)	31.8	(316)	A, EB	[87/5][77/8]
		31.1±0.1	(322)	C	[77/8]
		30.5±0.1	(332)	C	[77/8]
		30.1±0.1	(339)	C	[77/8]
		29.3±0.1	(352)	C	[77/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		31.9±0.1	(298)	C	[66/2]
	(250–368)	34.1	(265)	A, EST	[87/5][61/13] [70/16]
	(220–344)	35.5	(235)		[47/5]
	(273–303)	32.6	(288)		[06/1][84/9]
C_3H_7Br	2-bromopropane				[75-26-3]
	(323–363)	30.6	(298)	CGC	[95/21]
	(236–328)	32.1	(251)	A	[87/5]
	(299–332)	30.1	(314)	EB	[87/5][77/8]
		29.8±0.1	(305)	C	[77/8]
		29.2±0.1	(318)	C	[77/8]
		28.5±0.1	(330)	C	[77/8]
		28.0±0.1	(338)	C	[77/8]
		30.2±0.1	(298)	C	[66/2]
	(211–333)	33.4	(226)		[47/5]
	(273–303)	30.9	(288)		[06/1][84/9]
C_3H_7Cl	1-chloropropane				[540-54-5]
	(250–320)	29.0	(298)		[84/9][91/2]
		28.5±0.2	(298)	C	[77/1]
	(248–320)	31.0	(263)	A	[87/5][69/5] [70/16]
	(205–319)	33.1	(219)		[47/5]
C_3H_7Cl	2-chloropropane				[75-29-6]
	(239–310)	30.2	(254)	A	[87/5]
	(194–309)	30.6	(209)		[47/5]
	(273–303)	27.3	(288)		[06/1][84/9]
C_3H_7ClO	1-chloro-2-propanol				[127-00-4]
	(308–399)	45.0±2.2	(340)	EB	[02/14]
	(308–399)	42.2±1.9	(380)	EB	[02/14]
C_3H_7ClO	2-chloro-1-propanol				[78-89-7]
	(316–399)	45.0	(331)	A	[87/5]
$C_3H_7ClO_2$	3-chloro-1,2-propanediol				[96-24-2]
	(343–409)	66.6	(358)		[96/13]
$C_3H_7ClO_2S$	1-propanesulfonyl chloride				[10147-36-1]
	(273–362)	52.3	(288)		[99/16]
	(362–464)	49.9	(377)		[99/16]
	(243–273)	60.1	(258)	A	[87/5][99/16]
C_3H_7ClS	methyl(2-chloroethyl) sulfide				
	(293–333)	42.4	(308)	A, GS	[87/5][48/9] [70/16]
C_3H_7F	1-fluoropropane				[460-13-9]
	(196–289)	24.0	(274)	A, EST	[87/5][61/13] [70/16]
C_3H_7F	2-fluoropropane				[420-26-8]
	(190–264)	23.7	(249)	A	[87/5]
C_3H_7I	1-iodopropane				[107-08-4]
	(171–271)	37.8	(256)	A	[87/5]
		36.3±0.1	(298)	C	[68/1]
	(271–402)	36.8	(286)	A, EST	[87/5][61/13] [70/16]
	(237–375)	37.0	(252)		[47/5]
C_3H_7I	2-iodopropane				[75-30-9]
	(313–353)	34.0	(298)	CGC	[95/21]
	(173–262)	36.7	(247)	A	[87/5]
		34.1±0.1	(298)	C	[68/1]
	(230–363)	36.3	(244)		[47/5]
C_3H_7N	cyclopropylamine				[765-30-0]
		31.3±0.4			[71/36]
C_3H_7N	allylamine				[107-11-9]
	(273–303)	33.0	(288)	A	[87/5]
	(273–324)	32.6	(288)	A	[87/5]
C_3H_7N	azetidine				[503-29-7]
	(273–303)	32.6	(288)	A	[87/5]
C_3H_7NO	acetone oxime				[127-06-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(338–352)	51.4	(345)	A	[87/5]
C_3H_7NO	propionamide				[79-05-0]
	(338–486)	60.3	(353)		[47/5]
C_3H_7NO	N,N-dimethyl formamide				[68-12-2]
	(301–426)	49.2	(316)	A	[87/5]
		46.9	(298)	A	[85/7][85/6]
	(318–423)	42.5	(370)		[79/21]
	(331–425)	56.7	(346)		[74/7][84/9]
	(303–363)	46.7	(318)		[68/3]
C_3H_7NO	N-ethylformamide				[627-45-2]
		58.4	(298)	A	[85/7][85/6]
C_3H_7NO	N-methylacetamide				[79-16-3]
	(353–428)	62.0	(368)		[93/2]
	(333–443)	59.6	(348)	A	[87/5]
	(353–479)	53.5	(368)	A	[87/5]
		NA			[68/3]
C_3H_7NO	propionaldehyde oxime				[627-39-4]
	(313–339)	51.2	(326)	A	[87/5]
$C_3H_7NO_2$	ethyl carbamate				[51-79-6]
	(338–457)	56.6	(353)	A	[87/5][47/5]
$C_3H_7NO_2$	isopropyl nitrite				[541-42-4]
	(253–268)	26.0	(260)	A	[87/5][37/3]
$C_3H_7NO_2$	1-nitropropane				[108-03-2]
	(313–353)	43.9	(298)	CGC	[95/21]
	(293–405)	42.6	(308)	A, EB	[87/5][56/15] [70/16]
	(331–404)	40.6	(346)		[49/1]
$C_3H_7NO_2$	2-nitropropane				[79-46-9]
	(313–353)	43.9	(298)	CGC	[75/21]
	(284–394)	40.9	(299)	A, EB	[87/5][47/5] [56/15][70/16]
$C_3H_7NO_2$	propyl nitrite				[543-67-9]
	(253–268)	28.3	(260)	A	[87/5][37/3]
$C_3H_7NO_3$	isopropyl nitrate				[1712-64-7]
		35.3±0.1		DSC	[99/12]
	(273–343)	39.7	(288)	A	[87/5][57/2] [70/16]
$C_3H_7NO_3$	propyl nitrate				[627-13-4]
	(273–343)	41.7	(288)	A	[87/5][57/2] [70/16]
$C_3H_7N_3$	1-azidopropane				[22293-25-0]
	(253–298)	31.1	(268)	A	[87/5][64/5] [84/9]
$C_3H_7N_3$	2-azidopropane				[691-57-6]
	(253–298)	33.2	(268)	A	[87/5][64/5] [84/9]
C_3H_7P	2-propenylphosphine				[81637-99-2]
	(210–273)	32.7	(241)		[88/13]
C_3H_8	propane				[74-98-6]
	(278–332)	18.8	(293)	A	[87/5]
	(165–248)	19.5	(233)	A	[87/5]
	(104–165)	22.1	(150)	A	[87/5]
	(231–281)	19.0	(266)	A	[87/5]
	(329–369)	19.2	(344)	A	[87/5]
	(312–367)	18.9	(327)		[80/1]
		18.77	(256)		[71/28]
	(166–231)	20.0	(216)		[38/4]
$C_3H_8N_2$	dimethyl ammonium cyanide				
	(251–295)	49.0	(280)		[87/5][73/10]
$C_3H_8N_2S$	1,3-dimethylthiourea				
	(342–375)	93±4.0	(359)	ME, TE	[94/21]
C_3H_8O	methyl ethyl ether				[540-67-0]
	(281–433)	30.1	(296)	A	[87/5]
	(216–299)	37.0	(231)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(281–438)	37.1	(296)	A	[87/5]
	(278–281)	NA			[67/7]
	(182–280)	26.3	(265)		[47/5]
C_3H_8O	1-propanol				[71-23-8]
		41.2	(371)		[00/24]
		35.2	(423)		[00/24]
		29.4	(453)		[00/24]
		21.0	(498)		[00/24]
		11.4	(528)		[00/24]
	(323–373)	49.2	(298)	CGC	[95/21]
	(303–370)	47.0	(318)		[95/14]
	(360–377)	42.9	(375)		[90/10]
	(200–228)	48.0	(214)	A	[87/5]
	(356–376)	43.5	(366)	A	[87/5]
	(369–407)	42.3	(384)	A	[87/5]
	(401–482)	40.1	(416)	A	[87/5]
	(478–507)	36.5	(492)	A	[87/5]
	(243–303)	46.3	(298)		[83/14]
	(275–373)	49.3	(290)		[73/26]
		46.4±0.1	(313)	C	[73/13]
		45.7±0.1	(323)	C	[73/13]
		44.9±0.1	(333)	C	[73/13]
		44.0±0.1	(343)	C	[73/13]
		43.2±0.1	(353)	C	[73/13]
		42.4±0.1	(363)	C	[73/13]
		47.49±0.02	(298)	C	[71/27]
	(333–377)	44.7	(348)	EB	[70/2][87/5]
	(292–370)	46.9	(307)	DTA	[69/5]
	(288–348)	46.7	(303)		[67/10]
		47.3±0.1	(298)	C	[66/2]
	(338–378)	44.3	(353)	EB	[63/8]
		46.6	(298)	C	[63/2]
	(405–537)	40.7	(420)		[63/20]
	(343–385)	44.1	(358)		[61/18]
		43.9±0.1	(343)	C	[61/18]
		42.3±0.1	(360)	C	[61/18]
		41.2±0.1	(370)	C	[61/18]
		40.3±0.1	(378)	C	[61/18]
		39.7±0.1	(384)	C	[61/18]
	(321–367)	45.5	(366)		[59/3]
		43.2	(354)		[57/21]
C_3H_8O	2-propanol				[67-63-0]
	(322–355)	43.2	(337)		[02/26]
		39.8	(355)		[00/25]
		29.7	(423)		[00/25]
		23.7	(453)		[00/25]
		16.5	(483)		[00/25]
		10.5	(503)		[00/25]
		40.4			[99/32]
	(300–355)	44.8	(315)		[95/14]
	(195–228)	50.3	(213)	A	[87/5]
	(347–368)	42.0	(355)	A	[87/5]
	(350–383)	41.3	(365)	A	[87/5]
	(379–461)	39.2	(394)	A	[87/5]
	(453–508)	35.3	(468)	A	[87/5]
	(273–374)	45.7	(288)		[73/26]
	(325–362)	43.1	(340)	A, EB	[87/5][70/2]
		45.34±0.02	(298)	C	[71/27]
	(288–348)	45.5	(303)		[67/10]
		45.2±0.1	(298)	C	[66/2]
		42.7±0.1	(330)	C	[64/23]
		41.0±0.1	(346)	C	[64/23]
		39.8±0.1	(355)	C	[64/23]
		38.9±0.1	(363)	C	[64/23]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(329–363)	42.8	(344)	EB	[63/8]
		44.0	(298)	C	[63/2]
	(395–508)	39.1	(410)		[63/20]
		43.2	(324)	C	[63/28]
		41.7	(339)	C	[63/28]
		39.8	(355)	C	[63/28]
	(354–420)	41.1	(369)		[55/4]
	(273–363)	44.4	(298)		[28/5]
$C_3H_8OS_2$	2,3-dimercaptopropanol				[59-52-9]
	(353–413)	61.2	(382)		[99/16][87/5]
$C_3H_8O_2$	2-methoxyethanol				[109-86-4]
	(333–423)	42.8	(348)	A	[87/5]
		45.2±0.2	(298)	C	[71/5]
	(329–396)	42.9	(344)		[56/6]
$C_3H_8O_2$	dimethoxymethane				[109-87-5]
	(273–316)	31.2	(288)	A	[87/5]
	(273–318)	29.8	(288)	A	[87/5]
	(296–314)	30.3	(305)		[76/20]
	(273–308)	30.1	(288)		[49/2]
$C_3H_8O_2$	1,2-propanediol				[57-55-6]
	(365–496)	60.0±0.3	(380)	EB	[02/17]
	(365–496)	56.2±0.2	(420)	EB	[02/17]
	(365–496)	52.0±0.3	(460)	EB	[02/17]
	(365–496)	47.5±0.6	(500)	EB	[02/17]
	(318–461)	58.6	(333)	A	[87/5][47/5]
	(353–403)	58.2	(378)		[35/4]
	(403–460)	56.0	(431)		[35/4]
$C_3H_8O_2$	1,3-propanediol				[504-63-2]
		72.4±0.3	(298)	C	[88/14]
	(332–448)	57.2	(347)	A	[87/5][47/5]
	(383–433)	63.3	(408)		[35/4]
	(433–488)	60.4	(460)		[35/4]
$C_3H_8O_2$	propylene glycol				
	(373–408)	66.5	(413)	TGA	[87/18]
$C_3H_8O_3$	glycerol				[56-81-5]
		91.7±0.9	(298)	C	[88/10]
	(469–563)	78.5	(484)	A	[87/5]
	(291–341)	86.8	(316)	ME	[77/11]
		67.5	(343)	GC	[77/34]
		66.8	(353)	GC	[77/34]
		66.2	(363)	GC	[77/34]
		65.5	(373)	GC	[77/34]
		64.8	(383)	GC	[77/34]
	(293–343)	85.8	(308)	ME	[87/5][62/18] [70/16]
	(456–553)	86.0	(471)		[1886/1]
C_3H_8S	ethyl methyl sulfide				[624-89-5]
	(253–363)	33.7	(268)		[99/16]
		31.5	(298)		[81/12]
	(296–373)	31.8	(311)	A, EB	[87/5][51/4]
		31.8	(298)		[71/28] [66/5][54/11]
		30.3	(338)		[35/2]
C_3H_8S	1-propanethiol				[107-03-9]
	(254–364)	33.7	(269)		[99/16]
		31.9	(298)		[71/28]
	(297–375)	31.8	(312)	A, EB	[87/5][56/7] [66/5][54/11]
		31.6±0.1	(303)	C	[56/7]
		30.7±0.1	(320)	C	[56/7]
		29.5±0.1	(341)	C	[56/7]
	(284–340)	31.5	(312)		[33/7]
C_3H_8S	2-propanethiol				[75-33-2]
	(242–348)	31.9	(257)		[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		29.5	(298)		[71/28]
	(283–358)	30.1	(298)	A, EB	[87/5][54/2]
					[66/5][54/11]
$C_3H_8S_2$	1,3-propanedithiol				[109-80-8]
	(338–446)	50.9	(353)		[99/16]
	(377–446)	41.6	(398)	A	[87/5]
		49.7	(298)		[62/11]
C_3H_9N	isopropylamine				[75-31-0]
		28.4	(298)		[79/9]
		27.2	(313)		[79/9]
	(277–334)	29.7	(292)	A, EB, IPM	[87/5][68/4]
					[70/16]
C_3H_9N	propylamine				[107-10-8]
		31.3	(298)		[79/9]
		30.1	(313)		[79/9]
		28.9	(328)		[79/9]
	(296–350)	31.3	(311)	A, EB, IPM	[87/5][68/4]
					[70/16]
C_3H_9N	trimethylamine				[75-50-3]
	(333–403)	23.0	(368)		[50/9]
	(273–313)	24.1	(288)		[45/1]
	(193–276)	24.6	(261)	A	[87/5][44/6]
		24.5	(250)	C	[44/6]
C_3H_9NO	2-(methylamino)ethanol				[109-83-1]
	(340–461)	57.0±0.5	(298)	EB	[97/8]
C_3H_9NO	1-amino-2-propanol				[78-96-6]
	(306–431)	51.6	(321)	A	[87/5]
C_3H_9NO	N-methoxy dimethyl amine (trimethylhydroxylamine)				[5669-39-6]
	(194–297)	28.0	(282)	A	[87/5][57/4]
C_3H_9NO	2-methoxyethyl amine				[109-85-3]
	(278–318)	38.8	(293)	A	[87/5]
$C_3H_9O_3P$	methylphosphonic acid, dimethyl ester				[756-79-6]
	(336–408)	64.0	(351)	A	[87/5][55/5]
$C_3H_9O_3P$	trimethyl phosphite				[121-45-9]
	(302–342)	42.5	(317)	EB	[90/9]
	(422–494)	32.8	(437)	A	[87/5]
$C_3H_9O_4P$	trimethyl phosphate				[512-56-1]
	(296–466)	48.8	(311)	A	[87/5][47/5]
C_3H_9P	trimethyl phosphine				[594-09-2]
	(248–310)	28.9	(263)	A	[87/5]
		28.0±2.1			[57/23][62/15]
$C_3H_{10}N_2$	1,3-diaminopropane				[109-76-2]
		50.2±0.1	(298)	C	[69/2]
$C_3H_{10}N_2$	(*dl*) 1,2-propanediamine				[78-90-0]
	(293–393)	42.2	(308)	A	[87/5]
	(242–293)	47.2	(278)	A, IPM	[87/5][75/4]
	(242–293)	43.9±0.2	(298)	IPM	[75/4]
		44.2±0.2	(298)	IPM	[65/8][70/11]
$C_3H_{10}N_2$	trimethylhydrazine				[1741-01-1]
	(257–287)	34.6	(272)		[55/6]
		33.4±0.1	(292)	C	[55/6]
C_3N_2O	carbonyl cyanide				[1115-12-4]
	(250–291)	37.5	(276)	A	[87/5][48/16]
C_3O_2	carbon suboxide				[504-64-3]
	(161–249)	26.2	(234)	A	[87/5][65/5]
C_3S_2	carbon subsulfide				[627-34-9]
	(287–383)	45.1	(302)	A	[87/5]
C_4BrClF_9N	1,1,2-trifluoro-2-chloro-2-bromo-N,N-*bis*(trifluoromethyl)ethylamine				
	(329–364)	33.1	(344)	A	[87/5]
C_4BrF_6N	2-bromo-N,N-*bis*(trifluoromethyl)ethynylamine				[22130-38-7]
	(311–329)	30.4	(320)	A	[87/5]
C_4BrF_8N	N,N-*bis*(trifluoromethyl)-2,2-difluoro-1-bromovinylamine				[17727-57-4]
	(293–320)	31.2	(320)	A	[87/5]
$C_4BrF_9O_3S$	2-bromo-2-fluorosulfatooctafluorobutane				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(313–372)	43.5	(342)		[66/18]
$C_4BrF_{10}N$	1,1,2,2-tetrafluoro-2-bromo-N,N-*bis*(trifluoromethyl)ethylamine				
	(289–329)	30.4	(304)	A	[87/5]
$C_4Br_2Cl_2F_6$	1,4-dibromo-2,3-dichloro-1,1,2,3,4,4-hexafluorobutane				[375-42-8]
		47.7±0.1	(308)	C	[92/11]
		46.9±0.1	(315)	C	[92/11]
$C_4Br_2F_9N$	1,2-dibromo-1,2,2-trifluoro-N,N-*bis*(trifluoromethyl)ethylamine				[17725-58-5]
	(326–366)	34.3	(341)	A	[87/5]
C_4ClF_8N	2-chloro-1,2-difluoro-N,N-*bis*(trifluoromethyl)vinylamine				[13747-22-3]
	(273–312)	29.1	(288)	A	[87/5]
$C_4ClF_{10}N$	N-chloro-1,1,2,2,2-pentafluoro-N-(pentafluoroethyl)ethanamine				[54566-79-9]
		27.2	(325)		[75/19]
$C_4ClF_{10}N$	N-chloro-1,1,1,2,3,3,3-heptafluoro-N-(trifluoromethyl)-2-propanamine				[53684-04-1]
		28.9	(325)		[75/21]
$C_4ClF_{12}NS$	chlorodifluoro[1,1,1,2,3,3,3-heptafluoro-2-propanaminoto(2-)]-(trifluoromethyl) sulfur				[62609-69-2]
		37.7	(402)		[77/15]
$C_4Cl_2F_6$	1,4-dichloro-hexafluoro-2-butene				[20972-44-5]
	(279–330)	34.0	(294)	A	[87/5]
$C_4Cl_2F_6$	*cis* 2,3-dichloro-hexafluoro-2-butene				[2418-22-6]
	(298–341)	32.5	(313)	A	[87/5]
$C_4Cl_2F_6$	*trans* 2,3-dichloro-hexafluoro-2-butene				[2418-21-5]
	(298–340)	32.2	(313)	A	[87/5]
$C_4Cl_2F_7N$	2,3,4,4-tetrafluoro-2,3-dichloro-(trifluoromethyl)azetidine				
	(273–333)	32.6	(288)	A	[87/5]
$C_4Cl_3F_7$	2,3,3-trichloroheptafluorobutane				[335-44-4]
		33.3			[59/28]
		35.6	(298)		[59/28]
	(302–446)	36.4	(317)	MM, A	[87/5][56/12]
$C_4Cl_4F_4$	1,2,3,4-tetrachlorotetrafluoro-1-butene				[457-20-0]
	(362–414)	39.4	(377)	A	[87/5]
$C_4Cl_4F_6O$	trichloromethyl 2-chloro-1,1,2,3,3,3-hexafluoropropyl ether				[61136-57-0]
	(325–403)	40.3	(340)	A	[87/5]
		42.8±0.7	(298)	EB	[76/15]
C_4Cl_6	perchloro-1,3-butadiene				[87-68-3]
	(343–484)	58.6	(358)	A	[87/5]
	(343–473)	60.4	(358)		[71/22][84/9]
$C_4Cl_6O_3$	trichloroacetic anhydride				[4124-31-6]
	(329–496)	56.0	(344)	A	[87/5][47/5]
$C_4F_6O_3$	trifluoroacetic anhydride				[407-25-0]
	(271–312)	34.7	(286)	A	[87/5][62/4]
					[71/21]
C_4F_6	hexafluoro-1,3-butadiene				[685-63-2]
	(273–343)	25.9	(288)		[02/6]
C_4F_7NO	4,4-difluoro-3-(difluoromethylene)-2-(trifluoromethyl)-1,2-oxazetidine				
	(238–283)	31.1	(268)	A	[87/5]
C_4F_7NO	3,6-dihydro-2,2,3,3,5,6,6-heptafluoro-2*H*-1,4-oxazine				[4777-13-3]
	(249–293)	27.3	(278)	A	[87/5]
$C_4F_7NO_3S$	fluorosulfuric ester 3,3,3-trifluoro-2-(trifluoromethyl)lactonitrile				[26404-53-5]
	(262–320)	31.2	(277)	A	[87/5]
C_4F_8	perfluoro-1-butene				[357-26-6]
	(203–279)	28.9	(264)	A	[87/5][71/21]
	(250–293)	U14.4	(265)		[47/14][84/9]
C_4F_8	perfluorocyclobutane				[115-25-3]
	(289–348)	23.5	(304)	A	[87/5]
	(343–388)	23.2	(358)	A	[87/5]
	(233–388)	25.0	(248)		[67/14]
	(234–269)	25.0	(254)		[62/22][84/9]
	(233–274)	24.9	(259)	A	[87/5][54/5]
$C_4F_8N_2O_2S$	N,N′-*bis*(trifluoroacetyl)sulfur difluorodiimide				
	(328–383)	43.5	(355)		[78/22]
$C_4F_8N_2O_3$	perfluoro-2-(tetrafluoro-2-nitroethyl)-1,2-oxazetidine				
	(273–343)	31.0	(288)	A	[87/5]
C_4F_8OS	perfluorotetramethylene sulfoxide				[42060-63-9]
		37.1			[73/38]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_4F_8O_2S$	perfluorotetramethylene sulfone				[42060-64-0]
		31.1			[73/38]
$C_4F_8O_4S$	heptafluorobutyric acid and fluorosulfuric acid anhydride				[6069-35-8]
	(268–352)	44.8	(283)	A	[87/5][66/15]
C_4F_8S	perfluorotetramethylene sulfide				[706-76-3]
		26.9			[73/38]
$C_4F_8S_2$	perfluoro-1,4-dithiane				[710-65-6]
		33.0			[73/38]
C_4F_9N	1,1,1-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-methanamine				[453-22-5]
		22.2	(288)		[75/21]
C_4F_9N	perfluoro[N,N-dimethyl(vinylamine)]				[13821-49-3]
	(257–280)	27.5	(268)	A	[87/5]
C_4F_9N	perfluoro[N-methyl(propylidineamine)]				
	(245–280)	26.6	(265)	A	[87/5]
C_4F_9N	perfluoro[N-propyl(methylenenamine)]				
	(250–291)	28.3	(276)	A	[87/5]
C_4F_9NO	nonafluorobutyramide				[32822-51-8]
		29.7	(306)	HG	[71/18]
C_4F_9NO	2,2,4,4,5,5-hexafluoro-3-(trifluoromethyl)oxazolidine				
	(253–293)	27.4	(278)	A	[87/5]
C_4F_9NO	perfluoro[2,4-*bis*(trifluoromethyl)-1,2-oxazetidine]				
	(266–289)	25.9	(278)	A	[87/5]
C_4F_9NOS	1,1,1-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-methanesulfinamide				[31340-35-9]
		36.4	(361)	I	[72/24]
$C_4F_9NO_2$	O-(trifluoroacetyl)-N,N-*bis*(trifluoromethyl)hydroxylamine				[15496-02-3]
	(234–296)	30.5	(281)	A	[87/5]
$C_4F_9NO_2S$	N-(trifluoroacetyl)-S,S-*bis*(trifluoromethyl)sulfoximine				[34556-29-1]
		35.1	(363)	I	[72/25]
C_4F_9NS	1,1,1-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-methanesulfenamide				[31340-34-8]
		31.4	(324)	I	[72/24]
C_4F_{10}	perfluorobutane				[355-25-9]
	(272–327)	24.2	(287)	A	[87/5]
	(233–273)	24.2	(258)	A	[87/5]
	(323–386)	23.1	(338)	A	[87/5]
	(233–383)	21.0	(293)		[58/4]
	(233–383)	17.1	(333)		[58/4]
	(233–260)	25.8	(247)		[52/16][84/9]
$C_4F_{10}OS$	heptafluoropropyl trifluoromethyl sulfoxide				[33622-18-3]
		33.6			[71/34]
$C_4F_{10}OS$	*bis*(pentafluoroethyl) sulfoxide				[33622-19-4]
		35.1			[71/34]
$C_4F_{10}O_3S$	fluorosulfuric acid, perfluoro(1-methylpropyl) ester				[5762-52-7]
	(294–342)	33.8	(309)	A	[87/5]
$C_4F_{10}O_6S_2$	1,1,1,2,3,4,4,4-octafluoro-2,3-*bis*(fluorosulfato)butane				[2261-44-1]
	(316–393)	30.1	(331)	A	[87/5][64/22]
	(392–411)	27.1	(401)	A	[87/5][64/22]
$C_4F_{10}S$	perfluoroetramethylene sulfur difluoride				[42069-60-6]
		41.5			[73/38]
$C_4F_{10}S$	heptafluoropropyl trifluoromethyl sulfide				[33547-11-4]
		27.7			[71/34]
$C_4F_{11}NOS$	difluoro(1,1,1,3,3,3-hexafluoro-2-propaniminato)oxo(trifluoromethyl) sulfur				[62609-62-5]
		35.1	(396)	I	[77/19]
$C_4F_{11}NS$	fluoro(trifluoromethyl)[2,2,2,1-tetrafluoro-1-(trifluoromethyl)ethyl]-imino sulfur				[37826-43-0]
	(300–333)	32.4	(315)	A, I	[87/5][72/21]
$C_4F_{12}N_2O$	perfluoro(2,3-dimethyl)-4-oxo-diazepentane				
	(276–308)	32.0	(291)	A	[87/5][71/21]
$C_4F_{12}N_2O$	perfluoro(2,4-dimethyl)-4-oxo-diazepentane				
	(288–318)	30.1	(303)	A	[87/5][71/21]
$C_4F_{12}N_2S$	difluoro*bis*[1,1,2,2,2-pentafluorothananaminato] sulfur				[4101-59-1]
		37.0			[76/29]
$C_4F_{12}OS$	difluorooxo*bis*(pentafluoroethyl) sulfur				[33564-25-9]
	(284–341)	33.8	(299)		[99/16]
$C_4F_{12}O_2S$	*bis*(trifluoromethyl)*bis*(trifluoromethoxy) sulfur				[63465-11-2]
	(273–325)	29.3	(288)	A, I	[87/5][77/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[78/14]
$C_4F_{12}O_3S$	oxo*bis*(trifluoromethyl)*bis*(trifluoromethoxy) sulfur				[66632-46-0]
	(273–335)	33.4	(288)	A, I	[87/5][78/14]
$C_4F_{12}P_2S$	di[*bis*(trifluoromethyl)phosphino] sulfide				
	(273–335)	42.2	(304)	T	[64/31]
$C_4F_{12}P_4$	1,2,3,4-*tetrakis*(trifluoromethyl)tetraphosphetane				[393-02-2]
	(313–375)	43.2	(328)	A, SG	[87/5][58/10]
$C_4F_{12}S$	difluoro*bis*(pentafluoroethyl) sulfur				[33622-15-0]
	(284–341)	34.0	(299)	A	[87/5]
		32.2			[71/34]
$C_4F_{12}S$	difluoro(heptafluoropropyl) (trifluoromethyl) sulfur				[31206-31-2]
		32.8			[71/34]
$C_4F_{13}NOS$	trifluoro[1,1,1,2,3,3,3-heptafluoro-2-propanaminoato(2-)]-(trifluoromethanolato) sulfur				[65844-09-9]
		33.9	(389)	I	[78/14]
$C_4F_{15}N_2O_2P$	phosphorous *bis*[*bis*(trifluoromethyl)nitroxide] difluoride				
	(303–370)	37.6	(336)		[73/24]
$C_4F_{16}S_2$	hexadecafluoro-octahydro-1,4-dithiane				[4556-31-4]
	(323–408)	40.5	(365)		[99/16][73/38]
C_4N_4	dicyanoacetylene				[1071-98-3]
	(295–350)	27.3	(310)	A	[87/5]
C_4HBrF_7N	1-bromo-2-fluoro-N,N-*bis*(trifluoromethyl)vinylamine				[25273-49-8]
	(321–342)	29.8	(331)	A	[87/5]
C_4HBrF_9N	2-bromo-1,1,2-trifluoro-N,N-*bis*(trifluoromethyl)ethylamine				
	(308–342)	31.9	(323)	A	[87/5]
C_4HBrF_9N	2-bromo-1,2,2-trifluoro-N,N-*bis*(trifluoromethyl)ethylamine				[4905-96-8]
	(301–332)	33.8	(316)	A	[87/5]
$C_4HBr_2F_6N$	*trans* 1,2-dibromo-N,N-*bis*(trifluoromethyl)vinylamine				
	(355–382)	33.4	(369)	A	[87/5]
$C_4HCl_2F_5O_2$	3,4-dichloro-2,2,3,4,4-pentafluorobutyric acid				[375-07-5]
	(373–456)	54.8	(388)	A	[87/5][57/17]
C_4HF_5	3,3,4,4,4-pentafluoro-1-butyne				[7096-51-7]
	(203–261)	23.6	(246)	A	[87/5]
C_4HF_6N	N,N-*bis*(trifluoromethyl)ethynylamine				[13747-21-2]
	(229–271)	26.0	(256)	A	[87/5]
$C_4HF_7O_2$	perfluorobutyric acid				[375-22-4]
	(310–426)	50.1±0.2	(320)	EB	[02/21]
	(310–426)	45.9±0.2	(360)	EB	[02/21]
	(310–426)	41.0±0.5	(400)	EB	[02/21]
	(329–493)	47.8	(344)	A	[87/5]
	(353–393)	47.3	(368)	A	[87/5]
C_4HF_8N	N,N-*bis*(trifluoromethyl)-1,2-difluorovinylamine				[13747-24-5]
	(276–296)	28.8	(286)	A	[87/5]
C_4HF_8N	N,N-*bis*(trifluoromethyl)-2,2-difluorovinylamine				[13747-23-4]
	(274–291)	27.7	(282)	A	[87/5]
C_4HF_8NO	2,2,3,3,5,5,6,6-octafluoromorpholine				[375-17-7]
	(273–323)	32.7	(288)	A	[87/5]
C_4HF_8NOS	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-iminothiophene-1-oxide				[77589-47-0]
		28.0	(397)		[81/15]
$C_4HF_9N_2OS$	1,1,1-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-methanesulfonimidamide				[62609-65-8]
		37.2	(388)	I	[77/19]
$C_4HF_9O_2S$	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester				[52225-50-0]
		39.3	(362)	HG	[74/25]
$C_4HF_{10}N$	1,1,1,2,3,3,3-heptafluoro-N-(pentafluoroethyl)ethanamine				[54566-81-3]
		26.4	(306)		[75/19]
$C_4HF_{10}N$	1,1,1,2,3,3,3-heptafluoro-N-(trifluoromethyl)-2-propanamine				[53684-05-2]
		28.1	(309)		[75/21]
$C_4HF_{10}NOS$	S,S-*bis*(pentafluoroethyl)sulfoximine				[34556-24-6]
		35.6	(366)	I	[72/25]
C_4H_2	1,3-butadiyne				[460-12-8]
	(237–283)	26.1	(268)	A	[87/5][71/21]
	(191–282)	26.4	(267)		[47/5]
	(188–234)	33.4	(219)		[33/10][84/9]
	(195–273)	25.4	(258)		[26/3][84/9]
$C_4H_2BrF_6N$	1-bromo-N,N-*bis*(trifluoromethyl)vinylamine				[19451-87-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(288–327)	32.8	(303)	A	[87/5]
$C_4H_2BrF_6N$	*cis* 2-bromo-N,N-*bis*(trifluoromethyl)vinylamine				[19483-21-7]
	(314–346)	29.7	(329)	A	[87/5]
$C_4H_2BrF_6N$	*trans* 2-bromo-N,N-*bis*(trifluoromethyl)vinylamine				[19483-20-6]
	(314–341)	30.0	(327)	A	[87/5]
$C_4H_2BrF_8N$	2-bromo-1,2-difluoro-N,N-*bis*(trifluoromethyl)ethylamine				[6857-63-2]
	(323–348)	32.4	(328)	A	[87/5]
$C_4H_2BrF_8N$	2-bromo-2,2-difluoro-N,N-*bis*(trifluoromethyl)ethylamine				[6857-63-2]
	(313–348)	33.6	(328)	A	[87/5]
$C_4H_2Br_2S$	3,4-dibromothiophene				[3141-26-2]
	(333–374)	32.1	(348)	A, I	[87/5][71/3] [99/16]
$C_4H_2Cl_2O_2$	*trans* fumaroyl chloride				[627-53-4]
	(288–433)	45.6	(303)	A	[87/5][47/5]
$C_4H_2Cl_2S$	2,5-dichlorothiophene				[3172-52-9]
	(323–425)	49.9	(338)		[99/16]
	(323–425)	36.2	(338)		[99/16]
	(323–425)	40.7	(338)		[81/24]
	(333–374)	33.7	(348)	A, I	[87/5][71/3] [99/16]
$C_4H_2F_4$	1,1,4,4-tetrafluoro-1,3-butadiene				[407-70-5]
	(239–271)	22.4	(256)	A	[87/5]
$C_4H_2F_8$	1,1,1,2,2,3,3,4-octafluorobutane				[662-35-1]
	(260–278)	28.9	(269)	EB	[97/22]
$C_4H_2F_8O$	2-difluoromethoxy-1,1,1,3,3,3-hexafluoropropane				[26103-08-2]
	(283–315)	31.1	(298)	I	[02/19]
$C_4H_2F_6OS$	trifluorothioacetic acid S-(1,2,2-trifluoroethyl) ester				[35709-12-7]
	(282–322)	34.3	(297)	A	[87/5][99/16]
$C_4H_2F_6O_2$	trifluoroacetic acid, 2,2,2-trifluoroethyl ester				[407-38-5]
		31.8	(330)	HG	[73/20]
$C_4H_2F_7S$	*cis* 2-fluoro-N,N-*bis*(trifluoromethyl)vinylamine				[25273-51-2]
	(289–311)	29.1	(300)	A	[87/5]
$C_4H_2F_7S$	*trans* 2-fluoro-N,N-*bis*(trifluoromethyl)vinylamine				[25211-47-6]
	(273–295)	28.5	(284)	A	[87/5]
$C_4H_2F_8O$	1,1,1,2,2,3,3-heptafluoro-3-(fluoromethoxy)propane				[184899-81-8]
	(283–316)	31.0	(298)	I	[02/19]
$C_4H_2N_2O_4S$	2,4-dinitrothiophene				[5347-12-6]
	(388–523)	59.7	(403)	A	[87/5][71/21] [99/16]
$C_4H_2N_2O_4S$	2,5-dinitrothiophene				[59434-05-8]
	(388–523)	59.6	(403)		[99/16]
$C_4H_2O_3$	maleic anhydride				[108-31-6]
	(336–475)	49.1	(351)	A	[87/5]
	(326–350)	54.8			[49/28]
	(317–475)	56.7	(332)		[47/5]
$C_4H_3BrF_7N$	2-bromo-2-fluoro-N,N-*bis*(trifluoromethyl)ethylamine				[25237-12-1]
	(329–255)	30.9	(342)	A	[87/5]
C_4H_3BrS	2-bromothiophene				[1003-09-4]
	(333–373)	27.9	(348)	A, I	[87/5][71/3] [99/16]
C_4H_3BrS	3-bromothiophene				[872-31-1]
	(333–373)	28.9	(348)	A, I	[87/5][71/3] [99/16]
$C_4H_3ClF_6O_2S$	chlorosulfurous acid, 2,2,2-trifluoro-1-methyl-1-(trifluoromethyl)ethyl ester				[57169-82-1]
		39.7			[75/41]
C_4H_3ClS	2-chlorothiophene				[96-43-5]
	(313–401)	34.7	(328)		[99/16]
	(320–401)	36.9	(335)		[99/16][81/24]
	(333–374)	34.4	(348)	A, I	[87/5][71/3] [99/16]
$C_4H_3Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-methyl ester				[76619-91-5]
	(383–423)	64.8		GC	[80/24]
$C_4H_3F_5OS$	trifluoroacetic acid, S-(2,2-difluoroethyl) ester				[35709-11-6]
	(282–322)	39.3	(297)	A	[87/5][99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_4H_3F_6NO_2$	N,N-*bis*(trifluoromethyl)acetamide-N-oxide				[22743-78-8]
	(268–336)	40.6	(283)	A	[87/5]
$C_4H_3F_6O_2P$	*bis*(trifluoromethyl)acetoxyphosphine				
	(273–313)	41.0	(288)		[64/4][84/9]
$C_4H_3F_7O$	2,2,3,3,4,4,4-heptafluoro-1-butanol				[375-01-9]
	(273–298)	43.6	(286)	A, MM	[87/5][71/21] [67/4]
$C_4H_3F_7O$	1-(2,2-difluoroethoxy)-1,1,2,2,2-pentafluoroethane				[171182-95-9]
	(288–318)	31.5	(303)	I	[02/19]
$C_4H_3F_7O$	1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy)ethane				[306-78-0]
	(283–329)	34.0	(298)	I	[02/19]
$C_4H_3F_7O$	1,1,2,2-tetrafluoro-3-(trifluoromethoxy)propane				[1683-81-4]
	(288–319)	31.3	(303)	I	[02/19]
$C_4H_3F_7O$	1,1,1,3,3,3-hexafluoro-2-fluoromethoxypropane				[28523-86-6]
	(288–331)	34.1	(303)	I	[02/19]
$C_4H_3F_7O$	3-(difluoromethoxy)-1,1,1,2,2-pentafluoropropane				[56860-81-2]
	(283–319)	31.2	(298)	I	[02/19]
$C_4H_3F_7O_2S$	fluorosulfurous acid, 2,2,2-trifluoro-1-methyl-1-(trifluoromethyl)ethyl ester				[57169-83-2]
		36.4			[75/41]
C_4H_3IS	2-iodothiophene				[3437-95-4]
	(333–374)	29.0	(348)	A, I	[87/5][71/3] [99/16]
$C_4H_3NO_2S$	2-nitrothiophene				[609-40-5]
	(378–443)	48.6	(393)		[99/16]
	(321–498)	50.4	(336)	A	[87/5]
C_4H_4	1-butene-3-yne				[689-97-4]
	(180–278)	26.0	(236)	A	[87/5][47/5]
$C_4H_4BrF_6N$	2-bromo-N,N-*bis*(trifluoromethyl)ethylamine				[1683-83-6]
	(323–356)	31.0	(338)	A	[87/5]
$C_4H_4Cl_2$	1,2-dichloro-1,3-butadiene				[3574-40-1]
	(260–308)	33.3	(275)	A	[87/5]
$C_4H_4Cl_2$	2,3-dichloro-1,3-butadiene				[1653-19-6]
	(299–368)	33.8	(314)	A	[87/5]
$C_4H_4Cl_2O_2$	succinyl chloride				[543-20-4]
	(312–466)	54.7	(327)	A	[87/5][47/5]
$C_4H_4Cl_2O_3$	chloroacetic acid anhydride				[541-88-8]
	(340–490)	61.8	(355)	A	[87/5][47/5]
$C_4H_4Cl_4O_2S$	3,3,4,4-tetrachlorotetrahydrothiophene-1,1-dioxide				[3737-41-5]
	(303–348)	88.6	(318)	A	[87/5][99/16]
$C_4H_4F_4OS$	trifluorothioacetic acid, S-(2-fluoroethyl) ester				[35709-10-5]
	(282–322)	41.4	(297)	A	[87/5][99/16]
$C_4H_4F_6N_2S$	2,2,2-trifluoro-N-methyl-N′-[(trifluoromethyl)thio]ethanimidamide				[62067-10-1]
	(339–387)	34.9	(354)	A, I	[87/5][77/18] [99/16]
$C_4H_4F_6O$	3-difluoromethoxy-1,1,2,2-tetrafluoropropane				[35042-99-0]
	(283–349)	35.9	(298)	I	[02/19]
$C_4H_4F_6O$	1,1,1,3,3,3-hexafluoro-2-methoxypropane				[13171-18-1]
	(283–324)	32.6	(298)	I	[02/19]
$C_4H_4F_6O$	1,1,1-trifluoro-2-(1,1,2-trifluoroethoxy)ethane				[25449-61-0]
	(283–338)	35.4	(298)	I	[02/19]
$C_4H_4F_6O$	1,1,1-trifluoro-2-(2,2,2-trifluoroethoxy)ethane				[333-36-8]
	(283–337)	35.0	(298)	I	[02/19]
$C_4H_4F_6O$	1-(1,1-difluoroethoxy)-1,1,2,2-tetrafluoroethane				[50807-77-7]
	(288–352)	38.1	(303)	I	[02/19]
$C_4H_4F_6O$	1,1,1,2,3,3-hexafluoro-3-methoxypropane				[382-34-3]
	(288–327)	32.4	(303)	I	[02/19]
$C_4H_4F_6O$	1,1,2,2,3,3-hexafluoro-1-methoxypropane				[160620-20-2]
	(288–341)	34.5	(303)	I	[02/19]
$C_4H_4F_6O_2S$	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1-methylethyl ester				[52225-48-6]
		36.8	(375)	HG	[74/25]
$C_4H_4N_2$	pyrazine				[290-37-9]
	(354–426)	36.5±0.2	(380)	EB	[02/17]
	(354–426)	34.1±0.4	(420)	EB	[02/17]
	(332–373)	37.9	(352)		[95/4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_4H_4N_2$	pyrimidine				[289-95-2]
		49.8±0.3	(298)	C	[62/37]
$C_4H_4N_2$	pyridazine				[289-80-5]
		53.5±0.4	(298)	C	[62/37]
$C_4H_4N_4O_7$	furazandimethanol dinitrate				[57449-43-1]
	(399–433)	58.7	(414)	A	[87/5][75/18]
$C_4H_4N_4O_8$	furazandimethanol dinitrate, 2-oxide				[57449-44-2]
	(413–453)	64.3	(428)	A	[87/5][75/18]
C_4H_4O	furan				[110-00-9]
	(238–356)	30.2	(253)	A	[87/5]
	(227–323)	28.2	(298)		[70/36]
	(275–334)	28.6	(290)		[52/17][84/9]
$C_4H_4O_2$	diketene				[674-82-8]
	(297–388)	42.9	(312)	A	[87/5]
		42.9±0.1	(298)	C	[68/19]
$C_4H_4O_3$	succinic anhydride				[108-30-5]
	(401–534)	57.3	(416)	A	[87/5]
$C_4H_4O_4$	1,4-dioxane-2,5-dione				[502-97-6]
	(376–513)	50.4	(391)	A	[87/5][47/5]
C_4H_4S	thiophene				[110-02-1]
	(267–381)	35.8	(282)		[99/16]
	(333–373)	34.8	(348)	I	[71/3]
		34.6	(298)		[71/28]
	(300–366)	34.1	(315)	EB	[52/9]
	(311–393)	33.7	(326)		[49/7]
		33.6±0.1	(319)	C	[49/7]
		32.7±0.1	(336)	C	[49/7]
		31.5±0.1	(357)	C	[49/7]
	(344–363)	32.6	(353)		[45/8]
C_4H_5Cl	2-chloro-1,3-butadiene				[126-99-8]
	(243–263)	29.6	(253)	A	[87/5]
	(279–333)	29.6	(294)	A	[87/5][71/21]
	(293–333)	30.9	(308)		[64/7][84/9]
C_4H_5ClO	methacryloyl chloride				[920-46-7]
	(313–372)	36.1	(328)	A	[87/5]
$C_4H_5ClO_3$	ethyl chloroglyoxylate				[4755-77-5]
	(268–408)	44.9	(283)		[47/5]
$C_4H_5Cl_3O_2$	ethyl trichloroacetate				[515-84-4]
	(293–440)	49.0	(308)	A	[87/5]
		51.0±0.1	(298)	C	[72/41]
	(317–368)	47.5	(332)		[59/9][84/9]
$C_4H_5Cl_5$	1,2,2,3,4-pentachlorobutane				[2431-52-9]
	(368–498)	62.6	(383)	A	[87/5][68/29]
$C_4H_5F_2I$	1,1-difluoro-4-iodo-1-butene				
	(318–342)	40.6	(330)	A	[87/5]
$C_4H_5F_3O$	vinyl 2,2,2-trifluoroethyl ether				[406-90-6]
	(293–317)	32.0	(305)	A	[87/5]
$C_4H_5F_3OS$	trifluorothioacetic acid, S-ethyl ester				[383-64-2]
	(273–313)	42.0	(288)	A	[87/5]
$C_4H_5F_3O_2$	trifluoroacetic acid, ethyl ester				[383-63-1]
		34.7	(335)	HG	[73/20]
$C_4H_5F_5$	1,1,1,3,3-pentafluorobutane				[406-58-6]
	(303–358)	29.2	(318)		[02/12]
$C_4H_5F_5O$	1,1,1,2,2-pentafluoro-3-methoxypropane				[378-16-5]
	(283–321)	31.6	(298)	I	[02/19]
$C_4H_5F_5O$	1-(difluoromethoxy)-1,1,2-trifluoroethane				[69948-24-9]
	(283–316)	31.7	(298)	I	[02/19]
$C_4H_5F_6OP$	ethyl *bis*(trifluoromethyl)phosphinite				
	(248–328)	33.2	(288)		[59/21]
C_4H_5N	3-butenenitrile				[109-75-1]
	(293–417)	40.3	(308)	A	[87/5]
		40.0	(298)		[69/14]
	(254–392)	41.6	(268)		[47/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_4H_5N	(E) 2-butenenitrile				[627-26-9]
		40.0	(298)		[69/14]
C_4H_5N	(Z) 2-butenenitrile				[1190-76-7]
		38.9	(298)		[69/14]
C_4H_5N	*cis* crotonitrile				[1190-76-7]
	(297–405)	37.1	(312)	A	[87/5]
	(244–381)	39.0	(259)		[47/5]
C_4H_5N	*trans* crotonitrile				[627-26-7]
	(292–420)	39.7	(307)	A	[87/5]
	(254–395)	40.5	(268)		[47/5]
C_4H_5N	methacrylonitrile				[126-98-7]
	(273–373)	36.5	(288)	A	[87/5]
	(229–363)	35.4	(243)		[47/5]
C_4H_5N	cyclopropylcyanide				[5500-21-0]
		41.9±0.1	(298)	C	[82/5]
	(310–391)	39.4	(325)	BG	[71/2]
	(310–391)	39.8±0.4	(298)	BG	[71/2]
C_4H_5N	pyrrole				[109-97-7]
	(285–329)	42.5	(300)		[92/18]
	(313–373)	41.9	(328)	I	[71/3]
	(338–440)	42.5	(353)	A, EB, IPM	[87/5][68/4] [67/10]
		41.8			[61/26]
	(333–373)	41.9	(348)		[47/5]
C_4DH_4N	N-deutero pyrrole				[10162-82-0]
	(285–329)	42.9	(300)		[92/18]
C_4H_5NO	3-methylisoxazole				[30842-90-1]
		39.8±0.2	(298)	C	[78/9]
C_4H_5NO	5-methylisoxazole				[5765-44-6]
		39.7±0.2	(298)	C	[78/9]
$C_4H_5NO_2$	methyl cyanoacetate				[105-34-0]
	(292–322)	66.2±0.9	(298)	GS	[95/11]
	(385–573)	54.9	(400)	A	[87/5][71/21]
$C_4H_5NO_2$	succinimide				[123-56-8]
	(416–561)	66.9	(431)	A	[87/5]
	(388–560)	73.5	(403)		[47/5]
C_4H_5NS	allyl isothiocyanate				[57-06-7]
	(277–323)	47.6		GC	[97/27]
	(370–430)	56.8	(385)	A	[87/5]
	(283–323)	42.1	(298)		[35/3][84/9] [99/16]
C_4H_5NS	2-methylthiazole				[3581-87-1]
	(353–402)	39.4	(368)		[87/5][99/16]
	(342–404)	40.0	(357)	A	[87/5][69/29]
C_4H_5NS	4-methylthiazole				[693-95-8]
	(346–408)	40.8	(361)	A	[87/5]
		43.8±0.2	(298)	C	[66/35]
$C_4H_5N_7O_{12}$	2,2,2-trinitro-N-(2,2,2-trinitroethyl)ethanamine				[34880-53-0]
	(337–349)	80.8	(343)	A	[87/5]
C_4H_6	1,2-butadiene				[590-19-2]
	(243–291)	25.3	(276)	A	[87/5]
	(204–243)	26.4	(228)	A	[87/5]
		23.9	(298)		[71/28]
	(184–291)	25.2	(276)		[47/5]
		24.6±0.1	(273)	C	[47/13]
C_4H_6	1,3-butadiene				[106-99-0]
	(270–318)	23.0	(285)	A	[87/5]
	(193–213)	25.7	(203)	A	[87/5]
	(213–276)	23.6	(261)	A	[87/5]
	(315–382)	22.4	(330)	A	[87/5]
	(380–425)	22.9	(395)	A	[87/5]
		21.1	(298)		[71/28]
	(198–271)	23.7	(256)		[33/11][84/9]
	(191–249)	24.7	(235)		[32/1][84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_4H_6	1-butyne				[107-00-6]
	(205–289)	26.0	(274)	A	[87/5]
		23.7	(298)		[71/28]
		25.8±0.1	(263)	C	[50/10]
		24.5±0.1	(281)	C	[50/10]
C_4H_6	2-butyne				[503-17-3]
	(240–308)	29.0	(255)	A	[87/5]
		26.7	(298)		[71/28]
		26.9±0.1	(291)	C	[41/2]
C_4H_6	cyclobutene				[822-35-2]
	(206–275)	24.7	(260)	A	[87/5]
	(196–275)	24.6	(260)		[41/8][84/9]
$C_4H_6ClFO_2$	2-chloroethyl fluoroacetate				
	(273–333)	56.4	(288)	A, GS	[87/5][48/14] [71/21]
$C_4H_6ClF_3O$	2-chloro-1,1,2-trifluoroethyl ethyl ether				[310-71-4]
		37.5±0.1	(298)	C	[84/7]
		36.5±0.1	(313)	C	[84/7]
		35.3±0.1	(328)	C	[84/7]
		34.2±0.1	(343)	C	[84/7]
		32.9±0.1	(358)	C	[84/7]
$C_4H_6Cl_2$	3,4-dichloro-1-butene				[760-23-6]
	(320–396)	38.0	(335)	A	[87/5]
$C_4H_6Cl_2$	*trans* 1,3-dichloro-2-butene				[7415-31-8]
	(306–401)	39.3	(321)	A	[87/5]
$C_4H_6Cl_2$	*trans* 1,4-dichloro-2-butene				[110-57-6]
	(340–379)	45.6	(355)	A	[87/5]
$C_4H_6Cl_2O_2$	2-chloroethyl chloroacetate				[3848-12-2]
	(319–478)	53.3	(334)	A	[87/5][47/5]
$C_4H_6Cl_2O_2$	ethyl dichloroacetate				[535-15-9]
		50.6±0.1	(298)	C	[72/41]
	(283–430)	46.2	(298)	A	[87/5][47/5]
$C_4H_6Cl_4$	1,2,3,3-tetrachlorobutane				[13138-51-7]
	(349–464)	54.2	(364)	A	[87/5][68/29]
C_4H_6FN	4-fluorobutyronitrile				[407-83-0]
	(273–333)	45.2	(288)	A, GS	[87/5][48/14] [71/21]
$C_4H_6F_2O_2$	2-fluoroethyl fluoroacetate				
	(273–333)	55.1	(288)	A, GS	[87/5][48/14] [71/21]
$C_4H_6F_3I$	1,1,1-trifluoro-3-iodobutane				[540-87-4]
	(304–321)	32.4	(312)	A	[87/5]
$C_4H_6F_3I$	1,1,1-trifluoro-3-iodo-2-methylpropane				[26653-47-4]
	(298–368)	30.4	(313)	A	[87/5]
$C_4H_6F_3NO_3$	methyl N-trifluoromethyl-N-methoxyurethane				
		39.0			[79/28]
$C_4H_6F_4O$	1-ethoxy-1,1,2,2-tetrafluoroethane				[512-51-6]
	(283–330)	33.0	(298)	I	[02/19]
$C_4H_6F_4O$	1,1,2,2-tetrafluoro-3-methoxypropane				[60598-17-6]
	(293–347)	35.2	(308)	I	[02/19]
$C_4H_6F_6N_2O$	1,1-dimethyl-2,2-*bis*(trifluoromethyl)hydrazine-2-oxide				[30295-33-1]
	(287–356)	36.4	(302)	A	[87/5]
$C_4H_6F_6P_2S$	methyl(trifluoromethyl)phosphinothious acid, anhydrosulfide				[26348-88-9]
	(316–342)	46.7	(329)		[70/26]
$C_4H_6N_2O$	dimethylfurazan				[4975-21-7]
	(353–427)	51.1	(368)	A	[87/5][71/6]
$C_4H_6N_2O_2$	dimethylfurazan-2-oxide				[2518-42-5]
	(353–493)	57.0	(368)	A	[87/5][71/6]
$C_4H_6N_4O_8$	1,1,1,3-tetranitro-2-methylpropane				[42216-58-0]
	(304–327)	75.7	(316)	A	[87/5]
$C_4H_6N_4O_{11}$	2-nitro-2-hydroxmethyl-1,3-propanedioltrinitrate				[20820-44-4]
	(313–353)	72.9	(328)	A	[87/5]
C_4H_6O	*trans* crotonaldehyde				[123-73-9]
	(314–411)	36.6±0.1	(320)	EB	[02/15]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(314–411)	34.5±0.2	(360)	EB	[02/15]
	(314–411)	32.1±0.5	(400)	EB	[02/15]
C_4H_6O	crotonaldehyde				[4170-30-3]
		37.3±0.4	(298)	C	[96/8]
		38.8	(325)	EB	[94/16]
	(288–376)	35.1±0.5	(332)		[88/4]
	(304–377)	37.3	(319)		[79/15]
	(306–376)	36.8	(321)	A	[87/5][73/23]
					[84/9]
C_4H_6O	cyclobutanone				[1191-95-3]
	(301–344)	37.7	(322)	EB	[94/16]
	(283–313)	38.4	(298)	A	[87/5]
	(317–380)	36.3	(332)	A, EB	[87/5][76/10]
	(249–298)	38.5	(273)		[42/7][84/9]
C_4H_6O	divinyl ether				[109-93-3]
	(253–323)	29.2	(268)	A	[87/5]
	(253–323)	26.1	(301)	I	[33/13]
C_4H_6O	methyl vinyl ketone				[78-94-4]
	(279–355)	32.9	(294)	A	[87/5]
	(300–355)	33.6	(315)	A	[87/5]
C_4H_6O	2,3-dihydrofuran				[1191-99-7]
	(302–260)	30.8±0.1	(300)	EB	[02/21]
	(302–360)	28.6±0.3	(340)	EB	[02/21]
C_4H_6OS	divinyl sulfoxide				[1115-15-7]
		51.2±0.9	(298)	C	[89/12]
$C_4H_6O_2$	cyclopropane carboxylic acid				[1759-53-1]
	(357–473)	58.9±0.3	(340)	EB	[02/21]
	(357–473)	55.7±0.2	(380)	EB	[02/21]
	(357–473)	52.4±0.2	(420)	EB	[02/21]
	(357–473)	48.8±0.4	(460)	EB	[02/21]
$C_4H_6O_2$	2,3-butanedione (biacetyl)				[431-03-8]
	(273–348)	38.5	(288)	A, I	[87/5][72/12]
	(273–293)	39.6±0.2	(283)		[54/8]
$C_4H_6O_2$	*cis* 2-butenoic acid				[503-64-0]
	(306–445)	55.8	(321)	A	[87/5][47/5]
$C_4H_6O_2$	*trans* 2-butenoic acid				[107-93-7]
	(353–458)	56.7	(368)	A	[87/5][47/5]
$C_4H_6O_2$	2-butyne-1,4-diol				[110-65-6]
	(418–520)	69.0	(433)	A	[87/5][66/14]
					[71/21]
$C_4H_6O_2$	γ-butyrolactone				[96-48-0]
	(378–406)	49.5±0.1	(392)	EB	[91/7]
	(378–406)	55.2±1.3	(298)	EB	[91/7]
	(345–370)	51.8±0.6	(357)	MM	[91/7]
	(345–370)	55.6±1.4	(298)	MM	[91/7]
	(392–474)	48.2	(407)	A	[87/5]
		54.4±0.4	(298)	C	[90/1]
$C_4H_6O_2$	2-methyl-2-propenoic acid				[79-41-4]
		47.5±0.4	(298)	C	[96/8]
	(321–435)	53.9	(336)	A	[87/5]
	(298–434)	51.6	(313)	A	[87/5][47/5]
$C_4H_6O_2$	methyl acrylate				[96-33-3]
	(316–354)	34.2	(331)	A	[87/5]
	(299–337)	28.8	(314)	BG	[71/2]
	(229–353)	38.0	(244)		[47/5]
$C_4H_6O_2$	vinyl acetate				[108-05-4]
	(294–346)	34.4	(309)	A	[87/5][71/21]
					[63/21][84/9]
$C_4H_6O_2S$	diacetyl sulfide				[3232-39-1]
	(325–355)	54.2	(340)		[99/16]
	(325–355)	50.9	(340)	A	[87/5]
$C_4H_6O_2S$	divinyl sulfone				[77-77-0]
		56.4±0.9	(298)	C	[89/12]
		56.5±0.8	(298)		[69/24]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_4H_6O_3$	acetic anhydride				[108-24-7]
	(349–429)	43.3	(364)	EB	[87/6]
	(413–526)	47.6	(428)	A	[87/5]
	(320–413)	45.5	(335)	A	[87/5][71/21]
	(336–412)	44.2	(351)		[59/1]
$C_4H_6O_3$	propylene carbonate				[108-32-7]
	(412–466)	54.4	(427)	A	[87/5]
	(368–462)	57.8	(383)	EB	[82/8]
	(368–462)	55.2	(423)	EB	[82/8]
	(368–462)	53.0	(443)	EB	[82/8]
	(293–353)	55.2	(323)		[72/37]
	(323–370)	33.8	(338)	A, MM	[87/5][71/1]
$C_4H_6O_4$	dimethyl oxalate				[553-90-2]
	(347–485)	44.7	(416)	HG, EB	[88/3]
	(293–437)	48.8	(308)	A	[87/5][47/5]
C_4H_6S	2-vinylthiirane				[5954-75-6]
	(273–335)	38.7	(288)	A	[87/5][99/16]
C_4H_6S	divinyl sulfide				[627-51-0]
		38.3±0.7	(298)	C	[89/12]
C_4H_7Br	*cis* 1-bromo-1-butene				[31849-78-2]
	(280–397)	35.1	(295)	A	[87/5][71/21]
	(229–359)	36.5	(244)		[47/5]
C_4H_7Br	*trans* 1-bromo-1-butene				[32620-08-9]
	(234–368)	36.1	(249)	A	[87/5][47/5]
C_4H_7Br	2-bromo-1-butene				[23074-36-4]
	(276–391)	34.5	(291)	A	[87/5][71/21]
	(226–354)	36.1	(241)		[47/5]
C_4H_7Br	*cis* 2-bromo-2-butene				[3017-71-8]
	(234–367)	36.5	(249)	A	[87/5][47/5]
C_4H_7Br	*trans* 2-bromo-2-butene				[3017-68-3]
	(228–359)	35.7	(243)	A	[87/5][47/5]
C_4H_7BrO	1-bromo-2-butanone				[816-40-0]
	(322–428)	49.9	(337)	A	[87/5]
	(279–420)	47.7	(294)		[47/5]
C_4H_7BrO	3-bromo-2-butanone				[814-75-5]
	(306–409)	46.4	(321)	A	[87/5]
C_4H_7BrO	isobutyryl bromide				[2736-37-0]
	(286–436)	45.7	(301)	A	[87/5][47/5]
$C_4H_7Br_3$	1,3-dibromo-2-(bromomethyl)propane				
	(475–660)	66.1	(490)	A	[87/5]
$C_4H_7Br_3$	1,1,2-tribromobutane				[3675-68-1]
	(361–490)	49.4	(376)	A	[87/5]
$C_4H_7Br_3$	1,2,2-tribromobutane				[3675-69-2]
	(356–487)	48.4	(371)	A	[87/5]
	(314–486)	50.7	(329)		[47/5]
$C_4H_7Br_3$	1,2,3-tribromobutane				[632-05-3]
	(394–546)	54.1	(409)	A	[87/5][71/21]
	(318–489)	51.3	(333)		[47/5]
$C_4H_7Br_3$	1,2,4-tribromobutane				[38300-67-3]
	(390–541)	53.5	(405)	A	[87/5][71/21]
$C_4H_7Br_3$	2,2,3-tribromobutane				[62127-47-3]
	(311–480)	51.7	(326)	A	[87/5][47/5]
C_4H_7Cl	1-chloro-2-methyl-1-propene				[513-37-1]
	(285–343)	33.2	(300)	A	[87/5]
C_4H_7Cl	3-chloro-2-methyl-1-propene				[563-47-3]
	(285–348)	33.3	(300)	A	[87/5]
C_4H_7ClO	1-chloro-2-butanone				[616-27-3]
	(307–411)	49.2	(322)	A	[87/5][71/21]
C_4H_7ClO	3-chloro-2-butanone				[4091-39-8]
	(313–389)	38.8	(328)	A	[87/5]
C_4H_7ClO	3-chloro-2-butene-1-ol				[40605-42-3]
	(345–437)	50.0	(360)	A	[87/5]
$C_4H_7ClO_2$	propyl chloroformate				[109-61-5]
	(293–303)	40.7±0.4	(298)		[90/12]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		40.7±0.4	(298)	C	[90/12]
$C_4H_7ClO_2$	ethyl chloroacetate				[105-39-5]
	(274–418)	45.0	(289)	A	[87/5]
		49.5±0.1	(298)	C	[72/41]
	(298–418)	48.5	(313)		[28/2][84/9]
C_4H_7ClS	2-butene-3-chloro-1-thiol				
	(341–397)	48.2	(356)	A	[87/5]
$C_4H_7Cl_2O_4P$	dimethyl-(2,2-dichlorovinyl) phosphate				[62-73-7]
	(283–387)	68.0	(298)	A	[87/5]
$C_4H_7Cl_3$	1,2,3-trichlorobutane				[18338-40-4]
	(273–442)	41.3	(288)	A	[87/5][47/5]
C_4H_7FOS	2-fluoroethyl thioacetate				[462-31-7]
	(273–333)	44.7	(288)	A, GS	[87/5][48/14]
$C_4H_7FO_2$	ethyl fluoroacetate				[459-72-3]
	(273–333)	41.9	(288)	A, GS	[87/5][48/14]
					[71/21]
$C_4H_7F_3$	1,1,1-trifluorobutane				[460-34-4]
	(226–320)	28.1	(241)	A	[87/5][71/21]
$C_4H_7IO_2$	ethyl iodoacetate				[623-48-3]
	(301–362)	52.1	(316)	A	[87/5][47/3]
C_4H_7N	isobutyronitrile				[78-82-0]
	(324–354)	35.9	(339)		[79/18]
	(303–352)	37.5	(321)	BG	[71/2]
C_4H_7N	butyronitrile				[109-74-0]
		39.2±0.1	(298)	C	[82/5]
	(303–493)	38.8	(318)	EB	[71/4]
	(332–401)	37.7	(347)	A, EB	[87/5][47/5]
					[73/12]
C_4H_7NO	acetone cyanohydrin				[75-86-5]
	(355–393)	106.5	(370)	A	[87/5]
C_4H_7NO	2-hydroxybutyronitrile				[4476-02-2]
	(314–452)	57.9	(329)	A	[87/5][47/5]
C_4H_7NO	2-methyl-2-oxazoline				[1120-64-5]
		39.1±0.3	(298)	C	[76/27]
C_4H_7NO	methyacrylamide				[79-39-0]
	(390–418)	86.3	(404)	A	[87/5]
C_4H_7NO	ethoxyacetonitrile				[62957-60-2]
	(273–313)	46.5±0.3	(298)	GS	[95/11]
C_4H_7NO	3-methoxypropionitrile				[33695-59-9]
	(328–438)	47.6	(343)	A	[87/5]
C_4H_7NO	2-pyrrolidone				[616-45-5]
		73.6±1.3	(298)	EB, BG	[98/14]
		41.7±0.6		A	[95/26]
		69.1±0.5	(298)	C	[90/1]
	(395–518)	60.0	(410)	A	[87/5]
$C_4H_7NO_2$	diacetamide				[625-77-4]
	(368–496)	59.7	(383)	A	[87/5]
	(343–496)	64.6	(358)		[47/5]
$C_4H_7NO_2$	2-nitro-1-butene				[2783-12-2]
	(273–333)	44.0	(288)	A	[87/5][71/21]
$C_4H_7N_3O_9$	1,2,4-butanetriol trinitrate				[6859-60-5]
	(293–313)	60.0±11.3	(303)	A, GS	[87/5][57/11]
C_4H_8	1-butene				[106-98-9]
	(200–274)	23.3	(259)	A	[87/5]
	(126–192)	28.3	(177)	A	[87/5]
	(267–345)	22.8	(282)	A	[87/5]
	(342–411)	22.0	(357)	A	[87/5]
	(267–411)	22.5	(282)	A	[87/5]
		20.1	(298)		[71/28]
		25.3	(202)		[46/7]
		24.5	(219)		[46/7]
		23.3	(242)		[46/7]
		21.9	(267)		[46/7]
	(216–273)	23.2	(258)		[40/3][84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_4H_8	*cis* 2-butene				[590-18-1]
	(221–290)	24.4	(275)	A	[87/5]
	(276–325)	24.0	(291)	A	[87/5]
	(324–386)	23.6	(339)	A	[87/5]
	(383–431)	23.6	(398)	A	[87/5]
		22.1	(298)		[71/28]
	(195–267)	25.3	(252)		[42/8][84/9]
C_4H_8	*trans* 2-butene				[624-64-6]
	(205–287)	23.9	(272)	A	[87/5]
	(273–315)	23.6	(288)	A	[87/5]
	(313–385)	23.3	(328)	A	[87/5]
	(382–428)	23.2	(397)	A	[87/5]
		21.3	(298)		[71/28]
		22.8±0.1	(274)	C	[45/3]
	(203–274)	24.2	(259)		[45/3][84/9]
	(205–283)	23.9	(268)		[40/3][84/9]
C_4H_8	cyclobutane				[287-23-0]
	(198–287)	25.2	(272)	A	[87/5]
	(217–285)	25.2	(270)		[53/12][84/9]
C_4H_8	methylcyclopropane				[594-11-6]
	(177–278)	24.8	(263)	A	[87/5][47/5]
C_4H_8	2-methylpropene				[115-11-7]
	(212–279)	23.1	(264)	A	[87/5]
	(266–313)	22.7	(281)	A	[87/5]
	(310–376)	22.2	(325)	A	[87/5]
	(371–418)	22.3	(386)	A	[87/5]
		20.6	(298)		[71/28]
	(303–398)	22.2	(350)		[42/6]
	(216–273)	22.8	(258)		[40/3][84/9]
C_4H_8BrClO	2-bromoethyl 2-chloroethyl ether				[51070-66-7]
	(309–469)	53.3	(324)	A	[87/5][47/5]
$C_4H_8Br_2$	1,1-dibromobutane				[62168-25-6]
	(342–477)	45.8	(357)	A, EST	[87/5][56/16] [71/21]
$C_4H_8Br_2$	1,2-dibromobutane				[533-98-2]
	(338–425)	43.5	(353)	A	[87/5]
	(330–425)	45.9	(298)		[75/16][75/15]
		45.6±0.7	(298)	EB	[75/15]
	(281–439)	42.8	(296)	A	[87/5][47/5]
	(273–333)	45.1	(300)		[41/6]
$C_4H_8Br_2$	1,3-dibromobutane				[107-80-2]
	(351–450)	44.7	(366)	A	[87/5]
$C_4H_8Br_2$	1,4-dibromobutane				[110-52-1]
		52.6	(298)	GC	[94/19]
	(375–520)	51.4	(390)	A	[87/5][71/21]
	(305–470)	49.4	(320)		[47/5]
$C_4H_8Br_2$	*meso* 2,3-dibromobutane				[5780-13-2]
	(274–431)	41.7	(289)	A	[87/5][47/5]
$C_4H_8Br_2$	*threo* 2,3-dibromobutane				[598-71-0]
	(278–434)	40.9	(293)	A	[87/5]
$C_4H_8Br_2$	1,2-dibromo-2-methylpropane				[594-34-3]
		43.3±0.1		C	[74/2]
	(244–422)	33.3	(259)	A	[87/5][47/5]
$C_4H_8Br_2$	1,3-dibromo-2-methylpropane				[28148-04-1]
	(287–448)	45.1	(302)	A	[87/5][47/5]
$C_4H_8Br_2O$	*bis* (2-bromoethyl) ether				[5414-19-7]
	(320–486)	55.1	(335)	A	[87/5][47/5]
$C_4H_8Cl_2$	1,1-dichlorobutane				[541-33-3]
	(310–390)	39.5	(298)		[91/2]
	(304–386)	38.7	(319)	A	[87/5]
		39.4±0.6	(298)	EB	[77/14]
	(303–428)	38.8	(318)	EST	[87/5][56/16]
$C_4H_8Cl_2$	1,2-dichlorobutane				[616-21-7]
		40.1±0.1	(298)	C	[92/7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		40.2±0.1	(298)	C	[89/10]
	(312–394)	39.0	(327)	A	[87/5]
	(310–390)	40.4	(298)		[82/2][91/2]
		40.1±0.6	(298)	EB	[75/16]
	(249–397)	38.1	(264)	A	[87/5][47/5]
$C_4H_8Cl_2$	1,3-dichlorobutane				[1190-22-3]
		42.2±0.1	(298)	C	[92/7]
	(320–400)	42.3	(298)		[91/2]
		42.3±1.8	(298)	C	[90/11]
	(318–407)	40.5	(333)	A	[87/5]
$C_4H_8Cl_2$	1,4-dichlorobutane				[110-56-2]
		46.7	(298)	GC	[94/19]
		46.5±0.1	(298)	C	[92/7]
	(325–425)	46.4	(298)		[91/2]
		46.4±0.1	(298)	C	[90/11]
		46.4±0.1	(298)	C	[89/10]
	(336–425)	43.4	(351)	A	[87/5][71/21]
$C_4H_8Cl_2$	2,2-dichlorobutane				[4279-22-5]
		36.3±0.1	(298)	C	[92/7]
	(300–370)	36.7	(298)		[91/2]
	(293–376)	36.4	(308)	A	[87/5]
		33.7±0.6	(298)	EB	[77/14]
$C_4H_8Cl_2$	*meso* 2,3-dichlorobutane				
		38.4	(298)	C	[92/7][93/18]
$C_4H_8Cl_2$	(*dl*) 2,3-dichlorobutane				
		39.7	(298)	C	[93/18]
$C_4H_8Cl_2$	2,3-dichlorobutane				[7581-97-7]
	(247–389)	39.6	(262)	A	[87/5]
$C_4H_8Cl_2$	1,1-dichloro-2-methylpropane				[598-76-5]
	(242–379)	38.7	(257)	A	[87/5]
$C_4H_8Cl_2$	1,2-dichloro-2-methylpropane				[594-37-6]
	(247–381)	40.4	(262)	A	[87/5][47/5]
$C_4H_8Cl_2$	1,3-dichloro-2-methylpropane				[616-19-3]
	(270–408)	45.1	(285)	A	[87/5][47/5]
$C_4H_8Cl_2O$	*bis*(2-chloroethyl) ether				[111-44-4]
	(297–452)	49.8	(312)	A	[87/5][47/5]
$C_4H_8Cl_2S$	*bis*(2-chloroethyl) sulfide				[505-60-2]
	(288–358)	59.6	(303)	A, MM	[87/5][47/6] [84/9]
	(353–393)	50.3	(373)		[43/8]
$C_4H_8Cl_2S_3$	*bis*(2-chloroethyl) trisulfide				[19149-77-0]
	(293–333)	68.2	(308)	A, GS	[87/5][48/9] [99/16]
$C_4H_8F_2$	1,1-difluorobutane				[353-81-1]
	(246–347)	31.0	(261)	A, EST	[87/5][56/16] [71/21]
$C_4H_8F_2$	2,2-difluorobutane				[353-81-1]
	(238–336)	30.0	(253)	A	[87/5][71/21]
$C_4H_8F_2O_4S$	*bis*(2-fluoroethyl) sulfate				[381-46-4]
	(273–333)	63.9	(288)	A, GS	[87/5][48/14] [99/16]
$C_4H_8I_2$	1,4-diiodobutane				[628-21-7]
		59.0	(298)	GC	[94/19]
$C_4H_8N_2$	(dimethylamino)acetonitrile				[926-64-7]
	(277–307)	45.4±0.6		GS	[97/10]
$C_4H_8N_2$	1,4,5,6-tetrahydropyrimidine				[1606-49-1]
	(330–395)	75.6±2.0	(298)	IPM	[96/4]
$C_4H_8N_2O_6$	1,3-butanediol dinitrate				[6423-44-5]
	(293–313)	71.4±7.1	(303)	A, GS	[87/5][57/5]
$C_4H_8N_2O_6$	1,4-butanediol dinitrate				[3457-91-8]
	(293–313)	57.4±0.8	(303)	A, GS	[87/5][57/5]
$C_4H_8N_2O_7$	diethyleneglycol dinitrate				[693-21-0]
	(293–333)	94.3	(308)	A	[87/5]
C_4H_8O	2-butanone				[78-93-3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(294–342)	34.6	(309)	A	[87/5]
	(353–403)	32.5	(368)	A	[87/5]
	(397–479)	31.6	(412)	A	[87/5]
	(473–537)	31.1	(488)	A	[87/5]
		34.8±0.1	(298)	C	[83/3]
		34.5±0.1	(298)	C	[79/1]
	(258–362)	35.6	(273)		[78/20]
		34.7	(298)		[75/8]
	(315–363)	33.9	(330)	A, EB, GS	[87/5][75/8] [65/7]
		33.8±0.1	(314)	C	[61/17]
		32.3±0.1	(338)	C	[61/17]
		31.3±0.1	(352)	C	[61/17]
		30.5±0.1	(363)	C	[61/17]
		30.0±0.1	(370)	C	[61/17]
	(314–370)	33.9	(329)		[47/5]
C_4H_8O	2-methyl-2-propen-1-ol				[513-42-8]
	(323–373)	51.9	(298)	CGC	[95/21]
C_4H_8O	3-buten-1-ol				[627-27-0]
		50.9±0.1	(313)	C	[96/9]
		48.8±0.1	(328)	C	[96/9]
		46.7±0.1	(343)	C	[96/9]
C_4H_8O	(*dl*) 3-buten-2-ol				[6118-14-5]
	(304–370)	39.2	(319)	A	[87/5]
C_4H_8O	butyraldehyde				[123-72-8]
	(313–353)	33.2	(298)	CGC	[95/21]
	(293–349)	34.2	(308)	A	[87/5]
	(330–348)	32.9	(339)	EB	[63/15]
	(304–347)	33.3	(319)		[59/5][84/9]
	(258–353)	33.9	(306)		[38/7]
C_4H_8O	(*dl*) 1,2-epoxybutane				[106-88-7]
	(254–347)	24.7	(269)	A	[87/5]
C_4H_8O	1,2-epoxy-2-methylpropane (2,2-dimethyloxirane)				[558-30-5]
	(204–329)	30.6	(219)	A	[87/5][47/5]
C_4H_8O	ethyl vinyl ether				[109-92-2]
	(223–309)	29.5	(238)	A	[87/5]
C_4H_8O	isobutyraldehyde				[78-84-2]
	(313–353)	32.3	(298)	CGC	[95/21]
	(313–324)	31.4	(318)		[84/30]
	(309–337)	31.8	(324)		[76/20]
	(333–347)	33.4	(340)	EB	[63/15]
	(283–337)	32.8	(298)	A	[87/5][59/5] [64/21]
C_4H_8O	2-methoxy-1-propene				[116-11-0]
	(281–309)	28.3±0.1	(295)		[88/4]
C_4H_8O	*cis* methyl propenyl ether				[4188-68-5]
	(293–318)	30.6	(305)	A	[87/5]
C_4H_8O	*trans* methyl propenyl ether				[4188-69-6]
	(293–322)	29.5	(307)	A	[87/5]
C_4H_8O	tetrahydrofuran				[109-99-9]
	(273–339)	33.1	(288)	A	[87/5]
	(399–479)	29.0	(414)	A	[87/5]
	(467–541)	29.6	(482)	A	[87/5]
		32.0	(298)	C	[81/8]
	(235–340)	32.5±0.2	(288)		[76/16]
	(302–339)	30.8	(320)		[75/33]
	(273–308)	32.8	(288)		[70/22][84/9]
	(296–373)	31.9	(311)		[70/23][84/9]
	(224–360)	32.9	(298)		[70/36]
C_4H_8OS	1,4-oxathiane				[15980-15-1]
	(342–411)	42.1	(378)		[99/16]
	(342–411)	44.8	(357)	A	[87/5]
C_4H_8OS	S-ethyl thiolacetate				[625-60-5]
		40.0±0.2	(298)	C	[66/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_4H_8O_2$	2-methyl-1,3-dioxolane				[497-26-7]
	(270–308)	43.0±0.6		GS	[98/21][02/32]
$C_4H_8O_2$	*cis* 2-butene-1,4-diol				[6117-80-2]
	(373–508)	74.7	(388)	A	[87/5]
$C_4H_8O_2$	1,1-dimethoxyethene				
	(303–362)	39.6	(333)		[95/29]
$C_4H_8O_2$	butanoic acid				[107-92-6]
	(391–429)	50.3	(406)	EB	[01/15]
	(278–308)	58.5±0.3	(293)	GS	[00/6]
	(278–308)	58.2±0.3	(298)	GS	[00/6]
	(353–393)	60.7	(298)	CGC	[95/21]
	(437–592)	47.7	(452)	A	[87/5]
	(301–358)	51.1	(316)	A	[87/5]
	(355–453)	53.2	(370)	A	[87/5][71/21]
monomer		40.5±0.1	(298)	C	[70/8]
		58±4	(298)	C	[70/8]
	(363–436)	52.0	(378)		[49/1][84/9]
$C_4H_8O_2$	1,3-dioxane				[505-22-6]
		39.1±0.1	(298)	C	[82/9]
		35.6±0.4			[59/23]
$C_4H_8O_2$	1,4-dioxane				[123-91-1]
	(285–375)	38.0	(300)	A	[87/5]
	(329–372)	36.5	(350)		[84/20]
		38.6±0.1	(298)	C	[82/9]
	(293–398)	37.3	(308)		[63/22][84/9]
	(283–353)	37.0	(318)		[36/6]
$C_4H_8O_2$	ethyl acetate				[141-78-6]
	(300–390)	34.1	(315)		[97/11]
	(313–353)	35.0	(298)	CGC	[95/21]
	(271–373)	36.7	(286)		[81/11][84/9]
		35.6±0.1	(298)	C	[80/13]
		34.6±0.1	(313)	C	[80/13]
		31.4±0.1	(343)	C	[80/13]
		33.8±0.1	(326)	C	[77/12]
		33.4±0.1	(331)	C	[77/12]
		32.4±0.1	(344)	C	[77/12]
		31.9±0.1	(351)	C	[77/12]
		31.0±0.1	(363)	C	[77/12]
		34.0	(320)		[76/8]
		31.9	(350)		[76/8]
		35.1±0.2	(298)	C	[66/2]
	(288–351)	35.7	(303)	A	[87/5][65/3] [71/21]
$C_4H_8O_2$	3-hydroxy-2-butanone				[513-86-0]
	(273–418)	38.4	(288)	A	[87/5]
$C_4H_8O_2$	2-methylpropanoic acid				[79-31-2]
	(278–308)	55.8±0.3	(293)	GS	[00/6]
	(278–308)	55.5±0.3	(298)	GS	[00/6]
	(344–445)	51.6	(359)	EB	[87/9]
	(288–428)	50.9	(303)	A	[87/5]
	(428–562)	45.4	(443)	A	[87/5]
	(228–243)	53.4±3	(398)	TE	[79/4]
monomer		35.5±0.1	(298)	C	[70/8]
		53±4	(298)	C	[70/8]
$C_4H_8O_2$	isopropyl formate				[625-55-8]
	(221–342)	34.5	(236)	A	[87/5][47/5]
$C_4H_8O_2$	methyl propionate				[922-67-8]
	(313–363)	28.9	(298)	CGC	[95/21]
		35.6±0.4	(298)	GC	[87/17]
	(231–353)	39.1	(246)	A	[87/5]
	(353–486)	32.8	(368)	A	[87/5]
		35.9±0.1	(298)	C	[80/13]
		34.9±0.1	(313)	C	[80/13]
		36.3±0.3	(298)	GCC	[80/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		35.8±0.1	(298)	C	[79/1]
		34.2±0.1	(326)	C	[77/12]
		33.8±0.1	(331)	C	[77/12]
		32.8±0.1	(344)	C	[77/12]
		32.1±0.1	(355)	C	[77/12]
		31.5±0.1	(363)	C	[77/12]
	(293–353)	35.9	(308)	A	[87/5][65/3]
$C_4H_8O_2$	propyl formate				[110-74-7]
	(302–353)	35.3	(317)		[93/8]
	(354–518)	32.7	(369)	A	[87/5]
	(230–355)	36.8	(245)	A	[87/5]
		37.5±0.1	(298)	C	[80/13]
		36.5±0.1	(313)	C	[80/13]
		35.8±0.1	(326)	C	[76/14]
		35.4±0.1	(331)	C	[76/14]
		34.4±0.1	(344)	C	[76/14]
		33.8±0.1	(351)	C	[76/14]
		33.5±0.1	(355)	C	[76/14]
		32.9±0.1	(363)	C	[76/14]
	(299–355)	35.6	(314)		[28/1][84/9]
$C_4H_8O_2S$	allyl methyl sulfone				[16215-14-8]
	(405–450)	68.2	(420)	A	[87/5][99/16]
$C_4H_8O_2S$	tetrahydrothiophene-1,1-dioxide (sulfolane)				[126-33-0]
	(423–529)	59.0	(438)		[99/16]
	(364–529)	53.7	(379)		[99/16]
	(424–542)	67.8±0.8	(298)	EB	[97/8]
	(373–453)	58.2	(413)	TGA	[87/18]
	(303–328)	31.0	(315)	A	[87/5]
	(413–558)	58.7	(428)	A	[87/5]
	(360–400)	54.5	(380)		[84/18]
$C_4H_8O_3$	ethoxyacetic acid				[627-03-2]
	(280–310)	69.1	(295)	A	[87/5]
$C_4H_8O_3$	2-methoxy-1,3-dioxolane				[19693-75-5]
	(278–308)	46.4±0.8	(298)	GS	[02/32]
	(278–308)	46.8±0.8		GS	[95/7]
$C_4H_8O_3$	ethyl glycolate				[623-50-7]
	(287–432)	47.1	(302)	A	[87/5][47/5]
$C_4H_8O_3$	2-hydroxyisobutyric acid				[594-61-6]
	(371–485)	67.5	(386)	A	[87/5]
$C_4H_8O_3$	methyl 3-hydroxypropionate				[6149-41-3]
	(330–343)	60.0	(336)	A	[87/5]
$C_4H_8O_3$	methoxyacetic acid, methyl ester				[6290-49-9]
	(285–310)	39.3	(297)	A	[87/5]
$C_4H_8O_3$	(*dl*) methyl lactate				[547-64-8]
	(313–418)	44.7	(328)	A	[87/5]
$C_4H_8O_3$	peroxybutyric acid				[13122-71-9]
	(273–393)	45.5	(288)	A	[87/5][71/21]
C_4H_8S	2,2-dimethylthiirane				[3772-13-2]
	(273–473)	37.0	(288)	A	[87/5][71/21] [99/16]
C_4H_8S	2-ethylthiirane				[3195-86-6]
	(298–450)	39.7	(313)	A	[87/5][71/21]
C_4H_8S	tetrahydrothiophene				[110-01-0]
		38.8	(298)		[71/28]
	(331–401)	37.7	(346)	EB	[52/9]
	(343–434)	37.1	(358)	A, EB	[87/5][52/10] [66/5]
$C_4H_8S_2$	1,3-dithiane				[505-23-7]
		66.9±0.4		GC	[89/16]
$C_4H_8S_2$	1,4-dithiane				[505-29-3]
	(389–437)	48.7	(404)		[99/16]
		68.9±0.5		GC	[89/16]
	(388–437)	47.9	(403)	A	[87/5]
C_4H_9Br	1-bromobutane				[109-65-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(323–363)	36.4	(298)	CGC	[95/21]
	(340–370)	36.4	(298)		[91/2]
	(338–373)	34.6	(353)	A, EB	[87/5][77/8]
		35.6±0.1	(322)	C	[77/8]
		34.9±0.1	(332)	C	[77/8]
		34.5±0.1	(339)	C	[77/8]
		33.7±0.1	(352)	C	[77/8]
		33.0±0.1	(366)	C	[77/8]
		36.6±0.1	(298)	C	[68/1]
		36.7±0.1	(298)	C	[66/2]
	(273–400)	37.5	(288)	A, EST	[87/5][61/13] [71/21]
	(293–343)	33.5	(308)		[29/2][84/9]
C_4H_9Br	2-bromobutane				[78-76-2]
	(281–403)	33.9	(296)	A	[87/5][71/21]
		34.5±0.1	(298)	C	[68/1]
		34.8±0.1	(298)	C	[66/2]
C_4H_9Br	1-bromo-2-methylpropane				[78-77-3]
	(305–363)	34.1	(320)	A, EB	[87/5][77/8]
		33.1±0.1	(330)	C	[77/8]
		32.6±0.1	(341)	C	[77/8]
		32.0±0.1	(353)	C	[77/8]
		31.4±0.1	(366)	C	[77/8]
	(281–404)	34.0	(296)	A	[87/5][71/21]
		34.9±0.1	(298)	C	[68/1]
C_4H_9Br	2-bromo-2-methylpropane				[507-19-7]
	(248–346)	31.4	(263)	A	[87/5]
	(270–345)	31.0	(298)		[87/9][91/2]
	(298–323)	31.5	(313)		[69/10]
		31.8±0.1	(298)	C	[68/1]
	(273–346)	31.2	(288)		[51/5][84/9]
C_4H_9BrO	1-bromo-2-butanol				[2482-57-7]
	(296–418)	58.4	(311)	A	[87/5][47/5]
C_4H_9Cl	1-chlorobutane				[109-69-3]
	(260–350)	33.5	(298)		[84/9][91/2]
		33.5±0.1	(298)	C	[81/4]
		32.7±0.1	(313)	C	[81/4]
		31.8±0.1	(328)	C	[81/4]
		30.9±0.1	(343)	C	[81/4]
		30.0±0.1	(358)	C	[81/4]
		29.4±0.1	(358)	C	[81/4]
	(256–352)	35.6	(271)	DTA	[69/5]
		33.5±0.1	(298)	C	[68/1]
	(257–389)	35.0	(272)	A, EST	[87/5][61/13] [71/21]
	(293–343)	37.2	(308)		[29/2][84/9]
C_4H_9Cl	2-chlorobutane				[78-86-4]
	(315–341)	30.9	(328)	EB	[96/27]
	(266–377)	33.1	(281)	A	[87/5]
		31.5±0.1	(298)	C	[81/4]
		30.7±0.1	(313)	C	[81/4]
		29.9±0.1	(328)	C	[81/4]
		29.1±0.1	(343)	C	[81/4]
		28.2±0.1	(358)	C	[81/4]
		31.6±0.1	(298)	C	[68/1]
	(273–312)	31.8	(288)		[28/3][84/9]
C_4H_9Cl	1-chloro-2-methylpropane				[513-36-0]
	(219–342)	36.1	(234)	A	[87/5][47/5]
		31.7±0.1	(298)	C	[68/1]
C_4H_9Cl	2-chloro-2-methylpropane				[507-20-0]
	(313–353)	28.6	(298)	CGC	[95/21]
	(253–358)	32.3	(268)	A	[87/5][71/21]
	(295–323)	27.8	(309)	A	[87/5][69/10]
	(295–323)	27.0	(310)		[69/10][84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		29.0±0.1	(298)	C	[68/1]
	(254–324)	29.1	(269)		[47/5]
$C_4H_9ClO_2$	2-(2-chloroethoxy)ethanol				[628-89-7]
	(326–469)	59.8	(341)	A	[87/5][47/5]
$C_4H_9ClO_2S$	butyl sulfonyl chloride				[2386-60-9]
	(283–373)	55.7	(298)		[99/16]
	(373–474)	52.9	(388)		[99/16]
	(253–283)	60.2	(268)	A	[87/5][99/16]
C_4H_9ClS	ethyl (2-chloroethyl) sulfide				[693-07-2]
	(293–333)	44.4	(308)	A, GS	[87/5][48/9]
					[71/21]
C_4H_9F	1-fluorobutane				[2366-52-1]
	(222–326)	30.1	(237)	A, EST	[87/5][61/13]
					[71/21]
C_4H_9F	2-fluorobutane				[359-01-3]
	(233–329)	29.2	(248)	A	[87/5][71/21]
C_4H_9F	2-fluoro-2-methylpropane				[353-61-7]
	(222–315)	27.6	(237)	A	[87/5][71/21]
C_4H_9FO	4-fluoro-1-butanol				[372-93-0]
	(323–343)	64.0	(333)	A	[87/5]
C_4H_9I	1-iodobutane				[542-69-8]
	(313–353)	40.3	(298)	CGC	[95/21]
	(313–353)	39.7	(298)	CGC	[95/21]
		40.6±0.1	(298)	C	[68/1]
	(292–431)	39.9	(307)	A, EST	[87/5][61/13]
					[71/21]
C_4H_9I	2-iodobutane				[513-48-4]
	(313–353)	37.9	(298)	CGC	[95/21]
	(313–353)	38.8	(298)	CGC	[95/21]
		38.5±0.1	(298)	C	[68/1]
C_4H_9I	1-iodo-2-methylpropane				[513-38-2]
	(256–393)	41.1	(271)	A	[87/5][47/5]
		38.8±0.1	(298)	C	[68/1]
C_4H_9I	2-iodo-2-methylpropane				[558-17-8]
	(313–353)	37.0	(298)	CGC	[95/21]
	(236–294)	34.8	(279)	A	[87/5][71/21]
		35.4±0.1	(298)	C	[68/1]
C_4H_9N	pyrrolidine				[123-75-1]
	(273–313)	38.4	(288)	A	[87/5]
	(316–394)	35.8	(331)	EB, IPM	[87/5][59/4]
					[68/4]
		35.8±0.1	(322)	C	[59/4]
		34.5±0.1	(340)	C	[59/4]
		33.0±0.1	(360)	C	[59/4]
	(294–360)	37.3	(309)		[59/10][84/9]
C_4H_9NO	2-butanone oxime				[96-29-7]
	(308–425)	53.7	(323)	A	[87/5]
	(318–343)	55.5	(330)	A	[87/5]
C_4H_9NO	N-ethylacetamide				[625-50-3]
		64.9±0.2	(298)	C	[84/6]
C_4H_9NO	buyraldehyde oxime				[110-69-0]
	(313–343)	55.8	(328)	A	[87/5]
C_4H_9NO	butyramide				[541-35-5]
	(397–504)	64.0	(412)	A	[87/5]
C_4H_9NO	N,N-dimethylacetamide				[127-19-5]
	(371–423)	45.1	(386)	A	[87/5]
		50.2	(298)	A	[85/7][85/6]
	(297–438)	67.9	(312)		[74/7][84/9]
	(303–363)	45.2	(318)	A	[87/5][68/3]
C_4H_9NO	N-methylpropionamide				[1187-58-2]
		66.9±1.3	(298)	EB, BG	[98/14]
		64.9±0.3	(298)	C	[84/6]
	(303–363)	54.4	(318)	A	[87/5][68/3]
C_4H_9NO	morpholine				[110-91-8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(274–303)	45.6±0.4	(288)	GS	[98/13]
	(274–303)	45.0±0.4	(298)	GS	[98/13]
	(313–343)	44.3	(328)	TGA	[87/18]
	(273–318)	45.3	(288)	A	[87/5]
	(317–443)	42.3	(332)	A	[87/5]
$C_4H_9NO_2$	(*dl*) 2-aminobutyric acid				[2835-81-6]
	(400–418)	132.0	(409)	A	[87/5]
$C_4H_9NO_2$	S 2-aminobutyric acid				[1492-24-6]
	(449–462)	162.5	(455)	A	[87/5]
$C_4H_9NO_2$	sec-butyl nitrite				[924-43-6]
	(267–287)	29.6	(277)	A	[87/5][37/3]
$C_4H_9NO_2$	*tert*-butyl nitrite				[540-80-7]
	(267–337)	30.8	(282)	A	[87/5][37/3]
$C_4H_9NO_2$	lactic acid N-methyl amide				
	(359–415)	72.7	(374)	A	[87/5]
$C_4H_9NO_2$	N-methyl carbamic acid, ethyl ester				[105-40-8]
	(299–443)	51.7	(314)	A	[87/5][47/5]
$C_4H_9NO_2$	2-methyl-1-nitropropane				[625-74-1]
	(347–415)	41.1	(362)	A, EB	[87/5][56/15] [71/21]
$C_4H_9NO_2$	2-methyl-2-nitropropane				[594-70-7]
	(334–401)	39.1	(349)	EB	[87/5][56/15] [71/21]
$C_4H_9NO_2$	1-nitrobutane				[627-05-4]
	(313–353)	47.0	(298)	CGC	[95/21]
	(357–426)	42.7	(372)	A, EB	[87/5][56/15] [71/21]
$C_4H_9NO_2$	(*dl*) 2-nitrobutane				[600-24-8]
	(345–413)	40.3	(360)	A, EB	[87/5][56/15] [71/21]
$C_4H_9NO_2$	propyl carbamate				[627-12-3]
	(325–468)	61.6	(340)	A	[87/5][47/5]
$C_4H_9NO_3$	butyl nitrate				[928-45-0]
	(273–343)	44.1	(288)	A	[87/5][71/21] [57/2]
$C_4H_9NO_3$	isobutyl nitrate				[543-29-3]
	(273–343)	42.8	(288)	A	[87/5][71/21] [57/2]
$C_4H_9N_3O_2$	*bis*(nitrosoethyl)amine				
	(291–450)	46.4	(306)	A	[87/5]
C_4H_9P	allymethylphosphine				[62778-93-2]
	(242–291)	34.4	(276)	A	[87/5]
C_4H_9P	3-butenylphosphine				[114596-01-9]
	(252–295)	34.5	(273)		[88/13]
C_4H_9P	phospholane				[3466-00-0]
	(257–347)	37.4	(272)	A	[87/5]
C_4H_{10}	butane				[106-97-8]
	(300–315)	22.9	(308)		[97/16]
	(195–292)	23.4	(277)	A	[87/5]
	(273–321)	23.2	(288)	A	[87/5]
	(316–383)	22.6	(331)	A	[87/5]
	(375–425)	22.8	(390)	A	[87/5]
	(135–213)	27.0	(198)	A	[87/5][73/11]
		22.4	(298)		[71/28]
	(206–279)	23.1	(264)		[45/4][84/9]
	(195–273)	23.9	(258)		[40/10][84/9]
C_4H_{10}	2-methylpropene (isobutene)				[75-28-5]
	(303–333)	21.5	(318)		[99/29]
	(186–280)	22.4	(265)	A	[87/5]
	(121–187)	26.9	(172)	A	[87/5]
	(263–306)	21.9	(278)	A	[87/5]
	(301–366)	21.4	(316)	A	[87/5]
	(361–408)	21.6	(376)	A	[87/5]
	(277–344)	21.6	(292)		[76/19][84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		21.3	(286)		[71/28]
	(188–262)	22.6	(247)		[40/11][84/9]
$C_4H_{10}F_3NOS$	(diethylaminato)trifluorooxo sulfur				[26458-94-6]
	(329–354)	49.5	(341)	A	[87/5][99/16]
$C_4H_{10}F_3NS$	(N-ethylethaneaminato)trifluoro sulfur				[38078-09-0]
	(318–340)	45.2	(329)	A	[87/5][99/16]
$C_4H_{10}N_2$	piperazine				[275-02-5]
	(417–460)	50.1±1.9	(298)	EB	[97/7]
$C_4H_{10}N_2O_2$	diethylnitramine				[7119-92-8]
	(338–378)	49.7	(358)		[58/22]
$C_4H_{10}O$	1-butanol				[71-36-3]
	(357–389)	46.0	(372)	EB	[01/15]
		38.2	(423)		[00/20]
		29.6	(473)		[00/20]
		20.8	(523)		[00/20]
		44.1			[99/32]
	(323–373)	52.5	(298)	CGC	[95/21]
	(315–390)	49.9	(330)		[95/13]
	(364–403)	45.3	(379)		[93/7]
	(283–323)	55.2	(298)		[92/9]
	(376–399)	45.3	(387)	A	[87/5]
	(323–413)	50.1	(338)	A	[87/5]
	(413–550)	41.9	(428)	A	[87/5]
	(209–251)	51.6	(236)	A	[87/5]
	(376–397)	45.4	(386)	A	[87/5]
	(391–429)	43.8	(406)	A	[87/5]
	(415–501)	41.9	(430)	A	[87/5]
	(497–563)	37.4	(512)	A	[87/5]
	(243–303)	51.7	(298)		[83/14]
	(329–391)	49.0	(344)		[82/13]
		52.1	(298)	C	[82/6]
	(288–404)	55.0	(303)		[73/26]
		49.5±0.1	(333)	C	[73/13]
		48.6±0.1	(343)	C	[73/13]
		47.5±0.1	(353)	C	[73/13]
		46.4±0.1	(363)	C	[73/13]
		52.34±0.02	(298)	C	[71/27]
	(351–397)	47.2	(366)	EB	[87/5][70/2]
	(295–391)	53.0	(310)	DTA	[69/5]
		52.3±0.1	(298)	C	[66/2]
		47.2±0.1	(356)	C	[65/16]
		45.4±0.1	(381)	C	[65/16]
		43.1±0.1	(391)	C	[65/16]
	(419–563)	42.1	(434)		[63/20]
	(362–398)	46.6	(377)	EB	[63/8]
		51.0±0.1	(298)	C	[63/2]
	(337–390)	48.3	(352)		[59/11][84/9]
	(314–390)	48.3	(352)		[1898][84/9]
$C_4H_{10}O$	2-butanol				[78-92-2]
	(306–373)	47.7	(321)		[95/13]
	(303–403)	49.3	(318)	A	[87/5]
	(359–381)	43.2	(370)	A	[87/5]
	(372–524)	47.9	(387)	A	[87/5]
	(210–303)	57.5	(225)	A	[87/5]
	(359–380)	43.2	(369)	A	[87/5]
	(368–404)	42.0	(383)	A	[87/5]
	(395–485)	39.6	(410)	A	[87/5]
	(476–536)	35.0	(491)	A	[87/5]
	(307–373)	47.8	(322)		[82/13]
	(293–380)	53.2	(308)		[78/20]
	(319–372)	44.1	(334)		[75/23]
	(280–314)	50.2	(295)		[75/1]
	(298–393)	48.1	(313)		[73/26]
		49.74±0.02	(298)	C	[71/27]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(323–373)	46.3	(338)		[69/19][84/9]
		49.7±0.1	(298)	C	[66/2]
	(422–538)	38.4	(437)		[63/20]
	(345–381)	44.1	(360)	EB	[63/8]
		48.5	(298)	C	[63/2]
	(340–379)	44.7	(355)	EB	[87/5][62/15] [70/2]
		45.3±0.1	(340)	C	[62/15]
		43.3±0.1	(355)	C	[62/15]
		41.9±0.1	(365)	C	[62/15]
		40.8±0.1	(372)	C	[62/15]
$C_4H_{10}O$	2-methyl-1-propanol				[78-83-1]
	(350–400)	45.4	(365)	EB	[93/5]
	(313–411)	49.5	(328)	A	[87/5]
	(381–524)	46.0	(396)	A	[87/5]
	(202–243)	55.0	(228)	A	[87/5]
	(369–389)	44.2	(379)	A	[87/5]
	(383–416)	42.6	(398)	A	[87/5]
	(401–493)	41.1	(416)	A	[87/5]
	(483–548)	36.2	(498)	A	[87/5]
		50.8±0.1	(298)	C	[84/5]
		49.7±0.1	(313)	C	[84/5]
		48.3±0.1	(328)	C	[84/5]
		45.0±0.1	(358)	C	[84/5]
	(320–382)	48.1	(335)		[82/13]
	(293–388)	52.6	(308)		[73/26]
		50.79±0.02	(298)	C	[71/27]
		46.2±0.1	(347)	C	[70/20]
		44.2±0.1	(363)	C	[70/20]
		41.9±0.1	(381)	C	[70/20]
	(342–389)	46.2	(357)	A, EB	[87/5][70/2]
	(333–381)	47.0	(348)		[69/19][84/9]
		50.8±0.1	(298)	C	[66/2]
	(423–548)	40.1	(438)		[63/20]
	(353–388)	45.2	(368)	EB	[63/8]
		49.8	(298)	C	[63/2]
$C_4H_{10}O$	2-methyl-2-propanol				[75-65-0]
	(321–359)	43.4	(336)		[99/30]
	(323–373)	45.4	(298)	CGC	[95/21]
	(299–375)	46.2	(314)	A	[87/5]
	(347–363)	41.4	(355)	A	[87/5]
	(356–480)	43.2	(371)	A	[87/5]
	(347–363)	41.4	(355)	A	[87/5]
	(357–461)	39.8	(372)	A	[87/5]
	(453–506)	33.6	(468)	A	[87/5]
		46.2±0.1	(303)	C	[84/5]
		44.9±0.1	(313)	C	[84/5]
		43.0±0.1	(328)	C	[84/5]
		41.0±0.1	(343)	C	[84/5]
		37.2±0.1	(368)	C	[84/5]
	(306–357)	44.7	(321)		[82/13]
	(293–376)	46.5	(308)		[73/26]
		46.94±0.02	(298)	C	[71/27]
	(313–355)	44.2	(328)		[69/19][84/9]
		46.6±0.1	(298)	C	[66/2]
	(333–363)	42.1	(348)	EB	[63/18]
		42.5±0.1	(330)	C	[63/18]
		41.3±0.1	(340)	C	[63/18]
		40.4±0.1	(346)	C	[63/18]
		40.0±0.1	(349)	C	[63/18]
		39.0±0.1	(356)	C	[63/18]
	(329–363)	42.6	(344)	EB	[87/5][70/2] [63/18]
		44.9	(298)	C	[63/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(373–506)	38.7	(388)		[63/20]
	(293–363)	44.7	(323)		[28/5]
$C_4H_{10}O$	diethyl ether				[60-29-7]
	(286–329)	28.1	(301)	A	[87/5]
	(307–457)	26.9	(322)	A	[87/5]
	(305–360)	27.5	(320)	A	[87/5]
	(351–420)	26.6	(366)	A	[87/5]
	(417–467)	26.7	(432)	A	[87/5]
		27.1±0.1	(298)	C	[80/3]
	(250–329)	27.2	(298)		[76/2]
	(250–329)	29.5	(265)	A	[87/5][72/9]
					[76/2]
	(213–293)	28.4	(278)		[22/2]
$C_4H_{10}O$	isopropyl methyl ether				[598-53-8]
	(250–325)	28.8	(265)	A	[87/5]
		26.4±0.1	(298)	C	[80/3]
	(260–325)	28.4	(275)	A	[87/5][76/2]
		26.4	(298)		[76/2]
$C_4H_{10}O$	methyl propyl ether				[557-17-5]
	(325–407)	27.2	(340)	A	[87/5]
	(401–476)	26.7	(416)	A	[87/5]
	(273–321)	30.7	(288)	A	[87/5]
		27.6±0.1	(298)	C	[80/3]
	(253–328)	29.7	(268)	A	[87/5][76/2]
		27.5	(298)		[76/2]
		27.9±0.2	(298)	C	[75/3]
	(273–312)	29.7	(288)		[10/1][84/9]
$C_4H_{10}O_2$	(±) 1,2-butanediol				[26171-83-5]
	(372–506)	71.6±0.8	(298)	EB	[96/3]
$C_4H_{10}O_2$	(±) 1,3-butanediol				[107-88-0]
	(365–518)	74.5±1.0	(298)	EB	[96/3]
	(362–483)	67.6	(377)	A	[87/5]
	(373–423)	59.7	(398)		[35/4]
	(423–480)	58.1	(451)		[35/4]
$C_4H_{10}O_2$	1,4-butanediol				[110-63-4]
		79.3±0.5	(298)	C	[88/14]
	(380–510)	72.0	(395)	A	[87/5]
$C_4H_{10}O_2$	(*dl*) 2,3-butanediol				[513-85-9]
	(348–457)	62.5	(363)	A	[87/5]
	(317–455)	58.4	(332)		[47/5]
	(353–403)	57.9	(378)		[35/4]
	(303–456)	55.7	(380)		[35/4]
$C_4H_{10}O_2$	*meso* 2,3-butanediol				
	(413–453)	54.6	(433)		[46/12]
$C_4H_{10}O_2$	(*l*) 2,3-butanediol				
	(413–453)	52.6	(433)		[46/12]
$C_4H_{10}O_2$	diethylperoxide				[628-37-5]
	(253–333)	29.0	(268)	A	[87/5][51/10]
					[71/21]
$C_4H_{10}O_2$	1,1-dimethoxyethane				[534-15-6]
		36.4±0.1	(298)	C	[70/17]
	(273–333)	33.4	(288)	A	[87/5][49/2]
					[71/21]
$C_4H_{10}O_2$	1,2-dimethoxyethane				[110-71-4]
	(305–392)	36.8±0.2	(298)	EB	[96/5]
	(238–298)	39.4	(253)	A	[87/5]
	(238–363)	39.1	(253)	A	[87/5]
	(225–366)	33.9	(240)		[47/5]
$C_4H_{10}O_2$	2-ethoxyethanol				[110-80-5]
	(310–385)	47.4	(325)	EB	[01/17]
	(323–353)	45.9	(338)	TGA	[87/18]
		48.2±0.1	(298)	C	[71/5]
	(336–408)	44.7	(351)	A	[87/5][56/6]
$C_4H_{10}O_2S$	*bis* (2-hydroxyethyl) sulfide				[111-48-8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(368–483)	27.1	(383)	A	[87/5]
	(315–558)	28.3	(330)		[47/5]
$C_4H_{10}O_3$	diethylene glycol				[111-46-6]
	(410–539)	66.9±0.3	(420)	EB	[02/15]
	(410–539)	63.1±0.3	(460)	EB	[02/15]
	(410–539)	59.2±0.3	(500)	EB	[02/15]
	(410–539)	55.1±0.5	(540)	EB	[02/15]
	(373–453)	66.5	(413)	TGA	[87/18]
	(364–518)	59.8	(379)	A	[87/5]
	(412–513)	66.8	(427)		[81/17][84/9]
	(403–513)	69.2	(418)		[27/1][84/9]
$C_4H_{10}O_3$	1,2,3-butanetriol				[4435-50-1]
	(375–537)	68.1	(390)		[47/5]
$C_4H_{10}O_3$	orthoformic acid trimethyl ester				[149-73-5]
	(273–358)	39.0	(288)	A	[87/5]
		38.1±0.8	(298)		[71/26]
$C_4H_{10}O_3S$	diethyl sulfite				[623-81-4]
		44.7			[75/43]
	(283–431)	44.5	(298)	A	[87/5][47/5] [99/16]
$C_4H_{10}O_4$	*meso* erythritol				[149-32-6]
	(397–428)	113.6±1.1	(412)	TE	[90/16]
	(394–401)	93.3	(397)	A	[87/5]
$C_4H_{10}O_4S$	diethyl sulfate				[64-67-5]
	(413–484)	50.1	(428)	A	[87/5]
	(320–482)	54.9	(335)		[47/5][99/16]
$C_4H_{10}S$	1-butanethiol				[109-75-5]
		36.5	(298)		[71/28]
	(323–409)	35.0	(338)	A, EB	[87/5][57/7] [66/5]
		34.7±0.1	(330)	C	[57/7]
		33.6±0.1	(350)	C	[57/7]
		32.2±0.1	(371)	C	[57/7]
$C_4H_{10}S$	(*dl*) 2-butanethiol				[513-53-1]
		34.1	(298)		[71/28]
	(310–395)	33.2	(325)	A, EB	[87/5][58/7] [66/5]
		32.9±0.1	(318)	C	[58/7]
		32.3±0.1	(329)	C	[58/7]
		31.8±0.1	(337)	C	[58/7]
		30.6±0.1	(358)	C	[58/7]
$C_4H_{10}S$	2-methyl-1-propanethiol				[513-44-0]
		34.6	(298)		[71/28]
	(314–399)	33.6	(329)	A, EB	[87/5][58/6] [66/5]
		33.3±0.1	(321)	C	[58/6]
		32.3±0.1	(340)	C	[58/6]
		31.0±0.1	(361)	C	[58/6]
$C_4H_{10}S$	*tert*-butyl mercaptan				[75-66-1]
	(275–293)	30.1	(284)		[98/25]
		30.8	(298)		[71/28]
	(293–373)	30.9	(308)	A, EB	[87/5][53/7] [66/5]
$C_4H_{10}S$	diethyl sulfide				[352-93-2]
		35.8±0.7	(298)	C	[89/12]
		35.5	(298)		[81/12]
		35.8	(298)		[71/28]
	(318–396)	34.4	(333)	A, EB	[87/5][52/11] [66/5]
	(309–371)	34.8	(324)	EB	[52/9]
	(233–361)	37.5	(248)		[47/5]
		33.5	(364)		[35/2]
$C_4H_{10}S$	methyl isopropyl sulfide				[1551-21-9]
		34.1	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		33.0±0.1	(318)	C	[55/12]
		32.0±0.1	(336)	C	[55/12]
		30.7±0.1	(358)	C	[55/12]
	(298–368)	33.8	(313)	A, EB	[87/5][52/9]
$C_4H_{10}S$	methyl propyl sulfide				[3877-15-4]
		36.2	(298)		[71/28]
	(308–374)	35.3	(323)	A, EB	[87/5][52/9]
		34.5±0.1	(328)	C	[57/7]
		33.4±0.1	(347)	C	[57/7]
		32.1±0.1	(369)	C	[57/7]
$C_4H_{10}S_2$	1,4-butanedithiol				[1191-08-8]
	(347–469)	50.9	(362)	A	[87/5][99/16]
		55.3	(298)		[62/11]
		54.9	(298)		[62/11]
$C_4H_{10}S_2$	diethyl disulfide				[110-81-6]
	(383–423)	44.8	(298)	CGC	[95/21]
		45.4±0.8	(298)	C	[89/12]
	(287–434)	45.7	(302)	A	[87/5]
		45.2±0.1	(298)	C	[85/2]
		45.2	(298)		[81/12]
		45.6	(298)		[71/28]
	(373–431)	40.9	(388)	EB	[87/5][66/5]
					[52/12]
	(359–433)	41.5	(374)	EB	[52/9]
$C_4H_{11}N$	butyl amine				[109-73-9]
	(323–373)	35.6	(298)	CGC	[95/21]
	(313–350)	34.7	(328)	A	[87/5]
		35.7±0.2	(298)	C	[85/2]
	(296–349)	35.5	(311)	EB	[79/9]
		35.7±0.1	(298)	C	[79/9]
		34.7±0.1	(313)	C	[79/9]
		33.5±0.1	(323)	C	[79/9]
		32.4±0.1	(343)	C	[79/9]
		31.1±0.1	(358)	C	[79/9]
		35.7±0.1	(298)	C	[69/2]
$C_4H_{11}N$	(*dl*) 2-aminobutane				[13952-84-6]
	(264–371)	34.1	(279)	A	[87/5][71/21]
$C_4H_{11}N$	sec-butylamine				[13952-84-6]
	(300–335)	32.4	(315)	EB	[79/9]
		32.7±0.1	(298)	C	[79/9]
		31.6±0.1	(313)	C	[79/9]
		30.5±0.1	(328)	C	[79/9]
		29.4±0.1	(343)	C	[79/9]
		32.6±0.1	(298)	C	[69/2]
$C_4H_{11}N$	isobutylamine				[78-81-9]
	(248–347)	37.6	(263)		[87/5]
		33.9±0.1	(298)	C	[79/9]
		32.7±0.1	(313)	C	[79/9]
		31.6±0.1	(328)	C	[79/9]
	(297–340)	33.5	(313)	EB	[79/9]
		33.8±0.1	(298)	C	[69/2]
		33.9±0.2	(298)	IPM	[65/8][70/11]
$C_4H_{11}N$	*tert*-butylamine				[75-64-9]
		29.6±0.1	(298)	C	[69/2]
	(292–349)	30.1	(307)	A, EB, IPM	[87/5][68/4]
$C_4H_{11}N$	diethylamine				[109-89-7]
	(302–328)	31.2	(315)	A	[87/5]
	(325–437)	30.4	(340)	A	[87/5]
	(431–496)	28.4	(446)	A	[87/5]
		31.3±0.1	(298)	C	[79/9]
		30.2±0.1	(313)	C	[79/9]
		29.1±0.1	(328)	C	[79/9]
		28.0±0.1	(343)	C	[79/9]
		31.2±0.1	(298)	C	[69/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(273–333)	32.7±0.2	(298)	I	[69/16]
	(292–313)	31.8	(307)		[65/24][84/9]
	(304–323)	31.5	(319)		[62/23][84/9]
$C_4H_{11}N$	N-methyl isopropyl amine				[4747-21-1]
		30.7±0.1	(298)	C	[79/8]
		29.5±0.1	(313)	C	[79/8]
		27.1±0.1	(343)	C	[79/8]
	(293–319)	30.9	(306)	EB	[79/8]
$C_4H_{11}NO$	2-(dimethylamino)ethanol				[108-01-0]
	(350–387)	43.2	(365)	A	[87/5]
	(323–408)	42.7	(338)	A	[87/5]
$C_4H_{11}NO$	3-methoxypropylamine				[5332-73-0]
	(278–390)	44.5	(293)	A	[87/5]
$C_4H_{11}NO_2$	2,2′-iminodiethanol				[111-42-2]
	(463–582)	69.0	(478)		[59/1]
$C_4H_{11}NO_2$	diethanolamine				[111-42-2]
	(423–542)	74.4	(438)	A	[87/5]
	(376–454)	77.0	(391)		[69/20][84/9]
	(466–514)	70.6	(481)		[59/1][84/9]
$C_4H_{11}NO_2S$	N,N-dimethylethanesulfonamide				[6338-68-7]
	(384–517)	54.3	(399)	A	[87/5]
$C_4H_{11}O_3P$	diethylphosphite				[762-04-9]
	(338–471)	38.1	(353)	A	[87/5]
$C_4H_{11}O_3P$	dimethyl ethylphosphonate				
	(333–410)	70.1	(348)		[87/5][55/5] [84/9]
$C_4H_{12}ClN$	butylammonium chloride				[3858-78-4]
	(489–508)	62.1	(498)	A	[87/5]
$C_4H_{12}ClN$	diethylamine hydrochloride				[660-68-4]
	(513–558)	177.6	(528)		[87/5]
$C_4H_{12}ClN_2P$	*bis*(dimethylamino)chlorophosphine				
		45.9±1.2	(298)	STG	[95/2]
$C_4H_{12}FN_2OP$	*bis*(dimethylamido)fluorophosphate				[115-26-4]
	(312–350)	50.4	(327)	A	[87/5]
$C_4H_{12}NP$	dimethyl(dimethylamino)phosphine				[683-84-1]
	(264–372)	36.8	(279)	A	[87/5]
$C_4H_{12}N_2$	(*dl*) 1,2-butanediamine				[4426-48-6]
	(251–293)	50.2	(278)		[87/5][75/4]
	(251–293)	46.9	(298)	IPM	[75/4]
		46.3±0.2	(298)	IPM	[65/8][70/11]
$C_4H_{12}N_2$	2-methyl-1,2-propanediamine				[811-93-8]
	(256–293)	47.2	(278)	IPM	[87/5][75/4]
	(256–293)	43.5±0.2	(298)	IPM	[75/4]
		43.6±0.2	(298)	IPM	[65/8][70/11]
$C_4H_{12}N_2$	tetramethylhydrazine				[6415-12-9]
	(290–346)	32.9	(305)	T	[87/5][57/20]
$C_4H_{12}N_2O$	N-(2-hydroxyethyl)ethylenediamine				[111-41-1]
	(383–517)	62.8	(398)	A	[87/5]
$C_4H_{12}N_2OS$	tetramethyl sulfurous diamide				[3768-60-3]
	(320–351)	41.9	(335)	A	[87/5][99/16]
$C_4H_{12}N_2OS$	N,N,N′,N′-tetramethylsulfamide				[3768-63-6]
	(358–495)	53.2	(373)	A	[87/5][99/16]
$C_4H_{12}N_2S$	tetramethylsulfoxylic diamide				[2129-20-6]
	(301–326)	40.4	(313)	A	[87/5]
$C_4H_{13}N_3$	2,2′-diaminodiethylamine				[111-40-0]
	(371–521)	63.4±0.7	(298)	EB	[99/7]
$C_4H_{13}N_3$	dimethylene triamine				[111-40-0]
	(371–441)	54.8	(386)	A	[87/5]
$C_5BrF_{12}N$	1,1,2,3,3,3-hexafluoro-2-bromo-N,N-*bis*(trifluoromethyl)-propylamine				
	(324–351)	30.2	(337)	A	[87/5]
C_5ClF_5	1-chloro-2,3,4,5,5-pentafluoro-1,3-cyclopentadiene				[30221-57-9]
	(273–303)	31.0	(288)	A	[87/5]
C_5ClF_5	5-chloro-1,2,3,4,5-pentafluoro-1,3-cyclopentadiene				[30221-56-8]
	(283–323)	28.7	(298)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_5ClF_{10}N$	2,2,2-trifluoro-N-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethylidene]-ethanimidoyl chloride				[54120-14-8]
		28.6	(361)		[75/19]
$C_5ClF_{12}N$	N-chloro-1,1,2,3,3,3-heptafluoro-N-(pentafluoroethyl)-2-propanamine				[54566-78-8]
		28.6	(346)		[75/19]
$C_5Cl_2F_6$	1,2-dichlorohexafluorocyclopentene				[706-79-6]
		33.0			[59/28]
		36.5	(298)		[59/28]
$C_5Cl_2F_9N$	1,1-dichloro-2,2,2-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene]ethanamine				[54566-77-7]
		31.2	(361)		[75/19]
$C_5Cl_5F_7O$	(1,1,2-trifluoro-2,2-dichloroethyl)(2,2,3,3-tetrafluoro-1,1,3-trichloropropyl) ether				[61196-11-0]
	(362–449)	45.3	(377)	A	[87/5]
		50.7±0.8	(298)	EB	[76/15]
C_5Cl_6	hexachlorocyclopentadiene				[77-47-4]
	(335–512)	53.7	(350)	A	[87/5]
		67.4			[77/26]
C_5Cl_8	octachlorocyclopentene				[706-78-5]
		83.4			[77/26]
C_5F_5N	perfluoropyridine				[700-16-3]
	(273–363)	36.3	(288)	A	[87/5][61/9]
					[72/20]
C_5F_8	perfluoro-1,2-pentadiene				[21972-01-1]
	(262–276)	26.1	(269)	A	[87/5]
C_5F_9N	3,3,3-trifluoro-N,N-*bis*(trifluoromethyl)-1-propylamine				[19451-91-3]
	(277–293)	24.9	(285)	A	[87/5]
C_5F_9N	2,3,4,5-tetrahydrononafluoropyridine				[714-37-4]
	(249–310)	29.3	(264)	A	[87/5]
C_5F_9NO	2,2,2-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-acetamide				[52225-57-7]
		32.1	(319)		[74/24]
C_5F_9NO	3,3,4,5,6,6-hexafluoro-3,6-dihydro-2-trifluoromethyl-2*H*-1,2-oxazine				[4827-67-2]
	(263–323)	31.4	(278)	A	[87/5]
$C_5F_9NO_3S$	nonafluoro-1-butanesulfonyl isocyanate				[34805-64-6]
	(309–401)	48.2	(324)	A	[87/5]
C_5F_{10}	perfluorocyclopentane				[376-77-2]
	(285–297)	27.0	(291)	A	[87/5]
	(290–330)	25.6	(298)		[84/9][91/2]
	(290–329)	26.3	(298)		[56/10]
$C_5F_{10}N_2O_2$	decafluoroglutaramide				[32822-52-9]
		35.6	(368)	HG	[71/18]
$C_5F_{10}N_2O_2$	1-nitrodecafluoropiperadine				[1840-07-9]
	(283–343)	29.6	(298)	A	[87/5]
$C_5F_{10}O_2$	carbonofluoridic acid, 2,2,2-trifluoro-1,1-*bis*(trifluoromethyl)ethyl ester				[55064-79-4]
	(275–305)	32.2	(290)	A	[87/5][75/22]
$C_5F_{10}O_3S$	perfluorocyclopentyl fluorosulfate				
	(255–360)	36.6	(307)		[63/17]
$C_5F_{10}O_6S_2$	octafluorocyclopentanediol *bis*(fluorosulfate)				[741-20-8]
	(334–423)	49.5	(349)		[72/20][87/5]
					[99/16]
$C_5F_{11}N$	perfluoropiperidine				[836-77-1]
	(302–355)	30.0	(317)	A	[87/5][63/19]
					[72/20]
$C_5F_{11}N$	octafluoro-1-(trifluoromethyl)pyrrolidine				[2344-10-7]
	(249–306)	29.4	(264)	A	[87/5]
$C_5F_{11}NO$	N,2,2,2-tetrafluoro-N-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-acetamide				[52225-65-7]
		32.6	(332)		[74/24]
C_5F_{12}	perfluoro-2-methylbutane				[594-21-2]
	(290–340)	26.3	(298)		[84/9][91/2]
	(228–308)	31.0	(243)	A	[87/5][67/15]
	(290–337)	27.4	(298)		[56/10]
C_5F_{12}	perfluoropentane				[678-26-2]
	(280–340)	26.6	(298)		[84/9][91/2]
	(221–303)	31.1	(236)	A	[87/5][67/15]
	(288–338)	27.5	(298)		[56/10]
$C_5F_{12}N_2$	[2,2,2-trifluoro-1,1-*bis*(trifluoromethyl)ethyl](trifluoromethyl)diazene				[53684-06-3]
		23.7	(309)		[75/21]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_5F_{12}O_2$	*bis*(pentafluoroethoxy)difluoromethane				[20822-11-1]
	(246–299)	32.7	(261)	A	[87/5]
$C_5F_{12}O_2S$	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1,1-bis(trifluoromethyl) ethyl ester				[52225-54-4]
		37.7	(355)	HG	[74/25]
$C_5F_{12}O_4S$	pentafluoro(2,2,3,3,4,4,5-heptafluoro-5-oxopentaneperoxoato) sulfur				[60672-63-1]
		39.2			[76/31]
$C_5F_{13}N$	N-(trifluoromethyl)*bis*(pentafluoroethyl)amine				[1481-55-6]
	(298–319)	30.2	(308)	A	[87/5]
		29.4±0.4	(298)		[77/13]
$C_5F_{13}NS$	N-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-S,S-*bis*(trifluoro-methyl)sulfilimine				[37826-44-1]
	(314–360)	31.3	(329)	A	[87/5][99/16]
$C_5F_{14}N_2O$	1-[difluoro(trifluoromethoxy)methyl]-1,2,2-*tris*(trifluoromethyl)-hydrazine				[17636-89-4]
	(302–311)	34.7	(306)	A	[87/5]
$C_5F_{14}N_2O$	1,1-difluoro-N-(trifluoromethoxy)-N,N′,N′-*tris*(trifluoromethyl)-methanediamine				[17636-88-3]
	(282–323)	33.7	(297)	A	[87/5]
$C_5F_{14}OS$	pentafluoro[(nonafluorocyclopentyl)oxyl] sulfur				[736-59-4]
	(300–361)	36.1	(315)	A	[87/5][99/16]
$C_5F_{15}N$	N-(trifluoromethyl)*bis*(pentafluoroethyl)amine				[758-48-5]
		29.4±0.4	(298)		[77/20]
$C_5F_{15}NS$	difluoro[1,1,1,2,3,3,3-heptafluoro-2-propanaminoto(2-)]-*bis*(trifluoromethyl) sulfur				[65844-10-2]
		32.2	(375)	I	[78/14]
$C_5F_{15}P_5$	1,2,3,4,5-*pentakis*(trifluoromethyl)pentaphospholane				[745-23-3]
	(319–435)	51.8	(334)	A, SG	[87/5][58/10]
C_5O_2	pentacarbon dioxide				[51799-36-1]
	(186–273)	4.6	(258)	A	[87/5][37/1]
$C_5HClF_8O_2$	trifluoroacetic acid, 1-(chlorodifluoromethyl)-2,2,2-trifluoroethyl ester				[52225-55-5]
		37.2	(338)	HG	[74/25]
$C_5HF_{10}NO$	2,2,2-trifluoro-N-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-acetamide				
		42.3	(367)		[74/24]
C_5HF_9	nonafluorocyclopentane				[376-65-8]
	(289–348)	29.6	(304)	A	[87/5][56/10]
	(289–348)	29.4	(298)		[56/10]
C_5HF_9IN	*cis* 3,3,3-trifluoro-1-iodo-N,N-*bis*(trifluoromethyl)propenylamine				[20257-34-5]
	(343–366)	31.3	(354)	A	[87/5]
C_5HF_9IN	*trans* 3,3,3-trifluoro-1-iodo-N,N-*bis*(trifluoromethyl)propenylamine				[20257-35-6]
	(345–368)	35.0	(356)	A	[87/5]
$C_5HF_9O_2$	trifluoroacetic acid, 2,2,2-1-(trifluoromethyl)ethyl ester				[42031-15-2]
		28.5	(321)	HG	[73/20]
$C_5HF_{10}N$	2,2,3,3,4,4,5,5,6,6-decafluoropiperidine			A	[559-31-9]
	(273–313)	32.7	(288)		[87/5]
$C_5HF_{12}N$	1,1,1,2,3,3,3-heptafluoro-N-(pentafluoroethyl)-2-propanamine				[54566-80-2]
		29.8	(325)		[75/19]
C_5HN_3	ethylenetricarbonitrile				[997-76-2]
	(313–343)	66.0	(328)	A, MG	[87/5][63/1]
$C_5H_2BrF_8N$	2-bromo-3,3-difluoro-N,N-*bis*(trifluoromethyl)allylamine				[19451-93-5]
	(336–367)	33.8	(351)	A	[87/5]
$C_5H_2F_6O_2$	1,1,1,5,5,5-hexafluoropentan-2,4-dione				[1522-22-1]
	(273–330)	33.1	(301)	GS	[98/5]
		30.6±0.1	(298)		[97/2][75/2] [78/18]
$C_5H_2F_9N$	*trans* 3,3,3-trifluoro-N,N-*bis*(trifluoromethyl)propenylamine				[25273-42-1]
	(287–319)	28.2	(302)	A	[87/5]
$C_5H_2F_9NOS$	2,2,2-trifluoro-N-[(trifluoromethyl)thio]ethanimidic acid, 2,2,2-trifluoroethyl ester				[62067-07-6]
		35.8	(373)	I	[77/18]
$C_5H_2F_9NS$	2,2,2-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethyl]ethane-thioamide				[57682-29-8]
		36.9			[75/42]
$C_5H_2F_{10}O$	1,1,1,2,2,3,3-heptafluoro-3-(2,2,2-trifluoroethoxy)propane				[142469-08-7]
	(288–325)	31.5	(303)	I	[02/19]
$C_5H_2F_{10}O$	1,1,1,2,4,4,4-heptafluoro-2-(trifluoromethoxy)butane				[347148-74-7]
	(288–323)	31.8	(303)	I	[02/19]
$C_5H_2F_{10}O$	1,1,1,2,2-pentafluoro-3-(pentafluoroethoxy)propane				[155653-44-4]
	(288–320)	31.2	(303)	I	[02/19]
$C_5H_3BrF_9N$	2-bromo-3,3,3-trifluoro-N,N-*bis*(trifluoromethyl)propylamine				[19451-92-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(342–365)	34.2	(353)	A	[87/5]
$C_5H_3F_6N$	N,N-*bis*(trifluoromethyl)-1-propynylamine				[25237-11-0]
	(295–312)	31.1	(303)	A	[87/5]
$C_5H_3F_7O_2$	methyl perfluorobutyrate				
		34.5			[77/28][78/19]
$C_5H_3F_8NOS$	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-(methylimino)-thiophene-1-oxide				[77589-48-1]
		33.9	(330)		[81/15]
$C_5H_3F_9N_2OS$	1,1,1-trifluoro-N′-methyl-N-[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene]methanesulfonimidamide				[62609-63-6]
		32.6	(417)	I	[77/19]
$C_5H_3F_9O$	1,1,2,2-tetrafluoro-3-(pentafluoroethoxy)propane				[176310-27-3]
	(288–336)	34.0	(303)	I	[02/19]
$C_5H_3F_9O$	1-(2,2-difluoroethoxy)-1,1,2,2,3,3,3-heptafluoropropane				[176310-28-4]
	(288–340)	34.8	(303)	I	[02/19]
$C_5H_3F_9O$	1,1,1,2,2-pentafluoro-3-(1,1,2,2-tetrafluoroethoxy)propane				[50807-74-4]
	(293–343)	35.6	(308)	I	[02/19]
$C_5H_3F_9O$	1,1,1,2,4,4-hexafluoro-2-(trifluoromethoxy)butane				
	(283–332)	33.8	(298)	I	[02/19]
$C_5H_3F_9O$	1,1,1,3,3,3-hexafluoro-2-methoxy-2-(trifluoromethyl)propane				[66670-22-2]
	(288–326)	31.3	(303)	I	[02/19]
$C_5H_3F_9O$	1,1,1,2,3,3-hexafluoro-3-(2,2,2-trifluoroethoxy)propane				[993-95-3]
	(293–346)	36.1	(308)	I	[02/19]
$C_5H_3F_9O$	1,1,1,2,3,3-hexafluoro-4-(trifluoromethoxy)butane				[69948-43-2]
	(288–338)	34.0	(303)	I	[02/19]
$C_5H_3F_9O_2S$	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1-methyl-1-(trifluoromethyl)ethyl ester				[52225-51-1]
		34.3	(385)	HG	[74/25]
$C_5H_3N_3$	2,2-dicyanopropionitrile				[10359-20-3]
	(293–333)	55.2		B	[94/5]
$C_5H_4BrF_6N$	*cis* 2-bromo-N,N-*bis*(trifluoromethyl)propenylamine				[25273-47-6]
	(346–367)	35.3	(356)	A	[87/5]
$C_5H_4BrF_6N$	*trans* 2-bromo-N,N-*bis*(trifluoromethyl)propenylamine				[25273-48-7]
	(336–360)	33.3	(348)	A	[87/5]
C_5H_4BrN	2-bromopyridine				[109-04-6]
		54.4±1.3	(298)	C	[97/3]
C_5H_4BrN	3-bromopyridine				[626-55-1]
		52.1±1.3	(298)	C	[97/3]
	(289–447)	47.4	(304)	A	[87/5][47/5]
C_5H_4ClN	2-chloropyridine				[109-09-1]
		51.0±1.2	(298)	C	[97/4]
	(286–444)	53.0	(301)	A	[87/5][47/5]
C_5H_4ClN	3-chloropyridine				[626-60-8]
		47.9±1.1	(298)	C	[97/4]
$C_5H_4F_4N_4O_{10}$	*bis*(2-fluoro-2,2-dinitroethyl)difluoroformal				
	(323–357)	72.7	(340)		[97/12]
$C_5H_4F_7I$	1,1,1,2,2,3,3-heptafluoro-5-iodopentane				[1513-88-8]
	(317–386)	38.7	(332)	A	[87/5]
$C_5H_4F_8O$	1,1,2,2-tetrafluoro-3-(1,1,2,2-tetrafluoroethoxy)propane				[16627-68-2]
	(293–366)	40.2	(308)	I	[02/19]
$C_5H_4F_8O$	1,1,1,3,3-pentafluoro-3-methoxy-2-trifluoromethylpropane				[382-26-3]
	(288–343)	34.5	(303)	I	[02/19]
$C_5H_4F_9N$	3,3,3-trifluoro-N,N-*bis*(trifluoromethyl)propylamine				[19451-89-9]
	(290–333)	31.0	(305)	A	[87/5]
$C_5H_4N_2$	*cis* 2-methyl-2-butenedinitrile				[37580-43-1]
	(395–467)	58.5	(410)	A	[87/5][72/20]
$C_5H_4N_2$	*trans* 2-methyl-2-butenedinitrile				[37580-44-2]
	(339–411)	47.9	(354)	A	[87/5][72/20]
$C_5H_4N_4$	1,2,4-triazolo[1,5-a]pyrimidine				[275-02-5]
	(370–523)	82.5±13.1	(298)	EB	[97/7]
$C_5H_4O_2$	2-furfuraldehyde				[98-01-1]
	(357–435)	44.7	(372)	A	[87/5]
	(329–433)	48.2	(344)		[50/1][84/9]
	(365–443)	47.6	(380)		[26/4][84/9]
$C_5H_4O_2S$	2-thiophene carboxylic acid				[527-72-0]
	(314–323)	96.9 (sub)	(319)		[99/16]
$C_5H_4O_3$	citraconic anhydride				[616-02-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(320–487)	53.3	(335)	A	[87/5][47/5]
$C_5H_5Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-ethyl ester				[76619-92-6]
	(383–423)	66.9		GC	[80/24]
$C_5H_5F_3O_2$	1,1,1-trifluoropentane-2,4-dione				[367-57-7]
		37.2±0.2	(298)		[97/2][75/2]
					[78/18]
$C_5H_5F_6NO$	N,N-*bis*(trifluoromethyl)allylamine-N-oxide				[22743-77-7]
	(254–328)	33.1	(269)	A	[87/5]
$C_5H_5F_6NO$	1-methoxy-N,N-*bis*(trifluoromethyl)vinylamine				[22130-39-8]
	(321–343)	32.4	(332)	A	[87/5]
$C_5H_5F_6NO$	*cis* 2-methoxy-N,N-*bis*(trifluoromethyl)vinylamine				[22298-35-7]
	(341–362)	32.5	(351)	A	[87/5]
$C_5H_5F_6NO_2$	N,N-*bis*(trifluoromethyl)propionamide-N-oxide				[22743-66-4]
	(278–361)	42.1	(293)	A	[87/5]
$C_5H_5F_7O$	1,1,1,2-tetrafluoro-2-(trifluoromethoxy)butane				[200501-98-0]
	(283–319)	30.3	(298)	I	[02/19]
$C_5H_5F_7O$	1-ethoxy-1,1,2,2,3,3,3-heptafluoropropane				[22052-86-4]
	(288–323)	31.0	(303)	I	[02/19]
$C_5H_5F_7O$	1,1,1,2,2,3,3-heptafluoro-4-methoxybutane				[376-98-7]
	(293–344)	34.6	(308)	I	[02/19]
C_5H_5N	*cis* 1-cyano-1,3-butadiene				
		40.7	(348)		[54/17]
		38.3	(408)		[54/17]
C_5H_5N	*cis* 2,4-pentadienenitrile				[2180-69-0]
	(318–383)	41.4	(333)	A	[87/5][72/20]
C_5H_5N	bicyclo[1.1.0]butane-1-carbonitrile				[16955-35-4]
	(307–349)	48.0	(319)	BG	[71/2]
C_5H_5N	pyridine				[110-86-1]
		40.16±0.06	(298)		[96/25]
	(323–373)	40.4	(298)	CGC	[95/21]
	(295–388)	39.9	(310)	EB	[90/6]
	(296–353)	39.7	(311)	A	[87/5]
	(348–434)	37.3	(363)	A	[87/5]
	(431–558)	35.0	(446)	A	[87/5]
	(552–620)	34.0	(567)	A	[87/5]
	(298–333)	39.6	(313)		[86/9]
		40.2	(298)	C	[84/4]
		39.4	(313)	C	[84/4]
		38.5	(328)	C	[84/4]
		37.7	(343)	C	[84/4]
		36.3	(368)	C	[84/4]
	(340–426)	37.6	(355)	EB	[87/5][57/11]
		37.5±0.1	(346)	C	[57/11]
		36.4±0.1	(366)	C	[57/11]
		35.1±0.1	(388)	C	[57/11]
	(320–388)	38.4	(335)	MG	[53/4]
$C_5H_5NO_2$	2-cyanoacrylic acid, methyl ester				[137-05-3]
	(258–283)	57.8	(270)	A	[87/5][69/11]
					[72/20]
C_5H_6	1,3-cyclopentadiene				[542-92-7]
	(271–314)	28.2	(286)		[67/27][84/9]
	(291–314)	28.1	(302)	A, MM	[87/5][65/28]
	(291–314)	28.4±0.3	(298)	MM	[65/28]
	(273–287)	29.7	(298)		[65/28][33/12]
C_5H_6	ethynylcyclopropane				[6746-94-7]
	(290–320)	31.1	(305)	A	[87/5]
C_5H_6	isopropenylacetylene				[78-80-8]
		27.2			[77/25]
C_5H_6ClN	4-chloro-3-pentenenitrile				[32366-08-8]
	(349–433)	63.9	(364)	A	[87/5]
$C_5H_6Cl_2O_2$	glutaryl chloride				[2873-74-7]
	(329–490)	55.9	(344)	A	[87/5][47/5]
$C_5H_6F_2N_4O_{10}$	*bis*(2-fluoro-2,2-dinitroethyl)formal				
	(323–365)	85.1	(344)		[97/12]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_5H_6F_6N_2S$	2,2,2-trifluoro-N,N-dimethyl-N′-[(trifluoromethyl)thio]-ethanimidamide				[62067-11-2]
		40.4	(400)	I	[77/18]
$C_5H_6F_6O$	1,1,1,2,3,3-hexafluoro-4-methoxybutane				[58705-93-4]
	(293–360)	37.0	(308)	I	[02/19]
$C_5H_6F_6N_2S$	dimethylamino(hexafluoroisoproplidenimino) sulfur				
		39.7	(383)	I	[72/22]
$C_5H_6F_6O_2S$	trifluoromethanesulfinic acid, 2,2,2-trifluoro-1,1-dimethylethyl ester				[52225-49-7]
		35.6	(388)	HG	[74/25]
$C_5H_6F_6O_5S_2$	3,3-*bis*[(trifluoromethyl)sulfonyl]-1-propanol				[61915-97-7]
	(333–418)	32.8	(348)	A, I	[87/5][77/17] [99/16]
$C_5H_6N_2$	dimethylmalononitrile				[7321-55-3]
	(322–413)	47.5	(337)	A	[87/5][67/20]
$C_5H_6N_2$	2-methylpyrazine				[109-08-0]
	(288–392)	42.4	(340)		[95/4]
$C_5H_6N_2$	glutaronitrile				[544-13-8]
	(364–560)	60.1	(379)	A	[87/5]
	(277–303)	66.8	(290)	A	[87/5][72/20]
C_5H_6O	2-methylfuran				[534-22-5]
	(289–337)	32.4	(304)		[02/30]
	(251–338)	34.4	(266)	A	[87/5]
	(288–303)	32.5	(295)		[72/20]
	(333–373)	30.9	(348)		[71/3][84/9]
	(215–360)	32.2	(298)		[70/36]
$C_5H_6O_2$	5-methyl-2(3*H*)-furanone				[591-12-8]
	(324–442)	40.3	(339)	A	[87/5]
$C_5H_6O_2$	(*dl*) 5-methyl-2(5*H*)-furanone				[591-11-7]
	(356–481)	48.2	(371)	A	[87/5]
$C_5H_6O_2$	furfuryl alcohol				[98-00-0]
	(304–443)	53.6	(319)	A	[87/5][47/4]
$C_5H_6O_2$	5-hydroxy-3-pentyn-2-one				[15441-65-3]
	(273–333)	64.4	(288)	A	[87/5][72/20]
$C_5H_6O_3$	glutaric anhydride				[108-55-4]
	(373–560)	60.9	(388)	A	[87/5][47/5]
$C_5H_6O_3$	(*dl*) monomethylsuccinic anhydride				[4100-80-5]
	(342–521)	59.3	(357)	A	[87/5][47/5]
C_5H_6S	2-methylthiophene				[554-14-3]
	(333–373)	36.8	(348)	I	[71/3][84/9]
		38.7	(298)		[71/28]
	(324–391)	37.2	(339)	A, EB	[87/5][52/9] [99/16]
C_5H_6S	3-methylthiophene				[616-44-4]
	(326–398)	36.8	(357)		[99/16]
	(333–373)	37.4	(348)	I	[71/3][84/9]
		39.5	(298)		[71/28]
	(327–399)	37.5	(342)	A, EB	[87/5][52/9]
$C_5H_7ClO_3$	acetic acid, chlorooxo, propyl ester				[54166-91-5]
	(282–396)	52.7	(297)	A	[87/5][47/5]
$C_5H_7FO_2$	allyl fluoroacetate				
	(273–333)	48.9	(288)	A, GS	[87/5][48/14] [72/20]
C_5H_7N	cyclobutanecarbonitrile				[4426-11-3]
		44.3	(298)	C	[83/6]
	(328–402)	39.6	(347)	BG	[71/2]
		40.0±0.4	(298)	BG	[71/2]
C_5H_7N	2-ethylacrylonitrile				
	(244–387)	37.1	(259)		[87/5][47/5]
C_5H_7N	angelic acid, nitrile				[20068-02-4]
	(265–413)	42.8	(280)	A	[87/5][47/5]
C_5H_7N	1-methylpyrrole				[96-54-8]
	(333–373)	38.0	(343)	I	[71/3]
	(321–423)	39.0	(336)	A, EB, IPM	[87/5][68/4] [72/20]
C_5H_7N	(Z) 2-pentenenitrile				[25899-50-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		43.2	(298)		[69/14]
C_5H_7N	(E) 3-pentenenitrile				[16529-66-1]
		44.8	(298)		[69/14]
C_5H_7N	(E) 2-pentenenitrile				[26294-98-4]
		44.9	(298)		[69/14]
C_5H_7N	tiglic acid, nitrile				[30574-97-1]
	(247–395)	37.4	(262)	A	[87/5][47/5]
C_5H_7NO	4-oxo-pentanenitrile				[927-56-0]
	(293–473)	52.3	(308)	A	[87/5]
$C_5H_7NO_2$	ethyl cyanoacetate				[105-56-6]
	(340–479)	66.9	(355)	A	[87/5][47/5]
C_5H_7NS	isothiocyanic acid, 3-butenyl ester				[3386-97-8]
	(342–443)	45.2	(357)	A	[87/5][99/16]
C_5H_7NS	2,4-dimethylthiazole				[541-58-2]
	(357–421)	42.0	(372)	A	[87/5]
C_5H_8	bicyclo[2.1.0]pentane				[185-94-4]
		28.0±0.5	(298)	EB	[98/17][96/18]
	(296–315)	28.6	(305)	A	[87/5]
C_5H_8	spiropentane				[157-40-4]
	(276–344)	28.6	(291)	A	[87/5][50/7]
		28.3±0.1	(283)	C	[50/7]
		27.5±0.1	(298)	C	[50/7]
		26.7±0.1	(312)	C	[50/7]
C_5H_8	vinylcyclopropane				[693-86-7]
	(289–310)	28.9	(299)	A	[87/5]
C_5H_8	cyclopentene				[142-29-0]
	(249–318)	29.9	(264)	A	[87/5]
	(289–318)	24.8	(299)	MM	[50/6]
	(230–293)	28.4	(300)		[41/6]
C_5H_8	methylenecyclobutane				[1120-56-5]
	(290–316)	26.1	(303)	A	[87/5]
	(292–306)	29.1	(299)	A	[87/5][78/5] [78/17]
		27.7±0.4	(298)	EB	[74/3]
C_5H_8	3-methyl-1,2-butadiene				[598-25-4]
	(227–253)	31.0	(240)	A	[87/5]
	(252–323)	29.9	(267)	A	[87/5]
		28.0	(298)		[71/28]
	(213–242)	31.6	(230)	IPM	[69/12]
	(274–319)	29.0	(291)	EB	[69/12]
C_5H_8	2-methyl-1,3-butadiene				[78-79-5]
	(221–254)	29.4	(239)	A	[87/5]
	(254–316)	28.3	(269)	A	[87/5]
		26.4	(298)		[71/28]
	(216–235)	31.5	(225)	IPM	[69/12]
	(290–308)	27.3	(299)	MM	[50/6]
	(258–318)	27.4	(288)		[38/7]
C_5H_8	3-methyl-1-butyne				[598-23-2]
	(218–320)	30.2	(233)	A	[87/5]
		25.8	(298)		[71/28]
C_5H_8	1,2-pentadiene				[591-95-7]
	(231–249)	31.6	(240)	A	[87/5]
	(249–331)	30.6	(264)	A	[87/5]
		28.7	(298)		[71/28]
	(213–245)	32.2	(231)	IPM	[69/12]
	(285–319)	29.1	(300)	MM	[50/6]
C_5H_8	*cis* 1,3-pentadiene				[1574-41-0]
	(255–326)	30.1	(270)	A	[87/5]
	(230–255)	31.2	(242)	A	[87/5]
		28.3	(298)		[71/28]
	(213–242)	31.9	(230)	IPM	[69/12]
	(289–318)	28.8	(304)	MM	[50/6]
C_5H_8	*trans* 1,3-pentadiene				[2004-41-0]
	(228–256)	30.7	(242)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(256–324)	29.5	(271)	A	[87/5]
		27.8	(298)		[71/28]
	(213–242)	31.3	(230)	IPM	[69/12]
	(292–316)	28.3	(304)	MM	[50/6]
C_5H_8	1,4-pentadiene				[591-93-5]
	(216–236)	29.1	(226)	A	[87/5]
	(236–307)	28.1	(251)	A	[87/5]
		25.2	(298)		[71/28]
	(213–230)	29.3	(221)	IPM	[69/12]
	(288–300)	26.5	(293)	MM	[50/6]
	(194–255)	28.4	(240)		[40/3]
C_5H_8	2,3-pentadiene				[591-96-8]
	(234–258)	32.3	(246)	A	[87/5]
	(258–330)	31.1	(273)	A	[87/5]
		29.5	(298)		[71/28]
	(213–247)	33.2	(232)	IPM	[69/12]
	(298–322)	29.6	(310)	MM	[50/6]
C_5H_8	1-pentyne				[627-19-0]
	(229–315)	31.8	(244)	A	[87/5]
		28.4	(298)		[71/28]
C_5H_8	2-pentyne				[627-21-4]
	(240–329)	33.1	(255)	A	[87/5]
		30.8	(298)		[71/28]
$C_5H_8Br_2$	*trans* 1,2-dibromocyclopentane				[10230-26-9]
	(273–332)	47.9	(288)	A	[87/5][41/6]
$C_5H_8Br_4$	pentarythritol tetrabromide				[3229-00-3]
	(439–466)	61.0	(452)	A	[87/5]
$C_5H_8ClFO_2$	3-chloro-4-fluorobutyric acid, methyl ester				
	(273–333)	54.5	(288)	GS	[87/5][48/14] [72/20]
$C_5H_8ClF_3O$	2-chloro-1,1,2-trifluoroethyl isopropyl ether				
		39.2	(298)	C	[84/2]
		38.1	(313)	C	[84/2]
		37.0	(324)	C	[84/2]
$C_5H_8ClF_3O$	2-chloro-1,1,1-trifluoroethyl propyl ether				
		41.0	(298)	C	[84/7]
		39.9	(313)	C	[84/7]
		38.7	(328)	C	[84/7]
		37.5	(343)	C	[84/7]
		36.2	(358)	C	[84/7]
$C_5H_8Cl_2O$	3,3-*bis*(chloromethyl)oxetane				[78-71-7]
		56.0±0.4	(298)	C	[71/25]
$C_5H_8Cl_4$	1,1,1,5-tetrachloropentane				[2467-10-9]
	(340–432)	61.7	(355)	A	[87/5]
$C_5H_8F_2O_3$	*bis*(2-fluoroethyl)carbonate				
	(273–333)	61.5	(288)	GS	[87/5][48/14] [72/20]
$C_5H_8N_2$	1,3-dimethyl-2-imidazolidinone				[80-73-9]
	(355–498)	54.3	(375)	EB	[87/2]
	(355–498)	48.5	(450)	EB	[87/2]
$C_5H_8N_2$	1-ethylimidazole				[7098-07-9]
		66.0±3.9	(298)	C	[99/1]
$C_5H_8N_2$	1-ethylpyrazole				[2817-71-2]
		53.3±2.4	(298)	C	[99/1]
C_5H_8O	cyclopentanone				[120-93-2]
		42.1±0.2	(298)		[91/17]
		43.2±0.3		GC	[89/16]
	(317–427)	40.6	(332)		[87/7]
	(293–404)	42.6	(308)	A	[87/5]
	(338–416)	39.6	(353)	A, EB	[87/5][76/10]
		42.7±0.1	(298)	C	[68/17]
	(273–299)	43.6	(286)		[42/7]
C_5H_8O	2-ethylacrolein				[922-63-4]
		36.8±0.4	(298)	C	[96/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_5H_8O	cyclopropyl methyl ketone				[765-43-5]
	(361–387)	37.6	(374)	A	[87/5]
		39.4			[84/17]
		39.4±0.1	(298)	C	[83/6]
C_5H_8O	dihydro-2*H*-pyran				[25512-65-6]
	(273–288)	32.2	(280)	A	[87/5][72/20]
					[58/23]
C_5H_8O	*trans* 2-methyl-2-butenal				[497-03-0]
	(248–390)	39.2	(263)	A	[87/5][47/5]
C_5H_8O	3-methyl-3-buten-2-one				[814-78-8]
	(313–371)	26.2	(328)	A	[87/5][72/20]
C_5H_8O	2-methyl-3-butyn-2-ol				[115-19-5]
	(333–377)	41.0	(353)	A	[99/33]
	(294–380)	43.9	(337)	A	[87/5][72/20]
	(294–380)	49.5	(309)		[84/9][50/11]
C_5H_8O	1-penten-3-one				[1629-58-9]
	(303–376)	36.7	(318)	A	[87/5]
$C_5H_8O_2$	glutaraldehyde				[111-30-8]
	(347–382)	51.4	(362)		[98/15]
	(327–436)	56.2	(342)		[98/15]
$C_5H_8O_2$	methyl cyclopropanecarboxylate				[2868-37-3]
	(273–313)	42.6±0.4		GS	[98/22]
		41.3±0.1	(298)	C	[83/6]
$C_5H_8O_2$	acetylacetone				[123-54-6]
	(307–414)	39.2	(322)	EB	[85/4]
	(378–411)	35.2	(393)	A, I, EB	[87/5][72/38]
	(288–378)	42.7	(303)	A, EB	[87/5]
84% enol		41.8±0.2	(298)	C	[70/9]
100% enol		43.2	(298)	C	[70/9]
	(297–398)	39.4	(347)		[69/31]
$C_5H_8O_2$	*cis* 2-methyl-2-butenoic acid				[565-63-9]
	(361–458)	61.8	(376)	A	[87/5]
$C_5H_8O_2$	2-ethylpropenoic acid				[3586-58-1]
		52.1±0.4	(298)	C	[96/8]
$C_5H_8O_2$	2-ethylacrylic acid				[3586-58-1]
	(320–453)	62.2	(335)	A	[87/5][47/5]
$C_5H_8O_2$	4-oxovaleraldehyde (levulinaldehyde)				[626-96-0]
	(301–460)	48.8	(316)	A	[87/5][47/5]
$C_5H_8O_2$	3-methylcrotonic acid				[541-47-9]
	(363–473)	57.7	(378)	A	[87/5]
$C_5H_8O_2$	2-ethyl acrylate				[140-88-5]
	(243–372)	41.4	(258)		[47/5]
$C_5H_8O_2$	2-propenoic acid, ethyl ester				[140-88-5]
		39.2			[75/39]
$C_5H_8O_2$	methyl methacrylate				[80-62-6]
	(295–386)	38.8±0.1	(300)	EB	[02/16]
	(295–386)	36.3±0.2	(340)	EB	[02/16]
	(295–386)	33.3±0.4	(380)	EB	[02/16]
	(293–373)	37.9	(308)	A	[87/5]
	(318–348)	37.7	(333)		[84/31]
	(305–373)	38.0	(320)		[84/9]
		40.1			[75/39]
	(312–362)	39.0	(327)		[56/8]
$C_5H_8O_2$	*trans* 2-methyl-2-butenoic acid				[80-59-1]
	(350–453)	61.2	(365)	A	[87/5]
$C_5H_8O_2$	tetrahydro-2*H*-pyran-2-one (δ-valerolactone)				[542-28-9]
	(393–428)	52.4±0.2	(410)	EB	[91/7]
	(393–428)	60.2±1.3	(298)	EB	[91/7]
		58.0±0.4	(298)	C	[90/1]
	(342–433)	48.6	(387)		[30/6]
$C_5H_8O_2$	(*dl*) γ-valerolactone				[108-29-2]
		54.8±0.4	(298)	C	[90/1]
	(310–480)	53.5	(325)	A	[87/5][47/5]
$C_5H_8O_3$	4-oxopentanoic acid				[123-76-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(375–519)	74.4	(390)	A	[87/5][47/5]
$C_5H_8O_3$	methyl acetoacetate				[105-45-3]
	(289–446)	45.4	(304)	A	[87/5]
$C_5H_8O_4$	dimethyl malonate				[108-59-8]
	(351–460)	52.9±0.2	(360)	EB	[02/20]
	(351–460)	49.5±0.2	(400)	EB	[02/20]
	(351–460)	46.1±0.3	(440)	EB	[02/20]
	(278–308)	61.8±0.8	(293)	GS	[92/13]
	(374–620)	50.0	(497)	EB, HG	[88/3]
	(308–454)	53.7	(323)	A	[87/5]
$C_5H_8O_4$	glutaric acid				[110-94-1]
	(428–576)	98.1	(443)	A	[87/5][47/5]
$C_5H_8O_4$	diacetoxymethane				[628-51-3]
	(334–443)	50.6	(349)	A	[87/5]
C_5H_9BrO	3-bromo-2-pentanone				[815-48-5]
	(273–333)	45.2	(288)	A	[87/5][72/20]
C_5H_9Cl	cyclopentyl chloride				[930-28-9]
		38.8±0.4	(298)	C	[93/17]
	(322–387)	37.4	(337)	A, EB	[87/5][70/7]
$C_5H_9ClO_2$	isopropyl chloroacetate				[105-48-6]
	(308–425)	44.3	(323)		[28/2][84/9]
$C_5H_9ClO_2$	2-chloropropionic acid, ethyl ester				[535-13-7]
	(279–420)	46.5	(294)	A	[87/5][47/5]
$C_5H_9ClO_2$	3-chloropropionic acid, ethyl ester				[623-71-2]
	(316–358)	56.0	(331)	A	[87/5]
C_5H_9ClS	(2-chloroethyl) allyl sulfide				[19155-35-2]
	(293–333)	50.2	(308)	A, GS	[87/5][49/8] [72/20][99/16]
$C_5H_9Cl_3O$	3-chloro-2,2-*bis*(chloromethyl)-1-propanol				[813-99-0]
	(404–450)	79.6	(419)	A	[87/5]
C_5H_9FOS	4-fluorothiobutyric acid, methyl ester				[63732-24-1]
	(273–333)	52.4	(288)	A, GS	[87/5][48/14] [72/20][99/16]
$C_5H_9FO_2$	4-fluorobutyric acid, methyl ester				
	(273–333)	47.3	(288)	A, GS	[87/5][48/14] [72/20]
$C_5H_9FO_2$	isopropyl fluoroacetate				[406-06-4]
	(273–333)	44.3	(288)	A, GS	[87/5][48/14]
$C_5H_9FO_3$	3-fluoro-2-hydroxybutryic acid, methyl ester				
	(273–333)	62.3	(288)	GS	[87/5][48/14] [72/20]
C_5H_9N	pivalonitrile				[630-18-2]
	(299–365)	37.0	(318)	BG	[71/2]
	(313–371)	36.5	(328)	A, I	[87/5][67/16]
	(313–371)	37.8	(298)	I	[67/16]
C_5H_9N	2-methylbutyronitrile				[18936-17-9]
	(274–313)	42.5±0.3		GS	[94/5]
C_5H_9N	valeronitrile				[110-59-8]
	(313–418)	42.3	(328)	A	[87/5]
		44.3	(298)		[69/14]
C_5H_9NO	N-methyl-2-pyrrolidone				[872-50-4]
	(330–373)	53.1	(345)	GS	[96/12]
	(340–476)	53.4	(350)	EB	[87/2]
	(340–476)	47.7	(425)	EB	[87/2]
	(333–473)	49.3	(403)		[79/21]
C_5H_9NO	butyl isocyanate				[111-36-4]
	(273–389)	46.8	(288)	A	[87/5]
C_5H_9NO	isobutyl isocyanate				[1873-29-6]
	(273–376)	44.2	(288)	A	[87/5]
C_5H_9NO	N-methyl methacrylamide				[3887-02-3]
	(355–489)	60.9	(370)	A	[87/5]
C_5H_9NO	1-methyl-2-pyrrolidinone				[872-50-4]
	(361–477)	49.2	(376)	A	[87/5][72/20]
	(291–299)	55.3	(295)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_5H_9NO	*cis* 2-pentenoic acid amide				[15856-96-9]
	(343–384)	74.8	(358)	A	[87/5]
C_5H_9NO	α-methoxyisobutyronitrile				[76474-09-4]
	(261–285)	37.4±0.8	(298)	GS	[95/11]
C_5H_9NO	2-ethoxypropanenitrile				[14631-45-9]
	(348–445)	46.7	(363)	A, EB	[87/5][76/12]
C_5H_9NO	2-piperidone				[675-20-7]
	(293–312)	74.5	(302)	A	[87/5]
C_5H_9NO	2-ethyl-2-oxazoline				[10431-98-8]
		44.2±0.4	(298)	C	[76/27]
$C_5H_9NO_2$	N-formylmorpholine				[4394-85-8]
		56.9	(416)		[89/7]
	(375–423)	52.7	(399)	TGA	[87/18]
$C_5H_9N_3O_7$	2-ethoxy-1,1,1-trinitropropane				[26459-85-8]
	(293–310)	57.7	(301)	A	[87/5]
$C_5H_9N_3O_9$	2-hydroxymethyl-2-methyl-1,3-propanediol trinitrate				[3032-55-1]
	(299–345)	88.1	(314)	A	[87/5]
$C_5H_9N_3O_9$	1,2,5-pentanetriol trinitrate				[98071-55-7]
	(293–313)	41.7±2.1	(303)	A, GS	[87/5][57/5]
C_5H_{10}	1,1-dimethylcyclopropane				[1630-94-0]
		25.1±0.8	(298)	EB	[74/3]
C_5H_{10}	cyclopentane				[287-92-3]
	(280–331)	29.2	(295)	A	[87/5]
	(322–384)	28.0	(337)	A	[87/5]
	(381–455)	27.2	(396)	A	[87/5]
	(452–511)	27.5	(467)	A	[87/5]
		28.5	(298)		[71/28]
		28.5±0.1	(298)	C	[59/8]
		27.9±0.1	(310)	C	[59/8]
		27.3±0.1	(322)	C	[59/8]
		27.4	(323)		[46/11]
	(289–323)	29.0	(304)	MM	[45/2]
		29.2	(298)	C	[43/4]
C_5H_{10}	1-pentene				[109-67-1]
	(218–311)	29.1	(233)	A	[87/5]
	(286–304)	26.7	(295)	MM	[50/6]
		25.5	(298)		[71/28]
	(273–334)	26.9	(288)		[49/12]
		26.2±0.1	(284)	C	[49/12]
		25.5±0.1	(298)	C	[49/12]
		25.2±0.1	(303)	C	[49/12]
C_5H_{10}	*cis* 2-pentene				[627-20-3]
	(234–318)	29.8	(249)	A	[87/5]
		26.8	(298)		[71/28]
	(274–341)	28.1	(289)	EB	[50/8]
C_5H_{10}	*trans* 2-pentene				[646-04-8]
	(251–341)	28.8	(266)	A	[87/5]
		26.7	(298)		[71/28]
	(274–341)	28.0	(289)	EB	[50/8]
C_5H_{10}	2-methyl-1-butene				[563-46-2]
	(240–336)	28.5	(255)	A	[87/5]
		25.9	(298)		[71/28]
	(274–336)	27.3	(289)		[49/12]
		25.9±0.1	(298)	C	[49/12]
		25.5±0.1	(304)	C	[49/12]
C_5H_{10}	3-methyl-1-butene				[563-45-1]
	(237–324)	26.3	(252)	A	[87/5]
		23.9	(298)		[71/28]
	(273–324)	25.4	(288)	EB	[50/8]
C_5H_{10}	2-methyl-2-butene				[515-35-9]
	(271–343)	28.4	(286)	A	[87/5]
		27.1	(298)		[71/28]
	(276–344)	28.3	(291)		[49/12]
		27.5±0.1	(290)	C	[49/12]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		27.1±0.1	(298)	C	[49/12]
		26.3±0.1	(312)	C	[49/12]
$C_5H_{10}Br_2$	1,1-dibromopentane				[13320-56-4]
	(360–501)	48.8	(375)	A, EST	[87/5][56/16] [72/20]
$C_5H_{10}Br_2$	1,2-dibromopentane				[3234-49-9]
	(348–465)	46.5	(363)	A	[87/5]
	(350–450)	49.0	(298)		[75/15][91/2]
		49.2±0.8	(298)	EB	[75/15]
	(292–448)	48.8	(307)	A	[87/5][47/5]
$C_5H_{10}Br_2$	1,4-dibromopentane				[626-87-9]
	(377–524)	51.8	(392)	A	[87/5][72/20]
$C_5H_{10}Br_2$	1,5-dibromopentane				[111-24-0]
	(396–549)	54.4	(411)	A	[87/5][72/20]
$C_5H_{10}Cl_2$	1,1-dichloropentane				[820-55-3]
	(340–410)	44.3	(298)	A	[87/12][91/2]
	(325–457)	42.0	(340)	A, EST	[87/5][56/16] [72/20]
$C_5H_{10}Cl_2$	1,2-dichloropentane				[1674-33-5]
	(330–420)	44.4	(298)		[91/2]
	(332–418)	41.9	(347)	A	[87/5]
		43.8±0.7	(298)	EB	[75/16]
$C_5H_{10}Cl_2$	1,4-dichloropentane				[626-92-6]
	(350–440)	48.9	(298)		[91/2]
	(348–443)	45.0	(363)	A	[87/5]
		48.1±0.8	(298)	EB	[75/16]
$C_5H_{10}Cl_2$	1,5-dichloropentane				[628-76-2]
	(360–450)	52.2	(298)		[91/2]
	(362–453)	47.2	(377)	A	[87/5]
		51.3±0.8	(298)	EB	[75/16]
$C_5H_{10}Cl_2O$	(2-chloroethyl) (2-chloroisopropyl) ether				[52250-75-6]
	(297–453)	49.7	(312)	A	[87/5][47/5]
$C_5H_{10}Cl_2O$	(2-chloroethyl) (2-chloropropyl) ether				[42434-29-7]
	(302–467)	49.3	(317)	A	[87/5][47/5]
$C_5H_{10}Cl_2O_2$	*bis*(2-chloroethoxy) methane				[111-91-1]
	(326–488)	54.2	(341)	A	[87/5][47/5]
$C_5H_{10}F_2$	1,1-difluoropentane				[62127-40-6]
	(268–378)	34.4	(283)	A, EST	[87/5][56/16] [72/20]
$C_5H_{10}F_2$	2,2-difluoropentane				[371-65-3]
	(262–367)	33.7	(277)	A	[87/5][72/20]
$C_5H_{10}F_2$	3,3-difluoropentane				[358-03-2]
	(262–368)	33.8	(277)	A	[87/5][72/20]
$C_5H_{10}F_2O_2$	*bis*(2-fluoroethoxy) methane				[373-40-0]
	(273–333)	52.3	(288)	A, GS	[87/5][48/14] [72/20]
$C_5H_{10}N_2$	3-(dimethylamino)propionitrile				[1738-25-6]
		42.2±0.1			[92/20]
	(330–445)	45.9	(345)	A	[87/5]
	(331–407)	52.4	(346)	A	[87/5]
	(290–317)	44.1±0.2			[84/28]
		47.3			[77/29]
$C_5H_{10}N_2O$	1-nitrosopiperidine				[100-75-4]
	(333–383)	47.7	(348)	A	[87/5]
$C_5H_{10}N_2O_6$	1,5-pentanediol dinitrate				[3457-92-9]
	(293–313)	78.9±5.9	(303)	A, GS	[87/5][57/5] [72/20]
$C_5H_{10}N_2O_6$	2,4-pentanediol dinitrate				[25385-63-1]
	(293–313)	60.6±5.9	(303)	A, GS	[87/5][57/5] [72/20]
$C_5H_{10}N_2O_6$	1-(methoxymethoxy)-2,2-dinitropropane				[67727-92-8]
	(293–333)	71.3	(308)	A	[87/5]
$C_5H_{10}O$	allyl ethyl ether				[557-31-3]
	(244–401)	34.6	(259)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_5H_{10}O$	1-penten-3-ol				[616-25-1]
		49.9±0.1	(313)	C	[96/9]
		48.4±0.1	(328)	C	[96/9]
		46.8±0.1	(343)	C	[96/9]
$C_5H_{10}O$	3,3-dimethyl-2-propen-1-ol				
	(348–372)	48.7	(360)		[89/8]
$C_5H_{10}O$	2-methyl-3-buten-2-ol				[115-18-4]
	(290–372)	43.1±0.1	(331)		[88/4]
$C_5H_{10}O$	3-buten-3-methyl-1-ol				[763-32-6]
	(338–409)	55.6	(353)	A	[87/5]
$C_5H_{10}O$	(*dl*) 3-buten-3-methyl-2-ol				
	(358–379)	41.0	(368)	A	[87/5]
$C_5H_{10}O$	cyclopentanol				[96-41-3]
	(323–373)	57.1	(298)	CGC	[95/21]
	(346–437)	52.7	(361)	A, EB	[87/7]
	(283–321)	56.1	(298)	A	[87/5]
	(283–323)	56.4	(298)	A	[87/5]
	(279–314)	57.1	(294)		[75/1]
		57.5±0.2	(298)	C	[68/17]
		57.5±0.3	(298)	C	[66/2]
$C_5H_{10}O$	tetrahydropyran				[142-68-7]
	(335–412)	33.2	(350)		[00/12]
	(273–362)	35.0	(288)	A	[87/5]
	(273–288)	35.0	(281)		[72/20][58/23]
$C_5H_{10}O$	2-methyltetrahydrofuran				[96-47-9]
	(283–353)	34.0	(298)	A	[87/5]
		33.7	(298)		[70/36]
$C_5H_{10}O$	3-methyl-2-butanone				[563-80-4]
	(311–369)	35.5	(326)	A	[87/5]
	(363–415)	33.8	(378)	A	[87/5]
	(405–500)	32.6	(420)	A	[87/5]
		36.8	(298)	C	[83/3]
	(328–377)	35.0	(343)		[87/5][75/8]
		36.9	(298)		[75/8]
		35.0±0.1	(327)	C	[67/39]
		33.8±0.1	(346)	C	[67/39]
		32.3±0.1	(367)	C	[67/39]
$C_5H_{10}O$	2-pentanone				[107-87-9]
	(336–422)	36.1	(351)	A	[87/5]
	(416–501)	33.7	(431)	A	[87/5]
	(487–561)	33.3	(502)	A	[87/5]
		38.4	(298)	C	[83/3]
		38.3±0.3	(298)	GCC	[79/7]
		38.4	(298)		[75/8]
	(268–373)	39.5	(283)	EB	[66/12]
	(329–385)	36.5	(344)	A, GS, EB	[87/5][75/8] [65/7][72/20]
		36.1±0.1	(335)	C	[61/17]
		34.4±0.1	(360)	C	[61/17]
		33.4±0.1	(375)	C	[61/17]
		32.8±0.1	(386)	C	[61/17]
		32.2±0.1	(394)	C	[61/17]
$C_5H_{10}O$	3-pentanone				[96-22-0]
	(290–375)	35.9±0.2	(332)		[88/4]
	(329–426)	36.6	(344)	A	[87/5]
	(421–502)	33.7	(436)	A	[87/5]
	(494–561)	33.3	(509)	A	[87/5]
		38.5	(298)	C	[83/3]
		38.7±0.3	(298)	GCC	[79/7]
		38.6	(298)		[75/8]
		36.1±0.1	(335)	C	[67/39]
		34.9±0.1	(354)	C	[67/39]
		33.5±0.1	(375)	C	[67/39]
	(329–384)	36.6	(344)	A, GS, EB	[87/5][75/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[65/7][72/20]
	(283–323)	36.9	(303)		[37/9]
$C_5H_{10}O$	pentanal				[110-62-3]
	(313–353)	38.3	(298)	CGC	[95/21]
	(290–385)	U50.0	(305)	A	[87/5]
		38.1±0.1	(298)		[81/18]
	(305–377)	37.3	(320)		[79/15]
$C_5H_{10}O$	pivaldehyde				[630-19-3]
	(308–336)	34.2	(322)		[89/2]
$C_5H_{10}O$	3,3-dimethyloxetane				[6921-35-3]
		33.9±0.3	(298)	C	[71/25]
$C_5H_{10}OS$	S-propyl thiolacetate				[2307-10-0]
		44.1±0.2	(298)	C	[66/2]
$C_5H_{10}OS$	S-isopropyl thiolacetate				[926-73-8]
		42.3±0.2	(298)	C	[66/2]
$C_5H_{10}OS$	1-(methylthio)-2-(vinyloxy)ethane				[6607-53-0]
	(316–347)	47.5	(331)	A	[87/5][99/16]
$C_5H_{10}O_2$	tetrahydrofurfuryl alcohol				[97-99-4]
	(393–453)	46.2	(408)	A	[87/5]
	(333–443)	46.5	(388)		[79/21]
$C_5H_{10}O_2$	2,2-dimethyl-1,3-dioxolane				[2916-31-6]
	(278–318)	41.1±0.2		GS	[98/21][02/32]
$C_5H_{10}O_2$	4-methyl-1,3-dioxane				[1120-97-4]
	(273–313)	43.7±0.3		GS	[98/21][02/32]
$C_5H_{10}O_2$	1-methoxy-2-butanone				[50741-70-3]
	(297–408)	44.9	(312)	A	[87/5][34/3]
					[72/20]
$C_5H_{10}O_2$	3-hydroxy-3-methyl-2-butanone				[115-22-0]
	(317–419)	41.1	(332)	A	[87/5][72/20]
					[50/11]
$C_5H_{10}O_2$	4-hydroxy-3-methyl-2-butanone				[3393-64-4]
	(375–528)	58.3	(390)	A	[87/5][72/20]
	(317–458)	59.0	(332)		[47/5]
$C_5H_{10}O_2$	butyl formate				[592-84-7]
	(295–380)	37.9	(310)	A	[87/5]
		41.3±0.1	(298)	C	[80/13]
		40.1±0.1	(313)	C	[80/13]
		39.0±0.1	(328)	C	[80/13]
		38.7±0.1	(346)	C	[76/14]
		38.1±0.1	(355)	C	[76/14]
		37.3±0.1	(363)	C	[76/14]
$C_5H_{10}O_2$	sec butyl formate				[589-40-2]
	(238–367)	37.7	(253)	A	[87/5]
$C_5H_{10}O_2$	ethyl propionate				[105-37-3]
	(315–420)	36.7	(330)		[97/11]
	(372–538)	34.4	(387)	A	[87/5]
		39.3±0.1	(298)	C	[80/13]
		38.2±0.1	(313)	C	[80/13]
		36.6±0.1	(336)	C	[77/12]
		36.0±0.1	(344)	C	[77/12]
		35.5±0.1	(351)	C	[77/12]
		34.5±0.1	(363)	C	[77/12]
		39.1±0.1	(298)	C	[72/3]
	(306–372)	38.2	(321)	A	[87/5][65/3]
					[72/20]
$C_5H_{10}O_2$	isobutyl formate				[542-55-2]
	(371–507)	36.6	(386)	A	[87/5]
	(240–372)	38.6	(255)	A	[87/5][47/5]
$C_5H_{10}O_2$	isopropyl acetate				[108-21-4]
	(313–353)	37.0	(298)	CGC	[95/21]
		37.2±0.2	(298)	C	[66/2]
	(235–362)	38.8	(250)	A	[87/5][47/5]
	(273–363)	36.3	(288)	A	[29/5]
$C_5H_{10}O_2$	methyl butyrate				[623-42-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		36.9	(350)		[02/27]
		41.1±0.2	(284)		[02/27]
		40.6±0.2	(298)		[02/27]
	(349–384)	36.4	(364)		[90/10]
		39.0±0.4	(298)	GC	[87/17]
	(375–545)	34.2	(390)	A	[87/5]
		39.8±0.3	(298)	GCC	[80/5]
		39.3±0.2	(298)	C	[79/1]
	(246–375)	42.8	(261)	A	[87/5][47/5]
$C_5H_{10}O_2$	methyl isobutyrate				[547-63-7]
	(366–533)	33.7	(381)	A	[87/5]
		37.3	(298)		[U/1][85/6]
	(239–366)	40.1	(254)		[87/5][47/5]
$C_5H_{10}O_2$	propyl acetate				[109-60-4]
	(313–363)	37.7	(298)	CGC	[95/21]
	(333–372)	37.0	(348)		[93/8]
	(374–542)	34.8	(389)	A	[87/5]
	(322–383)	38.1	(327)	DTA	[80/8]
		39.8±0.1	(298)	C	[80/13]
		38.6±0.1	(313)	C	[80/13]
		35.3±0.1	(343)	C	[80/13]
		36.9±0.1	(336)	C	[77/12]
		36.4±0.1	(344)	C	[77/12]
		35.8±0.1	(351)	C	[77/12]
		34.8±0.1	(363)	C	[77/12]
		36.9	(335)		[76/8]
		33.9	(375)		[76/8]
		39.1±0.2	(298)	C	[66/2]
	(312–374)	38.2	(327)	A	[87/5][65/3] [72/20]
$C_5H_{10}O_2$	trimethylacetic acid (pivalic acid)				[75-98-9]
	(344–472)	57.6±0.2	(320)	EB	[02/16]
	(344–472)	54.4±0.2	(360)	EB	[02/16]
	(344–472)	50.9±0.2	(400)	EB	[02/16]
	(344–472)	47.0±0.4	(440)	EB	[02/16]
$C_5H_{10}O_2$	valeric acid (pentanoic acid)				[109-52-4]
	(283–313)	63.0±9.5	(298)	GS	[00/6]
	(353–393)	65.9	(298)	CGC	[95/21]
	(373–465)	57.9	(388)	EB	[87/9]
	(375–523)	58.0	(390)	A	[87/5]
	(243–266)	62.4±3	(298)	TE	[79/4]
$C_5H_{10}O_2$	3-methylbutanoic acid (isovaleric acid)				[503-74-2]
	(293–323)	60.7±0.3	(308)	GS	[00/6]
	(293–323)	61.2±0.3	(298)	GS	[00/6]
	(364–464)	55.8	(379)	A, EB	[87/9]
	(307–448)	56.6	(322)	A	[87/5]
	(243–259)	57.5±3	(298)	TE	[79/4]
monomer		46.9±0.2	(298)	C	[70/8]
	(360–377)	45.9	(375)		[1894/1]
$C_5H_{10}O_3$	diethyl carbonate				[105-58-8]
	(352–403)	39.7	(367)		[02/31]
	(308–400)	40.9	(323)	A	[87/5]
		43.6±0.2	(298)	C	[73/3]
	(308–368)	39.1		MM	[71/1]
	(263–399)	44.3	(278)		[47/5]
$C_5H_{10}O_3$	ethylene glycol methyl ethyl acetate				[110-49-6]
		50.3±0.1	(298)	C	[70/17]
	(343–417)	44.3	(358)	A	[87/5][57/6] [72/20]
$C_5H_{10}O_3$	(*dl*) ethyl lactate				[97-64-3]
	(308–426)	49.2	(323)	A	[87/5]
	(324–427)	51.3	(339)	A	[87/5]
$C_5H_{10}O_3$	3-hydroxypropionic acid, ethyl ester				[623-72-3]
	(338–356)	62.2	(347)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_5H_{10}O_3$	3-methoxypropionic acid, methyl ester				[3852-09-3]
	(350–438)	43.4	(370)	A	[87/5]
$C_5H_{10}O_3$	1,3,6-trioxacyclooctane				[1779-19-7]
		48.8±0.2	(298)	C	[82/9]
$C_5H_{10}O_4$	glycerol, 1-monoacetate				[106-61-6]
	(385–458)	74.0	(400)	A	[87/5][72/20]
$C_5H_{10}S$	allyl ethyl sulfide				[5296-62-8]
	(300–327)	38.9	(313)	A, EB	[87/5][62/16]
					[99/16]
	(300–327)	39.3	(298)		[62/16]
$C_5H_{10}S$	cyclopentanethiol				[1679-07-8]
	(354–446)	38.2	(369)		[99/16]
	(348–446)	38.4	(363)	A, EB	[87/5][61/7]
					[66/5]
		37.9±0.1	(361)	C	[61/7]
		36.7±0.1	(381)	C	[61/7]
		35.3±0.1	(405)	C	[61/7]
$C_5H_{10}S$	2-methyltetrahydrothiophene				[1795-09-1]
	(303–433)	40.6	(318)		[99/16]
		41.8	(298)		[71/28]
		41.3±0.1	(298)		[72/11][66/5]
	(335–447)	39.0	(350)	A, EB	[87/5][66/5]
	(341–411)	38.7	(356)		[52/9]
$C_5H_{10}S$	3-methyltetrahydrothiophene				[4740-00-5]
	(307–439)	41.3	(322)		[99/16]
		42.7	(298)		[71/28]
		42.1±0.1	(298)		[72/11][66/5]
	(340–453)	39.6	(355)	A, EB	[87/5][66/5]
	(346–422)	39.3	(361)		[52/9]
$C_5H_{10}S$	pentamethylene sulfide				[1613-51-0]
	(310–443)	41.4	(325)		[99/16]
		42.8	(298)		[71/28]
	(347–423)	39.5	(362)	A, EB	[87/5][52/9]
$C_5H_{11}Br$	1-bromopentane				[110-53-2]
	(323–363)	40.9	(298)	CGC	[95/21]
		41.4±0.1	(298)	C	[68/1]
		41.1±0.1	(298)	C	[66/2]
	(293–443)	41.0	(308)	A, EST	[87/5][61/13]
					[72/20]
$C_5H_{11}Br$	(*dl*) sec-pentylbromide, 2-bromopentane				[107-81-3]
	(303–432)	37.5	(318)	A	[87/5][72/20]
$C_5H_{11}Br$	2-bromopentane				[107-81-3]
	(323–363)	38.5	(298)	CGC	[95/21]
$C_5H_{11}Br$	3-bromopentane				[1809-10-5]
	(304–434)	37.7	(319)	A	[87/5][72/20]
$C_5H_{11}Br$	1-bromo-2,2-dimethylpropane				[630-17-1]
	(293–420)	35.6	(308)	A	[87/5][72/20]
$C_5H_{11}Br$	1-bromo-2-methylbutane				[10422-35-2]
	(306–436)	37.9	(321)	A	[87/5][72/20]
$C_5H_{11}Br$	1-bromo-3-methylbutane				[107-82-4]
	(306–436)	37.9	(321)	A	[87/5][72/20]
	(253–393)	41.0	(268)		[47/5]
$C_5H_{11}Br$	2-bromo-2-methylbutane				[507-36-8]
	(295–422)	36.4	(310)	A	[87/5][72/20]
$C_5H_{11}Br$	2-bromo-3-methylbutane				[18295-25-5]
	(301–430)	37.2	(316)	A	[87/5][72/20]
$C_5H_{11}Cl$	1-chloropentane				[543-59-9]
	(313–353)	38.8	(298)	CGC	[95/21]
		38.2	(298)	C	[81/4]
		37.3	(313)	C	[81/4]
		36.5	(328)	C	[81/4]
		35.6	(343)	C	[81/4]
		34.6	(358)	C	[81/4]
		34.0	(363)	C	[81/4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		38.2±0.1	(298)	C	[68/1]
	(277–421)	38.7	(292)	A, EST	[87/5][61/13] [72/20]
	(283–323)	36.2	(303)		[37/9]
$C_5H_{11}Cl$	2-chloropentane				[625-29-6]
		36.0	(298)	C	[81/4]
		35.2	(313)	C	[81/4]
		34.4	(328)	C	[81/4]
		33.5	(358)	C	[81/4]
		31.9	(368)	C	[81/4]
	(289–409)	36.2	(304)	A	[87/5][72/20]
$C_5H_{11}Cl$	3-chloropentane				[616-20-6]
	(289–410)	36.5	(304)	A	[87/5][72/20]
$C_5H_{11}Cl$	1-chloro-2,2-dimethylpropane				[753-89-9]
	(279–395)	34.9	(294)	A	[87/5][72/20]
$C_5H_{11}Cl$	(*dl*) 1-chloro-2-methylbutane				[616-13-7]
	(300–374)	35.4	(315)	A	[87/5][72/20]
$C_5H_{11}Cl$	2-chloro-2-methylbutane				[594-36-5]
	(280–396)	35.0	(295)	A	[87/5][72/20]
$C_5H_{11}Cl$	2-chloro-3-methylbutane				[631-65-2]
	(285–405)	35.9	(300)	A	[87/5][72/20]
$C_5H_{11}Cl$	1-chloro-3-methylbutane				[107-84-6]
	(313–353)	38.1	(298)	CGC	[95/21]
		36.2	(298)	C	[81/4]
		35.4	(313)	C	[81/4]
		34.6	(328)	C	[81/4]
		33.7	(343)	C	[81/4]
		32.8	(358)	C	[81/4]
		32.3	(368)	C	[81/4]
$C_5H_{11}ClO_2S$	1-pentanesulfonyl chloride				[6303-18-0]
	(293–387)	58.5	(308)		[99/16]
	(387–492)	55.1	(402)		[99/16]
	(263–293)	60.5	(278)	A	[87/5][99/16]
$C_5H_{11}Cl_2N$	N-methyl-*bis*(2-chloroethyl)amine				[51-75-2]
	(273–333)	54.6	(288)	A	[87/5]
$C_5H_{11}F$	1-fluoropentane				[592-50-7]
	(245–373)	33.7	(260)	EST	[87/5][61/13] [72/20]
$C_5H_{11}F$	1-fluoro-2-methylbutane				[10086-64-3]
	(287–329)	30.7	(302)	A	[87/5][72/20]
$C_5H_{11}F$	2-fluoro-2-methylbutane				[661-53-0]
	(249–341)	31.8	(264)	A	[87/5][72/20]
$C_5H_{11}I$	1-iodopentane				[628-17-1]
	(313–353)	44.4	(298)	CGC	[95/21]
		45.3±0.1	(298)	C	[68/1]
	(312–473)	43.1	(327)	A, EST	[87/5][61/13] [72/20]
$C_5H_{11}I$	1-iodo-2-methylbutane				[616-14-8]
	(339–406)	39.8	(354)	A	[87/5][72/20]
$C_5H_{11}I$	1-iodo-3-methylbutane				[541-28-6]
	(313–353)	42.2	(298)	CGC	[95/21]
	(270–422)	43.5	(285)	A	[87/5][47/5]
$C_5H_{11}I$	2-iodo-2-methylbutane				[594-38-7]
	(308–398)	40.4	(323)	A	[87/5][72/20]
$C_5H_{11}N$	cyclopentylamine				[1003-03-8]
	(317–419)	38.3	(332)	EB	[87/5][75/5]
	(317–419)	40.2±0.4	(298)	EB	[75/7]
$C_5H_{11}N$	1-methylpyrrolidine				[120-94-5]
	(270–298)	35.0±0.7	(284)	GS	[98/12]
	(270–298)	34.2±0.7	(298)	GS	[98/12]
	(273–315)	33.7	(288)	A	[87/5]
$C_5H_{11}N$	piperidine				[110-89-4]
		36.6	(338)		[88/7]
		35.3	(357)		[88/7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(315–417)	37.6	(330)	A, EB, IPM	[87/5][68/4]
$C_5H_{11}NO$	N,N-diethylformamide				[617-84-5]
		50.3	(298)		[85/7][85/6]
	(303–363)	48.9	(318)	A	[87/5][68/3]
$C_5H_{11}NO$	N-isopropylacetamide				[1118-69-0]
		66.4±0.3	(298)	C	[84/6]
$C_5H_{11}NO$	N-propylacetamide				[5331-48-6]
		69.8±0.2	(298)	C	[84/6]
$C_5H_{11}NO$	N,N-dimethylpropionamide				[758-96-3]
	(326–424)	53.5	(341)	A	[87/5]
		52.9			[77/29]
$C_5H_{11}NO$	N-methyl-2-methylpropionamide				
		67.1±0.2	(298)	C	[84/6]
$C_5H_{11}NO$	N-methylmorpholine				[109-02-4]
	(274–304)	40.2±0.3	(288)	GS	[98/13]
	(274–304)	39.6±0.3	(298)	GS	[98/13]
	(323–363)	33.6	(343)	TGA	[87/18]
	(297–389)	38.4	(312)	A	[87/5]
	(276–390)	40.0	(291)	A	[87/5]
$C_5H_{11}NO$	1-(dimethylamino)-2-propanone				[15364-56-4]
	(298–338)	43.6±0.3	(298)	GS	[94/3]
$C_5H_{11}NO$	3-pentanone oxime				[1188-11-0]
	(318–425)	55.8	(333)	A	[87/5]
$C_5H_{11}NO_2$	methyl 2-(N,N-dimethylamino)ethanoate				
	(278–308)	43.9±0.4	(293)	GS	[92/13]
$C_5H_{11}NO_2$	1-nitropentane				[628-05-7]
	(278–318)	50.3±0.2	(298)	GS	[97/5]
$C_5H_{11}NO_2$	isobutyl carbamate				[543-28-2]
	(356–479)	58.8	(371)	A	[87/5][47/5]
$C_5H_{11}NO_2$	N,N-dimethyl lactamide				[31502-31-5]
	(351–417)	73.7	(366)	A	[87/5]
$C_5H_{11}NO_3$	isopentyl nitrate				[543-87-3]
	(278–421)	47.0	(293)	A	[87/5][47/5]
$C_5H_{11}P$	phosphorinane				[4743-40-2]
	(294–345)	39.9	(309)	A, T	[87/5][66/9]
C_5H_{12}	pentane				[109-66-0]
	(308–423)	26.7	(323)		[02/34]
		26.4	(298)		[94/12]
	(223–352)	29.8	(238)	A	[87/5]
	(143–223)	32.3	(208)	A	[87/5]
	(350–422)	26.1	(365)	A	[87/5]
	(418–470)	26.2	(433)	A	[87/5]
		26.6±0.1	(298)	C	[82/6]
		26.4	(298)	C	[81/9]
		25.5	(310)		[77/31]
		23.0	(350)		[77/31]
		19.7	(390)		[77/31]
		15.1	(430)		[77/31]
		8.5	(460)		[77/31]
	(216–296)	26.2	(298)		[75/32]
	(269–341)	27.9	(284)	EB	[87/5][74/11]
		26.4	(298)		[71/28]
		26.4	(298)	C	[47/7]
	(286–310)	27.4	(298)	MM	[45/2]
		26.2	(298)		[40/15]
C_5DH_{11}	1-deuteropentane				
	(223–303)	26.2	(298)		[75/32]
C_5DH_{11}	3-deuteropentane				
	(213–294)	26.3	(298)		[75/32]
C_5D_{12}	pentane—d_{12}				[2031-90-5]
	(205–298)	26.0	(298)		[75/32]
C_5H_{12}	2,2-dimethylpropane (neopentane)				[463-82-1]
	(268–313)	24.0	(283)	A	[87/5]
	(312–385)	23.1	(327)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(382–433)	23.1	(397)	A	[87/5]
		21.8	(298)	C	[81/9]
		22.2	(290)		[77/32]
		19.5	(330)		[77/32]
		16.2	(370)		[77/32]
		11.1	(410)		[77/32]
	(257–293)	24.3	(272)		[75/26][84/9]
	(343–433)	22.8	(358)		[73/28][84/9]
		21.85	(298)		[71/28]
		22.8±0.1	(283)		[36/8]
C_5H_{12}	2-methylbutane (isopentane)				[78-78-4]
	(255–323)	26.9	(270)		[91/15]
	(216–323)	28.5	(231)	A	[87/5]
	(300–460)	25.2	(315)	A	[87/5]
	(320–391)	25.2	(335)	A	[87/5]
	(385–416)	24.8	(400)	A	[87/5]
	(412–460)	25.3	(427)	A	[87/5]
		24.4	(310)		[77/33]
		21.5	(350)		[77/33]
		18.0	(390)		[77/33]
		12.9	(430)		[77/33]
		24.8	(298)		[71/28]
	(190–300)	30.2	(205)		[47/5]
	(289–301)	26.2	(295)	MM	[45/2]
		25.0	(298)	C	[42/5]
$C_5H_{12}ClF_3N_2S$	chloro*bis*(N-methylmethanaminato)(trifluoromethyl) sulfur				[63265-71-4]
		38.1	(368)	I	[77/15]
$C_5H_{12}ClF_3N_2OS$	chloro*bis*(N-methylmethanaminato)oxo(trifluoromethyl) sulfur				[63265-73-6]
		40.2	(477)	I	[77/15]
$C_5H_{12}NO_3PS_2$	phosphorodithioic acid, O,O-dimethyl-S-[2-(methylamino)-2-oxoethyl] ester				[60-51-5]
	(283–390)	95.0	(298)	A	[87/5]
$C_5H_{12}N_2$	methyl butyldiazene				[4426-46-4]
		36.4±0.2	(298)	C	[78/3]
$C_5H_{12}N_2$	N-methylpiperazine				[109-01-3]
	(274–319)	46.7	(289)	A	[87/5]
$C_5H_{12}N_2O$	1,1,3,3-tetramethylurea				[632-22-4]
	(320–450)	41.7	(450)	A, EB	[87/2]
	(320–450)	52.2	(325)	A, EB	[87/2]
$C_5H_{12}N_2S$	1,3-diethylthiourea				[105-55-5]
	(351–384)	101±3.0	(368)	ME, TE	[94/21]
$C_5H_{12}O$	1-methoxybutane				[628-28-4]
	(293–367)	32.5	(308)	A	[87/5]
		32.4	(398)	C	[80/3]
	(265–367)	32.4	(298)		[76/2]
	(265–367)	29.6	(343)		[76/2]
		32.5±0.1	(298)	C	[75/3]
	(296–342)	32.4	(311)	EB	[69/15]
$C_5H_{12}O$	1-ethoxypropane				[628-32-0]
	(264–359)	33.0	(279)	A	[87/5][76/2]
		31.4	(298)	C	[80/3]
	(264–359)	31.4	(298)		[76/2]
	(264–359)	29.0	(336)		[76/2]
		31.4±0.1	(298)	C	[75/3]
	(293–335)	31.6	(308)		[69/15]
$C_5H_{12}O$	ethyl isopropyl ether				[625-54-7]
		30.0	(298)	C	[80/3]
$C_5H_{12}O$	methyl *tert*-butyl ether				[1634-04-4]
	(300–328)	29.9	(314)		[02/26]
	(315–365)	29.6	(330)		[98/9]
	(300–411)	31.2	(315)	EB	[94/10]
	(287–326)	30.4	(302)		[91/3]
		29.8	(298)	C	[80/3]
	(287–351)	30.2	(302)	A	[87/5][76/2]
		29.6	(298)		[76/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		27.9	(328)		[76/2]
		30.4±0.1	(298)	C	[75/3]
$C_5H_{12}O$	1-pentanol				[71-41-0]
		44.4	(411)		[00/26]
		40.1	(448)		[00/26]
		36.1	(473)		[00/26]
		31.7	(498)		[00/26]
		26.4	(523)		[00/26]
		22.0	(548)		[00/26]
		14.1	(573)		[00/26]
		7.1	(586)		[00/26]
		43.5			[99/32]
	(323–373)	57.8	(298)	CGC	[95/21]
	(323–373)	57.4	(298)	CGC	[95/21]
	(335–410)	51.5	(350)		[94/7]
	(388–420)	47.2	(403)	A	[87/5]
	(326–411)	54.3	(341)	A	[87/5]
	(408–441)	45.4	(423)	A	[87/5]
		55.7±0.2	(313)	C	[85/1]
		54.4±0.2	(328)	C	[85/1]
		53.0±0.2	(343)	C	[85/1]
		51.2±0.2	(358)	C	[85/1]
	(343–303)	55.4	(298)		[83/14]
	(310–411)	55.0	(325)		[73/26]
		50.5±0.1	(362)	C	[70/20]
		49.2±0.1	(374)	C	[70/20]
		47.0±0.1	(392)	C	[70/20]
		44.4±0.1	(411)	C	[70/20]
	(347–429)	51.6	(362)	EB	[87/5][70/2]
	(307–411)	56.2	(322)	DTA	[69/5]
		56.9±0.2	(298)	C	[66/2]
$C_5H_{12}O$	2-pentanol				[6032-29-7]
	(323–373)	53.6	(298)	CGC	[95/21]
	(274–393)	58.9	(289)	A	[87/5]
		54.2±0.2	(298)	C	[85/1]
		52.7±0.2	(313)	C	[85/1]
		50.9±0.2	(328)	C	[85/1]
		49.0±0.2	(343)	C	[85/1]
		46.9±0.1	(358)	C	[85/1]
		45.4±0.1	(368)	C	[85/1]
	(322–393)	50.3	(337)		[84/10]
	(298–393)	54.0	(313)		[73/26]
		53.0	(298)	C	[63/2]
	(298–383)	53.7	(313)		[35/6][84/9]
$C_5H_{12}O$	3-pentanol				[584-02-1]
	(245–390)	59.9	(260)	A	[87/5]
	(317–389)	49.6	(332)		[84/10]
	(279–318)	53.6	(294)		[75/1]
	(294–389)	50.2	(319)		[73/26]
		52.9	(298)	C	[63/2]
$C_5H_{12}O$	2-methyl-1-butanol				[137-32-6]
	(330–405)	51.2	(345)		[94/7]
	(338–402)	49.8	(353)	A	[87/5]
	(317–403)	53.9	(332)	A	[87/5]
	(249–319)	58.5	(264)	A	[87/5][79/16]
	(307–403)	56.1	(322)		[73/26]
		54.1	(298)	C	[63/2]
	(302–410)	43.4	(317)		[57/13][84/9]
	(298–393)	56.7	(313)		[84/9][35/6]
$C_5H_{12}O$	2-methyl-2-butanol				[75-85-4]
	(274–306)	51.5±0.3	(298)	GS	[01/7]
	(323–373)	50.5	(298)	CGC	[95/21]
	(308–375)	47.3	(323)		[94/7]
	(280–375)	49.0	(295)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(323–376)	45.8	(338)	A	[87/5]
		50.1±0.2	(298)	C	[85/1]
		48.4±0.2	(313)	C	[85/1]
		46.4±0.2	(328)	C	[85/1]
		44.2±0.1	(343)	C	[85/1]
		42.0±0.1	(358)	C	[85/1]
		40.3±0.1	(368)	C	[85/1]
	(298–375)	52.8	(313)		[73/26]
		49.2	(298)	C	[63/2]
	(298–364)	48.5	(313)		[35/6]
$C_5H_{12}O$	3-methyl-1-butanol				[123-51-3]
	(323–373)	55.3	(298)	CGC	[95/21]
	(325–385)	47.2	(340)		[94/7]
	(303–412)	57.1	(318)		[87/5]
		55.2±0.2	(303)	C	[85/1]
		54.2±0.2	(313)	C	[85/1]
		52.9±0.2	(328)	C	[85/1]
		51.4±0.2	(343)	C	[85/1]
		49.7±0.2	(358)	C	[85/1]
	(298–426)	56.5	(313)		[73/26]
		54.3	(298)	C	[63/2]
$C_5H_{12}O$	3-methyl-2-butanol				[598-75-4]
	(280–301)	51.6±0.3	(298)	GS	[01/7]
	(280–375)	49.0	(295)	A	[87/5]
	(298–384)	52.7	(313)		[73/26]
		51.7	(298)	C	[63/2]
$C_5H_{12}O$	(*dl*) 3-methyl-2-butanol				[598-75-4]
	(293–385)	46.4	(308)	A	[87/5]
$C_5H_{12}O$	2,2-dimethyl-1-propanol				[75-84-3]
	(274–312)	51.8±0.3	(298)	GS,B	[01/7]
	(330–387)	47.5	(345)	A	[87/5]
$C_5H_{12}O_2$	1-ethoxy-2-methoxyethane				[5137-45-1]
		39.8±0.1	(298)	C	[70/17]
$C_5H_{12}O_2$	2,2-dimethoxypropane				[77-76-9]
	(272–301)	37.6±0.4	(298)	GS	[02/32]
	(272–301)	38.2±0.4		GS	[98/21]
	(299–348)	35.3	(324)	EB	[94/16]
	(292–357)	33.4±0.2	(325)		[88/4]
$C_5H_{12}O_2$	2-isopropoxyethanol				[109-59-1]
		50.1±0.1	(298)	C	[71/7]
	(341–413)	45.1	(356)	A	[87/5][57/6] [72/20]
$C_5H_{12}O_2$	2-propoxyethanol				[2807-30-9]
		52.1±0.1	(298)	C	[71/5]
	(350–422)	46.3	(365)	A	[87/5][57/6] [72/20]
$C_5H_{12}O_2$	formaldehyde diethyl acetal (diethoxymethane)				[462-95-3]
	(273–361)	36.1	(288)	A	[87/5]
		35.7±0.2	(298)	C	[69/18]
$C_5H_{12}O_2$	2-methyl-1,3-butanediol				[684-84-4]
	(399–561)	62.4	(414)	A	[87/5]
$C_5H_{12}O_2$	3-methyl-1,3-butanediol				[2568-33-4]
	(346–475)	60.3	(361)	A	[87/5]
$C_5H_{12}O_2$	2,2-dimethyl-1,3-propanediol				[126-30-7]
	(400–480)	79.4	(415)	A	[87/5]
$C_5H_{12}O_2$	1,5-pentanediol				[111-29-5]
		86.8±0.5	(298)	C	[88/14]
	(391–479)	78.6	(406)	A	[87/5]
$C_5H_{12}O_3$	*tert*-butyldioxymethanol				[17742-78-8]
		59.6±2.4			[83/11]
$C_5H_{12}O_3$	diethylene glycol, methyl ether				[111-77-3]
	(385–466)	51.9	(400)	A	[87/5][57/6] [72/20]
$C_5H_{12}O_3$	2,3,4-pentanetriol				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(428–600)	78.9	(443)		[47/5]
$C_5H_{12}O_4$	tetramethoxymethane				[1850-14-2]
	(304–387)	41.2	(319)		[80/15]
$C_5H_{12}O_5$	adonitol				[488-81-3]
	(418–465)	111.1±1.5	(443)	TE	[90/16]
$C_5H_{12}O_5$	D-arabinitol				
	(414–461)	110.1±1.5	(440)	TE	[90/16]
$C_5H_{12}O_5$	xylitol				[87-99-0]
	(406–460)	111.1±0.8	(433)	TE	[90/16]
$C_5H_{12}S$	3-methyl-2-thiapentane				[10359-64-5]
	(288–418)	38.5	(303)		[99/16]
$C_5H_{12}S$	4-methyl-2-thiapentane				[5008-69-5]
	(288–411)	36.9	(303)		[99/16]
$C_5H_{12}S$	butyl methyl sulfide				[628-29-5]
	(297–423)	40.4	(312)		[99/16]
	(301–330)	35.3	(315)	A	[87/5]
		40.5	(298)		[81/12]
		41.0	(298)		[71/28]
		40.9±0.8	(298)	GC	[64/7]
	(296–325)	38.1	(313)	EB	[62/17]
	(343–436)	38.0	(358)	A, EB	[87/5][61/8] [66/5]
$C_5H_{12}S$	methyl *tert*-butyl sulfide				[6163-64-0]
	(276–397)	36.5	(291)		[99/16]
		35.9	(298)		[71/28]
	(305–411)	35.1	(320)	A, EB	[87/5][62/9] [66/5]
$C_5H_{12}S$	ethyl isopropyl sulfide				[5145-99-3]
	(284–406)	38.1	(299)		[99/16]
		37.8	(298)		[81/12]
		38.5	(298)		[71/28]
		37.9±0.8	(298)	GC	[64/17]
	(296–325)	38.1	(313)	EB	[62/17]
	(319–391)	36.3	(334)	A, EB	[87/5][52/9]
$C_5H_{12}S$	ethyl propyl sulfide				[4110-50-3]
	(293–418)	39.8	(308)		[99/16]
		40.0	(298)		[81/12]
		39.5	(298)	C	[81/8]
	(331–398)	37.8	(346)	A, EB	[87/5][52/9]
$C_5H_{12}S$	1-pentanethiol				[110-66-7]
	(300–426)	40.6	(315)		[99/16]
		41.1	(298)		[71/28]
		37.1±0.1	(356)	C	[65/14]
		36.4±0.1	(376)	C	[65/14]
		34.9±0.1	(400)	C	[65/14]
	(347–440)	38.1	(362)	A, EB	[87/5][52/11] [66/5]
$C_5H_{12}S$	2-pentanethiol				[2084-19-7]
	(287–412)	38.4	(302)		[99/16]
	(347–435)	37.8	(361)	A	[87/5]
$C_5H_{12}S$	3-pentanethiol				[616-31-9]
	(288–413)	38.3	(303)		[99/16]
$C_5H_{12}S$	2-methyl-1-butanethiol				[1878-18-8]
	(293–418)	39.2	(308)		[99/16]
		39.9±0.1	(298)		[72/11][66/5]
		39.7	(298)		[71/28]
	(324–432)	37.6	(339)	A, EB	[87/5][66/5]
$C_5H_{12}S$	3-methyl-1-butanethiol				[541-31-1]
	(292–418)	39.3	(307)		[99/16]
		39.7	(298)		[71/28]
		39.9±0.1	(298)		[72/11][66/5]
	(323–431)	37.7	(338)	A, EB	[87/5][66/5]
$C_5H_{12}S$	2-methyl-2-butanethiol				[1679-09-0]
	(276–398)	36.3	(291)		[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		35.6	(298)		[71/28]
	(320–411)	34.3	(335)	A, EB	[87/5][62/10]
		33.8±0.1	(330)	C	[62/10]
		32.7±0.1	(350)	C	[62/10]
		31.4±0.1	(372)	C	[62/10]
$C_5H_{12}S$	3-methyl-2-butanethiol				[2084-18-6]
	(285–409)	37.7	(300)		[99/16]
		37.5±0.1	(298)		[72/11][66/5]
		37.7	(298)		[71/28]
	(315–422)	36.2	(330)	A, EB	[87/5][66/5]
$C_5H_{12}S$	2,2-dimethyl-1-propanethiol				[1679-08-9]
	(280–403)	36.9	(295)		[99/16]
		36.4±0.1	(298)		[72/11][66/5]
		36.8	(298)		[71/28]
	(292–416)	36.2	(307)	A, EB	[87/5][66/5]
	(213–415)	42.1	(230)	EB, IPM	[66/5]
$C_5H_{12}S_2$	1,5-pentanedithiol				[928-98-3]
	(363–491)	51.6	(378)	A	[87/5][99/16]
		59.3	(298)		[62/11]
$C_5H_{12}S_2$	ethyl isopropyl disulfide				[53966-36-2]
	(369–426)	42.5	(384)		[99/16]
	(363–427)	42.9	(378)	A, EB	[87/5][52/9]
$C_5H_{12}S_2$	ethyl propyl disulfide				[30453-31-7]
	(373–414)	44.0	(388)	A, EB	[87/5][52/9]
					[99/16]
$C_5H_{13}N$	N-ethylisopropylamine				[19961-27-4]
		33.1±0.1	(298)	C	[79/8]
		32.1±0.1	(313)	C	[79/8]
		31.0±0.1	(328)	C	[79/8]
		28.8±0.1	(358)	C	[79/8]
	(303–342)	33.4	(318)	EB	[79/8]
$C_5H_{13}N$	N,N-diethylmethylamine				[616-39-7]
	(283–339)	31.8	(298)	A	[87/5]
$C_5H_{13}N$	N-methylbutylamine				[110-68-9]
	(283–313)	38.1	(298)	A	[87/5]
$C_5H_{13}N$	*tert*-butylmethylamine				[14610-37-8]
	(270–288)	32.3±1.4	(297)		[97/21]
$C_5H_{13}N$	pentylamine				[110-58-7]
	(298–417)	39.0	(313)	A	[87/5][72/20]
		40.1±0.1	(298)	C	[69/2]
$C_5H_{13}NO_2$	methyl diethanolamine				[105-59-9]
	(390–520)	73.0	(405)	A	[87/5]
$C_5H_{13}NO_2S$	N,N-diethyl methanesulfonamide				[2374-61-0]
	(384–528)	52.1	(399)	A	[87/5]
$C_5H_{13}NS$	N-methyl-*tert*-butylsulfenamide				
	(329–397)	41.9	(364)		[99/16]
$C_5H_{13}N_3$	1,1,3,3-tetramethylguanidine				[80-70-6]
		46.9			[67/29]
$C_5H_{13}O_3P$	diethyl methylphosphonate				[683-08-9]
	(343–402)	51.8	(358)	A	[87/5][72/20]
		56.5±4.2			[56/23][82/15]
$C_5H_{14}NP$	trimethylphosphine-N-ethylimine				
		61.5±4.2			[60/23][82/15]
$C_5H_{14}N_2$	N,N-dimethyl-1,3-propanediamine				[111-33-1]
	(303–366)	45.7	(318)	A	[87/5]
	(303–408)	42.0	(318)	A	[87/5]
		52.7			[77/29]
$C_5H_{14}N_2$	*bis*(dimethylamino)methane				[51-80-9]
	(273–348)	32.3	(310)		[65/29]
C_6BrF_5	bromopentafluorobenzene				[344-04-7]
	(400-522)	38.2	(415)	A	[87/5][72/20]
	(414-522)	38.0	(429)	EB	[69/11]
$C_6BrF_{15}N_2S$	*bis*[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]diimidosulfuryl bromide fluoride				[62977-74-6]
		41.0	(476)	I	[77/15]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_6ClF_{15}N_2S$	*bis*[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]diimidosulfuryl chloride fluoride				[62977-72-4]
		37.2	(458)	I	[77/15]
C_6ClF_5	chloropentafluorobenzene				[344-07-0]
	(290-550)	41.3	(298)		[91/2]
	(348-402)	37.7	(363)	A	[87/5]
	(307-417)	40.0	(322)		[87/5][68/10]
		37.7±0.1	(349)		[68/26]
		36.4±0.1	(369)		[68/26]
		34.8±0.1	(391)		[68/26]
	(403-547)	35.2	(418)	EB	[66/11]
$C_6ClF_{13}N_2$	1-chloro-1',2,2,2,2',2',2-heptafluoro-1,1'-*bis*(trifluoromethyl)-azoethane				[33757-14-1]
	(297-355)	33.3	(312)	A	[87/5][71/17]
$C_6ClF_{14}P$	*bis*(heptafluoropropyl) chlorophosphine				
	(283-373)	37.5	(328)		[59/21]
$C_6Cl_2F_{12}N_2S$	*bis*(2-chlorohexafluoroisopropylimino) sulfur				
		43.5	(404)	I	[72/22]
$C_6Cl_3F_3$	1,3,5-trichloro-2,4,6-trifluorobenzene				[319-88-0]
	(364-496)	49.2	(379)	A	[87/5]
	(364-550)	53.8	(298)		[84/9][91/2]
$C_6Cl_3F_{14}P$	trichloro *bis*(heptafluoropropyl)phosphorane				
	(323-393)	40.1	(358)		[59/21]
$C_6Cl_3N_3O_6$	1,3,5-trichloro-2,4,6-trinitrobenzene				[2631-68-7]
	(503-543)	68.9	(518)	A	[87/5][68/14]
	(503-543)	43.2	(518)		[72/20]
$C_6Cl_4O_2$	2,3,5,6-tetrachloro-1,4-benzoquinone (chloranil)				[118-75-2]
	(343-435)	88.5	(358)		[47/5]
C_6Cl_6	hexachlorobenzene				[118-74-1]
		74.4±0.7	(298)	GS	[01/1]
	(413-453)	76.8	(298)	GC	[94/22]
	(258-313)	81.3		GC	[94/23]
	(343-453)	68.6	(398)	GC	[90/2]
	(502-589)	68.7	(517)	A	[87/5]
	(387-582)	60.5	(402)		[47/5]
C_6F_6	hexafluorobenzene				[392-56-3]
	(318-376)	34.4	(333)	EB	[90/7]
	(403-516)	31.8	(425)		[88/20]
	(278-354)	36.5	(293)	A	[87/5]
	(348-389)	33.2	(363)	A	[87/5]
	(384-462)	32.2	(399)	A	[87/5]
	(458-517)	31.8	(473)	A	[87/5]
	(290-510)	35.6	(298)		[82/11][91/2]
		35.7	(298)	C	[81/8]
	(293-323)	35.7	(308)		[80/23]
	(278-321)	36.2	(292)	MM	[69/9]
	(363-516)	32.2	(378)	EB	[66/11]
	(275-387)	36.5	(293)		[65/8]
	(293-356)	35.1	(308)		[64/16]
	(293-358)	35.5	(308)		[46/5][84/9]
C_6F_7NOS	N-(pentafluorophenyl)imidosulfuryl fluoride				[20094-84-2]
	(309-355)	45.3	(332)		[68/21]
C_6F_7OP	pentafluorophenoxydifluorophosphine				
	(310-363)	42.4	(325)		[76/28]
$C_6F_7O_2P$	pentafluorophenoxyphosphoryl difluoride				
	(323-367)	46.4	(338)		[76/28]
C_6F_8	perfluoro(2-methyl-3-methylenecyclobutene)				
	(243-306)	31.0	(258)	A	[87/5]
$C_6F_{11}NO$	2,2,3,3,3-pentafluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene]propanamide				[52225-58-8]
		32.7	(338)		[74/24]
$C_6F_{11}NO_2S$	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-[(trifluoroacetyl)-imino]thiophene-1-oxide				[77589-41-4]
		33.9	(383)		[81/16]
C_6F_{12}	perfluoromethylcyclopentane				
		30.68	(298)	EB	[98/18]
C_6F_{12}	perfluorocyclohexane				[355-68-0]
	(373-457)	28.0	(388)		[88/20]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(350-451)	28.1	(365)	A	[87/5]
	(336-394)	29.6	(351)		[57/11][84/9]
C_6F_{12}	perfluoro(1,2-dimethylcyclobutane)				[2994-71-0]
	(242-318)	32.1	(257)	A	[87/5]
$C_6F_{12}N_2$	N,N,N,N-*tetrakis*(trifluoromethyl)-1,2-ethynylenediamine				[19451-96-8]
	(305-328)	32.1	(316)	A	[87/5]
$C_6F_{12}N_2OS$	1,1,1,3,3,3-hexafluoro-2-isocyanato-N-[2,2,2-trifluoro-1-(trifluoro-methyl)ethylidene]-2-propanamine				[34619-84-6]
		39.3	(375)	I	[72/24]
$C_6F_{12}N_2O_2S$	1,1,1-trifluoro-N'-(trifluoroacetyl)-N-[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene]methanesulfonimidamide				[62609-66-9]
		32.6	(404)	I	[77/19]
$C_6F_{12}N_2S$	*bis*[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]sulfoxylic diamide				[31340-33-7]
		40.6	(391)	I	[72/24]
$C_6F_{12}N_2S_2$	*bis*(hexafluoroisopropylidenimino) disulfide				
		46.0	(417)	I	[72/22]
$C_6F_{12}O$	perfluoro(methoxycyclopentane)				[788-40-9]
	(246-330)	38.6	(261)	A	[87/5][72/20]
$C_6F_{12}O_2$	trifluoroacetic acid, 2,2,2-trifluoro-1,1-*bis*(trifluoromethyl)ethyl ester				[24165-10-4]
	(264-298)	34.3	(279)	A	[87/5][75/22]
		33.1	(329)	HG	[73/20]
$C_6F_{12}O_4$	carbonoperoxoic acid, O-[2,2,2-trifluoro-1,1-*bis*(trifluoromethyl)ethyl]-O,O-(trifluoromethyl) ester ester				[55100-93-1]
	(273-315)	33.5	(288)	A	[87/5][75/22]
$C_6F_{13}NS$	2,2,2-trifluoro-N-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-ethanimidothioic acid, trifluoromethyl ester				[53120-07-9]
		35.3	(360)		[75/20]
C_6F_{14}	perfluorohexane				[355-42-0]
	(261-334)	34.4	(276)	A	[87/5]
	(285-340)	31.4	(298)		[84/9][91/2]
	(433-449)	33.4	(441)	A	[87/5][78/8]
	(303-330)	31.5	(316)		[58/12][84/9]
	(284-342)	32.4	(298)		[52/1]
C_6F_{14}	perfluoro-2-methylpentane				[335-04-4]
	(280-340)	31.4	(298)		[84/9][91/2]
	(253-329)	34.5	(268)	A	[87/5][67/15] [84/9]
	(277-341)	32.5	(292)		[52/1][84/9]
C_6F_{14}	perfluoro-3-methylpentane				[865-71-4]
	(282-333)	30.8	(297)	A	[87/5]
C_6F_{14}	perfluoro-2,3-dimethylbutane				[354-96-1]
	(260-340)	31.6	(298)		[84/9][91/2]
	(262-333)	33.0	(277)	A	[87/5][67/15]
$C_6F_{14}IP$	*bis*(heptafluoropropyl) iodophosphine				[84/9]
	(273-353)	41.6	(313)		[59/21]
$C_6F_{14}N_2S$	*bis*[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl] sulfur diimide				[34451-12-2]
	(325-378)	38.5	(340)	A	[87/5][72/21]
$C_6F_{14}O$	perfluorodipropyl ether				[356-62-7]
	(306-327)	31.2±0.4	(298)	EB	[89/13]
$C_6F_{15}N$	perfluorotriethylamine				[359-70-6]
	(297-343)	34.0±0.4	(298)	EB	[95/20]
		34.2±0.1	(298)	C	[95/20]
	(320-334)	32.8	(327)	A	[87/5]
	(317-349)	32.9	(332)	A	[87/5]
$C_6F_{15}NO$	1,1,1,2,3,3,3,-heptafluoro-N-(pentafluoroethyl)-N-(trifluoromethyl)-2-propanamine				[54566-82-4]
		27.1	(338)		[75/19]
$C_6F_{15}O_4S_2$	2,2,4,4-tetrafluoro-1,1,3,3-tetrahydro-1,1,3,3-*tetrakis*(trifluoromethoxy)-1,3-dithietane				[63441-15-6]
		37.2	(404)	I	[77/16]
$C_6F_{16}N_2S$	*bis*[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]diimidosulfuryl fluoride				[59617-31-1]
		35.8			[76/29]
$C_6F_{16}S$	difluoro*bis*[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl] sulfur				[1423-18-3]
	(273-383)	36.6	(328)	A	[87/5][99/16]
$C_6F_{20}N_3O_3P$	phosphorous *tris*[*bis*(trifluoromethyl)nitroxide] difluoride				
		39.3	(421)		[73/24]
C_6N_2	dicyanobutadiyne				[16419-78-6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(341-369)	30.2	(355)	A	[87/5]
$C_6HBrF_{12}N_2$	1-bromo-N,N,N',N'-*tetrakis*(trifluoromethyl)vinylenediamine				[19451-95-7]
	(348-371)	32.3	(359)	A	[87/5]
$C_6HClF_{11}NO$	N-[1-chloro-2,2,2-trifluoro-1-(trifluoromethyl)ethyl]-2,2,3,3,3-pentafluoropropanamide				[52225-62-4]
		40.8	(381)		[74/24]
$C_6HCl_2N_3O_6$	1,3-dichloro-2,4,6-trinitrobenzene				[1630-09-7]
	(504-563)	46.9	(519)	A	[87/5][72/20]
	(504-533)	80.4			[68/14]
$C_6HCl_3F_8O_2$	octafluoro-3,5,6-trichlorohexanoic acid				[2106-54-9]
	(373-505)	64.2	(388)	A	[87/5][72/20]
					[57/17]
C_6HCl_5	pentachlorobenzene				[608-93-5]
		66.0	(357)		[99/20]
	(413-453)	67.7	(298)	GC	[94/22]
	(371-549)	62.1	(386)	A	[87/5][47/5]
C_6HCl_5O	pentachlorophenol				[87-86-5]
	(463-507)	69.0	(478)	A	[87/5][72/20]
C_6HF_5	pentafluorobenzene				[363-72-4]
	(358-397)	33.5	(373)	A	[87/5]
	(393-479)	32.6	(408)	A	[87/5]
	(473-531)	32.2	(488)	A	[87/5]
	(290-510)	36.2	(298)		[82/11][91/2]
	(322-368)	34.8	(337)	A	[87/5][68/10]
	(373-530)	32.0	(388)	EB	[66/11]
	(298-356)	35.7	(313)		[64/16]
	(298-358)	35.7	(313)		[46/5][84/9]
C_6HF_5O	pentafluorophenol				[771-61-9]
	(323-455)	52.2±0.4	(298)	EB	[97/6]
	(378-428)	44.2	(393)	A	[87/5][68/10]
$C_6HF_{12}NO$	2,2,3,3,3-pentafluoro-N-[1,2,2,-tetrafluoro-1-(trifluoromethyl)ethyl]-propanamide				[52225-64-6]
		41.3	(368)		[74/24]
$C_6HF_{12}NOS$	2,2,2-trifluoro-N-[(trifluoromethyl)thio]ethanimidic acid, 2,2,2-trifluoro-1-(trifluoromethyl)ethyl ether				[62067-08-7]
		33.6	(364)	I	[77/18]
$C_6H_2BrCl_3O$	3-bromo-2,4,6-trichlorophenol				
	(385-579)	67.1	(400)	A	[87/5][47/5]
$C_6H_2ClN_3O_6$	1-chloro-2,4,6-trinitrobenzene				[88-88-0]
	(473-543)	63.1	(488)	A	[87/5][68/14]
$C_6H_2Cl_3F$	1-fluoro-2,4,6-trichlorobenzene				[36556-33-9]
	(344-489)	41.1	(359)	A	[87/5]
$C_6H_2Cl_3NO_2$	2,4,5-trichloro-1-nitrobenzene				[89-69-0]
	(427-560)	56.7	(442)	A	[87/5]
$C_6H_2Cl_4$	1,2,3,4-tetrachlorobenzene				[634-66-2]
	(413-453)	60.1	(298)	GC	[94/22]
	(341-527)	56.7	(356)	A	[87/5][47/5]
$C_6H_2Cl_4$	1,2,3,5-tetrachlorobenzene				[634-90-2]
	(413-453)	60.7	(298)	GC	[94/22]
	(331-519)	51.1	(346)	A	[87/5][47/5]
$C_6H_2Cl_4$	1,2,4,5-tetrachlorobenzene				[95-94-3]
	(413-453)	60.7	(298)	GC	[94/22]
	(419-518)	52.0	(434)	A	[87/5][47/5]
$C_6H_2Cl_4O$	2,3,4,6-tetrachlorophenol				[58-90-2]
	(373-548)	64.8	(388)	A	[87/5][47/5]
$C_6H_2Cl_4O_2$	3,4,5,6-tetrachloro-1,2-benzenediol				[1198-55-6]
	(293-323)	77.9	(308)	CGC	[99/13]
$C_6H_2F_4$	1,2,3,4-tetrafluorobenzene				[551-62-2]
	(300-390)	37.5	(298)		[84/9][91/2]
	(300-392)	36.8	(315)	A	[87/5][75/27]
					[84/9]
	(279-323)	37.0	(294)	MM	[87/5][69/9]
$C_6H_2F_4$	1,2,3,5-tetrafluorobenzene				[2367-82-0]
	(385-416)	32.4	(400)	A	[87/5]
	(290-380)	36.0	(298)		[84/9][91/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(287-382)	36.0	(302)	A	[87/5][75/27] [84/9]
	(279-323)	36.0	(294)	MM	[87/5][69/9]
$C_6H_2F_4$	1,2,4,5-tetrafluorobenzene				[327-54-8]
	(290-390)	37.2	(298)		[84/9][91/2]
	(390-488)	33.1	(405)	A	[87/5]
	(488-543)	32.6	(503)	A	[87/5]
	(293-390)	36.8	(308)	A	[87/5][75/27] [89/4]
$C_6H_2F_{12}O$	1,1,1,2,2,3,3,-heptafluoro-3-(2,2,3,3,3-pentafluoropropoxy)-propane				[176310-30-8]
	(288-344)	34.8	(303)	I	[02/19]
$C_6H_2F_{12}O_3S$	*bis*(1,1,1,3,3,3-hexafluoro-2-propanol) sulfite				[53517-89-9]
		42.4			[75/43]
$C_6H_2F_{14}NP$	amino *bis*(heptafluropropyl)phosphine				
	(293-393)	38.7	(343)		[59/21]
$C_6H_3BrCl_2O$	2-bromo-4,6-dichlorophenol				[45524-77-0]
	(357-541)	58.6	(372)	A	[87/5][47/5]
$C_6H_3ClN_2O_4$	1-chloro-2,4-dinitrobenzene				[97-00-7]
	(430-590)	80.5	(445)	A	[87/5]
$C_6H_3Cl_2NO_2$	3,4-dichloro-1-nitrobenzene				[99-54-7]
	(417-515)	55.5	(432)	A	[87/5]
$C_6H_3Cl_3$	1,2,4-trichlorobenzene				[120-82-1]
		55.8	(290)		[99/20]
	(391-490)	49.5	(406)	EB	[98/8]
	(413-453)	57.6	(298)	GC	[94/22]
		55.5±0.1	(298)	C	[87/13]
	(279-298)	47.0	(288)	RG	[49/11]
	(311-486)	49.3	(326)		[47/5]
$C_6H_3Cl_3$	1,2,3-trichlorobenzene				[87-61-6]
		54.5	(325)		[99/20]
	(413-453)	57.2	(298)	GC	[94/22]
	(258-313)	54.3		GC	[94/23]
	(293-383)	53.5	(308)	A	[87/5]
	(313-492)	47.4	(328)	A	[87/5][47/5]
$C_6H_3Cl_3$	1,3,5-trichlorobenzene				[108-70-3]
	(338-415)	50.3±0.1	(375)	DM	[01/8]
		51.7	(337)		[99/20]
	(413-453)	59.0	(298)	GC	[94/22]
	(336-482)	48.8	(351)	A	[87/5][47/5]
$C_6H_3Cl_3O$	2,4,5-trichlorophenol				[95-95-4]
	(345-525)	54.5	(360)	A	[87/5][47/5]
$C_6H_3Cl_3O$	2,4,6-trichlorophenol				[88-06-2]
	(349-519)	58.8	(364)	A	[87/5][47/5]
$C_6H_3Cl_3O_2$	3,4,5-trichloro-1,2-benzenediol				[56961-20-7]
	(293-323)	79.3	(308)	CGC	[99/13]
$C_6H_3F_3$	1,3,5-trifluorobenzene				[372-38-3]
	(280-320)	33.9	(298)		[84/9][91/2]
	(279-350)	34.5	(294)	A, MM	[87/5][69/9] [72/20]
$C_6H_3F_9O_2$	trifluoroacetic acid, 2,2,2-trifluoro-1-methyl-1-(trifluoromethyl)ethyl ester				[42031-16-3]
		33.5	(338)	HG	[73/20]
$C_6H_3F_9O_2$	acetic acid, 2,2,2-trifluoro-1,1-*bis*(trifluoromethyl)ethyl ester				[24165-09-1]
	(273-328)	40.1	(288)	A	[87/5][75/22]
$C_6H_3F_{10}NS$	2,2,2-trifluoro-N-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-ethanimidothioic acid, methyl ester				[54120-08-0]
		31.6	(383)		[75/20]
$C_6H_3F_{11}O$	1,1,1,2,2,3,3-heptafluoro-3-(2,2,3,3-tetrafluoropropoxy)propane				[176310-29-5]
	(288–357)	37.2	(303)	I	[02/19]
$C_6H_3F_{11}O$	1,1,1,2,2,3,3,4,4,5,5-undecafluoro-5-methoxypentane				[181214-74-4]
	(288–358)	36.6	(303)	I	[02/19]
$C_6H_3F_{11}O$	1,1,1,2,3,3,4,4-octafluoro-4-methoxy-2-(trifluoromethyl)butane				[203783-56-6]
	(288–357)	36.0	(303)	I	[02/19]
$C_6H_3F_{11}O$	1,1,1,2,3,3-hexafluoro-3-(2,2,3,3,3-pentafluoropropoxy)propane				[290-28-8]
	(293–360)	38.4	(308)	I	[02/19]
$C_6H_3N_3O_6$	1,2,3-trinitrobenzene				[603-13-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(523–573)	60.3	(538)	A	[87/5][68/14] [72/20]
$C_6H_3N_3O_6$	1,2,4-trinitrobenzene				[610-31-1]
	(523–573)	82.6	(538)	A	[87/5][68/14] [72/20]
$C_6H_3N_3O_6$	1,3,5-trinitrobenzene				[99-35-4]
	(475–585)	70.3	(490)	A	[87/5][68/14] [72/20]
$C_6H_3N_3O_7$	2,4,6-trinitrophenol (picric acid)				[88-89-1]
	(468–598)	106.4	(483)	A	[87/5]
C_6H_4BrCl	1-bromo-3-chlorobenzene				[108-37-2]
	(252–469)	52.2	(267)	A	[87/5][72/20]
C_6H_4BrCl	1-bromo-4-chlorobenzene				[106-39-8]
	(333–470)	49.1	(348)	A	[87/5]
	(305–470)	49.7	(320)		[47/5]
$C_6H_4Br_2$	1,2-dibromobenzene				[583-53-9]
	(388–568)	50.1	(403)	A	[87/5][72/20]
$C_6H_4Br_2$	1,3-dibromobenzene				[108-36-1]
	(417–500)	48.3	(432)	A	[87/5]
$C_6H_4Br_2$	1,4-dibromobenzene				[106-37-6]
	(373–493)	49.9	(388)	A	[87/5][72/20]
C_6H_4ClF	1-chloro-3-fluorobenzene				[625-98-9]
	(273–403)	37.4	(288)	A	[87/5]
C_6H_4ClI	1-chloro-4-iodobenzene				[352-33-0]
	(333–500)	56.5	(348)	A	[87/5]
$C_6H_4ClNO_2$	1-chloro-2-nitrobenzene				[88-73-3]
	(420–516)	52.1	(435)	EB	[84/21]
$C_6H_4ClNO_2$	1-chloro-3-nitrobenzene				[121-73-3]
	(414–506)	51.5	(429)	EB	[84/21]
$C_6H_4ClNO_2$	1-chloro-4-nitrobenzene				[100-00-5]
	(385–515)	51.3	(400)	A	[87/5]
$C_6H_4Cl_2$	1,2-dichlorobenzene				[95-50-1]
		51.2	(256)		[99/20]
	(363–454)	44.5	(376)	EB	[98/8]
	(256–287)	50.8	(271)		[96/19]
	(413–453)	50.9	(298)	GC	[94/22]
	(258–313)	51.2		GC	[94/23]
	(373–453)	44.0	(388)	A	[87/5]
	(360–450)	49.9	(298)		[84/9][91/2]
	(301–343)	50.0	(322)	GS	[82/1]
$C_6H_4Cl_2$	1,3-dichlorobenzene				[541-73-1]
		50.4	(248)		[99/20]
	(357–448)	44.1	(372)	EB	[98/8]
	(250–274)	50.0	(262)		[96/19]
	(413–453)	53.9	(298)	GC	[94/22]
	(360–450)	47.0	(298)		[84/9][91/2]
	(348–513)	44.7	(363)		[87/5][72/20]
$C_6H_4Cl_2$	1,4-dichlorobenzene				[106-46-7]
		46.4	(326)		[99/20]
	(358–448)	44.2	(373)	EB	[98/8]
	(413–453)	54.8	(298)	GC	[94/22]
	(258–313)	U35.0		GC	[94/23]
	(341–448)	45.0	(356)	A	[87/5]
	(370–450)	47.8	(298)		[84/9][91/2]
$C_6H_4Cl_2O$	2,4-dichlorophenol				[128-83-2]
	(326–483)	60.8	(341)	A	[87/5][47/5] [75/17]
$C_6H_4Cl_2O$	2,6-dichlorophenol				[87-65-0]
	(333–493)	57.9	(348)	A	[87/5][47/5]
$C_6H_4Cl_2O_2$	4,5-dichloro-1,2-benzenediol				[3428-24-8]
	(293–323)	70.5	(308)	CGC	[99/13]
$C_6H_4Cl_2O_3$	vinyl mucochlorate				
	(273–333)	63.9	(288)	A	[87/5]
$C_6H_4Cl_3N$	2,4,6-trichloroaniline				[634-93-5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(407–535)	92.9	(422)	A	[87/5][47/5]
$C_6H_4F_2$	1,2-difluorobenzene				[367-11-3]
	(300–400)	36.2	(298)		[84/9][91/2]
	(304–403)	35.5	(319)	EB	[63/23][84/9]
		34.6±0.1	(327)	C	[63/23]
		33.5±0.1	(345)	C	[63/23]
		32.2±0.1	(367)	C	[63/23]
$C_6H_4F_2$	1,3-difluorobenzene				[372-18-9]
	(310–400)	34.6	(298)		[80/11][91/2]
$C_6H_4F_2$	1,4-difluorobenzene				[540-36-3]
	(300–400)	35.8	(298)		[80/11][91/2]
$C_6H_4F_{10}O$	1,1,1,2,3,3-hexafluoro-3-(2,2,3,3-tetrafluoropropoxy)propane				[65064-78-0]
	(293–379)	42.3	(308)	I	[02/19]
$C_6H_4INO_2$	2-iodo-1-nitrobenzene				[609-73-4]
	(433–563)	59.9	(448)	A	[87/5]
$C_6H_4I_2$	1,4-diiodobenzene			A	[624-38-4]
	(402–560)	52.6	(417)		[87/5]
$C_6H_4N_2$	nicotinic acid nitrile				[100-54-9]
	(453–479)	45.0	(466)	A	[87/5][72/20]
$C_6H_4N_2O_4$	1,2-dinitrobenzene				[528-29-0]
	(454–593)	60.0	(469)	A	[87/5][72/20]
$C_6H_4N_2O_4$	1,3-dinitrobenzene				[99-65-0]
	(336–379)	96.7	(351)	A	[87/5]
$C_6H_4N_2O_4$	1,4-dinitrobenzene				[100-25-4]
	(445–572)	60.3	(460)	A	[87/5][72/20]
$C_6H_4O_2$	1,4-benzoquinone				[106-51-4]
	(388–402)	47.8	(395)	A	[87/5]
$C_6H_4S_4$	tetrathiafulvene				[31366-25-3]
	(331–355)	95.3	(343)		[99/16]
C_6H_5Br	bromobenzene				[108-86-1]
	(330–430)	44.8	(298)		[84/9][91/2]
		44.0	(293)	C	[75/37]
	(333–463)	42.3	(348)	A	[87/5][72/20]
		44.5±0.1	(298)	C	[68/1]
	(329–427)	42.4	(344)		[55/22]
C_6H_5BrO	2-bromophenol				[95-56-7]
		50.2			[86/10]
C_6H_5BrO	3-bromophenol				[591-20-8]
	(410–510)	73.5	(425)	A	[87/5]
		55.2			[86/10]
C_6H_5BrO	4-bromophenol				[106-41-2]
	(390–511)	58.8	(405)	A	[87/5]
		58.6			[86/10]
C_6H_5BrS	2-bromobenzenethiol				[6320-02-1]
		50.6			[86/10]
C_6H_5BrS	3-bromobenzenethiol				
		51.1			[86/10]
C_6H_5BrS	4-bromobenzenethiol				[106-53-6]
		52.3			[86/10]
C_6H_5Cl	chlorobenzene				[108-90-7]
	(313–353)	40.3	(298)	CGC	[95/21]
	(413–453)	43.9	(298)	GC	[94/22]
	(258–313)	48.1		GC	[94/23]
		40.6±0.3		GC	[89/16]
	(405–597)	35.4	(420)	A	[87/5]
	(335–405)	41.0	(298)		[84/9][91/2]
		41.0±0.1	(298)	C	[68/1]
	(333–405)	38.8	(348)		[87/5][52/18]
					[84/9]
	(253–303)	37.3	(278)	ME	[40/12]
C_6H_5ClO	2-chlorophenol				[95-57-8]
	(337–447)	47.0	(352)		[95/12]
		45.2			[66/10]
	(354–448)	47.2	(369)		[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(333–449)	50.1	(348)	A	[87/5][74/15]
	(285–447)	45.2	(300)		[47/5]
C_6H_5ClO	3-chlorophenol				[108-43-0]
		52.3			[86/10]
	(317–487)	53.1	(332)	A	[87/5][47/5]
C_6H_5ClO	4-chlorophenol				[106-48-9]
	(373–493)	60.6	(388)	A	[87/5]
		54.0			[86/10]
	(323–493)	52.8	(338)		[47/5]
C_6H_5ClS	2-chlorobenzenethiol				[6320-03-2]
		47.7			[86/10]
C_6H_5ClS	3-chlorobenzenethiol				[2037-31-2]
		48.5			[86/10]
C_6H_5ClS	4-chlorobenzenethiol				[106-54-7]
		48.5			[86/10]
$C_6H_5ClO_2$	4-chloro-1,2-benzenediol				[2138-22-9]
	(293–323)	70.2	(308)	CGC	[99/13]
$C_6H_5ClO_2S$	benzenesulfonyl chloride				[98-09-9]
	(339–524)	54.4	(354)		[99/16]
	(338–525)	57.2	(353)	A	[87/5][47/5]
$C_6H_5Cl_2N$	3,4-dichloroaniline				[95-76-1]
	(420–545)	58.6	(435)	A	[87/5]
$C_6H_5Cl_2O_2P$	phenyl dichlorophosphate				[770-12-7]
	(339–513)	63.6	(354)	A	[87/5][47/5]
C_6H_5F	fluorobenzene				[462-06-6]
	(358–530)	31.9	(373)	A	[87/5]
	(373–419)	31.8	(388)	A	[87/5]
	(414–501)	31.0	(429)	A	[87/5]
	(497–561)	30.9	(512)	A	[87/5]
	(255–360)	34.5	(298)		[84/9][91/2]
	(312–394)	33.6	(327)	EB	[87/5][56/19]
		33.5±0.1	(318)	C	[56/19]
		32.4±0.1	(337)	C	[56/19]
		31.2±0.1	(358)	C	[56/19]
		29.7±0.1	(382)	C	[56/19]
C_6H_5FO	3-fluorophenol				[372-20-3]
	(373–451)	50.3	(388)	A	[87/5]
C_6H_5FO	4-fluorophenol				[371-41-5]
	(360–460)	48.8	(375)	A	[87/5]
$C_6H_5F_8NOS$	1-(ethylimino)-2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-thiophene-1-oxide				[77984-30-6]
		31.4	(333)		[81/15]
$C_6H_5F_9O$	1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane				[163702-05-4]
	(293–350)	34.2	(308)	I	[02/19]
C_6H_5I	iodobenzene				[591-50-4]
	(313–353)	47.4	(298)	CGC	[95/21]
	(462–679)	41.1	(477)	A	[87/5]
	(320–460)	48.9	(298)		[84/9][91/2]
	(273–358)	51.4	(288)	A	[87/5][72/20]
	(358–543)	46.0	(373)	A	[87/5][72/20]
$C_6H_5NO_2$	nitrobenzene				[98-95-3]
	(313–353)	54.5	(298)	CGC	[95/21]
	(291–305)	56.1±1.7	(298)	ME	[71/10]
		55.0	(298)		[71/9]
	(279–296)	54.7	(287)	A	[87/5][72/20]
					[60/18]
	(407–483)	48.5	(422)		[52/19][84/9]
	(369–481)	48.9	(425)		[33/15]
$C_6H_5NO_3$	2-nitrophenol				[88-75-5]
	(366–490)	55.9	(381)	A	[87/5]
	(322–357)	54.4	(337)	A	[47/5]
$C_6H_5N_3$	phenyl azide				[622-37-3]
	(348–368)	45.2	(358)	A	[87/5][72/20]
C_6H_6	benzene				[71-43-2]
	(305–345)	33.2	(320)		[02/45]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(258–313)	35.6		GC	[94/23]
	(296–377)	33.5	(311)	EB	[90/7]
		33.9±0.2		GC	[89/16]
		33.4	(307)	C	[88/19]
		33.1	(314)	C	[88/19]
		32.4	(324)	C	[88/19]
		31.9	(332)	C	[88/19]
		31.4	(344)	C	[88/19]
		30.6	(353)	C	[88/19]
	(279–377)	34.4	(294)	A	[87/5]
	(353–422)	31.5	(368)	A	[87/5]
	(420–502)	30.2	(435)	A	[87/5]
	(501–562)	30.3	(516)	A	[87/5]
		30.8	(352)		[83/12]
		30.5	(361)		[83/12]
		30.2	(366)		[83/12]
	(313–373)	35.3	(343)		[83/8]
		31.0	(350)		[77/30]
		33.8±0.1	(298)	C	[73/13]
		33.0±0.1	(313)	C	[73/13]
		32.2±0.1	(328)	C	[73/13]
		31.8±0.1	(333)	C	[73/13]
		31.4±0.1	(343)	C	[73/13]
		30.9±0.1	(353)	C	[73/13]
		32.6±0.4	(313)	DSC	[71/23]
		32.5±0.5	(328)	DSC	[71/23]
		33.9	(298)		[71/28]
		31.6±0.4	(345)	DSC	[71/23]
		34.1	(293)		[49/20]
	(284–354)	34.1	(299)		[49/6]
		33.8	(298)	C	[47/7]
	(282–354)	34.1	(297)		[46/4]
		31.2	(294)		[46/8]
	(288–354)	34.1	(303)	MM	[45/2]
	(298–373)	33.4	(313)	EB	[41/9]
	(273–348)	34.5	(288)		[40/5]
		34.0	(298)		[27/3]
C_6D_6	benzene—d_6				[1076-43-3]
	(283–352)	34.2	(298)		[53/10]
C_6H_6	1,5-hexadien-3-yne				[821-08-9]
	(223–357)	40.4	(238)	A	[87/5]
C_6H_6	1,3-hexadien-5-yne				[10420-90-3]
	(223–303)	44.0	(238)	A	[87/5]
C_6H_6	2,4-hexadiyne				[2809-69-0]
	(364–408)	42.5	(298)	EB	[86/1]
C_6H_6ClN	2-chloroaniline				[95-51-2]
	(397–482)	50.7	(412)	A	[87/5]
	(287–336)	58.2±1.4	(311)	TE, ME	[85/11]
	(294–330)	57.1±1.0	(312)	TE, ME	[85/11]
C_6H_6ClN	3-chloroaniline				[108-42-9]
	(398–573)	53.6	(413)	A	[87/5][72/20]
	(292–346)	60.3±0.6	(319)	TE, ME	[85/11]
	(304–342)	61.0±0.8	(323)	TE, ME	[85/11]
C_6H_6ClN	4-chloroaniline				[106-47-8]
	(363–505)	52.2	(378)	A	[87/5]
$C_6H_6Cl_4$	α-3,4,5,6-tetrachlorocyclohexene				[41992-55-6]
	(353–399)	58.0	(368)	A	[87/5]
$C_6H_6Cl_6$	α-hexachlorocyclohexane				[319-84-6]
	(343–453)	68.5	(398)	GC	[90/2]
$C_6H_6Cl_6$	β-hexachlorocyclohexane				[58-69-9]
	(343–453)	70.5	(398)	GC	[90/2]
$C_6H_6F_8O$	1,1,2,2,3,3,4,4-octafluoro-5-methoxypentane				[77527-96-9]
	(293–396)	44.8	(308)	I	[02/19]
$C_6H_6F_9N_3S$	N-[N,N′-dimethyl-S-(trifluoromethyl)sulfonodiimidoyl]-1,1,1,3,3,3-hexafluoro-2-propanimine				[63265-76-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		32.6	(426)	I	[77/15]
$C_6H_6N_2$	3-hexenedinitrile				[1119-85-3]
	(353–448)	49.4	(368)	A	[87/5]
$C_6H_6N_2O_2$	2-nitroaniline				[88-74-4]
	(423–553)	59.3	(438)	A	[87/5]
	(377–558)	64.8	(392)		[47/5]
$C_6H_6N_2O_2$	3-nitroaniline				[99-09-2]
	(443–578)	64.9	(458)	A	[87/5]
$C_6H_6N_2O_2$	4-nitroaniline				[100-01-6]
	(473–538)	77.9	(488)	A	[87/5]
	(415–609)	70.0	(430)		[47/5]
C_6H_6O	phenol				[108-95-2]
	(363–391)	53.2	(378)	EB	[01/17]
	(393–433)	58.8	(298)	CGC	[95/21]
	(455–655)	49.5	(470)	A	[87/5]
	(314–395)	57.4	(329)	A	[87/5]
	(387–456)	50.9	(402)	A	[87/5]
	(449–526)	46.8	(464)	A	[87/5]
	(520–625)	43.8	(535)	A	[87/5]
		51.1			[86/10]
	(383–473)	51.3	(398)	EB, GS	[87/5][60/4] [72/20]
	(380–455)	51.4	(395)		[49/1][84/9]
	(414–454)	48.1	(434)		[39/4]
$C_6H_6O_2$	1,2-dihydroxybenzene (catechol)				[120-80-9]
	(395–519)	63.1	(410)	A	[87/5]
	(378–439)	61.2	(393)	GC	[75/24]
$C_6H_6O_2$	1,3-dihydroxybenzene (resorcinol)				[108-46-3]
	(419–550)	74.3	(434)	A	[87/5]
	(392–463)	74.3	(407)	GC	[87/5][75/24]
$C_6H_6O_2$	1,4-dihydroxybenzene (hydroquinone)				[123-31-9]
	(448–559)	70.5	(463)	A	[87/5]
$C_6H_6O_3$	1,2,3-trihydroxybenzene				[87-66-1]
	(425–582)	69.5	(440)	A	[87/5][55/9]
$C_6H_6O_4$	butynedioic acid, dimethyl ester				
	(273–460)	56.3	(288)	A	[87/5][72/20]
C_6H_6S	benzenethiol (thiophenol)				[108-98-5]
	(333–471)	45.9	(348)		[99/16]
		43.5			[86/10]
	(385–486)	43.1	(400)	A, EB	[87/5][66/5] [56/13]
		43.8±0.1	(375)	C	[56/13]
		42.6±0.1	(395)	C	[56/13]
		41.8±0.1	(407)	C	[56/13]
		41.3±0.1	(417)	C	[56/13]
	(324–440)	44.3	(339)		[55/9][84/9]
$C_6H_7Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-propyl ester				[76619-93-7]
	(383–433)	69.4		GC	[80/24]
C_6H_7N	3-methylenecyclobutanecarbonitrile				[15760-35-7]
	(348–435)	45.9	(366)	BG	[71/2]
C_6H_7N	bicyclo[2.1.0]pentane-1-carbonitrile				[31357-71-8]
	(332–390)	41.8	(343)	BG	[71/2]
C_6H_7N	aniline				[62-53-3]
	(350–499)	51.0±0.2	(360)	EB	[02/14]
	(350–499)	48.0±0.2	(400)	EB	[02/14]
	(350–499)	45.2±0.2	(440)	EB	[02/14]
	(350–499)	42.2±0.4	(480)	EB	[02/14]
	(421–591)	45.8	(444)		[92/1]
	(273–338)	52.2	(288)	A	[87/5]
	(304–485)	53.6	(319)	A	[87/5]
	(373–458)	48.6	(388)	A	[87/5]
	(455–523)	46.3	(470)	A	[87/5]
	(313–386)	51.4	(350)		[79/23]
	(304–457)	54.0	(319)		[62/7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		53.0	(333)	C	[62/7]
C_6H_7N	2-methylpyridine				[109-06-8]
	(308–441)	41.2±0.1	(320)	EB	[99/24]
	(308–441)	38.8±0.1	(360)	EB	[99/24]
	(308–441)	36.4±0.1	(400)	EB	[99/24]
	(308–441)	33.7±0.3	(440)	EB	[99/24]
	(323–373)	43.6	(298)	CGC	[95/21]
	(292–403)	42.0	(307)	EB	[90/6]
	(209–245)	46.9	(230)	A	[87/5]
	(429–537)	36.5	(444)	A	[87/5]
	(521–621)	35.4	(536)	A	[87/5]
		42.5±0.1	(298)	C	[84/4]
		41.6±0.1	(313)	C	[84/4]
		40.7±0.1	(328)	C	[84/4]
		39.8±0.1	(343)	C	[84/4]
		38.3±0.1	(368)	C	[84/4]
	(352–445)	39.1	(367)	EB, IPM	[87/5][68/4]
	(352–442)	39.1	(367)	EB	[87/5][63/11]
		38.8±0.1	(359)	C	[63/11]
		37.7±0.1	(379)	C	[63/11]
		36.2±0.1	(402)	C	[63/11]
	(337–403)	39.8	(352)	MG	[53/4]
C_6H_7N	3-methylpyridine				[108-99-6]
	(314–457)	43.2±0.1	(320)	EB	[99/24]
	(314–457)	40.9±0.1	(360)	EB	[99/24]
	(314–457)	38.6±0.1	(400)	EB	[99/24]
	(314–457)	36.1±0.2	(440)	EB	[99/24]
	(374–458)	40.1	(389)	A	[87/5]
	(450–570)	37.7	(465)	A	[87/5]
	(561–645)	36.8	(576)	A	[87/5]
		44.6±0.1	(298)	C	[84/4]
		43.6±0.1	(313)	C	[84/4]
		42.7±0.1	(328)	C	[84/4]
		42.0±0.1	(343)	C	[84/4]
		40.4±0.1	(368)	C	[84/4]
	(347–458)	41.3	(362)	EB, IPM	[87/5][68/4]
	(347–458)	41.3	(362)	EB	[87/5][63/12]
		40.2±0.1	(372)	C	[63/12]
		38.9±0.1	(393)	C	[63/12]
		37.4±0.1	(417)	C	[63/12]
	(354–418)	41.0	(369)	MG	[53/4]
C_6H_7N	4-methylpyridine				[108-89-4]
	(328–459)	43.4±0.1	(320)	EB	[99/24]
	(328–459)	41.1±0.1	(360)	EB	[99/24]
	(328–459)	38.8±0.1	(400)	EB	[99/24]
	(328–459)	36.2±0.2	(440)	EB	[99/24]
	(323–373)	44.7	(298)	CGC	[95/21]
	(348–460)	41.4	(363)	A	[87/5]
	(348–347)	42.1	(347)	A	[87/5]
	(381–460)	40.0	(396)	A	[87/5]
	(452–573)	37.9	(467)	A	[87/5]
	(564–646)	37.2	(579)	A	[87/5]
		44.9±0.1	(298)	C	[84/4]
		43.9±0.1	(313)	C	[84/4]
		42.9±0.1	(328)	C	[84/4]
		42.1±0.1	(343)	C	[84/4]
		44.8±0.1	(298)	C	[81/8]
	(348–459)	41.4	(363)	EB, IPM	[87/5][68/4]
	(350–418)	41.3	(365)	MG	[53/4]
C_6H_7N	2-cyclopentene-1-carbonitrile				[26555-56-5]
		44.9±0.1	(298)	C	[70/21]
C_6H_7NO	2-methoxypyridine				[1628-89-3]
	(304–338)	40.5	(319)	A	[87/5]
C_6H_7NO	1-methyl-2(1*H*)-pyridone				[694-85-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(353–399)	60.2	(368)	A	[87/5]
C_6H_7NS	4-(methylthio)pyridine				[22581-72-2]
	(346–383)	55.8	(361)	A	[87/5]
C_6H_8	*cis*, anti, *cis*-tricyclo[3.1.0.0^{2,4}]hexane				
	(273–329)	30.6	(293)		[79/3]
	(273–329)	29.7	(313)		[79/3]
C_6H_8	1,3-cyclohexadiene				[592-57-4]
	(307–364)	32.6	(322)	A, EB	[87/5][73/12]
	(304–322)	32.4	(313)	MM	[74/4]
C_6H_8	1,4-cyclohexadiene				[628-41-1]
	(304–360)	34.0	(319)	A	[87/5]
	(304–322)	33.9	(313)	MM	[74/4]
C_6H_8	*cis* 1,3,5-hexatriene				[2612-46-6]
	(306–323)	33.3	(314)	A, MM	[87/5][74/4]
C_6H_8ClN	3-methylpyridine hydrochloride				[14401-92-4]
	(420–471)	68.7	(435)	A	[87/5]
C_6H_8ClN	4-methylpyridine hydrochloride				[14401-93-5]
	(437–473)	64.7	(452)	A	[87/5]
$C_6H_8Cl_2O_4$	ethylene glycol, *bis* chloroacetate				[6941-69-1]
	(385–557)	73.9	(400)	A	[87/5][47/5]
$C_6H_8N_2$	2,5-dimethylpyrazine				[123-32-0]
	(303–411)	44.5	(357)		[95/4]
$C_6H_8N_2$	adiponitrile				[111-69-3]
	(348–523)	58.7	(363)	A	[87/5]
$C_6H_8N_2$	2-methylaminopyridine				[4597-87-9]
	(308–323)	49.0	(316)	A	[87/5]
$C_6H_8N_2$	3-methylaminopyridine				[18364-47-1]
	(313–343)	57.2	(326)	A	[87/5]
$C_6H_8N_2$	4-methylaminopyridine				[1121-58-0]
	(313–343)	54.1	(328)	A	[87/5]
$C_6H_8N_2$	1,3-diaminobenzene				[108-45-2]
	(372–559)	63.7	(387)	A	[87/5][47/5]
$C_6H_8N_2$	phenyl hydrazine				[100-63-0]
	(413–518)	57.3	(428)	A	[87/5][72/20]
	(345–517)	59.2	(360)		[47/5]
	(378–465)	57.2	(393)	T	[42/4]
C_6H_8O	2-cyclohexen-1-one				[930-68-7]
	(335–481)	49.5±0.4	(298)	EB	[97/8]
C_6H_8O	2,5-dimethylfuran				[625-36-3]
	(271–308)	32.3±0.3	(290)	GS	[98/2]
	(271–308)	31.8±0.3	(298)	GS	[98/2]
$C_6H_8O_2$	methyl bicyclo[1.1.0]butane-1-carboxylate				[4935-01-7]
	(299–377)	37.3	(318)	BG	[71/2]
$C_6H_8O_3$	2,2-dimethylsuccinic acid anhydride				[17347-61-4]
	(334–493)	57.3	(349)	A	[87/5][47/5]
$C_6H_8O_3$	2-methylglutaric acid anhydride				[31468-33-4]
	(366–556)	60.7	(381)	A	[87/5][47/5]
$C_6H_8O_4$	dimethyl fumarate				[624-49-7]
	(361–466)	53.8	(376)	A	[87/5]
$C_6H_8O_4$	dimethyl maleate				[624-48-6]
	(385–421)	52.0	(400)	A	[87/5]
	(318–478)	53.9	(334)		[47/5]
C_6H_8S	2,3-dimethylthiophene				[632-16-6]
	(353–473)	39.4	(368)	A	[87/5][72/20]
C_6H_8S	2,4-dimethylthiophene				[638-00-6]
	(323–493)	41.4	(338)	A	[87/5][72/20] [99/16]
C_6H_8S	2,5-dimethylthiophene				[638-02-8]
	(333–374)	39.7	(348)	I, A	[87/5][71/3] [99/16]
C_6H_8S	3,4-dimethylthiophene				[632-15-5]
	(328–478)	41.1	(343)	A	[87/5][72/20] [99/16]
C_6H_8S	2-ethylthiophene				[872-55-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(333–374)	39.7	(348)	I, A	[87/5][71/3] [99/16]
C_6H_8S	3-ethylthiophene				[1795-01-3]
	(318–473)	40.7	(333)	A	[87/5][72/20]
$C_6H_9F_3O_2$	butyl trifluoroacetate				[367-64-6]
	(343–377)	37.8	(358)	A, EB	[87/5][69/13]
C_6H_9N	cyclopentanecarbonitrile				[4254-02-8]
		48.1±0.1	(298)	C	[83/6]
		43.4±0.1	(298)		[73/6]
	(340–418)	40.9	(359)	BG	[71/2]
		43.5±0.1	(298)	C	[70/21]
C_6H_9N	2,5-dimethylpyrrole				[625-84-3]
	(373–443)	49.5	(388)	A, IPM, EB	[87/5][68/4]
$C_6H_9NO_2$	ethyl 2-cyanopropionate				[1572-99-2]
	(283–323)	58.6±0.3	(298)	GS	[95/11]
C_6H_9P	trivinylphosphine				[3746-01-8]
	(289–334)	33.7	(304)		[57/15][84/9]
C_6H_{10}	*cis* bicyclo[3.1.0]hexane				[285-58-5]
	(273–300)	33.7	(286)	A	[87/5]
		33.5±0.4	(298)		[70/30]
C_6H_{10}	cyclohexene				[110-83-8]
	(312–356)	32.6	(327)		[01/12]
	(285–357)	33.5±0.5	(298)	EB	[96/4]
	(309–365)	32.7	(324)	A, EB	[87/5][73/12]
	(305–322)	33.1	(308)	MM	[74/4]
		32.7±0.1	(313)	C	[73/13]
		32.2±0.1	(323)	C	[73/13]
		31.7±0.1	(333)	C	[73/13]
		31.2±0.1	(343)	C	[73/13]
		30.7±0.1	(353)	C	[73/13]
	(285–357)	33.7	(300)	MM	[50/6]
	(229–292)	32.6	(300)		[41/6]
C_6H_{10}	1-methylcyclopentene				[693-89-0]
		32.6±0.2	(298)	GCC	[79/17]
	(268–403)	33.4	(283)	A	[87/5][72/20]
C_6H_{10}	3-methylcyclopentene				[1120-62-3]
		31.0±0.2	(298)	GCC	[79/17]
	(263–392)	32.1	(278)	A	[87/5][72/20]
C_6H_{10}	4-methylcyclopentene				[1759-81-5]
	(271–403)	33.2	(286)	A	[87/5][72/20]
C_6H_{10}	1,3-dimethylcyclobutene				[1489-61-8]
	(269–296)	31.3	(282)	A	[87/5]
C_6H_{10}	2,3-dimethyl-1,3-butadiene				[513-81-5]
	(273–342)	32.2	(288)	A	[87/5][55/3]
C_6H_{10}	*trans* 1,3-hexadiene				[592-48-3]
	(299–319)	32.1	(309)	A, MM	[87/5][74/4]
C_6H_{10}	*trans* 1,4-hexadiene				[7319-00-8]
	(304–323)	30.2	(313)	A, MM	[87/5][74/4]
C_6H_{10}	1,5-hexadiene				[592-42-7]
	(299–333)	29.4	(314)	A	[87/5]
	(300–319)	28.6	(308)		[74/4]
	(273–333)	30.5	(288)	A	[87/5][55/3] [72/20]
C_6H_{10}	*trans trans* 2,4-hexadiene				[5194-51-4]
	(304–354)	33.2	(319)	A	[87/5]
	(305–323)	33.2	(308)	MM	[74/4]
C_6H_{10}	1-hexyne				[693-02-7]
	(250–290)	33.5	(270)	MM	[81/19]
	(237–287)	34.2	(262)	HSA	[81/19]
	(265–391)	33.4	(280)	A	[87/5][72/20]
C_6H_{10}	3-hexyne				[764-35-2]
	(253–354)	30.5	(268)	A	[87/5]
	(253–298)	31.6	(275)	T	[65/13]
$C_6H_{10}Br_2$	*trans* 1,2-dibromocyclohexane				[7429-37-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(350–416)	53.3	(365)	A	[87/5]
$C_6H_{10}ClFO_2$	3-fluorobutyric acid, 2-chloroethyl ester				
	(273–333)	60.4	(288)	A	[87/5][72/20]
$C_6H_{10}ClF_3O$	2-chloro-1,1,2-trifluoroethyl butyl ether				[358-36-1]
		45.1±0.1	(298)	C	[84/2]
		43.9±0.1	(313)	C	[84/2]
		42.8±0.1	(328)	C	[84/2]
		41.6±0.1	(343)	C	[84/2]
$C_6H_{10}Cl_2$	1,1-dichlorocyclohexane				[2108-92-1]
	(335–444)	43.5	(350)	A	[87/5]
$C_6H_{10}Cl_2$	*cis* 1,2-dichlorocyclohexane				[10498-35-8]
	(364–480)	45.8	(379)	A	[87/5]
$C_6H_{10}Cl_2$	*trans* 1,2-dichlorocyclohexane				[822-86-6]
	(344–462)	45.8	(359)	A	[87/5]
$C_6H_{10}Cl_2$	1,4-dichlorocyclohexane				[19398-57-3]
	(353–406)	47.8	(368)	A	[87/5]
$C_6H_{10}Cl_2O_2$	isobutyl dichloroacetate				[37079-08-6]
	(301–456)	51.4	(316)	A	[87/5][47/5]
$C_6H_{10}F_2O_2$	3-fluorobutyric acid, 2-fluoroethyl ester				
	(273–333)	54.8	(288)	A	[87/5][72/20]
$C_6H_{10}O$	cyclopentenyl methyl ether				
	(274–313)	42.3±0.8	(294)	GS	[98/2]
	(274–313)	42.1±0.8	(298)	GS	[98/2]
$C_6H_{10}O$	2,3-dihydro-4-methyl-2*H*-pyran				[12655-16-2]
	(304–392)	38.1	(319)	A	[87/5][68/16]
					[84/9]
$C_6H_{10}O$	methylenetetrahydro-2*H*-pyran				[35656-02-1]
	(339–382)	36.8	(354)	A	[87/5]
$C_6H_{10}O$	cyclohexanone				[108-94-1]
	(343–383)	46.2	(298)	CGC	[95/21]
	(343–383)	46.9	(298)	CGC	[95/21]
	(343–383)	46.7	(298)	CGC	[95/21]
	(318–428)	44.0	(333)		[93/2]
		44.4±0.1	(308)	C	[92/8]
		44.0±0.1	(313)	C	[92/8]
		43.4±0.1	(323)	C	[92/8]
		43.1±0.1	(328)	C	[92/8]
		42.2±0.1	(338)	C	[92/8]
		41.8±0.1	(343)	C	[92/8]
		41.4±0.1	(348)	C	[92/8]
		42.3±0.2		GC	[89/16]
	(345–458)	42.2	(360)	EB	[87/7]
	(395–426)	40.4	(410)		[84/19]
	(362–439)	41.5	(377)	A, EB	[87/5][73/12]
		45.1±0.1	(298)	C	[68/17]
	(273–298)	40.3	(286)		[38/6]
$C_6H_{10}O$	5-hexen-2-one				[109-49-9]
	(317–440)	42.1±0.1	(320)	EB	[02/21]
	(317–440)	39.4±0.2	(360)	EB	[02/21]
	(317–440)	36.6±0.3	(400)	EB	[02/21]
	(317–440)	33.5±0.6	(440)	EB	[02/21]
	(449–561)	34.6	(464)	A	[87/5]
$C_6H_{10}O$	mesityl oxide				
		35.2	(401)		[1898/2][97/18]
	[Note: May be a mixture of 2-methyl-1-penten-4-one and 4-methyl-3-penten-2-one]				
$C_6H_{10}O$	2-methyl-1-penten-4-one				[3744-02-3]
	(389–461)	36.9	(404)	A	[87/5]
	(286–461)	41.9	(298)		[75/8]
	(306–398)	41.1	(321)	MM	[87/5][47/9]
					[72/20]
$C_6H_{10}O$	4-methyl-3-penten-2-one				[141-79-7]
	(303–442)	42.7±0.3	(298)	EB	[97/18]
	(303–442)	41.4±0.3	(320)	EB	[97/18]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(303–442)	39.1±0.3	(360)	EB	[97/18]
	(303–442)	36.5±0.3	(400)	EB	[97/18]
	(303–442)	33.5±0.6	(440)	EB	[97/18]
	(343–383)	44.8	(298)	CGC	[95/21]
	(399–471)	37.8	(414)	A	[87/5]
	(292–471)	43.3	(298)		[75/4]
	(313–405)	41.5	(328)	MM	[87/5][47/9] [72/20]
$C_6H_{10}O_2$	methyl cyclobutanecarboxylate				[765-85-5]
		44.2±0.2		GS	[98/22]
		44.7±0.1	(298)	C	[83/6]
	(319–378)	41.4	(340)	BG	[71/2]
$C_6H_{10}O_2$	cyclopropanecarboxylic acid ethyl ester				
	(278–308)	44.0±0.5		GS	[98/22]
$C_6H_{10}O_2$	allyl glycidyl ether				[106-92-3]
	(323–420)	47.0	(338)	A	[87/5]
$C_6H_{10}O_2$	butyric acid, vinyl ester				[123-20-6]
	(365–387)	39.3	(376)	A	[87/5]
$C_6H_{10}O_2$	4-vinyl-1,3-dioxane				[1072-96-4]
	(306–416)	54.5	(321)	A	[87/5]
$C_6H_{10}O_2$	caprolactone				[502-44-3]
	(395–436)	54.0±0.2	(415)	EB	[91/7]
	(395–436)	62.0±1.3	(298)	EB	[91/7]
$C_6H_{10}O_2$	ethyl crotonate				[10544-63-5]
	(329–420)	47.1	(344)	A	[87/5]
$C_6H_{10}O_2$	ethyl methacrylate				[97-63-2]
	(285–390)	38.3	(300)	A	[87/5]
$C_6H_{10}O_2$	5,5-dimethyldihydro-2(3*H*)-furanone				[3123-97-5]
	(311–480)	52.7	(326)	A	[87/5]
$C_6H_{10}O_2$	propyl acrylate				[925-60-0]
	(287–395)	37.9	(302)	A	[87/5]
$C_6H_{10}O_2$	2,5-hexanedione				[110-13-4]
	(386–474)	50.1	(401)	A	[87/5]
$C_6H_{10}O_3$	*cis/trans* 2,5-dimethoxy-2,5-dihydrofuran				
		44.2±0.3	(298)	CGC	[00/9]
$C_6H_{10}O_3$	cyclohexene ozonide				[284-22-0]
	(276–311)	74.2	(291)	A	[87/5]
	(353–403)	58.6	(378)		[77/9]
$C_6H_{10}O_3$	ethyl acetoacetate				[141-97-9]
	(301–454)	52.5	(316)	A	[87/5]
$C_6H_{10}O_3$	methyl levulinate				[624-45-3]
	(312–471)	50.4	(327)	A	[87/5][47/5]
		51.1	(410)		[31/1]
$C_6H_{10}O_3$	propionic anhydride				[123-62-6]
	(293–440)	48.2	(308)	A	[87/5]
	(341–440)	52.2	(356)		[1883/1]
$C_6H_{10}O_3$	ethyl 3-oxobutanoate				[141-97-9]
		54.2±1.0	(298)	C	[95/6]
		55.0			[75/39]
$C_6H_{10}O_4$	1,1-diacetoxyethane				[542-10-9]
	(343–438)	49.7	(358)	A	[87/5]
$C_6H_{10}O_4$	2-acetoxypropionic acid, methyl ester				[6284-75-9]
	(337–445)	52.9	(352)	A	[87/5]
$C_6H_{10}O_4$	3-acetoxypropionic acid, methyl ester				[38003-42-8]
	(343–358)	68.0	(350)	A	[87/5]
$C_6H_{10}O_4$	diethyl oxalate				[95-92-1]
	(343–457)	53.9	(358)	A	[87/5]
	(320–459)	62.3	(335)	A	[87/5][47/5]
$C_6H_{10}O_4$	dimethyl succinate				[106-65-0]
	(340–470)	49.3	(364)	A	[87/5]
$C_6H_{10}O_4$	ethylene glycol diacetate				[111-55-7]
	(311–464)	55.2	(326)	A	[87/5]
		61.0±0.1	(298)	C	[70/17]
	(373–463)	57.6	(388)		[26/5][84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_6H_{10}O_4$	dimethyl methylmalonate				
	(278–308)	57.8±0.8	(293)	GS	[92/13]
$C_6H_{10}O_4$	adipic acid				[124-04-9]
	(432–611)	92.0	(447)	A	[87/5][47/5]
$C_6H_{10}O_5$	(*l*) glucosane				[498-07-7]
	(468–528)	92.2	(483)	A	[87/5][64/1]
					[72/20]
$C_6H_{10}O_5$	(*l*) malic acid, dimethyl ester				[617-55-0]
	(348–516)	58.7	(363)	A	[87/5][47/5]
$C_6H_{10}O_5$	methyl[1-(methxoycarbonyl)ethyl]carbonate				
	(358–483)	55.9	(373)	A	[87/5]
$C_6H_{10}O_6$	(*d*) dimethyl tartrate				[608-68-4]
	(322–365)	76.4	(337)	A, ME	[87/5][54/6]
	(375–553)	66.0	(390)		[47/5]
$C_6H_{10}O_6$	(*dl*) dimethyl tartrate				[609-69-5]
	(373–555)	62.5	(388)	A	[87/5][47/5]
$C_6H_{10}S$	diallyl sulfide				[592-88-1]
	(263–411)	46.6	(278)		[99/16]
	(263–412)	43.2	(278)	A	[87/5][47/5]
$C_6H_{11}Br$	bromocyclohexane				[108-85-0]
	(347–439)	42.8	(362)		[97/15]
$C_6H_{11}BrO_2$	ethyl 2-bromo-2-methylpropionate				[600-00-0]
	(283–437)	45.4	(298)	A	[87/5][47/5]
$C_6H_{11}Cl$	chlorocyclohexane				[542-18-7]
	(313–353)	41.8	(298)	CGC	[95/21]
		40.7±0.1	(298)	C	[95/18]
		42.9±0.6	(298)	C	[94/20]
	(350–416)	39.3	(365)	A	[87/5]
$C_6H_{11}Cl$	1-chloro-1-methylcyclopentane				[6196-85-6]
		39.7±0.1	(297)	C	[97/20]
$C_6H_{11}ClO$	diethylacetyl chloride				[2736-40-5]
	(313–412)	39.4	(328)	A	[87/5]
$C_6H_{11}ClO$	3-ethyl-3-(chloromethyl)oxetane				[2177-22-2]
		49.7±0.2	(298)	C	[71/25]
$C_6H_{11}ClO_2$	chloroacetic acid, sec-butyl ester				[17696-64-9]
	(290–441)	49.6	(305)	A	[87/5]
$C_6H_{11}ClO_2$	chloroacetic acid, isobutyl ester				[13361-38-8]
	(293–323)	43.9	(308)	A	[87/5]
$C_6H_{11}F$	fluorocyclohexane				[372-46-3]
	(271–301)	37.5±0.3	(298)	GS	[97/14]
	(316–373)	35.0	(331)	A	[87/5]
$C_6H_{11}FO_2$	2-fluorohexanoic acid				[1578-57-0]
	(387–411)	80.9	(399)	A	[87/5]
$C_6H_{11}I$	iodocyclohexane				[626-62-0]
	(313–353)	48.3	(298)	CGC	[95/21]
	(358–408)	43.0	(383)	A, I	[87/5][56/26]
$C_6H_{11}N$	hexanenitrile				[628-73-9]
	(371–442)	43.3	(386)	A, EB	[87/5][73/12]
	(344–441)	44.6	(359)	EB	[71/4]
$C_6H_{11}N$	4-methylvaleronitrile				[542-54-1]
	(332–430)	35.7	(347)	A	[87/5]
$C_6H_{11}NO$	cyclohexanone oxime				[100-64-1]
	(370–385)	63.1±1.0	(378)	EB	[02/20]
		58.7±0.6	(368)	C	[92/6]
	(371–446)	59.5±0.5			[92/6]
$C_6H_{11}NO$	ϵ-caprolactam				[105-60-2]
	(350–568)	69.2±0.3	(360)	EB	[02/17]
	(350–568)	65.7±0.3	(400)	EB	[02/17]
	(350–568)	62.3±0.2	(440)	EB	[02/17]
	(350–568)	59.0±0.2	(480)	EB	[02/17]
	(350–568)	55.7±0.3	(520)	EB	[02/17]
	(350–568)	52.4±0.5	(560)	EB	[02/17]
	(373–543)	62.3	(388)	A	[87/5]
$C_6H_{11}NO$	*cis* 2-hexenoic acid amide				[820-99-5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(343–383)	61.7	(358)	A	[87/5]
$C_6H_{11}NO$	1-methyl-2-piperidone				[931-20-4]
	(341–385)	55.4	(356)	A	[87/5]
$C_6H_{11}NO$	2,3,4,5-tetrahydro-6-methoxypyridine				[5693-62-9]
	(292–338)	42.8	(307)	A	[87/5]
$C_6H_{11}NO_2$	nitrocyclohexane				[1122-60-7]
	(298–318)	54.7±0.6	(298)	GS	[97/5]
$C_6H_{11}NO_2$	1-aminocyclopentanecarboxylic acid				[52-52-8]
	(443–468)	123.3	(455)	A	[87/5]
$C_6H_{11}NO_2$	lactic acid N-allyl amide				
	(359–419)	78.2	(374)	A	[87/5]
$C_6H_{11}NO_3$	ethyl acetamidoacetate				[1906-82-7]
	(383–466)	69.4	(398)	A	[87/5][72/20]
$C_6H_{11}NS$	2-piperidinethione				[13070-07-0]
	(363–370)	63.3	(366)	A	[87/5]
$C_6H_{11}NS$	2,3,4,5-tetrahydro-(methylthio)pyridine				[19766-29-1]
	(313–351)	52.6	(328)	A	[87/5]
C_6H_{12}	ethylcyclobutane				[4806-61-5]
		31.2±0.2	(298)	C	[83/6]
		32.6±0.8	(298)	EB	[74/3]
C_6H_{12}	cyclohexane				[110-82-7]
	(300–345)	32.7	(315)		[02/45]
	(360–470)	32.2	(375)		[93/3]
	(313–336)	31.9	(324)	EB	[95/9]
	(313–336)	33.1	(298)	EB	[95/9]
		32.3	(314)	C	[88/19]
		31.1	(332)	C	[88/19]
		30.3	(345)	C	[88/19]
		30.0	(355)	C	[88/19]
	(353–414)	30.9	(368)	A	[87/5]
	(412–491)	29.6	(427)	A	[87/5]
	(489–553)	29.6	(504)	A	[87/5]
		33.0±0.1	(298)	C	[82/18]
		33.0	(298)		[81/12]
		33.0±0.1	(298)	C	[79/13]
		32.3±0.1	(313)	C	[79/13]
		31.2±0.1	(333)	C	[79/13]
		31.0±0.1	(338)	C	[79/13]
		30.4±0.1	(348)	C	[79/13]
		30.1±0.1	(353)	C	[79/13]
		32.2±0.1	(313)	C	[73/13]
		31.9±0.1	(323)	C	[73/13]
		31.1±0.1	(333)	C	[73/13]
		30.6±0.1	(343)	C	[73/13]
		30.1±0.1	(354)	C	[73/13]
		32.9±0.3	(298)	ME	[72/33]
		32.9	(298)		[71/7]
		33.0	(298)		[71/28]
	(303–343)	32.5	(318)		[68/6]
	(298–348)	32.9	(313)		[67/21]
	(316–354)	32.8	(331)		[65/9]
		31.4±0.1	(324)	C	[51/2]
		30.4±0.1	(346)	C	[51/2]
		33.0	(298)	C	[47/7]
		30.1	(354)		[46/11]
	(293–355)	32.9	(308)	A, MM	[87/5][45/2]
		33.3±0.1	(298)	C	[43/5]
		33.5	(298)		[27/3]
C_6D_{12}	cyclohexane-d_{12}				[1735-17-7]
	(283–353)	33.1	(298)		[53/10]
C_6H_{12}	methylcyclopentane				[96-37-7]
		31.6	(298)		[71/28]
		31.3±0.1	(304)	C	[59/8]
		30.2±0.1	(326)	C	[59/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		29.1±0.1	(345)	C	[59/8]
		31.6±0.1	(298)	C	[47/7]
	(288–346)	31.9	(303)	A, MM	[87/5][45/2]
C_6H_{12}	1-hexene				[592-41-6]
	(300–337)	30.6	(315)		[01/12]
	(273–343)	31.6	(288)	A	[87/5]
		30.6	(298)		[71/28]
	(289–337)	30.6	(298)		[56/9]
	(289–337)	31.0	(304)	MM	[50/6]
C_6H_{12}	*cis* 2-hexene				[7688-21-3]
	(278–343)	32.2	(293)	A	[87/5]
		31.5	(298)		[71/28]
	(298–342)	31.5	(298)		[56/9]
C_6H_{12}	*trans* 2-hexene				[4050-45-7]
	(283–342)	32.2	(298)	A	[87/5]
		31.6	(298)		[71/28]
	(292–341)	31.5	(298)		[56/9]
C_6H_{12}	*cis* 3-hexene				[7642-09-3]
	(276–348)	32.1	(291)	A	[87/5]
		31.3	(298)		[71/28]
	(185–340)	31.3	(298)		[56/7]
C_6H_{12}	*trans* 3-hexene				[13269-52-8]
	(278–341)	32.3	(293)	A	[87/5]
		31.6	(298)		[71/28]
	(291–341)	31.5	(298)		[56/7]
C_6H_{12}	2-methyl-1-pentene				[763-29-1]
	(272–341)	31.6	(287)	A	[87/5]
		30.5	(298)		[71/28]
	(300–335)	30.5	(298)		[56/9]
C_6H_{12}	3-methyl-1-pentene				[760-20-3]
	(265–333)	30.0	(280)	A	[87/5]
		28.6	(298)		[71/28]
	(287–328)	28.6	(298)		[56/9]
C_6H_{12}	4-methyl-1-pentene				[691-37-2]
	(310–360)	28.6±0.2	(298)	EB	[97/18]
	(310–360)	27.4±0.3	(320)	EB	[97/18]
	(310–360)	26.2±0.4	(340)	EB	[97/18]
	(310–360)	24.9±0.5	(360)	EB	[97/18]
	(265–333)	30.1	(280)	A	[87/5]
		28.7	(298)		[71/28]
	(287–328)	28.7	(298)		[56/7]
C_6H_{12}	2-methyl-2-pentene				[625-27-4]
	(277–346)	32.4	(292)	A	[87/5]
		31.6	(298)		[71/28]
	(292–341)	31.6	(298)		[56/7]
C_6H_{12}	*cis* 3-methyl-2-pentene				[922-62-3]
	(277–347)	32.2	(292)	A	[87/5]
		31.3	(298)		[71/28]
	(300–344)	32.1	(298)		[56/9]
C_6H_{12}	*trans* 3-methyl-2-pentene				[616-12-6]
	(280–349)	32.8	(295)	A	[87/5]
		32.1	(298)		[71/28]
	(292–341)	31.3	(298)		[56/9]
C_6H_{12}	*cis* 4-methyl-2-pentene				[691-38-3]
	(267–330)	30.8	(282)	A	[87/5]
		29.5	(298)		[71/28]
	(300–330)	29.5	(298)		[56/9]
C_6H_{12}	*trans* 4-methyl-2-pentene				[674-76-0]
	(269–337)	31.2	(284)	A	[87/5]
		30.0	(298)		[71/28]
	(291–332)	30.0	(298)		[56/9]
C_6H_{12}	2,3-dimethyl-1-butene				[563-78-0]
	(267–335)	30.5	(282)	A	[87/5]
		29.2	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(289–329)	29.2	(298)		[56/9]
C_6H_{12}	3,3-dimethyl-1-butene				[558-37-2]
	(254–316)	28.6	(269)	A	[87/5]
		26.6	(298)		[71/28]
	(281–315)	26.6	(298)		[56/9]
C_6H_{12}	2,3-dimethyl-2-butene				[563-79-1]
	(289–347)	32.6	(298)		[56/9]
		32.5	(298)		[71/28]
	(282–348)	33.1	(297)	A	[87/5][55/3]
		32.9±0.1	(292)	C	[55/13]
		32.0±0.1	(308)	C	[55/13]
		30.9±0.1	(326)	C	[55/13]
		29.7±0.1	(346)	C	[55/13]
C_6H_{12}	2-ethyl-1-butene				[760-21-4]
	(289–338)	31.0	(298)		[56/9]
$C_6H_{12}Br_2$	1,1-dibromohexane				[58133-26-9]
	(378–526)	51.6	(393)	A, EST	[87/5][56/16] [72/20]
$C_6H_{12}ClNO$	4-(2-chloroethyl)morpholine				[3240-94-6]
	(273–333)	53.8	(288)	A	[87/5][72/20]
$C_6H_{12}Cl_2$	1,1-dichlorohexane				[62017-16-7]
	(330–440)	48.7	(298)		[87/12][91/2]
	(345–484)	45.1	(360)	A, EST	[87/5][56/16] [72/20]
$C_6H_{12}Cl_2$	(*dl*) 1,2-dichlorohexane				[2162-92-7]
	(350–440)	48.8	(298)		[91/2]
	(352–442)	44.9	(367)	A	[87/5]
		47.9±0.7	(298)	EB	[75/16]
$C_6H_{12}Cl_2$	1,6-dichlorohexane				[2163-00-0]
	(380–480)	56.3	(298)		[88/11][91/2]
$C_6H_{12}Cl_2O$	*bis*(2-chloro-1-methylethyl) ether				[108-60-1]
	(302–456)	53.6	(317)	A	[87/5][47/5]
$C_6H_{12}Cl_2O_2$	*bis*(2-chloroethyl)acetaldehyde acetal				[14689-97-5]
	(329–486)	59.4	(344)	A	[87/5][47/5]
$C_6H_{12}Cl_3N$	*tris*(2-chloroethyl)amine				[555-77-1]
	(273–333)	65.0	(288)	A, GS	[87/5][48/13] [72/20]
$C_6H_{12}Cl_3O_4P$	*tris*(2-chloroethyl)phosphate				
	(293–445)	36.7	(308)	A	[87/5][72/20]
$C_6H_{12}F_2$	1,1-difluorohexane				[62127-41-7]
	(290–407)	37.7	(305)	A, EST	[87/5][56/16] [72/20]
$C_6H_{12}F_3OP$	methyl (trifluoromethyl)phosphinous acid, *tert*-butyl ester				
	(273–329)	39.7	(296)		[70/26]
$C_6H_{12}F_3PS$	methyl (trifluoromethyl)phosphinothious acid, *tert*-butyl ester				[26348-87-8]
	(296–337)	43.2	(312)		[70/26]
$C_6H_{12}F_4N_2$	N,N,N′,N′-tetrafluoro-2-methyl-1,2-pentanediamine				[16096-76-7]
	(253–293)	42.8	(278)	A, IPM	[87/5][63/9] [62/13]
$C_6H_{12}N_2$	(diethylamino)acetonitrile				[3010-02-4]
	(283–318)	49.9±0.3		GS	[97/10]
$C_6H_{12}N_2O$	1,3-dimethyl-3,4,5,6-tetrahydro-2(1*H*)pyrimidinone				[7226-23-5]
	(370–520)	58.0	(400)	EB	[87/2]
$C_6H_{12}N_2OS$	tetramethyl monothiooxamide				
		59	(508)	TGA, DSC	[02/36]
$C_6H_{12}N_2O_2$	tetramethyloxamide				
		52.5	(460)	TGA, DSC	[02/36]
$C_6H_{12}N_2O_6$	2,5-dinitroxyhexane				
	(293–313)	54.4	(303)	B,GS	[57/5][72/20]
$C_6H_{12}N_2O_8$	triethylene glycol dinitrate				[111-22-8]
	(303–348)	88.3	(318)	A	[87/5][72/20]
$C_6H_{12}N_2S_2$	tetramethyl dithiooxamide				[35840-78-9]
		60.5	(533)	TGA, DSC	[02/36]
$C_6H_{12}O$	(*dl*) 2,5-dimethyltetrahydrofuran				[100-38-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(278–370)	35.4	(293)	A	[87/5]
$C_6H_{12}O$	1,2-epoxyhexane				[1436-34-6]
	(300–390)	43.1	(315)	A	[87/5][69/21] [84/9]
$C_6H_{12}O$	2-methyl-2,3-epoxypentane				[1192-22-9]
	(306–369)	40.6	(321)	A	[87/5]
$C_6H_{12}O$	allyl isopropyl ether				[6140-80-3]
	(253–415)	36.1	(268)	A	[87/5]
	(229–353)	36.8	(244)	A	[87/5][47/5]
$C_6H_{12}O$	allyl propyl ether				[1471-03-0]
	(261–428)	37.5	(276)	A	[87/5]
	(234–364)	36.4	(249)	A	[87/5][47/5]
$C_6H_{12}O$	butyl vinyl ether				[111-34-2]
	(311–403)	36.7±0.2	(298)	EB	[96/5]
	(353–393)	36.5	(298)	CGC	[95/21]
	(269–368)	36.1	(284)	A	[87/5]
$C_6H_{12}O$	isobutyl vinyl ether				[109-53-5]
	(266–357)	37.4	(281)	A	[87/5]
$C_6H_{12}O$	cyclohexanol				[108-93-0]
	(390–430)	49.8	(405)		[02/9]
		62.0±0.3	(298)	C	[99/6]
	(341–471)	63.5±0.7	(298)	EB	[97/8]
	(323–373)	61.3	(298)	CGC	[95/21]
	(350–456)	55.0	(365)	EB	[87/7]
	(318–434)	59.9	(333)	A	[87/5]
	(300–434)	62.7	(315)	A	[87/5]
	(404–432)	49.3	(418)		[84/19]
	(303–373)	58.4	(318)		[84/27]
	(299–319)	60.4	(309)		[75/1]
		62.0±0.9	(298)		[75/1]
		62.0±0.2	(298)	C	[68/17]
		62.0±0.3	(298)		[66/2]
	(307–422)	54.8	(322)		[46/4]
$C_6H_{12}O$	1-methylcyclopentanol				[1462-03-9]
	(354–407)	45.7	(369)	A	[87/5]
$C_6H_{12}O$	5-hexen-1-ol				[821-41-0]
		60.2±0.1	(298)	C	[96/9]
		58.0±0.1	(343)	C	[96/9]
		55.7±0.1	(358)	C	[96/9]
$C_6H_{12}O$	(*dl*) 3-methyl-2-pentanone				[565-61-7]
	(286–400)	39.8	(301)	A	[87/5]
	(283–395)	41.5	(298)	A	[87/5]
	(385–455)	36.5	(400)	A	[87/5]
	(283–457)	41.2	(298)		[75/8]
$C_6H_{12}O$	2-hexanone				[591-78-6]
		43.1±0.1	(298)	C	[92/8]
		42.5±0.1	(308)	C	[92/8]
		41.6±0.1	(323)	C	[92/8]
		40.7±0.1	(338)	C	[92/8]
		40.1±0.1	(348)	C	[92/8]
		39.5±0.1	(358)	C	[92/8]
	(293–411)	40.8	(308)	A	[87/5]
	(279–423)	43.8	(294)	A	[87/5]
	(310–427)	41.5	(325)	A	[87/5]
	(421–523)	36.7	(436)	A	[87/5]
	(513–587)	36.1	(528)	A	[87/5]
		43.1±0.1	(298)	C	[83/3]
		43.0±0.3	(298)	GCC	[79/7]
	(307–482)	42.9	(298)		[75/8]
		42.2±0.1	(298)	C	[70/19]
	(280–400)	53.8	(295)		[47/5]
$C_6H_{12}O$	3-hexanone				[589-38-8]
	(408–517)	36.5	(423)	A	[87/5]
	(511–583)	35.4	(526)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		40.6±0.1	(298)	C	[83/3]
		42.3±0.3	(298)	GCC	[79/7]
	(348–413)	38.9	(363)	A	[87/5][75/8]
		42.3	(298)		[75/8]
	(292–406)	42.2	(307)	A	[87/5][72/20]
		41.9±0.2	(298)	C	[70/19]
		38.4±0.1	(354)	C	[67/39]
		37.0±0.1	(374)	C	[67/39]
		35.4±0.1	(396)	C	[67/39]
	(349–406)	38.8	(364)	GS, EB	[65/7]
$C_6H_{12}O$	3,3-dimethyl-2-butanone (pinacolone)				[75-97-8]
		37.8±0.1	(308)	C	[92/8]
		37.5±0.1	(313)	C	[92/8]
		36.9±0.1	(323)	C	[92/8]
		36.7±0.1	(328)	C	[92/8]
		35.8±0.1	(338)	C	[92/8]
		35.4±0.1	(343)	C	[92/8]
		35.0±0.1	(348)	C	[92/8]
	(311–381)	36.9	(326)	A	[87/5]
	(363–400)	34.9	(378)	A	[87/5]
	(396–509)	33.8	(411)	A	[87/5]
	(491–567)	33.1	(506)	A	[87/5]
	(289–402)	38.3	(304)	A	[87/5][75/8]
		38.3	(298)		[75/8]
		37.9±0.1	(298)	C	[70/19]
$C_6H_{12}O$	4-methyl-2-pentanone				[108-10-1]
		40.1±0.1	(308)	C	[92/8]
		39.0±0.1	(323)	C	[92/8]
		38.0±0.1	(338)	C	[92/8]
		37.4±0.1	(348)	C	[92/8]
	(309–416)	39.2	(324)		[88/6]
	(281–400)	42.5	(296)	A	[87/5]
	(349–389)	37.0	(365)	EB	[85/12]
		42.5±0.1	(298)	C	[83/3]
	(282–456)	41.0	(298)		[75/8]
	(294–390)	41.2	(309)	A	[87/5][52/14]
$C_6H_{12}O$	2-methyl-3-pentanone				[565-69-5]
	(300–387)	43.4	(315)	A	[87/5]
	(280–387)	41.0	(295)	A	[87/5]
	(377–450)	36.2	(392)	A	[87/5]
	(280–452)	40.5	(298)		[75/8]
		39.8±0.2	(298)	C	[70/18]
$C_6H_{12}O$	hexanal				[66-25-1]
		42.3±0.1	(298)		[81/18]
	(315–402)	41.0	(330)		[79/15]
$C_6H_{12}OS$	S-butyl thiolacetate				[926-47-2]
		48.1±0.2	(298)	C	[66/2]
$C_6H_{12}OS$	S-*tert*-butyl thiolacetate				[999-90-6]
		42.9±0.2	(298)	C	[66/2]
$C_6H_{12}O_2$	2-ethyl-2-methyl-1,3-dioxolane				[126-39-6]
	(274–313)	44.8±0.3	(298)	GS	[02/32]
	(274–313)	43.1±0.3		GS	[98/21]
$C_6H_{12}O_2$	2-propyl-1,3-dioxolane				[3390-13-4]
	(278–313)	45.3±0.3	(298)	GS	[98/21][02/29]
$C_6H_{12}O_2$	4-ethyl-1,3-dioxane				[1121-61-5]
	(362–412)	39.3	(377)	A	[87/5]
$C_6H_{12}O_2$	2,4-dimethyl-1,3-dioxane				[766-20-1]
	(274–313)	44.9±0.6	(298)	GS	[02/32]
$C_6H_{12}O_2$	4,4-dimethyl-1,3-dioxane				[766-15-4]
	(333–407)	37.1	(348)	A	[87/5][68/16]
	(363–406)	38.8	(378)		[69/8]
$C_6H_{12}O_2$	*cis* 4,5-dimethyl-1,3-dioxane				[2391-24-4]
	(353–410)	48.5	(368)	A	[87/5]
$C_6H_{12}O_2$	*trans* 4,5-dimethyl-1,3-dioxane				[1121-20-6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(353–408)	39.1	(368)	A	[87/5]
$C_6H_{12}O_2$	2-hydroxymethyltetrahydropyran				[100-72-1]
	(344–460)	49.0	(359)	A	[87/5]
$C_6H_{12}O_2$	1,1-dimethoxycyclobutane				[4415-90-1]
	(274–313)	42.0±0.3	(298)	GS	[02/32]
	(273–313)	42.3±0.3		GS	[98/21]
	(301–348)	42.6	(325)	EB	[94/16]
$C_6H_{12}O_2$	[(1-methylethoxy)methyl]oxirane				[4016-14-2]
		43.5±2.1			[87/14]
$C_6H_{12}O_2$	(propoxymethyl)oxirane				[3126-95-2]
		48.5±0.4			[87/14]
$C_6H_{12}O_2$	1,1-dimethoxy-3-butene				
	(305–334)	42.0	(320)	EB	[94/16]
$C_6H_{12}O_2$	butyl acetate				[123-86-4]
		42.4	(298)	GC	[97/13]
	(313–363)	42.7	(298)	CGC	[95/21]
	(313–353)	43.1	(298)	CGC	[95/21]
		41.0±0.5	(298)	GC	[87/17]
		43.0±0.1	(313)	C	[80/13]
		41.7±0.1	(328)	C	[80/13]
		40.6±0.1	(343)	C	[80/13]
		39.4±0.1	(358)	C	[80/13]
	(326–404)	41.3	(341)	DTA	[80/8]
		43.6±0.5	(298)	GCC	[80/5]
		43.7±0.2	(298)	GCC	[80/5]
	(341–399)	40.5	(356)	A, EB	[87/5][69/13]
		43.6±0.2	(298)	C	[66/2]
	(332–399)	40.8	(347)	A	[87/5][64/24]
					[84/9]
		37.5	(398)		[61/23]
$C_6H_{12}O_2$	diacetone alcohol				[123-42-2]
	(301–388)	47.5	(316)	A, I	[87/5][52/14]
$C_6H_{12}O_2$	4-hydroxy-4-methyl-2-pentanone				[123-42-2]
		52.1			[75/39]
	(295–441)	51.0	(310)		[47/5]
$C_6H_{12}O_2$	ethyl butyrate				[105-54-4]
	(330–435)	39.4	(345)		[97/11]
	(332–393)	40.2	(347)		[93/8]
	(310–336)	42.1±0.1	(323)	EB	[91/7]
	(310–336)	43.7±1.3	(298)	EB	[91/7]
	(263–404)	48.3	(278)	A	[87/5]
		42.0±0.1	(298)	C	[66/2]
	(254–394)	41.8	(270)		[47/5]
$C_6H_{12}O_2$	ethyl isobutyrate				[97-62-1]
	(383–483)	36.0	(398)	A	[87/5]
		39.8±0.1	(298)	C	[66/2]
	(249–393)	44.1	(264)	A	[87/5][47/5]
$C_6H_{12}O_2$	isobutyl acetate				[110-19-0]
	(252–391)	39.8	(267)	A	[87/5][47/5]
$C_6H_{12}O_2$	*tert*-butyl acetate				[540-88-5]
		38.0±0.2	(298)	C	[66/2][96/11]
$C_6H_{12}O_2$	methyl 2,2-dimethylpropanoate				[598-98-1]
	(313–363)	37.7	(298)	CGC	[95/21]
		39.0±0.5	(298)	GC	[87/17]
		38.8	(298)		[U/1][85/6]
		39.7±0.3	(298)	GCC	[80/5]
	(299–356)	35.2	(319)	BG	[71/2]
$C_6H_{12}O_2$	isopentyl formate				[110-45-2]
	(255–397)	38.9	(270)	A	[87/5]
$C_6H_{12}O_2$	methyl isovalerate				[556-24-1]
	(254–390)	41.2	(269)	A	[87/5][47/5]
$C_6H_{12}O_2$	methyl valerate				[624-24-8]
		41.3	(350)		[02/27]
		43.7±0.2	(298)		[02/27]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(297–411)	42.5	(312)	A	[87/5]
		43.3±0.5	(298)	GC	[87/17]
		46.1±0.3	(298)	GCC	[80/5]
		44.1±0.1	(298)	GCC	[80/5]
		43.1±0.1	(298)	C	[77/1]
$C_6H_{12}O_2$	propyl propionate				[106-36-5]
	(378–406)	37.6	(392)		[94/15]
	(336–394)	39.9	(351)		[93/8]
	(259–396)	43.1	(274)	A	[87/5][47/5]
		42.1±0.1	(313)	C	[80/13]
		41.1±0.1	(328)	C	[80/13]
		40.0±0.1	(343)	C	[80/13]
		38.8±0.1	(358)	C	[80/13]
$C_6H_{12}O_2$	hexanoic acid				[142-62-1]
	(297–328)	68.4±0.9	(313)	GS	[00/6]
	(297–328)	69.2±0.9	(298)	GS	[00/6]
	(353–393)	71.3	(298)	CGC	[95/21]
		70.9	(271)		[82/4]
	(270–280)	73.2±2.0	(298)	TE	[79/4]
	(335–487)	65.9	(350)	A	[87/5][72/20]
	(371–452)	66.6	(386)		[57/16][84/9]
		64.6	(367)	I	[43/7]
$C_6H_{12}O_2$	2-ethyl butyric acid				[88-09-5]
	(373–466)	58.2	(388)	A	[87/5]
$C_6H_{12}O_2$	4-methylvaleric acid				[646-07-1]
	(339–481)	91.7	(354)	A	[87/5]
$C_6H_{12}O_2$	2,2-dimethylbutanoic acid				[595-37-9]
	(364–498)	59.4±0.3	(370)	EB	[02/14]
	(364–498)	54.6±0.3	(410)	EB	[02/14]
	(364–498)	50.0±0.4	(450)	EB	[02/14]
	(364–498)	46.0±0.7	(490)	EB	[02/14]
$C_6H_{12}O_2$	3,3-dimethylbutanoic acid				[1070-83-3]
	(283–325)	63.6±0.9	(304)	GS	[00/6]
	(283–325)	64.0±0.9	(298)	GS	[00/6]
$C_6H_{12}O_3$	1-hexene ozonide				[767-09-9]
	(353–373)	43.9	(363)	MM	[77/9]
$C_6H_{12}O_3$	sec-butyl glycolate				
	(301–451)	52.3	(316)	A	[87/5][47/5]
$C_6H_{12}O_3$	2,4,6-trimethyl-1,3,5-trioxane				[123-63-7]
	(323–396)	41.5	(338)	A	[87/5]
		41.4±0.4			[59/23]
$C_6H_{12}O_3$	glycerol 1-monoallyl ether				
	(323–383)	74.7	(338)	A	[87/5][72/20]
$C_6H_{12}O_3$	2-ethoxyacetic acid, ethyl ester				[817-95-8]
	(330–430)	46.1	(345)	A	[87/5]
$C_6H_{12}O_3$	3-ethoxypropionic acid, methyl ester				[14144-33-3]
	(320–432)	44.3	(335)	A	[87/5][72/20]
$C_6H_{12}O_3$	2-ethoxyethanol acetate				[111-15-9]
	(322–430)	50.9	(337)	A	[87/5]
		52.7±0.1	(298)	C	[70/17]
	(330–468)	52.6±0.4	(298)	EB	[66/3]
$C_6H_{12}O_3$	3-hydroxypropionic acid, propyl ester				
	(350–375)	60.9	(362)	A	[87/5]
$C_6H_{12}O_3$	3-methoxypropionic acid, ethyl ester				[10606-42-5]
	(313–432)	44.6	(328)	A	[87/5]
$C_6H_{12}O_3$	propyl lactate				[616-09-1]
	(334–442)	52.1	(349)	A	[87/5]
$C_6H_{12}O_3$	ethoxymethyl propionate				[54078-53-4]
		49.9±0.1	(298)	C	[74/37]
$C_6H_{12}O_4$	(*dl*) glycerol 1-propionate				[624-47-5]
	(388–456)	75.8	(403)	A	[87/5][72/20]
$C_6H_{12}O_6$	*myo*-inositol				
	(497–524)	119.0±1.4	(519)	TE	[90/16]
$C_6H_{12}S$	cyclopentyl methyl sulfide				[7133-36-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		45.1±0.1	(298)		[72/11][66/5]
	(354–473)	41.7	(369)	A, EB	[87/5][66/5]
$C_6H_{12}S$	*cis* 2,5-dimethyltetrahydrothiophene				[5161-13-7]
	(311–444)	41.7	(326)		[99/16]
	(349–427)	39.7	(364)	A, EB	[87/5][52/9]
$C_6H_{12}S$	*trans* 2,5-dimethyltetrahydrothiophene				[5161-14-8]
	(348–396)	39.3	(363)	EB	[87/5][52/9] [99/16]
$C_6H_{12}S$	2-ethyltetrahydrothiophene				[1551-32-2]
	(333–488)	42.6	(348)	A	[87/5][72/20] [99/16]
$C_6H_{12}S$	3-ethyltetrahydrothiophene				[62184-67-2]
	(343–503)	43.1	(358)	A	[87/5][72/20] [99/16]
$C_6H_{12}S$	2-methyltetrahydro-2*H*-thiopyrane				[5161-16-0]
	(317–455)	42.1	(332)		[99/16]
	(356–438)	40.2	(371)	A, EB	[87/5][52/9]
$C_6H_{12}S$	3-methyltetrahydro-2*H*-thiopyrane				[5258-50-4]
	(321–460)	42.5	(336)		[99/16]
	(361–435)	40.7	(376)	A, EB	[87/5][52/9]
$C_6H_{12}S$	4-methyltetrahydro-2*H*-thiopyrane				[5161-17-1]
	(321–461)	42.8	(336)		[99/16]
	(361–441)	40.8	(376)	A, EB	[87/5][52/9]
$C_6H_{13}Br$	2-bromo-3,3-dimethylbutane				[26356-06-9]
	(315–449)	39.5	(330)	A	[87/5][72/20]
$C_6H_{12}S$	cyclohexanethiol				[1569-69-3]
		44.9	(298)	C	[81/8]
		44.6±0.1	(298)		[72/11][66/5]
	(355–476)	41.2	(370)	A, EB	[87/5][66/5] [99/16]
$C_6H_{13}Br$	1-bromohexane				[111-25-1]
	(323–363)	45.5	(298)	CGC	[95/21]
		46.1±0.1	(298)	C	[68/1]
		45.6±0.1	(298)	C	[66/2]
	(333–456)	43.2	(348)	A, EST	[87/5][61/13] [72/20]
$C_6H_{13}Br$	(*dl*) 2-bromohexane				[3377-86-4]
	(303–416)	43.8	(318)	A	[87/5]
$C_6H_{13}Br$	2-bromo-4-methylpentane				[30310-22-6]
	(315–448)	29.3	(330)	A	[87/5][72/20]
$C_6H_{13}Cl$	1-chlorohexane				[544-10-5]
	(290–410)	42.0	(298)		[84/9][91/2]
		42.8±0.1	(298)	C	[81/4]
		40.5±0.1	(328)	C	[81/4]
		40.0±0.1	(343)	C	[81/4]
		39.0±0.1	(358)	C	[81/4]
		38.4±0.1	(368)	C	[81/4]
	(288–409)	43.5	(303)	A, DTA	[87/5][69/5] [72/20]
		42.8±0.1	(298)	C	[68/1]
$C_6H_{13}Cl$	(*dl*) 2-chlorohexane				[638-28-8]
	(300–399)	40.9	(315)	A	[87/5]
$C_6H_{13}Cl$	2-chloro-2,3-dimethylbutane				[594-57-0]
	(301–426)	38.0	(316)	A	[87/5][72/20]
$C_6H_{13}Cl$	(*dl*) 2-chloro-3,3-dimethylbutane				[5750-00-5]
	(300–425)	38.0	(315)	A	[87/5][72/20]
$C_6H_{13}ClO_2S$	1-hexanesulfonyl chloride				[14532-24-2]
	(273–304)	60.7	(288)		[99/16]
	(303–400)	61.7	(318)		[99/16]
	(400–507)	57.2	(415)		[99/16]
$C_6H_{13}Cl_2N$	N-ethyl-*bis*(2-chloroethyl)amine				[13426-57-8]
	(273–333)	54.9	(288)	A, GS	[87/5][48/13] [72/20]
$C_6H_{13}F$	1-fluorohexane				[373-14-8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(273–388)	36.9	(288)	A, EST	[87/5][61/13] [72/20]
$C_6H_{13}F$	3-fluorohexane				[52688-75-2]
	(281–393)	36.8	(296)	A	[87/5][72/20]
$C_6H_{13}I$	1-iodohexane				[638-45-9]
		49.8±0.1	(298)	C	[68/1]
	(331–485)	46.2	(346)	A, EST	[87/5][61/13] [72/20]
$C_6H_{13}N$	cyclohexylamine				[108-91-8]
	(363–407)	40.6	(378)		[87/5]
		42.7±0.1	(313)	C	[79/9]
		40.7±0.1	(343)	C	[79/9]
		39.6±0.1	(358)	C	[79/9]
		42.8±0.1	(298)	C	[75/9]
	(333–408)	40.8	(348)	A	[87/5][72/20]
	(334–401)	40.8	(349)		[60/17][84/9]
$C_6H_{13}N$	hexahydro-1*H*-azepine				[111-49-9]
	(348–423)	37.7	(363)	A	[87/5]
	(312–411)	40.4	(327)	A	[87/5][72/20]
$C_6H_{13}N$	(*dl*) 2-methylpiperidine				[109-05-7]
	(323–431)	38.2	(338)	EB, IPM	[87/5][68/4]
$C_6H_{13}NO$	N-ethylmorpholine				[100-74-3]
	(274–313)	42.3±0.3	(294)	GS	[98/13]
	(274–313)	42.1±0.3	(298)	GS	[98/13]
$C_6H_{13}N$	N-methylpiperidine				[626-67-5]
	(273–380)	37.3	(288)	A	[87/5]
		36.7±0.1	(298)		[79/14][98/18]
$C_6H_{13}NO$	N,N-diethylacetamide				[127-19-5]
		54.1	(298)	A	[85/7][85/6]
$C_6H_{13}NO$	N-butylacetamide				[1119-49-9]
		75.0±0.3	(298)	C	[84/6]
$C_6H_{13}NO$	N,N-dimethyl butyramide				[760-79-2]
	(251–432)	50.8	(366)	A	[87/5]
		55.2			[77/29]
$C_6H_{13}NO_2$	methyl 2-(N,N-dimethylamino)propanoate				
	(278–306)	46.1±1.1	(290)	GS	[92/13]
$C_6H_{13}NO_2$	ethyl 2-(N,N-dimethylamino)ethanoate				
	(278–308)	47.6±0.8	(293)	GS	[92/13]
$C_6H_{13}NO_2$	N-isopropyl lactamide				
	(369–407)	69.9	(384)	A	[87/5]
$C_6H_{13}NO_2$	N-propyl lactamide				
	(373–423)	74.0	(388)	A	[87/5]
C_6H_{14}	hexane				[110-54-3]
		31.5±0.1	(298)	C	[96/18]
		31.5	(298)		[94/12]
	(283–323)	32.1	(298)		[92/9]
		31.3±0.3		GC	[89/16]
	(238–298)	34.9	(253)	A	[87/5]
	(189–259)	35.7	(244)	A	[87/5]
	(298–343)	31.5	(313)	A	[87/5]
	(341–377)	30.1	(356)	A	[87/5]
	(374–451)	29.3	(389)	A	[87/5]
	(445–508)	29.4	(460)	A	[87/5]
		26.6	(373)	C	[85/17]
		22.5	(423)	C	[85/17]
		15.7	(473)	C	[85/17]
		8.9	(498)	C	[85/17]
		31.6	(298)		[U/1][85/6]
	(298–338)	30.9	(313)		[84/15]
		31.6±0.1	(298)	C	[79/13]
		30.7±0.1	(313)	C	[79/13]
		29.5±0.1	(333)	C	[79/13]
		28.2±0.1	(353)	C	[79/13]
	(300–321)	31.6	(310)		[74/4][84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(178–265)	32.5	(250)		[73/11]
		31.55	(298)		[71/28]
		30.9±0.1	(309)	C	[47/12]
		29.8±0.1	(328)	C	[47/12]
		31.5±0.1	(298)	C	[47/7]
	(286–343)	32.0	(301)	A, MM	[87/5][45/2]
		31.0±0.2	(298)	C	[43/3]
		30.5±0.2	(313)	C	[43/3]
		29.0±0.2	(333)	C	[43/3]
		28.2±0.2	(353)	C	[43/3]
C_6H_{14}	2-methylpentane				[107-83-5]
	(301–333)	30.0	(316)		[02/5]
	(310–359)	29.7	(325)		[98/9]
	(293–335)	30.5	(308)	A	[87/5]
		29.9	(298)		[71/28]
		29.9±0.1	(298)	C	[49/8]
		28.7±0.1	(318)	C	[49/8]
		27.8±0.1	(333)	C	[49/8]
		29.9±0.1	(298)	C	[47/7]
	(286–334)	30.4	(301)	MM	[45/2]
		29.8±0.2	(293)	C	[43/3]
		29.0±0.2	(313)	C	[43/3]
		27.6±0.2	(333)	C	[43/3]
		26.9±0.2	(353)	C	[43/3]
C_6H_{14}	3-methylpentane				[96-14-0]
	(316–361)	29.9	(331)		[99/28]
	(293–338)	30.5	(308)	A	[87/5]
		30.3±0.1	(298)	C	[79/13]
		29.5±0.1	(313)	C	[79/13]
		28.3±0.1	(333)	C	[79/13]
		27.0±0.1	(353)	C	[79/13]
		30.3	(298)		[71/28]
		30.0±0.1	(303)	C	[49/8]
		28.8±0.1	(324)	C	[49/8]
		28.1±0.1	(336)	C	[49/8]
		30.3±0.1	(298)	C	[47/7]
	(288–337)	30.2	(303)	MM	[45/2]
C_6H_{14}	2,3-dimethylbutane				[79-29-8]
		29.1	(298)		[71/28]
		29.2±0.1	(296)	C	[49/8]
		28.9±0.1	(303)	C	[49/8]
		28.3±0.1	(313)	C	[49/8]
		27.3±0.1	(331)	C	[49/8]
	(287–332)	29.6	(302)	MM	[45/2]
		29.2±0.1	(293)	C	[43/3]
		28.2±0.1	(313)	C	[43/3]
		27.0±0.1	(333)	C	[43/3]
		26.1±0.1	(353)	C	[43/3]
C_6H_{14}	2,2-dimethylbutane				[75-83-2]
		27.7	(298)		[71/28]
	(273–318)	28.7	(288)		[49/2][84/9]
		27.8±0.1	(296)	C	[47/12]
		26.3±0.1	(323)	C	[47/12]
	(211–289)	29.2	(274)		[46/2]
	(288–323)	28.3	(303)	MM	[45/2]
$C_6H_{14}FO_3P$	fluorophosphoric acid, diisopropyl ester				[55-91-4]
	(273–348)	29.4	(288)	A	[87/5]
$C_6H_{14}NO$	N-(hydroxyethyl)piperazine				
	(308–343)	77.3±0.7	(326)	GS	[02/28]
	(308–343)	78.8±0.7	(298)	GS	[02/28]
$C_6H_{14}N_2$	dipropyldiazene				[821-67-0]
		39.9±0.4	(298)	C	[76/3]
	(295–305)	39.5	(300)	UV	[74/32]
		41.1			[68/20][74/32]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_6H_{14}N_2$	diisopropyldiazene				[3880-49-7]
		35.9±0.4	(298)	C	[76/3]
	(296–308)	36.1	(302)	UV	[74/32]
		37.7		I	[74/32]
		34.9			[68/28][74/32]
$C_6H_{14}N_2$	1,4-diaminocyclohexane				[3114-70-3]
	(383–473)	48.2	(398)	A	[87/5]
$C_6H_{14}N_2$	1,4-dimethylpiperazine				[106-58-1]
	(270–309)	44.3±0.3	(289)	GS	[98/13]
	(270–309)	43.8±0.3	(298)	GS	[98/13]
	(276–405)	41.6	(291)	A	[87/5]
$C_6H_{14}N_2$	2,5-dimethylpiperazine				[106-55-8]
	(437–609)	48.4	(452)	A	[87/5]
$C_6H_{14}N_2$	propylhydrazone acetone				
	(288–318)	44.0	(300)		[80/20]
$C_6H_{14}N_2$	isopropylhydrazone acetone				
	(288–323)	44.6	(303)		[80/20]
$C_6H_{14}N_2O$	dipropyldiazene N-oxide				[17697-55-1]
		51.7±0.1	(298)	C	[81/7]
$C_6H_{14}O$	butyl ethyl ether				[62881-9]
		36.3±0.1	(298)	C	[80/3]
	(311–365)	36.5	(298)		[76/2]
	(311–365)	32.1	(365)		[76/2]
	(311–365)	35.2	(326)	A, EB	[87/5][76/2]
					[69/15][72/20]
$C_6H_{14}O$	*tert*-amyl methyl ether				[994-05-8]
		35.3±0.4	(298)		[U/2][02/32]
	(309–396)	36.6±0.1	(320)	EB	[02/15]
	(309–396)	34.5±0.2	(360)	EB	[02/15]
	(309–396)	32.1±0.5	(400)	EB	[02/15]
	(314–362)	33.4	(329)		[98/9]
	(283–308)	35.7±1.0	(295)	GS	[98/2]
	(283–308)	35.5±1.0	(298)	GS	[98/2]
	(306–359)	33.8	(321)	EB	[94/10]
		35.8	(298)	C	[91/11]
	(294–359)	34.3	(309)	EB	[84/26]
$C_6H_{14}O$	*tert*-butyl ethyl ether				[637-92-3]
	(307–346)	32.1	(322)		[00/13]
	(306–345)	32.2	(321)	EB	[94/10]
	(284–346)	33.5	(299)	A	[87/5]
	(248–350)	35.3	(263)	A	[87/5]
	(340–407)	31.2	(355)	A	[87/5]
$C_6H_{14}O$	dipropyl ether				[111-43-3]
	(385–467)	32.2	(400)	A	[87/5]
	(465–530)	32.4	(480)	A	[87/5]
		35.7±0.1	(298)	C	[80/3]
	(292–389)	35.6	(307)	A	[87/5][76/2]
		31.4	(363)		[76/2]
	(312–371)	34.6	(327)	A, EB	[87/5][73/12]
	(300–362)	35.1	(315)	EB	[69/15]
	(340–379)	34.5	(360)		[68/13]
$C_6H_{14}O$	diisopropyl ether				[108-20-3]
	(278–323)	33.0	(293)		[99/14]
	(307–349)	31.1	(322)		[99/10]
	(360–440)	29.9	(375)	A	[87/5]
	(436–500)	29.5	(451)	A	[87/5]
		32.1±0.1	(298)	C	[80/3]
	(284–365)	32.6	(299)	A	[87/5][76/2]
	(284–365)	29.2	(341)		[76/2]
	(296–342)	32.1	(311)	A, EB	[87/5][69/15]
	(321–350)	30.1	(336)		[65/22][72/20]
	(273–333)	33.2	(288)		[49/2][84/9]
$C_6H_{14}O$	1-hexanol				[111-27-3]
	(265–328)	62.0	(288)	GS	[01/3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(265–328)	61.1	(298)	GS	[01/3]
	(373–423)	61.5	(298)	CGC	[95/21]
	(323–373)	61.6	(298)	CGC	[95/21]
	(253–338)	61.2	(296)		[92/14]
	(298–343)	57.7	(313)	A	[87/5]
	(380–417)	47.9	(395)	EB	[85/12]
		58.5±0.2	(328)	C	[85/3]
		57.6±0.2	(343)	C	[85/3]
		55.2±0.2	(358)	C	[85/3]
		53.8±0.2	(368)	C	[85/3]
	(243–303)	59.1	(298)		[83/14]
		60.8±0.2	(298)	C	[77/1]
	(308–430)	57.9	(323)		[73/26]
	(325–431)	58.5	(340)	DTA	[87/5][69/5] [72/20]
		61.6±0.2	(298)	C	[66/2]
	(334–381)	56.0	(349)		[61/6]
	(308–428)	U55.8	(323)	I	[38/10]
	(333–425)	57.9	(348)		[35/6][84/9]
$C_6H_{14}O$	(*dl*) 2-hexanol				[626-93-7]
	(274–309)	58.3±0.3	(298)	GS	[01/7]
	(224–323)	61.8	(239)		[99/11]
	(360–415)	48.7	(375)	A	[87/5]
		56.8±0.2	(313)	C	[85/1]
		55.0±0.2	(328)	C	[85/1]
		53.0±0.2	(343)	C	[85/1]
		50.7±0.2	(358)	C	[85/1]
		49.2±0.2	(368)	C	[85/1]
	(337–413)	52.4	(352)		[84/10]
	(351–412)	47.8	(366)	A	[87/5][75/23]
	(301–415)	53.1	(316)		[73/26]
	(298–413)	49.7	(356)	I	[38/10]
$C_6H_{14}O$	(*dl*) 3-hexanol				[623-37-0]
	(278–311)	58.6±0.4	(298)	GS	[01/7]
	(244–318)	U50.7	(259)		[99/11]
	(354–410)	46.1	(369)	A	[87/5]
	(280–320)	57.5	(295)	A	[87/5]
	(333–409)	51.5	(348)		[84/10]
	(280–316)	57.4	(295)		[75/1]
	(298–408)	46.4	(353)	I	[38/10]
$C_6H_{14}O$	(*dl*) 2-methyl-1-pentanol				[105-30-6]
	(275–313)	59.4±0.3	(298)	GS	[01/7]
	(367–423)	49.3	(382)	A	[87/5]
	(261–294)	64.9	(279)	A	[87/5][79/16]
		57.4±0.2	(328)	C	[85/1]
		55.7±0.2	(343)	C	[85/1]
		53.9±0.2	(358)	C	[85/1]
		52.7±0.2	(368)	C	[85/1]
	(298–423)	54.2	(313)		[73/26]
	(298–413)	50.2	(356)	I	[38/10]
$C_6H_{14}O$	(*dl*) 3-methyl-1-pentanol				[589-35-5]
	(280–316)	61.7±0.3	(298)	GS	[01/7]
	(328–427)	54.8	(343)	A	[87/5]
	(298–427)	59.7	(313)		[73/26]
	(298–423)	47.2	(360)	I	[40/9]
$C_6H_{14}O$	4-methyl-1-pentanol				[626-89-1]
	(357–427)	53.0	(372)	A	[87/5]
	(371–427)	51.1	(386)	A	[87/5]
	(298–427)	63.9	(313)		[73/26]
	(298–423)	46.5	(360)	I	[40/9]
$C_6H_{14}O$	2-methyl-2-pentanol				[590-36-3]
	(341–396)	44.2	(356)	A	[87/5]
	(330–397)	48.9	(345)	A	[87/5]
		54.7±0.2	(298)	C	[85/1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		52.8±0.2	(313)	C	[85/1]
		50.7±0.2	(328)	C	[85/1]
		48.5±0.2	(343)	C	[85/1]
		46.1±0.2	(358)	C	[85/1]
		44.4±0.2	(368)	C	[85/1]
	(288–396)	58.3	(303)		[73/26]
	(268–394)	49.1	(283)		[47/5]
	(288–396)	51.3	(303)	I	[33/9]
$C_6H_{14}O$	(*dl*) 3-methyl-2-pentanol				[565-60-5]
	(275–310)	58.2±0.3	(298)	GS	[01/7]
	(314–409)	54.4	(329)	A	[87/5]
	(255–295)	60.4	(280)	A	[87/5][79/16]
	(296–408)	54.8	(311)		[73/26]
$C_6H_{14}O$	(*dl*) 4-methyl-2-pentanol				[108-11-2]
	(274–301)	57.3±0.3	(298)	GS	[01/7]
	(240–295)	59.6	(280)	A	[87/5]
	(293–406)	49.6	(308)		[73/26]
	(353–404)	47.3	(368)	A, EB	[87/5][70/7]
	(298–403)	45.6	(350)	I	[38/10]
$C_6H_{14}O$	(*dl*) 2-methyl-3-pentanol				[565-67-3]
	(275–307)	56.0±0.5	(298)	GS	[01/7]
	(307–401)	52.2	(322)	A	[87/5]
	(342–400)	45.4	(357)	A	[87/5][75/23]
	(298–401)	52.0	(313)		[73/26]
	(298–399)	44.4	(349)	I	[40/8]
$C_6H_{14}O$	3-methyl-3-pentanol				[77-74-7]
	(275–301)	55.7±0.3	(298)	GS	[01/7]
	(322–397)	40.1	(337)	A	[87/5]
	(338–396)	46.4	(353)		[73/26]
		56.7±0.8	(298)		[91/8]
	(298–393)	42.1	(346)	I	[40/8]
$C_6H_{14}O$	2,2-dimethyl-1-butanol				[1185-33-7]
	(356–415)	47.2	(371)	A	[87/5]
	(298–415)	53.7	(313)		[73/26]
	(298–408)	52.1	(313)	I	[40/7]
$C_6H_{14}O$	(*dl*) 2,3-dimethyl-1-butanol				[19550-30-2]
	(324–431)	51.4	(339)	A	[87/5]
	(373–422)	49.6	(388)		[73/26]
$C_6H_{14}O$	3,3-dimethyl-1-butanol				[624-95-3]
	(276–312)	58.0±0.2	(298)	GS	[01/7]
		58.6±0.1	(328)	C	[96/9]
		55.4±0.1	(343)	C	[96/9]
		52.4±0.1	(358)	C	[96/9]
	(319–424)	50.8	(334)	A	[87/5]
	(353–417)	49.4	(368)		[73/26]
$C_6H_{14}O$	2,3-dimethyl-2-butanol				[594-60-5]
	(303–340)	54.0±0.8	(298)		[91/8]
	(299–400)	48.8	(314)	A	[87/5]
	(298–393)	49.1	(313)		[73/26]
$C_6H_{14}O$	(*dl*) 3,3-dimethyl-2-butanol				[464-07-3]
	(280–315)	53.8±0.3	(298)	GS	[01/7]
	(302–401)	48.3	(317)	A	[87/5]
	(338–393)	46.8	(353)		[73/26]
$C_6H_{14}O$	2-ethyl-1-butanol				[97-95-0]
	(275–313)	60.3±0.3	(298)	GS	[01/7]
	(321–426)	53.1	(336)	A	[87/5]
	(262–295)	65.4	(280)	A	[87/5][79/16]
	(298–426)	59.6	(313)		[73/26]
	(298–418)	U45.5	(313)	I	[40/7]
$C_6H_{14}OS$	2-methyl-2-propanesulfonic acid, ethyl ester				
	(337–343)	U14.0	(340)	A	[87/5]
$C_6H_{14}O_2$	2-butoxyethanol				[111-76-2]
	(363–382)	51.2	(373)	MM	[99/15]
	(336–443)	49.5	(351)	A	[87/5][72/20]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(336–443)	52.6	(351)		[57/6][84/9]
$C_6H_{14}O_2$	1,1-dimethoxybutane				[4461-87-4]
	(304–329)	41.2	(317)	EB	[94/16]
$C_6H_{14}O_2$	1,1-diethoxyethane				[105-57-7]
	(275–308)	39.6±0.3	(298)	GS	[98/21][02/32]
	(281–384)	41.6	(296)	A	[87/5][72/20]
	(273–343)	39.8	(288)		[49/2][84/9]
	(239–392)	36.2	(255)		[47/5]
$C_6H_{14}O_2$	1,2-diethoxyethane				[629-14-1]
	(339–382)	39.3	(361)		[87/16]
	(239–393)	37.9	(254)	A	[87/5]
		43.2±0.1	(298)	C	[70/17]
$C_6H_{14}O_2$	1-methoxy-2-propoxyethane				[77078-18-3]
		43.7±0.1	(298)	C	[70/17]
$C_6H_{14}O_2$	2-isobutoxyethanol				[4439-24-1]
	(344–432)	48.1	(359)	A	[87/5][72/20]
					[57/6][84/9]
$C_6H_{14}O_2$	1,6-hexanediol				[629-11-8]
	(355–559)	98.5±1.8	(298)	EB, IPM	[96/5]
$C_6H_{14}O_2$	3-methyl-1,5-pentanediol				[4457-71-0]
	(402–485)	76.9	(417)	A	[87/5]
$C_6H_{14}O_2$	(*dl*) 2-methyl-2,4-pentanediol				[107-41-5]
	(373–473)	58.1	(388)	A	[87/5]
$C_6H_{14}O_2$	2,3-dimethyl-2,3-butanediol				[76-09-5]
	(346–448)	59.1	(361)	A	[87/5]
$C_6H_{14}O_3$	diethylene glycol, dimethyl ether				[111-96-6]
		48.0±0.6	(298)	CGC	[00/9]
	(286–433)	47.4	(301)	A	[87/5][47/5]
$C_6H_{14}O_3$	3,5,7-trioxanonane				[5648-29-3]
		44.7±0.2	(298)	C	[69/18]
$C_6H_{14}O_3$	*tert*-butyl 2-hydroxyethyl peroxide				[15476-85-4]
		66.4±1.9			[83/11]
$C_6H_{14}O_3$	diethylene glycol, monoethyl ether				[111-90-0]
	(318–475)	52.1	(333)	A	[87/5][47/5]
$C_6H_{14}O_3$	dipropylene glycol				[25265-71-8]
	(423–505)	61.2	(438)	A	[87/5]
$C_6H_{14}O_3$	2-ethyl-2-hydroxymethyl-1,3-propanediol				[77-99-6]
	(433–570)	81.4	(448)	A	[87/5]
$C_6H_{14}O_3$	1,2,6-trihydroxyhexane				[106-69-4]
	(393–433)	97.2	(408)	A	[87/5]
$C_6H_{14}O_4$	1,1,2,2-tetramethoxyethane				[2517-44-4]
	(351–432)	42.9	(366)	A	[87/5]
$C_6H_{14}O_4$	triethylene glycol				[112-27-6]
	(442–562)	72.2±0.3	(440)	EB	[02/17]
	(442–562)	68.5±0.3	(480)	EB	[02/17]
	(442–562)	64.6±0.3	(520)	EB	[02/17]
	(442–562)	60.8±0.5	(560)	EB	[02/17]
	(288–303)	67.7	(295)	A	[87/5]
	(387–552)	71.5	(402)	A	[87/5][47/5]
$C_6H_{14}O_6$	dulcitol				
	(464–496)	133.8±1.4	(482)	TE	[90/16]
$C_6H_{14}O_6$	D-mannitiol				
	(458–501)	135.6±1.1	(479)	TE	[90/16]
$C_6H_{14}O_6$	D-sorbitol				
	(461–497)	132.4±2.0	(477)	TE	[90/16]
$C_6H_{14}S$	methyl pentyl sulfide				[1741-83-9]
	(321–349)	44.2	(336)		[99/16]
		45.2	(298)		[81/12]
		44.6±0.8	(298)	GC	[64/17]
	(321–350)	42.6	(308)	EB	[61/17]
$C_6H_{14}S$	butyl ethyl sulfide				[638-46-0]
	(314–445)	43.7	(319)		[99/16]
		44.5	(298)		[81/12]
		44.9	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		44.6±0.8	(298)	GC	[64/17]
	(316–348)	43.5	(333)	EB	[62/17]
	(354–424)	40.7	(369)	A, EB	[87/5][52/9]
$C_6H_{14}S$	sec-butyl ethyl sulfide				[5008-72-0]
	(304–434)	41.2	(319)		[99/16]
	(345–409)	39.0	(360)	A, EB	[87/5][52/9]
$C_6H_{14}S$	*tert*-butyl ethyl sulfide				[14290-92-7]
	(293–420)	39.2	(308)		[99/16]
		39.3	(298)		[71/28]
	(332–400)	37.1	(347)	A, EB	[87/5][52/9]
$C_6H_{14}S$	diisopropyl sulfide				[625-80-9]
	(293–420)	39.4	(308)		[99/16]
		39.6±0.1	(298)		[72/11][66/5]
	(324–433)	37.7	(339)	A, EB	[87/5][66/5]
		39.6±0.8	(298)	GC	[64/17]
	(303–328)	38.5	(318)	EB	[62/17]
	(330–400)	37.4	(345)	EB	[52/9]
$C_6H_{14}S$	dipropyl sulfide				[111-47-7]
	(313–411)	42.9	(328)		[99/16]
		44.2	(298)		[81/12]
		44.5	(298)		[71/28]
		39.5	(298)		[71/28]
		44.7±0.8	(298)	GC	[64/17]
	(353–427)	40.6	(368)	A, EB	[87/5][52/9]
$C_6H_{14}S$	isopropyl propyl sulfide				[5008-73-1]
	(303–432)	41.1	(318)		[99/16]
		41.8	(298)		[81/12]
	(343–416)	39.0	(358)	A, EB	[87/5][52/9]
$C_6H_{14}S$	ethyl isobutyl sulfide				[1613-45-2]
	(305–401)	41.3	(320)		[99/16]
	(345–414)	39.2	(360)	A, EB	[87/5][52/9]
$C_6H_{14}S$	1-hexanethiol				[111-31-9]
	(320–454)	43.9	(335)		[99/16]
		44.8±0.2	(298)		[66/10][66/5]
	(352–468)	42.4	(367)	A, EB	[87/5][66/5]
$C_6H_{14}S$	2-hexanethiol				[1679-06-7]
	(310–440)	42.7	(325)		[99/16]
	(328–423)	41.4	(343)	A	[87/5]
$C_6H_{14}S$	2,3-dimethyl-2-butanethiol				[1639-01-6]
	(285–318)	39.3	(300)		[99/16]
	(318–441)	37.8	(333)		[99/16]
		39.3±0.1	(298)		[72/11][66/5]
	(328–441)	37.4	(343)	A, EB	[87/5][66/5]
$C_6H_{14}S$	2-methyl-2-pentanethiol				[1633-97-2]
		40.0±0.1	(298)		[72/11][66/5]
	(327–439)	38.0	(342)	A, EB	[87/5][66/5]
					[99/16]
$C_6H_{14}S_2$	diisopropyl disulfide				[4253-89-8]
	(383–423)	49.3	(298)	CGC	[95/21]
		39.6	(298)		[81/12]
	(377–447)	43.8	(392)	A, EB	[87/5][52/9]
					[99/16]
$C_6H_{14}S_2$	dipropyl disulfide				[629-19-6]
	(354–499)	47.8	(369)		[99/16]
		53.8±0.1	(298)	C	[85/2]
		53.8	(298)		[81/12]
	(389–447)	47.0	(404)	A, EB	[87/5][58/8]
					[66/5]
	(395–456)	46.6	(410)	EB	[52/9]
$C_6H_{14}S_2$	ethyl (1,1-dimethylethyl) disulfide				[4151-69-3]
	(373–461)	43.4	(388)	A, EB	[87/5][52/9]
					[99/16]
$C_6H_{14}S_2$	isopropyl propyl disulfide				[33672-51-4]
	(383–433)	45.4	(398)	A	[87/5][99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_6H_{14}S_2$	1,6-hexanedithiol				[1191-43-1]
	(379–511)	55.7	(394)	A	[87/5][99/16]
$C_6H_{14}S_3$	trithiodiethylene glycol, dimethyl ether				
	(391–418)	103.7	(404)	A	[87/5]
$C_6H_{14}S_3$	2,5,8-trithianonane				[37460-04-1]
	(391–533)	116.4	(406)		[99/16]
$C_6H_{15}N$	hexylamine				[111-26-2]
	(323–373)	45.0	(298)	CGC	[95/21]
	(303–406)	42.2	(318)	A	[87/5]
		45.1±0.1	(298)	C	[69/2]
$C_6H_{15}N$	(*dl*) sec-butyl ethyl amine				[21035-44-9]
	(283–372)	37.9	(298)		[87/5][72/20]
$C_6H_{15}N$	diisopropylamine				[108-18-9]
	(260–412)	35.4	(275)	A	[87/5]
	(273–367)	35.6	(288)	A	[87/5]
		34.6±0.1	(298)	C	[79/8]
		33.7±0.1	(313)	C	[79/8]
		32.6±0.1	(328)	C	[79/8]
		31.5±0.1	(343)	C	[79/8]
		30.2±0.1	(358)	C	[79/8]
	(300–356)	34.4	(315)	EB	[79/8]
	(291–305)	34.6	(298)		[71/13]
		34.5±0.1	(298)	C	[69/2]
	(273–333)	33.8±0.2	(298)	I	[69/16]
$C_6H_{15}N$	N-isopropyl propylamine				[21968-17-2]
		37.3±0.1	(298)	C	[79/8]
		36.2±0.1	(313)	C	[79/8]
		35.2±0.1	(328)	C	[79/8]
		34.1±0.1	(343)	C	[79/8]
		33.0±0.1	(358)	C	[79/8]
	(312–369)	36.2	(327)	EB	[79/8]
$C_6H_{15}N$	N-butylethylamine				[13360-63-9]
		40.2±0.1	(298)	C	[79/8]
		39.1±0.1	(313)	C	[79/8]
		38.0±0.1	(328)	C	[79/8]
		36.9±0.1	(343)	C	[79/8]
		35.8±0.1	(358)	C	[79/8]
	(313–375)	39.9	(328)	EB	[79/8]
	(283–382)	41.4	(298)	A	[87/5][72/20]
$C_6H_{15}N$	dipropylamine				[142-84-7]
	(321–382)	40.0	(336)		[00/8]
	(302–422)	39.8	(317)		[87/5][72/20]
	(291–305)	41.5	(298)		[71/13]
		40.0±0.1	(298)	C	[69/2]
	(273–333)	40.2±0.3	(298)	I	[69/16]
$C_6H_{15}N$	triethylamine				[121-44-8]
	(231–319)	35.2±0.9	(275)		[01/9]
	(302–338)	34.1	(317)	EB	[90/9]
	(298–324)	34.6	(311)		[87/5]
	(283–363)	35.5	(298)		[87/5]
		34.8±0.2	(298)	C	[79/9]
		33.9±0.1	(313)	C	[79/9]
		33.0±0.2	(328)	C	[79/9]
		32.2±0.1	(343)	C	[79/9]
		31.3±0.2	(358)	C	[79/9]
	(303–361)	34.8	(318)	EB	[79/9]
	(283–313)	35.1	(298)		[75/35]
		34.9±0.1	(298)	C	[69/2]
$C_6H_{15}N$	N,N-dimethyl *tert*-butyl amine				[918-02-5]
	(283–318)	34.8	(298)	A	[87/5]
$C_6H_{15}NO$	N-(methoxymethyl)diethylamine				[5888-29-9]
	(293–318)	38.0	(305)	A	[87/5]
$C_6H_{15}NO$	N,N-diethylethanolamine				[100-37-8]
	(332–475)	48.5±0.2	(340)	EB	[02/21]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(332–475)	45.0±0.2	(380)	EB	[02/21]
	(332–475)	41.6±0.4	(420)	EB	[02/21]
	(332–475)	37.8±0.7	(460)	EB	[02/21]
	(328–433)	48.5	(343)	A	[87/5]
$C_6H_{15}NO_2$	diisopropanolamine				[110-97-4]
	(390–521)	68.0	(405)	A	[87/5][72/20]
$C_6H_{15}NO_2$	2-[2-(dimethylamino)ethoxy]ethanol				[1704-62-7]
	(412–452)	54.4	(427)	A	[87/5]
$C_6H_{15}NO_2S$	N,N-diethyl ethanesulfonamide				[33718-39-7]
	(392–526)	55.4	(407)	A	[87/5]
$C_6H_{15}NO_3$	triethanolamine				[102-71-6]
	(523–579)	79.3	(538)	A	[87/5][59/1]
					[84/9]
$C_6H_{15}NS$	N,N-dimethyl-S-*tert*-butylthiohydroxylamine				
	(328–334)	28.3	(331)	A	[87/5][99/16]
$C_6H_{15}N_3$	1,3,5-trimethylhexahydro-s-triazine				
	(284–328)	50.8±0.8	(306)	GS	[02/28]
	(284–328)	51.2±0.8	(298)	GS	[02/28]
$C_6H_{15}O_2PS_3$	O,O-dimethyl-S-[2-(ethylthio)ethyl]dithiophosphate				[640-15-3]
	(283–394)	76.8	(298)	A	[87/5][99/16]
$C_6H_{15}O_3P$	phosphonic acid, dipropyl ester				[1809-21-8]
	(318–467)	38.1	(333)	A	[87/5][72/20]
$C_6H_{15}O_3PS$	O,O,O-triethythiophosphate				[126-68-1]
	(305–335)	87.5	(320)	A	[87/5][99/16]
$C_6H_{15}O_3PS$	O,O,S-triethylthiophosphate				[1186-09-0]
	(312–352)	76.3	(327)	A	[87/5][99/16]
$C_6H_{15}O_3PS_2$	phosphorothioic acid, O-[2-(ethylthio)ethyl]-O,O-dimethyl ester				[867-27-6]
	(283–379)	71.0	(298)	A	[87/5][99/16]
$C_6H_{15}O_3PS_2$	phosphorothioic acid, S-[2-(ethylthio)ethyl]-O,O-dimethyl ester				[919-86-8]
	(283–407)	78.8	(298)	A	[87/5][99/16]
$C_6H_{15}O_4P$	triethylphosphate				[78-40-0]
	(312–484)	46.3	(327)	A	[87/5][47/5]
$C_6H_{15}P$	triethylphosphine				[554-70-1]
	(291–402)	38.3	(306)	A	[87/5][72/20]
$C_6H_{16}FN_2OP$	N,N′-diisopropyl phosphorodiamidic fluoride				[371-86-8]
	(278–398)	58.1	(293)	A	[87/5]
$C_6H_{16}N_2$	1,6-hexanediamine				[124-09-4]
	(348–474)	49.3	(363)	A	[87/5]
	(338–473)	51.3	(353)	A	[87/5]
$C_6H_{16}N_2O_2$	N,N-*bis*(2-hydroxyethyl)ethylenediamine				[4439-20-7]
	(399–500)	106.4±6.4	(298)	EB, IPM	[97/6][97/7]
$C_6H_{18}N_3P$	*tris*(dimethylamino)phosphine				[1608-26-0]
		41.5±0.6	(298)	STG	[95/2]
	(298–333)	63.2	(313)		[84/15]
$C_6H_{18}N_4$	triethylenetetramine				[112-24-3]
	(431–550)	59.8	(446)	A	[87/5][72/20]
$C_7ClF_{17}N_2S$	chloro(trifluoromethyl)*bis*(heptafluoroisopropylimino) sulfur				
		38.9	(467)	I	[77/15]
$C_7F_6O_2$	carbonofluoridic acid pentafluorophenyl ester				[59483-82-8]
		42.3			[76/30]
C_7F_8	perfluorotoluene				[434-64-0]
	(291–378)	40.0	(306)		[99/16]
	(285–376)	40.9	(300)	A	[87/5]
	(290–400)	40.4	(298)		[84/9][91/2]
C_7F_{10}	3,3-difluoro-1,2-*bis*(trifluoromethyl)-4-(difluoroethylene)cyclobutene				[14451-74-2]
	(272–316)	31.5	(287)	A	[87/5][99/16]
$C_7F_{12}O_2S_4$	pentane*bis*(dithioperoxoic) acid, hexafluoro-*bis*(trifluoromethyl) ester				[58936-62-2]
		33.6	(370)	I	[76/18]
$C_7F_{12}O_6$	hexafluoroperoxyglutaric acid, *bis*(trifluoromethyl) ester				[32751-20-5]
	(200–390)	47.3	(215)	A	[87/5][99/16]
C_7F_{14}	perfluoromethylcyclohexane				[355-02-2]
	(305–414)	33.1	(320)		[99/16]
	(413–488)	30.2	(428)		[99/16]
	(306–384)	34.0	(298)		[84/9][91/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		34.1±0.3	(298)		[81/23]
	(305–385)	33.4	(320)	A	[87/5][70/14] [73/18]
	(306–384)	33.3	(321)		[59/12][84/9]
	(298–353)	33.8	(313)		[57/14][84/9]
	(272–349)	33.3	(310)		[56/14][70/14]
$C_7F_{15}NS$	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				[77984-26-0]
		33.9	(371)		[81/15]
C_7F_{16}	perfluoroheptane				[335-57-9]
	(363–474)	32.6	(378)		[99/16]
	(304–390)	36.3±0.3	(298)	EB	[97/8]
	(290–355)	35.9	(298)		[84/9][91/2]
		33.1			[59/28]
	(293–355)	34.9	(324)		[56/14]
	(271–379)	37.7	(286)	A	[87/5][51/6] [70/14][73/18]
$C_7F_{16}N_2OS$	1,1,1-trifluoro-N′-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-N-[2,2,2-trifluoro-1-(trifluromethyl)ethylidene]methanesulfonimidamide				[62609-64-7]
		33.5	(451)		[77/19]
$C_7F_{17}N$	perfluoro-N,N-diethylpropylamine				[338-81-8]
	(283–366)	39.2	(325)		[99/16]
$C_7HF_{13}O_2$	tridecafluoroheptanoic acid				[375-85-9]
	(359–485)	61.4±0.3	(370)	EB	[02/14]
	(359–485)	55.5±0.3	(410)	EB	[02/14]
	(359–485)	48.7±0.7	(450)	EB	[02/14]
C_7HF_{15}	1,1,1,2,2,3,3,4,4,5,5,6,6,7,7-pentafluoroheptane				[375-83-7]
	(365–369)	30.7	(367)		[66/34]
	(292–370)	37.1	(307)	A	[87/5][53/6] [73/18][99/16]
$C_7H_2F_{13}NO$	(E) 1,1,1,2,3,3,3-heptafluoro-N-[2,2,2-trifluoro-1-(2,2,2-trifluoro-ethoxy)ethylidene]-2-propanamine				[54181-88-3]
		35.7	(369)		[75/20]
$C_7H_3ClF_3NO_2$	1-(trifluoromethyl)-2-chloro-5-nitrobenzene				[777-37-7]
	(364–508)	58.1	(379)	A	[87/5][53/6] [73/18][99/16]
$C_7H_3ClF_3NO_2$	1-(trifluoromethyl)-4-chloro-3-nitrobenzene				[121-17-5]
	(358–495)	57.6	(373)	A	[87/5][73/18] [99/16]
$C_7H_3Cl_2F_3$	1-(trifluoromethyl)-3,4-dichlorobenzene				[328-84-7]
	(353–453)	44.1	(368)	A	[87/5]
	(284–446)	41.8	(299)		[47/5]
$C_7H_3Cl_2NO$	3,4-dichlorophenylisocyanate				[102-36-3]
	(373–473)	47.4	(388)	A	[87/5]
$C_7H_3Cl_5$	1-(trichloromethyl)-3,4-dichlorobenzene				[13014-24-9]
	(438–663)	59.3	(453)	A	[87/5][70/14] [73/18][99/16]
$C_7H_3F_5$	2,3,4,5,6-pentafluorotoluene				[771-56-2]
	(403–523)	36.1	(418)		[99/16]
	(493–564)	34.9	(508)		[99/16]
	(310–410)	41.2	(298)		[84/9][91/2]
	(312–416)	39.9	(327)	A	[87/5][68/10] [73/18][99/16]
$C_7H_4ClF_3$	1-(trifluoromethyl)-2-chlorobenzene				[88-16-4]
	(310–426)	44.6	(325)	A	[87/5][51/9] [70/14][73/18]
$C_7H_4ClF_3$	1-(trifluoromethyl)-3-chlorobenzene				[98-15-7]
	(302–411)	43.0	(317)	A	[87/5][51/9] [70/14][73/18]
$C_7H_4ClF_3$	1-(trifluoromethyl)-4-chlorobenzene				[98-56-6]
	(302–412)	42.2	(317)	A	[87/5][51/9] [70/14][73/18]
C_7H_4ClN	2-chlorobenzonitrile				[873-32-5]
	(378–486)	53.5	(393)	EB	[94/18]
C_7H_4ClN	4-chlorobenzonitrile				[623-03-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(389–483)	51.9	(404)	EB	[94/18]
C_7H_4ClNO	3-chlorophenyl isocyanate				[2909-38-8]
	(344–432)	53.1	(359)	A	[87/5][64/10]
C_7H_4ClNO	4-chlorophenyl isocyanate				[104-12-1]
	(363–443)	48.9	(378)	A	[87/5]
	(323–433)	44.3	(338)		[67/17]
$C_7H_4ClNO_3$	3-nitrobenzoyl chloride				[121-90-4]
	(428–551)	62.4	(443)	A	[87/5][99/16]
$C_7H_4Cl_2O$	2-chlorobenzoyl chloride				[609-65-4]
	(374–395)	53.4	(384)	A	[87/5][99/16]
$C_7H_4Cl_2O$	3-chlorobenzoyl chloride				[618-46-2]
	(367–391)	49.4	(382)	A	[87/5][99/16]
$C_7H_4Cl_2O$	4-chlorobenzoyl chloride				[122-01-0]
	(370–392)	55.7	(381)	A	[87/5][99/16]
$C_7H_4Cl_4$	1-(trichloromethyl)-2-chlorobenzene				[2136-89-2]
	(423–588)	55.0	(438)	A	[87/5][70/14]
$C_7H_4Cl_4$	2,3,5,6-tetrachlorotoluene				[1006-31-1]
	(399–548)	52.6	(414)	A	[87/5][73/15]
					[99/16]
$C_7H_4F_3NO_2$	1-(trifluoromethyl)-3-nitrobenzene				[98-46-4]
	(341–475)	53.8	(356)	A	[87/5][53/6]
					[99/16]
$C_7H_4F_4$	1-(trifluoromethyl)-2-fluorobenzene				[392-85-8]
	(310–410)	38.1	(298)		[84/9][91/2]
$C_7H_4F_4$	1-(trifluoromethyl)-3-fluorobenzene				[401-80-9]
	(313–410)	36.8	(328)	A	[87/5][70/14]
$C_7H_4F_4$	1-(trifluoromethyl)-4-fluorobenzene				[402-44-8]
	(286–381)	35.8	(301)	A	[87/5][70/14]
$C_7H_4F_{12}O$	2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoro-1-heptanol				[335-99-9]
	(355–446)	53.4	(370)	A	[87/5][99/16]
C_7H_5BrO	benzoyl bromide				[618-32-6]
	(320–492)	52.3	(335)	A	[87/5][47/5]
C_7H_5ClO	benzoyl chloride				[98-88-4]
	(305–470)	49.6	(320)	A	[87/5][47/5]
					[99/16]
C_7H_5ClO	2-chlorobenzaldehyde				[89-98-5]
	(382–563)	49.8	(397)	A	[87/5][99/16]
$C_7H_5Cl_2N$	phenylcarbonimidic dichloride				[622-44-6]
	(273–333)	54.0	(288)	A	[87/5][73/18]
					[99/16]
$C_7H_5Cl_3$	1-(chloromethyl)-2,4-dichlorobenzene				[94-99-5]
	(413–578)	54.6	(428)	A	[87/5][70/14]
					[73/18]
$C_7H_5Cl_3$	(trichloromethyl)benzene				[98-07-7]
		57.6			[95/30]
	(318–487)	52.0	(333)	A	[87/5][47/5]
$C_7H_5Cl_3$	2,3,6-trichlorotoluene				[2077-46-5]
	(384–509)	62.2	(399)	A	[87/5][73/15]
$C_7H_5FN_2O_4$	(fluorodinitromethyl)benzene				[17003-70-2]
	(328–363)	52.8	(343)	A	[87/5]
$C_7H_5F_3$	(trifluoromethyl)benzene				[98-08-8]
	(328–413)	35.6	(343)		[99/16]
	(468–532)	31.6	(483)		[99/16]
	(323–384)	35.9	(338)	I	[92/3]
	(460–530)	32.4	(475)		[85/15]
	(330–410)	37.1	(298)		[84/9][91/2]
		35.4±0.1	(334)	C	[59/7]
		34.1±0.1	(353)	C	[59/7]
		32.6±0.1	(375)	C	[59/7]
	(328–413)	35.7	(343)	A, EB	[87/5][51/9]
					[70/14][59/7]
	(241–375)	39.1	(256)		[47/5]
	(275–353)	38.5	(290)		[46/3]
$C_7H_5F_{10}NS$	2,2,2-trifluoro-N-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-ethanimidothioic acid, ethyl ester				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		30.1	(394)		[75/20]
$C_7H_5F_{11}O$	1-ethoxy-1,1,2,2,3,3,4,4,5,5,5-undecafluoropentane				[181214-75-5]
	(288–373)	39.0	(303)	I	[02/19]
$C_7H_5F_{11}O$	1-ethoxy-1,1,2,2,3,3,4,4,4-octafluoro-3-(trifluoromethyl)butane				[203783-57-7]
	(288–373)	38.3	(303)	I	[02/19]
C_7H_5N	benzonitrile				[100-47-0]
	(301–464)	49.1	(316)	A	[87/5][47/5]
C_7H_5N	phenyl isocyanide				[931-54-4]
	(285–438)	46.2	(300)	A	[87/5][47/5]
C_7H_5NO	benzoxazole				[273-53-0]
		51.2	(320)	EB	[92/10]
		48.6	(360)	EB	[92/10]
		46.1	(400)	EB	[92/10]
		43.5	(440)	EB	[92/10]
		40.7	(480)	EB	[92/10]
C_7H_5NO	phenyl isocyanate				[103-71-9]
	(329–445)	46.5±0.3	(298)	EB	[96/4]
	(283–439)	45.0	(298)	A	[87/5][47/5]
$C_7H_5NO_3$	2-nitrobenzaldehyde				[552-89-6]
	(390–547)	58.7	(405)	A	[87/5]
	(359–547)	59.5	(373)		[47/5]
$C_7H_5NO_3$	3-nitrobenzaldehyde				[99-61-6]
	(401–552)	62.0	(416)	A	[87/5]
C_7H_5NS	benzothiazole				[95-16-9]
		58.7	(320)	EB	[92/10]
		56.0	(360)	EB	[92/10]
		53.5	(400)	EB	[92/10]
		50.9	(440)	EB	[92/10]
		48.4	(480)	EB	[92/10]
		45.7	(520)	EB	[92/10]
C_7H_5NS	phenyl isothiocyanate				[103-72-0]
	(320–492)	52.6	(335)	A	[87/5][47/5]
$C_7H_5N_3O_6$	2,4,6-trinitrotoluene				[118-96-7]
	(353–523)	93.7	(368)	A	[87/5]
		87.0±1.9	(298)	ME	[78/2]
$C_7H_5N_3O_7$	2,4,6-trinitroanisole				[606-35-9]
	(342–363)	91.9	(352)	A	[87/5]
$C_7H_6Cl_2$	(dichloromethyl)benzene				[98-87-3]
	(308–487)	49.5	(323)	A	[87/5][47/5]
$C_7H_6Cl_2$	2,4-dichlorotoluene				[95-73-8]
	(346–475)	50.6	(361)	A	[87/5][73/15] [99/16]
$C_7H_6Cl_2$	3,4-dichlorotoluene				[95-75-0]
	(378–543)	49.4	(393)	A	[87/5][0/14] [99/16]
$C_7H_6Cl_3NO_2$	2,2,4-trichloro-5-(dimethylamino)-4-cyclopentene-1,3-dione				[77765-42-5]
	(453–483)	70.9	(468)	GC	[80/25]
$C_7H_6F_3N$	1-(trifluoromethyl)-3-aminobenzene				[98-16-8]
	(334–464)	53.1	(349)	A	[87/5][53/6] [99/16]
$C_7H_6F_3NS$	N-(trifluoromethyl)thioaniline				
	(333–413)	47.0	(348)	A	[87/5]
$C_7H_6F_6O_4$	dimethyl perfluoroglutarate				
		52.3	(298)	EB	[76/7]
$C_7H_6N_2O_4$	2,4-dinitrotoluene				[121-14-2]
	(344–572)	76.9	(359)	A	[87/5]
	(473–572)	58.2	(488)		[87/5][68/14] [73/18]
	(354–439)	70.2			[77/6][58/1]
$C_7H_6N_2O_4$	2,6-dinitrotoluene				[606-20-2]
	(330–533)	77.8	(345)	A	[87/5]
	(423–553)	56.9	(438)	A	[87/5][68/14]
	(344–427)	68.7			[77/6][58/1]
$C_7H_6N_2O_4$	3,5-dinitrotoluene				[618-85-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(493–543)	62.6	(508)	A	[87/5][68/14]
C_7H_6O	benzaldehyde				[100-52-7]
	(313–353)	49.1	(298)	CGC	[95/21]
	(348–452)	49.5	(363)	A	[87/5]
	(409–481)	43.8	(424)	A	[87/5]
	(311–376)	48.6	(326)	A	[87/5]
	(370–475)	45.5	(385)	A	[87/5]
	(465–541)	41.9	(480)	A	[87/5]
	(529–599)	40.6	(544)	A	[87/5]
	(311–404)	50.3	(298)	EB	[75/5]
	(311–404)	42.5	(452)	EB	[75/5]
	(273–373)	47.0	(288)	A, BG	[87/5][73/4]
	(299–452)	54.4	(314)		[47/5]
C_7H_6O	2,4,6-cycloheptatrienone (tropone)				[539-80-0]
	(273–323)	54.2	(288)	A	[87/5]
$C_7H_6O_2$	benzoic acid				[65-85-0]
	(353–393)	78.9	(298)	CGC	[95/21]
	(405–523)	66.3	(420)	A	[87/5]
		65.4	(428)	I	[43/7]
	(401–520)	67.7	(416)	MM, A	[27/5]
$C_7H_6O_2$	4-hydroxybenzaldehyde				[123-08-0]
	(394–583)	72.3	(409)	A	[87/5][47/5]
$C_7H_6O_2$	2-hydroxybenzaldehyde				[100-83-4]
	(383–470)	30.6	(398)	A	[87/5]
		47.7			[86/10]
	(306–470)	49.6	(321)		[47/5]
$C_7H_6O_2$	phenyl formate				[1864-94-4]
	(287–305)	52.9±0.6	(298)	BG	[76/9][75/36]
$C_7H_6O_2$	1,3-benzodioxole				[274-09-9]
		41.4			[58/25]
$C_7H_6O_3$	2-hydroxybenzoic acid				[69-72-7]
	(445–504)	79.4	(460)	A	[87/5]
C_7H_7Br	benzylbromide				[100-39-0]
	(284–306)	53.3±0.7	(298)	GS	[02/29]
		53.7	(298)	CGC	[02/29]
	(340–409)	48.1	(355)	I, A	[76/11][87/5]
		50.5±0.5	(298)		[76/11]
	(305–472)	46.9	(320)	A	[87/5][47/5]
					[99/16]
C_7H_7Br	2-bromotoluene				[95-46-5]
	(322–455)	47.2	(337)		[99/16]
	(353–518)	45.3	(368)	A	[87/5][70/14]
					[73/18]
	(297–455)	52.6	(312)		[47/5]
	(273–348)	48.8	(288)		[40/5]
C_7H_7Br	3-bromotoluene				[591-17-3]
	(351–457)	47.7	(366)		[99/16]
	(287–457)	48.3	(302)	A	[87/5][47/5]
	(273–348)	49.4	(288)		[40/5]
C_7H_7Br	4-bromotoluene				[108-38-7]
	(320–458)	47.1	(335)		[99/16]
	(273–472)	55.3	(288)		[99/16]
	(358–523)	45.8	(373)	A	[87/5][70/14]
					[73/18]
C_7H_7BrO	2-bromoanisole				[578-57-4]
		52.3			[86/10]
C_7H_7BrO	3-bromoanisole				[2398-37-0]
		50.2			[86/10]
C_7H_7BrO	4-bromoanisole				[104-92-7]
		50.6			[86/10]
	(318–496)	48.9	(333)		[47/5]
C_7H_7BrS	2-bromothioanisole				[19614-16-5]
		56.5			[86/10]
C_7H_7BrS	3-bromothioanisole				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		54.4			[86/10]
C_7H_7BrS	4-bromothioanisole				[104-95-0]
		55.7			[86/10]
C_7H_7Cl	benzyl chloride				[100-44-7]
	(276–309)	50.1±0.3	(298)	GS	[02/29]
		49.9	(298)	CGC	[02/29]
	(320–390)	48.6	(335)	A, I	[87/5][76/11]
		50.1±0.5	(298)		[76/11][99/16]
	(295–453)	48.6	(310)		[87/5][47/5]
C_7H_7Cl	2-chlorotoluene				[95-49-8]
	(370–432)	41.6	(385)		[99/16]
	(345–430)	45.3	(298)		[84/9][91/2]
	(345–430)	42.5	(361)		[84/9]
	(338–493)	42.8	(353)	A	[87/5][73/18]
					[70/14]
	(278–432)	44.8	(293)		[47/5]
	(273–348)	45.8	(288)		[40/5]
C_7H_7Cl	3-chlorotoluene				[108-41-8]
	(373–435)	41.9	(388)		[99/16]
	(277–436)	43.7	(292)	A	[87/5][47/5]
	(273–348)	46.2	(288)		[40/5]
C_7H_7Cl	4-chlorotoluene				[106-43-4]
	(362–435)	41.8	(375)		[99/16]
	(304–436)	41.7	(319)	A	[87/5]
	(340–430)	46.0	(298)		[84/9][91/2]
	(338–433)	43.5	(353)		[84/9]
	(279–435)	44.1	(293)		[47/5]
C_7H_7ClO	2-chloroanisole				[766-51-8]
		49.4			[86/10]
	(388–460)	48.3	(403)	A	[87/5][73/18]
					[99/16]
C_7H_7ClO	3-chloroanisole				[2845-89-8]
		48.1			[86/10]
C_7H_7ClO	4-chloroanisole				[623-12-1]
		47.7			[86/10]
C_7H_7ClS	2-chlorothioanisole				[17733-22-1]
		53.6			[86/10]
C_7H_7ClS	3-chlorothioanisole				[4867-37-2]
		51.9			[86/10]
C_7H_7ClS	4-chlorothioanisole				[123-09-1]
		53.1			[86/10]
C_7H_7F	benzyl fluoride				[350-50-5]
	(278–318)	46.2±0.3	(298)	GS	[02/29]
		46.5	(298)	CGC	[02/29]
	(278–318)	46.3±0.3	(298)	GS	[97/14]
	(297–410)	43.7	(312)	A	[87/5]
	(298–356)	44.3	(312)	I	[76/11]
		44.5±0.4	(298)		[76/11]
C_7H_7F	2-fluorotoluene				[95-52-3]
	(248–388)	42.0	(263)		[99/16]
	(452–531)	31.5	(465)		[99/16]
	(453–530)	32.3	(468)		[84/16]
	(308–348)	38.0	(323)		[74/26][84/9]
	(295–388)	38.7	(310)	A	[87/5][51/9]
	(248–387)	40.5	(264)		[47/5]
C_7H_7F	3-fluorotoluene				[352-70-5]
	(250–390)	41.6	(265)		[99/16]
	(293–390)	39.2	(308)	A	[87/5][51/9]
	(250–389)	40.7	(266)		[47/5]
C_7H_7F	4-fluorotoluene				[352-32-9]
	(340–430)	39.5	(298)		[84/9][91/2]
	(340–429)	37.0	(355)	A	[87/5][51/9]
					[99/16]
$C_7H_7F_2N$	N,N-difluorobenzylamine				[23162-99-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(313–333)	77.8	(323)	A	[87/5]
$C_7H_7F_9O$	1,1,1,2,2,3,3,4,4-nonafluoro-4-propoxybutane				[72372-80-6]
	(288–369)	37.9	(303)	I	[02/19]
C_7H_7I	benzyl iodide				[620-05-3]
	(301–337)	57.4±0.3	(298)	GS	[02/29]
		57.7	(298)	CGC	[02/29]
	(360–400)	46.8	(375)	I, A	[87/5][76/11]
		50.6±1.4	(298)		[76/11]
C_7H_7I	2-iodotoluene				[615-37-2]
	(310–484)	49.7	(325)	A	[87/5][47/5]
C_7H_7IO	4-iodoanisole				[696-62-8]
	(401–520)	54.4	(416)	A	[87/5][99/16]
	(401–479)	53.1±0.4	(440)	I	[56/26]
$C_7H_7NO_2$	(nitromethyl)benzene				[622-42-4]
	(363–413)	53.8	(378)	A	[87/5]
$C_7H_7NO_2$	2-nitrotoluene				[88-72-2]
	(274–323)	59.0±0.3	(299)	GS	[00/15]
		59.1±0.3	(298)		[00/15]
	(388–448)	52.0	(403)	EB	[94/8]
	(402–496)	51.0	(417)	A	[87/5]
	(387–493)	52.2	(402)		[38/9][94/8]
$C_7H_7NO_2$	3-nitrotoluene				[99-08-1]
	(397–452)	52.8	(413)	EB	[94/8]
	(353–505)	49.8	(368)	A	[87/5]
$C_7H_7NO_2$	4-nitrotoluene				[99-99-0]
	(407–457)	52.8	(422)	EB	[94/8]
	(423–512)	49.8	(438)	A	[87/5]
	(387–493)	54.2	(402)		[38/9][94/8]
$C_7H_7NO_3$	2-nitroanisole				[91-23-6]
	(424–545)	58.6	(439)	A	[87/5]
$C_7H_7N_3$	(azidomethyl)benzene				[622-79-7]
	(333–363)	48.0	(348)	A	[87/5]
C_7H_8	bicyclo[2.2.1]hepta-2,5-diene				[121-46-0]
		34.8±0.1	(298)	C	[93/1]
	(300–364)	33.6	(315)	A	[87/5]
		34.7±0.1	(298)	C	[85/2]
		33.8±0.9	(298)		[78/1]
	(300–353)	32.9±0.8	(298)	BG	[73/1]
C_7H_8	1,3,5-cycloheptatriene				[544-25-2]
	(273–338)	40.8	(288)	A	[87/5][73/18]
	(273–416)	39.4	(288)	A, EB	[87/5][56/20]
		38.7±0.2	(298)		[56/20]
C_7H_8	tetracyclo[3.2.0.0^{2,7}.0^{4,6}]heptane (quadricyclane)				[278-06-8]
		37.9±0.1	(298)	C	[93/1]
		37.9±0.1	(298)	C	[85/2]
		37.0±0.8	(298)		[78/1]
	(302–372)	37.3±0.8	(317)	BG	[87/5][73/1]
C_7H_8	toluene				[108-88-3]
	(331–496)	35.7	(346)		[93/3]
	(210–279)	40.6	(264)	A	[87/5]
	(383–445)	34.4	(398)	A	[87/5]
	(440–531)	33.2	(455)	A	[87/5]
	(530–592)	33.3	(545)	A	[87/5]
	(273–295)	38.9	(284)	A	[87/5]
		33.5±0.1	(380)	C	[85/10]
		32.1±0.1	(403)	C	[85/10]
		29.4±0.1	(441)	C	[85/10]
		27.1±0.1	(470)	C	[85/10]
		24.0±0.1	(505)	C	[85/10]
		35.4	(333)		[84/29]
		33.4	(373)		[84/29]
		31.4	(413)		[84/29]
		28.4	(453)		[84/29]
		24.0	(493)		[84/29]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(343–383)	35.4	(360)		[75/33]
		38.0	(298)		[71/28]
	(303–343)	37.3	(318)		[68/23]
	(288–348)	36.9	(303)		[67/10]
	(210–293)	37.8	(278)		[56/5]
	(308–386)	37.0	(323)		[87/5][49/6]
		38.0	(298)	C	[47/7]
	(286–362)	37.8	(301)		[46/4]
	(308–384)	37.0	(323)	MM	[45/2]
	(273–323)	38.8	(288)		[43/1]
C_7H_8O	anisole				[100-66-3]
	(353–393)	45.3	(298)	CGC	[95/21]
	(382–429)	41.8	(397)		[93/4]
		41.0			[86/10]
	(382–437)	41.9	(397)	A	[87/5][76/2]
	(382–437)	46.9	(298)		[76/2]
	(282–437)	39.0	(426)		[76/2]
		46.8±0.2	(298)	C	[75/3]
		42.9±0.1	(367)	C	[67/39]
		42.0±0.1	(382)	C	[67/39]
		40.5±0.1	(402)	C	[67/39]
		38.9±0.1	(427)	C	[67/39]
	(382–437)	41.9	(397)		[55/9][65/7]
C_7H_8O	benzyl alcohol				[100-51-6]
	(277–381)	64.8±0.6	(298)	GS	[99/3]
	(323–373)	69.5	(298)	CGC	[95/21]
		60.5			[95/30]
	(303–333)	66.2	(318)	GS	[82/1]
	(385–573)	54.6	(400)	A	[87/5][73/18]
	(293–313)	61.5	(303)	A, ME	[87/5][57/9]
					[73/18]
C_7H_8O	2-hydroxytoluene				[95-48-7]
	(304–409)	58.5	(319)	A	[87/5]
	(399–470)	50.1	(414)	A	[87/5]
	(463–526)	46.2	(478)	A	[87/5]
	(517–630)	44.0	(532)	A	[87/5]
		50.2			[86/10]
	(383–473)	51.3	(398)	GS, EB	[87/5][60/4]
					[73/18]
	(415–462)	48.2	(438)		[39/4]
C_7H_8O	3-hydroxytoluene				[108-39-4]
	(393–433)	62.5	(298)	CGC	[95/21]
	(284–313)	61.7	(298)	A	[87/5]
	(285–416)	63.1	(300)	A	[87/5]
	(410–477)	52.7	(425)	A	[87/5]
	(471–531)	47.6	(486)	A	[87/5]
	(523–633)	43.8	(538)	A	[87/5]
	(383–473)	55.0	(398)	GS, EB	[87/5][60/4]
					[73/18]
	(388–429)	60.6	(409)	GS	[80/17]
	(359–473)	58.8	(374)		[55/9][84/9]
	(422–474)	50.7	(448)		[39/4]
C_7H_8O	4-hydroxytoluene				[106-44-5]
	(308–393)	62.0	(323)	A	[87/5]
	(385–477)	55.4	(400)	A	[87/5]
	(463–533)	49.2	(478)	A	[87/5]
	(523–635)	46.0	(538)	A	[87/5]
		54.0			[86/10]
	(383–473)	55.6	(398)	A, GS, EB	[87/5][60/4]
					[73/18]
	(419–474)	51.3	(446)		[39/4]
C_7H_8OS	4-methoxybenzenethiol				[106-53-6]
		52.3			[86/10]
$C_7H_8O_2$	2,4-dihydroxytoluene				[496-73-1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(391–459)	72.2	(406)	A, GC	[87/5][75/24]
$C_7H_8O_2$	2,6-dihydroxytoluene				[608-25-3]
	(398–434)	66.9	(413)	A, GC	[87/5][75/24]
$C_7H_8O_2$	3,4-dihydroxytoluene				[452-86-8]
	(387–415)	90.0	(401)	A	[87/5]
$C_7H_8O_2$	3,5-dihydroxytoluene				[504-15-4]
	(402–468)	76.6	(417)	A, GC	[87/5][75/24]
$C_7H_8O_2$	2-methoxyphenol				[90-05-1]
	(378–479)	52.7	(393)	A	[87/5][73/18]
	(355–478)	52.7	(370)		[55/9]
$C_7H_8O_2$	3-methoxyphenol				[150-19-6]
	(413–518)	64.8	(428)	A	[87/5][73/18]
$C_7H_8O_2$	4-methoxyphenol				[150-76-5]
		58.6			[86/10]
	(418–518)	61.4	(433)	A	[87/5][73/18]
$C_7H_8O_2$	2,3-dimethyl-2*H*-pyran-2-one				[63233-31-8]
	(352–518)	64.9	(367)	A	[87/5][47/5]
$C_7H_8O_2S$	6-methyl-4-methoxy-2*H*-pyran-2-thione				[52911-98-5]
	(401–415)	108.9	(408)	A	[87/5][99/16]
					[74/30]
$C_7H_8O_2S$	2-methyl-6-(methylthio)-4*H*-pyran-4-one				[52911-99-6]
	(387–432)	62.7	(402)	A	[87/5][99/16]
					[74/30]
$C_7H_8O_3$	2-furancarboxylic acid, ethyl ester				[614-99-3]
	(354–389)	51.2	(369)	A	[87/5]
	(310–468)	52.6	(325)		[47/5]
$C_7H_8O_3$	3-methoxy-6-methyl-4*H*-pyran-4-one				[4225-42-7]
	(370–384)	72.8	(377)	A	[87/5]
$C_7H_8O_3$	4-methoxy-6-methyl-2*H*-pyran-2-one				[672-89-9]
	(385–434)	57.4	(400)	A	[87/5]
C_7H_8S	benzenemethanethiol				[100-53-8]
	(394–436)	47.5	(409)		[99/16]
		56.6±0.1	(298)		[72/11]
C_7H_8S	2-methylbenzenethiol				[137-06-4]
	(351–498)	48.1	(366)		[99/16]
	(370–470)	46.6	(394)	A	[87/5]
		46.0			[86/10]
C_7H_8S	3-methylbenzenethiol				[108-40-7]
	(353–498)	48.7	(368)		[99/16]
	(380–471)	47.1	(395)	A	[87/5]
C_7H_8S	4-methylbenzenethiol				[106-45-6]
	(351–499)	48.1	(366)		[99/16]
	(379–471)	46.5	(394)	A	[87/5]
		46.4			[86/10]
C_7H_8S	methyl phenyl sulfide				[100-68-5]
		47.7			[86/10]
		54.3±0.1	(298)		[72/11][66/5]
	(389–475)	47.5	(404)	A, EB	[87/5][66/5]
					[99/16]
	(323–353)	50.6±2.1	(298)		[62/20]
$C_7H_8S_3$	4,5,6,7-tetrahydro-1,4-benzodithiol-2-thione				[698-42-0]
	(341–352)	99.0	(346)		[99/16]
$C_7H_9Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-butyl ester				[79886-21-8]
	(383–433)	73.3	GC		[80/24]
$C_7H_9F_3N_2O_4$	glycine, N-[N-(trifluoroacetyl)glycyl]methyl ester				[433-33-0]
	(420–443)	93.8	(431)	A	[87/5][73/18]
$C_7H_9F_5O_2$	pentafluoropropionic acid, butyl ester				[680-28-4]
	(354–389)	38.6	(369)	A, EB	[87/5][69/13]
					[99/16]
C_7H_9N	benzylamine				[100-46-9]
	(302–458)	51.8	(317)	A	[87/5][77/3]
					[47/1]
C_7H_9N	2,3-dimethylpyridine				[583-61-9]
	(283–313)	52.0±0.6	(298)	GS	[99/3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(328–476)	45.2	(340)	EB	[95/22]
	(328–476)	42.7	(380)	EB	[95/22]
	(328–476)	40.2	(420)	EB	[95/22]
	(328–476)	37.4	(460)	EB	[95/22]
	(323–373)	47.6	(298)	CGC	[95/21]
		46.9	(313)	C	[85/1]
		45.0	(343)	C	[85/1]
		43.5	(368)	C	[85/1]
	(372–436)	43.0	(387)	A	[87/5][73/18]
C_7H_9N	2,4-dimethylpyridine				[108-47-4]
	(323–373)	47.5	(298)	CGC	[95/21]
	(288–373)	45.5	(330)		[95/4]
	(331–473)	44.8	(340)	EB	[95/22]
	(331–473)	42.3	(380)	EB	[95/22]
	(331–473)	39.8	(420)	EB	[95/22]
	(331–473)	37.0	(460)	EB	[95/22]
	(298–431)	47.1	(313)	EB	[90/6]
	(267–358)	47.5	(282)	MM	[86/2]
		46.5	(313)	C	[85/1]
		44.6	(343)	C	[85/1]
		43.9	(368)	C	[85/1]
	(349–433)	43.5	(364)	A	[87/5][73/18]
C_7H_9N	2,5-dimethylpyridine				[589-93-5]
	(330–471)	44.4	(340)	EB	[95/22]
	(330–471)	41.9	(380)	EB	[95/22]
	(330–471)	39.4	(420)	EB	[95/22]
	(330–471)	36.5	(460)	EB	[95/22]
	(358–431)	42.8	(373)	A, MG	[87/5][53/4] [73/18]
C_7H_9N	2,6-dimethylpyridine				[108-48-5]
	(323–373)	46.4	(298)	CGC	[95/21]
	(288–373)	43.7	(330)		[95/4]
	(315–457)	43.9	(320)	EB	[95/22]
	(315–457)	41.4	(360)	EB	[95/22]
	(315–457)	38.8	(400)	EB	[95/22]
	(315–457)	36.0	(440)	EB	[95/22]
	(295–417)	45.0	(310)	EB	[90/6]
	(267–358)	46.1	(282)	MM	[86/2]
		44.4	(313)	C	[85/1]
		42.5	(343)	C	[85/1]
		40.8	(368)	C	[85/1]
	(352–418)	41.6	(367)	A, MG	[87/5][53/4]
C_7H_9N	3,4-dimethylpyridine				[583-58-4]
	(341–495)	46.6	(360)	EB	[95/22]
	(341–495)	44.2	(400)	EB	[95/22]
	(341–495)	41.7	(440)	EB	[95/22]
	(341–495)	39.0	(480)	EB	[95/22]
	(288–422)	47.6	(355)		[95/4]
		48.8	(328)	C	[85/1]
		47.6	(343)	C	[85/1]
		45.9	(368)	C	[85/1]
	(385–454)	44.8	(400)	A	[87/5][73/18]
C_7H_9N	3,5-dimethylpyridine				[591-22-0]
	(323–373)	48.7	(298)	CGC	[95/21]
	(288–392)	47.0	(340)		[95/4]
	(335–487)	46.7	(340)	EB	[95/22]
	(335–487)	44.3	(380)	EB	[95/22]
	(335–487)	41.8	(420)	EB	[95/22]
	(335–487)	39.2	(460)	EB	[95/22]
	(273–358)	49.1	(288)	MM	[86/2]
		49.6	(313)	C	[85/1]
		46.5	(343)	C	[85/1]
		44.8	(368)	C	[85/1]
	(373–446)	44.3	(388)	A	[87/5][73/18]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_7H_9N	3-ethylpyridine				[536-78-7]
	(334–373)	44.6	(349)	A	[87/5][73/18]
C_7H_9N	2-ethylpyridine				[100-71-0]
	(323–373)	43.7	(338)	A	[87/5][73/18]
C_7H_9N	4-ethylpyridine				[536-75-4]
	(333–372)	45.3	(348)	A	[87/5][73/18]
C_7H_9N	N-methylaniline				[100-61-8]
	(309–469)	53.6	(324)	A	[87/5]
C_7H_9N	*o*-toluidine				[95-53-4]
	(290–517)	57.8	(300)	EB, IPM	[94/17]
	(290–517)	54.5	(340)	EB, IPM	[94/17]
	(290–517)	51.5	(380)	EB, IPM	[94/17]
	(290–517)	48.6	(420)	EB, IPM	[94/17]
	(290–517)	45.7	(460)	EB, IPM	[94/17]
	(290–517)	42.7	(500)	EB, IPM	[94/17]
	(391–474)	50.0	(406)	A	[87/5][49/1] [84/9]
C_7H_9N	*m*-toluidine				[108-44-1]
	(394–477)	51.1	(409)	A	[87/5][49/1] [84/9]
C_7H_9N	*p*-toluidine				[106-49-0]
	(393–474)	51.1	(408)	A	[87/5]
	(315–473)	54.9	(330)		[47/5]
C_7H_9N	1-cyclohexene-1-carbonitrile				[1855-63-6]
		53.6±0.1	(298)	C	[70/21]
C_7H_9N	bicyclo[3.1.0]hexane-1-carbonitrile				[31357-72-9]
	(366–444)	U43.2	(382)	BG	[71/2]
C_7H_9NO	2-methoxyaniline				[90-04-0]
	(334–492)	57.5	(349)	A	[87/5][47/5]
C_7H_{10}	bicyclo[2.2.1]hept-2-ene (norbornene)				[498-66-8]
	(338–406)	35.1±0.2	(298)	EB	[96/5]
	(301–350)	34.3	(316)	A	[87/5]
C_7H_{10}	bicyclo[4.1.0]hept-3-ene				[16554-83-9]
	(333–384)	36.7	(348)	A	[87/5]
		38.4±0.6	(298)	EB	[74/20]
C_7H_{10}	tricyclo[2.2.1.0^{2,6}]heptane				[279-19-6]
	(302–337)	38.3	(317)	A	[87/5]
C_7H_{10}	tricyclo[4.1.0.0^{2,4}]heptane				
		36.5±0.5	(298)	EB	[74/20]
C_7H_{10}	tricyclo[4.1.0.0^{2,6}]heptane				[187-26-8]
	(322–373)	35.3	(337)	A	[87/5]
$C_7H_{10}N_2$	2,3,5-trimethylpyrazine				[14667-55-1]
		53.9±1.6	(298)	C	[96/2]
$C_7H_{10}N_2$	diallylcyanamide				[538-08-9]
	(369–495)	52.3	(384)	A	[87/5]
$C_7H_{10}N_2$	1,5-dicyanopentane				[646-20-8]
	(306–331)	74.5	(318)	A	[87/5]
$C_7H_{10}N_2$	2,4-diaminotoluene				[95-80-7]
	(379–553)	67.7	(394)	A	[87/5][47/5]
$C_7H_{10}N_2$	4-tolyhydrazine				[539-44-6]
	(355–515)	65.4	(370)	A	[87/5][47/5]
$C_7H_{10}O$	1-ethynyl-1-cyclopentanol				[17356-19-3]
	(323–373)	62.1	(298)	CGC	[95/21]
$C_7H_{10}O$	7-norbornanone				[10218-02-7]
	(322–348)	47.9	(335)	EB	[94/16]
$C_7H_{10}O$	2-norbornanone				[497-38-1]
		50.0	(298)	GC	02/37]
	(343–383)	51.5	(298)	CGC	[95/21]
	(343–383)	49.6	(298)	CGC	[95/21]
$C_7H_{10}O_2$	5-methyl-5-hexene-2,4-dione				[20583-46-4]
	(323–363)	26.4	(338)	A	[87/5][73/18]
$C_7H_{10}O_3$	3-acetyl-2,4-pentanedione				[815-68-9]
	(369–477)	54.9	(384)	A	[87/5]
$C_7H_{10}O_3$	glycidyl methacrylate				[106-91-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		61.2±0.4	(298)	A	[87/14]
		60.6±0.9	(298)	C	[86/8]
$C_7H_{10}O_4$	trimethylsuccinic anhydride				
	(326–504)	52.9	(341)	A	[87/5][47/5]
$C_7H_{10}O_4$	dimethyl citraconate				[617-54-9]
	(324–484)	55.8	(339)	A	[87/5][47/5]
$C_7H_{10}O_4$	dimethyl itaconate				[617-52-7]
	(342–481)	67.0	(357)	A	[87/5][47/5]
$C_7H_{10}O_4$	dimethyl mesaconate				[617-53-8]
	(319–479)	55.2	(334)	A	[87/5][47/5]
$C_7H_{10}O_6$	*tris*(methoxycarbonyl)methane				
	(308–348)	74.4±0.6		GS	[95/8]
$C_7H_{10}S$	2-propylthiophene				[1551-27-5]
	(243–303)	46.0	(273)		[81/2][99/16]
$C_7H_{10}S$	2-isopropylthiophene				[4095-22-1]
	(352–468)	41.5	(367)		[99/16]
$C_7H_{11}BrO_2$	4-bromo-3-methylcrotonic acid, ethyl ester				[26918-14-9]
	(346–381)	43.1	(361)	A	[87/5]
$C_7H_{11}ClO_5$	(2-chloroethyl)[(1-methoxycarbonyl)ethyl] carbonate				
	(365–525)	66.8	(380)	A	[87/5][99/16]
$C_7H_{11}Cl_3O_2$	trichloracetic acid, neopentyl ester				[57392-56-0]
	(378–473)	57.7	(393)	A	[87/5][99/16]
$C_7H_{11}NO_2$	2-methyl-2-acetoxybutyronitrile				
	(315–469)	58.1	(330)	A	[87/5][47/5]
$C_7H_{11}NO_2$	5-oxo-2-pyrrolidinecarboxylic acid, ethyl ester				
	(418–511)	73.7	(433)	A	[87/5]
$C_7H_{11}N$	cyclohexanecarbonitrile				[766-05-2]
	(333–427)	39.4	(351)	BG	[71/2]
		51.9±0.1	(298)	C	[70/21]
C_7H_{12}	bicyclo[2.2.1]heptane (norbornane)				[279023-2]
		40.0±0.1 sub	(298)		[87/1]
C_7H_{12}	*cis* bicyclo[4.1.0]heptane				[286-08-8]
	(298–385)	38.0±0.8	(313)	A	[87/5][70/30]
C_7H_{12}	(*dl*) bicyclo[4.1.0]heptane				[286-08-8]
	(333–385)	36.5	(348)	A	[87/5]
C_7H_{12}	1-methylbicyclo[3.1.0]hexane				[4625-24-5]
	(312–362)	34.0	(327)	A	[87/5]
C_7H_{12}	cycloheptene				[628-92-2]
	(251–313)	38.5	(266)	A	[87/5][41/6]
	(251–312)	36.7	(300)		[41/6]
C_7H_{12}	1,2-dimethylcyclopentene				[765-47-9]
	(294–431)	36.4	(309)	A	[87/5][73/18]
C_7H_{12}	(*dl*) 1,3-dimethylcyclopentene				[62184-82-1]
	(283–410)	35.0	(298)	A	[87/5][73/18]
C_7H_{12}	(*dl*) 1,4-dimethylcyclopentene				[57426-81-0]
	(273–413)	35.1	(288)	A	[87/5][73/18]
C_7H_{12}	(*dl*) 1,5-dimethylcyclopentene				[16491-15-9]
	(273–423)	37.1	(288)	A	[87/5][73/18]
C_7H_{12}	1-ethylidenecyclopentane				
		38.6±0.2	(298)	GCC	[79/17]
C_7H_{12}	1-ethylcyclopentene				[2146-38-5]
		38.5±0.3	(298)	GCC	[79/17]
	(293–433)	36.5	(308)	A	[87/5][73/18]
C_7H_{12}	3-ethylcyclopentene				[694-35-9]
	(288–435)	36.5	(303)	A	[87/5][73/18]
C_7H_{12}	4-ethylcyclopentene				[3742-38-9]
	(288–435)	36.5	(303)	A	[87/5][73/18]
C_7H_{12}	1-methyl-1-cyclohexene				[591-49-1]
	(275–313)	37.7±0.2	(294)	GS	[00/7]
	(275–313)	37.5±0.2	(298)	GS	[00/7]
	(333–384)	35.7	(348)	A	[87/5][70/24]
					[84/9]
	(309–384)	36.7	(324)	MM	[60/20]
C_7H_{12}	(*dl*) 3-methyl-1-cyclohexene				[591-48-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(335–376)	34.8	(350)	A	[87/5][70/24] [84/9]
C_7H_{12}	(*dl*) 4-methyl-1-cyclohexene				[591-47-9]
	(275–296)	37.0±0.6	(286)	GS	[00/7]
	(275–296)	36.3±0.6	(298)	GS	[00/7]
	(292–429)	36.3	(307)	A	[87/5]
C_7H_{12}	methylenecyclohexane				[1192-37-6]
		36.1±0.3	(298)	GCC	[79/17]
	(331–387)	34.4	(346)	A, EB	[87/5][73/12]
C_7H_{12}	1-heptyne				[628-71-7]
	(336–373)	37.9	(351)	A	[87/5][70/24] [84/9]
C_7H_{12}	2-heptyne				[1119-65-9]
	(346–385)	38.6	(361)	A	[87/5][70/24] [84/9]
C_7H_{12}	3-heptyne				[2586-89-2]
	(343–380)	39.1	(358)	A	[87/5][70/24] [84/9]
$C_7H_{12}Br_2$	1,2-dibromocycloheptane				[29974-68-3]
	(292–353)	50.3	(307)	A	[87/5][41/6] [73/18]
$C_7H_{12}ClNO$	6-chlorohexylisocyanate				[13654-91-6]
	(363–453)	52.5	(378)	A	[87/5][68/7] [73/18]
$C_7H_{12}Cl_2O_2$	dichloroacetic acid, neopentyl ester				
	(368–463)	57.4	(383)	A	[87/5][99/16]
$C_7H_{12}Cl_2S$	(2-chloroethyl)(2-chlorocyclopentyl) sulfide				
	(273–333)	65.9	(303)	A, GS	[87/5][48/9] [99/16]
$C_7H_{12}Cl_4$	1,1,1,7-tetrachloroheptane				[3922-36-9]
	(342–455)	71.7	(357)		[99/16]
	(370–454)	69.9	(385)	A	[87/5]
$C_7H_{12}N_2$	2-piperidinoacetonitrile				
	(303–338)	56.0±0.5		GS	[97/10]
$C_7H_{12}O$	*exo*-norborneol				[497-37-0]
		52.5	(298)	GC	[02/37]
$C_7H_{12}O$	cyclohexenyl methyl ether				
	(274–313)	44.0±0.2	(294)	GS	[98/2]
	(274–313)	43.7±0.2	(298)	GS	[98/2]
$C_7H_{12}O$	cycloheptanone				[502-42-1]
	(343–383)	50.6	(298)	CGC	[95/21]
	(343–383)	51.9	(298)	CGC	[95/21]
	(343–383)	50.7	(298)	CGC	[95/21]
	(313–453)	48.5	(328)	A	[87/5]
	(373–465)	44.8	(388)	A, EB	[87/5][76/10]
$C_7H_{12}O_2$	cyclobutanecarboxylic acid, ethyl ester				
	(274–308)	44.9±0.4		GS	[98/22]
$C_7H_{12}O_2$	1,4-dioxaspiro[4.4]nonane				[176-32-9]
	(278–313)	47.6±0.5	(298)	GS	[98/21][02/32]
$C_7H_{12}O_2$	butyl acrylate				[141-32-2]
	(318–419)	47.3±0.3	(298)	EB	[96/5]
	(272–421)	44.8	(287)	A	[87/5][47/5]
$C_7H_{12}O_2$	isobutyl acrylate				[106-63-8]
	(330–410)	43.8	(345)	A	[87/5]
$C_7H_{12}O_2$	heptanolactone				[539-87-7]
	(368–390)	48.2±0.3	(379)	MM	[91/7]
	(369–390)	53.3±1.3	(298)	MM	[91/7]
$C_7H_{12}O_2$	propyl methacrylate				[2210-28-8]
	(304–413)	41.6	(319)	A	[87/5]
$C_7H_{12}O_3$	glycidyl butyrate				[2461-40-7]
		58.7±0.4	(298)		[87/14]
		58.0±0.4	(298)	C	[86/8]
$C_7H_{12}O_3$	2-acetoxy-2-methyl-3-butanone				[10235-71-9]
	(337–368)	54.8	(352)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_7H_{12}O_3$	ethyl levulinate				[539-88-8]
	(320–480)	58.3	(335)	A	[87/5][47/5]
		51.6	(420)		[31/1]
$C_7H_{12}O_4$	2-acetoxypropionic acid, ethyl ester				[2985-28-6]
	(313–454)	57.9	(328)	A	[87/5]
$C_7H_{12}O_4$	3-acetoxypropionic acid, ethyl ester				[40326-37-2]
	(350–367)	72.1	(358)	A	[87/5][73/18]
$C_7H_{12}O_4$	1,2-propylene glycol diacetate				[623-84-7]
	(318–367)	54.9	(323)		[01/19]
$C_7H_{12}O_4$	diethyl malonate				[105-53-3]
	(288–318)	64.7±0.2	(293)	GS	[92/13]
	(293–318)	63.3	(305)	A	[87/5]
	(384–468)	59.9	(399)	A	[87/5]
	(313–472)	51.2	(328)	A	[87/5][47/5]
$C_7H_{12}O_4$	dimethyl dimethylmalonate				
	(278–307)	55.6±0.8	(293)	GS	[92/13]
$C_7H_{12}O_4$	glutaric acid, dimethyl ester				[1119-40-0]
	(366–483)	54.7	(381)	A	[87/5]
$C_7H_{12}O_4$	methyl adipate				[627-91-8]
	(453–503)	82.9	(468)	A	[87/5]
$C_7H_{12}O_4$	heptanedioic acid (pimelic acid)				[111-16-0]
	(436–615)	88.6	(451)	A	[87/5][47/5]
$C_7H_{12}O_4$	2,4,8,10-tetraoxaspiro[5.5]undecane				[126-54-5]
		56.0			[59/23]
$C_7H_{12}O_5$	ethyl[(1-methoxycarbonyl)ethyl]carbonate				
	(343–473)	60.0	(358)	A	[87/5]
$C_7H_{12}O_5$	2-(lactyloxy)propionic acid, methyl ester				
	(317–384)	72.0	(332)	A	[87/5]
$C_7H_{13}ClO$	heptanoyl chloride				[2528-61-2]
	(307–418)	63.7	(322)	A	[87/5][47/5]
$C_7H_{13}ClO_2$	chloroacetic acid, neopentyl ester				
	(378–448)	55.6	(393)	A	[87/5][99/16]
$C_7H_{13}F_3O_3$	*tris*(2-fluoroethyl)orthoformate				[2339-51-7]
	(273–333)	59.7	(288)	A	[87/5][99/16]
$C_7H_{13}N$	2,2-dimethylpentanenitrile				
	(274–303)	46.9±0.4		GS	[94/5]
$C_7H_{13}N$	heptanonitrile				[629-08-3]
	(313–473)	46.0	(328)	A	[87/5]
	(294–457)	46.4	(309)		[47/5]
$C_7H_{13}NO$	N-methylcaprolactam				[2556-73-2]
	(340–400)	49.4	(370)		[84/18]
$C_7H_{13}NO$	2-butoxypropionitrile				
	(373–423)	46.7	(388)	A	[87/5][73/18]
$C_7H_{13}NO$	2-methoxy-3,3-dimethylbutanenitrile				[162047-91-8]
	(295–324)	58.8±1.1	(298)	GS	[95/11]
$C_7H_{13}NO$	2-methoxy-2-methylpentanenitrile				[162047-90-7]
	(278–308)	48.5±0.6	(298)	GS	[95/11]
$C_7H_{13}NO_2$	lactic acid, N-(methallyl) amide				
	(360–428)	81.8	(375)	A	[87/5]
$C_7H_{13}NO_2$	N-lactylmorpholine				
	(371–423)	62.7	(386)	A	[87/5]
$C_7H_{13}NO_3$	(*dl*) N-acetylalanine ethyl ester				[5143-72-6]
	(372–460)	65.2	(387)	A	[87/5][73/18]
$C_7H_{13}O_6P$	Mevinphos				[7786-34-7]
	(293–383)	68.1	(308)	A	[87/5]
C_7H_{14}	cycloheptane				[291-64-5]
	(282–333)	38.6	(297)	A	[87/5]
	(476–604)	31.7	(491)	A	[87/5]
	(333–398)	36.4	(348)	A, EB	[87/5][76/10]
	(341–433)	36.1	(356)	A, EB	[87/5][56/20]
		38.5±0.2	(298)		[56/20]
C_7H_{14}	methylcyclohexane				[108-87-2]
	(295–333)	36.2	(310)		[91/3]
		35.1±0.4	(298)	GC	[87/17]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(373–511)	32.3	(388)	A	[87/5]
	(501–573)	31.2	(516)	A	[87/5]
		32.2	(353)		[84/29]
		29.9	(393)		[84/29]
		26.9	(433)		[84/29]
		23.4	(473)		[84/29]
		35.4±0.1	(298)	C	[79/13]
		34.6±0.1	(313)	C	[79/13]
		33.5±0.1	(333)	C	[79/13]
		32.5±0.1	(353)	C	[79/13]
		35.4	(298)	GCC	[78/16]
		35.3	(298)		[75/12]
	(308–368)	34.6	(323)	A	[87/5][70/25]
					[84/9]
		31.8	(374)		[46/11]
	(299–375)	34.9	(314)	MM	[45/2]
	(273–348)	36.1	(288)		[40/5]
C_7H_{14}	1,1-dimethylcyclopentane				[1638-26-2]
	(284–363)	34.0	(299)	A	[87/5]
		33.8	(298)		[71/28]
	(289–362)	33.8	(304)		[49/6]
C_7H_{14}	*cis* 1,2-dimethylcyclopentane				[1192-18-3]
	(293–375)	35.5	(308)	A	[87/5]
		35.8	(298)		[71/28]
	(298–373)	35.2	(313)		[49/6]
C_7H_{14}	(*dl*) *trans* 1,2-dimethylcyclopentane				[822-50-4]
	(295–367)	34.2	(310)	A	[87/5]
		34.6	(298)		[71/28]
	(299–366)	34.0	(314)		[49/6]
C_7H_{14}	*cis* 1,3-dimethylcyclopentane				[2532-58-3]
	(295–366)	34.2	(310)	A	[87/5]
		34.3	(298)		[71/28]
		32.8±0.1	(323)	C	[59/8]
		31.7±0.1	(342)	C	[59/8]
		30.4±0.1	(364)	C	[59/8]
	(299–366)	34.0	(314)		[49/6]
C_7H_{14}	(*dl*) *trans* 1,3-dimethylcyclopentane				[1759-58-6]
	(295–367)	34.0	(310)	A	[87/5]
		34.5	(298)		[71/28]
	(291–365)	34.2	(306)		[49/6]
C_7H_{14}	ethylcyclopentane				[1640-89-7]
	(308–387)	35.5	(323)	A	[87/5]
	(386–507)	32.9	(401)	A	[87/5]
	(499–569)	31.9	(514)	A	[87/5]
		35.6±0.1	(313)	C	[81/14]
		34.8±0.1	(328)	C	[81/14]
		33.9±0.1	(343)	C	[81/14]
		33.0±0.1	(358)	C	[81/14]
		32.5±0.1	(368)	C	[81/14]
		36.5	(298)		[71/28]
	(302–377)	35.7	(317)		[49/6]
C_7H_{14}	1-heptene				[592-76-7]
	(311–368)	34.6	(326)	A	[87/5]
	(327–367)	33.9	(342)		[70/24][84/9]
		35.7	(298)		[71/28]
	(295–318)	35.3	(310)	MM	[50/6]
	(255–312)	35.9	(300)		[41/6]
	(273–362)	34.5	(288)		[36/3]
C_7H_{14}	*cis* 2-heptene				[6443-92-1]
	(276–304)	39.0±0.3	(290)	GS	[00/7]
	(276–304)	38.6	(298)	GS	[00/7]
	(315–372)	35.3	(330)	A	[87/5]
	(332–371)	34.6	(347)		[70/24][84/9]
		36.0	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_7H_{14}	*trans* 2-heptene				[14686-13-6]
	(314–373)	35.3	(329)	A	[87/5]
		36.0	(298)		[71/28]
	(331–370)	34.6	(346)		[70/24]
C_7H_{14}	*cis* 3-heptene				[7642-10-6]
	(312–369)	35.0	(327)	A	[87/5]
		35.6	(298)		[71/28]
C_7H_{14}	*trans* 3-heptene				[14686-14-7]
	(312–368)	34.6	(327)	A	[87/5]
		35.6	(298)		[71/28]
C_7H_{14}	2-methyl-1-hexene				[6094-02-6]
	(318–390)	33.9	(333)	A	[87/5][73/18]
		35.1	(298)		[71/28]
C_7H_{14}	(*dl*) 3-methyl-1-hexene				[3404-61-3]
	(311–381)	33.4	(326)	A	[87/5][73/18]
		34.3	(298)		[71/28]
C_7H_{14}	(*dl*) 4-methyl-1-hexene				[3769-23-1]
	(313–384)	33.6	(328)	A	[87/5][73/18]
		34.7	(298)		[71/28]
C_7H_{14}	5-methyl-1-hexene				[3524-73-0]
	(313–393)	33.5	(328)	A	[87/5][73/18]
		34.3	(298)		[71/28]
C_7H_{14}	2-methyl-2-hexene				[2738-19-4]
	(322–394)	34.0	(337)	A	[87/5][73/18]
		35.6	(298)		[71/28]
C_7H_{14}	*cis* 3-methyl-2-hexene				[10574-36-4]
	(322–396)	34.2	(337)	A	[87/5][73/18]
		35.6	(298)		[71/28]
C_7H_{14}	*trans* 3-methyl-2-hexene				[20710-38-7]
	(321–394)	34.1	(336)	A	[87/5][73/18]
		35.6	(298)		[71/28]
C_7H_{14}	*cis* 4-methyl-2-hexene				[3683-19-0]
	(313–384)	33.5	(328)	A	[87/5][73/18]
		34.7	(298)		[71/28]
C_7H_{14}	*trans* 4-methyl-2-hexene				[3683-22-5]
	(314–385)	33.6	(329)	A	[87/5][73/18]
		34.7	(298)		[71/28]
C_7H_{14}	*cis* 5-methyl-2-hexene				[13151-17-2]
	(354–372)	32.6	(363)	A	[87/5][73/18]
		34.7	(298)		[71/28]
C_7H_{14}	*trans* 5-methyl-2-hexene				[7385-82-2]
	(315–386)	33.6	(330)	A	[87/5][73/18]
		34.7	(298)		[71/28]
C_7H_{14}	*cis* 2-methyl-3-hexene				[15840-60-5]
	(262–383)	36.1	(277)	A	[87/5][73/18]
		34.3	(298)		[71/28]
C_7H_{14}	*trans* 2-methyl-3-hexene				[692-24-0]
	(313–383)	33.5	(328)	A	[87/5][73/18]
		34.3	(298)		[71/28]
C_7H_{14}	*cis* 3-methyl-3-hexene				[4914-89-0]
	(307–375)	35.4	(322)	A	[87/5]
		36.4	(298)		[71/28]
	(302–368)	35.7	(317)	MM	[60/20]
C_7H_{14}	*trans* 3-methyl-3-hexene				[3899-36-3]
	(310–368)	34.8	(325)	A	[87/5]
		35.8	(298)		[71/28]
	(300–367)	35.3	(315)	MM	[60/20]
C_7H_{14}	(*dl*) 2,3-dimethylpent-1-ene				[3404-72-6]
	(311–382)	33.4	(326)	A	[87/5][73/18]
C_7H_{14}	2,3-dimethylpent-2-ene				
		34.3	(298)		[71/28]
C_7H_{14}	2,4-dimethylpent-1-ene				[2213-32-3]
	(311–361)	32.3	(326)	A	[87/5]
		33.1	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(289–355)	33.2	(304)	MM	[60/20]
C_7H_{14}	3,3-dimethylpent-1-ene				[3404-73-7]
	(306–374)	33.0	(321)	A	[87/5][73/18]
		33.5	(298)		[71/28]
C_7H_{14}	(*dl*) 3,4-dimethylpent-1-ene				[7385-78-6]
	(309–378)	33.2	(324)	A	[87/5][73/18]
		33.9	(298)		[71/28]
C_7H_{14}	4,4-dimethylpent-1-ene				[762-62-9]
	(299–347)	31.0	(314)	A	[87/5]
		31.2	(298)		[71/28]
	(290–346)	31.0	(315)	MM	[60/20]
C_7H_{14}	2,3-dimethylpent-2-ene				[10574-37-5]
	(322–396)	34.2	(337)	A	[87/5][73/18]
		35.6	(298)		[71/28]
C_7H_{14}	2,4-dimethylpent-2-ene				[625-65-0]
	(276–297)	35.2±1.5	(286)	GS	[00/7]
	(276–297)	34.5±1.5	(298)	GS	[00/7]
	(286–363)	34.5	(301)	A	[87/5]
		34.3	(298)		[71/28]
	(292–357)	34.2	(307)	MM	[60/20]
C_7H_{14}	*cis* 3,4-dimethylpent-2-ene				[4914-91-4]
	(316–387)	33.7	(331)	A	[87/5][73/18]
		34.7	(298)		[71/28]
C_7H_{14}	*trans* 3,4-dimethylpent-2-ene				[4914-92-5]
	(317–390)	33.9	(332)	A	[87/5][73/18]
		35.1	(298)		[71/28]
C_7H_{14}	*cis* 4,4-dimethylpent-2-ene				[762-63-0]
	(303–355)	32.2	(318)	A	[87/5]
		32.6	(298)		[71/28]
	(291–354)	32.6	(306)	MM	[60/20]
C_7H_{14}	*trans* 4,4-dimethylpent-2-ene				[690-08-4]
	(295–352)	32.8	(310)	A	[87/5]
		32.8	(298)		[71/28]
	(289–350)	33.0	(304)	MM	[60/20]
C_7H_{14}	2-ethyl-3-methyl-1-butene				[7357-93-9]
	(303–381)	33.8	(318)	A	[87/5]
		34.3	(298)		[71/28]
	(290–360)	34.4	(305)	MM	[60/20]
C_7H_{14}	2-ethyl-1-pentene				[3404-71-5]
	(267–392)	36.6	(282)	A	[87/5][73/18]
		35.1	(298)		[71/28]
C_7H_{14}	3-ethyl-1-pentene				[4038-04-4]
	(311–382)	33.4	(326)	A	[87/5][73/18]
		34.3	(298)		[71/28]
C_7H_{14}	3-ethyl-2-pentene				[816-79-5]
	(321–395)	34.1	(336)	A	[87/5][73/18]
		35.6	(298)		[71/28]
C_7H_{14}	2,3,3-trimethyl-1-butene				[594-56-9]
	(288–353)	32.4	(303)	A	[87/5]
		34.3	(298)		[71/28]
	(288–351)	32.1	(303)	MM	[60/20]
$C_7H_{14}Br_2$	1,1-dibromoheptane				[59104-79-9]
	(395–548)	54.4	(410)	A, EST	[87/5][56/16] [70/14]
$C_7H_{14}Br_2$	(*dl*) 1,2-dibromoheptane				[42474-21-5]
	(295–553)	52.9	(310)	A	[87/5][73/18] [99/16]
	(295–355)	54.4	(300)		[41/6]
$C_7H_{14}Cl_2$	1,1-dichloroheptane				[821-25-0]
	(375–460)	53.5	(298)		[87/12][91/2]
	(364–510)	48.4	(379)	A, EST	[87/5][56/16] [70/14]
$C_7H_{14}Cl_2$	1,2-dichloroheptane				[10575-87-8]
	(353–466)	49.0	(368)		[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(350–470)	53.2	(298)		[82/12][91/2]
$C_7H_{14}Cl_2$	1,7-dichloroheptane				[821-76-1]
	(406–491)	52.3	(421)		[99/16]
	(410–490)	61.2	(298)		[88/11][91/2]
$C_7H_{14}F_2$	1,1-difluoroheptane				[407-96-5]
	(311–424)	41.1	(326)	A, EST	[87/5][56/16]
					[70/14]
$C_7H_{14}N_2$	3-(diethylamino)propionitrile				[5351-04-2]
	(338–470)	53.7	(353)	A	[87/5]
$C_7H_{14}N_2$	2-(diethylamino)propionitrile				
	(278–315)	50.8±0.3		GS	[97/10]
$C_7H_{14}O$	1,2-epoxyheptane				[5063-65-0]
	(305–414)	45.5	(320)	A	[87/5][70/28]
$C_7H_{14}O$	cycloheptanol				[502-41-0]
	(284–323)	64.7	(299)	A	[87/5]
	(284–321)	67.4	(299)		[75/1]
$C_7H_{14}O$	1-methylcyclohexanol				[590-67-0]
	(340–430)	49.1	(355)	A	[87/5]
$C_7H_{14}O$	2-methylcyclohexanol				[583-59-5]
	(323–373)	63.3	(298)	CGC	[95/21]
$C_7H_{14}O$	*cis* 2-methylcyclohexanol				[7443-70-1]
		61.8			[75/39]
$C_7H_{14}O$	3-methylcyclohexanol				[591-23-1]
	(323–373)	65.5	(298)	CGC	[95/21]
$C_7H_{14}O$	(*dl*) *cis* 3-methylcyclohexanol				[24965-90-0]
	(340–450)	54.3	(355)	A	[87/5]
$C_7H_{14}O$	(*dl*) *trans* 3-methylcyclohexanol				[23068-71-5]
	(350–450)	50.0	(365)	A	[87/5]
$C_7H_{14}O$	4-methylcyclohexanol				[589-91-3]
	(323–373)	65.9	(298)	CGC	[95/21]
$C_7H_{14}O$	*cis* 4-methylcyclohexanol				[7731-28-4]
	(340–450)	49.9	(355)	A	[87/5]
$C_7H_{14}O$	*trans* 4-methylcyclohexanol				[7731-29-5]
	(340–350)	52.1	(355)	A	[87/5]
$C_7H_{14}O$	1-ethyl-1-cyclopentanol				[1462-96-0]
	(347–426)	58.4	(362)	A	[87/5][73/18]
$C_7H_{14}O$	2-heptanone				[110-43-0]
	(343–383)	46.1	(298)	CGC	[95/21]
	(343–383)	48.5	(298)	CGC	[95/21]
	(303–424)	47.5	(318)	A	[87/5]
	(449–480)	39.1	(464)	A	[87/5]
		47.4±0.3	(298)	GCC	[79/7]
		47.2±0.1	(298)	C	[79/1]
	(327–457)	44.7	(342)		[87/5][75/8]
		48.0	(298)		[75/8]
	(309–424)	46.9	(324)	EB	[66/12]
	(292–423)	50.9	(307)		[47/5]
	(273–348)	48.0	(288)		[40/5]
$C_7H_{14}O$	4-heptanone				[123-19-3]
	(343–383)	47.8	(298)	CGC	[95/21]
		46.2±0.4	(298)	GCC	[79/7]
	(304–490)	45.5	(319)	A	[87/5][75/8]
		46.7	(298)		[75/8]
	(296–417)	57.5	(311)	A	[87/5][47/5]
	(283–323)	40.7	(303)		[37/9]
$C_7H_{14}O$	2-methyl-3-hexanone				[7379-12-6]
	(296–406)	41.3	(311)	A	[87/5]
$C_7H_{14}O$	2,2-dimethyl-3-pentanone				[564-04-5]
		42.3±0.1	(298)	C	[70/18]
		42.3±0.1	(298)	C	[66/2]
$C_7H_{14}O$	2,4-dimethyl-3-pentanone				[565-80-0]
	(321–399)	39.4	(336)	A	[87/5][73/18]
		41.6±0.1	(298)	C	[70/18]
		41.5±0.1	(298)	C	[66/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_7H_{14}O$	heptanal				[111-71-7]
	(313–353)	48.7	(298)	CGC	[95/21]
		47.3±0.1	(298)		[81/18]
	(285–428)	62.0	(300)		[47/5]
$C_7H_{14}O$	3-methylhexanal				[19269-28-4]
	(314–417)	42.8	(329)	EB	[87/10]
$C_7H_{14}O$	3,4-dimethylpentanal				[19353-21-0]
	(319–417)	42.4	(334)	EB	[87/10]
$C_7H_{14}O_2$	1,1-dimethoxycyclopentane				[931-94-2]
	(278–318)	44.5±0.3	(298)	GS	[98/21][02/32]
	(307–343)	46.1	(325)	EB	[94/16]
$C_7H_{14}O_2$	methyl hexanoate				[106-70-7]
		45.2	(350)		[02/27]
		46.4±0.1	(325)		[02/27]
		47.7±0.1	(298)		[02/27]
	(313–363)	47.9	(298)	CGC	[95/21]
	(313–353)	48.2	(298)	CGC	[95/21]
		47.8±0.5	(298)	GC	[87/17]
		48.7±0.3	(298)	GCC	[80/5]
		48.0±0.1	(298)	C	[77/1]
	(315–383)	45.3	(330)	A	[87/5][63/16]
$C_7H_{14}O_2$	butyl propionate				[590-01-2]
	(305–417)	49.1	(320)	A	[87/5]
	(305–365)	47.4	(320)		[59/13][84/9]
$C_7H_{14}O_2$	ethyl pivalate				[3938-95-2]
	(308–429)	39.8±0.1	(320)	EB	[02/16]
	(308–429)	36.9±0.2	(360)	EB	[02/16]
	(308–429)	33.8±0.6	(400)	EB	[02/16]
		41.3±0.1	(298)	C	[66/2]
$C_7H_{14}O_2$	ethyl isovalerate				[108-64-5]
	(301–418)	42.8	(316)	A	[87/5]
	(267–407)	44.5	(282)		[47/5]
$C_7H_{14}O_2$	isobutyl propionate				[540-42-1]
	(271–410)	44.9	(286)	A	[87/5][47/5]
$C_7H_{14}O_2$	isopentyl acetate				[123-92-2]
	(230–435)	46.4	(300)		[99/27]
	(278–305)	46.8±0.2	(292)	GS	[99/4]
	(278–305)	46.4±0.2	(298)	GS	[99/4]
	(308–424)	44.3	(323)	A	[87/5]
	(313–368)	45.1	(328)		[59/15][84/9]
$C_7H_{14}O_2$	isopropyl isobutyrate				[617-50-5]
	(257–394)	43.3	(272)	A	[87/5][47/5]
$C_7H_{14}O_2$	4-methoxy-4-methyl-2-pentanone				[107-70-0]
	(343–423)	45.0	(358)	A	[87/5]
$C_7H_{14}O_2$	methyl *tert*-butylacetate				[10250-48-3]
	(274–313)	44.4±0.2	(298)	GS	[96/11]
$C_7H_{14}O_2$	neopentyl acetate				[926-41-0]
	(301–400)	49.1	(316)	A	[87/5]
$C_7H_{14}O_2$	*tert*-pentyl acetate				[625-16-1]
	(274–308)	42.8±0.3	(298)	GS	[96/11]
$C_7H_{14}O_2$	pentyl acetate				[628-63-7]
	(321–462)	48.6±0.4	(298)	EB	[96/3]
	(329–423)	43.2	(344)	A	[87/5]
$C_7H_{14}O_2$	propyl butyrate				[105-66-8]
	(390–430)	39.6	(405)		[95/17]
	(355–416)	42.0	(370)		[93/8]
	(271–416)	44.3	(286)	A	[87/5][47/5]
$C_7H_{14}O_2$	propyl isobutyrate				[644-49-5]
	(267–407)	50.5	(282)	A	[87/5][47/5]
$C_7H_{14}O_2$	ethyl 2-methylbutanoate				
	(288–308)	64.7	(298)	GS	[92/13]
$C_7H_{14}O_2$	butyl glycidyl ether				[2426-08-6]
		53.3±0.4			[87/14]
$C_7H_{14}O_2$	*tert*-butyl glycidyl ether				[7665-72-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		50.2±0.4			[87/14]
$C_7H_{14}O_2$	2,2,4-trimethyl-1,3-dioxane				
		41.9±1.2	(298)		[67/37]
$C_7H_{14}O_2$	2-methyl-2-propyl-1,3-dioxolane				[4352-98-1]
	(278–313)	46.3±0.3	(298)	GS	[98/21][02/32]
$C_7H_{14}O_2$	2-methyl-2-isopropyl-1,3-dioxolane				[4405-16-7]
	(274–303)	43.9±0.2	(298)	GS	[02/32]
	(273–303)	44.6±0.2		GS	[98/21]
$C_7H_{14}O_2$	[(1-methylpropoxy)methyl]oxirane				[3814-55-9]
		45.2±1.8			[87/14]
$C_7H_{14}O_2$	heptanoic acid				[111-14-8]
	(283–328)	72.5±0.8	(306)	GS	[00/6]
	(283–328)	72.9±0.8	(298)	GS	[00/6]
	(353–393)	75.7	(298)	CGC	[95/21]
		76.0	(266)		[82/4]
	(271–291)	72.0±1.5	(298)	TE	[79/4]
	(351–495)	68.3	(366)	A	[87/5][47/5]
$C_7H_{14}O_3$	*tert*-butylperoxymethyloxirane				[33415-52-0]
		53.9±0.4			[87/14]
$C_7H_{14}O_3$	2-propoxyethylacetate				[20706-25-6]
		55.6±0.1	(298)	C	[70/17]
$C_7H_{14}O_3$	(*dl*) butyl lactate				[138-22-7]
	(339–456)	58.7	(354)	A	[87/5]
$C_7H_{14}O_3$	3-ethoxypropionic acid, ethyl ester				[763-69-9]
	(312–446)	45.5	(327)	A	[87/5]
$C_7H_{14}O_3$	1-heptene ozonide				[768-63-8]
	(353–373)	44.4	(363)	A	[87/5][77/9]
$C_7H_{14}O_3$	4-(2-hydroxyethyl)-4-methyl-1,3-dioxane				
	(329–455)	51.7	(344)	A	[87/5]
$C_7H_{14}O_3$	3-hydroxypropionic acid, butyl ester				
	(361–382)	60.3	(371)	A	[87/5][73/18]
$C_7H_{14}O_3$	3-methoxypropionic acid, propyl ester				[5349-56-4]
	(323–433)	47.0	(338)	A	[87/5]
$C_7H_{14}O_3$	3-propoxypropionic acid, methyl ester				[14144-39-9]
	(323–453)	46.6	(338)	A	[87/5]
$C_7H_{14}O_3$	(*dl*) butyric acid, 2,3-dihydroxypropyl ester				[557-25-5]
	(392–449)	80.4	(407)	A	[87/5]
$C_7H_{14}O_3$	2-butoxypropionic acid				[14620-87-2]
	(373–473)	52.8	(388)	A	[87/5][73/18]
$C_7H_{14}S$	allyl *tert*-butyl sulfide				[37850-75-2]
	(319–339)	41.9	(332)		[99/16]
	(319–339)	43.1	(329)	A, EB	[87/5][62/16]
	(319–339)	44.8	(298)	EB	[62/16]
$C_7H_{15}Br$	1-bromoheptane				[629-04-9]
	(341–481)	47.0	(356)		[99/16]
	(323–363)	50.2	(298)	CGC	[95/21]
		50.8±0.1	(298)	C	[68/1]
		50.4±0.2	(298)	C	[66/2]
	(333–483)	47.5	(348)	A, EST	[87/5][61/13]
$C_7H_{15}Br$	(*dl*) 2-bromoheptane				[1974-04-5]
	(333–440)	45.0	(348)	A	[87/5][99/16]
$C_7H_{15}Cl$	1-chloroheptane				[629-06-1]
	(326–462)	45.1	(341)		[99/16]
	(313–353)	47.9	(298)	CGC	[95/21]
	(300–430)	47.0	(298)		[84/9][91/2]
	(307–434)	46.9	(322)	A, DTA	[87/5][69/5]
		47.7±0.1	(298)	C	[68/1]
$C_7H_{15}Cl$	(*dl*) 2-chloroheptane				[1001-89-4]
	(313–424)	44.8	(328)	A	[87/5][99/16]
$C_7H_{15}Cl_2N$	N-methyl-*bis*(2-chloropropyl)amine				[52802-03-6]
	(273–333)	54.6	(288)	A, GS	[87/5][48/13]
					[73/18]
$C_7H_{15}Cl_2N$	N-propyl-*bis*(2-chloroethyl)amine				[621-68-1]
	(273–369)	56.8	(288)	A, GS	[87/5][48/13]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[73/18]
$C_7H_{15}F$	1-fluoroheptane				[661-11-0]
	(294–416)	40.3	(309)		[99/18]
	(287–417)	40.8	(302)	A, EST	[87/5][61/13]
$C_7H_{15}I$	1-iodoheptane				[4282-40-0]
	(373–513)	47.8	(388)	A, EST	[87/5][61/13]
					[70/14]
$C_7H_{15}N$	N-ethylpiperidine				[766-09-6]
	(274–313)	41.1±0.6	(294)	GS	[98/12]
	(274–313)	40.8±0.6	(298)	GS	[98/12]
$C_7H_{15}N$	octahydroazocine				[1121-92-2]
	(273–313)	46.5	(288)	A	[87/5]
$C_7H_{15}NO$	N,N-dimethyl-*tert*-butylcarboxamide				
		55.1±0.4	(298)	ME	[95/3][93/19]
$C_7H_{15}NO$	1-(diethylamino)-2-propanone				[1620-14-0]
	(278–318)	47.7±0.3	(298)	GS	[94/3]
$C_7H_{15}NO_2$	methyl 2-(N,N-dimethylamino)-2-methylpropanoate				
	(278–308)	49.2±1.0	(293)	GS	[92/13]
$C_7H_{15}NO_2$	lactic acid, N-butylamide				[30220-58-7]
	(365–433)	77.4	(380)	A	[87/5]
$C_7H_{15}NO_2$	lactic acid, N-sec-butylamide				
	(368–418)	74.6	(383)	A	[87/5]
$C_7H_{15}NO_2$	lactic acid, N-isobutylamide				
	(388–418)	73.5	(403)	A	[87/5]
$C_7H_{15}NO_2$	(*l*) leucine methyl ester				[2666-93-5]
	(320–353)	39.4	(366)	A	[87/5]
C_7H_{16}	heptane				[142-85-5]
	(330–371)	34.7	(345)		[02/8]
		36.6	(298)		[94/12]
	(298–363)	36.1	(313)		[84/27]
	(298–338)	36.1	(313)		[84/15]
		36.6±0.1	(298)	C	[79/13]
		35.6±0.1	(313)	C	[79/13]
		34.4±0.1	(333)	C	[79/13]
		33.1±0.1	(353)	C	[79/13]
		36.55	(298)		[71/28]
	(288–348)	36.4	(303)		[67/10]
	(297–375)	36.1	(312)	A	[87/5][49/6]
		34.5±0.1	(331)	C	[47/10]
		33.2±0.1	(350)	C	[47/10]
	(313–398)	35.4	(328)		[46/4]
	(299–372)	36.0	(314)	MM	[45/2]
		32.0	(371)	C	[40/6]
	(310–397)	35.5	(325)	EB	[40/14]
C_7H_{16}	2-methylhexane				[591-76-4]
	(296–365)	34.6	(311)	A	[87/5]
		34.9±0.1	(298)	C	[79/13]
		33.9±0.1	(313)	C	[79/13]
		32.7±0.1	(333)	C	[79/13]
		31.3±0.1	(353)	C	[79/13]
		34.8	(298)		[71/28]
	(273–318)	34.8	(298)		[61/16]
	(291–364)	34.8	(306)		[49/6]
C_7H_{16}	(*dl*) 3-methylhexane				[589-34-4]
	(289–366)	35.1	(304)	A	[87/5]
		35.1±0.1	(298)	C	[79/13]
		34.2±0.1	(313)	C	[79/13]
		32.9±0.1	(333)	C	[79/13]
		31.7±0.1	(353)	C	[79/13]
		35.1	(298)		[71/28]
	(293–366)	34.9	(308)		[49/6]
C_7H_{16}	2,2-dimethylpentane				[590-35-2]
		32.4±0.1	(298)	C	[98/16]
		31.8±0.1	(308)	C	[98/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		31.4±0.1	(315)	C	[98/16]
		31.0±0.1	(323)	C	[98/16]
		30.5±0.1	(330)	C	[98/16]
		30.1±0.1	(338)	C	[98/16]
		29.4±0.1	(348)	C	[98/16]
		28.8±0.1	(358)	C	[98/16]
		28.1±0.1	(368)	C	[98/16]
	(277–354)	33.2	(292)	A	[87/5]
	(353–483)	30.1	(368)	A	[87/5]
	(285–353)	32.8	(300)		[49/6]
		32.4±0.1	(298)	C	[47/7]
		32.2±0.1	(298)	C	[47/7]
	(288–353)	32.6	(303)	MM	[45/2]
C_7H_{16}	(*dl*) 2,3-dimethylpentane				[565-59-3]
	(309–371)	33.0	(324)		[99/10]
	(208–286)	35.9	(271)	A	[87/5]
		34.3±0.1	(298)	C	[79/13]
		33.4±0.1	(313)	C	[79/13]
		32.2±0.1	(333)	C	[79/13]
		31.1±0.1	(353)	C	[79/13]
	(286–365)	34.5	(301)		[87/5][73/18]
	(291–364)	34.4	(306)		[49/6]
		34.2±0.1	(298)	C	[47/7]
C_7H_{16}	2,4-dimethylpentane				[108-08-7]
		32.7±0.1	(298)	C	[98/16]
		32.3±0.1	(308)	C	[98/16]
		31.9±0.1	(315)	C	[98/16]
		31.5±0.1	(323)	C	[98/16]
		31.0±0.1	(330)	C	[98/16]
		30.6±0.1	(338)	C	[98/16]
		30.0±0.1	(348)	C	[98/16]
	(284–355)	33.3	(299)	A	[87/5][73/18]
	(287–354)	33.2	(302)		[49/6]
		32.9±0.1	(298)	C	[47/7]
C_7H_{16}	3,3-dimethylpentane				[562-49-2]
	(213–281)	34.8	(266)		[87/5]
	(280–360)	33.6	(295)		[87/5]
		33.0±0.1	(298)	C	[81/9]
		33.0	(298)		[71/28]
	(287–360)	33.2	(302)		[49/6]
		33.0±0.1	(298)	C	[47/7]
	(285–360)	33.3	(300)	MM	[87/5][45/2]
C_7H_{16}	3-ethylpentane				[617-78-7]
		35.1±0.1	(298)	C	[98/16]
		34.5±0.1	(308)	C	[98/16]
		34.1±0.1	(315)	C	[98/16]
		33.7±0.1	(232)	C	[98/16]
		33.3±0.1	(330)	C	[98/16]
		32.7±0.1	(338)	C	[98/16]
		32.2±0.1	(348)	C	[98/16]
	(291–368)	35.2	(306)		[87/5]
		35.2	(298)		[71/28]
		35.2±0.1	(298)	C	[47/7]
	(294–367)	35.0	(309)		[45/2]
	(308–391)	34.4	(323)	EB	[41/9][84/9]
C_7H_{16}	2,2,3-trimethylbutane				[464-06-2]
	(284–355)	32.4	(299)	A	[87/5]
	(353–483)	29.9	(368)	A	[87/5]
		32.0	(298)		[71/28]
	(286–355)	32.3	(301)		[49/6]
		31.2±0.1	(314)	C	[47/10]
	(296–378)	31.9	(311)	EB	[41/9]
$C_7H_{16}N_2S$	1,3-dipropylthiourea				[26536-60-7]
	(346–394)	107±3.0	(370)	ME, TE	[94/21]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_7H_{16}O$	*tert*-amyl ethyl ether				[919-94-8]
		39.2±0.4	(298)		[U/2][02/32]
		38.2±0.2	(298)	C	[02/22]
	(318–374)	35.7	(333)	EB	[02/22]
	(320–374)	35.6	(335)	EB	[94/10]
$C_7H_{16}O$	propyl *tert*-butyl ether				[29072-93-3]
		38.3	(298)		[U/2][02/32]
	(315–370)	37.2±0.6	(298)	EB	[02/10]
		36.6±0.2	(298)	C	[02/10]
$C_7H_{16}O$	isopropyl *tert*-butyl ether				[17348-59-3]
		36.2	(298)		[U/2][02/32]
	(305–360)	34.4±0.6	(298)	EB	[02/10]
		34.5±0.2	(298)	C	[02/10]
	(307–360)	34.0	(322)	EB	[94/10]
$C_7H_{16}O$	1-heptanol				[111-70-6]
	(323–373)	66.5	(298)	CGC	[95/21]
	(373–423)	66.4	(298)	CGC	[95/21]
	(258–363)	65.2	(310)		[92/14]
	(335–450)	62.5	(350)	A	[87/5]
		66.8±0.2	(298)	C	[77/1]
	(333–449)	65.2	(348)		[73/26]
	(336–450)	62.6	(351)	DTA	[87/5][69/5]
	(333–425)	62.9	(348)		[35/6][84/9]
$C_7H_{16}O$	(*dl*) 2-heptanol				[543-49-7]
	(244–338)	66.1	(259)		[99/11]
	(351–433)	54.4	(366)		[84/10]
	(357–431)	51.6	(372)	A	[87/5][75/23]
	(323–433)	59.8	(338)		[73/26]
$C_7H_{16}O$	(*dl*) 3-heptanol				[589-82-2]
	(244–333)	67.0	(259)		[99/11]
	(325–430)	60.3	(340)	A	[87/5]
	(263–295)	64.7	(280)	A	[87/5][79/16]
	(349–430)	53.1	(364)		[84/10]
	(328–429)	59.2	(343)		[73/26]
$C_7H_{16}O$	4-heptanol				[589-55-9]
	(320–428)	58.2	(335)	A	[87/5]
	(349–428)	53.1	(364)		[84/10]
	(282–320)	63.1	(297)	A	[87/5][75/1]
	(320–428)	56.9	(335)		[73/26]
$C_7H_{16}O$	2-methyl-1-hexanol				[624-22-6]
	(343–438)	53.5	(390)		[73/26]
$C_7H_{16}O$	3-methyl-1-hexanol				[13231-81-7]
	(353–445)	57.4	(399)		[73/26]
$C_7H_{16}O$	4-methyl-1-hexanol				[818-49-5]
	(348–448)	62.6	(363)		[73/26]
$C_7H_{16}O$	2-methyl-2-hexanol				[625-23-0]
	(311–415)	54.5	(326)	A	[87/5][73/26]
$C_7H_{16}O$	5-methyl-2-hexanol				[627-59-8]
	(348–428)	49.4	(388)		[73/26]
$C_7H_{16}O$	2-methyl-3-hexanol				[617-29-8]
	(323–420)	55.7	(338)		[73/26]
$C_7H_{16}O$	3-methyl-3-hexanol				[597-96-6]
	(323–416)	53.6	(338)		[73/26]
$C_7H_{16}O$	3,4-dimethyl-1-pentanol				[6570-87-2]
	(393–438)	50.3	(388)		[73/26]
$C_7H_{16}O$	2,4-dimethyl-2-pentanol				[625-06-9]
	(328–408)	49.7	(343)		[73/26]
$C_7H_{16}O$	2,2-dimethyl-3-pentanol				[3970-62-5]
	(318–411)	51.4	(333)		[73/26]
$C_7H_{16}O$	2,3-dimethyl-3-pentanol				[595-41-5]
	(318–413)	53.2	(333)		[73/26]
$C_7H_{16}O$	2,4-dimethyl-3-pentanol				[600-36-2]
		51.8	(328)	C	[96/6]
		48.8	(343)	C	[96/6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		45.7	(358)	C	[96/6]
	(307–412)	53.6	(322)	A	[87/5][73/26]
$C_7H_{16}O$	3-ethyl-3-pentanol				[597-49-9]
	(317–408)	51.3	(332)	A	[87/5][73/18]
	(308–416)	55.2	(323)		[73/26]
$C_7H_{16}O$	2-methyl-2-ethyl-1-butanol				[18371-13-6]
	(358–428)	55.7	(373)		[73/26]
$C_7H_{16}O$	2,3,3-trimethyl-2-butanol				[594-83-2]
	(298–363)	48.7	(313)	MM	[85/5]
$C_7H_{16}O_2$	1-butoxy-2-methoxyethane				[13343-98-1]
		47.8±0.1	(298)	C	[70/17]
$C_7H_{16}O_2$	1-propoxy-2-ethoxyethane				[18854-31-4]
		46.8±0.1	(298)	C	[70/17]
$C_7H_{16}O_2$	1,3-diethoxypropane				[3459-83-4]
		45.9±0.2	(298)	C	[72/42]
$C_7H_{16}O_2$	2,2-diethoxypropane				[126-84-1]
	(273–308)	43.2±0.4	(298)	GS	[02/32]
	(273–308)	43.9		GS	[98/21]
	(286–304)	U28.2	(295)	A, I	[87/5][62/14]
$C_7H_{16}O_2$	1-*tert*-butoxy-2-propanol				[57018-52-7]
	(346–420)	45.4	(361)	EB	[01/6]
$C_7H_{16}O_2$	4-methyl-4-methoxy-2-pentanol				[141-73-1]
	(343–423)	46.6	(358)	A	[87/5][73/18]
$C_7H_{16}O_3$	diethylene glycol monopropyl ether				[6881-94-3]
	(369–404)	65.3	(384)	A	[87/5]
$C_7H_{16}O_3$	2-(2-propoxyethoxy)ethanol				[6881-94-3]
	(378–495)	65.7±0.8	(298)	EB	[96/3]
$C_7H_{16}O_3$	triethoxymethane				[122-51-0]
	(293–323)	49.0	(308)	A	[87/5]
		46.0±0.8	(298)		[71/26]
	(278–419)	47.2	(293)		[87/5][47/5]
$C_7H_{16}O_3$	3,5,7,9-tetraoxaundecane				[4431-82-7]
		53.6±0.7	(298)	C	[69/18]
$C_7H_{16}O_3$	*tert*-pentylperoxyethanol				[51452-08-5]
		70.1±2.5			[83/11]
$C_7H_{16}O_4$	3-*tert*-butyldioxy-1,2-propanediol				[38578-50-6]
		88.0±2.6			[83/11]
$C_7H_{16}S$	1-heptanethiol				[1639-09-4]
	(273–345)	49.5	(288)		[99/16]
		50.6±0.2	(298)		[66/10][66/5]
	(373–472)	45.0	(388)	A, EB	[87/5][65/8]
					[66/5]
$C_7H_{16}S$	2-heptanethiol				[628-00-2]
	(343–437)	44.1	(358)		[99/16]
	(343–471)	47.2	(360)		[99/16]
	(341–443)	44.2	(356)	A	[87/5][73/18]
$C_7H_{16}S_2$	1,7-heptanedithiol				[62224-02-6]
	(392–526)	59.0	(407)	A	[87/5][73/18]
					[99/16]
$C_7H_{17}N$	*tert*-butylisopropylamine				
	(275–299)	35.7±1.0	(287)		[97/21]
$C_7H_{17}N$	N-butyl isopropylamine				[39099-23-5]
		42.1±0.1	(298)	C	[79/8]
		40.9±0.1	(313)	C	[79/8]
		39.9±0.1	(328)	C	[79/8]
		38.7±0.1	(343)	C	[79/8]
		37.6±0.1	(358)	C	[79/8]
	(325–395)	40.0	(340)	C	[79/8]
$C_7H_{17}N$	heptylamine				[111-68-2]
	(323–373)	49.9	(298)	CGC	[95/21]
	(326–430)	46.5	(341)	A	[87/5]
		50.0±0.1	(298)	C	[69/2]
$C_7H_{17}NO$	N-(ethoxymethyl)diethylamine				[7352-03-6]
	(285–400)	39.6	(300)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_7H_{17}O_2PS_3$	O,O-diethyl-S-[(ethylthio)methyl]dithiophosphate				[298-02-2]
	(283–387)	70.8	(298)	A	[87/5][73/18] [99/16]
$C_7H_{18}N_2$	N,N-diethyl-1,3-propanediamine				[104-78-9]
	(329–443)	46.4	(344)	A	[87/5]
$C_7H_{17}N_2$	1,7-heptanediamine				[646-19-5]
	(273–313)	46.5	(288)	A	[87/5]
$C_7H_{18}N_2O$	1,3-*bis*(dimethylamino)-2-propanol				[5966-51-8]
	(355–450)	50.3	(370)	A	[87/5]
$C_7H_{18}N_3$	N,N-diethyl-2-(1-methylhydrazino)ethanamine				[67727-91-7]
	(283–313)	61.8	(298)	A	[87/5]
$C_7H_{20}N_4$	1,4,8,11-tetraazaundecane				[4741-99-5]
	(332–348)	98.3±1.3	(340)	TE	[83/16]
	(332–348)	100.0±2.5	(298)	TE	[83/16]
$C_8F_8O_2$	trifluoroacetic acid, pentafluorophenyl ester				[14533-84-7]
		42.1			[76/31]
$C_8F_8O_4$	carbonoperoxoic acid, O-(pentafluorophenyl) O,O-(trifluoromethyl) ester				[59483-83-9]
		51.8			[76/30]
C_8F_{16}	perfluoroethylcyclohexane				[335-21-7]
	(308–512)	37.2	(323)		[99/16]
	(310–400)	38.6	(298)		[84/9][91/2]
		38.7±0.4	(298)		[81/23]
	(311–411)	37.1	(326)	A	[87/5][70/14] [59/12][99/16]
C_8F_{16}	perfluoro-1,3-dimethylcyclohexane				[335-27-3]
	(308–375)	37.4	(323)		[99/16]
C_8F_{16}	*cis/trans* perfluoro-1,3-dimethylcyclohexane				
		38.6±0.1	(298)	C	[96/26]
$C_8F_{16}N_2$	2,2,2-trifluoro-N′-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidine]ethanimidamide				[57682-63-0]
		32.8			[75/42]
$C_8F_{16}O$	perfluoro-2-butyltetrahydrofuran				
	(383–433)	34.7	(408)	EST	[60/27]
C_8F_{18}	perfluorooctane				[307-34-6]
	(437–503)	32.0	(452)		[99/16]
	(309–378)	41.2±0.8	(298)	EB	[81/23]
		41.1±0.1	(298)	C	[81/23]
	(310–379)	39.5	(325)	A	[87/5][62/4] [70/14]
$C_8F_{18}N_2OS$	*bis*(1,1,1,3,3,3-hexafluoro-2-propanaminato)oxo*bis*(trifluoromethyl) sulfur				[66632-47-1]
	(273–333)	39.6	(288)	A	[87/5][78/14] [99/16]
$C_8F_{18}N_2S$	S,S-*bis*(trifluoromethyl)-N-[2,2,2-trifluoro-1-(trifluoromethyl)-1-[(2,2,2-trifluoro-1-[trifluoromethyl]ethylidine)amino]ethyl sulfilimine				[37826-45-2]
	(329–373)	41.1	(344)	A	[87/5][72/21]
$C_8F_{18}O$	*bis*(nonafluorobutyl) ether				[308-48-5]
	(315–374)	40.3±0.8	(298)	EB	[89/13]
		40.7±0.1	(298)	C	[89/13]
	(343–375)	36.6	(358)	A	[87/5]
	(288–313)	42.2	(300)	A	[87/5]
	(374–413)	56.3	(389)	A	[87/5][99/16]
$C_8F_{18}O_2$	dodecafluoro-1,6-*bis*(trifluoromethoxy)hexane				
	(293–353)	33.6	(323)		[99/16]
$C_8F_{18}O_3S$	*bis*(1,1,1,3,3,3-hexafluoro-2-(trifluoromethyl)-2-propanol) sulfite				[53517-90-1]
		38.7			[75/43]
$C_8F_{20}N_2S$	difluoro[1,1,1,3,3,3-hexafluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)-ethylidene]-2,2-propanediaminato(2-)-N]-*bis*(trifluoromethyl) sulfur				[65844-11-3]
		39.3	(390)	I	[78/14]
$C_8HCl_4F_{11}O_2$	3,5,7,8-tetrachloro-2,2,3,4,4,5,6,6,7,8,8-undecafluorooctanoic acid				[2923-68-4]
	(373–553)	70.6 6	(388)	A	[87/5][57/17] [99/16]
$C_8HF_{16}NO$	1,1,1,2,3,3,3-heptafluoro-N-[2,2,2-trifluoro-1-[2,2,2-trifluoro-1-(trifluoromethyl)ethoxy]ethylidene]-2-propanamine				[54181-87-2]
		36.0	(364)		[75/20]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_2F_{16}$	1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-hexadecafluorooctane				[307-99-3]
	(298–323)	41.1	(310)	A	[87/5][99/16]
$C_8H_3ClF_6$	4-chloro-1,3-*bis*(trifluoromethyl)benzene				[327-76-4]
	(275–353)	48.0	(290)		[87/5][46/3]
					[70/14][99/16]
$C_8H_3ClF_6$	5-chloro-1,3-*bis*(trifluoromethyl)benzene				[328-72-3]
	(275–353)	46.2	(290)	A	[87/5][46/3]
					[70/14][99/16]
$C_8H_3Cl_4F_3$	1,1,1-trifluoro-2,2-dichloro-2-(3,4-dichlorophenyl)ethane				[328-82-5]
	(417–461)	56.9	(432)	A	[87/5][99/16]
$C_8H_3F_5O_2$	acidic acid, pentafluorophenyl ester				[19220-93-0]
	(283–322)	48.1	(298)	A	[87/5][99/16]
$C_8H_3F_{15}O$	2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-pentadecafluoro-1-octanol				[307-30-2]
	(350–437)	53.3	(365)	A	[87/5][99/16]
$C_8H_4ClF_3O$	trifluoromethyl 3-chlorophenyl ketone				[321-31-3]
	(366–405)	52.7	(386)	A	[87/5][99/16]
$C_8H_4Cl_2O_2$	isophthaloyl chloride				[99-63-8]
	(443–550)	61.5	(458)	A	[87/5][99/16]
$C_8H_4Cl_2O_2$	phthaloyl chloride				[88-95-9]
	(391–549)	58.0	(406)	A	[87/5][47/5]
					[99/16]
$C_8H_4Cl_2O_2$	terephthaloyl chloride				[100-20-9]
	(454–473)	56.2	(463)	A	[87/5][99/16]
$C_8H_4Cl_3F_3$	1,1,1-trifluoro-2,2-dichloro-(3-chlorophenyl)ethane				[309-12-6]
	(387–475)	49.6	(431)		[99/16]
	(387–474)	50.4	(402)	A	[87/5]
$C_8H_4F_6$	1,3-*bis*(trifluoromethyl)benzene				[402-31-3]
	(275–353)	42.4	(290)	A	[87/5][51/9]
					[70/14][99/16]
$C_8H_4F_6$	1,4-*bis*(trifluoromethyl)benzene				[433-19-2]
	(287–390)	41.8	(302)	A	[87/5][70/14]
					[99/16]
$C_8H_4O_3$	phthalic anhydride				[85-44-9]
	(407–558)	52.1	(422)	A	[87/5]
	(411–450)	63.9±2.5	(422)		[79/22]
		65.3±0.8			[46/16][79/22]
$C_8H_5Cl_2F_3$	1,1,1-trifluoro-2,2-dichloro-2-phenylethane				[309-10-4]
	(365–446)	47.2	(380)	A	[87/5][99/16]
$C_8H_5Cl_2N$	α,α-dichlorophenylacetonitrile				[40626-45-7]
	(329–497)	57.2	(344)	A	[87/5][47/5]
$C_8H_5Cl_5$	pentachloroethylbenzene				[606-07-5]
	(369–572)	58.8	(384)	A	[87/5][47/5]
					[99/16]
$C_8H_5F_5O$	2,2,2-trifluoroacetophenone				[434-45-7]
	(342–425)	43.1	(357)	A	[87/5][99/16]
$C_8H_5F_{14}OP$	ethyl *bis*(heptafluropropyl)phosphinite				
	(303–393)	41.9	(348)		[59/21]
C_8H_5NO	benzoylnitrile				[613-90-1]
	(318–481)	52.0	(333)	A	[87/5][47/5]
C_8H_6	phenylacetylene				[536-74-3]
	(313–416)	42.6±0.1	(320)	EB	[02/17]
	(313–416)	40.4±0.1	(360)	EB	[02/17]
	(313–416)	38.0±0.2	(400)	EB	[02/17]
	(265–291)	43.9	(278)	MM	[81/19]
	(270–292)	45.2	(281)	HSA	[81/19]
C_8H_6BrN	(*dl*) α-bromophenylacetonitrile				[5798-79-8]
	(293–515)	64.7	(308)	A	[87/5]
$C_8H_6Cl_2$	2,3-dichlorostyrene				[2123-28-6]
	(334–508)	55.4	(349)		[99/16]
	(334–508)	54.3	(349)	A	[87/5][47/5]
$C_8H_6Cl_2$	2,4-dichlorostyrene				[2123-27-5]
	(327–498)	55.0	(342)	A	[87/5][70/14]
$C_8H_6Cl_2$	2,5-dichlorostyrene				[1123-84-8]
	(328–500)	54.3	(343)	A	[87/5][47/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[70/14]
$C_8H_6Cl_2$	2,6-dichlorostyrene				[28469-92-3]
		53.8±1.5	(298)	GS	[01/1]
	(321–490)	50.4	(336)	A	[87/5][47/5]
					[70/14]
$C_8H_6Cl_2$	3,4-dichlorostyrene				[2039-83-0]
	(330–503)	53.3	(345)	A	[87/5][47/5]
					[70/14]
$C_8H_6Cl_2$	3,5-dichlorostyrene				[2155-42-2]
	(326–498)	55.1	(341)	A	[87/5][70/14]
$C_8H_6Cl_2O$	3-(chloromethyl)benzoyl chloride				[63024-77-1]
	(424–464)	54.7	(439)	A	[87/5][99/16]
$C_8H_6Cl_2O$	4-(chloromethyl)benzoyl chloride				[876-08-4]
	(440–466)	68.3	(453)	A	[87/5][99/16]
$C_8H_6Cl_4$	2,3,4,6-tetrachloro-1-ethylbenzene				[877-08-7]
	(350–543)	53.6	(365)	A	[87/5][47/5]
$C_8H_6Cl_4$	3,4,5,6-tetrachloro-1,2-dimethylbenzene				[877-08-7]
	(367–547)	63.6	(382)	A	[87/5][70/14]
$C_8H_6F_{12}O_3S$	*bis*(1,1,1,3,3,3-hexafluoro-2-methyl-2-propanol) sulfite				[53602-64-5]
		46.5			[75/43]
C_8H_6O	2,3-benzofuran				[271-89-6]
	(323–403)	46.2	(338)	A	[87/5]
C_8H_6O	2-ethynylphenol				[5101-44-0]
	(300–373)	33.5	(315)	A	[87/5]
$C_8H_6O_2$	phenyl glyoxal				[1074-12-0]
	(348–467)	59.7	(363)	A	[87/5][47/5]
$C_8H_6O_2$	phthalide				[87-41-2]
	(368–563)	59.3	(383)	A	[87/5][47/5]
$C_8H_6O_3$	piperonal				[120-57-0]
	(310–353)	65.7	(331)		[53/5]
	(360–536)	60.6	(375)	A	[87/5][47/5]
C_8H_6S	benzo[b]thiophene				[95-15-8]
	(349–424)	52.1	(364)		[99/16]
	(424–498)	47.9	(439)		[99/16]
	(498–631)	45.0	(513)		[99/16]
	(310–542)	54.3	(320)		[91/13]
	(310–542)	52.0	(360)		[91/13]
	(310–542)	49.7	(400)		[91/13]
	(310–542)	46.2	(460)		[91/13]
	(310–542)	43.8	(500)		[91/13]
	(310–542)	41.2	(540)		[91/13]
		47.2	(425)		[81/1]
		42.8	(505)		[81/1]
		36.1	(605)		[81/1]
	(306–346)	53.8	(326)		[81/2][99/16]
C_8H_7Br	2-bromostyrene				[2039-88-5]
	(378–543)	48.7	(393)	A	[87/5][70/14]
C_8H_7Br	4-bromostyrene				[2039-82-9]
	(393–420)	48.5	(406)		[99/16]
	(383–543)	49.9	(398)	A	[87/5][70/14]
C_8H_7Cl	2-chlorostyrene				[2039-87-4]
	(363–523)	46.0	(378)	A	[87/5][70/14]
C_8H_7Cl	3-chlorostyrene				[2039-85-2]
	(298–463)	46.1	(313)	A	[87/5][47/5]
					[70/14]
C_8H_7Cl	4-chlorostyrene				[1073-67-2]
	(363–523)	48.1	(378)	A	[87/5][47/5]
					[70/14]
C_8H_7ClO	4′-chloroacetophenone				[99-91-2]
	(404–623)	54.0	(419)	A	[87/5][99/16]
	(395–485)	50.7	(410)		[49/1][84/9]
C_8H_7ClO	phenylacetyl chloride				[103-80-0]
	(321–483)	56.5	(336)	A	[87/5][47/5]
					[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_7ClO_2$	benzyl chloroformate				[501-53-1]
	(293–303)	38.5±0.1	(298)		[90/12]
$C_8H_7Cl_3O_3$	3,4,5-trichloro-2,6-dimethoxyphenol				[2539-26-6]
	(293–323)	77.4	(308)	CGC	[99/13]
C_8H_7FO	2-fluoroacetophenone				[450-95-3]
	(273–333)	62.0	(288)	A, GS	[87/5][48/14] [99/16]
$C_8H_7F_3$	1,1,1-trifluoro-2-phenylethane				[21249-93-4]
	(273–313)	46.1±0.3	(298)	GS	[97/14]
C_8H_7N	benzylcyanide				[140-29-4]
	(283–328)	60.1±0.7	(306)	GS	[00/2]
	(283–328)	60.5±0.7	(298)	GS	[00/2]
	(333–507)	54.8	(348)	A	[87/5][47/5]
C_8H_7N	2-tolunitrile				[620-22-4]
	(309–479)	50.8	(324)	A	[87/5][47/5]
C_8H_7N	4-tolunitrile				[104-85-8]
	(315–491)	48.0	(330)	A	[87/5][47/5]
C_8H_7N	2-tolylisocyanide				[10468-64-1]
	(298–457)	48.5	(313)	A	[87/5][47/5]
C_8H_7NO	benzyl isocyanate				[3173-56-6]
	(333–393)	42.3	(348)	A	[87/5]
$C_8H_7NO_3$	2′-nitroacetophenone				[577-59-3]
	(293–333)	103.6	(308)	A	[87/5]
$C_8H_7NO_4$	2-nitrobenzoic acid, methyl ester				[606-27-9]
	(423–453)	56.1	(438)	A	[87/5]
$C_8H_7NO_4$	(2-nitrophenyl) acetate				[610-69-5]
	(373–526)	71.1	(388)	A	[87/5][47/5]
C_8H_7NS	benzyl isothiocyanate				[622-78-6]
	(352–516)	62.2	(367)	A	[87/5][47/5]
C_8H_7NS	2-methylbenzothiazole				[120-75-2]
	(343–499)	61.3	(358)	A	[87/5][47/5] [99/16]
$C_8H_7N_3O_7$	2,4,6-trinitrophenetole				[4732-14-3]
	(342–351)	120.5	(346)	A	[87/5]
C_8H_8	cyclooctatetraene				[629-20-9]
	(273–348)	43.9	(288)	A	[87/5]
		43.1	(298)		49/23]
C_8H_8	bicyclo[2.2.2]octa-2,5,7-triene				[500-24-3]
		42.9±0.1	(298)	C	[85/2]
C_8H_8	1,5,7-octatriene-3-yene				[16607-77-5]
	(313–429)	35.1	(328)	A	[87/5]
C_8H_8	styrene				[100-42-5]
	(245–334)	42.5	(260)	A	[87/5]
	(334–419)	41.5	(349)	A	[87/5]
	(306–333)	42.5	(319)		[59/27]
	(303–417)	43.1	(318)		[55/22]
	(285–333)	43.9	(298)		[46/10]
		43.5±0.4	(298)		[46/10]
	(306–389)	40.2	(348)		[42/3]
	(245–357)	43.2	(298)		[39/6]
$C_8H_8Br_2$	(1,2-dibromoethyl)benzene				[93-52-7]
	(359–527)	64.9	(374)	A	[87/5][47/5] [70/14]
$C_8H_8Cl_2$	2,5-dichloro-1,4-dimethylbenzene				[1124-05-6]
	(393–573)	52.7	(408)	A	[87/5][70/14] [99/16]
$C_8H_8Cl_2$	2,3-dichloro-1-ethylbenzene				[54484-61-6]
	(319–495)	48.9	(334)	A	[87/5][47/5] [70/14]
$C_8H_8Cl_2$	2,5-dichloro-1-ethylbenzene				[54484-63-8]
	(311–490)	46.0	(326)	A	[87/5][47/5] [70/14]
$C_8H_8Cl_2$	3,4-dichloro-1-ethylbenzene				[6623-59-2]
	(320–500)	49.3	(335)	A	[87/5][47/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[70/14]
$C_8H_8Cl_2$	1,4-*bis*(chloromethyl)benzene				[93-52-7]
	(412–504)	50.8	(427)		[99/16]
$C_8H_8Cl_2O_2$	2-(2,4-dichlorophenoxy)ethanol				[120-67-2]
	(484–560)	65.1	(499)		[59/1][84/9]
				A	[99/16][87/5]
$C_8H_8Cl_2O_3$	3,5-dichloro-2,6-dimethoxyphenol				
	(293–323)	70.4	(308)	CGC	[99/13]
$C_8H_8Cl_3O_3PS$	O,O-dimethyl-O-(2,4,5-trichlorophenyl)thiophosphate				[299-84-3]
	(298–373)	56.8	(313)	A	[87/5]
$C_8H_8N_2O_2$	1,4-*bis*(2-hydroxyethyl)piperazine				[122-96-3]
	(413–507)	67.8±5.3			[98/7]
$C_8H_8N_2O_3$	2′-nitroacetanilide				[552-32-9]
	(473–593)	44.0	(488)	A	[87/5]
C_8H_8O	acetophenone				[98-86-2]
	(360–520)	55.4±0.4	(298)	EB	[96/3]
	(343–383)	53.4	(298)	CGC	[95/21]
	(343–383)	52.7	(298)	CGC	[95/21]
	(343–383)	57.9	(298)	CGC	[95/21]
	(375–603)	49.7	(390)	A	[87/5]
	(383–437)	41.9	(398)	GS, EB	[65/7]
	(310–476)	51.2	(325)		[47/5]
C_8H_8O	2,5-dihydrobenzo-3,4-furan				[496-14-0]
	(285–510)	53.7±0.4	(298)	EB	[96/4]
C_8H_8O	phenylacetaldehyde				[122-78-1]
	(283–333)	54.5	(298)	A	[87/5]
$C_8H_8O_2$	1,4-benzodioxan				[493-09-4]
	(400–486)	50.4	(415)	A	[87/5]
		50.4			[58/25]
$C_8H_8O_2$	benzyl formate				[104-57-4]
	(298–357)	51.6	(313)	A	[87/5]
$C_8H_8O_2$	2′-hydroxyacetophenone				[118-93-4]
	(369–491)	58.3	(384)	A	[87/5]
		50.2			[86/10]
$C_8H_8O_2$	2-methoxybenzaldehyde				[135-02-4]
		55.2			[86/10]
$C_8H_8O_2$	4-methoxybenzaldehyde				[123-11-5]
	(348–521)	58.4	(363)	A, EB	[85/9]
	(283–323)	60.4	(298)	A	[87/5][55/8]
	(346–521)	57.1	(361)	A	[87/5][47/5]
$C_8H_8O_2$	methyl benzoate				[93-58-3]
	(358–517)	51.1±0.2	(360)	EB	[02/15]
	(358–517)	48.5±0.2	(400)	EB	[02/15]
	(358–517)	45.8±0.2	(440)	EB	[02/15]
	(358–517)	43.0±0.4	(480)	EB	[02/15]
		57.2±0.1	(303)	C	[98/6]
	(313–353)	53.4	(298)	CGC	[95/21]
	(313–363)	53.8	(298)	CGC	[95/21]
	(433–473)	54.7	(298)	CGC	[95/21]
	(334–428)	50.7	(379)	BG	[88/2]
	(334–428)	48.3	(410)	BG	[88/2]
	(283–323)	53.9	(298)	A	[87/5]
	(373–533)	49.7	(388)	A	[87/5]
		55.6±0.1	(298)	C	[72/1]
	(341–433)	52.8	(363)	BG	[71/2]
$C_8H_8O_2$	*m*-toluic acid				[99-04-7]
	(473–533)	62.8	(503)	A	[87/5][70/34]
$C_8H_8O_2$	phenyl acetate				[122-79-2]
	(313–363)	53.3	(298)	CGC	[95/21]
	(433–473)	53.6	(298)	CGC	[95/21]
	(313–353)	53.1	(298)	CGC	[95/21]
	(311–469)	51.7	(326)	A	[87/5][47/5]
$C_8H_8O_2$	phenylacetic acid				[103-82-2]
	(370–539)	65.0	(385)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_8O_3$	*cis* 4-cyclohexene-1,2-dicarboxylic acid anhydride				[935-79-5]
	(325–525)	53.1±0.1			[84/14]
$C_8H_8O_3$	4-hydroxybenzoic acid, methyl ester				[99-76-3]
	(446–517)	81.5	(461)	A	[87/5]
$C_8H_8O_3$	methyl salicylate				[119-36-8]
	(327–497)	59.9	(342)	A	[87/5]
	(329–496)	58.7	(344)	A	[87/5]
	(288–333)	56.9	(303)		[87/5]
$C_8H_8O_3$	4-hydroxy-3-methoxybenzaldehyde (vanillin)				[121-33-5]
	(380–558)	66.9	(395)	A	[87/5][47/5]
$C_8H_8O_4$	2-acetyl-5-hydroxy-3-oxo-4-hexenoic acid-δ-lactone (dehydroacetic acid)				[520-45-6]
	(364–542)	62.1	(379)	A	[87/5][47/5]
C_8H_9Br	1-bromo-2,5-dimethylbenzene				[553-94-6]
	(310–480)	50.9	(325)		[99/16][47/5]
	(310–480)	53.6	(325)	A	[87/5][70/14]
C_8H_9Br	(1-bromoethyl)benzene				[585-71-7]
	(298–333)	56.4±0.3	(298)	GS	[02/29]
		52.4	(298)	CGC	[02/29]
C_8H_9Br	(2-bromoethyl)benzene				[103-63-9]
	(348–401)	51.5	(363)	A	[87/5][99/16]
C_8H_9Br	1-bromo-2-ethylbenzene				[1973-22-4]
	(368–523)	48.1	(383)	A	[87/5][70/14]
					[99/16]
C_8H_9Br	1-bromo-4-ethylbenzene				[1585-07-5]
	(347–479)	46.2	(362)		[99/16]
	(378–533)	49.4	(393)	A	[87/5][70/14]
	(303–479)	52.0	(318)		[47/5]
C_8H_9Cl	(*dl*) (1-chloroethyl)benzene				[627-65-1]
	(281–319)	52.8±0.2	(298)	GS	[02/29]
		52.4	(298)	CGC	[02/29]
	(336–372)	51.4	(351)		[99/16]
	(342–378)	47.0	(357)	A	[87/5]
C_8H_9Cl	(2-chloroethyl)benzene				[622-24-2]
	(356–480)	53.1	(368)		[99/16]
	(356–380)	51.7	(368)	A	[87/5]
C_8H_9Cl	1-chloro-2-ethylbenzene				[89-96-3]
	(353–503)	46.1	(368)	A	[87/5][70/14]
	(290–450)	47.2	(305)		[47/5]
C_8H_9Cl	1-chloro-3-ethylbenzene				[620-16-6]
	(348–457)	46.4	(363)		[99/16]
	(358–508)	46.8	(373)	A	[87/5][70/14]
	(291–454)	46.4	(307)		[47/5]
C_8H_9Cl	1-chloro-4-ethylbenzene				[622-98-0]
	(350–458)	45.8	(365)		[99/16]
	(358–508)	46.8	(373)	A	[87/5][70/14]
	(381–457)	45.5	(396)		[47/5]
C_8H_9Cl	1-(chloromethyl)-4-methylbenzene				[104-82-5]
	(376–457)	44.9	(391)	A	[87/5][99/16]
$C_8H_9ClNO_5PS$	O,O-(dimethyl)-O-(3-chloro-4-nitrophenyl)thiophosphate				[500-28-7]
	(283–409)	92.0	(346)	A	[87/5][99/16]
C_8H_9ClO	1-chloro-2-ethoxybenzene				[614-72-2]
	(318–481)	52.4	(333)	A	[87/5][47/5]
C_8H_9ClO	4-chlorophenethyl alcohol				[1875-88-3]
	(426–673)	59.3	(411)	A	[87/5][99/16]
C_8H_9ClO	4-chloro-1-ethoxybenzene				[622-61-7]
	(395–485)	49.5	(410)	A	[87/5][99/16]
$C_8H_9ClO_2$	ethylene glycol, 4-chlorophenyl ether				[7477-64-7]
	(410–554)	68.5	(425)	A	[87/5][99/16]
$C_8H_9ClO_3$	3-chloro-2,6-dimethoxyphenol				
	(293–323)	68.6	(308)	CGC	[99/13]
$C_8H_9Cl_3O_4$	2-acetyl-4,4,4-trichloro-3-oxobutyric acid, ethyl ester				
	(374–409)	53.1	(389)	A	[87/5][99/16]
C_8H_9I	(1-iodoethyl)benzene				[10604-60-1]
	(303–340)	59.9±0.4	(298)	GS	[02/29]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_8H_9N	2-methyl-5-vinylpyridine				[140-76-1]
	(342–457)	55.2	(357)	A	[87/5]
	(342–457)	54.5	(357)		[61/19][84/9]
C_8H_9N	N-methylbenzaldehyde-imine				
	(283–318)	51.1±0.2	(301)	GS	[97/9]
	(283–318)	51.2±0.2	(298)	GS	[97/9]
C_8H_9NO	acetanilide				[103-84-4]
	(473–577)	64.8	(488)	A	[87/5]
	(387–577)	66.3	(402)		[47/5]
$C_8H_9NO_2$	anthranilic acid, methyl ester				[134-20-3]
	(299–333)	62.3	(314)	A, ME	[87/5][54/7]
$C_8H_9NO_2$	2-nitro-1,3-dimethylbenzene				[81-20-9]
	(284–323)	57.2±0.8	(303)	GS	[00/15]
		57.5±0.8	(298)		[00/15]
	(373–498)	49.7	(388)	A	[87/5]
$C_8H_9NO_2$	4-nitro-1,3-dimethylbenzene				[89-87-2]
	(368–518)	56.7	(383)	A	[87/5]
	(338–517)	57.3	(353)		[47/5]
$C_8H_9NO_2$	1,2-dimethyl-3-nitrobenzene				[83-41-0]
	(383–518)	59.4	(398)		[84/9]
$C_8H_9NO_2$	1,2-dimethyl-4-nitrobenzene				[99-51-4]
	(399–536)	63.6	(414)		[84/9]
$C_8H_9NO_2$	2-nitro-1-ethylbenzene				[612-22-6]
	(284–323)	62.7±0.4	(303)	GS	[00/15]
		63.0±0.4	(298)		[00/15]
	(353–422)	56.3	(368)	A	[87/5]
$C_8H_9NO_2$	4-nitro-1-ethylbenzene				[100-12-9]
	(353–433)	59.4	(368)	A	[87/5]
$C_8H_9N_3$	2,2-dicyanohexanenitrile				
	(288–323)	61.0±0.2		GS	[94/5]
C_8H_{10}	1,2-dimethylbenzene				[95-47-6]
	(373–423)	42.9	(298)	CGC	[95/21]
	(333–419)	41.1	(348)	A	[87/5]
	(416–473)	38.0	(431)	A	[87/5]
	(471–571)	36.7	(486)	A	[87/5]
	(567–630)	36.7	(582)	A	[87/5]
	(386–416)	39.8	(401)		[82/3]
		43.4	(298)		[71/28]
		43.4±0.1	(298)	C	[47/7]
	(337–419)	40.8	(352)	MM	[45/2][49/6]
	(273–323)	45.0	(288)		[43/1][84/9]
C_8H_{10}	1,3-dimethylbenzene				[108-38-3]
	(360–410)	39.2	(375)		[02/9]
	(327–412)	40.7	(342)		[89/7]
	(267–301)	44.7	(282)	A	[87/5]
	(412–462)	37.5	(427)	A	[87/5]
	(461–554)	36.4	(476)	A	[87/5]
	(550–617)	36.2	(565)	A	[87/5]
	(380–411)	38.7	(395)		[83/2]
		42.7	(298)		[71/28]
		42.7±0.1	(298)	C	[47/7]
	(331–415)	40.4	(346)	MM	[87/5][45/2] [49/6]
	(273–333)	43.2	(288)		[43/1][84/9]
C_8H_{10}	1,4-dimethylbenzene				[106-42-3]
	(373–423)	42.3	(298)	CGC	[95/21]
	(293–323)	43.0±0.1	(298)		[90/3]
		42.3±0.01	(298)		[88/16]
		40.3	(353)		[88/7]
	(411–463)	37.3	(426)	A	[87/5]
	(460–553)	36.1	(475)	A	[87/5]
	(551–616)	36.2	(566)	A	[87/5]
		36.0±0.1	(411)	C	[85/10]
		34.5±0.1	(436)	C	[85/10]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		30.5±0.1	(484)	C	[85/10]
		24.7±0.1	(540)	C	[85/10]
	(380–410)	37.3	(395)		[82/3]
		42.3±0.1	(298)	C	[81/10]
		42.6	(298)		[74/13]
	(286–453)	42.4	(301)	IPM, EB	[87/5][74/11]
		42.4	(298)		[71/28]
	(303–343)	41.6	(318)		[68/23]
		42.4±0.1	(298)	C	[47/7]
	(332–413)	40.1	(347)	MM	[45/2][49/6]
C_8H_{10}	ethylbenzene				[100-41-4]
	(298–420)	41.8	(313)	A	[87/5]
	(409–459)	37.0	(424)	A	[87/5]
	(457–554)	35.8	(472)	A	[87/5]
	(320–400)	40.6	(335)		[86/13]
	(549–617)	35.5	(564)	A	[87/5]
		40.5±0.1	(328)	C	[82/10]
		39.5±0.1	(343)	C	[82/10]
		38.6±0.1	(358)	C	[82/10]
		42.4±0.1	(298)	C	[81/10]
		42.3	(298)		[71/28]
		42.2±0.1	(298)	C	[47/7]
	(330–410)	40.0	(345)	MM	[45/2][49/6]
$C_8H_{10}F_3NO_3$	N-trifluoroacetyl-*l*-proline, methyl ester				[715-58-2]
	(303–523)	57.9	(318)	A	[87/5][99/16]
$C_8H_{10}F_3NO_5$	N-trifluoroacetyl-*l*-aspartic acid, dimethyl ester				[81084-01-7]
	(303–423)	58.2	(318)	A	[87/5][99/16]
$C_8H_{10}NO_5PS$	O,O-dimethyl-O-(4-nitrophenyl) thiophosphate				[298-00-0]
	(293–427)	88.9	(308)	A	[87/5]
		87.0		GS	[79/19]
$C_8H_{10}N_2O_2$	3-nitro-N,N-dimethylaniline				[619-31-8]
	(427–558)	52.3	(442)	A, GS, EB	[87/5][60/4]
	(357–492)	48.2	(372)		[55/9]
$C_8H_{10}O$	2,3-dimethylphenol				[526-75-0]
	(433–492)	52.1	(448)	A, GS, EB	[87/5][60/4]
$C_8H_{10}O$	2,4-dimethylphenol				[105-67-9]
	(393–433)	64.6	(298)	CGC	[95/21]
	(282–318)	65.9	(297)	A	[87/5]
	(429–486)	51.8	(444)	A, GS, EB	[87/5][60/4]
$C_8H_{10}O$	2,5-dimethylphenol				[95-87-4]
	(427–485)	51.7	(442)	A, GS, EB	[87/5][60/4]
$C_8H_{10}O$	2,6-dimethylphenol				[576-26-1]
		75.6	(298)		[71/7]
		75.1	(298)		[68/9]
	(417–476)	48.5	(432)	A, GS, EB	[87/5][60/4]
$C_8H_{10}O$	3,4-dimethylphenol				[96-65-8]
		85.1	(298)		[71/7]
		85.0	(298)		[68/9]
	(444–502)	54.9	(459)	A, GS, EB	[87/5][60/4]
$C_8H_{10}O$	3,5-dimethylphenol				[108-68-9]
		82.0	(298)		[71/7]
	(427–497)	55.3	(442)	A, GS, EB	[87/5][60/4]
$C_8H_{10}O$	benzyl methyl ether				[538-86-3]
	(274–314)	51.4±0.3	(298)	GS	[02/29]
$C_8H_{10}O$	ethoxybenzene				[103-73-1]
	(390–454)	44.5	(405)	A	[87/5][76/2]
	(390–454)	50.7	(298)		[76/2]
	(390–454)	40.7	(443)		[76/2]
		51.0±0.1	(298)	C	[75/3]
	(400–454)	44.0	(415)		[65/7][84/9]
$C_8H_{10}O$	2-ethylphenol				[90-00-6]
	(393–433)	64.5	(298)	CGC	[95/21]
	(423–491)	50.5	(438)	A, GS, EB	[87/5][63/10]
	(277–318)	63.5	(292)	A, GS, EB	[87/5][63/10]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(359–480)	51.6	(374)		[55/9]
	(321–492)	51.4	(348)		[53/9]
	(321–492)	49.5	(373)		[53/9]
	(321–492)	48.6	(398)		[53/9]
	(321–492)	47.0	(423)		[53/9]
	(321–492)	43.1	(473)		[53/9]
$C_8H_{10}O$	3-ethylphenol				[620-17-7]
	(445–503)	53.1	(460)	A, GS, EB	[87/5][63/10]
	(277–323)	68.1	(292)	A, GS, EB	[87/5][63/10]
	(334–501)	58.3	(348)		[53/9]
	(334–501)	56.5	(373)		[53/9]
	(334–501)	55.2	(398)		[53/9]
	(334–501)	53.7	(423)		[53/9]
	(334–501)	48.8	(473)		[53/9]
$C_8H_{10}O$	4-ethylphenol				[123-07-9]
	(444–503)	53.2	(459)	A, GS, EB	[87/5][63/10]
	(337–503)	56.5	(348)		[53/9]
	(337–503)	54.7	(373)		[53/9]
	(337–503)	53.8	(398)		[53/9]
	(337–503)	51.3	(423)		[53/9]
	(337–503)	47.6	(473)		[53/9]
$C_8H_{10}O$	4-methylbenzyl alcohol				[589-18-4]
	(338–376)	64.2	(353)	A	[87/5]
$C_8H_{10}O$	(*dl*) 1-phenylethanol				[13323-81-4]
	(353–480)	53.5	(368)	A	[87/5]
$C_8H_{10}O$	2-phenylethanol				[60-12-8]
	(394–613)	55.1	(409)	A	[87/5]
	(283–318)	68.4	(298)	A, ME	[87/5][54/10]
$C_8H_{10}O$	2-methylanisole				[578-58-5]
		45.2			[86/10]
$C_8H_{10}O$	4-methylanisole				[104-93-8]
		46.0			[86/10]
$C_8H_{10}OS$	4-methoxythioanisole				[1879-16-9]
		53.6			[86/10]
$C_8H_{10}O_2$	ethyl *trans* β-(2-furyl)acrylate				
	(428–500)	56.8	(464)		[56/11]
$C_8H_{10}O_2$	4-methoxybenzyl alcohol				[105-13-5]
	(394–424)	95.6	(409)	A	[87/5]
	(354–453)	71.7	(369)	EB	[85/9]
$C_8H_{10}O_2$	1,3-dihydroxy-2,5-dimethylbenzene				[488-87-9]
	(393–459)	74.7	(408)	A, GC	[87/5][75/24]
$C_8H_{10}O_2$	1,3-dihydroxy-4,5-dimethylbenzene				[527-55-9]
	(424–453)	67.5	(438)	A, GC	[87/5][75/24]
$C_8H_{10}O_2$	1,3-dihydroxy-4,6-dimethylbenzene				[615-89-4]
	(388–466)	74.7	(403)	A, GC	[75/24]
$C_8H_{10}O_2$	1,4-dihydroxy-2,5-dimethylbenzene				[615-90-7]
	(331–361)	101.1	(346)	A	[87/5]
$C_8H_{10}O_2$	1,3-dihydroxy-5-ethylbenzene				[4299-72-3]
	(408–479)	81.3	(423)	A, GC	[87/5][75/24]
$C_8H_{10}O_2$	1,2-dimethoxybenzene				[91-16-7]
		66.9			[58/25]
$C_8H_{10}O_2$	1,3-dimethoxybenzene				[151-10-0]
	(358–423)	60.8	(373)	A, GC	[87/5][75/24]
$C_8H_{10}O_2$	1,4-dimethoxybenzene				[150-78-7]
	(298–357)	62.1	(313)	A	[87/5]
		51.5			[86/10]
$C_8H_{10}O_2$	2-phenoxyethanol				[122-99-6]
	(351–519)	66.0	(366)	A	[87/5][47/5]
$C_8H_{10}O_2$	3-methoxy-4-hydroxytoluene				[2896-67-5]
	(356–495)	53.2	(371)	A	[87/5]
$C_8H_{10}O_2S$	benzyl methyl sulfone				[3112-90-1]
	(455–529)	64.9	(470)	A	[87/5][99/16]
$C_8H_{10}O_3$	*cis* cyclohexane-1,2-dicarboxylic acid anhydride				[13149-00-3]
	(325–525)	48.8±0.1			[84/14]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_{10}O_6$	dioxobutanedioic acid, diethyl ester				[59743-08-7]
	(343–507)	59.3	(358)	A	[87/5][47/5]
$C_8H_{10}S$	benzyl methyl sulfide				[766-92-7]
	(336–368)	51.8	(351)		[99/16]
	(336–368)	50.8	(351)	A	[87/5]
	(323–358)	55.2±2.1	(298)		[62/20]
$C_8H_{10}S$	ethyl phenyl sulfide				[622-38-8]
	(338–367)	50.9	(353)		[99/16]
	(338–477)	51.7	(353)	A	[87/5]
	(323–358)	53.6±2.1			[62/20]
$C_8H_{10}S$	2-(methylthio)toluene				
		50.2			[86/10]
$C_8H_{10}S$	4-(methylthio)toluene				[623-13-2]
		50.2			[86/10]
$C_8H_{11}Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-pentyl ester				[76619-94-8]
	(413–455)	74.1		GC	[80/24]
$C_8H_{11}F_3O_2$	trifluoroacetic acid, cyclohexyl ester				[1549-45-7]
	(345–420)	43.0	(360)	A, EB	[87/5][69/13]
					[99/16]
$C_8H_{11}N$	N,N-dimethylaniline				[121-69-7]
	(284–323)	53.7±0.5	(304)		[97/21]
	(363–418)	49.2	(378)	A	[87/5]
		52.8±0.1	(298)	C	[82/18]
	(302–467)	47.6	(317)	A	[87/5][47/5]
$C_8H_{11}N$	2,4-dimethylaniline				[95-68-1]
	(295–339)	61.3±0.6	(317)		[97/21]
	(383–485)	55.5	(398)	A	[87/5]
	(326–485)	56.9	(341)		[47/5]
$C_8H_{11}N$	2,5-dimethylaniline				[95-78-3]
	(295–339)	61.7±0.7	(317)		[97/21]
$C_8H_{11}N$	2,6-dimethylaniline				[87-62-7]
	(286–326)	59.2±0.3	(306)		[00/14]
		59.6±0.3	(298)		[00/14]
	(373–490)	48.5	(388)	A	[87/5]
	(317–491)	50.7	(332)		[47/5]
$C_8H_{11}N$	N-ethylaniline				[103-69-5]
	(279–318)	58.3±0.6	(298)		[97/21]
	(311–477)	52.2	(326)	A	[87/5]
$C_8H_{11}N$	2-ethylaniline				[578-54-1]
	(283–323)	60.3±0.9	(304.3)	GS	[00/14]
		60.6±0.9	(298)		[00/14]
$C_8H_{11}N$	4-ethylaniline				[589-16-2]
	(393–491)	53.1	(408)	A	[87/5]
	(325–490)	54.6	(340)		[47/5]
$C_8H_{11}N$	5-ethyl-2-methylpyridine				[104-90-5]
	(348–451)	45.4	(363)	A	[87/5]
	(253–276)	51.6	(264)	GS	[80/6]
$C_8H_{11}N$	α-methylbenzylamine				[98-84-0]
	(283–318)	54.7±0.3	(301)	GS	[99/3]
	(283–318)	54.9±0.3	(298)	GS	[99/3]
$C_8H_{11}N$	(dl) α-methylbenzylamine				[618-36-0]
	(292–318)	36.7	(305)	A	[87/5]
		54.5±0.1	(298)	C	[87/8]
$C_8H_{11}N$	$(+)\alpha$-methylbenzylamine				
		54.1±0.1	(298)	C	[87/8]
$C_8H_{11}N$	$(-)\alpha$-methylbenzylamine				
		54.6±0.1	(298)	C	[87/8]
$C_8H_{11}N$	4-methylbenzylamine				[104-84-7]
	(353–466)	54.4	(368)	A	[87/5]
$C_8H_{11}N$	2,3,5-trimethylpyridine				[695-98-7]
	(293–426)	44.0	(359)		[95/4]
$C_8H_{11}N$	2,3,6-trimethylpyridine				[1462-84-6]
		48.5	(328)	C	[85/1]
		47.5	(343)	C	[85/1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		45.7	(368)	C	[85/1]
$C_8H_{11}N$	2,4,6-trimethylpyridine				[108-75-8]
	(323–373)	50.2	(298)	CGC	[95/21]
	(303–424)	46.5	(363)		[95/4]
	(298–444)	51.2	(313)	EB	[90/6]
		50.3±0.2	(298)		[85/1]
		48.3	(328)	C	[85/1]
		47.2	(343)	C	[85/1]
		45.5	(368)	C	[85/1]
$C_8H_{11}N$	2-propylpyridine				[622-39-9]
	(338–445)	46.6	(353)	A	[87/5]
$C_8H_{11}N$	3-propylpyridine				[4673-31-8]
	(350–450)	49.9	(365)	A	[87/5]
$C_8H_{11}N$	4-propypyridine				[1122-81-2]
	(354–465)	47.8	(369)	A	[87/5]
$C_8H_{11}NO$	2-anilinoethanol				[122-98-5]
	(377–553)	69.9	(392)	A	[87/5][47/5]
$C_8H_{11}NO$	2-ethoxyaniline				[94-70-2]
	(373–458)	57.3	(388)	A	[87/5]
$C_8H_{11}NO$	4-ethoxyaniline				[156-43-4]
	(421–523)	61.2	(436)	A	[87/5]
C_8H_{12}	tricyclo[3.3.0.0^{2,6}]octane				[250-21-5]
	(273–343)	40.0	(273)		[88/9]
	(273–343)	39.1	(298)		[88/9]
	(273–343)	38.3	(323)		[88/9]
C_8H_{12}	cyclooctadiene (mixed isomers)				
	(290–474)	34.6	(305)	A	[87/5]
C_8H_{12}	*cis cis* 1,5-cyclooctadiene				[1552-12-1]
		43.4±0.1	(298)	C	[96/18]
C_8H_{12}	1,5-cyclooctadiene				[10092-71-4]
	(348–386)	40.9	(363)	A	[87/5]
C_8H_{12}	(*dl*) *trans* 1,2-divinylcyclobutane				[6553-48-6]
	(319–371)	38.9±0.5	(298)	EB	[96/18]
	(350–385)	39.1	(365)	A	[87/5]
		42.3	(298)		[73/8]
		39.0±0.5	(367)		[73/8]
C_8H_{12}	(*dl*) 4-vinyl-1-cyclohexene				[100-40-3]
	(292–405)	40.1	(307)	A	[87/5]
$C_8H_{12}Cl_2O_5$	diethylene glycol *bis*(chloroacetate)				
	(421–586)	87.3	(436)		[87/5][47/5]
					[99/16]
$C_8H_{12}N_2$	suberic acid dinitrile				[629-40-3]
	(303–339)	77.3	(318)	A	[87/5]
$C_8H_{12}O$	1-methylnorcamphor				[59348-18-4]
		47.6			[84/17]
$C_8H_{12}O$	2-*tert*-butylfuran				[7040-43-9]
	(270–308)	38.7±0.4	(289)	GS	[98/2]
	(270–308)	38.1±0.4	(298)	GS	[98/2]
$C_8H_{12}O_4$	diethyl fumerate				[623-91-6]
	(326–492)	53.2	(341)	A	[87/5][47/5]
$C_8H_{12}O_4$	diethyl maleate				[141-05-9]
	(330–498)	55.2	(345)	A	[87/5][47/5]
$C_8H_{12}O_4S$	thiodiacetic acid, diethyl ether				[925-47-3]
	(385–448)	77.7	(400)		[99/16]
C_8H_{14}	*cis* bicyclo[3.3.0]octane				[1755-05-1]
	(298–318)	54.9	(308)	A	[87/5]
		41.5±0.4	(318)		[70/30]
		43.1±0.8	(298)		[70/30]
C_8H_{14}	*trans* bicyclo[3.3.0]octane				[5597-89-7]
	(298–320)	49.6	(309)	A	[87/5]
		41.3±0.4	(320)		[70/30]
		42.7±0.8	(298)		[70/30]
C_8H_{14}	*cis* bicyclo[4.2.0]octane				[28282-35-1]
	(298–347)	51.1	(313)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		39.5±0.4	(347)		[70/30]
		42.7±1.2	(298)		[70/30]
C_8H_{14}	*cis* bicyclo[5.1.0]octane				[16526-90-2]
	(297–322)	43.6±0.8	(309)	A	[87/5][70/30]
C_8H_{14}	cyclooctene				[931-88-4]
	(273–411)	42.0	(288)	A	[87/5]
	(273–333)	41.6	(300)		[41/6]
C_8H_{14}	vinylcyclohexane				[695-12-5]
		39.7±0.2	(298)	GCC	[79/17]
C_8H_{14}	allylcyclopentane				[3524-75-2]
		40.4±0.2	(298)	GCC	[79/17]
C_8H_{14}	2,5-dimethyl-1,5-hexadiene				[627-58-7]
	(330–388)	38.8	(345)	A	[87/5]
C_8H_{14}	3,3-dimethyl-1,5-hexadiene				[24253-25-6]
	(293–371)	35.2	(308)	A	[87/5]
C_8H_{14}	1-ethylcyclohexene				[1453-24-3]
	(353–412)	39.1	(368)	A	[87/5]
	(332–411)	40.1	(347)	MM	[60/20]
C_8H_{14}	1-methylbicyclo[4.1.0]heptane				[2439-79-4]
	(340–394)	37.2	(355)	A	[87/5]
C_8H_{14}	1-octyne				[629-05-0]
		42.3±0.1	(298)	C	[83/7]
	(357–400)	38.5	(372)	A	[87/5][70/24] [84/9]
C_8H_{14}	2-octyne				[2809-67-8]
		44.5±0.1	(298)	C	[83/7]
	(368–412)	39.9	(383)	A	[87/5][70/24] [84/9]
C_8H_{14}	3-octyne				[15232-76-5]
		43.9	(298)		[U/1][85/6]
	(363–406)	39.7	(378)	A	[87/5][70/24] [84/9]
C_8H_{14}	4-octyne				[1942-45-6]
		42.7±0.1	(298)	C	[83/7]
	(362–405)	39.6	(377)	A	[87/5][70/24] [84/9]
$C_8H_{14}Br_2$	1,2-dibromocyclooctane				[29974-69-4]
	(292–354)	50.3	(307)	A	[87/5][41/6]
$C_8H_{14}Cl_2S$	(2-chlorocyclohexyl)(2-chloroethyl) sulfide				[16660-53-0]
	(293–333)	62.5	(308)	A, GS	[87/5][48/9] [99/16]
$C_8H_{14}N_2$	2-piperidinopropionitrile				
	(283–318)	57.6±0.3		GS	[97/10]
$C_8H_{14}O$	cyclooctanone				[502-49-8]
	(343–383)	54.4	(298)	CGC	[95/21]
	(343–383)	53.6	(298)	CGC	[95/21]
	(343–383)	54.2	(298)	CGC	[95/21]
	(323–403)	47.3	(338)	A	[87/5]
	(394–484)	46.8	(409)	A, EB	[87/5][76/10]
$C_8H_{14}O$	2-ethyl-2-hexenal				[66266-68-2]
	(326–448)	48.4	(341)	A	[87/5][61/12]
$C_8H_{14}O$	2-ethyl-4-methyl-2-pentenal				[28419-86-5]
	(311–436)	46.7	(326)	A	[87/5][61/12]
$C_8H_{14}O$	6-methyl-5-hepten-2-one				[110-93-0]
	(364–393)	45.9	(379)		[89/8]
	(328–451)	44.7±0.2	(390)		[88/4]
$C_8H_{14}O$	(*dl*) 2-propylcyclopentanone				[1193-70-0]
	(332–457)	46.0	(347)	A	[87/5]
$C_8H_{14}O_2$	octanolactone				[5698-29-3]
	(345–380)	48.9±0.2	(362)	MM	[91/7]
	(345–380)	52.8±1.3	(298)	MM	[91/7]
$C_8H_{14}O_2$	acrylic acid, neopentyl ester				
	(301–325)	45.7	(313)	A	[87/5]
$C_8H_{14}O_2$	1,4-butanediol divinyl ether				[3891-33-6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(335–440)	49.0	(350)	A	[87/5]
$C_8H_{14}O_2$	butyl methacrylate				[97-88-1]
	(343–373)	47.4	(358)	A	[87/5]
	(344–437)	45.1	(359)	A	[87/5]
$C_8H_{14}O_2$	cyclopentanecarboxylic acid ethyl ester				
	(275–308)	51.2±0.6		GS	[96/22]
$C_8H_{14}O_2$	1,4-dioxaspiro[4.5]decane				[177-10-6]
	(278–308)	50.6±0.6	(298)	GS	[98/21][02/32]
$C_8H_{14}O_2$	cyclohexyl acetate				[622-45-7]
	(278–318)	51.7±0.2	(298)	GS	[96/11]
	(368–446)	46.7	(383)	A, EB	[87/5][69/13]
$C_8H_{14}O_2$	methylacrylic acid, *tert*-butyl ester				[585-07-9]
	(313–410)	42.9	(328)	A	[87/5]
$C_8H_{14}O_2$	pentyl acrylate				[2998-23-4]
	(325–440)	44.9	(340)	A	[87/5]
$C_8H_{14}O_3$	butyric anhydride				[106-31-0]
	(349–470)	49.1	(364)	A	[87/5]
$C_8H_{14}O_3$	diethylene glycol divinyl ether				[764-99-8]
	(336–470)	50.0	(351)	A	[87/5]
$C_8H_{14}O_3$	2-ethylacetoacetic acid, ethyl ester				[607-97-6]
	(313–471)	53.3	(328)	A	[87/5][47/5]
$C_8H_{14}O_3$	isopropyl levulinate				[21884-26-4]
	(321–481)	56.6	(336)	A	[87/5][47/5]
		52.0	(422)		[31/1]
$C_8H_{14}O_3$	propyl levulinate				[645-67-0]
	(332–495)	56.3	(347)	A	[87/5]
		54.0	(436)		[31/1]
$C_8H_{14}O_4$	2-acetoxypropionic acid, propyl ester				
	(318–469)	59.5	(333)	A	[87/5]
$C_8H_{14}O_4$	3-acetoxypropionic acid, propyl ester				
	(361–373)	74.7	(367)	A	[87/5]
$C_8H_{14}O_4$	diethyl succinate				[123-25-1]
	(327–490)	56.5	(342)	A	[87/5][47/5]
$C_8H_{14}O_4$	diisopropyl oxalate				[615-81-6]
	(418–501)	57.8	(433)	A	[87/5]
	(316–467)	57.6	(331)	A	[87/5][47/5]
$C_8H_{14}O_4$	dimethyl adipate				[627-93-0]
	(382–500)	58.8	(397)	A	[87/5]
$C_8H_{14}O_4$	dipropyl oxalate				[615-98-5]
	(326–487)	57.8	(341)	A	[87/5][47/5]
$C_8H_{14}O_4$	2-methylmalonic acid, diethyl ester				[609-08-5]
	(312–475)	52.5	(327)	A	[87/5][47/5]
$C_8H_{14}O_4$	octanedioic acid (suberic acid)				[505-48-6]
	(445–619)	91.4	(460)	A	[87/5][47/5]
$C_8H_{14}O_4S$	thiodiacetic acid, diethyl ester				[925-47-3]
	(384–448)	77.3	(399)	A	[87/5]
$C_8H_{14}O_5$	isopropyl[1-(methoxycarbonyl)ethyl] carbonate				
	(330–493)	55.5	(345)	A	[87/5]
$C_8H_{14}O_5$	2-(lactyloxy)propionic acid, ethyl ester				
	(321–389)	72.8	(336)	A	[87/5]
$C_8H_{14}O_5$	malic acid, diethyl ester				[7554-12-3]
	(353–527)	59.6	(368)	A	[87/5][47/5]
$C_8H_{14}O_5$	propyl[1-(methoxycarbonyl)ethyl] carbonate				
	(373–495)	58.0	(388)	A	[87/5]
$C_8H_{14}O_6$	(*d*) diethyl tartrate				[13811-71-7]
	(375–553)	65.9	(390)		[47/5]
$C_8H_{14}O_6$	(*dl*) diethyl tartrate				[87-91-2]
	(375–553)	67.3	(390)	A	[87/5][47/5]
$C_8H_{14}O_6S$	sulfonyldiacetic acid, diethyl ester				[29771-87-7]
	(421–494)	88.2	(426)		[99/16]
	(421–494)	87.6	(436)	A	[87/5]
$C_8H_{15}Br$	(2-bromoethyl)cyclohexane				[1647-26-3]
	(311–486)	54.2	(326)	A	[87/5][47/5] [70/14]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_{15}ClO$	octanoyl chloride				[111-64-8]
	(343–373)	74.5	(358)	A	[87/5][99/16]
$C_8H_{15}ClO$	5-methylheptanoyl chloride				
	(338–373)	66.3	(353)	A	[87/5][99/16]
$C_8H_{15}Cl_3O_4$	trichlorohydrine pentaerythritol				
	(404–449)	80.4	(419)		[65/10]
$C_8H_{15}N$	3-azabicyclo[3.2.2]nonane				[283-24-9]
	(303–443)	52.2	(318)	A	[87/5]
$C_8H_{15}N$	octanenitrile				[124-12-9]
	(373–480)	50.0	(388)	A	[87/5]
		56.8±0.3	(298)	C	[77/5]
	(374–420)	49.8	(389)	EB	[71/4]
	(420–479)	48.0	(435)	EB	[71/4]
	(316–477)	56.7	(331)		[47/5]
$C_8H_{15}NO$	heptyl isocyanate				[4747-81-3]
	(326–461)	47.5	(341)	A	[87/5]
$C_8H_{15}NO$	methacrylic acid, N-*tert*-butylamide				[6554-73-0]
	(340–467)	49.6	(355)	A	[87/5]
$C_8H_{15}NO_2$	methacrylic acid, 2-(dimethylamino)ethyl ester				[2867-47-2]
	(372–460)	48.8	(387)	A	[87/5]
$C_8H_{15}NO_2$	1-lactopiperidine				
	(346–408)	62.1	(361)	A	[87/5]
$C_8H_{15}NO_2$	N-acetyl-N-butylacetamide				[1563-86-6]
		64.4±0.4	(298)	C	[65/12]
$C_8H_{15}NO_3$	N,N-diethyloxamic acid, ethyl ester				[5411-58-5]
	(349–525)	60.5	(364)	A	[87/5][47/5]
C_8H_{16}	1-ethyl-1-methylcyclopentane				[16747-50-5]
		38.8	(298)	C	[81/10]
C_8H_{16}	cyclooctane				[292-64-8]
		43.1±0.2		GC	[89/16]
	(289–369)	43.3	(304)	A	[87/5]
	(373–434)	39.3	(388)	EB	[76/10]
		43.3±0.2	(298)		[56/20]
	(369–467)	39.4	(384)	A, EB	[87/5][56/20]
C_8H_{16}	1,1-dimethylcyclohexane				[590-66-9]
	(271–303)	39.6±0.1	(287)	GS	[95/27]
		38.8±0.1	(298)		[95/27]
		37.9	(298)		[75/12]
		37.8	(298)		[71/28]
	(313–395)	36.6	(328)	A	[87/5][49/6]
C_8H_{16}	*cis* 1,2-dimethylcyclohexane				[2207-01-4]
		39.4	(298)		[75/12]
		39.7	(298)		[71/28]
		35.5±0.1	(370)	C	[51/2]
		34.5±0.1	(387)	C	[51/2]
		39.7±0.1	(298)	C	[47/7]
	(322–405)	38.0	(337)	A, MM	[87/5][45/2]
C_8H_{16}	(*dl*) *trans* 1,2-dimethylcyclohexane				[6876-23-9]
		38.3	(298)		[75/12]
		38.4	(298)		[71/28]
		34.4±0.1	(373)	C	[51/2]
		33.5±0.1	(387)	C	[51/2]
		38.4±0.1	(298)	C	[47/7]
	(316–399)	37.0	(331)	A, MM	[87/5][45/2]
C_8H_{16}	*cis* 1,3-dimethylcyclohexane				[638-04-0]
	(318–396)	36.8	(333)	A	[87/5]
		38.1	(298)		[75/12]
		38.2	(298)		[71/28]
		34.9±0.1	(363)	C	[51/2]
		33.3±0.1	(385)	C	[51/2]
		38.2±0.1	(298)	C	[47/7]
	(316–398)	37.7	(331)	MM	[45/2]
C_8H_{16}	(*dl*) *trans* 1,3-dimethylcyclohexane				[2207-03-6]
	(314–400)	37.9	(329)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		39.1	(298)		[75/12]
		39.2	(298)		[71/28]
		39.2±0.1	(298)	C	[47/7]
	(314–394)	37.4	(329)	MM	[45/2]
C_8H_{16}	*cis* 1,4-dimethylcyclohexane				[624-29-3]
		39.0	(298)		[75/12]
		39.0	(298)		[71/28]
		39.0±0.1	(298)	C	[47/7]
	(317–400)	37.6	(332)	A, MM	[87/5][45/2]
C_8H_{16}	(*dl*) *trans* 1,4-dimethylcyclohexane				[2207-04-7]
		37.6	(298)		[75/12]
		37.9	(298)		[71/28]
		35.6±0.1	(341)	C	[51/2]
		34.6±0.1	(357)	C	[51/2]
		33.5±0.1	(377)	C	[51/2]
		39.9±0.1	(298)	C	[47/7]
	(313–395)	36.7	(328)	A, MM	[87/5][45/2]
C_8H_{16}	ethylcyclohexane				[1678-91-7]
		39.2±0.4	(298)	GC	[87/17]
		39.8±0.1	(313)	C	[81/14]
		38.9±0.1	(328)	C	[81/14]
		37.9±0.1	(343)	C	[81/14]
		37.0±0.1	(358)	C	[81/14]
		36.3±0.1	(368)	C	[81/14]
		40.0±0.4	(298)	GCC	[78/16]
		40.4	(298)		[75/12]
		40.5	(298)		[41/28]
		40.5±0.1	(298)	C	[47/7]
	(323–407)	38.6	(338)	A, MM	[87/5][45/2]
C_8H_{16}	propylcyclopentane				[2040-96-2]
		41.1	(298)		[71/28]
		41.1±0.1	(298)	C	[47/7]
	(323–406)	39.2	(338)	A, MM	[87/5][45/2]
C_8H_{16}	isopropylcyclopentane				[3875-51-2]
		37.9	(298)		[71/28]
		39.4±0.1	(298)	C	[47/7]
	(320–403)	37.9	(335)	A, MM	[87/5][45/2]
C_8H_{16}	1,1,2-trimethylcyclopentane				[4259-00-1]
	(309–389)	36.3	(324)	A, MM	[87/5][49/6]
C_8H_{16}	1,1,3-trimethylcyclopentane				[4516-69-2]
	(301–379)	35.4	(316)	A, MM	[87/5][49/6]
C_8H_{16}	1-ethyl-1-methylcyclopentane				[16747-50-5]
	(331–397)	36.7	(346)	A	[87/5]
	(238–288)	40.2	(273)	IPM	[87/5][74/11]
		38.9	(298)		[71/28]
	(316–396)	37.3	(331)		[49/6]
C_8H_{16}	(*dl*) *cis* 1-ethyl-2-methylcyclopentane				[930-89-2]
	(238–304)	42.5	(253)	A	[87/5]
	(303–403)	39.3	(318)	A	[87/5]
	(238–288)	41.6	(273)	IPM	[74/11]
		40.2	(298)		[71/28]
	(322–402)	38.3	(337)		[49/6]
C_8H_{16}	*trans* 1-ethyl-2-methylcyclopentane				
		39.3	(298)		[71/28]
C_8H_{16}	*cis* 1-ethyl-3-methylcyclopentane				
		39.3	(298)		[41/7]
C_8H_{16}	*trans* 1-ethyl-3-methylcyclopentane				
		38.9	(298)		[41/7]
C_8H_{16}	1,1,2-trimethylcyclopentane				[4259-00-1]
		37.2	(298)		[71/28]
C_8H_{16}	1,1,3-trimethylcyclopentane				[4516-69-2]
		36.0	(298)		[71/28]
C_8H_{16}	*cis, cis* 1,2,3-trimethylcyclopentane				
		38.9	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_8H_{16}	*cis, cis* 1,2,4-trimethylcyclopentane				
		38.1	(298)		[71.28]
C_8H_{16}	*cis* 1,2-*trans*-3-trimethylcyclopentane				
		38.1	(298)		[71/28]
C_8H_{16}	*cis* 1,2-*trans*-4-trimethylcyclopentane				[4850-28-6]
	(311–392)	36.8	(326)	A, MM	[87/5][49/6]
C_8H_{16}	*trans* 1,2-*cis*-4-trimethylcyclopentane				[13398-35-1]
		36.8	(298)		[71/28]
	(305–385)	36.0	(320)	A, MM	[87/5][49/6]
C_8H_{16}	1-octene				[111-66-0]
	(373–423)	40.6	(298)	CGC	[95/21]
		39.5±0.1	(313)	C	[82/10]
		38.6±0.1	(328)	C	[82/10]
		37.6±0.1	(343)	C	[82/10]
		36.6±0.1	(358)	C	[82/10]
		35.8±0.1	(368)	C	[82/10]
	(263–291)	40.2	(277)	MM	[81/19]
	(260–291)	41.2	(275)	HSA	[81/19]
		40.3±0.2	(298)	C	[77/1]
		38.0	(298)		[71/28]
	(317–395)	38.8	(332)	A, MM	[87/5][50/6]
C_8H_{16}	*cis* 2-octene				[7642-04-8]
		40.2	(298)		[71/28]
	(356–400)	37.8	(371)	A	[87/5]
C_8H_{16}	*trans* 2-octene				[13389-42-9]
	(356–399)	37.9	(371)	A	[87/5]
		40.2	(298)		[71/28]
C_8H_{16}	*cis* 3-octene				[14850-22-7]
		39.7	(298)		[71/28]
C_8H_{16}	*trans* 3-octene				[14919-01-8]
	(354–396)	37.6	(369)	A	[87/5]
		40.2	(298)		[71/28]
C_8H_{16}	*cis* 4-octene				[7642-15-1]
	(353–395)	37.2	(368)	A	[87/5]
		39.7	(298)		[71/28]
C_8H_{16}	*trans* 4-octene				[14850-23-8]
	(276–308)	43.2±0.3	(292)	GS	[00/7]
	(276–308)	42.9±0.3	(298)	GS	[00/7]
	(353–396)	37.4	(368)	A	[87/5]
		39.7	(298)		[71/28]
C_8H_{16}	2-methyl-1-heptene				[15870-10-7]
		39.3	(298)		[71/28]
C_8H_{16}	3-methyl-1-heptene				[4810-09-7]
		38.5	(298)		[71/28]
C_8H_{16}	4-methyl-1-heptene				[13151-05-8]
		38.9	(298)		[71/28]
C_8H_{16}	5-methyl-1-heptene				[13151-04-7]
		38.9	(298)		[71/28]
C_8H_{16}	6-methyl-1-heptene				[5026-76-6]
		38.9	(298)		[71/28]
C_8H_{16}	2-methyl-2-heptene				[627-97-4]
		39.7	(298)		[71/28]
	(257–396)	41.2	(272)	A	[87/5][47/5]
C_8H_{16}	3-methyl-*cis*-2-heptene				[22768-19-0]
		39.7	(298)		[71/28]
C_8H_{16}	3-methyl-*trans*-2-heptene				[22768-20-3]
		39.7	(298)		[71/28]
C_8H_{16}	4-methyl-*cis*-2-heptene				
		38.9	(298)		[71/28]
C_8H_{16}	4-methyl-*trans*-2-heptene				
		38.9	(298)		[71/28]
C_8H_{16}	5-methyl-*cis*-2-heptene				[24608-84-2]
		39.3	(298)		[71/28]
C_8H_{16}	5-methyl-*trans*-2-heptene				[24608-85-3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		39.3	(298)		[71/28]
C_8H_{16}	6-methyl-*cis*-2-heptene				
		39.3	(298)		[71/28]
C_8H_{16}	6-methyl-*trans*-2-heptene				[51065-65-7]
		39.3	(298)		[71/28]
C_8H_{16}	2-methyl-*cis*-3-heptene				[20488-34-0]
		38.9	(298)		[71/28]
C_8H_{16}	2-methyl-*trans*-3-heptene				[692-96-6]
		38.9	(298)		[71/28]
C_8H_{16}	3-methyl-*cis*-3-heptene				[22768-17-8]
		39.7	(298)		[71/28]
C_8H_{16}	3-methyl-*trans*-3-heptene				[22768-18-9]
		39.7	(298)		[71/28]
C_8H_{16}	4-methyl-*cis*-3-heptene				[14255-24-4]
		39.7	(298)		[71/28]
C_8H_{16}	4-methyl-*trans*-3-heptene				[13714-85-7]
		39.7	(298)		[71/28]
C_8H_{16}	5-methyl-*cis*-3-heptene				[50422-80-5]
		38.9	(298)		[71/28]
C_8H_{16}	5-methyl-*trans*-3-heptene				[53510-18-2]
		38.9	(298)		[71/28]
C_8H_{16}	6-methyl-*cis*-3-heptene				[66225-19-2]
		38.9	(298)		[71/28]
C_8H_{16}	6-methyl-*trans*-3-heptene				[66225-20-5]
		38.9	(298)		[71/28]
C_8H_{16}	2-ethyl-1-hexene				[1632-16-2]
		39.7	(298)		[71/28]
C_8H_{16}	3-ethyl-1-hexene				[3404-58-8]
		38.5	(298)		[71/28]
C_8H_{16}	4-ethyl-1-hexene				[16746-85-3]
		38.9	(298)		[71/28]
C_8H_{16}	2,3-dimethyl-1-hexene				[16746-86-4]
		38.5	(298)		[71/28]
C_8H_{16}	2,4-dimethyl-1-hexene				[16746-87-5]
		38.5	(298)		[71/28]
C_8H_{16}	2,5-dimethyl-1-hexene				[6795-92-4]
		38.9	(298)		[71/28]
C_8H_{16}	3,3-dimethyl-1-hexene				[3404-77-1]
		36.0	(298)		[71/28]
C_8H_{16}	3,4-dimethyl-1-hexene				[16745-94-1]
		38.9	(298)		[71/28]
C_8H_{16}	3,5-dimethyl-1-hexene				[7423-69-0]
		38.1	(298)		[71/28]
C_8H_{16}	4,4-dimethyl-1-hexene				[1647-08-1]
		31.0	(298)		[71/28]
C_8H_{16}	4,5-dimethyl-1-hexene				[16106-59-5]
		38.5	(298)		[71/28]
C_8H_{16}	5,5-dimethyl-1-hexene				[7116-86-1]
		37.7	(298)		[71/28]
C_8H_{16}	3-ethyl-*cis*-2-hexene				[36880-72-5]
		39.7	(298)		[71/28]
C_8H_{16}	3-ethyl-*trans*-2-hexene				[19781-63-6]
		39.7	(298)		[71/28]
C_8H_{16}	4-ethyl-*cis*-2-hexene				[54616-49-8]
		38.9	(298)		[71/28]
C_8H_{16}	4-ethyl-*trans*-2-hexene				[19781-63-6]
		38.9	(298)		[71/28]
C_8H_{16}	2,3-dimethyl-2-hexene				[7145-20-2]
		39.7	(298)		[71/28]
C_8H_{16}	2,4-dimethyl-2-hexene				[14255-23-3]
		38.5	(298)		[71/28]
C_8H_{16}	2,5-dimethyl-2-hexene				[3404-78-2]
		38.9	(298)		[71/28]
C_8H_{16}	3,4-dimethyl-*cis*-2-hexene				[19550-81-3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		39.3	(298)		[71/28]
C_8H_{16}	3,4-dimethyl-*trans*-2-hexene				[19550-82-4]
		39.3	(298)		[71/28]
C_8H_{16}	3,5-dimethyl-*cis*-2-hexene				[66225-31-8]
		38.9	(298)		[71/28]
C_8H_{16}	3,5-dimethyl-*trans*-2-hexene				[66225-12-5]
		38.9	(298)		[71/28]
C_8H_{16}	4,4-dimethyl-*cis*-2-hexene				[66225-13-6]
		38.1	(298)		[71/28]
C_8H_{16}	4,4-dimethyl-*trans*-2-hexene				[19550-83-5]
		38.1	(298)		[71/28]
C_8H_{16}	4,5-dimethyl-*cis*-2-hexene				
		38.5	(298)		[71/28]
C_8H_{16}	4,5-dimethyl-*trans*-2-hexene				[66225-14-7]
		38.5	(298)		[71/28]
C_8H_{16}	5,5-dimethyl-*cis*-2-hexene				[39761-61-0]
		38.1	(298)		[71/28]
C_8H_{16}	5,5-dimethyl-*trans*-2-hexene				[39782-43-9]
		38.1	(298)		[71/28]
C_8H_{16}	3-ethyl-3-hexene				[16789-51-8]
		39.3	(298)		[71/28]
C_8H_{16}	*cis* 2,2-dimethyl-3-hexene				[690-92-6]
	(319–380)	35.3	(334)	A	[87/5]
		37.2	(298)		[71/28]
	(305–379)	36.1	(320)	MM	[60/20]
C_8H_{16}	*trans* 2,2-dimethyl-3-hexene				[690-93-7]
	(306–379)	36.1	(321)	A	[87/5]
		37.2	(298)		[71/28]
	(303–374)	36.3	(318)	MM	[60/20]
C_8H_{16}	*cis* 2,3-dimethyl-3-hexene				[59643-75-3]
		38.9	(298)		[71/28]
C_8H_{16}	*trans* 2,3-dimethyl-3-hexene				[66225-30-7]
		38.9	(298)		[71/28]
C_8H_{16}	*cis* 2,4-dimethyl-3-hexene				[37549-89-6]
		38.5	(298)		[71/28]
C_8H_{16}	*trans* 2,4-dimethyl-3-hexene				[61847-78-7]
		38.5	(298)		[71/28]
C_8H_{16}	*cis* 2,5-dimethyl-3-hexene				[10557-44-5]
		37.2	(298)		[71/28]
C_8H_{16}	*trans* 2,5-dimethyl-3-hexene				[692-70-6]
		37.5	(298)		[71/28]
C_8H_{16}	*cis* 3,4-dimethyl-3-hexene				[19550-87-9]
		39.7	(298)		[71/28]
C_8H_{16}	*trans* 3,4-dimethyl-3-hexene				[19550-88-0]
		39.7	(298)		[71/28]
C_8H_{16}	2-*n*-propyl-1-pentene				
		39.3	(298)		[71/28]
C_8H_{16}	2-isopropyl-1-pentene				[61847-79-8]
		38.8	(298)		[71/28]
C_8H_{16}	2-ethyl-3-methyl-1-pentene				[3404-67-9]
	(307–389)	36.4	(322)	A	[87/5]
		38.9	(298)		[71/28]
	(308–383)	36.4	(323)	MM	[60/20]
C_8H_{16}	2-ethyl-4-methyl-1-pentene				[3404-80-6]
		38.5	(298)		[71/28]
C_8H_{16}	3-ethyl-2-methyl-1-pentene				[19780-66-6]
		37.7	(298)		[71/28]
C_8H_{16}	3-ethyl-3-methyl-1-pentene				[6196-60-7]
		38.9	(298)		[71/28]
C_8H_{16}	3-ethyl-4-methyl-1-pentene				[61847-80-1]
		38.5	(298)		[71/28]
C_8H_{16}	2,3,3-trimethyl-1-pentene				[560-23-6]
		38.5	(298)		[71/28]
C_8H_{16}	2,3,4-trimethyl-1-pentene				[565-76-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		38.5	(298)		[71/28]
C_8H_{16}	2,4,4-trimethyl-1-pentene				[107-39-1]
	(343–381)	33.5	(358)	A	[87/5]
		35.7	(298)		[71/28]
	(301–375)	35.1	(316)	MM	[60/20]
C_8H_{16}	3,3,4-trimethyl-1-pentene				[564-03-4]
		38.1	(298)		[71/28]
C_8H_{16}	2-methyl-3-ethyl-2-pentene				[19780-67-7]
		39.3	(298)		[71/28]
C_8H_{16}	4-methyl-3-ethyl-*cis*-2-pentene				[42067-48-1]
		39.3	(298)		[71/28]
C_8H_{16}	4-methyl-3-ethyl-*trans*-2-pentene				[42067-49-2]
		38.9	(298)		[71/28]
C_8H_{16}	2,3,4-trimethyl-2-pentene				[565-77-5]
		39.3	(298)		[71/28]
C_8H_{16}	2,4,4-trimethyl-2-pentene				[107-40-4]
	(319–380)	35.7	(334)	A	[87/5]
		39.3	(298)		[71/28]
	(305–378)	37.2	(320)	MM	[60/20]
C_8H_{16}	3,4,4-trimethyl-*cis*-2-pentene				[39761-64-3]
		38.9	(298)		[71/28]
C_8H_{16}	3,4,4-trimethyl-*trans*-2-pentene				[39761-64-3]
		38.9	(298)		[71/28]
C_8H_{16}	3-methyl-2-isopropyl-1-butene				
		38.1	(298)		[71/28]
C_8H_{16}	3,3-dimethyl-2-ethyl-1-butene				
		38.5	(298)		[71/28]
$C_8H_{16}Br_2$	1,1-dibromooctane				[62168-26-7]
	(412–571)	57.1	(427)	A, EST	[87/5][56/16] [70/14][99/16]
$C_8H_{16}Cl_2$	1,1-dichlorooctane				[20395-24-8]
	(380–480)	57.7	(298)	A	[87/12][91/2]
	(382–533)	51.4	(397)	A, EST	[87/5][56/16] [70/14][99/16]
$C_8H_{16}Cl_2$	1,2-dichlorooctane				[21948-46-9]
	(370–490)	52.0	(385)		[82/12][99/16]
	(370–490)	57.6	(298)		[82/12][92/1]
$C_8H_{16}Cl_2$	1,8-dichlorooctane				[2162-99-4]
	(410–510)	55.9	(426)		[99/16]
	(410–510)	65.6	(298)		[88/11][91/2]
$C_8H_{16}Cl_2$	erythro-4,5-dichlorooctane				[2162-99-4]
	(351–480)	47.3	(415)		[99/16]
$C_8H_{16}F_2$	1,1-difluorooctane				[61350-03-6]
	(329–459)	44.2	(344)	A, EST	[87/5][56/16] [70/14][99/16]
$C_8H_{16}NO_2$	ethyl 2-(N,N-dimethylamino)-2-methylpropanoate				
	(278–313)	51.6±0.5	(298)	GS	[96/20]
$C_8H_{16}N_2$	methyl ethyl ketazine				[5921-54-0]
	(439–524)	40.0			[93/21]
$C_8H_{16}N_2$	1,1,4,4-tetramethyltetramethylenediazine				
		50.1±0.4	(298)	C	[76/3]
$C_8H_{16}N_2$	2-diethylamino-2-methylpropionitrile				
		56.3±1.1		GS	[97/10]
$C_8H_{16}O$	octanal				[124-13-0]
	(313–353)	53.8	(298)	CGC	[95/21]
	(293–438)	43.4	(308)	A	[87/5]
		51.3±0.2	(298)		[81/18]
$C_8H_{16}O$	2,4-dimethyl-3-hexanone				[18641-70-8]
	(350–418)	42.5	(365)	A	[87/5]
$C_8H_{16}O$	1-ethylcyclohexanol				[1940-18-7]
	(324–440)	46.9	(339)	A	[87/5]
$C_8H_{16}O$	2-methyl-3-heptanone				[13019-20-0]
	(350–428)	43.5	(365)	A	[87/5]
$C_8H_{16}O$	6-methyl-3-hepten-2-ol				[51500-48-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(314–449)	59.7	(329)	A	[87/5][47/5]
$C_8H_{16}O$	(*dl*) 6-methyl-5-hepten-2-ol				[4630-06-2]
	(314–448)	57.0	(329)	A	[87/5][47/5]
$C_8H_{16}O$	2-octanone				[111-13-7]
	(343–383)	52.6	(298)	CGC	[95/21]
	(317–446)	49.8	(332)	A	[87/5]
		52.0±0.3	(298)	GCC	[79/7]
	(324–520)	49.1	(339)	A	[87/5][75/8]
	(324–520)	51.8	(298)		[75/8]
	(296–446)	50.6	(311)		[47/5]
$C_8H_{16}O$	3-octanone				[106-68-3]
	(293–348)	43.8	(308)	A	[87/5]
$C_8H_{16}O$	4-octanone				[589-63-9]
	(288–433)	36.4	(303)	A	[87/5]
$C_8H_{16}O$	1-propylcyclopentanol				[1604-02-0]
	(344–447)	64.2	(359)	A	[87/5]
$C_8H_{16}O$	2,2,4-trimethyl-3-pentanone				[5857-36-2]
	(287–408)	55.7	(302)	A	[87/5][47/5]
		43.3±0.2	(298)	C	[70/18]
		43.3±0.1	(298)	C	[66/2]
$C_8H_{16}O_2$	3-butoxy-2-butanone				
	(323–398)	36.7	(338)	A	[87/5]
$C_8H_{16}O_2$	*trans* 2,2,4,6-tetramethyl-1,3-dioxane				
		41.9±1.2	(298)		[67/37]
$C_8H_{16}O_2$	*cis* 2,2,4,6-tetramethyl-1,3-dioxane				
		42.3±1.2	(298)		[67/37]
$C_8H_{16}O_2$	1,1-dimethoxycyclohexane				[933-40-4]
	(278–308)	48.6±0.2	(298)	GS	[02/32]
	(278–308)	49.0±0.2		GS	[98/21]
	(315–347)	52.4	(331)	EB	[94/16]
$C_8H_{16}O_2$	octanoic acid (caprylic acid)				[124-07-2]
	(297–343)	79.8±0.6	(320)	GS	[00/6]
	(297–434)	81.0±0.6	(298)	GS	[00/6]
	(353–393)	81.2	(298)	CGC	[95/21]
	(417–514)	66.6	(432)	A, EB	[87/9]
	(296–331)	85.3	(311)	A	[87/5]
	(360–512)	74.4	(375)	A	[87/5]
		80.0	(290)		[82/4]
	(291–303)	82.9±1.0	(298)	TE	[79/4]
		70.0	(407)	I	[43/7]
$C_8H_{16}O_2$	ethyl hexanoate				[123-66-0]
	(345–374)	47.4±0.3	(359)	EB	[91/7]
	(345–379)	51.5±1.3	(298)	EB	[91/7]
	(396–449)	51.8	(311)	A	[87/5]
	(300–376)	48.6	(315)	A	[87/5]
$C_8H_{16}O_2$	(*dl*) 2-ethylhexanoic acid				[149-57-5]
	(397–514)	76.3±0.9	(298)	EB	[97/8]
	(403–500)	61.8	(418)	A	[87/5]
		75.6±0.5	(298)	C	[76/1]
$C_8H_{16}O_2$	hexyl acetate				[142-92-7]
		52.1	(298)	GC	[97/13]
	(303–444)	50.9	(318)		[95/16]
	(304–381)	48.9	(319)	A	[87/5]
	(378–459)	46.2	(387)	DTA	[80/8]
$C_8H_{16}O_2$	isobutyl butyrate				[539-90-2]
	(277–430)	41.7	(292)	A	[87/5][47/5]
$C_8H_{16}O_2$	isobutyl isobutyrate				[97-85-8]
	(278–313)	44.5±0.1	(298)	GS	[96/11]
	(277–421)	46.9	(292)	A	[87/5][47/5]
$C_8H_{16}O_2$	isopentyl propionate				[624-54-4]
	(281–434)	44.1	(296)	A	[87/5]
$C_8H_{16}O_2$	methyl heptanoate				[106-73-0]
		49.1	(350)		[02/27]
		50.2±0.1	(326)		[02/27]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		51.8±0.1	(298)		[02/27]
	(313–363)	53.4	(298)	CGC	[95/21]
	(433–473)	53.7	(298)	CGC	[95/21]
	(313–353)	53.5	(298)	CGC	[95/21]
		49.7±0.5	(298)	GC	[87/17]
		53.1±0.4	(298)	GCC	[80/5]
		53.1±0.1	(298)	C	[80/5]
		51.6±0.5	(298)	C	[77/1]
	(332–402)	49.0	(347)	A, EST	[87/5][63/16]
$C_8H_{16}O_2$	4-methylvaleric acid, ethyl ester				[25415-67-2]
	(284–434)	45.4	(299)	A	[87/5][47/5]
$C_8H_{16}O_2$	propyl isovalerate				[557-00-6]
	(281–429)	44.3	(296)	A	[87/5][47/5]
$C_8H_{16}O_2$	ethyl hexanoate				[123-66-0]
	(279–309)	50.8±0.4	(294)	GS	[99/4]
	(279–309)	50.6±0.4	(298)	GS	[99/4]
$C_8H_{16}O_2$	[(3-methylbutoxy)methyl]oxirane				[15965-97-6]
		55.8±1.9			[87/14]
$C_8H_{16}O_3$	2-butoxyethyl acetate				[112-07-2]
		59.5±0.1	(298)	C	[70/17]
$C_8H_{16}O_3$	2-butoxypropionic acid, methyl ester				[4126-55-0]
	(348–417)	51.9	(363)	A	[87/5]
$C_8H_{16}O_3$	3-butoxypropionic acid, methyl ester				[14144-34-4]
	(311–469)	51.1	(326)	A	[87/5]
$C_8H_{16}O_3$	3-ethoxypropionic acid, propyl ester				
	(343–461)	48.6	(358)	A	[87/5][54/15]
$C_8H_{16}O_3$	ethylene glycol monobutyl ether acetate				[112-07-2]
	(293–465)	51.9	(308)	A	[87/5]
$C_8H_{16}O_3$	2-hydroxyisobutyric acid, butyl ester				[816-50-2]
	(384–458)	47.7	(399)	A	[87/5]
$C_8H_{16}O_3$	3-methoxypropionic acid, butyl ester				[4195-88-4]
	(311–469)	50.9	(326)	A	[87/5]
$C_8H_{16}O_3$	pentyl lactate				[6382-06-5]
	(288–469)	73.9	(303)	A	[87/5]
$C_8H_{16}O_3$	diethylene glycol monoethyl ether acetate				[112-15-2]
	(293–491)	51.7	(308)	A	[87/5]
$C_8H_{16}O_4$	1,4,7,10-tetraoxacyclododecane (12-crown-4)				[294-93-9]
		65.7±3.7	(298)	CGC	[00/9]
		65.6±0.4	(298)	C	[82/9]
$C_8H_{17}Br$	1-bromooctane				[111-83-1]
	(323–363)	55.1	(298)	CGC	[95/21]
		55.8±0.1	(298)	C	[76/6][77/1]
	(373–475)	49.3	(388)	A, EST	[87/5][61/13] [70/14]
$C_8H_{17}Br$	(*dl*) 2-bromooctane				[555-35-7]
	(343–463)	48.4	(358)	A	[87/5][99/16]
$C_8H_{17}Cl$	1-chlorooctane				[111-85-3]
	(330–460)	51.4	(298)		[84/9][91/2]
	(327–457)	50.3	(342)	A, DTA	[87/5][69/5]
		52.4±0.1	(298)	C	[68/1]
$C_8H_{17}Cl$	(*dl*) 2-chlorooctane				[628-61-5]
	(330–446)	47.8	(345)	A	[87/5][99/16]
$C_8H_{17}Cl$	(3-chloromethyl)heptane				[123-04-6]
	(371–443)	44.2	(386)	A	[87/5][99/16]
$C_8H_{17}ClO_4$	triethylene glycol mono(2-chloroethyl) ether				[5197-66-0]
	(383–555)	68.6	(398)	A	[87/5][47/5]
$C_8H_{17}Cl_2N$	N-butyl *bis*(2-chloroethyl)amine				[42520-97-8]
	(273–380)	60.7	(288)	A,GS	[87/5][48/13] [99/16]
$C_8H_{17}Cl_2N$	N-sec-butyl *bis*(2-chloromethyl)amine				
	(273–373)	59.5	(288)	GS	[87/5][48/13] [99/16]
$C_8H_{17}Cl_2N$	N-*tert*-butyl *bis*(2-chloromethyl)amine				[10125-86-7]
	(273–345)	58.4	(288)	A, GS	[87/5][48/13]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[99/16]
$C_8H_{17}Cl_2N$	N-isobutyl *bis*(2-chloromethyl)amine				[87289-70-1]
	(273–345)	60.3	(288)	A, GS	[87/5][48/13]
					[99/16]
$C_8H_{17}F$	1-fluorooctane				[463-11-6]
		49.7	(298)		[U/1][85/6]
	(307–446)	44.1	(322)	A, EST	[87/5][61/13]
					[70/14]
$C_8H_{17}I$	1-iodooctane				[629-27-6]
	(391–554)	50.7	(406)	A, EST	[87/5][61/13]
					[70/14]
$C_8H_{17}NO$	N-propylpiperidine				[5470-07-0]
	(275–314)	45.2±0.4	(294)	GS	[98/12]
	(275–314)	44.9±0.4	(298)	GS	[98/12]
$C_8H_{17}NO$	butyric acid, N,N-diethylamide				[1114-76-7]
	(298–373)	38.7	(313)	A	[87/5]
$C_8H_{17}NO$	caprylaldehyde oxime				[929-55-5]
	(313–400)	71.3	(328)	A	[87/5]
$C_8H_{17}NO$	2-octanone oxime				[7207-49-0]
	(293–487)	67.5	(308)	A	[87/5]
$C_8H_{17}NO$	3-octanone oxime				[7207-50-3]
	(293–400)	67.2	(308)	A	[87/5]
$C_8H_{17}NO$	4-octanone oxime				[7207-51-4]
	(293–400)	68.8	(308)	A	[87/5]
$C_8H_{17}NO_2$	2,4,4-trimethyl-2-nitropentane				
	(288–324)	54.2±0.8	(298)	GS	[97/5]
$C_8H_{17}NO_2$	lactic acid, N-isopentylamide				
	(386–433)	77.9	(401)	A	[87/5]
$C_8H_{17}NO_2$	lactic acid, N-pentylamide				
	(373–448)	81.8	(388)	A	[87/5]
$C_8H_{17}NO_2$	(*l*) leucine ethyl ester				[2743-60-4]
	(333–449)	43.5	(348)	A	[87/5]
$C_8H_{17}NO_2$	ethyl 2-(N,N-dimethylamino)-2-methylpropionate				
		55.6±0.4	(283)	DSC	[93/15]
$C_8H_{17}NO_2$	(1-methylheptyl)nitrite				
	(303–338)	44.9	(318)	A	[87/5]
C_8H_{18}	2,2-dimethylhexane				[590-73-8]
		37.3	(298)		[71/28]
	(243–380)	39.7	(258)		[47/5]
		37.3±0.1	(298)	C	[47/7]
	(302–381)	36.6	(317)	A, MM	[87/5][45/2]
C_8H_{18}	2,3-dimethylhexane				[584-94-1]
		38.8	(298)		[71/28]
	(250–388)	41.4	(265)		[47/5]
		38.8±0.1	(298)	C	[47/7]
	(310–390)	37.6	(325)	A, MM	[87/5][45/2]
C_8H_{18}	2,4-dimethylhexane				[589-43-5]
		37.8	(298)		[71/28]
	(246–382)	41.0	(261)		[47/5]
		37.8±0.1	(298)	C	[47/7]
	(305–385)	36.9	(320)	A, MM	[87/5][45/2]
C_8H_{18}	2,5-dimethylhexane				[592-13-2]
		37.9	(298)		[71/28]
	(246–382)	41.1	(261)		[47/5]
		37.9±0.1	(298)	C	[47/7]
	(307–383)	36.9	(322)	A, MM	[87/5][45/2]
C_8H_{18}	3,3-dimethylhexane				[563-16-6]
	(247–385)	41.2	(262)		[47/5]
		37.5±0.1	(298)	C	[47/7]
	(308–386)	36.6	(323)	A, MM	[87/5][45/2]
C_8H_{18}	3,4-dimethylhexane				[583-48-2]
	(251–390)	41.3	(266)		[47/5]
		39.0±0.1	(298)	C	[47/7]
	(313–392)	37.7	(328)	A, MM	[87/5][45/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_8H_{18}	3-ethylhexane				[619-99-8]
		39.7	(298)		[71/28]
	(251–391)	42.4	(268)		[47/5]
		39.6±0.1	(298)	C	[47/7]
	(314–393)	38.2	(329)	A, MM	[87/5][45/2]
C_8H_{18}	3-ethyl-2-methylpentane				[609-26-7]
		38.5	(298)		[71/28]
		38.5±0.1	(298)	C	[47/7]
	(311–390)	37.4	(326)	A, MM	[87/5][45/2]
C_8H_{18}	3-ethyl-3-methylpentane				[1067-08-9]
		38.0	(298)		[71/28]
	(249–391)	40.2	(264)		[47/5]
		38.0±0.1	(298)	C	[47/7]
	(312–393)	36.9	(327)	A, MM	[87/5][45/2]
C_8H_{18}	2-methylheptane				[592-27-8]
	(285–392)	39.8	(300)	A	[87/5]
		39.7±0.1	(298)	C	[79/13]
		38.7±0.1	(313)	C	[79/13]
		37.3±0.1	(333)	C	[79/13]
		36.0±0.1	(353)	C	[79/13]
	(233–283)	41.6	(268)	IPM	[87/5][74/11]
		39.7	(298)		[71/28]
		39.8±0.1	(298)	C	[47/7]
	(315–391)	38.1	(330)	MM	[45/2]
C_8H_{18}	3-methylheptane				[589-81-1]
		39.8±0.2	(298)	C	[87/19]
	(286–393)	40.1	(301)	A	[87/5]
	(238–286)	41.6	(271)	IPM	[87/5][74/11]
		39.8	(298)		[71/28]
		39.8±0.1	(298)	C	[47/7]
	(316–393)	38.3	(331)	MM	[45/2]
C_8H_{18}	4-methylheptane				[589-53-7]
		39.7±0.1	(298)	C	[79/13]
		38.7±0.1	(313)	C	[79/13]
		37.4±0.1	(333)	C	[79/13]
		36.1±0.1	(353)	C	[79/13]
		39.7	(298)		[71/28]
	(253–391)	42.3	(268)		[47/5]
		39.7±0.1	(298)	C	[47/7]
	(312–392)	38.2	(327)	A, MM	[87/5][45/2]
C_8H_{18}	octane				[111-65-9]
		41.6	(298)		[94/12]
	(297–400)	41.0	(312)	A	[87/5]
	(216–278)	44.4	(263)	A	[87/5]
	(396–432)	36.3	(411)	A	[87/5]
	(428–510)	35.5	(443)	A	[87/5]
	(506–569)	34.9	(521)	A	[87/5]
	(295–402)	41.2	(310)		[86/13]
	(298–333)	41.9	(313)		[84/15]
		41.5±0.1	(298)	C	[81/9]
		41.5±0.1	(298)	C	[79/13]
		40.5±0.1	(313)	C	[79/13]
		39.1±0.1	(333)	C	[79/13]
		37.8±0.1	(353)	C	[79/13]
	(217–297)	43.0	(282)		[73/11]
		41.5	(298)		[71/28]
		38.0±0.1	(311)	C	[60/21]
		36.7±0.1	(328)	C	[60/21]
		35.4±0.1	(344)	C	[60/21]
		41.5±0.1	(298)	C	[47/7]
	(326–400)	39.2	(341)	MM	[45/2]
C_8H_{18}	2,2,3,3-tetramethylbutane				[594-82-1]
	(377–390)	333.0	(383)	A	[87/5]
C_8H_{18}	(*dl*) 2,2,3-trimethylpentane				[560-21-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		37.7±0.1	(298)	C	[98/16]
		37.1±0.1	(308)	C	[98/16]
		36.6±0.1	(315)	C	[98/16]
		36.0±0.1	(323)	C	[98/16]
		35.5±0.1	(330)	C	[98/16]
		35.1±0.1	(338)	C	[98/16]
		34.8±0.1	(348)	C	[98/16]
		34.1±0.1	(358)	C	[98/16]
		33.5±0.1	(368)	C	[98/16]
		36.9	(298)		[71/28]
		36.9±0.1	(298)	C	[47/7]
	(306–384)	36.1	(321)	A, MM	[87/5][45/2]
C_8H_{18}	2,2,4-trimethylpentane				[540-84-1]
	(373–423)	34.9	(298)	CGC	[95/21]
	(289–333)	36.1	(304)		[91/3]
	(423–523)	31.6	(438)	A	[87/5]
	(372–416)	32.2	(387)	A	[87/5]
	(413–494)	31.5	(428)	A	[87/5]
	(490–544)	31.4	(505)	A	[87/5]
		35.2±0.1	(298)	C	[82/10]
		34.4±0.1	(313)	C	[82/10]
		33.4±0.1	(328)	C	[82/10]
		32.6±0.1	(343)	C	[82/10]
		31.7±0.1	(358)	C	[82/10]
		31.0±0.1	(368)	C	[82/10]
		35.1±0.1	(298)	C	[79/13]
		34.3±0.1	(313)	C	[79/13]
		33.2±0.1	(333)	C	[79/13]
		32.0±0.1	(353)	C	[79/13]
		35.1	(298)		[71/28]
	(194–299)	40.7	(209)	A	[87/5][56/5]
		35.1±0.1	(298)	C	[47/7]
	(297–374)	34.8	(312)	A, MM	[87/5][45/2]
		31.0	(371)	C	[40/6]
	(318–399)	33.9	(333)	EB	[40/14]
C_8H_{18}	2,3,3-trimethylpentane				[560-21-4]
		37.6±0.1	(298)	C	[98/16]
		36.9±0.1	(308)	C	[98/16]
		36.5±0.1	(315)	C	[98/16]
		36.0±0.1	(323)	C	[98/16]
		35.5±0.1	(330)	C	[98/16]
		35.1±0.1	(338)	C	[98/16]
		34.4±0.1	(348)	C	[98/16]
		33.9±0.1	(358)	C	[98/16]
		33.3±0.1	(368)	C	[98/16]
		37.2	(298)		[71/28]
		36.9±0.1	(298)	C	[47/7]
		37.2±0.1	(298)	C	[47/7]
	(308–390)	36.4	(323)	A, MM	[87/5][45/2]
C_8H_{18}	2,3,4-trimethylpentane				[565-75-3]
	(288–400)	37.7	(303)	A	[87/5]
	(223–289)	39.1	(274)	A	[87/5]
		37.7±0.1	(298)	C	[81/9]
	(223–426)	41.3	(238)	IPM, EB	[74/11]
	(223–278)	39.8	(263)	IPM	[74/11]
		37.7	(298)		[71/28]
		37.7±0.1	(298)	C	[47/7]
	(310–388)	36.7	(325)	MM	[45/2]
$C_8H_{18}N_2$	dibutyldiazene				[2159-75-3]
		49.3±0.2	(298)	C	[78/3]
$C_8H_{18}N_2$	di-*tert*-butyldiazene				[927-83-3]
		39.1±0.3	(298)	C	[76/3]
	(294–305)	39.6	(299)	UV	[74/32]
		32.7		I	[74/32]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_{18}N_2$	butylhydrazone butyraldehyde				
	(298–323)	55.6	(310)		[80/20]
$C_8H_{18}N_2$	isobutylhydrazone isobutyraldehyde				
	(288–313)	57.2	(300)		[80/20]
$C_8H_{18}N_2O$	dibutyldiazene N-oxide				[16649-52-8]
		45.9±0.1	(298)	C	[81/7]
$C_8H_{18}O$	heptyl methyl ether				[629-32-3]
		46.9	(298)		[U/1][85/6]
$C_8H_{18}O$	butyl *tert*-butyl ether				[1000-63-1]
		43.2	(298)		[U/2][02/32]
		41.6±0.2	(298)	C	[02/11]
		42.3±0.3	(298)	C	[91/12]
	(293–397)	41.7	(308)	A	[87/5]
	(356–397)	38.3	(371)	EB	[87/5][69/13]
$C_8H_{18}O$	*tert*-butyl isobutyl ether				[33021-02-2]
		41.2±0.3	(298)		[U/2][02/32]
		39.2±0.3	(298)	C	[02/11]
	(273–308)	40.9±0.3	(298)	GS	[96/11]
		40.1±0.1	(298)	C	[91/12]
$C_8H_{18}O$	butyl isobutyl ether				[17071-47-5]
	(328–406)	40.3	(343)	A	[87/5]
$C_8H_{18}O$	sec-butyl *tert*-butyl ether				
		41.3	(298)		[U2/][02/32]
$C_8H_{18}O$	1-methyl-1-*tert*-butoxypropane				[32970-45-9]
		40.3±0.2	(298)	C	[91/12]
$C_8H_{18}O$	dibutyl ether				[142-96-1]
	(339–415)	40.9	(354)	A	[87/5]
	(336–415)	41.7	(351)	A	[87/5]
		44.7±0.1	(298)	C	[82/6]
		45.0±0.1	(298)	C	[80/3]
	(362–414)	44.4	(298)		[76/2]
	(362–414)	36.4	(413)		[76/2]
	(362–413)	40.6	(377)	EB	[69/15]
	(386–440)	39.4	(413)		[65/20]
$C_8H_{18}O$	di-*tert*-butyl ether				[6163-66-2]
	(290–386)	37.7±0.3	(298)	EB	[96/5]
	(289–382)	37.3	(304)	A	[87/5][76/2]
	(289–382)	37.2	(298)		[76/2]
	(289–382)	31.6	(380)		[76/2]
		37.6±0.1	(298)	C	[75/3]
	(277–382)	38.7	(292)	A	[87/5][61/20]
$C_8H_{18}O$	diisobutyl ether				[628-55-7]
	(320–396)	38.9	(335)	A	[87/5]
$C_8H_{18}O$	propyl *tert*-amyl ether				
		43.8±0.7	(298)		[U/2][02/32]
$C_8H_{18}O$	isopropyl *tert*-amyl ether				
		41.6	(298)		[U/2][02/32]
$C_8H_{18}O$	2-ethyl-1-hexanol				[104-76-7]
	(373–398)	52.7	(388)		[73/14]
	(347–457)	60.2	(362)	A	[87/5][61/12]
$C_8H_{18}O$	3-ethyl-3-hexanol				[597-76-2]
	(331–433)	49.2	(345)		[73/26]
$C_8H_{18}O$	2-ethyl-4-methyl-1-pentanol				[10137-88-9]
	(343–450)	58.9	(358)	A	[87/5][61/12] [73/26]
$C_8H_{18}O$	2-methyl-1-heptanol				[106-67-2]
	(350–449)	53.3	(365)	A	[87/5][73/26]
$C_8H_{18}O$	3-methyl-1-heptanol				[1070-32-2]
	(360–459)	53.4	(375)	A	[87/5][73/26]
$C_8H_{18}O$	4-methyl-1-heptanol				[817-91-4]
	(357–456)	55.9	(372)	A	[87/5]
	(354–456)	56.7	(369)		[73/26]
$C_8H_{18}O$	(*dl*) 5-methyl-1-heptanol				[7212-53-5]
	(364–460)	57.6	(379)	A	[87/5][73/26]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_{18}O$	6-methyl-1-heptanol				[1653-40-3]
	(368–610)	61.0	(383)	A	[87/5][73/26]
$C_8H_{18}O$	2-methyl-2-heptanol				[625-25-2]
	(343–430)	53.1	(358)	A	[87/5]
	(339–429)	55.0	(354)		[73/26]
$C_8H_{18}O$	3-methyl-2-heptanol				[31367-46-1]
	(341–440)	48.0	(356)	A	[87/5][73/26]
$C_8H_{18}O$	4-methyl-2-heptanol				[56298-90-9]
	(351–445)	54.2	(366)	A	[87/5][73/26]
$C_8H_{18}O$	5-methyl-2-heptanol				[54630-50-1]
	(348–445)	51.9	(363)	A	[87/5]
	(348–445)	47.2	(363)		[73/26]
$C_8H_{18}O$	(*dl*) 6-methyl-2-heptanol				[4730-22-7]
	(354–445)	55.2	(369)	A	[87/5][73/26]
$C_8H_{18}O$	(*dl*) 2-methyl-3-heptanol				[18720-62-2]
	(349–441)	54.8	(364)	A	[87/5][73/26]
$C_8H_{18}O$	3-methyl-3-heptanol				[5582-82-1]
	(344–433)	54.1	(359)	A	[87/5]
	(338–433)	54.7	(353)		[73/26]
$C_8H_{18}O$	4-methyl-3-heptanol				[14979-39-6]
	(330–429)	43.9	(345)	A	[87/5][73/26]
$C_8H_{18}O$	5-methyl-3-heptanol				[18720-65-5]
	(330–427)	46.5	(345)	A	[87/5][73/26]
$C_8H_{18}O$	(*dl*) 6-methyl-3-heptanol				[18720-66-6]
	(333–432)	47.6	(348)	A	[87/5]
$C_8H_{18}O$	2-methyl-4-heptanol				[21570-35-4]
	(348–440)	54.8	(363)	A	[87/5]
	(345–437)	56.3	(360)		[73/26]
$C_8H_{18}O$	(*dl*) 3-methyl-4-heptanol				[1838-73-9]
	(340–438)	48.0	(355)	A	[87/5][73/26]
$C_8H_{18}O$	4-methyl-4-heptanol				[598-01-6]
	(344–434)	54.4	(359)	A	[87/5]
	(331–434)	54.8	(345)		[73/26]
$C_8H_{18}O$	2,5-dimethyl-3-hexanol				[19550-07-3]
	(337–431)	55.0	(352)		[73/26]
$C_8H_{18}O$	1-octanol				[111-87-5]
	(282–321)	69.6	(303)	GS	[01/3]
	(282–321)	70.1	(298)	GS	[01/3]
	(373–423)	71.6	(298)	CGC	[95/21]
	(273–363)	68.7	(318)		[92/14]
	(328–400)	67.3	(343)	A	[87/5]
	(430–474)	52.5	(445)	A	[87/5]
	(397–479)	56.6	(412)	A	[87/5]
	(475–555)	47.8	(490)	A	[87/5]
		71.0±0.4	(298)	C	[77/1]
	(343–468)	67.5	(358)		[73/26]
	(386–480)	58.3	(401)	EB	[87/5][70/2]
	(352–468)	65.0	(367)	DTA	[69/5]
	(293–353)	70.4	(308)		[66/7]
	(267–282)	64.0	(274)	A, ME	[87/5][65/15]
	(365–427)	61.6	(380)		[58/2]
$C_8H_{18}O$	(*dl*) 2-octanol				[123-96-6]
	(253–353)	70.7	(268)		[99/11]
	(333–453)	60.7	(348)	A	[87/5]
	(367–453)	56.1	(382)		[84/10]
	(345–453)	60.0	(360)		[73/26]
$C_8H_{18}O$	(*dl*) 3-octanol				[20296-29-1]
	(253–348)	71.6	(268)		[99/11]
	(313–450)	64.1	(328)	A	[87/5]
	(366–450)	54.5	(381)		[84/10]
	(349–449)	58.8	(364)		[73/26]
$C_8H_{18}O$	(*dl*) 4-octanol				[589-62-8]
	(343–450)	57.3	(358)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(364–449)	54.8	(379)		[84/10]
	(341–449)	62.1	(356)		[73/26]
$C_8H_{18}O$	(*dl*) 2,4,4-trimethyl-1-pentanol				[123-44-4]
		60.6±0.1	(328)	C	[96/9]
		58.6±0.1	(343)	C	[96/9]
		56.5±0.1	(358)	C	[96/9]
	(352–446)	54.2	(367)	A	[87/5]
	(333–441)	54.7	(348)		[73/26]
$C_8H_{18}O$	2,2,3-trimethyl-3-pentanol				[7294-05-5]
	(318–426)	47.3	(333)		[73/26]
$C_8H_{18}O$	2,2,4-trimethyl-3-pentanol				[5162-48-1]
	(328–428)	57.1	(343)		[73/26]
$C_8H_{18}O_2$	di-*tert*-butyl peroxide				[110-05-4]
	(308–358)	37.0	(333)		[95/23]
	(308–358)	38.9	(298)		[95/23]
	(246–311)	32.0	(261)	A	[87/5][78/6]
	(273–384)	31.0	(288)	A	[87/5][51/10]
$C_8H_{18}O_2$	1,2-dipropoxyethane				[18854-56-3]
	(234–453)	U28.2	(249)	A	[87/5]
		50.6±0.1	(298)	C	[70/17]
$C_8H_{18}O_2$	1-butoxy-2-ethoxyethane				[4413-13-2]
		50.9±0.1	(298)	C	[70/17]
$C_8H_{18}O_2$	ethylene glycol mono(2-ethylbutyl) ether				[4468-93-3]
	(357–470)	53.4	(372)	A	[87/5]
$C_8H_{18}O_2$	ethylene glycol monohexyl ether				[112-25-4]
	(363–483)	54.6	(378)	A	[87/5]
$C_8H_{18}O_2$	3-hydroxymethyl-4-heptanol				
	(375–518)	61.6	(390)	A	[87/5]
$C_8H_{18}O_2$	2,2,4-trimethyl-1,3-pentanediol				[144-19-4]
	(396–489)	66.6±2.1	(400)	EB	[02/14]
	(396–489)	60.3±1.7	(440)	EB	[02/14]
	(396–489)	55.0±1.6	(480)	EB	[02/14]
	(413–502)	58.5	(428)	A	[87/5]
$C_8H_{18}O_3$	diethylene glycol diethyl ether				[112-36-7]
		56.4±1.4	(298)	CGC	[00/9]
	(330–461)	48.3	(345)	A	[87/5]
$C_8H_{18}O_3$	diethylene glycol monobutyl ether				[112-36-7]
	(415–505)	55.7	(430)	A	[87/5]
$C_8H_{18}O_4$	1,2-*bis*(2-methoxyethoxy)ethane (triglyme)				[112-49-2]
		63.7±3.3	(298)	CGC	[00/9]
$C_8H_{18}O_4S_2$	2,2-butanediol *bis*(ethylsulfonate)				[76-20-0]
	(443–493)	75.7	(458)	A	[87/5][99/16]
$C_8H_{18}O_5$	tetraethylene glycol				[112-60-7]
	(426–581)	92.2	(441)	A	[87/5][47/5]
$C_8H_{18}S$	dibutyl sulfide				[544-40-1]
	(283–390)	40.3	(298)		[99/16]
		53.0	(298)		[81/12]
		54.2±0.8	(298)	GC	[64/17]
	(390–470)	46.5	(405)	A, EB	[87/5][52/9]
$C_8H_{18}S$	di-*tert*-butyl sulfide				[626-26-6]
	(264–329)	44.9	(279)		[99/16]
	(329–470)	41.4	(344)		[99/16]
	(390–470)	46.4	(405)		[99/16]
	(278–308)	44.8	(293)		[98/25]
	(324–420)	42.4	(339)	A	[87/5]
		43.8	(298)		[81/12]
		43.8±0.1	(298)		[72/11]
		49.3±0.8	(298)	GC	[64/17]
	(325–350)	42.3	(333)	EB	[62/17]
$C_8H_{18}S$	diisobutyl sulfide				[592-65-4]
	(325–346)	46.4	(335)	A	[87/5][99/16]
		48.7	(298)		[81/12]
		48.5±0.8	(298)	GC	[64/17]
	(326–346)	43.1	(336)	EB	[62/17]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_{18}S$	1-octanethiol				[111-88-6]
	(372–473)	49.6	(387)	A	[87/5][99/16]
					[32/2]
$C_8H_{18}S$	2-octanethiol				[3001-66-9]
	(347–489)	49.0	(362)		[99/16]
$C_8H_{18}S$	(*dl*) 2-octanethiol				[10435-81-1]
	(361–460)	48.0	(376)	A	[87/5][99/16]
					[32/2]
$C_8H_{18}S_2$	dibutyl disulfide				[629-45-8]
	(383–423)	64.1	(298)	CGC	[95/21]
		62.3±0.2	(298)	C	[85/2]
		62.3	(298)		[81/12]
$C_8H_{18}S_2$	diisobutyl disulfide				
		57.2	(298)		[81/12]
$C_8H_{18}S_2$	2,7-dimethyl-4,5-dithiaoctane				[1518-72-5]
		57.2±0.1	(298)	C	[85/2]
$C_8H_{18}S_2$	2,2,5,5-tetramethyl-3,4-dithiahexane				[110-06-5]
	(383–423)	53.8	(298)	CGC	[95/21]
		52.5±0.2	(298)	C	[85/2]
		52.5	(298)		[81/12]
$C_8H_{18}S_2$	1,8-octanedithiol				[1191-62-4]
	(405–543)	60.9	(420)	A	[87/5][43/6]
					[99/16]
$C_8H_{19}N$	N-butyl isobutylamine				[20810-06-4]
	(313–423)	41.2	(328)	A	[87/5]
$C_8H_{19}N$	N,N-dibutylamine				[111-92-2]
	(343–479)	46.0	(358)	A	[87/5]
		46.0±0.1	(343)	C	[79/8]
		44.8±0.1	(358)	C	[79/8]
	(291–305)	48.1	(298)		[71/13]
		49.4±0.1	(298)	C	[69/2]
	(273–333)	45.7±0.3	(298)	I	[69/16]
$C_8H_{19}N$	N,N-diisobutylamine				[110-93-3]
	(291–305)	39.3	(298)		[71/13]
	(273–333)	43.1±0.3	(298)	I	[69/16]
	(268–413)	43.8	(283)	A	[87/5][47/5]
$C_8H_{19}N$	N,N-di-sec-butylamine				
	(273–333)	41.3±0.3	(298)	I	[69/16]
$C_8H_{19}N$	2-ethylhexylamine				[104-75-6]
	(341–447)	44.8	(356)	A	[87/5]
$C_8H_{19}N$	octylamine				[111-86-4]
	(343–494)	54.8±0.5	(298)	EB	[96/4]
	(323–373)	54.6	(298)	CGC	[95/21]
	(308–453)	50.8	(323)	A	[87/5]
$C_8H_{19}O_2PS_3$	O,O-diethyl-S-[2-(ethylthio)ethyl] dithiophosphate				[298-04-4]
	(283–401)	76.7	(298)	A	[87/5][99/16]
$C_8H_{19}O_3P$	dibutyl phosphite				[1809-19-4]
	(298–438)	37.8	(313)	A	[87/5]
$C_8H_{19}O_3P$	diisopropyl ethylphosphonate				
		60.7±4.2			[56/23][82/15]
$C_8H_{19}O_3PS_2$	O,O-diethyl-O-[2-(ethylthio)ethyl] thiophosphate				[298-03-3]
	(283–411)	78.7	(298)	A	[87/5][99/16]
$C_8H_{19}O_3PS_2$	O,O-diethyl-S-[2-(ethylthio)ethyl] thiophosphate				[126-75-0]
	(283–401)	76.4	(298)	A	[87/5][99/16]
$C_8H_{20}ClN$	dibutylammonium chloride				[6287-40-7]
	(553–563)	116.7	(558)	A	[87/5][99/16]
$C_8H_{20}N_2$	tetraethylhydrazine				[4267-00-9]
	(308–368)	33.4	(323)	A	[87/5]
$C_8H_{20}N_2$	N,N,N′,N′-tetramethyl-1,3-butanediamine				[97-84-7]
	(273–363)	49.2	(288)		[02/42]
	(335–439)	42.7	(350)	A	[87/5]
$C_8H_{20}N_2O_2S$	N,N,N′,N′-tetraethylsulfamide				[2832-49-7]
	(407–528)	59.1	(422)	A	[87/5]
$C_8H_{20}N_2O_3$	*tris*(2-hydroxyethyl)ethylenediamine				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(373–472)	90.0		GS	[98/7]
$C_8H_{20}O_5P_2S_2$	dithiopyrophosphoric acid, tetraethyl ester				[3689-24-5]
	(293–409)	80.6	(308)	A	[87/5][99/16]
$C_8H_{20}O_7P_2$	pyrophosphoric acid, tetraethyl ester				[107-49-3]
	(283–411)	82.2	(298)	A	[87/5]
$C_8H_{23}N_5$	tetraethylene pentamine				[112-57-2]
	(464–615)	71.3	(478)	A	[87/5]
$C_8H_{24}N_4O_3P_2$	pyrophosphoric acid *tetrakis*(dimethylamide)				[152-16-9]
	(273–415)	65.5	(288)	A	[87/5]
C_9F_{16}	*trans* perfluorohydrindane				
		45.2±0.1	(298)	C	[96/26]
$C_9F_{17}NO_3S$	perfluoro-1-octanesulfonylisocyanate				[34834-20-3]
	(324–470)	67.7	(339)	A	[87/5][99/16]
C_9F_{18}	perfluoro(propylcyclohexane)				[374-59-4]
	(321–396)	40.4	(336)		[99/16]
		43.1±0.1	(298)	C	[96/26]
		43.1±0.5	(298)	EB	[81/23]
		43.1±0.1	(298)	C	[81/23]
C_9F_{18}	perfluoro(isopropylcyclohexane)				
		46.7±0.1	(298)	C	[96/26]
$C_9F_{18}N_2$	1,1,1,3,3,3-hexafluoro-N,N′-*bis*[2,2,2-trifluoro-1-(trifluoromethy)-ethyidene]-2,2-propanediamine				[34451-14-4]
	(314–381)	35.5	(329)	A	[87/5][72/21]
$C_9F_{18}O_3$	carbonic acid, *bis*[1,1,1,3,3,3-hexafluoro-2-(trifluoromethyl)-2-propyl] ester				[40719-69-5]
	(316–358)	39.7	(331)	A	[87/5][75/22]
$C_9F_{19}NO$	2,2,2-trifluoro-N-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-ethanimidic acid, 1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl ester				[54120-06-8]
		37.6	(385)		[75/20]
C_9F_{20}	perfluorononane				[375-96-2]
	(387–524)	32.8	(402)	A	[87/5][67/12]
					[99/16]
$C_9F_{21}N$	perfluoro-N-methyl-N,N-dibutylamine				[514-03-4]
	(339–407)	48.8±0.8	(298)	EB	[95/20]
		48.2±0.1	(298)	C	[95/20]
$C_9F_{21}N$	*tris*(heptafluoropropyl)amine				[338-83-3]
		46.6±0.3	(298)	C	[95/20]
	(329–403)	46.9±0.7	(298)	EB	[95/20]
	(333–403)	40.6	(348)	A	[87/5]
$C_9H_4O_5$	trimellitic acid anhydride				[552-30-7]
	(558–596)	65.6	(573)	A	[87/5]
$C_9H_5ClN_2O_2$	5-chloro-2,4-diisocyanato-1-methylbenzene				[15166-26-4]
	(373–433)	66.7	(388)	A	[87/5]
	(373–433)	60.2±0.2	(403)		[72/26]
$C_9H_6Cl_6O_3S$	Endosulfan I				[959-98-8]
	(343–453)	80.4	(398)	GC	[90/2]
$C_9H_6Cl_6O_3S$	Endosulfan II				[33213-65-9]
	(343–453)	82.4	(398)	GC	[90/2]
$C_9H_6Cl_6O_4S$	Endosulfan sulfate				[1031-07-8]
	(343–453)	85.6	(398)	GC	[90/2]
$C_9H_6N_2O_2$	2,4-toluene diisocyanate				[584-84-9]
	(373–530)	59.7	(388)	A	[87/5]
	(393–530)	59.5	(408)	A	[87/5]
	(373–530)	61.3	(388)	I	[75/13]
	(373–433)	57.7±0.2	(403)		[72/26]
$C_9H_6N_2O_2$	2,6-toluene diisocyanate				[91-08-7]
	(373–463)	60.4	(388)	A	[87/5]
$C_9H_6O_2$	coumarin				[91-64-5]
	(379–463)	63.2	(394)	A	[87/5][47/5]
$C_9H_7Cl_3O_3$	2,4,5-trichlorophenoxyacetic acid, methyl ester				[1928-37-6]
	(444–573)	76.9	(459)	A	[87/5][99/16]
$C_9H_7F_3O_2$	trifluoroacetic acid, 3-tolyl ester				[1736-09-0]
	(363–439)	47.4	(378)	A, EB	[87/5][69/13]
					[99/16]
$C_9H_7F_3O_2$	trifluoroacetic acid, 4-tolyl ester				[1813-29-2]
	(365–442)	47.8	(380)	A, EB	[87/5][69/13]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[99/16]
C_9H_7N	isoquinoline				[119-65-3]
	(439–517)	51.0	(454)	A, EB	[87/5][61/10]
C_9H_7N	quinoline				[91-22-5]
	(573–668)	46.9	(588)	DSC	[96/10]
	(504–616)	46.5	(519)		[92/1]
	(463–794)	46.1	(478)	A	[87/5]
	(286–309)	58.1	(298)	GS	[80/6]
	(433–511)	49.2	(448)	EB	[87/5][61/10]
C_9H_8	indene				[95-13-6]
	(369–457)	45.3	(384)	A	[87/5]
	(289–455)	43.6	(304)	A	[87/5][47/5]
	(329–454)	43.9	(392)		[42/3]
$C_9H_8Cl_2O_3$	2,4-dichlorophenoxyacetic acid, methyl ester				[1928-38-7]
	(403–548)	68.0	(418)	A	[87/5][99/16]
$C_9H_8Cl_3NO_3$	2,2,4-trichloro-5-(4-morpholinyl)-4-cyclopentene-1,3-dione				[75907-45-8]
	(453–483)	79.6	(468)	GC	[80/25]
$C_9H_8N_2$	1-phenylpyrazole				[1126-00-7]
		70.2±3.4	(298)	C	[00/1]
$C_9H_8N_2$	1-phenylimidazole				[7164-98-9]
		84.6±3.7	(298)	C	[00/1]
C_9H_8O	1-indanone				[83-33-0]
	(318–348)	60.3±0.4		GS	[98/3]
C_9H_8O	3-phenyl-2-propenal (cinnamaldehyde)				[14371-10-9]
		62.4	(298)	GC	[02/37]
	(408–482)	51.7	(444)	TGA	[02/40]
	(349–519)	58.2	(364)	A	[87/5][47/5]
	(353–373)	72.7	(363)	A	[87/5]
$C_9H_8O_2$	*trans* cinnamic acid				[140-10-3]
	(430–573)	73.9	(445)	A	[87/5]
$C_9H_8O_2$	7,7-dimethoxynorborane				[39869-70-0]
	(321–357)	49.0	(339)	EB	[94/16]
$C_9H_9F_6NO_5$	(*l*) N,O-*bis*(trifluoroacetal)-threonine methyl ester				[1548-45-4]
	(323–413)	72.5	(338)	A	[87/5][99/16]
C_9H_9N	3-methylindole (skatole)				[83-34-1]
	(368–540)	64.5	(383)	A	[87/5][47/5]
C_9H_9N	α-methylbenzylcyanide				[1823-91-2]
	(284–318)	60.8±0.7	(301)	GS	[00/2]
	(284–318)	60.9±0.7	(298)	GS	[00/2]
$C_9H_9NO_4$	3-nitrobenzoic acid, ethyl ester				[618-98-4]
	(381–571)	65.1	(396)	A	[87/5][47/5]
C_9H_{10}	indane				[496-11-7]
	(374–466)	44.0	(389)	A	[87/5]
		49.0	(298)	C	[81/10]
	(355–482)	45.0	(370)		[76/26]
C_9H_{10}	2-methylstyrene				[611-15-4]
	(305–385)	47.9	(320)	A	[87/5][53/13]
C_9H_{10}	3-methylstyrene				[100-80-1]
	(314–385)	47.5	(329)	A	[87/5][53/13]
C_9H_{10}	4-methylstyrene				[622-97-9]
	(304–390)	47.6	(319)	A	[87/5][53/13]
C_9H_{10}	α-methylstyrene				[98-83-9]
	(274–314)	49.2±0.3	(294)	GS	[99/21]
		48.9±0.3	(298)		[99/21]
	(331–467)	48.6±0.4	(298)	EB	[97/6]
	(343–493)	44.3	(358)	A	[87/5]
	(353–413)	44.8	(368)	A	[87/5]
C_9H_{10}	*cis* β-methylstyrene				[766-90-5]
	(348–498)	44.8	(363)	A	[87/5]
C_9H_{10}	*trans* β-methylstyrene				[873-66-5]
	(291–452)	46.4	(306)	A	[87/5][47/5]
C_9H_{10}	allylbenzene				[300-57-2]
	(274–313)	46.5±0.2	(294)	GS	[99/21]
		46.3±0.2	(298)		[99/21]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_9H_{10}Cl_2O_4$	2,6-dichlorosyringaldehyde				
	(293–323)	82.2	(308)	CGC	[99/13]
$C_9H_{10}F_2$	1,1-difluoro-3-phenylpropane				
	(278–318)	53.3±0.4	(298)	GS	[97/14]
$C_9H_{10}O$	allyl phenyl ether				[1746-13-0]
	(349–456)	49.4	(364)	A	[87/5]
$C_9H_{10}O$	cinnamyl alcohol				[104-54-1]
	(295–325)	68.1±0.1	(310)	TG,DTA	[02/3]
	(310–328)	79.8	(319)	A	[87/5]
	(373–523)	56.2	(388)	A	[87/5]
$C_9H_{10}O$	2,4-dimethylbenzaldehyde				[15764-16-6]
	(358–489)	57.4	(373)	A	[87/5]
$C_9H_{10}O$	5-hydroxyindane				[1470-94-6]
	(393–524)	55.4	(408)	A	[87/5]
$C_9H_{10}O$	4′-methylacetophenone				[122-00-9]
	(288–333)	59.6	(303)	A	[87/5]
$C_9H_{10}O$	2-phenylpropionaldehyde				[93-53-8]
	(364–517)	52.3±0.2	(360)	EB	[02/21]
	(364–517)	49.4±0.2	(400)	EB	[02/21]
	(364–517)	46.6±0.3	(440)	EB	[02/21]
	(364–517)	43.4±0.5	(480)	EB	[02/21]
$C_9H_{10}O$	3-phenylpropionaldehyde				[104-53-0]
	(330–363)	67.5	(345)	A	[87/5]
$C_9H_{10}O$	benzyl methyl ketone				[103-79-7]
	(343–383)	56.1	(298)	CGC	[95/21]
	(343–383)	55.0	(298)	CGC	[95/21]
	(273–328)	53.5±0.3	(298)		[54/8]
$C_9H_{10}O$	ethyl phenyl ketone (propiophenone)				[93-55-0]
	(388–623)	52.1	(403)	A	[87/5]
	(391–454)	44.4	(406)	EB, GS	[65/7]
$C_9H_{10}O$	2-vinylanisole				[612-15-7]
	(314–467)	56.7	(329)	A	[87/5][47/5]
$C_9H_{10}O$	3-vinylanisole				[626-20-0]
	(316–471)	55.9	(331)	A	[87/5][47/5]
$C_9H_{10}O$	4-vinylanisole				[637-69-4]
	(318–478)	54.9	(333)	A	[87/5][47/5]
$C_9H_{10}O_2$	methyl *o*-toluate				[89-71-4]
		57.3±0.2	(293)	C	[98/6]
$C_9H_{10}O_2$	methyl *m*-toluate				[99-36-5]
		60.3±0.2	(296)	C	[98/6]
		53.5	(388)		[74/1]
$C_9H_{10}O_2$	acetic acid, 3-tolyl ester				[122-46-3]
	(385–480)	55.7	(400)	A, EB	[87/5][69/13]
$C_9H_{10}O_2$	acetic acid, 4-tolyl ester				[140-39-6]
	(385–480)	55.9	(400)	A, EB	[87/5][69/13]
$C_9H_{10}O_2$	2-acetylanisole				[579-74-8]
		56.5			[86/10]
$C_9H_{10}O_2$	4-acetylanisole				[100-06-1]
	(311–334)	66.5	(322)	A, ME	[87/5][54/9]
$C_9H_{10}O_2$	3,4-dihydro-2*H*-1,5-benzodioxepin				[7216-18-4]
		55.6			[58/25]
$C_9H_{10}O_2$	benzyl acetate				[140-11-4]
	(283–490)	55.5	(298)	A	[87/5]
	(283–328)	60.4	(305)	ME	[54/10]
$C_9H_{10}O_2$	ethylbenzoate				[93-89-0]
	(369–531)	52.5±0.2	(380)	EB	[02/15]
	(369–531)	49.6±0.2	(420)	EB	[02/15]
	(369–531)	46.7±0.3	(460)	EB	[02/15]
	(369–531)	43.6±0.5	(500)	EB	[02/15]
	(344–440)	57.0	(356)	BG	[88/2]
	(344–440)	50.5	(419)	BG	[88/2]
	(288–333)	55.9	(303)	A	[87/5]
	(358–487)	50.4	(373)	A	[87/5]
	(317–486)	51.9	(332)		[47/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_9H_{10}O_2$	3-phenylpropionic acid				[501-52-0]
	(375–553)	67.0	(390)	A	[87/5]
$C_9H_{10}O_2$	3-methylbenzoic acid, methyl ester				[99-36-5]
	(359–500)	54.8	(374)	A	[87/5]
$C_9H_{10}O_2$	(phenoxymethyl)oxirane				[122-60-1]
	(400–532)	69.9±0.7	(298)	EB	[97/18]
	(400–532)	60.3±0.5	(400)	EB	[97/18]
	(400–532)	56.7±0.4	(440)	EB	[97/18]
	(400–532)	53.1±0.4	(480)	EB	[97/18]
	(400–532)	51.3±0.5	(500)	EB	[97/18]
	(400–532)	49.4±0.6	(520)	EB	[97/18]
	(343–373)	65.6±0.1			[76/21]
$C_9H_{10}O_2$	2-phenyl-1,3-dioxolane				[936-51-6]
	(285–333)	62.6±0.7	(298)	GS	[02/32]
	(298–333)	62.1±0.3	(316)	GS	[95/25]
$C_9H_{10}O_3$	ethyl salicylate				[118-61-6]
	(288–333)	59.2	(303)	A	[87/5]
	(334–505)	55.2	(349)	A	[87/5]
$C_9H_{10}O_3$	2-furanacrylic acid, ethyl ester				[623-20-1]
	(428–500)	56.8	(443)	A	[87/5]
$C_9H_{10}O_3$	methyl 4-methoxybenozate				[121-98-2]
	(382–472)	61.1	(397)	EB	[85/9]
$C_9H_{10}O_3$	ethyl 4-hydroxybenzoate				[120-47-8]
		72.6		TGA	[01/20]
$C_9H_{10}O_3$	*cis,cis* 3-methyl-4-cyclohexene-1,2-dicarboxylic acid anhydride				[35438-32-5]
	(325–525)	49.5±1.0			[84/14]
$C_9H_{11}Br$	1-bromo-2-isopropylbenzene				[7073-94-1]
	(404–484)	48.4	(419)		[99/16]
	(378–528)	49.8	(393)	A	[87/5][70/14]
$C_9H_{11}Br$	1-bromo-4-isopropylbenzene				[586-61-8]
	(362–493)	51.1	(377)		[99/16]
	(388–528)	50.4	(403)	A	[87/5][70/14]
$C_9H_{11}Br$	cumyl bromide				[3575-19-7]
		58.0	(298)	CGC	[02/29]
$C_9H_{11}Cl$	1-chloro-2-isopropylbenzene				[2077-13-6]
	(341–465)	48.1	(356)		[99/16]
	(363–508)	47.7	(378)	A	[87/5][70/14]
$C_9H_{11}Cl$	1-chloro-4-isopropylbenzene				[2621-46-7]
	(307–472)	51.4	(322)		[99/16]
	(368–513)	48.5	(383)	A	[87/5][70/14]
$C_9H_{11}Cl$	cumyl chloride				[934-53-2]
		54.7	(298)	CGC	[02/29]
$C_9H_{11}ClO_2$	propylene glycol mono(4-chlorophenyl) ether				[67146-43-4]
	(417–542)	64.9	(432)	A	[87/5][99/16]
$C_9H_{11}ClO_4$	2-chlorosyringaldehyde				
	(293–323)	77.7	(308)	CGC	[99/13]
$C_9H_{11}ClS$	benzyl (2-chloroethyl) sulfide				[4322-51-8]
	(293–333)	52.3	(308)	A, GS	[87/5][48/9]
					[99/16]
$C_9H_{11}F_5O_2$	pentafluoropropionic acid, cyclohexyl ester				[24262-73-5]
	(335–428)	46.4	(350)	A, EB	[87/5][69/13]
$C_9H_{11}I$	cumyl iodide				[54290-22-1]
		63.3	(298)	CGC	[02/29]
$C_9H_{11}NO$	N-methylacetanilide				[579-10-2]
	(383–519)	60.1	(398)	A	[87/5]
	(377–526)	56.7	(392)		[47/5]
$C_9H_{11}NO_2$	1-nitro-2-isopropylbenzene				[6526-72-3]
	(278–323)	65.5±0.7	(301)	GS	[00/15]
		65.6±0.7	(298)		[00/15]
$C_9H_{11}NO_2$	ethyl 2-aminobenzoate (ethyl anthranilate)				[87-25-2]
	(433–593)	59.6	(448)	A	[87/5]
$C_9H_{11}NO_2$	ethyl carbanilate				[101-99-5]
	(380–510)	84.2	(395)	A	[87/5][47/5]
C_9H_{12}	*cis* bicyclo[4.3.0]nona-3,7-diene				[38451-18-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(356–429)	41.8	(371)	A	[87/5]
C_9H_{12}	(Z) 5-ethylidene-2-norbornene				[28304-66-7]
	(315–462)	44.3±0.3	(298)	EB	[97/18]
	(315–462)	43.0±0.3	(320)	EB	[97/18]
	(315–462)	40.5±0.3	(360)	EB	[97/18]
	(315–462)	38.0±0.3	(400)	EB	[97/18]
	(315–462)	35.2±0.5	(440)	EB	[97/18]
C_9H_{12}	5-ethylidene-2-norbornene				[3048-64-4]
	(314–420)	42.3±0.3	(298)	EB	[96/5]
C_9H_{12}	*trans* 5-ethylidene-2-norbornene				[28304-67-8]
	(346–416)	41.2	(361)	A	[87/5]
C_9H_{12}	2-ethyltoluene				[611-14-3]
		46.9	(298)		[94/11]
		47.7	(298)		[71/28]
	(353–443)	43.6	(368)	A	[87/5][49/6]
C_9H_{12}	3-ethyltoluene				[620-14-4]
		46.6	(298)		[94/11]
		46.9	(298)		[71/28]
	(348–438)	43.4	(363)	A	[87/5][49/6]
C_9H_{12}	4-ethyltoluene				[622-96-8]
		46.5	(298)		[94/11]
		46.6	(298)		[71/28]
	(349–442)	43.2	(364)	A	[87/5][49/6]
C_9H_{12}	isopropylbenzene				[98-82-8]
		45.1	(298)		[94/11]
	(349–426)	41.2	(364)		[89/6]
	(339–433)	42.1	(354)	A	[87/5]
		45.1±0.1	(298)	C	[82/5]
		44.0	(298)		[75/12]
		45.1	(298)		[71/28]
		45.1	(298)	C	[47/7]
	(343–426)	41.9	(358)	MM	[49/6][45/2]
C_9H_{12}	propylbenzene				[103-65-1]
		46.2	(298)		[94/11]
	(340–391)	43.8	(355)		[86/13]
		45.0	(298)		[75/12]
		46.2	(298)		[71/28]
		46.2	(298)	C	[47/7]
	(348–433)	42.7	(363)	A, MM	[87/5][49/6] [45/2]
C_9H_{12}	3a,4,7,7a-tetrahydro-1*H*-indene				[3048-65-5]
	(338–440)	42.3	(353)	A	[87/5]
C_9H_{12}	1,2,3-trimethylbenzene				[526-73-8]
		49.0	(298)		[94/11]
		48.8	(298)		[74/14]
	(363–456)	44.8	(378)	A	[87/5][49/6]
		49.1	(298)		[71/28]
		49.1	(298)	C	[47/7]
C_9H_{12}	1,2,4-trimethylbenzene				[95-63-6]
		48.0	(298)		[94/11]
		47.2	(298)		[74/14]
		47.9	(298)		[71/28]
	(357–450)	44.1	(372)	A	[87/5][49/6]
		47.9	(298)	C	[47/7]
C_9H_{12}	1,3,5-trimethylbenzene				[108-67-8]
		47.6	(298)		[94/11]
	(296–342)	46.2±1.3	(319)	MM	[91/7]
	(296–342)	47.5±2.1	(298)	MM	[91/7]
	(348–424)	43.5	(363)		[89/7]
	(249–356)	49.7	(264)	A	[87/5]
		47.5±0.1	(298)	C	[87/19]
	(354–445)	43.9	(369)	A	[87/5][49/6]
	(273–299)	47.7	(286)	MM	[81/19]
		47.5	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		47.5	(298)	C	[47/7]
C_9H_{12}	5-vinyl-2-norbornene				[3048-64-4]
	(301–410)	42.0	(316)	A	[87/5]
	(354–409)	48.9	(369)	A	[87/5]
$C_9H_{12}NO_5PS$	O,O-dimethyl-O-(3-methyl-4-nitrophenyl)thiophosphate				[122-14-5]
	(293–382)	78.0	(308)	A	[87/5]
$C_9H_{12}N_2$	n-pentylmalodinitrile				
	(298–328)	66.9±0.4		GS	[90/4]
$C_9H_{12}N_2$	phenylhydrazone acetone				[103-02-6]
	(413–436)	74.6	(424)	A	[87/5]
$C_9H_{12}O$	(1-methoxyethyl)benzene				
	(298–313)	49.2±0.4	(296)	GS	[01/16]
	(298–313)	49.1±0.4	(298)	GS	[01/16]
$C_9H_{12}O$	benzyl ethyl ether				[539-30-0]
	(278–314)	53.5±0.4	(298)	GS	[02/29]
	(299–460)	48.0	(314)	A	[87/5][47/5]
$C_9H_{12}O$	2-ethylanisole				[14804-32-1]
	(302–460)	49.8	(317)	A	[87/5][47/5]
$C_9H_{12}O$	3-ethylanisole				[10568-38-4]
	(306–470)	49.3	(321)	A	[87/5][47/5]
$C_9H_{12}O$	4-ethylanisole				[1515-95-3]
	(306–470)	51.9	(321)	A	[87/5][47/5]
$C_9H_{12}O$	5-ethyl-3-methylphenol				
	(468–521)	55.0	(483)	A, GS, EB	[87/5][64/14]
	(385–506)	58.5			[55/9]
$C_9H_{12}O$	2-isopropylphenol				[88-69-7]
	(375–493)	63.5	(390)	EB	[90/5]
	(370–489)	55.1	(385)	A	[87/5]
	(375–493)	56.1	(390)		[86/7]
	(335–501)	57.3	(350)		[47/5]
$C_9H_{12}O$	3-isopropylphenol				[618-45-1]
	(377–497)	64.3	(392)	A	[87/5]
$C_9H_{12}O$	4-isopropylphenol				[99-89-8]
	(391–507)	63.7	(406)	EB	[90/5]
	(380–496)	63.1	(395)	A	[87/5]
$C_9H_{12}O$	isopropyl phenyl ether				[2741-16-4]
	(345–448)	49.5	(360)	A	[87/5][65/25]
					[84/9]
$C_9H_{12}O$	3-phenyl-1-propanol				[122-97-4]
	(284–328)	62.8	(299)	A	[87/5]
	(347–508)	62.6	(362)		[47/5]
$C_9H_{12}O$	2-phenyl-2-propanol				[617-94-7]
	(391–423)	52.9	(406)	A	[87/5]
$C_9H_{12}O$	phenyl propyl ether				[622-85-5]
	(374–463)	46.5	(389)	A	[87/5]
$C_9H_{12}O$	2-propylphenol				[644-35-9]
	(377–495)	56.9	(392)	A	[87/5]
	(381–504)	59.9	(398)		[53/9]
	(381–504)	57.2	(423)		[53/9]
	(381–504)	53.0	(473)		[53/9]
$C_9H_{12}O$	3-propylphenol				[621-27-2]
	(408–538)	60.2	(423)	A	[87/5]
	(386–512)	59.9	(398)		[53/9]
	(386–512)	57.2	(423)		[53/9]
	(386–512)	53.0	(473)		[53/9]
$C_9H_{12}O$	4-propylphenol				[645-56-7]
	(383–508)	56.7	(398)	A	[87/5]
	(347–517)	61.3	(348)		[53/9]
	(347–517)	59.5	(373)		[53/9]
	(347–517)	58.4	(398)		[53/9]
	(347–517)	56.2	(423)		[53/9]
	(347–517)	51.5	(473)		[53/9]
$C_9H_{12}O$	2,3,5-trimethylphenol				[697-82-5]
	(459–521)	53.9	(474)	A, GS, EB	[87/5][64/14]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(379–506)	55.1	(394)		[55/9]
$C_9H_{12}O$	2,4,5-trimethylphenol				[496-78-6]
	(379–505)	56.5	(394)	A	[87/5][55/9]
$C_9H_{12}O$	2,4,6-trimethylphenol				[527-60-6]
	(367–494)	53.2	(382)	A	[87/5][55/9]
$C_9H_{12}O$	3,4,5-trimethylphenol				[527-54-8]
	(396–521)	61.1	(411)	A	[87/5]
$C_9H_{12}O$	2,5,6-trimethylphenol				[2416-94-6]
	(359–503)	51.1±0.2	(431)		[88/4]
$C_9H_{12}O$	α,α-dimethylbenzyl alcohol				[617-94-7]
	(311–338)	63.4±0.5	(325)	GS	[99/3]
	(311–338)	65.0±0.5	(298)	GS	[99/3]
$C_9H_{12}O_2$	trimethylhydroquinone				[700-13-0]
	(450–501)	45.5±0.3	(475)		[88/4]
$C_9H_{12}O_2$	cumene hydroperoxide				[80-15-9]
	(283–333)	69.9	(298)	A	[87/5]
	(347–390)	74.0	(362)	A	[87/5]
$C_9H_{12}O_2$	1,3-dihydroxy-5-methyl-2-ethylbenzene				
	(388–453)	77.1	(403)	A, GC	[87/5][75/24]
$C_9H_{12}O_2$	3,5-dimethoxytoluene				[4179-19-5]
	(374–520)	59.5	(389)	A	[87/5]
$C_9H_{12}O_2$	ethylene glycol monobenzyl ether				[622-08-2]
	(453–530)	58.6	(468)	A	[87/5]
$C_9H_{12}O_2$	propylene glycol 1-phenyl ether				[770-35-4]
	(389–509)	59.5	(404)	A	[87/5]
$C_9H_{12}O_2$	isopropyl catechol (isomer not specified)				
	(393–453)	65.3	(423)		[65/21]
$C_9H_{12}O_2$	benzaldehyde dimethyl acetal				[1125-88-8]
	(278–318)	60.9±0.5	(298)	GS	[02/32]
	(283–318)	56.5±0.7	(300)	GS	[95/25]
$C_9H_{12}O_3$	1,3,5-trimethoxybenzene				[621-23-8]
		68.2±2.0	(298)	CGC	[00/9]
$C_9H_{12}S$	benzyl ethyl sulfide				[6263-62-3]
	(346–370)	56.0	(358)		[99/16]
	(345–500)	54.8	(360)	A	[87/5]
		56.9±2.1	(298)		[62/20]
$C_9H_{12}S$	2-ethylthioanisole				[20760-06-9]
	(481–511)	44.3	(496)		[99/16]
$C_9H_{12}S$	ethyl *m*-tolyl sulfide				[34786-24-8]
	(472–502)	43.5	(487)		[99/16]
$C_9H_{12}S$	ethyl *p*-tolyl sulfide				[622.63-9]
	(473–503)	43.6	(488)		[99/16]
$C_9H_{12}S$	(isopropylthio)benzene				[3019-20-3]
	(461–491)	U23.6	(476)		[99/16]
$C_9H_{12}S$	(propylthio)benzene				[874-79-3]
	(473–503)	44.3	(488)		[99/16]
$C_9H_{13}Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-hexyl ester				[76619-95-9]
	(433–483)	69.5		GC	[80/24]
$C_9H_{13}N$	α,α-dimethylbenzylamine				
	(283–323)	56.4±0.7	(303)	GS	[99/3]
	(283–323)	56.7±0.7	(298)	GS	[99/3]
$C_9H_{13}N$	N,N-dimethylbenzylamine				[103-83-3]
	(288–328)	48.9±0.4	(308)	GS	[99/3]
	(288–328)	49.5±0.4	(298)	GS	[99/3]
		50.1±0.9	(298)	C	[96/21]
$C_9H_{13}N$	N,N-dimethyl-2-toluidine				[609-72-3]
	(301–458)	52.4	(316)	A	[87/5][47/5]
$C_9H_{13}N$	N,N-dimethyl-3-toluidine				[121-72-2]
		58.2±6.9	(298)	CGC	[96/1]
$C_9H_{13}N$	N,N-dimethyl-4-toluidine				[99-97-8]
	(323–483)	60.7	(338)	A	[87/5][47/5]
$C_9H_{13}N$	N-ethyl-3-toluidine				[102-27-2]
		60.0±3.0	(298)	CGC	[96/1]
$C_9H_{13}N$	2-isopropylaniline				[643-28-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(286–326)	61.3±0.9	(306)	GS	[00/14]
		61.8±0.9	(298)		[00/14]
$C_9H_{13}N$	4-isopropylaniline				[99-88-7]
	(333–500)	57.5	(348)	A	[87/5][47/5]
$C_9H_{13}N$	1-phenyl-2-propylamine				[300-62-9]
	(333–353)	53.4	(343)	A	[87/5]
$C_9H_{13}N$	2,4,6-trimethylaniline				[88-05-1]
	(341–510)	64.1	(356)	A	[87/5][47/5]
C_9H_{14}	1-ethyltricyclo[2,2,1,$0^{2,6}$]heptane				
		42.0±0.1	(298)	C	[96/18]
C_9H_{14}	2-methylenebicyclo[2.2.2]octane				[2972-20-5]
		45.2			[74/33]
C_9H_{14}	2-methylbicyclo[2.2.2]oct-2-ene				[4893-13-4]
	(363–402)	40.2	(378)	A	[87/5]
		43.5±0.4	(298)	EB	[74/20][74/33]
C_9H_{14}	2-vinylbicyclo[2.2.1]heptane				[2146-39-6]
	(350–385)	38.6	(365)	A	[87/5]
$C_9H_{14}F_3NO_3$	N-trifluoroacetyl-*l*-leucine, methyl ester				[1115-39-5]
	(273–463)	55.9	(288)	A	[87/5][99/16]
$C_9H_{14}N_2$	azelaic acid dinitrile				[1675-69-0]
	(308–341)	80.4	(323)	A	[87/5]
$C_9H_{14}O$	*cis* 2-hexahydroindanone				[5689-04-3]
		57.5	(298)		[71/8]
$C_9H_{14}O$	*trans* 2-hexahydroindanone				[16484-17-6]
		56.1	(298)		[71/8]
$C_9H_{14}O$	2,5,6-trimethyl-2-cyclohexen-1-one				[20030-30-2]
	(371–478)	45.5±0.3	(425)		[88/4]
$C_9H_{14}O$	3,3,5-trimethyl-2-cyclohex-1-one (isophorone)				[78-59-1]
	(311–489)	48.6	(326)	A	[87/5][47/5]
$C_9H_{14}O$	2,6-dimethyl-2,5-heptadien-4-one (phorone)				[504-20-1]
	(315–471)	54.1	(330)	A	[87/5][47/5]
$C_9H_{14}O_2$	bicyclo[2.2.1]heptan-7-one ethylene ketal				
	(283–318)	53.8±0.2		GS	[98/21][02/32]
$C_9H_{14}O_2$	methyl 2-octynoate				[111-12-6]
	(283–312)	64.5	(297)	A, ME	[87/5][55/8]
$C_9H_{14}O_4$	diethyl citraconate				[691-83-8]
	(332–504)	54.9	(347)	A	[87/5][47/5]
$C_9H_{14}O_4$	diethyl itaconate				[2409-52-1]
	(324–501)	51.0	(339)	A	[87/5][47/5]
$C_9H_{14}O_4$	diethyl mesaconate				[2418-31-7]
	(335–502)	55.9	(350)	A	[87/5][47/5]
$C_9H_{14}O_4$	1,1-cyclopropanedicarboxylic acid diethyl ester				[1559-02-0]
	(288–318)	63.9±0.5		GS	[98/22]
$C_9H_{14}O_5$	diethyl acetylmalonate				[570-08-1]
	(363–510)	54.0	(378)	A	[87/5]
$C_9H_{14}O_5$	ethyl[(1-allyloxycarbonyl)ethyl] carbonate				
	(342–496)	61.3	(357)	A	[87/5]
$C_9H_{14}O_5$	2-lactyloxypropionic acid, allyl ester				
	(331–401)	75.1	(346)	A	[87/5]
$C_9H_{14}O_6$	glycerol triacetate				[102-76-1]
	(284–319)	82.0	(299)	A	[87/5]
		83.4±1.0	(298)	GCC	[80/5]
$C_9H_{14}O_7$	trimethyl citrate				[1587-20-8]
	(379–560)	67.4	(394)	A	[87/5][47/5]
$C_9H_{15}Cl_3O_2$	3-chloro-2,2-*bis*(chloromethyl)propyl butyrate				
	(426–482)	73.6	(441)	A	[87/5][99/16]
$C_9H_{15}NOS$	carbamothioic acid, (1-methylethyl)-2-propynyl-S-ethyl ester				[59300-33-3]
	(298–313)	72.8	(305)	A	[87/5][99/16]
$C_9H_{15}NOS$	carbamothioic acid, propyl-2-propynyl-S-ethyl ester				[59300-33-3]
	(298–313)	64.6	(305)	A	[87/5]
C_9H_{16}	1-nonyne				[3452-09-3]
	(320–464)	45.6±0.2	(320)	EB	[02/16]
	(320–464)	42.7±0.2	(360)	EB	[02/16]
	(320–464)	39.7±0.3	(400)	EB	[02/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(320–464)	36.4±0.5	(440)	EB	[02/16]
C_9H_{16}	*trans* bicyclo[6.1.0]nonane				[39124-79-3]
		42.7±0.6		EB	[78/15]
C_9H_{16}	*cis* bicyclo[6.1.0]nonane				[13757-43-2]
		49.8±0.8		EB	[78/15]
	(297–360)	50.4±0.8	(312)	A	[87/5][70/30]
C_9H_{16}	1,4-dimethylbicyclo[2.2.1]heptane				[20454-81-3]
	(328–393)	36.8	(343)	A	[87/5][70/6] [84/9]
C_9H_{16}	*trans* 2,3-dimethylbicyclo[2.2.1]heptane				[20558-16-1]
	(345–411)	39.3	(360)	A	[87/5][70/6] [84/9]
C_9H_{16}	2-ethylbicyclo[2.2.1]heptane				[2146-41-0]
	(349–396)	44.4	(364)	A	[87/5]
C_9H_{16}	*cis* hexahydroindan				[4551-51-3]
	(263–293)	47.1	(278)	A	[87/5]
	(290–366)	45.9	(305)	A	[87/5]
	(363–463)	41.9	(378)	A	[87/5]
	(350–442)	42.6	(365)	GS	[55/7]
C_9H_{16}	*trans* hexahydroindan				[3296-50-2]
	(281–362)	45.1	(296)	A	[87/5]
	(356–457)	41.1	(371)	A	[87/5]
	(262–283)	45.9	(272)	A	[87/5]
	(358–479)	41.0	(373)	A	[87/5]
	(345–435)	41.6	(360)	GS	[55/7]
C_9H_{16}	allylcyclohexane				[2114-42-3]
		44.0±0.2	(298)	GCC	[79/17]
C_9H_{16}	ethylidenecyclohexane				[1003-64-1]
		42.0±0.2	(298)	GCC	[79/17]
C_9H_{16}	spiro[4.4]nonane				[175-93-9]
	(278–313)	44.5±0.6	(298)	GS	[02/32]
$C_9H_{16}Cl_4$	1,1,1,9-tetrachlorononane				[1561-48-4]
	(303–434)	78.0	(318)		[99/16]
	(298–338)	89.0	(313)	A	[87/5]
$C_9H_{16}N_2$	2-methyl-2-piperdinopropionitrile				[2273-41-8]
		57.6±0.4		GS	[97/10]
$C_9H_{16}O$	cyclononanone				[3350-30-9]
	(333–413)	51.4	(348)	A	[87/5]
$C_9H_{16}O$	1-(1-methyl-3-cyclohexen-3-yl)ethanol				[2890-62-2]
	(358–410)	54.6	(373)	A	[87/5]
$C_9H_{16}O$	methyl (1-methylcyclohexyl) ketone				[2890-62-2]
	(374–414)	46.1	(389)	A	[87/5]
$C_9H_{16}O$	*trans* 2-nonenal				[18829-56-6]
	(363–398)	56.1	(378)	A	[87/5]
$C_9H_{16}O$	(*dl*) 3,5,5-trimethylcyclohexanone				[873-94-9]
	(423–463)	39.3	(438)	A	[87/5]
$C_9H_{16}O$	2,5,5-trimethyl-4-hexene-1-al				[1000-30-2]
	(293–353)	57.0	(308)	A	[87/5]
$C_9H_{16}OS$	tetrahydro-2,2,6,6-tetramethyl-4*H*-thiopyran-4-one				[22842-41-7]
	(300–360)	34.7	(315)	A	[87/5][72/27] [99/16]
$C_9H_{16}O_2$	bicyclo[2.2.1]heptan-7-one dimethyl ketal				[39869-70-0]
	(283–318)	50.2±0.2		GS	[98/21][02/32]
$C_9H_{16}O_2$	acetic acid, 2-methylcyclohexyl ester, mixed isomers				[5726-19-2]
	(337–457)	49.0	(353)	A	[87/5]
$C_9H_{16}O_2$	2-butyl-4,7-dihydro-1,3-dioxepine				[61732-95-4]
	(318–453)	50.9	(333)	A	[87/5]
$C_9H_{16}O_2$	hexyl acrylate				[2499-95-8]
	(342–461)	48.2	(357)	A	[87/5]
$C_9H_{16}O_2$	methacrylic acid, neopentyl ester				
	(313–338)	40.5	(325)	A	[87/5]
$C_9H_{16}O_2$	oxo-2-cyclodecanone (nonanolactone)				[6008-27-1]
	(352–381)	54.5±0.2	(366)	MM	[91/7]
	(352–381)	59.0±1.3	(298)	MM	[91/7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(333–383)	60.9	(348)	A	[87/5]
$C_9H_{16}O_2$	2,6-dimethyl-3,5-heptanedione				[18362-64-6]
		56.1	(298)		[78/18]
$C_9H_{16}O_2$	pentyl methacrylate				[2849-98-1]
	(339–456)	47.6	(354)	A	[87/5]
$C_9H_{16}O_3$	butyl levulinate				[2052-15-5]
	(338–511)	55.5	(373)	A	[87/5]
		56.0	(452)		[31/1]
$C_9H_{16}O_3$	sec-butyl levulinate				[2052-15-5]
	(393–499)	51.0	(408)	A	[87/5]
$C_9H_{16}O_3$	isobutyl levulinate				[3757-32-2]
	(338–503)	61.5	(353)	A	[87/5][47/5]
		54.7	(444)		[31/1]
$C_9H_{16}O_4$	2-acetoxypropionic acid, butyl ester				
	(325–485)	63.2	(340)	A	[87/5]
$C_9H_{16}O_4$	3-acetoxypropionic acid, butyl ester				[40326-38-3]
	(373–391)	75.4	(382)	A	[87/5]
$C_9H_{16}O_4$	diethyl glutarate				[818-38-2]
	(338–510)	55.7	(353)	A	[87/5][47/5]
$C_9H_{16}O_4$	ethylmalonic acid, diethyl ester				[133-13-1]
	(323–485)	55.3	(338)	A	[87/5][47/5]
$C_9H_{16}O_4$	nonanedioic acid (azelaic acid)				[123-99-9]
	(451–630)	89.3	(466)	A	[87/5][47/5]
$C_9H_{16}O_5$	butyl[1-(methoxycarbonyl)ethyl] carbonate				
	(349–510)	61.7	(364)	A	[87/5]
$C_9H_{16}O_5$	isobutyl[1-(methoxycarbonyl)ethyl] carbonate				
	(340–501)	59.1	(355)	A	[87/5]
$C_9H_{16}O_5$	2-lactoylpropionic acid, propyl ester				
	(327–397)	73.5	(342)	A	[87/5]
$C_9H_{16}O_5$	methyl[1-(butoxycarbonyl)ethyl] carbonate				
	(311–503)	60.2	(326)	A	[87/5]
$C_9H_{17}N$	*trans* (R,S)-decahydroquinoline				[767-92-0]
	(325–525)	50.4	(340)	EB, IPM	[94/17]
	(325–525)	47.6	(380)	EB, IPM	[94/17]
	(325–525)	45.0	(420)	EB, IPM	[94/17]
	(325–525)	42.3	(460)	EB, IPM	[94/17]
	(325–525)	39.5	(500)	EB,IPM	[94/17]
$C_9H_{17}N$	octyl cyanide				[2243-27-8]
	(328–503)	56.8	(343)	A	[87/5]
$C_9H_{17}NO_3$	(*dl*) N-acetylvaline ethyl ester				[56430-36-5]
	(382–466)	67.7	(397)	A	[87/5]
$C_9H_{17}NO_3S$	(*dl*) N-acetylmethionine ethyl ester				[33280-93-2]
	(432–519)	81.6	(447)	A	[87/5][99/16]
C_9H_{18}	butylcyclopentane				[2040-95-1]
	(413–432)	39.4	(422)	A	[87/5]
		43.8±0.1	(328)	C	[81/14]
		42.7±0.1	(343)	C	[81/14]
		41.6±0.1	(358)	C	[81/14]
		40.9±0.1	(368)	C	[81/14]
		46.0	(298)		[71/28]
C_9H_{18}	*cis* 1-ethyl-3-methylcyclohexane				[19489-10-2]
	(373–465)	39.0	(388)	A	[87/5]
C_9H_{18}	isopropylcyclohexane				[696-29-7]
	(295–431)	44.1	(310)	A	[87/5]
	(344–429)	41.1	(359)		[49/6]
C_9H_{18}	propylcyclohexane				[1678-92-8]
		42.8±0.5	(298)	GC	[87/17]
		44.7±0.4	(298)	GCC	[78/16]
		45.2	(298)		[71/28]
		45.2	(298)	C	[47/7]
	(346–431)	41.7	(361)	A, MM	[87/5][47/5] [49/6]
C_9H_{18}	1,1,3-trimethylcyclohexane				[3073-66-3]
	(348–411)	37.7	(363)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(327–410)	38.6	(342)		[62/24][84/9]
	(328–411)	38.4	(343)		[49/6]
C_9H_{18}	1,1,4-trimethylcyclohexane				[7094-27-1]
		45.6			[95/31]
C_9H_{18}	*cis* 1,3,5-trimethylcyclohexane				[1795-27-3]
	(318–410)	38.3	(333)	A	[87/5]
C_9H_{18}	2,6-dimethyl-1-heptene				[3074-78-0]
	(273–306)	46.3±0.5	(290)	GS	[00/7]
	(273–306)	45.9±0.5	(298)	GS	[00/7]
C_9H_{18}	1-nonene				[124-11-8]
	(278–318)	44.7±0.2	(298)	GS	[00/7]
		45.5	(298)		[71/28]
	(339–423)	42.0	(354)	A, MM	[87/5][50/6]
C_9H_{18}	*cis* 2-nonene				[6434-77-1]
	(379–424)	40.7	(394)	A	[87/5]
C_9H_{18}	*trans* 2-nonene				[6434-78-2]
	(379–422)	40.8	(394)	A	[87/5]
C_9H_{18}	*cis* 3-nonene				[20237-46-1]
	(376–422)	40.3	(391)	A	[87/5]
C_9H_{18}	*trans* 3-nonene				[20063-92-7]
	(377–421)	40.6	(392)	A	[87/5]
C_9H_{18}	*cis* 4-nonene				[10405-84-2]
	(376–421)	40.1	(391)	A	[87/5]
C_9H_{18}	*trans* 4-nonene				[10405-85-3]
	(376–420)	40.4	(391)	A	[87/5]
$C_9H_{18}Br_2$	1,1-dibromononane				[62168-27-8]
	(427–591)	59.5	(442)	A, EST	[87/5][56/16]
					[70/14][99/16]
$C_9H_{18}Cl_2$	1,1-dichlorononane				[821-88-5]
	(420–490)	62.3	(298)		[87/12][91/2]
	(398–556)	54.0	(413)	A, EST	[87/5][56/16]
					[70/14][99/16]
$C_9H_{18}Cl_2$	1,2-dichlorononane				[56375-96-3]
	(430–510)	52.1	(443)		[99/16]
	(430–510)	62.1	(298)		[86/5][91/2]
$C_9H_{18}F_2$	1,1-difluorononane				[62127-42-8]
	(347–482)	47.2	(362)	A, EST	[87/5][56/16]
					[70/14][99/16]
$C_9H_{18}F_2$	2,2-difluorononane				
	(279–313)	46.7±0.2	(298)	GS	[97/14]
$C_9H_{18}N_2$	2-(diethylamino)pentanenitrile				[19340-91-9]
	(283–318)	57.4±0.4		GS	[97/10]
	(283–326)	58.8	(298)	A	[87/5]
$C_9H_{18}O$	1-butylcyclopentanol				[1462-97-1]
	(359–466)	63.5	(374)	A	[87/5]
$C_9H_{18}O$	2,2,4,4-tetramethyl-3-pentanone				[815-24-7]
		45.5±0.4	(298)	C	[77/7]
		45.4±0.1	(298)	C	[70/18]
		45.4±0.1	(298)	C	[66/2]
$C_9H_{18}O$	2,6-dimethyl-4-heptanone				[108-83-8]
		49.8±0.1	(308)	C	[92/8]
		49.3±0.1	(313)	C	[92/8]
		48.4±0.1	(323)	C	[92/8]
		47.9±0.1	(328)	C	[92/8]
		47.1±0.1	(338)	C	[92/8]
		46.6±0.1	(343)	C	[92/8]
		46.1±0.1	(348)	C	[92/8]
		45.2±0.1	(358)	C	[92/8]
	(322–471)	51.0	(298)		[75/8]
		50.9±0.1	(298)	C	[70/18]
	(336–451)	46.8	(351)	A, MM	[87/5][47/8]
$C_9H_{18}O$	1-(1-methylcyclohexyl)ethanol				
	(358–408)	55.5	(373)	A	[87/5]
$C_9H_{18}O$	nonanal				[124-19-6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(323–343)	55.2	(298)	CGC	[96/7][00/10]
	(313–353)	58.9	(298)	CGC	[95/21]
	(306–458)	51.1	(321)	A	[87/5]
		56.3±0.2	(298)		[81/18]
$C_9H_{18}O$	2-nonanone				[925-78-0]
	(285–454)	55.6	(300)		[99/27]
	(335–468)	52.6	(350)	A	[87/5]
		56.6±0.6	(298)	GCC	[79/7]
		56.4±0.1	(298)	C	[77/2]
	(342–545)	56.4	(298)		[75/8]
	(335–437)	52.7	(348)		[66/12]
$C_9H_{18}O$	5-nonanone				[502-56-7]
	(443–486)	44.7	(458)	A	[87/5]
		54.9±0.4	(298)	GCC	[79/7]
	(357–468)	49.7	(372)	A	[87/5][75/8]
		55.0	(298)		[75/8]
		53.3±0.1	(298)	C	[70/19]
	(283–323)	40.2	(298)	A	[87/5][37/9]
$C_9H_{18}O$	3,3,5-trimethylcyclohexanol				[116-02-9]
	(343–473)	61.8	(358)	A	[87/5]
$C_9H_{18}O$	2,2,5-trimethyl-4-hexene-1-ol				[53965-16-5]
	(323–373)	61.5	(338)	A	[87/5]
$C_9H_{18}O_2$	2-butoxy-3-pentanone				[22432-66-2]
	(333–398)	39.8	(348)	A	[87/5]
$C_9H_{18}O_2$	2-butyl-1,3-dioxepane				[22432-66-2]
	(325–358)	57.4	(340)	A	[87/5]
$C_9H_{18}O_2$	2-ethylheptanoic acid				[3274-29-1]
	(386–475)	63.4	(401)	A, EB	[87/5][60/22]
$C_9H_{18}O_2$	2-methyl-2-pentyl-1,3-dioxolane				[4352-95-8]
	(278–318)	54.0±0.3	(298)	GS	[98/21][02/32]
$C_9H_{18}O_2$	2,2-diisopropyl-1,3-dioxolane				[4421-10-7]
	(278–318)	49.9±0.3	(293)	GS	[98/21][02/32]
$C_9H_{18}O_2$	2-hexyl-1,3-dioxolane				[1708-34-5]
	(325–353)	55.0	(339)	A	[87/5]
$C_9H_{18}O_2$	methyl 2,4,4-trimethylpentanoate				[64198-22-7]
	(278–318)	48.4±0.2	(298)	GS	[96/11]
$C_9H_{18}O_2$	butyl pivalate				[5129-37-3]
	(274–313)	50.4±0.3	(298)	GS	[96/11]
$C_9H_{18}O_2$	isobutyl isovalerate				[589-59-3]
	(289–442)	47.3	(304)	A	[87/5][47/5]
$C_9H_{18}O_2$	isopentyl butyrate				[106-27-4]
	(294–452)	47.4	(309)	A	[87/5][47/5]
$C_9H_{18}O_2$	isopentyl isobutyrate				[2050-01-3]
	(287–442)	47.4	(302)	A	[87/5][47/5]
$C_9H_{18}O_2$	isopropyl caproate				[2311-46-8]
	(307–383)	51.6	(322)	A	[87/5]
$C_9H_{18}O_2$	methyl octanoate (methyl caprylate)				[111-11-5]
		53.3	(350)		[02/27]
		52.6±0.1	(363)		[02/27]
		56.9±0.1	(298)		[02/27]
		54.7±0.6	(298)	GC	[87/17]
		57.3±0.4	(298)	GCC	[80/5]
		57.9±0.4	(298)	C	[77/7]
		56.4±0.5	(298)	C	[77/1]
	(347–470)	52.4	(362)	A, EST	[87/5][63/16]
	(373–419)	50.8	(388)		[61/6][84/9]
	(307–350)	55.2	(322)	MG, OM	[52/13]
$C_9H_{18}O_2$	nonanoic acid				[112-05-0]
	(381–528)	76.9	(396)	A	[87/5]
	(292–313)	85.3±2.0	(304)	ME, TE	[82/4]
	(293–303)	82.4±0.4	(298)		[68/20]
	(387–483)	64.2		EB	[60/22]
$C_9H_{18}O_2$	propyl caproate				[626-77-7]
	(315–394)	52.8	(330)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(315–394)	52.1	(330)		[61/6][84/9]
$C_9H_{18}O_2$	heptyl acetate				[112-06-1]
		56.9	(298)	GC	[9713]
	(387–478)	49.2	(402)	DTA	[80/8]
$C_9H_{18}O_2$	*tert*-amyl butyrate				[2050-00-2]
	(278–308)	50.8±0.6	(298)	GS	[96/11]
$C_9H_{18}O_2$	butyl 2-methylbutanoate				[15706-73-7]
	(278–313)	50.6±0.5	(298)	GS	[96/11]
$C_9H_{18}O_3$	2-butoxypropionic acid, ethyl ester				
	(348–438)	80.3	(363)	A	[87/5]
$C_9H_{18}O_3$	3-ethoxypropionic acid, butyl ester				[14144-35-5]
	(346–479)	51.8	(361)	A	[87/5]
$C_9H_{18}O_3$	3-hydroxypropionic acid, hexyl ester				
	(408–432)	69.6	(420)	A	[87/5]
$C_9H_{18}O_3$	lactic acid, hexyl ester				[20279-51-0]
	(307–494)	67.4	(322)	A	[87/5]
$C_9H_{18}O_3$	3-methoxypropionic acid, pentyl ester				[10500-16-0]
	(322–485)	53.3	(337)	A	[87/5]
$C_9H_{18}O_3$	3-propoxypropionic acid, propyl ester				[14144-41-3]
	(317–484)	50.9	(332)	A	[87/5]
$C_9H_{19}Br$	1-bromononane				[693-58-3]
	(376–525)	53.1	(391)		[99/16]
	(391–549)	52.2	(406)	A, EST	[87/5][61/13] [70/14]
$C_9H_{19}Cl$	1-chlorononane				[2473-01-0]
	(363–509)	51.5	(378)		[99/16]
	(340–480)	55.9	(298)		[84/9][91/2]
	(342–478)	53.4	(357)	A, DTA	[87/5][69/5]
$C_9H_{19}F$	1-fluorononane				[463-18-3]
	(278–313)	50.8±0.9	(298)	GS	[94/17]
	(333–473)	46.8	(348)	A, EST	[87/5][61/13] [70/14][99/16]
$C_9H_{19}I$	1-iodononane				[4282-42-2]
	(391–551)	54.6	(406)		[99/16]
	(408–577)	53.5	(423)	A	[87/5][70/14]
	(343–493)	64.3	(358)		[47/5]
$C_9H_{19}N$	2,2,6,6-tetramethylpiperidine				
	(288–313)	44.5±0.5	(300)		[97/21]
$C_9H_{19}N$	N-butylpiperidine				[4945-48-6]
	(275–313)	49.2±0.2	(294)	GS	[98/12]
	(275–313)	48.9±0.2	(298)	GS	[98/12]
$C_9H_{19}N$	N,N-diethyl-4-pentenylamine				[13173-21-2]
	(338–430)	41.5	(353)	A	[87/5]
$C_9H_{19}NO$	1-(cyclohexylamino)-2-propanol				[103-00-4]
	(423–512)	56.6	(438)	A	[87/5][84/9] [59/1]
$C_9H_{19}NO$	nonanamide				[1120-07-6]
	(353–370)	114.8	(361)	A	[87/5]
$C_9H_{19}NO_2$	heptylcarbamic acid, methyl ester				[35601-84-4]
	(368–408)	109.8	(383)	A	[87/5]
$C_9H_{19}NO_2$	propyl 2-(N,N-dimethylamino)-2-methylpropanoate				
	(282–318)	54.0±0.5	(298)	GS	[96/20]
$C_9H_{19}NO_2$	ethyl 2-(N,N-diethylamino)-2-propanoate				
	(283–313)	54.9±0.6	(298)	GS	[96/20]
C_9H_{20}	nonane				[111-84-2]
		46.7	(299)	C	[96/22]
		46.0	(314)	C	[96/22]
		46.6±0.2	(298)	C	[96/18]
		46.6	(298)		[94/12]
	(322–413)	43.9	(337)		[86/13]
		44.3	(328)	C	[84/8]
		43.2	(343)	C	[84/8]
		42.1	(358)	C	[84/8]
		46.4	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(219–308)	48.3	(234)	A	[87/5][73/11]
		46.4	(298)	C	[47/7]
	(344–426)	42.7	(359)	A, MM	[87/5][45/2] [49/6]
C_9H_{20}	2-methyloctane				[3221-61-2]
	(305–417)	43.2	(320)	A	[87/5]
		44.9	(298)		[71/28][61/30]
C_9H_{20}	3-methyloctane				[2216-33-3]
		44.9	(298)		[71/28][61/30]
C_9H_{20}	4-methyloctane				[2216-34-4]
		44.5	(298)		[71/28][61/30]
C_9H_{20}	3-ethylheptane				[15869-80-4]
		44.5	(298)		[71/28][61/30]
C_9H_{20}	4-ethylheptane				[2216-32-2]
		44.1	(298)		[61/30]
C_9H_{20}	2,2-dimethylheptane				[1071-26-7]
		42.3	(298)		[71/28][61/30]
C_9H_{20}	2,3-dimethylheptane				[3074-71-3]
		43.6	(298)		[71/28][61/30]
C_9H_{20}	2,4-dimethylheptane				[2213-23-2]
		42.9	(298)		[71/28][61/30]
C_9H_{20}	2,5-dimethylheptane				[2216-30-0]
		43.3	(298)		[71/28][61/30]
C_9H_{20}	2,6-dimethylheptane				[1072-05-5]
		43.3	(298)		[71/28][61/30]
C_9H_{20}	3,3-dimethylheptane				[4032-86-4]
		42.6	(298)		[71/28][61/30]
C_9H_{20}	3,4-dimethylheptane				[922-28-1]
		43.6	(298)		[71/28][61/30]
C_9H_{20}	3,5-dimethylheptane				[926-82-9]
		43.3	(298)		[71/28]
C_9H_{20}	4,4-dimethylheptane				[1068-19-5]
		42.2	(298)		[71/28][61/30]
C_9H_{20}	3,3-diethylpentane				[1067-20-5]
		42.6±0.3	(298)	GCC	[79/17]
		43.6	(298)		[71/28][61/30]
	(335–426)	39.8	(350)	A	[87/5][49/6]
C_9H_{20}	2-methyl-3-ethylhexane				[16789-46-1]
		43.2	(298)		[61/30]
C_9H_{20}	2-methyl-4-ethylhexane				[3074-75-7]
		42.9	(298)		[61/30]
C_9H_{20}	3-methyl-3-ethylhexane				[3074-76-8]
		42.9	(298)		[61/30]
C_9H_{20}	3-methyl-4-ethylhexane				
		43.6	(298)		[61/30]
C_9H_{20}	2,2,3-trimethylhexane				[16747-25-4]
	(238–303)	42.2	(288)	IPM	[74/11]
		41.7	(298)		[71/28][61/30]
C_9H_{20}	2,2,4-trimethylhexane				[16747-26-5]
	(288–410)	39.5	(303)	A	[87/5]
	(238–393)	41.0	(278)	A	[87/5]
	(238–303)	40.5	(288)	IPM	[74/11]
		40.7	(298)		[71/28]
C_9H_{20}	2,2,5-trimethylhexane				[3522-94-9]
	(288–399)	40.1	(303)	A	[87/5]
	(238–303)	41.1	(288)	A, IPM	[87/5][74/11]
		40.2	(298)		[71/28]
	(319–398)	38.5	(334)		[49/6]
		40.2	(298)	C	[47/7]
C_9H_{20}	2,3,3-trimethylhexane				[16747-28-7]
	(238–303)	44.2	(253)	A	[87/5]
	(288–422)	39.4	(303)	A	[87/5]
		42.1	(298)		[71/28][61/30]
C_9H_{20}	2,3,4-trimethylhexane				[921-47-1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		42.7	(298)		[71/28][61/30]
C_9H_{20}	2,3,5-trimethylhexane				[1069-53-0]
		41.4	(298)		[71/28]
		41.4	(298)	C	[47/7]
C_9H_{20}	2,4,4-trimethylhexane				[16747-30-0]
		41.1	(298)		[71/28][61/30]
	(323–406)	38.5	(338)	A	[87/5][49/6]
C_9H_{20}	3,3,4-trimethylhexane				[16747-31-2]
		42.2	(298)		[71/28][61/30]
C_9H_{20}	2,2-dimethyl-3-ethylpentane				[16747-32-3]
		41.7	(298)		[71/28][61/30]
C_9H_{20}	2,3-dimethyl-3-ethylpentane				[16747-33-4]
		42.7	(298)		[71/28][61/30]
C_9H_{20}	2,4-dimethyl-3-ethylpentane				[1068-87-7]
		42.3	(298)		[71/28][61/30]
C_9H_{20}	2,2,3,3-tetramethylpentane				[7154-79-2]
		41.2	(298)		[71/28][61/30]
	(328–415)	39.2	(343)	A	[87/5][49/6]
C_9H_{20}	2,2,3,4-tetramethylpentane				[1186-53-4]
		40.8	(298)		[71/28][61/30]
	(325–413)	38.4	(340)	A	[87/5][49/6]
C_9H_{20}	2,2,4,4-tetramethylpentane				[1070-87-7]
		38.5±0.1	(298)	C	[82/6]
		38.5±0.3	(298)	GCC	[79/17]
		38.2	(298)		[71/28][61/30]
	(313–397)	37.2	(328)	A	[87/5][49/6]
	(331–375)	36.5	(346)	EB	[41/9][84/9]
	(375–422)	34.8	(390)		[41/9]
C_9H_{20}	2,3,3,4-tetramethylpentane				[16747-38-9]
		41.8	(298)		[71/28][61/30]
	(331–416)	39.3	(346)	A	[87/5][49/6]
$C_9H_{20}ClF_3N_2S$	chloro*bis*(N-ethylethanaminato)(trifluoromethyl) sulfur				[63265-72-5]
		39.8	(479)	I	[77/15]
$C_9H_{20}ClF_3N_2OS$	chloro*bis*(N-ethylethanaminato)oxo(trifluoromethyl) sulfur				[63265-74-7]
		44.4	(486)	I	[77/15]
$C_9H_{20}N_2S$	1,3-dibutylthiourea				[109-46-6]
	(368–403)	105±2.0	(386)	ME, TE	[94/21]
$C_9H_{20}O$	1-nonanol				[143-08-8]
		72.2	(298)	CGC	[00/10]
	(373–423)	76.7	(298)	CGC	[95/21]
	(273–323)	77.4	(298)		[92/14]
	(368–500)	65.0	(383)	A	[87/5]
	(381–495)	62.9	(396)	A	[87/5]
		76.9±0.8	(298)	C	[77/1]
	(425–494)	59.7	(440)	EB	[76/13]
	(368–487)	64.5	(383)		[73/26]
	(365–487)	65.5	(380)	DTA	[69/5]
$C_9H_{20}O$	2-nonanol				[628-99-9]
	(253–353)	79.6	(268)		[99/11]
	(364–471)	55.5	(379)		[73/26]
$C_9H_{20}O$	3-nonanol				[624-51-1]
	(263–363)	75.5	(278)		[99/11]
	(366–468)	57.1	(381)		[73/26]
$C_9H_{20}O$	2-methyl-2-octanol				[628-44-4]
	(338–451)	64.6	(353)		[73/26]
$C_9H_{20}O$	2-methyl-3-octanol				[26533-34-6]
	(388–453)	49.5	(403)		[73/26]
$C_9H_{20}O$	3-methyl-3-octanol				[5340-36-3]
	(353–388)	53.2	(368)		[73/26]
$C_9H_{20}O$	2,2-dimethyl-4-heptanol				
	(320–445)	50.2	(335)		[73/26]
$C_9H_{20}O$	2,6-dimethyl-4-heptanol				[108-82-7]
	(363–453)	54.5	(378)		[73/26]
	(374–452)	52.8	(389)	A, MM	[87/5][47/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_9H_{20}O$	2,2,3-trimethyl-3-hexanol				[5340-41-0]
	(343–441)	55.1	(358)		[73/26]
$C_9H_{20}O$	2,4-dimethyl-3-ethyl-3-pentanol				[3970-59-0]
	(369–451)	50.0	(384)		[73/26]
$C_9H_{20}O$	2,2,3,4-tetramethyl-3-pentanol				[29772-39-2]
	(329–448)	60.8	(344)		[73/26]
$C_9H_{20}O$	butyl 1,1-dimethylpropyl ether				[3249-47-6]
	(278–308)	46.1±0.3	(298)	GS	[96/11]
$C_9H_{20}O$	2-methoxy-2,4,4-trimethylpentane				
	(381–418)	38.5	(396)		[01/14]
$C_9H_{20}O$	methyl *tert*-octyl ether				
		45.3	(298)		[U/2][02/32]
$C_9H_{20}O$	pentyl *tert*-butyl ether				[10100-95-5]
		48.3	(298)		[U/2][02/32]
	(319–365)	43.7	(334)	EB	[90/15]
	(319–365)	46.9±1.0	(298)	EB	[90/15]
$C_9H_{20}O$	isobutyl *tert*-amyl ether				
		46.3	(298)		[U/2][02/32]
$C_9H_{20}O$	sec-butyl *tert*-amyl ether				
		46.8	(298)		[U/2][02/32]
$C_9H_{20}O$	butyl *tert*-amyl ether				
		48.3	(298)		[U/2][02/32]
$C_9H_{20}O_2$	2,6,6-trimethyl-5-oxa-2-heptanol				
	(329–454)	53.3	(344)		[68/16][84/9]
$C_9H_{20}O_2$	dibutoxymethane				
	(366–452)	47.9	(381)	EB	[00/17]
$C_9H_{20}O_2$	1-butoxy-2-propoxyethane				[18854-58-5]
		54.7±0.1	(298)	C	[70/17]
$C_9H_{20}O_2$	2-butyl-2-ethyl-1,3-propanediol				[115-84-4]
	(424–523)	74.3±0.3	(420)	EB	[02/14]
	(424–523)	67.2±0.3	(460)	EB	[02/14]
	(424–523)	61.4±0.6	(500)	EB	[02/14]
$C_9H_{20}O_2$	4-*tert*-butoxy-2-methyl-2-butanol				[22419-28-9]
	(367–483)	61.5	(382)	A	[87/5]
$C_9H_{20}O_2$	2,2,4-trimethyl-1,6-hexanediol				[3089-24-5]
	(419–541)	68.0	(434)	A	[87/5]
$C_9H_{20}O_3$	dipropylene glycol isopropyl ether				
	(319–479)	55.0	(334)	A	[87/5][47/5]
$C_9H_{20}O_4$	tripropylene glycol				
	(369–541)	63.3	(384)	A	[87/5]
$C_9H_{20}S$	1-nonanethiol				[1455-21-6]
	(390–494)	52.6	(405)	A	[87/5][99/16] [32/2]
$C_9H_{20}S$	2-nonanethiol				[13281-11-3]
	(379–482)	50.3	(394)		[99/16][32/2]
$C_9H_{20}S_2$	1,9-nonanedithiol				[3489-28-9]
	(418–557)	63.6	(433)	A	[87/5][99/16] [43/6]
$C_9H_{21}N$	N-methyl octylamine				[2439-54-5]
	(365–508)	49.2	(380)	A	[87/5]
$C_9H_{21}N$	nonylamine				[112-20-9]
	(377–478)	50.7	(392)	A	[87/5]
$C_9H_{21}N$	tripropylamine				[102-69-2]
	(341–475)	45.6	(356)	A	[87/5]
		46.2±0.1	(298)	C	[69/2]
$C_9H_{21}NO_3$	triisopropanolamine				[122-20-3]
	(428–573)	73.7	(443)	A	[87/5]
$C_9H_{21}O_4P$	tripropylphosphate				[513-08-6]
	(394–525)	56.7	(409)	A	[87/5]
$C_9H_{21}P$	tripropylphosphine				[2234-97-1]
	(324–368)	39.4±0.2	(346)		[01/9]
$C_9H_{22}ClN_2PS$	P-(chloromethyl)-N,N′-*bis*(1-methylpropyl)phosphorothioic diamide				[58023-20-4]
	(333–368)	66.8	(348)	A	[87/5][99/16]
$C_{10}Cl_8$	octachloronaphthalene				[2234-13-1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(323–423)	96.1	(373)	GC	[99/9]
$C_{10}Cl_{12}$	Mirex				[2385-85-5]
	(343–453)	90.3	(398)	GC	[90/2]
$C_{10}F_{16}$	perfluorobicyclo[4.4.0]dec-1,6-diene				
		45.3±0.1	(298)	C	[96/26]
$C_{10}F_{18}$	perfluoro(*cis*-decahydronaphthalene)				[60433-11-6]
	(313–415)	43.9	(328)		[99/16]
		46.2±0.1	(298)	C	[96/26]
		46.7±0.6	(298)	EB	[81/23]
		46.2±0.1	(298)	C	[81/23]
$C_{10}F_{18}$	perfluoro(*trans*-decahydronaphthalene)				[60433-12-7]
	(315–417)	43.3	(330)		[99/16]
		45.4±0.1	(298)	C	[96/26]
		45.9±0.6	(298)	EB	[81/23]
		45.4±0.1	(298)	C	[81/23]
$C_{10}F_{20}$	perfluoro-1-decene				[35328-43-9]
	(315–399)	42.3	(330)		[99/16]
		45.2±0.6	(298)	EB	[81/23]
$C_{10}F_{20}$	perfluoro(1-methyl-4-isopropyl)cyclohexane				[116667-53-9]
	(339–418)	42.7	(354)		[99/16]
		46.7±0.5	(298)	EB	[81/23]
$C_{10}F_{20}$	perfluoro(isobutylcyclohexane)				[132868-02-1]
	(327–415)	43.4	(342)		[99/16]
		46.3±0.6	(298)	EB	[81/23]
		46.7±0.1	(298)	C	[81/23]
$C_{10}F_{20}N_2S$	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				[77984-27-1]
		29.3	(389)		[81/15]
$C_{10}F_{22}$	perfluorodecane				[307-45-9]
	(404–543)	34.0	(420)	A	[87/5][67/18] [99/16]
$C_{10}F_{22}O$	*bis*(undecafluoropentyl)ether				[464-36-8]
	(337–411)	49.9±1.5	(298)	EB	[89/13]
		49.5±0.1	(298)	C	[89/13]
	(288–313)	51.5	(300)	A	[87/5][99/16]
		47.3±0.8	(298)	EB	[76/7]
$C_{10}HCl_5F_{14}O_2$	2,2,3,4,4,5,6,6,7,8,8,9,10,10-tetradecafluoro-3,5,7,9,10-penta-chlorodecanoic acid				[335-74-0]
	(373–578)	80.6	(388)	A	[87/5][57/17] [99/16]
$C_{10}HCl_7$	1,2,3,4,5,6,7-heptachloronaphthalene				[58863-14-2]
	(323–423)	90.6	(373)	GC	[99/9]
$C_{10}H_2Cl_6$	1,2,4,5,6,8-hexachloronaphthalene				[90948-28-0]
	(323–423)	85.3	(373)	GC	[99/9]
$C_{10}H_2Cl_6$	1,2,3,5,7,8-hexachloronaphthalene				[103426-94-4]
	(323–423)	85.0	(373)	GC	[99/9]
$C_{10}H_2Cl_6$	1,2,3,5,6,7-hexachloronaphthalene				[103426-97-7]
	(323–423)	84.5	(373)	GC	[99/9]
$C_{10}H_2Cl_6$	1,2,3,4,6,7-hexachloronaphthalene				[103426-96-6]
	(323–423)	84.5	(373)	GC	[99/9]
$C_{10}H_2O_6$	pyromellitic acid dianhydride				[89-32-7]
	(641–665)	79.6	(576)	A	[87/5]
$C_{10}H_3Cl_5$	1,2,3,5,8-pentachloronaphthalene				[150224-24-1]
	(323–423)	80.5	(373)	GC	[99/9]
$C_{10}H_3Cl_5$	1,2,3,5,7-pentachloronaphthalene				[53555-65-0]
	(323–423)	78.2	(373)	GC	[99/9]
$C_{10}H_3Cl_5$	1,2,3,4,6-pentachloronaphthalene				[67922-26-3]
	(323–423)	78.9	(373)	GC	[99/9]
$C_{10}H_4Cl_4$	1,2,4,7-tetrachloronaphthalene				[67922-21-8]
	(323–423)	72.1	(373)	GC	[99/9]
$C_{10}H_4Cl_4$	1,2,3,5-tetrachloronaphthalene				[53555-63-8]
	(323–423)	73.4	(373)	GC	[99/9]
$C_{10}H_4Cl_4$	1,2,3,4-tetrachloronaphthalene				[20020-02-4]
	(323–423)	73.2	(373)	GC	[99/9]
$C_{10}H_5Cl_3$	1,2,3-trichloronaphthalene				[50402-52-3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(323–423)	68.0	(373)	GC	[99/9]
$C_{10}H_5Cl_7$	Heptachlor				[76-44-8]
	(343–453)	76.5	(398)	GC	[90/2]
$C_{10}H_5Cl_9$	*cis* Nonachlor				[5103-73-1]
	(343–453)	83.8	(398)	GC	[90/2]
$C_{10}H_5Cl_9$	*trans* Nonachlor				[39765-80-5]
	(343–453)	85.5	(398)	GC	[90/2]
$C_{10}H_6Cl_2$	1,2-dichloronaphthalene				[2050-69-3]
	(323–423)	60.7	(373)	GC	[99/9]
$C_{10}H_6Cl_2$	1,4-dichloronaphthalene				[1825-31-6]
	(323–423)	58.7	(373)	GC	[99/9]
$C_{10}H_6Cl_8$	*cis* Chlordane				[5103-71-9]
	(323–409)	83.0	(338)		[99/16]
	(343–453)	82.0	(398)	GC	[90/2]
$C_{10}H_6Cl_8$	*trans* Chlordane				[5103-74-2]
	(373–409)	81.7	(388)		[99/16]
	(343–453)	80.7	(398)	GC	[90/2]
$C_{10}H_6N_2O_4$	1,5-dinitronaphthalene				[605-71-0]
	(506–642)	74.7	(521)	A	[87/5]
$C_{10}H_6N_2O_4$	1,8-dinitronaphthalene				[602-38-0]
	(553–715)	78.5	(568)	A	[87/5]
$C_{10}H_7Br$	1-bromonaphthalene				[90-11-9]
	(357–555)	58.5	(372)		[87/5]
	(295–359)	56±6	(329)	ME	[80/7]
	(469–559)	45.8	(484)	A, EB	[87/5][76/13] [99/16]
$C_{10}H_7Br$	2-bromonaphthalene				[580-13-2]
	(330–378)	42.5	(354)		[99/16]
	(322–359)	40.4	(340)	ME, TE	[81/22]
$C_{10}H_7Cl$	1-chloronaphthalene				[90-13-1]
		64.0±0.3	(298)	GS	[01/1]
	(323–423)	58.6	(373)	GC	[99/9]
	(353–553)	59.6	(368)	A	[87/5][47/5]
	(400–435)	57.8	(415)	A	[87/5]
$C_{10}H_7Cl$	2-chloronaphthalene				[91-58-7]
	(400–435)	57.9	(417)		[99/16]
	(323–423)	58.5	(373)	GC	[99/9]
$C_{10}H_7Cl_7$	1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindan				[2589-15-3]
	(333–353)	83.8	(343)		[99/16]
$C_{10}H_7F_5O_2$	pentafluoropropionic acid, 3-tolyl ester				[24277-51-0]
	(371–446)	48.3	(386)	A, EB	[87/5][69/13] [99/16]
$C_{10}H_7F_5O_2$	pentafluoropropionic acid, 4-tolyl ester				[24271-52-1]
	(371–448)	48.3	(386)	A, EB	[87/5][69/13] [99/16]
$C_{10}H_7I$	1-iodonaphthalene				[90-14-2]
	(321–428)	78.9	(336)		[99/16]
$C_{10}H_7NO_2$	1-nitronaphthalene				[86-57-7]
	(332–580)	66.4	(347)	A	[87/5]
$C_{10}H_8$	azulene				[275-51-4]
		52.8	(298)	CGC	[98/11]
	(369–515)	53.0	(384)	A	[87/5]
	(442–534)	51.2	(457)	EB	[77/10]
	(373–423)	55.5	(373)		[62/25]
$C_{10}H_8$	naphthalene				[91-20-3]
	(323–473)	56.1	(398)	GC	[02/18]
		53.4	(298)	CGC	[98/11]
	(460–647)	45.4	(475)	DSC	[96/10]
	(403–453)	56.6	(298)	CGC	[95/21]
		48.7±0.3	(400)	EB	[93/11]
		46.4	(440)	EB	[93/11]
		44.0	(480)	EB	[93/11]
		41.5	(520)	EB	[93/11]
	(513–613)	44.4	(528)		[93/3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(418–613)	47.9	(423)	EB	[90/7]
	(352–500)	50.6	(367)	A	[87/5]
	(491–565)	44.8	(506)	A	[87/5]
	(563–663)	43.2	(578)	A	[87/5]
	(661–750)	43.3	(676)	A	[87/5]
	(441–727)	44.7	(466)		[81/21][86/15]
	(353–388)	50.3±0.2	(370)		[81/6]
	(354–453)	50.7	(369)		[68/11]
	(399–491)	49.0	(414)		[55/7]
		46.4	(441)	C	[51/7]
		48.3	(379)	I	[43/7]
	(373–473)	47.2	(423)	I	[23/1]
	(360–494)	47.7	(427)	I	[22/1]
$C_{10}H_8N_2O_2$	1,3-*bis*(isocyanatomethyl)benzene				[3634-83-1]
	(403–473)	46.7	(418)	A	[87/5]
$C_{10}H_8N_2O_2$	1,4-*bis*(isocyanatomethyl)benzene				[1014-98-8]
	(403–473)	56.9	(418)	A	[87/5]
$C_{10}H_8N_2O_2$	benzene, ethyldiisocyanato (mixed isomers)				[64711-83-7]
	(363–473)	60.7	(378)	A	[87/5][77/22]
$C_{10}H_8O$	1-naphthol				[90-15-3]
	(399–556)	58.5	(414)	A	[87/5]
	(423–563)	60.8	(473)		[27/4]
$C_{10}H_8O$	2-naphthol				[135-19-3]
	(393–433)	76.2	(298)	CGC	[95/21]
	(401–561)	59.7	(416)	A	[87/5]
	(417–561)	59.7	(432)		[55/9]
	(423–563)	61.8	(473)		[27/4]
$C_{10}H_9Cl_3O_3$	(2,4,5-trichlorophenoxy)acetic acid, ethyl ester				[1928-39-8]
	(444–573)	76.4	(459)	A	[87/5][99/16]
$C_{10}H_9N$	2-methylquinoline (quinaldine)				[91-63-4]
		66.1±1.9	(298)	C	[95/1]
	(281–313)	61.2	(297)	GS	[80/6]
	(443–521)	54.7	(548)	A, EB	[87/5][61/11] [61/10]
$C_{10}H_9N$	3-methylquinoline				[612-58-8]
	(443–528)	55.8	(458)	A	[87/5][61/11]
$C_{10}H_9N$	4-methylquinoline (lepidine)				[491-35-0]
		67.6±1.8	(298)	C	[95/1]
	(463–539)	58.2	(478)	A, EB	[87/5][61/11] [61/10]
$C_{10}H_9N$	6-methylquinoline				[91-62-3]
		67.7±1.8	(298)	C	[95/1]
	(453–540)	56.1	(468)	A	[87/5]
$C_{10}H_9N$	7-methylquinoline				[612-60-2]
	(493–532)	56.7	(508)	A, EB	[87/5][61/10]
$C_{10}H_9N$	8-methylquinoline				[611-32-5]
		65.7±1.9	(298)	C	[95/1]
	(493–523)	52.2	(508)	A, EB	[87/5][61/10]
$C_{10}H_9N$	1-naphthylamine				[134-32-7]
	(377–574)	63.6	(392)	A	[87/5][47/5]
$C_{10}H_9N$	2-naphthylamine				[91-59-8]
	(388–579)	63.5	(403)	A	[87/5][47/5]
$C_{10}H_9NO$	6-methoxyquinoline				[5263-87-6]
		78.1±2.3	(298)	C	[02/35]
$C_{10}H_{10}$	1,3-divinylbenzene				[108-57-6]
	(305–453)	48.3	(320)	A	[87/5][47/5]
$C_{10}H_{10}$	dicyclopentadiene				
	(307–440)	42.4	(322)		[47/5]
$C_{10}H_{10}$	1,2-dihydronaphthalene				[447-53-0]
	(274–319)	51.9±0.4	(296)	GS	[99/21]
		51.9±0.4	(298)		[99/21]
$C_{10}H_{10}$	1,4-dihydronaphthalene				[612-17-9]
	(300–333)	53.2±0.4	(296)	GS	[99/21]
		54.2±0.4	(298)		[99/21]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{10}H_{10}$	diisopropenyldiacetylene				[5187-81-5]
		50.2			[77/25]
$C_{10}H_{10}Cl_2O_3$	(2,4-dichlorophenoxy)acetic acid, ethyl ester				[533-23-3]
	(444–573)	72.6	(459)	A	[87/5][99/16]
$C_{10}H_{10}N_2$	1-benzylpyrazole				[10199-67-4]
		73.8±2.0	(298)	C	[99/5]
$C_{10}H_{10}O$	2-methyl-3-phenyl-2-propenal				[101-39-3]
	(401–556)	59.3±0.2	(400)	EB	[02/16]
	(401–556)	56.3±0.2	(440)	EB	[02/16]
	(401–556)	53.4±0.2	(480)	EB	[02/16]
	(401–556)	50.5±0.4	(520)	EB	[02/16]
	(401–556)	47.7±0.6	(560)	EB	[02/16]
	(343–393)	71.5	(358)	A	[87/5]
$C_{10}H_{10}O$	4-phenyl-3-buten-2-one				[122-57-6]
	(354–534)	58.5	(369)	A	[87/5][47/5]
$C_{10}H_{10}O$	1-tetralone				[529-34-0]
	(284–324)	65.0±0.3	(298)	GS	[98/4]
	(388–535)	61.5	(403)	A	[87/5]
$C_{10}H_{10}O_2$	cinnamic acid, methyl ester				[103-26-4]
	(409–557)	59.9±0.2	(420)	EB	[02/16]
	(409–557)	56.9±0.2	(460)	EB	[02/16]
	(409–557)	53.8±0.3	(500)	EB	[02/16]
	(409–557)	50.5±0.5	(540)	EB	[02/16]
	(288–333)	62.4	(303)	A	[87/5]
	(350–536)	58.3	(365)	A	[87/5][47/5]
$C_{10}H_{10}O_2$	1,3-diacetylbenzene				[6781-42-6]
	(323–418)	43.2	(338)	A	[87/5]
$C_{10}H_{10}O_2$	1,4-diacetylbenzene				[1009-61-6]
	(388–431)	82.2	(403)	A	[87/5]
$C_{10}H_{10}O_2$	isosafrole				[120-58-1]
	(393–531)	59.4	(408)	A	[87/5]
$C_{10}H_{10}O_2$	α-methylcinnamic acid				[1199-77-5]
	(398–561)	78.5	(413)	A	[87/5][47/5]
$C_{10}H_{10}O_2$	safrole				[94-59-7]
	(336–506)	54.6	(351)	A	[87/5][47/5]
$C_{10}H_{10}O_2$	4-carboxypentacyclo[4.3.0.0.^{2,5}0^{4,7}]nonane				
		82.0		C	[84/12]
$C_{10}H_{10}O_4$	1,2-diacetoxybenzene				[635-67-6]
	(371–551)	62.9	(386)	A	[87/5]
$C_{10}H_{10}O_4$	dimethyl isophthalate				[1459-93-4]
	(350–607)	77.2±0.8	(298)	EB, IPM	[96/7]
	(393–550)	60.5	(408)	A, GS	[87/5][63/13]
$C_{10}H_{10}O_4$	dimethyl phthalate				[131-11-3]
	(466–518)	61.5	(481)	EB	[99/25]
		69.4±0.1	(365)	C	[98/6]
		72.5±0.6	(344)	C	[98/6]
		74.5±0.3	(326)	C	[98/6]
	(304–371)	78.7	(319)	A	[87/5]
	(371–547)	63.7	(386)	A	[87/5]
	(377–440)	68.6	(409)		[69/1]
$C_{10}H_{10}O_4$	dimethyl terephthalate				[120-61-6]
	(413–523)	62.0	(428)	A	[87/5]
$C_{10}H_{11}N$	α,α-dimethylbenzylcyanide				
	(284–323)	60.3±0.6	(303)	GS	[00/2]
	(284–323)	60.6±0.6	(298)	GS	[00/2]
$C_{10}H_{11}N$	α-ethylbenzylcyanide				
	(283–313)	64.3±0.6	(298)	GS	[00/2]
$C_{10}H_{13}NO_2$	2-nitro-1-*tert*-butylbenzene				
	(278–323)	64.8±0.6	(301)	GS	[00/15]
		65.0±0.6	(298)		[00/15]
$C_{10}H_{12}$	*endo* dicyclopentadiene				[77-73-6]
	(350–446)	43.6	(365)	A	[87/5]
$C_{10}H_{12}$	2,4-dimethylstyrene				[2234-20-0]
	(307–453)	50.0	(322)	A	[87/5][47/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{10}H_{12}$	2,5-dimethylstyrene				[2039-89-6]
	(302–453)	48.1	(317)	A	[87/5][47/5]
$C_{10}H_{12}$	1-ethyl-2-vinylbenzene				[7564-63-8]
	(363–413)	46.3	(378)	A	[87/5]
$C_{10}H_{12}$	1-ethyl-3-vinylbenzene				[7525-62-4]
	(343–453)	49.6	(358)	A	[87/5]
$C_{10}H_{12}$	1-ethyl-4-vinylbenzene				[3454-07-7]
	(341–448)	48.4	(356)	A	[87/5]
$C_{10}H_{12}$	1,2,3,4-tetrahydronaphthalene (tetralin)				[119-64-2]
	(465–580)	44.1	(480)		[92/2]
	(311–481)	51.1	(326)	A	[87/5]
		41.3±0.1	(498)	C	[85/10]
		37.6±0.1	(552)	C	[85/10]
		35.7±0.1	(567)	C	[85/10]
		33.9±0.1	(585)	C	[85/10]
		32.0±0.1	(604)	C	[85/10]
	(331–437)	52.1	(346)		[84/24]
	(367–479)	48.6	(382)		[47/5]
$C_{10}H_{12}Cl_4NOPS$	P-chloromethyl-N-(1-methylethyl)amidothiophosphonic acid, O-(2,4,6-trichlorophenyl) ester				[21844-03-1]
	(323–363)	78.3	(338)		[87/5]
$C_{10}H_{12}N_2$	2-diethylamino-2-piperidinoacetonitrile				
	(298–338)	62.8±0.4		GS	[97/10]
$C_{10}H_{12}O$	anethole				[104-46-1]
		61.9	(298)	GC	[02/37]
$C_{10}H_{12}O$	*cis* anethole				[25679-28-1]
	(333–363)	68.7	(348)	A	[87/5]
$C_{10}H_{12}O$	*trans* anethole				[4180-23-8]
	(333–363)	78.3	(348)	A	[87/5]
$C_{10}H_{12}O$	estragole				[140-67-0]
	(325–488)	56.3	(340)	A	[87/5]
$C_{10}H_{12}O$	2′-ethylacetophenone				[2142-64-5]
	(363–397)	52.8	(378)	A	[87/5]
	(293–423)	U23.7	(368)		[68/31]
$C_{10}H_{12}O$	4′-ethylacetophenone				[937-30-4]
	(294–368)	42.2	(309)	A	[87/5]
	(293–423)	39.8	(368)		[68/31]
$C_{10}H_{12}O$	4-isopropylbenzaldehyde (cuminal)				[122-03-2]
	(331–505)	55.3	(346)	A	[87/5][47/5]
$C_{10}H_{12}O$	2-methyl-3-phenylpropanal				[5445-77-2]
	(333–373)	59.1	(348)	A	[87/5]
$C_{10}H_{12}O$	4′-methypropiophenone				[5337-93-9]
	(332–512)	52.6	(347)	A	[87/5][47/5]
$C_{10}H_{12}O$	4-vinylphenetole				[5459-40-5]
	(337–498)	59.2	(352)	A	[87/5][47/5]
$C_{10}H_{12}O$	4-methoxy-α-methylstyrene				
	(308–343)	60.6±0.3	(326)	GS	[99/21]
		62.1±0.3	(298)		[99/21]
$C_{10}H_{12}O_2$	acetic acid, phenethyl ester				[103-45-7]
	(283–318)	67.4	(298)	A	[87/5]
	(422–506)	52.2	(437)	A	[87/5]
$C_{10}H_{12}O_2$	methyl 2-phenylpropionate				
	(284–318)	61.8±0.7	(301)	GS	[99/2]
	(284–318)	62.0±0.7	(298)	GS	[99/2]
$C_{10}H_{12}O_2$	4-allyl-2-methoxyphenol (eugenol)				[97-53-0]
		66.3	(298)	GC	[02/37]
	(395–527)	57.7	(410)	A	[87/5]
	(285–333)	66.1	(300)	ME	[87/5][59/7]
	(351–526)	60.3	(366)		[47/5]
$C_{10}H_{12}O_2$	benzyl propionate				[122-63-4]
	(298–378)	59.0	(313)	A	[87/5]
$C_{10}H_{12}O_2$	5-allyl-2-methoxyphenol				[501-19-9]
	(345–527)	61.4	(371)	A	[87/5]
$C_{10}H_{12}O_2$	2-methoxy-4-(1-propenyl)phenol (isoeugenol)				
	(359–540)	60.7	(374)		[57/6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{10}H_{12}O_2$	*cis* isoeugenol				[5912-86-7]
	(373–403)	69.7	(388)	A	[87/5]
$C_{10}H_{12}O_2$	*trans* isoeugenol				[5932-68-3]
	(363–420)	69.1	(378)	A	[87/5]
$C_{10}H_{12}O_2$	phenylacetic acid, ethyl ester				[101-97-3]
	(288–328)	63.9±0.4	(308)	GS	[99/2]
	(288–328)	64.5±0.4	(298)	GS	[99/2]
	(393–500)	54.0	(408)	A	[87/5]
$C_{10}H_{12}O_2$	propylbenzoate				[2315-68-6]
	(359–458)	60.2	(379)	BG	[88/2]
	(359–458)	52.7	(440)	BG	[88/2]
	(327–504)	53.8	(342)	A	[87/5][47/5]
$C_{10}H_{12}O_2$	[(phenylmethoxy)methyl]oxirane				[2930-05-4]
		71.0±0.4			[87/14]
$C_{10}H_{12}O_3$	acetic acid, (2-phenoxyethyl) ester				[6192-44-5]
	(355–533)	56.8	(370)	A	[87/5][47/5]
$C_{10}H_{12}O_3$	propyl 4-hydroxybenzoate				[94-13-3]
		76.5		TGA	[01/20]
$C_{10}H_{12}O_4$	maleic acid, diallyl ester				[999-21-3]
	(392–426)	77.7	(407)	A	[87/5]
$C_{10}H_{13}Br$	2-bromo-4-isopropyltoluene				[2437-76-5]
	(400–510)	50.2	(415)	A	[87/5][70/14] [99/16]
$C_{10}H_{13}Br$	3-bromo-4-isopropyltoluene				[4478-10-8]
	(400–510)	48.3	(415)	A	[87/5][70/14] [99/16]
$C_{10}H_{13}Cl$	2-chloro-4-isopropyltoluene				[4395-79-3]
	(400–490)	49.3	(415)	A	[87/5][70/14] [99/16]
$C_{10}H_{13}Cl$	3-chloro-4-isopropyltoluene				[15146-00-6]
	(400–490)	47.1	(415)	A	[87/5][70/14]
$C_{10}H_{13}ClO$	2-chloroethyl α-methylbenzyl ether				[4446-91-7]
	(335–508)	54.8	(350)	A	[87/5][47/5] [99/16]
$C_{10}H_{13}ClO_3$	diethylene glycol 4-chlorophenyl ether				[58498-77-4]
	(450–523)	75.9	(465)	A	[87/5][99/16]
$C_{10}H_{13}Cl_3O_2P$	4-*tert*-butyl phenyl dichlorophosphate				
	(369–572)	59.6	(384)		[47/5]
$C_{10}H_{13}Cl_3NOPS$	P-chloromethyl-N-(1-methylethyl)amidothiophosphonic acid, O-(2,4-dichlorophenyl) ester				[18361-88-1]
	(323–368)	93.1	(345)	A	[87/5][99/16]
$C_{10}H_{13}NO$	N,N-dimethyl-*m*-toluamide				
	(374–405)	29.9	(390)		[69/1]
$C_{10}H_{13}NO_2$	4′-ethoxyacetanilide				[62-44-2]
	(463–533)	82.6	(478)	A	[87/5]
$C_{10}H_{13}NO_2$	2-nitro-4-isopropyltoluene				[943-15-7]
	(370–415)	67.7	(385)	A	[87/5]
$C_{10}H_{13}NO_2$	3-nitro-4-isopropyltoluene				[35480-94-5]
	(330–430)	54.0	(345)	A	[87/5]
$C_{10}H_{14}$	butylbenzene				[104-51-8]
	(343–501)	47.4±0.2	(350)	EB	[02/14]
	(343–501)	43.5±0.2	(410)	EB	[02/14]
	(343–501)	40.6±0.4	(450)	EB	[02/14]
	(343–501)	37.5±0.7	(490)	EB	[02/14]
		50.8	(298)		[94/11]
	(243–403)	53.5	(258)		[93/10]
		48.0±0.1	(343)	C	[82/10]
		46.8±0.1	(358)	C	[82/10]
		46.0±0.1	(368)	C	[82/10]
		50.1	(298)		[71/28]
	(374–454)	45.2	(389)		[65/26][84/9]
	(369–463)	45.7	(384)	A	[87/5][49/6]
$C_{10}H_{14}$	(*dl*) sec-butylbenzene				[135-98-8]
	(335–491)	45.7±0.2	(340)	EB	[02/14]
	(335–491)	43.2±0.2	(380)	EB	[02/14]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(335–491)	40.6±0.3	(420)	EB	[02/14]
	(335–491)	37.8±0.5	(460)	EB	[02/14]
		48.1	(298)		[94/11]
	(243–373)	50.6	(258)		[93/10]
	(384–448)	42.8	(399)	A	[87/5]
		49.5	(298)		[71/28]
	(368–448)	44.0	(375)		[49/6]
$C_{10}H_{14}$	*tert*-butylbenzene				[98-06-6]
	(332–486)	45.3±0.2	(340)	EB	[02/14]
	(332–486)	42.6±0.2	(380)	EB	[02/14]
	(332–486)	39.9±0.3	(420)	EB	[02/14]
	(332–486)	37.0±0.5	(460)	EB	[02/14]
	(278–308)	47.8±0.4	(293)	GS	[98/19]
		47.5±0.4	(298)		[98/19]
		47.6	(298)		[94/11]
	(368–444)	43.1	(383)	A	[87/5]
		47.7	(298)		[74/14]
		49.1	(298)		[71/28]
	(357–443)	43.7	(372)		[49/6]
$C_{10}H_{14}$	1,2-diethylbenzene				[135-01-3]
		52.8	(298)		[71/28]
	(369–464)	46.0	(384)	A	[87/5][49/6]
$C_{10}H_{14}$	1,3-diethylbenzene				[141-93-5]
		52.5	(298)		[71/28]
	(368–457)	45.8	(383)	A	[87/5][49/6]
$C_{10}H_{14}$	1,4-diethylbenzene				[105-05-5]
		52.5	(298)		[71/28]
	(369–464)	45.8	(384)	A	[87/5][49/6]
$C_{10}H_{14}$	1,2-dimethyl-3-ethylbenzene				[933-98-2]
	(344–497)	49.7	(359)	A	[87/5]
		54.9	(298)		[71/28]
$C_{10}H_{14}$	1,2-dimethyl-4-ethylbenzene				[934-80-5]
	(340–493)	48.9	(355)	A	[87/5]
		53.9	(298)		[71/28]
$C_{10}H_{14}$	1,3-dimethyl-2-ethylbenzene				[2870-04-0]
	(341–493)	48.8	(356)	A	[87/5]
		53.9	(298)		[71/28]
	(299–461)	48.6	(314)		[47/5]
$C_{10}H_{14}$	1,3-dimethyl-4-ethylbenzene				[874-41-9]
	(339–492)	48.5	(354)	A	[87/5]
		53.3	(298)		[71/28]
$C_{10}H_{14}$	1,3-dimethyl-5-ethylbenzene				[934-74-7]
	(336–487)	48.0	(351)	A	[87/5]
		52.4	(298)		[71/28]
	(295–456)	47.5	(310)		[47/5]
$C_{10}H_{14}$	1,4-dimethyl-2-ethylbenzene				[1758-88-9]
	(338–490)	48.0	(353)	A	[87/5]
		52.6	(298)		[71/28]
	(299–440)	48.7	(313)		[47/5]
$C_{10}H_{14}$	isobutylbenzene				[538-93-2]
		48.0	(298)		[94/11]
	(373–447)	43.2	(388)	A	[87/5]
		49.5	(298)		[71/28]
	(360–447)	43.8	(375)		[49/6]
$C_{10}H_{14}$	2-isopropyltoluene				[527-84-4]
	(354–453)	44.4	(369)	A	[87/5][59/1]
					[84/9]
		50.6	(298)		[71/28]
$C_{10}H_{14}$	3-isopropyltoluene				[535-77-3]
	(351–450)	44.7	(366)	A	[87/5][59/1]
					[84/9]
		50.0	(298)		[71/28]
$C_{10}H_{14}$	4-isopropyltoluene				[99-87-6]
		48.9	(298)		[94/11]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(380–452)	44.0	(395)	A	[87/5][59/1]
					[84/9]
		50.3	(298)		[71/28]
$C_{10}H_{14}$	2-propyltoluene				[1074-17-5]
	(337–488)	48.0	(352)	A	[87/5]
		52.7	(298)		[71/28]
$C_{10}H_{14}$	3-propyltoluene				[1074-43-7]
	(334–485)	47.8	(349)	A	[87/5]
		52.1	(298)		[71/28]
$C_{10}H_{14}$	4-propyltoluene				[1074-55-1]
	(335–487)	47.6	(350)	A	[87/5]
		51.9	(298)		[71/28]
$C_{10}H_{14}$	1,2,3,4-tetramethylbenzene				[488-23-3]
		54.0	(298)		[94/11]
		52.6±0.2	(298)	C	[94/1]
	(352–509)	50.7	(367)	A	[87/5]
		57.2	(298)		[71/28]
	(316–477)	55.7	(331)		[47/5]
$C_{10}H_{14}$	1,2,3,5-tetramethylbenzene				[527-53-7]
		53.2	(298)		[94/11]
		52.0±0.2	(298)	C	[94/1]
	(348–502)	50.0	(363)	A	[87/5]
		55.8	(298)		[71/28]
	(314–471)	58.9	(329)		[47/5]
$C_{10}H_{14}$	1,2,4,5-tetramethylbenzene				[95-93-2]
	(363–381)	47.7±0.3	(375)	DM	[01/8]
	(353–500)	49.4	(368)	A	[87/5]
$C_{10}H_{14}$	spirocyclopropane-1,6-tricyclo[3.2.1.0^{2,4}]octane				
		47.8±0.1	(298)	C	[98/17][96/18]
$C_{10}H_{14}NO_5PS$	Parathion				[58-38-2]
	(293–433)	93.4	(308)	A	[87/5][99/16]
$C_{10}H_{14}NO_5PS$	phosphorothioic acid, O,O′-diethyl-S-(4-nitrophenyl)				[3270-86-8]
	(313–366)	75.9	(328)	A	[87/5][99/16]
$C_{10}H_{14}NO_5PS$	phosphorothioic acid, O,S-diethyl-O′-(4-nitrophenyl)				[597-88-6]
	(332–364)	75.1	(347)	A	[87/5][99/16]
$C_{10}H_{14}NO_6P$	O,O-diethyl-O-(4-nitrophenyl) phosphate				[311-45-5]
	(273–422)	87.9	(288)	A	[87/5]
$C_{10}H_{14}N_2$	(*dl*) nicotine				[22083-74-5]
	(406–520)	53.3	(421)	A	[87/5]
$C_{10}H_{14}O$	2-butylphenol				[3180-09-4]
	(403–533)	55.1	(418)	A	[87/5][75/17]
	(382–520)	52.9	(398)		[53/9]
	(382–520)	51.0	(423)		[53/9]
	(382–520)	47.0	(473)		[53/9]
$C_{10}H_{14}O$	2-sec-butylphenol				[89-72-5]
	(451–513)	52.1	(466)	A, GS, EB	[87/5][64/14]
$C_{10}H_{14}O$	2-*tert*-butylphenol				[88-18-6]
	(289–329)	62.6±0.2	(309)	GS	[99/18]
		63.2±0.2	(298)		[99/18]
	(409–467)	74.1	(424)	EB	[90/5]
	(409–465)	52.9	(424)		[86/7]
	(353–498)	54.9	(368)	A	[87/5]
	(330–507)	55.6	(348)		[53/9]
	(330–507)	53.9	(373)		[53/9]
	(330–507)	51.0	(423)		[53/9]
	(330–507)	47.0	(473)		[53/9]
$C_{10}H_{14}O$	3-butylphenol				[4074-43-5]
	(396–533)	62.5	(411)	A	[87/5]
	(396–533)	56.6	(398)		[53/9]
	(396–533)	54.4	(423)		[53/9]
	(396–533)	49.9	(473)		[53/9]
$C_{10}H_{14}O$	3-*tert*-butylphenol				[585-34-2]
	(320–348)	69.1±0.8	(334)	GS	[99/18]
		71.3±0.8	(298)		[99/18]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(391–524)	62.4	(406)	A	[87/5]
	(391–524)	56.6	(398)		[53/9]
	(391–524)	54.4	(423)		[53/9]
	(391–524)	49.9	(473)		[53/9]
$C_{10}H_{14}O$	4-butylphenol				[1638-22-8]
	(395–653)	61.7	(410)	A	[87/5]
	(357–529)	57.6	(373)		[53/9]
	(357–529)	56.6	(398)		[53/9]
	(357–529)	54.4	(423)		[53/9]
	(357–529)	49.9	(473)		[53/9]
$C_{10}H_{14}O$	4-sec-butylphenol				[99-71-8]
	(344–516)	59.0	(359)	A	[87/5][47/5]
$C_{10}H_{14}O$	4-*tert*-butylphenol				[98-54-4]
		67.9±1.0	(298)	C	[99/7]
	(471–525)	54.3	(486)	A, GS, EB	[87/5][47/5] [64/14]
	(346–523)	59.6	(348)		[53/9]
	(346–523)	57.6	(373)		[53/9]
	(346–523)	56.6	(398)		[53/9]
	(346–523)	54.4	(423)		[53/9]
	(346–523)	49.9	(473)		[53/9]
$C_{10}H_{14}O$	butyl phenyl ether				[1126-79-0]
	(391–483)	48.9	(406)	A	[87/5][49/1] [84/9]
$C_{10}H_{14}O$	3-isopropyl-2-methylphenol				[4371-48-6]
	(365–516)	60.2	(380)	EB	[69/23]
$C_{10}H_{14}O$	4-isopropyl-2-methylphenol				[1740-97-2]
	(382–503)	59.8	(397)	EB	[69/23]
$C_{10}H_{14}O$	5-isopropyl-2-methylphenol (carvacrol)				[499-75-2]
		68.2	(298)	GC	[02/37]
	(387–512)	59.4	(402)	EB	[69/23]
	(343–510)	56.5	(358)	A	[87/5][47/5]
$C_{10}H_{14}O$	6-isopropyl-2-methylphenol				[3228-04-4]
	(371–499)	54.5	(386)	EB	[69/23]
$C_{10}H_{14}O$	3,5-diethylphenol				[1197-34-8]
	(387–521)	54.3	(402)	A	[87/5][55/9]
$C_{10}H_{14}O$	4-isobutylphenol				[4167-74-2]
	(345–510)	58.1	(360)	A	[87/5][47/5]
$C_{10}H_{14}O$	2,3,5,6-tetramethylphenol				[527-35-5]
	(381–522)	51.2	(396)	A	[87/5][55/9]
$C_{10}H_{14}O$	2-isopropyl-5-methylphenol (thymol)				[89-83-8]
		68.7	(298)	GC	[02/37]
	(393–433)	70.5	(298)	CGC	[95/21]
	(381–514)	58.4	(396)	A	[87/5]
	(339–514)	63.2	(373)		[53/9]
	(339–514)	58.4	(398)		[53/9]
	(339–514)	55.2	(423)		[53/9]
	(339–514)	52.8	(448)		[53/9]
	(339–514)	51.5	(473)		[53/9]
	(337–505)	54.9	(352)		[47/5]
$C_{10}H_{14}O$	(*dl*) carvone				[22327-39-5]
	(330–501)	55.0	(345)	A	[87/5][47/5]
$C_{10}H_{14}O$	4-ethylphenetole				[1585-06-4]
	(321–481)	54.3	(336)	A	[87/5][47/5]
$C_{10}H_{14}O$	2-(2-ethylphenyl)ethanol				
	(420–653)	59.5	(435)	A	[87/5]
$C_{10}H_{14}O$	2-(4-ethylphenyl)ethanol				[22545-13-7]
	(420–653)	59.1	(435)	A	[87/5]
$C_{10}H_{14}O$	4-isopropylbenzyl alcohol				[536-60-7]
	(347–520)	59.7	(362)	A	[87/5][47/5]
$C_{10}H_{14}O$	2-methyl-3-phenyl-1-propanol				[7384-80-7]
	(343–393)	71.9	(358)	A	[87/5]
$C_{10}H_{14}O$	(1-ethoxyethyl)benzene				
	(286–318)	52.4±0.2	(302)	GS	[01/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(286–318)	52.6±0.2	(298)	GS	[01/16]
$C_{10}H_{14}O$	2-adamantanone				[700-58-3]
		60.7	(298)	GC	[02/37]
$C_{10}H_{14}O_2$	1,2-dihydroxy-3-*tert*-butylbenzene				[4026-05-5]
	(334–384)	70.1±0.8	(359)	GS	[00/5]
	(334–384)	73.5±0.8	(298)	GS	[00/5]
$C_{10}H_{14}O_2$	1,2-dihydroxy-4-*tert*-butylbenzene				[98-29-3]
	(439–516)	96.5±2.8	(298)	EB	[97/6]
$C_{10}H_{14}O_2$	1,3-dihydroxy-2-butylbenzene				[13331-20-9]
	(413–469)	75.3	(428)	A, GC	[87/5][75/24]
$C_{10}H_{14}O_2$	2-methoxy-4-propylphenol				[2785-87-7]
	(373–413)	78.0	(388)	A	[87/5]
$C_{10}H_{14}O_2$	*tert*-butylcatechol (isomer not specified)				
	(421–466)	58.2	(443)		[65/21]
$C_{10}H_{14}O_2$	1,1-dimethoxy-2-phenylcyclopropane				[18523-34-7]
	(278–313)	63.7±0.6	(298)	GS	[02/32]
$C_{10}H_{14}O_2$	acetophenone dimethyl ketal				[4316-35-2]
	(268–303)	54.0±0.8	(298)	GS	[02/32]
	(268–303)	55.0±1.3	(286)	GS	[95/25]
$C_{10}H_{14}O_3$	trimethyl orthobenzoate				[707-07-3]
	(294–333)	59.9±0.4	(298)	GS	[02/32]
	(294–333)	58.6±0.4		GS	[95/7]
$C_{10}H_{14}O_5$	allyl[(1-allyloxycarbonyl)ethyl] carbonate				
	(353–503)	61.9	(368)	A	[87/5]
$C_{10}H_{15}Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-heptyl ester				[76633-71-1]
	(433–483)	72.7		GC	[80/24]
$C_{10}H_{15}N$	2-*tert*-butylaniline				
	(279–318)	62.7±0.4	(298)	GS	[00/14]
$C_{10}H_{15}N$	2,6-diethylaniline				
	(284–328)	69.5±0.6	(306)		[00/14]
		65.9±0.6	(298)		[00/14]
$C_{10}H_{15}N$	5-isopropyl-2-methylaniline				[2051-53-8]
	(360–386)	72.0	(373)	A	[87/5]
$C_{10}H_{15}N$	N-α-dimethylphenethylamine				[537-46-2]
	(270–304)	52.8	(285)	A	[87/5]
$C_{10}H_{15}N$	N-butylaniline				[1126-78-9]
	(413–643)	55.6	(428)	A	[87/5]
$C_{10}H_{15}N$	N,N-diethylaniline				[91-66-7]
	(343–493)	54.5	(358)	A	[87/5]
$C_{10}H_{15}NO$	2-(dimethylamino)-1-phenylethanone				
	(293–333)	69.7±0.5	(298)	GS	[94/3]
$C_{10}H_{15}NO$	4-(butylamino)phenol				[103-62-8]
	(464–511)	71.2	(478)	A	[87/5]
$C_{10}H_{15}NO_2$	N,N-*bis*(2-hydroxyethyl)aniline				[120-07-0]
	(418–611)	77.6	(433)	A	[87/5][47/5]
$C_{10}H_{15}O_3PS_2$	O,O-dimethyl-O-[3-methyl-4-(methylthio)phenyl]thiophosphate				[55-38-9]
	(293–373)	75.6	(308)	A	[87/5][99/16]
$C_{10}H_{16}$	adamantane				[281-23-2]
		48.2	(298)	GC	[02/37]
	(403–453)	51.7	(298)	CGC	[95/21]
$C_{10}H_{16}$	(*dl*) camphene				[79-92-5]
	(320–434)	44.0	(335)	A	[87/5][47/5]
$C_{10}H_{16}$	(*d*) 3,7,7-trimethylbicyclo[4.1.0]hept-2-ene (2-carene)				[4497-92-1]
	(293–450)	45.5	(308)	A	[87/5][54/12]
$C_{10}H_{16}$	(*d*) 3,7,7-trimethylbicyclo[4.1.0]hept-3-ene (3-carene)				[498-15-7]
	(359–443)	42.8	(374)	A	[87/5]
$C_{10}H_{16}$	(+) limonene				
	(373–423)	49.6	(298)	CGC	[95/21]
$C_{10}H_{16}$	(S)-(−) limonene				
	(320–451)	47.4	(335)		[96/15]
$C_{10}H_{16}$	(*d*) limonene				[5989-27-5]
		49.9	(298)	GC	[02/37]
	(339–495)	46.1±0.2	(350)	EB	[02/15]
	(339–495)	43.5±0.2	(390)	EB	[02/15]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(339–495)	40.9±0.3	(430)	EB	[02/15]
	(339–495)	37.9±0.6	(470)	EB	[02/15]
	(250–434)	49.2	(300)		[99/27]
		48.9±0.1	(298)	C	[87/8]
	(287–448)	44.5	(302)	A	[87/5]
	(288–323)	47.7	(303)	A	[87/5]
$C_{10}H_{16}$	(*l*) limonene				[5989-54-8]
		49.0±0.1	(298)	C	[87/8]
	(303–363)	45.5	(318)	A	[87/5][54/12]
$C_{10}H_{16}$	(*dl*) limonene				[138-86-3]
	(287–448)	45.9	(302)	A	[87/5]
$C_{10}H_{16}$	limonene				
	(353–405)	39.4	(379)	TGA	[02/40]
$C_{10}H_{16}$	β-myrcene				
	(303–363)	47.0	(318)		[54/12]
$C_{10}H_{16}$	7-methyl-3-methylene-1,6-octadiene (myrcene)				[123-35-3]
		50.6	(298)	GC	[02/37]
	(287–445)	45.7	(302)	A	[87/5][47/5]
$C_{10}H_{16}$	5-isopropyl-2-methyl-1,3-cyclohexadiene				[99-83-2]
	(293–448)	47.7	(308)	A	[87/5]
$C_{10}H_{16}$	3-isopropyl-6-methylenecyclohexene				[555-10-2]
	(303–363)	47.7	(318)	A	[87/5][54/12]
$C_{10}H_{16}$	α-pinene				
	(320–429)	42.5	(335)		[96/15]
	(365–430)	40.2	(380)		[93/4]
		44.6±0.1	(298)	C	[87/19]
$C_{10}H_{16}$	(*d*) α-pinene				[80-56-8]
	(292–433)	45.0	(307)	A	[87/5]
	(293–363)	43.4	(308)		[54/12]
$C_{10}H_{16}$	β-pinene				
	(290–439)	46.0	(305)		[96/15]
	(364–439)	41.6	(379)		[93/4]
		45.8±0.1	(298)	C	[87/19]
$C_{10}H_{16}$	(*l*) β-pinene				[127-91-3]
	(291–441)	46.1	(306)	A	[87/5]
	(293–363)	44.9	(308)		[54/12]
$C_{10}H_{16}$	terpinolene				[586-62-9]
	(313–363)	50.8	(328)		[54/12]
	(305–458)	50.5	(320)	A	[87/5][47/5]
$C_{10}H_{16}$	tetrahydrodicyclopentadiene				[6004-38-2]
	(358–465)	43.5	(373)	A	[87/5]
$C_{10}H_{16}ClO_6$	lactic acid, O-ethoxycarbonyl, 2-(2-chloroethoxy)ethyl ester (solid)				
	(406–523)	83.8	(421)	A	[87/5]
$C_{10}H_{16}Cl_3NOS$	carbamothioic acid, *bis*(isopropyl), S-(2,3,3-trichloroallyl) ester				
	(293–318)	84.3	(305)	A	[87/5]
$C_{10}H_{16}N_2$	sebaconitrile				[1871-96-1]
	(303–343)	83.7	(318)	A	[87/5]
$C_{10}H_{16}N_2$	N′-(2,4-dimethylphenyl)-N-methylformamidine				
		89.2	(303)		[98/23]
$C_{10}H_{16}O$	3,7-dimethyl-6-octen-1-yn-3-ol (dehydrolinalool)				[29171-20-8]
	(406–471)	52.1	(421)	EB	[01/13]
	(359–381)	Unreliable			[99/33]
	(369–445)	50.4±0.1	(407)		[88/4]
$C_{10}H_{16}O$	camphor				
	(343–383)	54.4	(298)	CGC	[95/21]
	(343–383)	54.5	(298)	CGC	[95/21]
	(343–383)	55.2	(298)	CGC	[95/21]
$C_{10}H_{16}O$	(+) camphor				[464-49-3]
		55.3	(298)	GC	[02/37]
$C_{10}H_{16}O$	α-pinene oxide				[1686-14-2]
		53.6	(298)	GC	[02/37]
$C_{10}H_{16}O$	(*d*) 3-bornanone				[13854-85-8]
	(452–488)	44.6	(467)	A	[87/5]
$C_{10}H_{16}O$	(*d*) 1,3,3-trimethylbicyclo[2.2.1]heptan-2 one (fenchone)				[4695-62-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(365–384)	47.0	(374)		[02/13]
		51.7±0.1	(298)	C	[87/8]
		51.4±0.1	(298)	C	[87/8]
		51.1±0.1	(298)	C	[85/2]
	(301–464)	48.9	(316)	A	[87/5][47/5]
$C_{10}H_{16}O$	(*l*) 1,3,3-trimethylbicyclo[2.2.1]heptan-2one (fenchone)				
		51.1±0.1	(298)	C	[87/8]
		51.3±0.1	(298)	C	[87/8]
		51.4±0.1	(298)	C	[85/2]
$C_{10}H_{16}O$	pulegone				[89-82-7]
		62.0	(298)	GC	[02/37]
	(331–494)	U99.8	(346)	A	[87/5][47/5]
$C_{10}H_{16}O$	(*d*) 1-isopropyl-4-methylbicyclo[3.1.0]hexan-3-one (thujone)				[471-15-8]
	(311–474)	51.8	(326)	A	[87/5][47/5]
$C_{10}H_{16}O$	(*dl*) 3-isopropyl-6-methyl-2-cyclohexene-1-one				[499-74-1]
	(364–507)	56.9	(379)	A	[87/5]
$C_{10}H_{16}O$	5-isopropyl-2-methyl-2-cyclohexen-1-one				[43205-82-9]
	(361–503)	56.8	(376)	A	[87/5]
$C_{10}H_{16}O$	3,4-epoxycarane (α-isomer)				
		49.4			[77/27]
$C_{10}H_{16}O$	3,4-epoxycarane (β-isomer)				
		50.2			[77/27]
$C_{10}H_{16}O$	(*dl*) dihydrocarvone				[4584-09-2]
	(319–496)	51.2	(334)	A	[87/5][47/5]
$C_{10}H_{16}O$	geranial (citral)				[141-27-5]
	(283–333)	61.0	(298)	A	[87/5]
	(373–501)	54.9	(388)	A	[87/5]
$C_{10}H_{16}O$	1-adamantanol				[768-95-6]
		60.8	(298)	GC	[02/37]
$C_{10}H_{16}O$	*trans* octahydro-3a-methyl-2*H*-inden-2-one				[20379-99-1]
		58.3±0.2	(298)	C	[70/38]
$C_{10}H_{16}O_2$	3-acetyl-2,2-dimethylcyclobutaneacetaldehyde (pinonaldehyde)				
	(283–308)	75.5±5.6		ME	[97/24]
$C_{10}H_{16}O_2$	2,2-dimethyl-3-(2-oxopropyl)cyclopropaneacetaldehyde (caronaldehyde)				
	(283–308)	77.4±6.9		ME	[97/24]
$C_{10}H_{16}O_2$	diosphenol				[490-03-9]
	(339–505)	56.2	(354)	A	[87/5][47/5]
$C_{10}H_{16}O_2$	fencholic acid				
	(374–537)	77.5	(389)		[47/5]
$C_{10}H_{16}O_2$	(2,3,3-trimethyl-3-cyclopentadienyl)acetic acid				
	(370–529)	71.3	(385)	A	[87/5][47/5]
$C_{10}H_{16}O_4$	1,1-cyclobutanedicarboxylic acid, diethyl ester				
	(288–318)	65.8±0.4		GS	[98/22]
$C_{10}H_{16}O_6$	lactic acid, O-ethoxycarbonyl, tetrafurfuryl ester				
	(390–523)	71.2	(405)	A	[87/5]
$C_{10}H_{16}O_6$	*tris*-(carboethoxy)methane				
	(297–338)	79.1±0.7	(298)	GS	[92/13]
$C_{10}H_{16}S$	(1R) (−)-thiocamphor				[53402-10-1]
		55.5	(298)	GC	[02/37]
$C_{10}H_{17}N$	1-cyclohexylimino-2-butene				
		58.3			[93/20]
$C_{10}H_{17}NOS$	carbamothioic acid, N,N-dipropyl, S-(2-propynyl) ester (solid)				[59300-36-6]
	(298–313)	92.4	(305)	A	[87/5]
$C_{10}H_{17}NO_3$	2-(2-cyanoethoxy)propionic acid, butyl ester				
	(328–382)	61.7	(343)	A	[87/5]
$C_{10}H_{17}NO_5$	(*l*) N-acetylaspartic acid, diethyl ester				[1069-39-2]
	(418–508)	76.0	(433)	A	[87/5]
$C_{10}H_{18}$	spiro[4.5]decane				[176-63-6]
		54.8	(298)	C	[75/14]
	(348–389)	44.0	(363)		[65/11]
$C_{10}H_{18}$	*cis* bicyclo[5.3.0]decane				[16189-46-1]
	(298–377)	49.8	(313)	A	[87/5]
		46.9±0.8	(377)		[70/30]
		53.6±1.2	(298)		[70/30]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{10}H_{18}$	bicyclopentyl				[1636-39-1]
	(350–393)	43.2	(365)	A	[87/5]
$C_{10}H_{18}$	*cis* carane				[18968-24-6]
	(362–445)	42.8	(377)	A	[87/5]
$C_{10}H_{18}$	*cis* decahydronaphthalene				[493-01-6]
	(371–473)	45.5	(386)	A, GS	[87/5][55/7]
$C_{10}H_{18}$	*trans* decahydronaphthalene				[493-02-7]
	(363–461)	44.2	(378)	A, GS	[87/5][55/7]
$C_{10}H_{18}$	5-decyne				[1942-46-7]
	(477–487)	45.5	(366)	A	[87/5]
$C_{10}H_{18}$	*cis* 2,6,6-trimethylbicyclo[3.1.1]heptane (*cis*-pinane)				[4755-33-3]
	(378–441)	41.8	(393)		[02/41]
$C_{10}H_{18}Cl_4$	1,2,9,10-tetrachlorodecane				
		75.4			[98/20]
$C_{10}H_{18}O$	1,8-epoxy-p-menthane				[470-82-6]
	(264–303)	35.6	(279)	A	[87/5]
$C_{10}H_{18}O$	(*dl*) borneol				[6627-72-1]
	(477–487)	50.9	(482)	A	[87/5]
$C_{10}H_{18}O$	1,4-cineole				[470-82-6]
	(353–403)	41.1	(378)	TGA	[02/40]
		53.2	(298)	GC	[02/37]
	(288–449)	46.1	(303)	A	[87/5]
$C_{10}H_{18}O$	(*d*) dihydrocarveol				[619-01-2]
	(336–498)	58.2	(351)	A	[87/5]
$C_{10}H_{18}O$	(*dl*) fenchyl alcohol				[2217-01-8]
	(318–474)	89.1	(333)	A	[87/5]
$C_{10}H_{18}O$	geraniol				[106-24-1]
	(288–333)	62.9	(303)	A	[87/5]
	(342–503)	59.1	(357)	A	[87/5]
$C_{10}H_{18}O$	(*d*) isopulegol				[7786-67-6]
	(335–485)	49.8	(350)	A	[87/5]
$C_{10}H_{18}O$	(*d*) linalool				[126-90-9]
	(273–321)	65.4	(297)		[99/27]
	(313–471)	52.4	(328)	A	[87/5]
$C_{10}H_{18}O$	linalool				[78-70-6]
	(368–428)	51.4	(399)	TGA	[02/40]
	(409–465)	50.3	(424)	EB	[02/2]
$C_{10}H_{18}O$	*cis* 3,7-dimethyl-2,6-octadien-1-ol (nerol)				[106-25-2]
	(334–499)	55.4	(349)	A	[87/5]
$C_{10}H_{18}O$	(*dl*) α-terpineol				[98-55-5]
	(325–491)	54.0	(340)	A	[87/5]
$C_{10}H_{18}O$	(+) α-terpineol				[7785-53-7]
		60.7	(298)	GC	[02/37]
$C_{10}H_{18}O$	1-(1-methylcyclohex-3-enyl)-1-propanol				
	(397–422)	53.6	(409)	A	[87/5]
$C_{10}H_{18}O$	cyclodecanone				[1502-06-3]
	(353–423)	55.2	(368)	A	[87/5]
$C_{10}H_{18}O$	ethyl (1-methylcyclohexyl) ketone				
	(388–431)	45.2	(403)	A	[87/5]
$C_{10}H_{18}O$	2-isopropyl-5-methylcyclohexanone (menthone)				[10458-14-7]
	(372–397)	50.1	(385)		[02/13]
	(350–483)	51.2	(365)	A	[87/5]
$C_{10}H_{18}O$	(*d*) citronellal				[2385-77-5]
	(288–333)	54.9	(303)	A	[87/5]
	(317–480)	53.2	(332)	A	[87/5][47/5]
$C_{10}H_{18}O$	(Z) 3-decenal				[69891-94-7]
	(323–343)	59.2	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(E) 3-decenal				[68676-85-7]
	(323–343)	59.8	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(Z) 4-decenal				[21662-09-9]
	(323–343)	59.3	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(E) 4-decenal				[65405-70-1]
	(323–343)	60.0	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(Z) 5-decenal				[21662-08-8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(323–343)	58.5	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(E) 5-decenal				[21662-11-3]
	(323–343)	59.2	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(Z) 6-decenal				[147159-48-6]
	(323–343)	59.3	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(E) 6-decenal				[147159-48-6]
	(323–343)	59.5	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(Z) 7-decenal				[21661-97-2]
	(323–343)	59.9	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(E) 7-decenal				[21662-10-2]
	(323–343)	59.8	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(Z) 8-decenal				[174155-46-5]
	(323–343)	60.5	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O$	(E) 8-decenal				[174155-47-6]
	(323–343)	60.2	(298)	CGC	[96/7][00/10]
$C_{10}H_{18}O_2$	3,7-dimethyl-6-octenoic acid				[502-47-6]
	(372–530)	68.7	(387)	A	[87/5][47/5]
$C_{10}H_{18}O_2$	8,8-dimethyl-6,10-dioxaspiro[4.5]decane				
	(283–313)	53.7±0.5		GS	[98/21][02/32]
$C_{10}H_{18}O_2$	2,2,6-trimethyl-3,5-heptanedione				[7333-23-5]
		57.7	(298)		[78/18]
$C_{10}H_{18}O_2$	decanolactone				[706-14-9]
	(365–387)	57.7±0.8	(376)	MM	[91/7]
	(365–387)	63.0±1.5	(298)	MM	[91/7]
$C_{10}H_{18}O_2$	cyclohexyl butyrate				[1551-44-6]
	(283–313)	60.0±0.6	(298)	GS	[96/11]
$C_{10}H_{18}O_2$	heptyl acrylate				[2499-58-3]
	(359–481)	51.1	(374)	A	[87/5]
$C_{10}H_{18}O_2$	hexyl methacrylate				[142-09-6]
	(354–475)	50.5	(369)	A	[87/5]
$C_{10}H_{18}O_2$	1-methyl-3-isopropylcyclopentane carboxylic acid				[512-77-6]
	(374–538)	91.6	(389)	A	[87/5]
$C_{10}H_{18}O_3$	3-hydroxy-2,3-dimethyl-4-hexenoic acid, ethyl ester				
	(362–387)	57.4	(374)	A	[87/5]
$C_{10}H_{18}O_3$	isopentyl levulinate				
	(403–521)	59.4	(418)	A	[87/5]
		56.3	(461)		[31/1]
$C_{10}H_{18}O_3$	1-ethylpropyl levulinate				
	(397–513)	58.6	(412)	A	[87/5]
$C_{10}H_{18}O_3$	1-methylbutyl levulinate				
	(397–513)	57.2	(412)	A	[87/5]
$C_{10}H_{18}O_3$	2-methylbutyl levulinate				
	(391–473)	56.5	(406)	A	[87/5]
$C_{10}H_{18}O_3$	pentyl levulinate				[20279-49-6]
	(354–527)	66.3	(369)	A	[87/5][47/5]
		56.2	(466)		[31/1]
$C_{10}H_{18}O_3$	trimethylacetic acid anhydride				[1538-75-6]
	(355–513)	50.7±0.2	(360)	EB	[02/16]
	(355–513)	47.4±0.2	(400)	EB	[02/16]
	(355–513)	44.0±0.4	(440)	EB	[02/16]
	(355–513)	40.3±0.7	(480)	EB	[02/16]
$C_{10}H_{18}O_4$	pentyl 2-acetoxypropionate				
	(312–501)	68.5	(327)	A	[87/5]
$C_{10}H_{18}O_4$	diethyl adipate				[141-28-6]
	(347–513)	57.5	(362)	A	[87/5][47/5]
$C_{10}H_{18}O_4$	diisobutyl oxalate				[2050-61-5]
	(336–503)	55.5	(351)	A	[87/5][47/5]
$C_{10}H_{18}O_4$	dipropyl succinate				[925-15-5]
	(350–524)	59.4	(365)	A	[87/5][47/5]
$C_{10}H_{18}O_4$	diethyl ethylmethylmalonate				[2049-70-9]
	(317–481)	53.2	(332)	A	[87/5]
$C_{10}H_{18}O_4$	sebacic acid				[111-20-6]
	(456–625)	85.9	(471)		[47/5]
$C_{10}H_{18}O_5$	ethyl[1-(butoxycarbonyl)ethyl] carbonate				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(324–473)	70.2	(339)	A	[87/5]
$C_{10}H_{18}O_5$	2-lactoyloxypropionic acid, butyl ester				
	(336–407)	74.8	(351)	A	[87/5]
$C_{10}H_{18}O_5$	2-lactoyloxypropionic acid, sec-butyl ester				
	(329–399)	74.3	(344)	A	[87/5]
$C_{10}H_{18}O_5$	pentyl[1-(ethoxycarbonyl)methyl] carbonate				
	(383–503)	68.2	(398)	A	[87/5]
$C_{10}H_{18}O_5$	pentyl[1-(methoxycarbonyl)ethyl] carbonate				
	(360–524)	63.7	(375)	A	[87/5]
$C_{10}H_{18}O_6$	(*d*) diisopropyl tartrate				[62961-64-2]
	(376–548)	65.7	(391)	A	[87/5][47/5]
$C_{10}H_{18}O_6$	(*d*) dipropyl tartrate				[2217-14-3]
	(388–576)	71.8	(403)	A	[87/5][47/5]
$C_{10}H_{19}ClNO_5P$	Phosphamidon				[13171-21-6]
	(293–388)	90.1	(308)	A	[87/5][99/16]
$C_{10}H_{19}Cl_2N$	N,N-*bis*(2-chloroethyl)cyclohexylamine				[4261-59-0]
	(273–333)	62.4	(288)	A, GS	[87/5][48/13] [99/16]
$C_{10}H_{19}N$	N-cyclopentylpiperidine				[7335-04-8]
	(283–318)	54.9±0.3	(301)	GS	[98/12]
	(283–318)	55.1±0.3	(298)	GS	[98/12]
$C_{10}H_{19}N$	decanenitrile (caprinitrile)				[1975-78-6]
	(381–519)	58.0	(396)	A	[87/5]
		66.8±0.4	(298)	C	[77/5]
	(381–431)	57.8	(396)	EB	[71/4]
	(431–518)	54.4	(446)	EB	[71/4]
$C_{10}H_{19}NO_3$	(*l*) N-acetylisoleucine, ethyl ester				
	(391–476)	69.1	(406)	A	[87/5]
$C_{10}H_{19}NO_3$	(*l*) N-acetylleucine, ethyl ester				
	(396–476)	74.8	(411)	A	[87/5]
$C_{10}H_{19}O_6PS_2$	(*dl*) Malathion				[121-75-5]
	(283–419)	71.1	(298)	A	[87/5]
$C_{10}H_{19}O_7PS$	O,O-dimethyl-S-[1,2-*bis*(ethoxycarbonyl)ethyl]thiophosphate				
	(283–406)	93.4	(298)	A	[87/5]
$C_{10}H_{20}$	1,1,4-trimethylcycloheptane				[2158-55-6]
		45.5±0.2	(298)	C	[96/18]
		45.6±0.2	(298)		[95/19]
	[Note: Text in [96/18] states 1,1,4-trimethylcycloheptane; however, the molecular structure of 1,1,4-trimethylcyclohexane is given in the paper.]				
$C_{10}H_{20}$	cyclodecane				[293-96-9]
	(404–489)	45.1	(419)	A, EB	[87/5][76/10]
	(343–386)	48.2	(358)	EB	[87/5][76/10]
$C_{10}H_{20}$	butylcyclohexane				[1678-93-9]
	(274–313)	47.4±0.2	(294)	GS	[95/27]
		47.0±0.2	(298)		[95/27]
		48.9±0.5	(298)	GC	[87/17]
		49.4±0.4	(298)	GCC	[78/16]
		49.4	(298)		[75/12]
		50.0	(298)		[71/28]
	(367–457)	44.9	(382)	A	[87/5][49/6]
$C_{10}H_{20}$	sec-butylcyclohexane				[7058-01-7]
	(369–455)	44.1	(384)	A	[87/5][49/6]
$C_{10}H_{20}$	*tert*-butylcyclohexane				[3178-22-1]
		45.0±0.1	(328)	C	[81/14]
		44.0±0.1	(343)	C	[81/14]
		43.0±0.1	(358)	C	[81/14]
		42.4±0.1	(368)	C	[81/14]
	(355–446)	42.9	(370)	A	[87/5][49/6]
$C_{10}H_{20}$	isobutylcyclohexane				[1678-98-4]
		47.5	(298)		[75/12]
	(355–446)	43.5	(370)	A	[87/5][49/6]
$C_{10}H_{20}$	1-isopropyl-4-methylcyclohexane				[99-82-1]
	(382–443)	43.6	(297)	A	[87/5]
$C_{10}H_{20}$	n-pentylcyclopentane				[3741-00-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		51.0	(298)		[71/28]
$C_{10}H_{20}$	1-decene				[872-05-9]
	(383–445)	43.8	(398)	A	[87/5]
		50.4±0.2	(298)	C	[77/1]
		50.5	(298)		[71/28]
	(360–445)	45.1	(375)		[50/6]
$C_{10}H_{20}$	*cis* 2-decene				[20348-51-0]
	(401–447)	43.6	(416)	A	[87/5]
$C_{10}H_{20}$	*trans* 2-decene				[20063-97-2]
	(401–447)	43.7	(416)	A	[87/5]
$C_{10}H_{20}$	*cis* 3-decene				[19398-86-8]
	(398–444)	43.1	(413)	A	[87/5]
$C_{10}H_{20}$	*trans* 3-decene				[19150-21-1]
	(398–445)	43.4	(413)	A	[87/5]
$C_{10}H_{20}$	*cis* 4-decene				[19398-88-0]
	(397–444)	43.0	(412)	A	[87/5]
$C_{10}H_{20}$	*trans* 4-decene				[19398-89-1]
	(398–444)	43.2	(413)	A	[87/5]
$C_{10}H_{20}$	*cis* 5-decene				[7433-78-5]
	(397–443)	42.9	(412)	A	[87/5]
$C_{10}H_{20}$	*trans* 5-decene				[7433-56-9]
	(398–444)	42.3	(413)	A	[87/5]
$C_{10}H_{20}$	4-propyl-3-heptene				[4485-13-6]
	(333–371)	43.7	(348)	A, MG	[87/5][55/11]
$C_{10}H_{20}$	*trans* 2,2,4,4-tetramethyl-3-hexene				
		42.0±0.2	(298)	GCC	[79/17]
$C_{10}H_{20}Br_2$	1,1-dibromodecane				[59104-80-2]
	(442–610)	62.2	(457)	A, EST	[87/5][56/16] [70/14][99/16]
$C_{10}H_{20}Br_2$	1,2-dibromodecane				[28467-71-2]
	(368–524)	67.0	(383)	A	[87/5][47/5] [70/14]
$C_{10}H_{20}Cl_2$	1,1-dichlorodecane				[3162-62-7]
	(415–577)	56.9	(430)	A, EST	[87/5][56/16] [70/14]
$C_{10}H_{20}Cl_2$	1,10-dichlorodecane				[2162-98-3]
	(441–520)	61.1	(456)		[99/16]
		67.3			[98/20]
	(440–540)	73.1	(298)		[91/2]
$C_{10}H_{20}F_2$	1,1-difluorodecane				[62127-43-9]
	(364–504)	50.2	(379)	A, EST	[87/5][56/16] [70/14][99/16]
$C_{10}H_{20}NO_2$	ethyl 2-(N,N-diethylamino)butanoate				
	(283–313)	57.3±0.2	(298)	GS	[96/20]
$C_{10}H_{20}N_2O_2$	tetraethyloxamide				[14288-05-2]
		63	(464)	TGA, DSC	[02/36]
$C_{10}H_{20}O$	*bis*(3-methyl-2-butenyl) ether				
	(383–413)	47.8	(398)		[89/8]
$C_{10}H_{20}O$	(2-ethylhexyl) vinyl ether				[103-44-6]
	(330–451)	44.7	(345)	A	[87/5]
$C_{10}H_{20}O$	1-butylcyclohexanol				[5445-30-7]
	(362–481)	55.7	(377)	A	[87/5]
$C_{10}H_{20}O$	3,7-dimethyl-6-octene-1-ol				[106-22-9]
	(293–333)	72.6	(308)	A	[87/5]
	(373–500)	65.9	(388)	A	[87/5]
$C_{10}H_{20}O$	(*l*) menthol				[2216-51-5]
	(372–488)	59.1	(387)	A	[87/5]
	(329–485)	58.2	(344)		[47/5]
$C_{10}H_{20}O$	1-(1-methylcyclohexyl)-1-propanol				
	(396–420)	55.4	(408)	A	[87/5]
$C_{10}H_{20}O$	2-(1-methylcyclohexyl)-2-propanol				[27331-02-8]
	(393–418)	53.0	(405)	A	[87/5]
$C_{10}H_{20}O$	(Z) 3-decen-1-ol				[10340-22-4]
	(323–363)	78.7	(298)	CGC	[00/10][94/13]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{10}H_{20}O$	(E) 3-decen-1-ol				[10339-60-3]
	(323–363)	78.8	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(Z) 4-decen-1-ol				[57074-37-0]
	(323–363)	79.6	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(E) 4-decen-1-ol				[10339-62-5]
	(323–363)	80.3	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(Z) 5-decen-1-ol				[51652-47-2]
	(323–363)	80.3	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(E) 5-decen-1-ol				[56578-18-8]
	(323–363)	80.6	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(Z) 6-decen-1-ol				[68760-59-8]
	(323–363)	80.3	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(E) 6-decen-1-ol				[38421-92-0]
	(323–363)	80.6	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(Z) 7-decen-1-ol				[16504-66-8]
	(323–363)	80.8	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(E) 7-decen-1-ol				[52957-12-7]
	(323–363)	81.1	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(Z) 8-decen-1-ol				[83799-67-1]
	(323–363)	81.6	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	(E) 8-decen-1-ol				[83799-68-2]
	(323–363)	81.5	(298)	CGC	[00/10][94/13]
$C_{10}H_{20}O$	2-decanone				[693-54-9]
	(317–484)	51.7	(332)	A	[87/5][47/5]
	(357–560)	55.1	(372)		[87/5]
		60.9±0.5	(298)	GCC	[79/7]
	(358–568)	44.6	(487)		[75/8]
$C_{10}H_{20}O$	2,2,5,5-tetramethyl-3-hexanone				[868-91-7]
		48.8±0.2	(298)	C	[70/18]
$C_{10}H_{20}O$	decanal				[112-31-2]
	(308–353)	60.5	(298)	CGC	[96/7][00/10]
	(288–333)	57.3	(303)	A	[87/5]
	(293–358)	57.3	(308)	A	[87/5]
		60.4±0.3	(298)		[81/18]
	(324–482)	56.3	(339)		[87/5][47/5]
$C_{10}H_{20}O_2$	2-heptyl-1,3-dioxolane				[4359-57-3]
	(318–453)	62.0	(333)	A	[87/5]
$C_{10}H_{20}O_2$	2-(1-ethylpentyl)-1,3-dioxolane				[4359-47-1]
	(333–453)	55.3	(348)	A	[87/5]
$C_{10}H_{20}O_2$	4-hexyl-1,3-dioxane				[2244-85-1]
	(318–453)	56.9	(333)	A	[87/5]
$C_{10}H_{20}O_2$	3-pentyl-4-hydroxytetrahydropyran				[61827-60-9]
	(383–453)	72.6	(398)	A	[87/5]
$C_{10}H_{20}O_2$	2-butoxy-3-hexanone				
	(333–418)	39.5	(348)	A	[87/5]
$C_{10}H_{20}O_2$	hydroxycitronellal				[107-75-5]
	(283–333)	75.3	(298)	A, ME	[87/5][55/8]
$C_{10}H_{20}O_2$	octyl acetate				[112-14-1]
		61.7	(298)	GC	[97/22]
	(334–417)	54.9	(349)	A	[87/5]
	(345–472)	47.8	(360)	A	[87/5]
$C_{10}H_{20}O_2$	ethyl octanoate				[106-32-1]
	(382–412)	52.5±0.2	(397)	EB	[91/7]
	(382–412)	59.5±1.3	(298)	EB	[91/7]
	(330–480)	53.2	(345)	A	[87/5]
$C_{10}H_{20}O_2$	2-ethylhexylacetate				[103-09-3]
	(333–472)	50.1	(348)	A	[87/5]
$C_{10}H_{20}O_2$	isopentyl isovalerate				[659-70-1]
	(341–479)	46.4	(356)	A	[87/5]
	(300–467)	47.2	(315)		[47/5]
$C_{10}H_{20}O_2$	neopentyl pivalate				[5340-26-1]
	(280–310)	49.1±0.5	(295)	GS	[99/4]
	(280–310)	48.9±0.5	(298)	GS	[99/4]
$C_{10}H_{20}O_2$	methyl nonanoate				[1731-84-6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		57.4	(350)		[02/27]
		56.7±0.3	(364)		[02/27]
		61.6±0.4	(298)		[02/27]
		57.7±0.7	(298)	GC	[87/17]
		62.0±0.5	(298)	GCC	[80/5]
		62.0±0.4	(298)	C	[77/1]
	(364–439)	55.6	(379)	A, EST	[87/5][63/16]
$C_{10}H_{20}O_2$	decanoic acid (capric acid)				[334-48-5]
	(398–543)	76.4	(413)	A	[87/5]
	(305–323)	88.6	(314)	ME, TE	[82/4]
		71.4	(418)	I	[43/7]
$C_{10}H_{20}O_3$	propyl 3-butoxypropionate				[14144-47-9]
	(373–473)	44.2	(388)	A	[87/5]
$C_{10}H_{20}O_3$	pentyl 3-ethoxypropionate				[14144-36-6]
	(374–498)	54.1	(389)	A	[87/5]
$C_{10}H_{20}O_3$	methyl 3-hexyloxypropionate				[7419-97-8]
	(373–473)	55.1	(388)	A	[87/5]
$C_{10}H_{20}O_4$	diethylene glycol monobutyl ether acetate				[124-17-4]
	(393–520)	57.7	(408)	A	[87/5]
$C_{10}H_{20}O_5$	1,4,7,10,13-pentaoxacyclopentadecane (15-crown-5)				[33100-27-5]
		75.7±1.7	(298)	CGC	[00/9]
		79.6±0.3	(298)	C	[82/9]
$C_{10}H_{21}Br$	1-bromodecane				[112-29-8]
	(391–545)	56.1	(406)		[99/16]
	(383–570)	56.6	(398)	A, EST	[87/5][61/13]
$C_{10}H_{21}Cl$	1-chlorodecane				[1002-69-3]
		64.0±0.2	(298)	GS	[01/1]
	(379–530)	54.4	(394)		[99/16]
	(359–499)	56.2	(374)	A, DTA	[87/5][69/5]
$C_{10}H_{21}F$	1-fluorodecane				[334-56-5]
	(342–503)	50.4	(357)	A	[87/5][61/13]
$C_{10}H_{21}I$	1-iododecane				[2050-77-3]
	(407–571)	57.4	(422)		[99/16]
	(397–598)	58.1	(412)	A, EST	[87/5][61/13]
$C_{10}H_{21}N$	N,α-dimethylcyclohexanethylamine				[101-40-6]
	(270–300)	50.2	(285)	A	[87/5]
$C_{10}H_{21}NO$	N,N-diethylhexanamide				[6282-97-9]
	(373–443)	47.7	(388)	A	[87/5]
$C_{10}H_{22}$	decane				[124-18-5]
	(337–376)	46.6	(352)		[02/13]
		51.1±3.9	(298)	CGC	[00/9]
		51.5	(299)	C	[96/22]
		50.5	(314)	C	[96/22]
		50.1	(324)	C	[96/22]
		49.2	(334)	C	[96/22]
	(403–453)	50.9	(298)	CGC	[95/21]
	(423–473)	51.5	(298)	CGC	[95/21]
		51.4	(298)		[94/12]
	(409–584)	42.5	(424)		[92/2]
	(268–490)	48.1	(340)	EB, IPM	[89/1]
	(268–490)	51.4	(298)	EB, IPM	[89/1]
	(252–383)	53.8	(267)	A	[87/5]
	(447–526)	41.7	(462)	A	[87/5]
	(524–617)	38.6	(539)	A	[87/5]
	(298–347)	50.3	(313)	GS	[86/6]
	(308–351)	49.8±1.7			[84/12]
		51.4±0.1	(298)	C	[82/18]
	(243–310)	55.9	(258)		[73/11]
		51.4	(298)		[71/28]
	(373–443)	45.3	(388)		[87/5][70/6]
		51.4	(298)	C	[47/7]
	(368–440)	45.5	(383)	MM	[45/2]
$C_{10}H_{22}$	2-methylnonane				[871-83-0]
	(324–441)	46.4±0.2	(339)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		47.3±0.2	(328)	C	[84/8]
		46.2±0.2	(343)	C	[84/8]
		45.0±0.2	(358)	C	[84/8]
		51.0	(298)		[71/28]
$C_{10}H_{22}$	3-methylnonane				[5911-04-6]
		47.3±0.2	(328)	C	[84/8]
		46.2±0.2	(343)	C	[84/8]
		45.1±0.2	(358)	C	[84/8]
		50.2	(298)		[71/28]
$C_{10}H_{22}$	4-methylnonane				[17301-94-9]
		49.5	(298)		[61/30]
$C_{10}H_{22}$	5-methylnonane				[15869-85-9]
		47.0±0.2	(328)	C	[84/8]
		45.9±0.2	(343)	C	[84/8]
		44.6±0.2	(358)	C	[84/8]
		49.8	(298)		[71/28]
$C_{10}H_{22}$	3-ethyloctane				[5881-17-4]
		49.0	(298)		[71/28]
$C_{10}H_{22}$	4-ethyloctane				[15869-86-0]
		48.1	(298)		[71/28]
$C_{10}H_{22}$	4-propylheptane				[3178-29-8]
		48.5	(298)		[71/28]
	(331–430)	44.1	(346)	A, MG	[87/5][55/11]
$C_{10}H_{22}$	4-isopropylheptane				
		47.3	(298)		[71/28]
$C_{10}H_{22}$	2,2-dimethyloctane				[15869-87-1]
		49.0	(298)		[71/28]
$C_{10}H_{22}$	2,3-dimethyloctane				[7146-60-3]
		48.1	(298)		[71/28]
$C_{10}H_{22}$	2,4-dimethyloctane				[4032-94-4]
		44.9±0.2	(328)	C	[84/4]
		43.6±0.2	(343)	C	[84/4]
		42.4±0.2	(358)	C	[84/4]
		48.5	(298)		[71/28]
$C_{10}H_{22}$	2,5-dimethyloctane				[15869-89-3]
		49.0	(298)		[71/28]
$C_{10}H_{22}$	2,6-dimethyloctane				[2051-30-1]
		49.3	(298)		[71/28]
$C_{10}H_{22}$	2,7-dimethyloctane				[1072-16-8]
		47.7	(298)		[71/28]
	(279–433)	45.2	(294)	A	[87/5][47/5]
$C_{10}H_{22}$	3,3-dimethyloctane				[4110-44-5]
		48.5	(298)		[71/28]
$C_{10}H_{22}$	3,4-dimethyloctane				[15869-92-8]
		48.1	(298)		[71/28]
$C_{10}H_{22}$	3,5-dimethyloctane				[15869-93-9]
		48.5	(298)		[71/28]
$C_{10}H_{22}$	3,6-dimethyloctane				[15869-94-0]
		47.3	(298)		[71/28]
$C_{10}H_{22}$	4,4-dimethyloctane				[15869-95-1]
		48.1	(298)		[71/28]
$C_{10}H_{22}$	4,5-dimethyloctane				[15869-96-2]
		48.5	(298)		[71/28]
$C_{10}H_{22}$	2-methyl-3-ethylheptane				[14676-29-0]
		48.1	(298)		[71/28]
$C_{10}H_{22}$	2-methyl-4-ethylheptane				[52896-88-5]
		47.3	(298)		[71/28]
$C_{10}H_{22}$	2-methyl-5-ethylheptane				[13475-78-0]
		48.1	(298)		[71/28]
$C_{10}H_{22}$	3-methyl-3-ethylheptane				[17302-01-1]
		47.7	(298)		[71/28]
$C_{10}H_{22}$	3-methyl-4-ethylheptane				[52896-89-6]
		47.7	(298)		[71/28]
$C_{10}H_{22}$	3-methyl-5-ethylheptane				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		47.7	(298)		[71/28]
$C_{10}H_{22}$	4-methyl-3-ethylheptane				
		48.1	(298)		[61/30]
$C_{10}H_{22}$	4-methyl-4-ethylheptane				
		47.2	(298)		[61/30]
$C_{10}H_{22}$	2,2,3-trimethylheptane				[52896-92-1]
		46.9	(298)		[71/28]
$C_{10}H_{22}$	2,2,4-trimethylheptane				[14720-74-2]
		45.6	(298)		[71/28]
$C_{10}H_{22}$	2,2,5-trimethylheptane				[20291-95-6]
		46.0	(298)		[71/28]
$C_{10}H_{22}$	2,2,6-trimethylheptane				[1190-83-6]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	2,3,3-trimethylheptane				[52896-93-2]
		46.9	(298)		[71/28]
$C_{10}H_{22}$	2,3,4-trimethylheptane				[52896-95-4]
		47.3	(298)		[71/28]
$C_{10}H_{22}$	2,3,5-trimethylheptane				[20278-85-7]
		47.3	(298)		[71/28]
$C_{10}H_{22}$	2,3,6-trimethylheptane				[4032-93-3]
		47.3	(298)		[71/28]
$C_{10}H_{22}$	2,4,4-trimethylheptane				[4032-92-2]
		45.2	(298)		[71/28]
$C_{10}H_{22}$	2,4,5-trimethylheptane				[20278-84-6]
		46.9	(298)		[71/28]
$C_{10}H_{22}$	2,4,6-trimethylheptane				[2613-61-8]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	2,5,5-trimethylheptane				[1189-99-7]
		46.0	(298)		[71/28]
$C_{10}H_{22}$	3,3,4-trimethylheptane				[20278-88-0]
		46.9	(298)		[71/28]
$C_{10}H_{22}$	3,3,5-trimethylheptane				[7154-80-5]
		46.0	(298)		[71/28]
$C_{10}H_{22}$	3,4,4-trimethylheptane				[20278-88-0]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	3,4,5-trimethylheptane				[20278-89-1]
		47.3	(298)		[71/28]
$C_{10}H_{22}$	2-methyl-3-isopropylhexane				
		46.4	(298)		[71/28]
$C_{10}H_{22}$	3,3-diethylhexane				[17302-02-2]
		47.3	(298)		[71/28]
$C_{10}H_{22}$	3,4-diethylhexane				[19398-77-7]
		47.7	(298)		[71/28]
$C_{10}H_{22}$	2,2-dimethyl-3-ethylhexane				[20291-91-2]
		46.0	(298)		[71/28]
$C_{10}H_{22}$	2,2-dimethyl-4-ethylhexane				[52896-99-8]
		45.2	(298)		[71/28]
$C_{10}H_{22}$	2,3-dimethyl-3-ethylhexane				[52897-00-4]
		46.9	(298)		[71/28]
$C_{10}H_{22}$	2,3-dimethyl-4-ethylhexane				[52897-01-5]
		46.9	(298)		[71/28]
$C_{10}H_{22}$	2,4-dimethyl-3-ethylhexane				[7220-26-0]
		46.9	(298)		[71/28]
$C_{10}H_{22}$	2,4-dimethyl-4-ethylhexane				[52897-03-7]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	2,5-dimethyl-3-ethylhexane				[52897-04-8]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	3,3-dimethyl-4-ethylhexane				[52897-05-9]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	3,4-dimethyl-3-ethylhexane				[52897-06-0]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	2,2,3,3-tetramethylhexane				[13475-81-5]
		45.2	(298)		[71/28]
$C_{10}H_{22}$	2,2,3,4-tetramethylhexane				[52897-08-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		45.6	(298)		[71/28]
$C_{10}H_{22}$	2,2,3,5-tetramethylhexane				[52897-09-3]
		45.2	(298)		[71/28]
$C_{10}H_{22}$	2,2,4,4-tetramethylhexane				[51750-65-3]
		43.5	(298)		[71/28]
$C_{10}H_{22}$	2,2,4,5-tetramethylhexane				[16747-42-5]
		44.4	(298)		[71/28]
$C_{10}H_{22}$	2,2,5,5-tetramethylhexane				[1071-81-4]
		43.5	(298)		[71/28]
$C_{10}H_{22}$	2,3,3,4-tetramethylhexane				[52897-10-6]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	2,3,3,5-tetramethylhexane				[52897-11-7]
		45.2	(298)		[71/28]
$C_{10}H_{22}$	2,3,4,4-tetramethylhexane				[52897-12-8]
		46.0	(298)		[71/28]
$C_{10}H_{22}$	2,3,4,5-tetramethylhexane				[52897-15-1]
		46.0	(298)		[71/28]
$C_{10}H_{22}$	3,3,4,4-tetramethylhexane				[5171-84-6]
		42.3	(298)		[71/28]
$C_{10}H_{22}$	2,4-dimethyl-3-isopropylpentane				[13475-79-1]
		45.6	(298)		[71/28]
$C_{10}H_{22}$	2-methyl-3,3-diethylpentane				[52897-16-2]
		47.3	(298)		[71/28]
$C_{10}H_{22}$	2,2,3-trimethyl-3-ethylpentane				[52897-17-3]
		46.0	(298)		[71/28]
$C_{10}H_{22}$	2,2,4-trimethyl-3-ethylpentane				[52897-18-4]
		44.8	(298)		[71/28]
$C_{10}H_{22}$	2,3,4-trimethyl-3-ethylpentane				[52897-19-5]
		46.4	(298)		[71/28]
$C_{10}H_{22}$	2,2,3,3,4-pentamethylpentane				[16747-44-7]
		45.2	(298)		[71/28]
$C_{10}H_{22}$	2,2,3,4,4-pentamethylpentane				[16747-45-8]
		43.5	(298)		[71/28]
$C_{10}H_{22}O$	hexyl *tert*-butyl ether				[69775-79-7]
		53.2	(298)		[U/2][02/32]
$C_{10}H_{22}O$	pentyl *tert*-amyl ether				
		53.5	(298)		[U/2][02/32]
$C_{10}H_{22}O$	ethyl *tert*-octyl ether				
		45.3±0.3	(298)		[U/2][02/32]
$C_{10}H_{22}O$	dipentyl ether				[693-65-2]
	(373–460)	46.2	(388)	A	[87/5]
	(423–480)	45.6	(451)		[68/13]
$C_{10}H_{22}O$	butyl hexyl ether				[54459-71-1]
		53.2±0.1	(298)	C	[85/2]
$C_{10}H_{22}O$	diisopentyl ether				[544-01-4]
	(353–393)	51.4	(298)	CGC	[95/21]
	(417–470)	41.4	(443)		[68/13]
	(291–447)	47.6	(306)	A	[87/5][47/5]
$C_{10}H_{22}O$	1-decanol				[112-30-1]
	(281–327)	79.5	(309)	GS	[01/3]
	(281–327)	80.9	(298)	GS	[01/3]
	(278–378)	81.1	(293)		[99/11]
	(373–423)	81.7	(298)	CGC	[95/21]
	(353–393)	79.3	(298)	CGC	[94/13][00/10]
	(283–388)	75.4	(336)		[92/14]
	(349–410)	71.6	(364)	A	[87/5]
	(405–528)	62.6	(420)	A	[87/5]
	(474–529)	53.9	(489)	A	[87/5]
		78.2±0.8	(323)	C	[79/6]
		81.5±0.8	(298)	C	[79/6]
		81.5±0.8	(298)	C	[77/1]
	(298–325)	77.6	(313)		[73/26]
	(400–529)	63.5	(415)	A, EB	[87/5][70/2]
	(378–504)	69.5	(393)	DTA	[69/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(298–325)	77.6	(311)	ME	[65/15]
	(364–461)	69.6	(379)		[58/2]
$C_{10}H_{22}O$	(*dl*) 3,7-dimethyl-1-octanol				[106-21-8]
	(341–467)	79.1	(356)	A	[87/5]
$C_{10}H_{22}O_2$	ethylene glycol dibutyl ether				[112-48-1]
	(356–476)	55.9	(371)	A	[87/5]
		58.8±0.1	(298)	C	[70/17]
$C_{10}H_{22}O_2$	ethylene glycol diisobutyl ether				[5669-09-0]
	(336–456)	46.1	(351)	A	[87/5]
$C_{10}H_{22}O_2$	ethylene glycol mono(2-ethylhexyl) ether				[1559-35-9]
	(381–502)	56.5	(396)	A	[87/5]
$C_{10}H_{22}O_2$	acetaldehyde dibutyl ether				[871-22-7]
	(303–464)	47.3	(318)	A	[87/5]
$C_{10}H_{22}O_2$	3,4-diethyl-3,4-hexanediol				[6931-71-1]
	(405–507)	54.7	(420)	A, EB	[87/5][79/10]
$C_{10}H_{22}O_2$	3-ethyl-3-hydroxymethyl-2-heptanol				
	(338–500)	63.4	(353)		[87/5]
$C_{10}H_{22}O_3$	diethylene glycol monohexyl ether				[112-59-4]
	(406–531)	62.7	(421)	A	[87/5]
$C_{10}H_{22}O_3$	dipropylene glycol monobutyl ether				[24083-03-2]
	(337–500)	63.2	(352)	A	[87/5][47/5]
$C_{10}H_{22}O_4$	tripropylene glycol monomethyl ether				[20324-33-8]
	(308–515)	58.7	(323)	A	[87/5]
$C_{10}H_{22}O_5$	tetraethylene glycol dimethyl ether (tetraglyme)				[143-24-8]
		76.9±2.6	(298)	CGC	[00/9]
	(419–553)	58.0	(434)	A	[87/5]
$C_{10}H_{22}S$	1-ethylthiooctane				[3698-94-0]
	(384–545)	63.9±0.6	(298)	EB	[96/3]
$C_{10}H_{22}S$	1-decanethiol				[143-10-2]
	(390–544)	56.4	(405)		[99/16]
	(283–293)	58.6	(288)	A	[87/5]
	(413–534)	54.6	(428)	A	[87/5]
		65.5±0.5	(298)	C	[77/1]
$C_{10}H_{22}S$	2-decanethiol				[13402-60-3]
	(380–534)	54.6	(395)		[99/16]
$C_{10}H_{22}S$	diisopentyl sulfide				[544-02-5]
	(339–366)	57.9	(352)	A	[87/5][99/16]
	(340–365)	56.9	(352)	C	[62/17]
$C_{10}H_{22}S$	dipentyl sulfide				[872-10-6]
	(346–365)	U66.3	(356)		[99/16]
	(346–366)	58.7	(356)	A	[87/5]
	(346–366)	57.5	(358)	EB	[62/17]
$C_{10}H_{22}S_2$	dipentyl disulfide				[112-51-6]
	(410–571)	59.8	(425)		[99/16]
		71.1±0.2	(298)	C	[85/2]
$C_{10}H_{22}S_2$	1,10-decanedithiol				[1191-67-9]
	(434–571)	72.3	(449)	A	[87/5][99/16]
					[43/6]
$C_{10}H_{23}N$	decylamine				[2016-57-1]
	(410–506)	52.4	(425)	A, EST	[87/5][56/17]
$C_{10}H_{23}N$	N,N-dimethyloctylamine				[7378-99-6]
	(284–323)	54.0±0.5	(303)		[97/21]
	(371–517)	50.2	(386)	A	[87/5]
$C_{10}H_{23}N$	dipentylamine				[2050-92-2]
	(379–527)	51.2	(394)	A	[87/5]
$C_{10}H_{23}N_2$	N-methyl-N-(-dimethylamino)hydrazone acetone				
	(288–315)	62.3	(301)		[80/20]
$C_{10}H_{23}N_3$	[2-(dimethylamino)ethyl]methylhydrazone-2-propanone				[67752-90-3]
	(288–315)	62.3	(301)	A	[87/5]
$C_{10}H_{24}NO_3PS$	O,O-diethyl-S-[2-(diethylamino)ethyl]thiophosphate				[78-53-5]
	(358–407)	94.5	(373)	A	[87/5][99/16]
$C_{10}H_{24}N_4$	*tetrakis*(dimethylamino)ethylene				[996-70-3]
	(358–485)	53.9±0.5	(298)	EB	[97/7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{11}F_{21}N_3$	2,2,2-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-N′-[2,2,2-trifluoro-1-(trifluoromethyl)-1-[[2,2,2-trifluoro-1-(trifluoro-methyl)ethylidene]amino]ethyl] ethanimidamide				[57731-09-6]
		39.8			[75/42]
$C_{11}F_{22}$	perfluoro(1-methyl-4-*tert*-butylcyclohexane) (mix *cis*+*trans*)				[75169-50-5]
	(345–442)	45.8	(360)		[99/16]
$C_{11}F_{22}$	perfluoro(1-methyl-4-*tert*-butylcyclohexane) (isomer not specified)				
		54.1±0.5	(298)	EB	[81/23]
$C_{11}F_{24}O_2$	octadecafluoro-1,9-*bis*(trifluoromethoxy)nonane				
	(293–353)	43.0	(323)		[99/16]
$C_{11}H_4Cl_5NO_2$	2,2,4-trichloro-5-[(3,4-dichlorophenyl)amino]-4-cyclopentene-1,3-dione				[77765-41-4]
	(453–483)	87.5	(468)	GC	[80/25]
$C_{11}H_5BrCl_3NO_2$	2,2,4-trichloro-5-[(2-bromophenyl)amino]-4-cyclopentene-1,3-dione				[73373-59-8]
	(453–483)	67.5	(468)	GC	[80/25]
$C_{11}H_5BrCl_3NO_2$	2,2,4-trichloro-5-[(3-bromophenyl)amino]-4-cyclopentene-1,3-dione				[73373-60-1]
	(453–483)	78.1	(468)	GC	[80/25]
$C_{11}H_5BrCl_3NO_2$	2,2,4-trichloro-5-[(4-bromophenyl)amino]-4-cyclopentene-1,3-dione				[73373-61-2]
	(453–483)	82.9	(468)	GC	[80/25]
$C_{11}H_5Cl_4NO_2$	2,2,4-trichloro-5-[(4-chlorophenyl)amino]-4-cyclopentene-1,3-dione				[73373-63-4]
	(453–483)	86.2	(468)	GC	[80/25]
$C_{11}H_7N_3$	2,2-dicyano-1-phenylpropionitrile				[6023-46-7]
	(318–388)	66.9		B	[94/5]
$C_{11}H_8N_4$	1,1,2,2-tetracyano-4-methyl-4-cyclohexene				
		82.0±2.1		MG	[71/37]
$C_{11}H_8O_2$	1-naphthoic acid				[86-55-5]
	(457–573)	97.2	(472)	A	[87/5]
$C_{11}H_8O_2$	2-naphthoic acid				[93-09-4]
	(463–582)	98.9	(478)	A	[87/5]
$C_{11}H_9Cl$	1-(chloromethyl)naphthalene				[86-52-2]
	(423–565)	59.8	(494)		[99/16]
	(407–447)	U90.2	(422)	A	[87/5]
$C_{11}H_9N$	2-phenylpyridine				[1009-89-5]
		68.7±4.6	(298)	CGC	[00/3]
$C_{11}H_9N$	3-phenylpyridine				[1008-88-4]
		64.5±4.5	(298)	CGC	[00/3]
$C_{11}H_{10}$	1-methylnaphthalene				[92-12-0]
	(323–473)	62.4	(298)	GC	[02/18]
	(485–595)	50.0	(500)		[92/2]
	(259–388)	63.3	(274)		[88/12]
	(424–536)	49.6	(455)		[81/1]
	(424–536)	45.9	(525)		[81/1]
	(278–313)	57.5	(293)	A, GS	[87/5][79/11]
		57.3±0.4	(298)	C	[74/28]
	(415–526)	52.3	(430)	A, GS	[87/5][55/7]
$C_{11}H_{10}$	2-methylnaphthalene				[91-57-6]
	(424–535)	48.4	(465)		[81/1]
	(424–535)	46.4	(505)		[81/1]
	(423–515)	51.2	(438)	A, GS	[87/5][55/7]
$C_{11}H_{11}Cl_3O_3$	2,4,5-trichlorophenoxyacetic acid, propyl ester				[1928-40-1]
	(444–573)	83.2	(459)	A	[87/5][99/16]
$C_{11}H_{11}N$	2,4-dimethylquinoline				[1198-37-4]
	(458–543)	56.3	(473)	A	[87/5]
$C_{11}H_{11}N$	2,6-dimethylquinoline				[877-43-0]
	(461–541)	55.7	(476)	A	[87/5]
$C_{11}H_{12}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, isopropyl ester				[94-11-1]
	(460–573)	69.5	(475)	A	[87/5][99/16]
$C_{11}H_{12}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, propyl ester				[1928-61-1]
	(444–573)	77.3	(459)	A	[87/5][99/16]
$C_{11}H_{12}Cl_2O_4$	2,4-dichlorophenoxyacetic acid, 3-hydroxypropyl ester				[28191-20-0]
	(463–483)	72.1	(473)	A	[87/5][99/16]
$C_{11}H_{12}O$	2-ethylidiene-3-phenylpropanal				
	(333–374)	73.6	(348)	A	[87/5]
$C_{11}H_{12}O_2$	benzyl methacrylate				[2495-37-6]
	(347–431)	70.5	(362)	A	[87/5]
$C_{11}H_{12}O_2$	ethyl cinnamate				[103-36-6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(453–544)	57.8	(468)	A	[87/5]
$C_{11}H_{12}O_2$	1-phenyl-1,3-pentanedione				[5331-64-6]
	(371–550)	64.6	(386)	A	[87/5]
$C_{11}H_{12}O_2$	1-phenyl-4,7-dioxaspiro[2.4]heptane				[39522-76-4]
	(307–333)	71.3±0.7	(298)	GS	[02/32]
	(288–302)	69.6±0.7		GS	[98/21]
$C_{11}H_{12}O_2$	4-carboxymethylpentacyclo[4.3.0.0.^{2,5}0^{4,7}]nonane				[40317-63-3]
	(303–343)	80.0±1.7	(333)		[84/12]
$C_{11}H_{12}O_3$	benzoylacetic acid, ethyl ester				[94-02-0]
	(380–538)	72.1	(395)	A	[87/5]
$C_{11}H_{12}O_3$	myristicin				[607-91-0]
	(368–553)	61.2	(383)	A	[87/5]
$C_{11}H_{12}O_3$	2-piperonylpropanal				
	(373–423)	74.5	(388)	A	[87/5]
$C_{11}H_{13}Cl_3$	4-*tert*-butyl-2,3,6-trichlorotoluene				[61468-36-8]
	(423–570)	62.7	(438)	A	[87/5][73/15] [99/16]
$C_{11}H_{14}$	1,1-dimethylindane				[4912-92-9]
	(313–348)	50.1	(328)	A	[87/5]
	(313–467)	50.5	(328)	A	[87/5]
	(387–467)	45.9	(402)	A	[87/5]
$C_{11}H_{14}$	4,6-dimethylindane				[1685-82-1]
	(313–467)	56.9	(328)	A	[87/5]
	(313–363)	56.4	(328)	A	[87/5]
	(415–467)	50.3	(430)	A	[87/5]
$C_{11}H_{14}$	4,7-dimethylindane				[6682-71-9]
	(313–470)	54.7	(328)	A	[87/5]
	(313–363)	56.9	(328)	A	[87/5]
	(417–470)	50.6	(432)	A	[87/5]
$C_{11}H_{14}$	4-isopropylstyrene				[2055-40-5]
	(408–478)	48.5	(423)	A	[87/5]
$C_{11}H_{14}$	5-methyl-1,2,3,4-tetrahydronaphthalene				[2809-64-5]
	(416–508)	53.4	(431)	A	[87/5]
$C_{11}H_{14}$	6-methyl-1,2,3,4-tetrahydronaphthalene				[1680-51-9]
	(411–502)	53.7	(426)	A	[87/5]
$C_{11}H_{14}$	2,4,5-trimethylstyrene				[3937-24-4]
	(352–490)	56.4	(367)	A	[87/5][49/18]
$C_{11}H_{14}$	2,4,6-trimethylstyrene				[769-25-5]
	(362–483)	50.9	(377)	A	[87/5][49/18]
$C_{11}H_{14}Cl_2$	4-*tert*-butyl-2,5-dichlorotoluene				[61468-35-7]
	(395–538)	57.0	(410)	A	[87/5][73/15] [99/16]
$C_{11}H_{14}N_2O_4$	3-nitro-(4-nitrophenyl)pentane				
	(321–358)	88.0±0.8	(298)	GS	[97/5]
$C_{11}H_{14}O$	*tert*-butyl phenyl ketone				[938-16-9]
	(330–493)	55.5	(345)	A	[87/5][47/5]
$C_{11}H_{14}O$	2-ethyl-3-phenylpropanal				
	(343–388)	64.6	(358)	A	[87/5]
$C_{11}H_{14}O$	isobutyl phenyl ketone				[582-62-7]
	(331–501)	55.7	(346)	A	[87/5][47/5]
$C_{11}H_{14}O$	2,3,5-trimethylacetophenone				
	(352–557)	57.9	(367)	A	[87/5][47/5]
$C_{11}H_{14}O_2$	1,1-dimethoxy-2-phenylcyclopropane				
	(278–313)	63.9±0.6		GS	[98/21]
$C_{11}H_{14}O_2$	3-acetoxy-1-phenylpropane				
	(293–333)	74.3	(306)	A	[87/5]
$C_{11}H_{14}O_2$	butyl benzoate				[120-50-3]
	(374–474)	63.2	(394)	BG	[88/2]
	(374–474)	55.7	(452)	BG	[88/2]
	(343–405)	59.1	(358)	A	[87/5]
$C_{11}H_{14}O_2$	1,2-dimethoxy-4-(1-propenyl)benzene				[93-16-3]
	(358–521)	61.9	(373)	A	[87/5][47/5]
$C_{11}H_{14}O_2$	isobutyl benzoate				[136-60-7]
	(370–467)	60.4	(393)	BG	[88/2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(370–467)	54.4	(449)	BG	[88/2]
	(291–300)	58.1	(295)	A	[87/5]
	(338–510)	57.1	(353)	A	[87/5][47/5]
$C_{11}H_{14}O_2$	ethyl 2-phenylpropionate				[2510-99-8]
	(293–329)	63.2±0.3	(311)	GS	[99/2]
	(293–329)	64.0±0.3	(298)	GS	[99/2]
$C_{11}H_{14}O_2$	1-(4-methoxyphenyl)-2-butanone				[53917-01-4]
	(373–443)	62.6	(388)	A	[87/5]
$C_{11}H_{14}O_3$	butyl 4-hydroxybenzoate				
		72.2		TGA	[01/20]
$C_{11}H_{14}O_3$	2-piperonylpropanol				
	(373–443)	84.8	(388)	A	[87/5]
$C_{11}H_{15}Cl$	4-*tert*-butyl-2-chlorotoluene				[42597-10-4]
	(372–503)	54.0	(387)	A	[87/5][73/15] [99/16]
$C_{11}H_{15}N$	2-phenylethylazetidine				[42525-65-2]
	(302–333)	62.2	(317)	A	[87/5][76/22]
$C_{11}H_{15}N$	N-phenylpiperidine				[4096-20-2]
	(284–323)	64.0±0.4	(303)	GS	[98/12]
	(284–323)	64.3±0.4	(298)	GS	[98/12]
$C_{11}H_{15}NO$	N,N-diethylbenzamide				[1696-17-9]
	(373–403)	56.5	(388)	A	[87/5]
	(374–405)	53.2	(389)		[69/1]
$C_{11}H_{15}NO$	(4R,5R)-3,4-dimethyl-5-phenyl-1,3-oxazolidine				
	(293–303)	50.0±1.3	(298)		[98/3]
$C_{11}H_{15}NO$	(4S,5R)-3,4-dimethyl-5-phenyl-1,3-oxazolidine				
	(293–303)	52.4±0.9	(298)		[98/3]
$C_{11}H_{16}$	tetracyclo[6,2,1,$0^{2,7}$,$0^{3,5}$]undecane				[1777-44-2]
		55.3±0.3	(298)	C	[96/18]
$C_{11}H_{16}$	pentylbenzene				[538-68-1]
		55.3	(298)		[94/11]
		55.1	(298)		[71/28]
$C_{11}H_{16}$	(*dl*) 2-phenylpentane				[2719-52-0]
	(302–466)	50.3	(317)	A	[87/5]
$C_{11}H_{16}$	1-*tert*-butyl-3-methylbenzene				[1075-38-3]
	(279–314)	51.4±0.6	(296)	GS	[98/19]
		51.3±0.6	(298)		[98/19]
$C_{11}H_{16}$	1-*tert*-butyl-4-methylbenzene				[98-51-1]
	(279–314)	52.3±0.5	(296)	GS	[98/19]
		52.2±0.6	(298)		[98/19]
$C_{11}H_{16}$	4-*tert*-butyltoluene				[98-15-1]
	(342–465)	49.1	(357)	A	[87/5][73/15]
$C_{11}H_{16}$	3,5-diethyltoluene				[2050-24-0]
	(307–474)	49.6	(322)	A	[87/5][47/5]
$C_{11}H_{16}$	1-ethyl-3-isopropylbenzene				[4920-99-4]
	(301–466)	48.8	(316)	A	[87/5][47/5]
$C_{11}H_{16}$	1-ethyl-4-isopropylbenzene				[4218-48-8]
	(304–469)	49.4	(319)	A	[87/5][47/5]
$C_{11}H_{16}$	2-ethyl-1,3,5-trimethylbenzene				[3982-67-0]
	(312–481)	52.6	(327)	A	[87/5]
$C_{11}H_{16}$	3-ethyl-1,2,4-trimethylbenzene				[18262-85-6]
	(347–488)	61.3	(362)	A	[87/5]
$C_{11}H_{16}$	5-ethyl-1,2,4-trimethylbenzene				[17851-27-3]
	(317–481)	56.4	(332)	A	[87/5][47/5]
$C_{11}H_{16}$	pentamethylbenzene				[700-12-9]
	(338–503)	57.8	(353)	A	[87/5]
$C_{11}H_{16}O$	2-sec-butyl-4-methylphenol				[51528-17-7]
	(413–548)	58.4	(428)	A	[87/5]
	(383–523)	59.0	(373)		[53/9]
	(383–523)	58.0	(398)		[53/9]
	(383–523)	55.8	(423)		[53/9]
	(383–523)	51.4	(473)		[53/9]
$C_{11}H_{16}O$	2-*tert*-butyl-4-methylphenol				[2409-55-4]
	(327–358)	63.0±0.3	(343)	GS	[99/18]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		65.7±0.3	(298)		[99/18]
	(385–517)	58.9	(400)	A	[87/5]
	(343–507)	57.7	(348)		[53/9]
	(343–507)	55.7	(373)		[53/9]
	(343–507)	52.6	(423)		[53/9]
	(343–507)	48.5	(473)		[53/9]
$C_{11}H_{16}O$	2-*tert*-butyl-5-methylphenol				[88-60-8]
	(296–343)	65.9±0.3	(320)	GS	[99/18]
		67.2±0.3	(298)		[99/18]
	(378–490)	59.8	(393)	A	[87/5]
	(383–518)	53.0	(398)	A	[87/5]
$C_{11}H_{16}O$	2-*tert*-butyl-6-methylphenol				[2219-82-1]
	(308–343)	62.2±0.5	(326)	GS	[99/19]
		63.8±0.5	(298)		[99/19]
	(375–505)	55.2	(390)	A	[87/5]
$C_{11}H_{16}O$	4-*tert*-butyl-2-methylphenol				[98-27-1]
	(291–333)	71.3±0.6	(312)	GS	[99/18]
		72.1±0.6	(298)		[99/18]
	(347–520)	61.5	(362)	A	[87/5]
	(275–297)	75.7	(286)	A	[87/5][60/1]
	(347–532)	55.7	(348)		[53/9]
	(347–532)	53.9	(373)		[53/9]
	(347–532)	53.2	(398)		[53/9]
	(347–532)	50.9	(423)		[53/9]
	(347–532)	46.7	(473)		[53/9]
$C_{11}H_{16}O$	2-ethyl-3-phenyl-1-propanol				[3968-87-4]
	(348–393)	70.9	(363)	A	[87/5]
$C_{11}H_{16}O$	2-(2-pentyl)phenol				[87-26-3]
	(397–501)	74.4	(413)	EB	[90/5]
	(397–501)	59.6	(412)		[93/10]
$C_{11}H_{16}O$	4-pentylphenol				[14938-35-3]
	(423–563)	60.9	(438)	A	[87/5]
$C_{11}H_{16}O$	4-*tert*-pentylphenol				[80-46-6]
	(297–333)	64.2±0.2	(329)	GS	[99/18]
		65.3±0.2	(298)		[99/18]
	(385–548)	58.2	(400)	A	[87/5]
$C_{11}H_{16}O$	5-phenyl-1-pentanol				[10521-91-2]
	(373–430)	58.2	(388)	A	[87/5]
$C_{11}H_{16}O$	(1-propoxyethyl)benzene				
	(288–321)	56.4±0.2	(305)	GS	[01/16]
	(288–321)	56.7±0.2	(298)	GS	[01/16]
$C_{11}H_{16}O$	(1-isopropoxyethyl)benzene				[65757-61-1]
	(278–313)	55.4±0.3	(298)	GS	[02/29][02/38]
$C_{11}H_{16}O$	cumyl ethyl ether				[1712-74-9]
	(278–313)	54.8±0.5	(296)	GS	[01/18]
	(278–313)	54.7±0.5	(298)	GS	[01/18]
$C_{11}H_{16}O_2$	2-*tert*-butyl-4-methoxyphenol				[121-00-6]
	(403–463)	54.4	(418)	A	[87/5]
$C_{11}H_{16}O_2$	1,3-dihydroxy-4-pentylbenzene				[533-24-4]
	(423–488)	84.9	(438)	A, GC	[87/5][75/24]
$C_{11}H_{16}O_2$	phenyldiethoxymethane				[774-48-1]
	(283–329)	62.8±0.6	(298)	GS	[02/32]
$C_{11}H_{16}O_2$	1,1-dimethoxy-1-phenylpropane				[25310-92-3]
	(288–328)	58.9±0.3	(298)	GS	[02/32]
	(288–328)	57.9±0.3		GS	[98/21]
$C_{11}H_{16}O_2$	*tert*-pentylcatechol (isomer not specified)				
	(398–473)	58.2	(436)		[65/21]
$C_{11}H_{16}O_5$	ethylcamphoric acid anhydride				
	(391–571)	70.8	(406)	A	[87/5][47/5]
$C_{11}H_{16}O_5$	(1-methylallyl)[1-(allyloxycarbonyl)ethyl]carbonate				
	(368–508)	60.2	(383)	A	[87/5]
$C_{11}H_{17}Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-octyl ester				[76619-96-0]
	(443–483)	74.2		GC	[80/24]
$C_{11}H_{17}NO$	2-(dimethylamino)-1-phenyl-1-propanone				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(293–333)	64.8±1.2	(298)	GS	[94/3]
$C_{11}H_{18}O$	6-methyl-3-isopropenyl-5-hepten-2-one				
	(390–420)	49.7	(405)		[89/8]
$C_{11}H_{18}O_2$	borneol formate				[7492-41-3]
	(320–487)	52.7	(335)		[87/5][47/5]
$C_{11}H_{18}O_2$	3,7-dimethyl-*cis*-2,6-octadienyl formate				[2142-94-1]
	(330–498)	58.1	(345)	A	[87/5]
$C_{11}H_{18}O_2$	3,7-dimethyl-*trans*-2,6-octadienyl formate				[105-86-2]
	(334–503)	57.1	(349)	A	[87/5][47/5]
$C_{11}H_{18}O_2$	isoborneol formate				[1200-67-5]
	(383–441)	53.5	(398)	A	[87/5]
$C_{11}H_{18}O_4$	1,1-cyclopentanedicarboxylic acid, diethyl ester				
	(293–323)	66.8±0.4		GS	[98/22]
$C_{11}H_{18}O_5$	4-oxononanedioic acid, dimethyl ester				
	(394–559)	72.7	(409)	A	[87/5]
$C_{11}H_{18}O_6$	1,1,1-*tris*(ethoxycarbonyl)methane				
	(298–338)	74.1±0.4		GS	[95/8]
$C_{11}H_{18}O_6$	1,1,1-*tris*(methoxycarbonyl)pentane				
	(298–338)	81.0±0.4		GS	[95/8]
$C_{11}H_{19}NO_2$	ethyl *bis*(isopropyl)cyanoacetate				[62391-95-1]
	(284–319)	65.0±0.9	(298)	GS	[95/11]
$C_{11}H_{19}O_5$	N-acetyl-(*l*)-glutamic acid, diethyl ester				[1446-19-1]
	(403–503)	67.2	(418)	A	[87/5]
$C_{11}H_{20}$	spiro[5.5]undecane				[180-43-8]
		56.1	(298)	C	[75/14]
$C_{11}H_{20}$	cyclopentylcyclohexane				[1606-08-2]
	(383–488)	47.9	(398)	A	[87/5]
$C_{11}H_{20}Cl_4$	1,1,1,11-tetrachloroundecane				[3922-34-7]
	(303–353)	92.5	(318)	A	[87/5][99/16]
$C_{11}H_{20}Cl_4$	1,2,10,11-tetrachloroundecane				
		78.7			[98/20]
$C_{11}H_{20}O$	cycloundecanone				[878-13-7]
	(363–433)	60.3	(378)	A	[87/5]
	(448–501)	51.8	(463)	A, EB	[87/5][76/10]
$C_{11}H_{20}O_2$	2,2,6,6-tetramethyl-3,5-heptanedione				[1118-71-4]
		59.5	(298)		[78/18]
$C_{11}H_{20}O_2$	(*dl*) 2-ethylhexyl acrylate				[103-11-7]
	(323–489)	55.3	(338)	A	[87/5][47/5]
$C_{11}H_{20}O_2$	formic acid, 3-para-menthol ester				
	(320–492)	52.0	(335)	A	[87/5][47/5]
$C_{11}H_{20}O_2$	2-hexyl-4,7-dihydro-1,3-dioxepin				[61732-96-5]
	(333–453)	66.0	(348)	A	[87/5]
$C_{11}H_{20}O_2$	octyl acrylate				[2499-59-4]
	(331–500)	56.2	(346)	A	[87/5][47/5]
$C_{11}H_{20}O_2$	oxa-2-cyclododecanone (undecanolactone)				[1725-03-7]
	(365–387)	57.7±0.8	(376)	MM	[91/7]
	(365–387)	66.2±1.3	(298)	MM	[91/7]
	(353–413)	70.5	(368)	A	[87/5]
$C_{11}H_{20}O_2$	10-undecenoic acid				[112-38-9]
	(387–548)	70.6	(402)	A	[87/5][47/5]
$C_{11}H_{20}O_2$	3,3-dimethyl-1,5-dioxaspiro[5.5]undecane				[[7-7-29-9]
	(283–323)	59.0±0.6		GS	[98/21][02/32]
$C_{11}H_{20}O_3$	hexyl levulinate				[24431-34-3]
	(363–540)	66.6	(378)	A	[87/5][47/5]
		59.1	(479)		[31/1]
$C_{11}H_{20}O_4$	(*dl*) hexyl 2-acetoxypropionate				[77008-66-3]
	(322–517)	70.3	(337)	A	[87/5]
$C_{11}H_{20}O_4$	azelaic acid, dimethyl ester				[1732-10-1]
	(413–540)	63.6	(428)	A	[87/5]
$C_{11}H_{20}O_4$	diethyl diethylmalonate				[77-25-8]
	(386–491)	68.5	(401)	A	[87/5]
$C_{11}H_{20}O_5$	hexyl[1-(methoxycarbonyl)ethyl]carbonate				
	(371–538)	65.9	(386)	A	[87/5]
$C_{11}H_{20}O_5$	propyl[1-(butoxycarbonyl)ethyl]carbonate				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(330–463)	66.4	(345)	A	[87/5]
$C_{11}H_{21}N$	2-butyl-2-methylhexanenitrile				[80606-32-2]
	(298–388)	59.8±0.4		GS	[94/5]
$C_{11}H_{21}N$	undecanonitrile				[2244-07-1]
	(355–534)	63.7	(370)	A	[87/5]
		71.1±0.1	(298)	C	[77/5]
$C_{11}H_{21}N$	N-cyclohexylpiperidine				[3319-01-5]
	(288–328)	59.9±0.6	(308)	GS	[98/12]
	(288–328)	60.5±0.6	(298)	GS	[98/12]
$C_{11}H_{21}NO$	N-hexanoylpiperidone				[15770-38-4]
	(383–433)	66.3	(398)	A	[87/5]
$C_{11}H_{22}$	pentylcyclohexane				[4292-92-6]
		52.9±0.5	(298)		[87/17]
		54.1±0.3	(298)	GCC	[78/16]
		53.9	(298)		[75/12]
		55.0	(298)		[71/28]
$C_{11}H_{22}$	hexylcyclopentane				[4457-00-5]
		55.9	(298)		[71/28]
$C_{11}H_{22}$	1-undecene				[821-95-4]
	(283–312)	54.3±0.3	(298)	GS	[00/7]
		55.4	(298)		[71/28]
	(378–473)	48.2	(393)	A	[87/5][50/6]
$C_{11}H_{22}$	*cis* 2-undecene				[821-96-5]
	(333–393)	53.2	(348)	A	[87/5]
$C_{11}H_{22}$	*trans* 2-undecene				[693-61-8]
	(333–393)	53.0	(348)	A	[87/5]
$C_{11}H_{22}$	*cis* 3-undecene				[821-97-6]
	(333–393)	52.3	(348)	A	[87/5]
$C_{11}H_{22}$	*trans* 3-undecene				[1002-68-2]
	(333–393)	52.0	(348)	A	[87/5]
$C_{11}H_{22}$	*cis* 4-undecene				[821-98-7]
	(333–393)	51.6	(348)	A	[87/5]
$C_{11}H_{22}$	*trans* 4-undecene				[693-62-9]
	(333–393)	52.1	(348)	A	[87/5]
$C_{11}H_{22}$	*cis* 5-undecene				[764-96-5]
	(333–393)	51.4	(348)	A	[87/5]
$C_{11}H_{22}$	*trans* 5-undecene				[764-97-6]
	(333–393)	51.8	(348)	A	[87/5]
$C_{11}H_{22}$	3-methyl-3-propyl-1-heptene				
	(263–293)	52.8±1.0	(278)	HSA	[95/27]
		50.9	(298)		[95/27]
		51.5	(298)	CGC	[95/27]
$C_{11}H_{22}Cl_2$	1,1-dichloroundecane				[822-01-5]
	(430–500)	59.5	(445)		[99/16][87/12]
	(430–500)	71.7	(298)		[87/12][91/2]
$C_{11}H_{22}N_2$	*bis*(piperidino)methane				[880-09-1]
	(283–322)	61.9±0.9	(303)	GS	[02/28]
	(283–322)	62.2±0.9	(298)	GS	[02/28]
$C_{11}H_{22}O$	1-hexylcyclopentanol				[36633-49-5]
	(387–509)	59.2	(402)	A	[87/5]
$C_{11}H_{22}O$	cyclohexyl tert-amyl ether				
		54.3±0.2	(298)		[02/32]
$C_{11}H_{22}O$	2-undecanone				[112-12-9]
	(461–538)	51.5	(476)	A	[87/5]
		69.7±0.5	(298)	GCC	[79/7]
		67.0±0.4	(298)	C	[79/1]
	(393–523)	56.2	(408)	A	[87/5][75/8]
		46.4	(506)		[75/8]
	(335–433)	61.6	(350)	A, EB	[87/5][66/12]
	(341–497)	61.9	(356)		[47/5]
$C_{11}H_{22}O$	6-undecanone				[927-49-1]
	(343–383)	59.0	(298)	CGC	[95/21]
	(343–383)	61.8	(298)	CGC	[95/21]
	(388–543)	55.3	(403)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(461–513)	50.4	(476)	A	[87/5]
		63.5±0.5	(298)	GCC	[79/7]
	(383–514)	45.8	(500)		[75/6]
$C_{11}H_{22}O$	2,2,6,6-tetramethyl-4-heptanone				
		52.9±0.2	(298)	C	[71/31]
$C_{11}H_{22}O$	undecanal				[112-44-7]
	(323–343)	69.3	(298)	CGC	[96/7][00/10]
	(288–400)	60.2	(303)	A	[87/5]
$C_{11}H_{22}O_2$	heptyl butyrate				[5870-93-9]
	(384–498)	58.7	(399)	A	[87/5]
$C_{11}H_{22}O_2$	4,5-dimethyl-2-hexyl-1,3-dioxolane				[6454-22-4]
	(333–453)	65.6	(348)	A	[87/5]
$C_{11}H_{22}O_2$	4-heptyl-1,3-dioxane				[2244-84-0]
	(353–453)	64.4	(368)	A	[87/5]
$C_{11}H_{22}O_2$	3-hexyl-4-hydroxytetrahydro-2*H*-pyran				[41277-7502]
	(383–453)	73.6	(398)	A	[87/5]
$C_{11}H_{22}O_2$	isopropyl caprylate				[5458-59-3]
	(338–420)	57.5	(353)	A	[87/5]
	(338–419)	58.3	(353)		[48/8][84/9]
$C_{11}H_{22}O_2$	methyl decanoate (methyl caprate)				[110-42-9]
		62.0	(350)		[02/27]
		62.9±0.1	(337)		[02/27]
		66.1±0.2	(298)		[02/27]
	(373–433)	66.9	(298)	GC	[97/28]
	(453–543)	49.9	(498)	GC	[93/9]
		66.3±0.5	(298)	GCC	[80/5]
		66.8±0.6	(298)	C	[77/1]
	(379–500)	57.1	(394)	A, EST	[87/5][63/16]
	(324–370)	63.0	(339)	MG, OM	[52/13]
$C_{11}H_{22}O_2$	2-octyl-1,3-dioxolane				[5432-30-4]
	(333–453)	60.3	(348)	A	[87/5]
$C_{11}H_{22}O_2$	propyl caprylate				[624-13-5]
	(343–500)	58.8	(358)	A	[87/5]
	(343–426)	58.2	(358)		[48/8][84/9]
$C_{11}H_{22}O_2$	nonyl acetate				[143-13-5]
		66.8	(298)		[97/22]
	(313–358)	67.0	(298)	GC	[97/13][00/10]
$C_{11}H_{22}O_2$	undecanoic acid				[112-37-8]
	(393–557)	81.3	(408)	A	[87/5]
	(310–332)	90.7±2.0	(323)	ME, TE	[82/4]
	(303–308)	97.9±6.3	(305)		[68/20]
$C_{11}H_{22}O_3$	butyl 2-butoxypropionate				[38611-89-1]
	(373–398)	40.8	(385)	A	[87/5]
$C_{11}H_{22}O_3$	butyl 3-butoxypropionate				[14144-48-0]
	(343–493)	57.6	(358)	A	[87/5]
$C_{11}H_{22}O_3$	hexyl 3-ethoxypropionate				[14144-37-7]
	(373–514)	56.7	(388)	A	[87/5]
$C_{11}H_{22}O_3$	octyl lactate				[51191-33-4]
	(328–528)	71.5	(343)	A	[87/5]
$C_{11}H_{23}Br$	1-bromoundecane				[693-67-4]
	(407–564)	58.8	(422)		[99/16]
	(398–591)	59.5	(413)	A, EST	[87/5][61/13] [70/14]
$C_{11}H_{23}Cl$	1-chloroundecane				[2473-03-2]
	(370–520)	65.9	(298)		[84/9][91/2]
	(374–519)	59.4	(389)	A, DTA	[87/5][69/5]
$C_{11}H_{23}F$	1-fluoroundecane				[506-05-8]
	(373–523)	52.3	(388)	A, EST	[87/5][61/13] [70/14]
$C_{11}H_{23}I$	1-iodoundecane				[4282-44-4]
	(422–589)	60.1	(437)		[99/16]
	(412–618)	60.9	(427)	A, EST	[87/5][61/13] [70/14]
$C_{11}H_{23}NO$	N,N-dimethyl nonamide				[6225-08-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(411–509)	69.3	(426)	A	[87/5]
$C_{11}H_{23}NO_2$	N,N-dibutyl lactamide				[6288-16-0]
	(393–418)	88.3	(405)	A	[87/5]
$C_{11}H_{23}NO_2$	N-octyl lactamide				
	(428–468)	96.3	(443)	A	[87/5]
$C_{11}H_{24}$	undecane				[1120-21-4]
		56.2	(299)	C	[96/22]
		55.4	(314)	C	[96/22]
		54.5	(324)	C	[96/22]
		54.0	(334)	C	[96/22]
		53.1	(344)	C	[96/22]
		56.6	(298)		[94/12]
	(278–470)	60.0	(293)	A	[87/5]
		56.3	(298)		[71/28]
	(378–470)	49.1	(393)		[55/7]
$C_{11}H_{24}$	2-methyldecane				[6975-98-0]
	(273–353)	55.5	(288)	A	[87/5]
	(379–463)	47.4	(394)	A	[87/5]
		51.9	(328)	C	[84/8]
		50.6	(343)	C	[84/8]
		49.5	(358)	C	[84/8]
	(273–293)	55.4	(283)	IPM	[74/11]
$C_{11}H_{24}$	3-methyldecane				[13151-34-3]
	(340–464)	46.5	(355)	A	[87/5]
$C_{11}H_{24}$	4-methyldecane				[2847-72-5]
	(339–460)	46.6	(354)	A	[87/5]
		50.4	(343)	C	[84/8]
		49.2	(358)	C	[84/8]
		48.5	(368)	C	[84/8]
$C_{11}H_{24}$	5-methyldecane				[13151-35-4]
	(334–452)	46.0	(349)	A	[87/5]
$C_{11}H_{24}$	2,3-dimethylnonane				[2884-06-2]
	(336–460)	45.1	(351)	A	[87/5]
$C_{11}H_{24}$	2,4-dimethylnonane				[17302-24-8]
	(334–452)	46.8	(349)	A	[87/5]
$C_{11}H_{24}$	2,4,6-trimethyloctane				[62016-37-9]
	(325–442)	44.9	(340)	A	[87/5]
$C_{11}H_{24}$	2,4,7-trimethyloctane				[62016-38-0]
		47.6	(328)	C	[84/8]
		46.4	(343)	C	[84/8]
		45.3	(358)	C	[84/8]
$C_{11}H_{24}O$	decyl methyl ether				[7289-52-3]
	(341–429)	56.9	(356)	A	[87/5]
	(341–471)	57.0	(356)		[87/5][76/2]
	(341–471)	62.6	(298)		[76/2]
	(341–471)	45.5	(489)		[76/2]
		62.3±0.3	(298)	C	[75/3]
$C_{11}H_{24}O$	ethyl nonyl ether				[16979-32-1]
		60.3±0.1	(298)	C	[85/2]
$C_{11}H_{24}O$	propyl octyl ether				[29379-41-7]
		58.8±0.1	(298)	C	[85/2]
$C_{11}H_{24}O$	butyl heptyl ether				[71112-90-8]
		58.2±0.1	(298)	C	[85/2]
$C_{11}H_{24}O$	heptyl *tert*-butyl ether				
		56.6	(298)		[U/2][02/32]
$C_{11}H_{24}O$	hexyl *tert*-amyl ether				
		58.6	(298)		[U/2][02/32]
$C_{11}H_{24}O$	propyl *tert*-octyl ether				
		50.1±0.3	(298)		[U/2][02/32]
$C_{11}H_{24}O$	1-undecanol				[112-42-5]
	(313–354)	79.5	(336)	GS	[01/3]
	(313–354)	84.7	(298)	GS	[01/3]
	(373–423)	86.8	(298)	CGC	[95/21]
	(353–393)	85.6	(298)	CGC	[94/13][00/10]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(293–342)	83.6	(318)		[92/14]
	(283–393)	83.5	(298)		[99/11]
	(393–523)	68.7	(408)	A	[87/5]
	(393–534)	68.5	(408)	A	[87/5]
	(393–516)	72.3	(408)		[73/26]
$C_{11}H_{24}O$	2-undecanol				[1653-30-1]
	(344–505)	61.4	(359)		[47/5]
$C_{11}H_{24}O$	2,5-dimethyl-3-isopropyl-3-hexanol				[57233-26-8]
	(321–458)	57.2	(336)		[73/26]
$C_{11}H_{24}O$	2,2,4-trimethyl-3-isopropyl-3-pentanol				[5457-41-0]
	(321–458)	67.1	(336)		[73/26]
$C_{11}H_{24}O_4$	tripropylene glycol, monoethyl ether				[75899-69-3]
	(317–521)	60.0	(332)	A	[87/5]
$C_{11}H_{24}S$	1-undecanethiol				[5332-52-5]
	(405–563)	59.3	(420)		[99/16]
$C_{11}H_{24}S_2$	1,11-undecanedithiol				[63476-06-2]
	(444–582)	75.1	(459)	A	[87/5][43/6] [99/16]
$C_{11}H_{25}N$	undecylamine				[7307-55-3]
	(428–527)	55.1	(443)	A, EST	[87/5][56/17]
$C_{11}H_{26}NO_2PS$	methylthiophosphonic acid, O-ethyl-S-[2-(N,N-diisopropylamino)-ethyl] ester				[50782-69-9]
	(280–315)	101.0	(295)	A	[87/5][99/16]
$C_{12}Cl_{10}$	decachlorobiphenyl				[2051-24-3]
	(343–393)	103.4	(368)	GC	[94/6]
	(343–453)	103.4	(398)	GC	[90/2]
$C_{12}F_{10}$	decafluorobiphenyl				[434-90-2]
	(453–608)	49.9	(468)	DSC	[96/10]
$C_{12}F_{18}$	*hexakis*(trifluoromethyl)bicyclo[2.2.0]hexa-2,5-diene				[23174-55-2]
	(293–343)	41.4	(308)	A	[87/5][70/33] [99/16]
$C_{12}F_{18}$	*hexakis*(trifluoromethyl)tetracyclo[2.2.0.0^{2,6}0^{3,5}]hexane				[22736-20-5]
	(313–353)	33.1	(328)	A	[87/5][70/33] [99/16]
$C_{12}F_{18}$	*hexakis*(trifluoromethyl)tricyclo[3.1.0.0^{2,6}]hex-3-ene				[22186-64-7]
	(293–353)	38.6	(308)	A	[87/5][70/33] [99/16]
$C_{12}F_{27}N$	perfluorotributylamine				[311-89-7]
		60.3±0.1	(298)	C	[95/20]
	(298–450)	57.4	(313)	A	[87/5]
	(371–544)	51.1	(386)	A	[87/5]
		60.4±1.2	(298)		[77/13][77/20]
$C_{12}H_2Cl_8$	2,2′,3,3′,5,5′,6,6′-octachlorobiphenyl				[2136-99-4]
	(343–393)	92.9	(368)	GC	[94/6]
	(343–453)	92.9	(398)	GC	[90/2]
$C_{12}H_3Br_7O$	2′,3,3′,4,4′,5,6-heptabromodiphenyl ether				[327185-13-7]
	(363–473)	115.8	(418)	GC	[01/2]
	(403–475)	121.2		CGC	[01/11]
$C_{12}H_3Cl_7$	2,2′,3,4′,5,5′,6-heptachlorobiphenyl				[52663-68-0]
	(343–393)	94.0	(368)	GC	[94/6]
$C_{12}H_3Cl_7$	2,2′,3,4,4′,5,5′-heptachlorobiphenyl				[35065-29-3]
	(343–393)	96.5	(268)	GC	[94/6]
$C_{12}H_3Cl_7$	2,2′,3,3′,4,4′,6-heptachlorobiphenyl				[52663-71-5]
		109.1	(298)	CGC	[01/1]
	(343–393)	95.9	(368)	GC	[94/6]
$C_{12}H_3Cl_7$	2,2′,3,3′,4,4′,5-heptachlorobiphenyl				[35065-30-6]
	(343–393)	98.4	(368)	GC	[94/6]
$C_{12}H_4Br_6O$	2,2′,3,4,4′,5′-hexabromodiphenyl ether				
	(403–475)	114.1		CGC	[01/11]
$C_{12}H_4Br_6O$	2,2′,4,4′,5,5′-hexabromodiphenyl ether				[68631-49-2]
	(363–473)	107.6	(418)	GC	[01/2]
$C_{12}H_4Cl_6$	2,3,3′,4,4′,5-hexachlorobiphenyl				[38380-08-4]
		112.6±0.4	(298)	CGC	[01/1]
	(343–393)	94.8	(368)	GC	[94/6]
$C_{12}H_4Cl_6$	2,2′,4,4′,5,5′-hexachlorobiphenyl				[35065-27-1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		103.5±0.1	(298)	CGC	[01/1]
	(343–393)	91.4	(368)	GC	[94/6]
$C_{12}H_4Cl_6$	2,2′,3,4′,5′,6-hexachlorobiphenyl				[38380-04-0]
	(343–393)	89.8	(368)	GC	[94/6]
$C_{12}H_4Cl_6$	2,2′,3,4,4′,5′-hexachlorobiphenyl				[35065-28-2]
	(343–393)	91.9	(368)	GC	[94/6]
$C_{12}H_4Cl_6$	2,2′,3,3′,4,4′-hexachlorobiphenyl				[38380-07-3]
	(343–393)	93.5	(368)	GC	[94/6]
$C_{12}H_5Br_5O$	2,2′,3,4,4′-pentabromodiphenyl ether				
	(403–475)	111.0		CGC	[01/11]
$C_{12}H_5Br_5O$	2,2′,3,3′,4-pentabromodiphenyl ether				[327185-11-5]
	(363–473)	99.1	(418)	GC	[01/2]
$C_{12}H_5Br_5O$	2,2′,4,4′,5-pentabromodiphenyl ether				[60348-60-9]
	(363–473)	100.3	(418)	GC	[01/2]
	(405–475)	104.8		CGC	[01/11]
$C_{12}H_5Br_5O$	2,2′,4,4′,6-pentabromodiphenyl ether				[189084-66-0]
	(363–473)	101.8	(418)	GC	[01/2]
$C_{12}H_5Cl_5$	2,3′,4,4′,5-pentachlorobiphenyl				[31508-00-6]
	(343–393)	89.3	(368)	GC	[94/6]
$C_{12}H_5Cl_5$	2,3,3′,4,4′-pentachlorobiphenyl				[32598-14-4]
	(343–393)	91.1	(368)	GC	[94/6]
$C_{12}H_5Cl_5$	2,2′,4,5,5′-pentachlorobiphenyl				[37680-73-2]
	(343–393)	86.4	(368)	GC	[94/6]
	(343–453)	83.7	(398)	GC	[90/2]
$C_{12}H_5Cl_5$	2,2′,3,5′,6-pentachlorobiphenyl				[38379-99-6]
		92.3±0.6	(298)	CGC	[01/1]
$C_{12}H_5Cl_5$	2,2′,3,6,6′-pentachlorobiphenyl				[73575-54-9]
		89.6±0.2	(298)	CGC	[01/1]
$C_{12}H_5Cl_5$	2,2′,4,5′,6-pentachlorobiphenyl				[60145-21-3]
		91.6±0.5	(298)	CGC	[01/1]
$C_{12}H_5Cl_5$	2,2′,3,4,5′-pentachlorobiphenyl				[38380-02-8]
	(343–393)	87.3	(368)	GC	[94/6]
$C_{12}H_5Cl_5$	2,2′,4,4′,5-pentachlorobiphenyl				[38380-01-7]
	(343–393)	86.8	(368)	GC	[94/6]
$C_{12}H_6Br_4O$	2,2′,4,4′-tetrabromodiphenyl ether				[5436-43-1]
	(363–473)	92.0	(418)	GC	[01/2]
	(403–475)	103.1		CGC	[01/1]
$C_{12}H_6Br_4O$	2,3′,4,4′-tetrabromodiphenyl ether				[189084-61-5]
	(363–473)	93.5	(418)	GC	[01/2]
$C_{12}H_6Br_4O$	2,3′,4,6-tetrabromodiphenyl ether				[327185-09-1]
	(363–473)	91.1	(418)	GC	[01/2]
$C_{12}H_6Br_4O$	2,4,4′,6-tetrabromodiphenyl ether				[189084-63-7]
	(363–473)	90.1	(418)	GC	[01/2]
$C_{12}H_6Br_4O$	3,3′,4,4′-tetrabromodiphenyl ether				[93703-48-1]
	(363–473)	95.3	(418)	GC	[01/2]
$C_{12}H_6Cl_4$	2,2′,3,3′-tetrachlorobiphenyl				[38444-93-8]
	(343–398)	81.8	(368)	GC	[94/6]
$C_{12}H_6Cl_4$	2,2′,5,5′-tetrachlorobiphenyl				[35693-99-3]
	(343–398)	80.8	(368)	GC	[94/6]
	(343–453)	79.0	(398)	GC	[90/2]
$C_{12}H_6Cl_4$	2,3′,4,4′-tetrachlorobiphenyl				[32598-10-0]
	(343–398)	83.3	(368)	GC	[94/6]
$C_{12}H_6Cl_4$	2,3′,4′,5-tetrachlorobiphenyl				[32598-11-1]
	(343–398)	84.8	(368)	GC	[94/6]
$C_{12}H_6Cl_4$	2,2′,4,5′-tetrachlorobiphenyl				[41464-40-8]
		87.4±0.8	(298)	CGC	[01/1]
$C_{12}H_6Cl_4$	2,2′,5,6′-tetrachlorobiphenyl				[41464-41-9]
		84.9±0.6	(298)	CGC	[01/1]
	(343–398)	78.8	(368)	GC	[94/6]
$C_{12}H_6Cl_4$	3,3′,4,4′-tetrachlorobiphenyl				[32598-13-3]
	(343–393)	87.2	(368)	GC	[94/6]
$C_{12}H_7Br_3O$	2,4,4′-tribromodiphenyl ether				
	(403–475)	94.1		CGC	[01/11]
$C_{12}H_7Br_3O$	3,4,4′-tribromodiphenyl ether				[147217-81-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(363–473)	86.7	(418)	GC	[01/2]
$C_{12}H_7Br_3O$	2,4,6-tribromodiphenyl ether				[155999-95-4]
	(363–473)	85.1	(418)	GC	[01/2]
$C_{12}H_7Br_3O$	2,4′,6-tribromodiphenyl ether				[189084-60-4]
	(363–473)	83.3	(418)	GC	[01/2]
$C_{12}H_7Br_3O$	2′,3,4-tribromodiphenyl ether				[147217-78-5]
	(363–473)	81.0	(418)	GC	[01/2]
$C_{12}H_7Br_3O$	3,3′,4-tribromodiphenyl ether				[147217-80-9]
	(363–473)	86.4	(418)	GC	[01/2]
$C_{12}H_7Cl_2NO_3$	2,4-dichlorophenyl 4-nitrophenyl ether				[1836-75-5]
	(328–403)	90.4	(343)		[87/5]
$C_{12}H_7Cl_3$	2,4,5-trichlorobiphenyl				[15862-07-4]
	(343–393)	76.6	(368)	GC	[94/6]
$C_{12}H_7Cl_3$	2,4,6-trichlorobiphenyl				[35693-92-6]
	(343–393)	74.4	(368)	GC	[94/6]
$C_{12}H_7Cl_3$	2,4′,5-trichlorobiphenyl				[16606-02-3]
	(343–398)	77.7	(368)	GC	[94/6]
$C_{12}H_7Cl_3$	2,2′,5-trichlorobiphenyl				[36780-65-2]
		80.2±0.9	(298)	CGC	[01/1]
$C_{12}H_8Br_2O$	2,4-dibromodiphenyl ether				[171977-44-9]
	(363–473)	75.4	(418)	GC	[01/2]
$C_{12}H_8Br_2O$	3,4-dibromodiphenyl ether				[189084-59-1]
	(363–473)	77.4	(418)	GC	[01/2]
$C_{12}H_8Br_2O$	3,4′-dibromodiphenyl ether				[83694-71-7]
	(363–473)	77.4	(418)	GC	[01/2]
$C_{12}H_8Br_2O$	4,4′-dibromodiphenyl ether				[2050-47-7]
	(363–473)	78.0	(418)	GC	[01/2]
$C_{12}H_8Br_2O$	2,4′-dibromodiphenyl ether				[147217-71-8]
	(363–473)	76.4	(418)	GC	[01/2]
$C_{12}H_8Br_2O$	2,6-dibromodiphenyl ether				[51930-04-2]
	(363–473)	73.1	(418)	GC	[01/1]
$C_{12}H_8Cl_2$	2,4-dichlorobiphenyl				[33284-50-3]
		75.3±1.5	(298)	CGC	[01/1]
	(343–393)	73.5	(368)	GC	[94/6]
$C_{12}H_8Cl_2$	2,5-dichlorobiphenyl				[34883-39-1]
		76.8±0.4	(298)	CGC	[01/1]
	(343–393)	73.9	(368)	GC	[94/6]
$C_{12}H_8Cl_2$	3,3′-dichlorobiphenyl				[2050-67-1]
		81.0±0.2	(298)	CGC	[01/1]
	(343–393)	75.4	(368)	GC	[94/6]
$C_{12}H_8Cl_2$	4,4′-dichlorobiphenyl				[2050-68-2]
		81.4±0.3	(298)	CGC	[01/1]
	(343–393)	76.0	(368)	GC	[94/6]
$C_{12}H_8Cl_2O_2S$	4,4′-dichlorodiphenylsulfone				[80-07-9]
	(463–573)	59.7	(478)		[99/16]
$C_{12}H_8Cl_3NO_2$	2,2,4-trichloro-5-[(2-methylphenyl)amino]-4-cyclopentene-1,3-dione				[77765-39-0]
	(453–483)	85.0	(468)	GC	[80/25]
$C_{12}H_8Cl_3NO_3$	2,2,4-trichloro-5-[(2-methoxyphenyl)amino]-4-cyclopentene-1,3-dione				[77765-40-3]
	(453–483)	84.6	(468)	GC	[80/25]
$C_{12}H_8Cl_3NO_3$	2,2,4-trichloro-5-[(3-methoxyphenyl)amino]-4-cyclopentene-1,3-dione				[73373-64-5]
	(453–483)	63.1	(468)	GC	[80/25]
$C_{12}H_8Cl_6$	Aldrin				[309-00-2]
	(343–453)	75.1	(398)	GC	[90/2]
$C_{12}H_8Cl_6$	Dieldrin				[60-57-1]
	(343–453)	82.5	(398)	GC	[90/2]
$C_{12}H_8O$	dibenzofuran				[132-64-9]
	(323–473)	66.2	(398)	GC	[02/18]
	(403–559)	55.1	(418)	A	[87/5]
	(403–418)	66.2	(410)		[58/23]
$C_{12}H_8OS$	phenoxathiin				[262-20-4]
	(365–640)	68.7	(400)	EB, IPM	[93/13]
	(365–640)	66.0	(440)	EB, IPM	[93/13]
	(365–640)	63.4	(480)	EB, IPM	[93/13]
	(365–640)	60.8	(520)	EB, IPM	[93/13]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(365–640)	58.0	(560)	EB, IPM	[93/13]
	(365–640)	55.1	(600)	EB, IPM	[93/13]
$C_{12}H_8S$	dibenzothiophene				[132-64-0]
	(373–424)	65.6	(388)		[99/16]
	(424–608)	63.4	(439)		[99/16]
		69.5	(380)		[95/24]
		66.8	(420)		[95/24]
		64.3	(460)		[95/24]
		61.8	(500)		[95/24]
		59.3	(540)		[95/24]
		56.8	(580)		[95/24]
		54.0	(620)		[95/24]
		68.0	(400)		[91/10]
		64.9	(450)		[91/10]
		61.8	(500)		[91/10]
		58.7	(550)		[91/10]
		55.4	(600)		[91/10]
		51.8	(650)		[91/10]
	(385–574)	60.1	(400)	A	[87/5]
		56.9	(590)	C	[84/3]
		55.3	(610)	C	[84/3]
		53.6	(630)	C	[84/3]
	(373–403)	69.4	(385)		[81/2]
$C_{12}H_8S_2$	thianthrene				[92-85-3]
	(429–460)	71.2	(444)		[99/16]
	(460–539)	68.4	(475)		[99/16]
	(395–639)	72.7	(440)	EB, IPM	[93/13]
	(395–639)	69.9	(480)	EB, IPM	[93/13]
	(395–639)	67.2	(520)	EB, IPM	[93/13]
	(395–639)	64.5	(560)	EB, IPM	[93/13]
	(395–639)	61.7	(600)	EB, IPM	[93/13]
	(430–593)	69.1	(465)		[83/4]
	(430–593)	68.7	(515)		[83/4]
	(428–448)	71.1	(438)		[81/2]
$C_{12}H_9Br$	4-bromobiphenyl				[92-66-0]
	(371–583)	62.2	(386)	A	[87/5][47/5]
$C_{12}H_9BrO$	2-bromodiphenyl ether				[7025-06-1]
	(363–473)	63.7	(418)	GC	[01/2]
$C_{12}H_9BrO$	3-bromodiphenyl ether				[6876-00-2]
	(363–473)	65.4	(418)	GC	[01/2]
$C_{12}H_9BrO$	4-bromodiphenyl ether				[101-55-3]
	(463–673)	64.6	(478)	A	[87/5]
$C_{12}H_9BrO$	2-bromo-4-phenylphenol				[92-03-5]
	(373–584)	57.8	(388)	A	[87/5][47/5]
$C_{12}H_9Cl$	2-chlorobiphenyl				[2051-60-7]
		72.1±2.0	(298)	CGC	[01/1]
	(343–393)	64.4	(368)	GC	[94/6]
	(409–540)	57.8	(424)	A	[87/5]
	(306–350)	74.5	(328)	ME	[83/9]
	(410–540)	55.8	(424)	QM	[75/28]
	(362–541)	61.1	(377)	A	[87/5][47/5]
$C_{12}H_9Cl$	3-chlorobiphenyl				[2051-61-8]
		74.3±1.1	(298)	CGC	[01/1]
	(343–393)	66.6	(368)	GC	[94/6]
	(310–359)	66.2	(335)	ME	[83/9]
	(341–402)	69.2	(372)	TE	[83/9]
	(452–536)	66.0	(494)	QM	[75/28]
$C_{12}H_9Cl$	4-chlorobiphenyl				[2051-62-9]
		71.6±0.7	(298)	CGC	[01/1]
	(343–393)	66.8	(368)	GC	[94/6]
	(451–536)	65.9	(466)		[87/5]
	(348–409)	67.8	(378)	TE	[83/9]
	(369–566)	59.0	(384)	A	[87/5][47/5]
$C_{12}H_9ClO$	2-chloro-3-phenylphenol				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(391–591)	65.0	(406)		[87/5][47/5]
$C_{12}H_9ClO$	2-chloro-6-phenylphenol				[85-97-2]
	(393–590)	67.6	(408)	A	[87/5][47/5]
$C_{12}H_9N$	carbazole				[86-74-8]
		NA			[83/17]
	(525–631)	65.7	(540)	A	[87/5][23/2]
					[84/9]
	(517–624)	66.0	(532)		[23/1][84/9]
$C_{12}H_{10}$	acenaphthene				[83-32-9]
	(323–473)	63.9	(398)	GC	[02/18]
		66.2	(298)	CGC	[98/11]
	(368–552)	54.0	(403)	A	[87/5]
	(368–413)	60.3	(383)	A	[87/5][75/11]
					[84/9]
		61.3	(395)	I	[43/7]
	(413–561)	54.3	(466)	I	[23/1]
	(420–561)	55.4	(435)		[23/1][84/9]
$C_{12}H_{10}$	biphenyl				[92-52-4]
	(323–473)	62.5	(298)	GC	[02/18]
		64.5±2.2	(298)	GS	[01/1]
		66.2	(298)	CGC	[98/11]
	(495–688)	51.2	(510)	DSC	[96/10]
	(403–453)	66.0	(298)	CGC	[95/21]
	(348–453)	59.6	(363)	GS	[89/9]
	(350–578)	64.9	(298)	EB	[89/4]
	(350–578)	57.4	(400)	EB	[89/4]
	(350–578)	60.3	(360)	EB	[89/4]
	(350–578)	50.4	(500)	EB	[89/4]
	(333–393)	60.4	(363)		[89/14]
	(390–563)	57.3	(405)	A	[87/5]
	(396–437)	54.9	(417)	GS	[80/17]
	(528–766)	48.0	(647)		[57/12]
	(342–544)	59.4	(357)		[30/4][84/9]
$C_{12}H_{10}N_2$	*trans* azobenzene				[17082-12-1]
	(436–626)	72.8±0.7	(298)	EB	[96/5]
	(376–566)	62.3	(391)	A	[87/5][47/5]
$C_{12}H_{10}O$	1-acetylnaphthalene				[941-98-0]
	(388–569)	65.4	(403)	A	[87/5]
$C_{12}H_{10}O$	2-acetylnaphthalene				[93-08-3]
	(393–574)	74.1	(408)	A	[87/5]
$C_{12}H_{10}O$	diphenyl ether				[101-84-8]
	(353–393)	67.1	(298)	CGC	[95/21]
	(477–544)	65.0	(298)		[76/2]
	(477–544)	48.2	(531)		[76/2]
	(477–544)	53.0	(492)	GS, EB	[87/5][76/2]
		15.8±0.1	(298)	C	[72/28]
					[65/7]
	(313–333)	64.2	(323)	A	[87/5][48/11]
$C_{12}H_{10}O$	2-hydroxybiphenyl				[90-43-7]
	(434–547)	94.2	(449)	A	[87/5]
$C_{12}H_{10}O$	4-hydroxybiphenyl				[92-69-3]
	(450–581)	72.3	(465)	A	[87/5]
$C_{12}H_{10}O_2$	2,2′-dihydroxybiphenyl				[1806-29-7]
	(444–598)	61.7	(459)	A	[87/5]
$C_{12}H_{10}O_2$	3-phenoxyphenol				[713-68-8]
	(416–494)	69.5	(431)	A	[87/5]
$C_{12}H_{10}O_4S_2$	diphenyl disulfone				[10409-06-0]
		149.0±2.9	(298)	EST	[64/33]
		161.9±3.3(sub)		EST	[64/33]
	[Note: Enthalpy of sublimation value incorrectly given in our earlier paper][7]				
$C_{12}H_{10}S$	diphenyl sulfide				[139-66-2]
	(369–566)	60.5	(384)		[99/16]
	(345–611)	67.3	(360)	EB, IPM	[95/24]
	(345–611)	64.3	(400)	EB, IPM	[95/24]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(345–611)	61.3	(440)	EB, IPM	[95/24]
	(345–611)	58.3	(480)	EB, IPM	[95/24]
	(345–611)	55.3	(520)	EB, IPM	[95/24]
	(345–611)	52.0	(560)	EB, IPM	[95/24]
	(369–566)	58.2	(384)	A	[87/5][49/5]
$C_{12}H_{10}S_2$	diphenyl disulfide				[882-33-7]
	(405–583)	72.4	(420)		[99/16]
		78.7±2.9	(298)		[62/16]
	(404–583)	74.4	(419)		[87/5][47/5]
$C_{12}H_{11}N$	2-aminobiphenyl				[90-41-5]
	(340–623)	68.6	(400)	EB, IPM	[91/14]
	(340–623)	65.1	(440)	EB, IPM	[91/14]
	(340–623)	61.8	(480)	EB, IPM	[91/14]
	(340–623)	58.5	(520)	EB, IPM	[91/14]
	(340–623)	55.2	(560)	EB, IPM	[91/14]
	(340–623)	51.7	(600)	EB, IPM	[91/14]
$C_{12}H_{11}N$	diphenylamine				[122-39-4]
	(381–575)	64.1	(396)	A	[87/5][47/5]
	(573–673)	54.2	(588)	A	[87/5]
$C_{12}H_{12}$	1,5-dimethylnaphthalene				[571-61-7]
	(323–473)	64.1	(398)	GC	[02/18]
$C_{12}H_{12}$	1,6-dimethylnaphthalene				[575-43-9]
	(323–473)	63.6	(398)	GC	[02/18]
$C_{12}H_{12}$	1,8-dimethylnaphthalene				[569-41-5]
	(338–413)	62.8	(353)	A	[87/5][75/11] [84/9]
		64.8	(336)		[77/22]
$C_{12}H_{12}$	2,3-dimethylnaphthalene				[581-40-8]
		60.9±0.7	(380)		[88/16]
	(378–408)	60.0	(393)	A	[87/5]
$C_{12}H_{12}$	2,6-dimethylnaphthalene				[581-42-0]
	(384–418)	57.3	(399)	A	[87/5][75/11] [84/9]
$C_{12}H_{12}$	2,7-dimethylnaphthalene				[582-16-1]
		57.3	(400)		[93/11]
		54.8	(440)		[93/11]
		52.2	(480)		[93/11]
		49.5	(520)		[93/11]
		46.6	(560)		[93/11]
	(369–400)	58.5	(384)	A	[87/5][75/11] [84/9]
$C_{12}H_{12}$	1-ethylnaphthalene				[1127-76-0]
	(393–565)	57.3	(408)	A, GS	[87/5][79/11]
$C_{12}H_{12}$	2-ethylnaphthalene				[939-27-5]
	(323–473)	64.7	(398)	GC	[02/18]
	(269–398)	69.3	(284)		[88/12]
	(286–319)	61.9	(301)	A	[87/5]
	(393–565)	56.7	(408)	A	[87/5]
$C_{12}H_{12}N_2$	1,1-diphenylhydrazine				[530-50-7]
	(399–596)	68.8	(414)	A	[87/5][47/5]
$C_{12}H_{12}O_6$	1,2,3-benzenetricarboxylic acid, trimethyl ester				[2672-57-3]
	(453–513)	72.5	(468)	A, GS	[87/5][63/13]
$C_{12}H_{12}O_6$	1,2,4-benzenetricarboxylic acid, trimethyl ester				[28904-30-5]
		78.5±0.4	(399)	C	[98/6]
	(443–493)	61.1	(458)	A, GS	[87/5][63/13]
$C_{12}H_{12}O_6$	1,3,5-benzenetricarboxylic acid, trimethyl ester				[2672-58-4]
	(443–513)	75.4	(458)	A	[87/5]
$C_{12}H_{13}Cl_3O_3$	2,4,5-trichlorophenoxyacetic acid, butyl ester				[93-79-8]
	(460–573)	87.3	(475)	A	[87/5]
$C_{12}H_{14}Cl_2$	cyclohexyl-3,4-dichlorobenzene				
	(383–488)	64.7	(398)		[81/20]
$C_{12}H_{14}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, butyl ester				[94-80-4]
	(444–573)	76.3	(459)	A	[87/5][99/16]
$C_{12}H_{14}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, sec-butyl ester				[94-79-1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(444–573)	74.2	(459)	A	[87/5][99/16]
$C_{12}H_{14}Cl_2O_4$	2,4-dichlorophenoxyacetic acid, 2-ethoxyethyl ester				[74944-83-5]
	(443–503)	63.5	(458)	A	[87/5]
$C_{12}H_{14}Cl_2O_4$	2,4-dichlorophenoxyacetic acid, 4-hydroxybutyl ester				[36227-43-7]
	(443–503)	72.1	(458)	A	[87/5]
$C_{12}H_{14}N_2O_5$	2-cyclohexyl-4,6-dinitrophenol				[131-89-5]
	(405–565)	88.6	(420)	A	[87/5][47/5]
$C_{12}H_{14}O_2$	ethyl *cis*-2-phenylcyclopropanecarboxylate				
		70.7±0.6	(298)	C	[98/17]
$C_{12}H_{14}O_3$	1-acetoxy-2-methoxy-4-allylbenzene (eugenol acetate)				[93-28-7]
	(374–555)	63.1	(389)	A	[87/5][47/5]
$C_{12}H_{14}O_4$	1,3-benzodioxole (apiol)				[523-80-8]
	(389–558)	70.6	(404)	A	[87/5]
$C_{12}H_{14}O_4$	diethyl phthalate				[84-66-2]
		74.6	(426)	BG	[88/17]
	(345–453)	77.9	(360)	A	[87/5]
	(421–570)	59.1	(436)	A	[87/5]
	(307–333)	86.8	(310)	GS	[82/1]
		81.1±0.8	(298)	GCC	[80/5]
	(381–567)	65.9	(396)		[47/5]
$C_{12}H_{15}N$	N,N-diallyl aniline				[6247-00-3]
	(421–513)	54.8	(436)	A	[87/5]
$C_{12}H_{16}$	cyclohexylbenzene				[827-52-1]
	(283–462)	60.4	(298)		[93/10]
	(421–513)	51.3	(436)	A	[87/5]
		59.9±0.3	(298)	C	[78/7]
$C_{12}H_{16}$	dicyclohexadiene				
	(377–505)	77.9	(329)	A	[87/5]
$C_{12}H_{16}$	2,5-diethylstyrene				[2715-29-9]
	(322–496)	52.2	(337)	A	[87/5][47/5]
$C_{12}H_{16}$	1-isopropenyl-4-isopropylbenzene				[2388-14-9]
	(403–479)	50.9	(418)	A	[87/5]
$C_{12}H_{16}O_2$	pentyl benzoate				[2049-96-9]
	(395–492)	85.9	(410)	A	[87/5]
$C_{12}H_{16}O_2$	isopentyl benzoate				[94-46-2]
	(345–535)	51.6	(360)	A	[87/5][47/5]
$C_{12}H_{16}O_2$	ethyl 2-phenylbutyrate				[94-46-2]
	(404–489)	56.0	(419)	A	[87/5]
$C_{12}H_{16}O_3$	pentyl salicylate				[2050-08-0]
	(402–540)	66.5	(417)	A	[87/5]
$C_{12}H_{16}O_3$	isopentyl salicylate				[87-20-7]
	(287–329)	73.0	(302)	A, ME	[87/5][55/8]
$C_{12}H_{16}O_4$	benzo-12-crown-4				[14174-08-4]
		82.7±2.3	(298)	CGC	[00/9]
$C_{12}H_{17}NO$	N-butylacetanilide				[91-49-6]
	(443–653)	60.2	(458)	A	[87/5]
$C_{12}H_{17}NO$	N,N-diethyl-2-phenylacetamide				[2431-96-1]
	(404–460)	82.8	(419)	A	[87/5][69/1]
$C_{12}H_{17}NO_2$	1-nitro-2,6-diisopropylbenzene				
	(308–343)	66.9±0.6	(326)	GS	[00/15]
		68.4±0.6	(298)		[00/15]
$C_{12}H_{18}$	1-*cis*-5-*trans*-9-*trans*-cyclododecatriene				[4904-61-4]
	(344–387)	49.9	(359)	A	[87/5]
	(400–423)	60.0	(411)	A	[87/5]
	(426–503)	47.8	(441)	A	[87/5]
$C_{12}H_{18}$	1-*trans*-5-*trans*-9-*cis*-cyclododecatriene				[706-31-0]
	(286–373)	68.0	(301)	A	[87/5]
$C_{12}H_{18}$	hexylbenzene				[1077-16-3]
		60.2	(298)		[94/11]
	(274–463)	61.6	(289)		[93/10]
		60.0	(298)		[71/28]
$C_{12}H_{18}$	1,2-diisopropylbenzene				[577-55-9]
	(388–476)	48.9	(403)	A	[87/5]
$C_{12}H_{18}$	1,3-diisopropylbenzene				[99-62-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(283–318)	56.0±0.8	(301)	GS	[98/10]
	(283–318)	56.2±0.8	(298)	GS	[98/10]
	(387–477)	48.9	(402)	A	[87/5]
$C_{12}H_{18}$	1,4-diisopropylbenzene				[100-18-5]
	(366–530)	50.7±0.2	(400)	EB	[02/20]
	(366–530)	46.3±0.3	(440)	EB	[02/20]
	(366–530)	43.0±0.5	(480)	EB	[02/20]
	(366–530)	39.3±0.9	(520)	EB	[02/20]
	(283–318)	56.3±0.3	(301)	GS	[98/10]
	(283–318)	56.5±0.3	(298)	GS	[98/10]
	(393–485)	47.6	(408)	A	[87/5]
	(393–485)	48.9	(408)		[59/1][84/9]
$C_{12}H_{18}$	1,3-dimethyl-5-*tert*-butylbenzene				[98-19-1]
	(284–318)	56.5±0.6	(301)	GS	[98/19]
		56.6±0.6	(298)		[98/19]
	(253–443)	59.8	(268)		[93/10]
$C_{12}H_{18}$	hexamethylbenzene				[87-85-4]
	(443–537)	56.8	(458)	A	[87/5]
$C_{12}H_{18}$	1,2,4-triethylbenzene				[877-44-1]
	(319–491)	51.2	(334)	A	[87/5][47/5]
$C_{12}H_{18}$	1,3,5-triethylbenzene				[102-25-0]
	(371–534)	59.2±0.3	(298)	EB	[97/6]
$C_{12}H_{18}$	1,2,4-trimethyl-5-isopropylbenzene				[10222-95-4]
		64.9	(298)		[75/39]
$C_{12}H_{18}$	2-isopropenyl-1-methyl-1-vinyl-3-cyclohexane				[6902-73-4]
	(348–404)	47.8	(363)	A	[87/5]
$C_{12}H_{18}Cl_2NOPS$	P-(chloromethyl)-N,-(1-methylpropyl)amidothiophosphonic acid, O-(2-chloro-4-methylphenyl) ester				[42585-08-0]
	(309–363)	62.6	(324)	A	[87/5]
$C_{12}H_{18}O$	(1-butoxyethyl)benzene				
	(278–318)	59.8±0.3	(298)	GS	[01/16]
$C_{12}H_{18}O$	R,S (1-sec-butoxyethyl)benzene				[6857-85-1]
	(296–332)	58.7±0.5	(298)	GS	[02/29][02/38]
$C_{12}H_{18}O$	S,S (1-sec-butoxyethyl)benzene				[8760-63-8]
	(297–332)	59.1±0.5	(298)	GS	[02/29][02/39]
$C_{12}H_{18}O$	propyl cumyl ether				[24142-77-6]
	(278–325)	59.1±0.2	(302)	GS	[01/18]
	(278–325)	59.3±0.2	(298)	GS	[01/18]
$C_{12}H_{18}O$	benzyl pentyl ether				[6382-14-5]
	(363–512)	50.8	(378)	A	[87/5][69/17]
$C_{12}H_{18}O$	2,4-diisopropylphenol				[2934-05-6]
	(395–528)	58.4	(410)	A	[87/5]
$C_{12}H_{18}O$	2,4-diisopropylphenol				
	(293–328)	67.9±0.3	(310)	GS	[99/19]
		68.7±0.3	(298)		[99/19]
$C_{12}H_{18}O$	2,3-dimethyl-4-*tert*-butylphenol				[68189-19-5]
	(418–523)	60.2	(433)	A	[87/5]
$C_{12}H_{18}O$	2,3-dimethyl-6-*tert*-butylphenol				[46170-85-8]
	(412–525)	60.0	(427)		[87/5]
$C_{12}H_{18}O$	2,4-dimethyl-6-*tert*-butylphenol				[1879-09-0]
	(304–333)	67.2±0.8	(318)	GS	[99/19]
		68.4±0.8	(298)		[99/19]
	(388–522)	58.4	(403)	A	[87/5]
	(344–535)	54.4	(348)		[53/9]
	(344–535)	52.7	(373)		[53/9]
	(344–535)	51.7	(398)		[53/9]
	(344–535)	49.7	(423)		[53/9]
	(344–535)	45.4	(473)		[53/9]
$C_{12}H_{18}O$	2,5-dimethyl-4-*tert*-butylphenol				[17696-37-6]
	(408–538)	61.7	(423)	A	[87/5]
	(361–548)	62.0	(373)		[53/9]
	(361–548)	59.4	(398)		[53/9]
	(361–548)	57.1	(423)		[53/9]
	(361–548)	52.8	(473)		[53/9]
$C_{12}H_{18}O$	2,6-dimethyl-4-*tert*-butylphenol				[879-97-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(392–522)	59.7	(407)	A	[87/5]
	(347–530)	58.4	(348)		[53/9]
	(347–530)	57.0	(373)		[53/9]
	(347–530)	55.4	(398)		[53/9]
	(347–530)	54.2	(423)		[53/9]
	(347–530)	49.3	(473)		[53/9]
$C_{12}H_{18}O$	3,4-dimethyl-6-*tert*-butylphenol				[1445-23-4]
	(413–532)	62.7	(428)	A	[87/5]
$C_{12}H_{18}O$	2-ethyl-4-*tert*-butylphenol				[63452-61-9]
	(428–623)	61.6	(443)	A	[87/5]
	(397–543)	55.4	(398)		[53/9]
	(397–543)	54.2	(423)		[53/9]
	(397–543)	49.3	(473)		[53/9]
$C_{12}H_{18}O$	2-ethyl-6-*tert*-butylphenol				[63551-41-7]
	(393–443)	58.2	(408)	A	[87/5]
$C_{12}H_{18}O$	3-ethyl-6-*tert*-butylphenol				[4237-25-6]
	(415–530)	59.5	(430)	A	[87/5]
$C_{12}H_{18}O$	4-ethyl-2-*tert*-butylphenol				[96-70-8]
	(394–523)	59.2	(409)	A	[87/5]
	(349–533)	57.0	(373)		[53/9]
	(349–533)	55.4	(398)		[53/9]
	(349–533)	54.2	(423)		[53/9]
	(349–533)	49.3	(473)		[53/9]
$C_{12}H_{18}O$	2-methyl-4-*tert*-pentylphenol				[71745-63-6]
	(443–653)	65.6	(458)	A	[87/5]
	(409–561)	55.3	(423)		[53/9]
	(409–561)	50.7	(473)		[53/9]
$C_{12}H_{18}O$	3-methyl-4-*tert*-pentylphenol				
	(443–683)	65.1	(458)	A	[87/5]
	(409–561)	55.3	(423)		[53/9]
	(409–561)	50.7	(473)		[53/9]
$C_{12}H_{18}O$	4-methyl-2-*tert*-pentylphenol				[34072-71-4]
	(423–653)	61.4	(438)	A	[87/5]
	(394–538)	58.1	(398)		[53/9]
	(394–538)	55.3	(423)		[53/9]
	(394–538)	50.7	(473)		[53/9]
$C_{12}H_{18}O_2$	1,3-dihydroxy-2-hexylbenzene				[5673-09-6]
	(433–494)	76.8	(448)	A, GC	[87/5][75/24]
$C_{12}H_{18}O_2$	1,3-dihydroxy-4-hexylbenzene				[136-77-6]
	(434–494)	88.1	(449)	A, GC	[87/5][75/24]
$C_{12}H_{18}O_4$	3,4-dihydro-2,2-dimethyl-4-oxo-2*H*-pyran-6-carboxylic acid, butyl ester				[532-34-3]
	(357–435)	64.7	(372)	A	[87/5]
$C_{12}H_{18}O_6$	triethyl aconitrate				
	(423–540)	79.6	(438)	A	[87/5]
$C_{12}H_{19}N$	2,6-diisopropylaniline				[24544-04-5]
	(284–323)	69.2±0.3	(303)		[00/14]
		69.5±0.3	(298)		[00/14]
$C_{12}H_{19}N$	N-methyl-3-methyl-3-phenyl-2-butaneamine				
	(283–330)	67.0±0.8	(307)	GS	[98/1]
	(283–330)	67.5±0.8	(298)	GS	[98/1]
$C_{12}H_{19}NO$	2-(dimethylamino)-2-methyl-1-phenylpropanone				
	(298–338)	66.7±0.4	(298)	GS	[94/3]
$C_{12}H_{19}NO$	2-(diethylamino)-1-phenylethanone				
	(293–338)	71.6±0.9	(298)	GS	[94/3]
$C_{12}H_{19}F_3N_2O_4$	N[N-(trifluoroacetyl)valyl]alanine ethyl ester				
	(425–453)	86.4	(439)	A	[87/5][99/16]
$C_{12}H_{20}$	1-ethyladamantane				[770-69-4]
		55.3±1.1	(298)		[00/22]
	(383–492)	49.1	(398)	A	[87/5]
$C_{12}H_{20}$	1,3-dimethyladamantane				[707-79-4]
		49.2±0.2	(308)	C	[01/4]
		49.7±0.2	(298)	C	[01/4]
	(352–526)	49.4±0.3	(298)	EB	[96/3]
		67.8±1.3	(298)	EB	[77/4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{12}H_{20}O$	2,5-di-*tert*-butylfuran				[4789-40-6]
	(274–323)	56.1±1.1	(298)	GS	[98/2]
$C_{12}H_{20}O_2$	bornyl acetate				[76-49-3]
	(319–496)	50.8	(334)	A	[87/5][47/5]
$C_{12}H_{20}O_2$	geranyl acetate				[105-87-3]
	(346–516)	58.1	(361)	A	[87/5][47/5]
$C_{12}H_{20}O_2$	isobornyl acetate				[125-12-2]
	(404–450)	56.1	(419)	A	[87/5]
$C_{12}H_{20}O_2$	bicyclo[2,2,1]heptane-7-one 2,2-dimethylpropylene acetal				
	(293–323)	60.5±0.9	(298)	GS	[02/32]
$C_{12}H_{20}O_2$	3,7-dimethyl-1,6-octadien-3-ol acetate (linalyl acetate)				[115-95-7]
	(281–490)	57.8	(296)	A	[87/5]
	(328–493)	56.8	(343)		[47/5]
$C_{12}H_{20}O_2$	terpineol acetate				[80-26-2]
	(310–424)	68.1	(325)	A	[87/5]
$C_{12}H_{20}O_4$	dibutyl maleate				[105-76-0]
	(255–550)	41.1	(270)	A	[87/5]
$C_{12}H_{20}O_5$	2-ethoxycarbonylpropionic acid, cyclohexyl ester				
	(388–523)	67.6	(403)	A	[87/5]
$C_{12}H_{20}O_7$	triethyl citrate				[77-93-0]
	(380–567)	68.2	(395)	A	[87/5]
$C_{12}H_{21}O_4P$	trimethylallyl phosphate				
	(367–597)	53.9	(381)		[47/5]
$C_{12}H_{21}N_2O_3PS$	Diazinon				[333-41-5]
	(293–398)	87.4	(308)	A	[87/5][99/16]
$C_{12}H_{22}$	*cis* bicyclohexyl				[92-51-3]
	(331–511)	53.8	(346)	A	[87/5]
$C_{12}H_{22}$	bicyclohexyl				[92-51-3]
		50.1	(435)		[81/1]
		42.5	(525)		[81/1]
		58.0±0.2	(298)	C	[78/12]
$C_{12}H_{22}$	6-dodecyne				[6975-99-1]
	(373–388)	60.9	(380)	A	[87/5]
$C_{12}H_{22}$	perhydroacenaphthylene				
	(422–514)	49.6	(437)	EB	[00/16]
$C_{12}H_{22}Cl_4$	1,2,11,12-tetrachlorododecane				
		81.9			[98/20]
$C_{12}H_{22}O$	*trans* 2-cyclohexylcyclohexanol				
	(324–364)	83.2±1.2	(344)	ME	[97/23]
$C_{12}H_{22}O$	cyclododecanone				[830-13-7]
	(373–443)	61.0	(388)	A	[87/5]
	(408–450)	57.9	(423)	A, EB	[87/5][76/10]
	(458–556)	54.7	(473)	A, EB	[87/5][76/10]
$C_{12}H_{22}O$	(Z) 2-dodecenal				[81149-96-4]
	(323–363)	72.5	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 2-dodecenal				[20407-84-5]
	(323–363)	72.6	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(Z) 3-dodecenal				[68141-15-1]
	(323–363)	69.6	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 3-dodecenal				[76595-72-7]
	(323–363)	70.2	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(Z) 4-dodecenal				[21944-98-9]
	(323–363)	69.4	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 4-dodecenal				[174155-48-7]
	(323–363)	69.9	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(Z) 5-dodecenal				[68820-33-7]
	(323–363)	69.1	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 5-dodecenal				[68820-34-8]
	(323–363)	69.6	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(Z) 6-dodecenal				[12674-61-7]
	(323–363)	69.2	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 6-dodecenal				[174155-49-8]
	(323–363)	67.7	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(Z) 7-dodecenal				[63851-40-1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(323–363)	69.4	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 7-dodecenal				[82944-76-1]
	(323–363)	69.6	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(Z) 8-dodecenal				[139909-65-2]
	(323–363)	70.0	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 8-dodecenal				[144298-64-6]
	(323–363)	69.8	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(Z) 9-dodecenal				[56219-03-5]
	(323–363)	70.1	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 9-dodecenal				[155235-07-7]
	(323–363)	70.4	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(Z) 10-dodecenal				[81892-61-7]
	(323–363)	71.0	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O$	(E) 10-dodecenal				[81892-62-8]
	(323–363)	70.9	(298)	CGC	[96/7][00/10]
$C_{12}H_{22}O_2$	dodecanolactone				[947-05-7]
	(377–403)	64.2±1.1	(390)	MM	[91/7]
	(377–403)	70.5±1.7	(298)	MM	[91/7]
$C_{12}H_{22}O_2$	acetic acid, 4-*tert*-butylcyclohexyl ester				
	(285–318)	63.8	(300)	A, ME	[87/5][58/9] [57/9]
$C_{12}H_{22}O_2$	(*d*) menthyl acetate				[16409-45-3]
	(330–500)	55.3	(345)	A	[87/5][47/5]
$C_{12}H_{22}O_2$	citronellyl acetate				[150-84-5]
	(347–490)	68.7	(362)	A	[87/5][47/5]
$C_{12}H_{22}O_2$	2-(1-ethylpentyl)-4,7-dihydro-1,3-dioxepin				[61732-97-6]
	(333–453)	66.3	(348)	A	[87/5]
$C_{12}H_{22}O_2$	octyl methacrylate				[2157-01-9]
	(384–513)	55.6	(399)	A	[87/5]
$C_{12}H_{22}O_2$	methyl 10-undecenoate				[111-81-9]
	(397–524)	59.2	(412)	A	[87/5]
$C_{12}H_{22}O_2$	(Z) 3-decenyl acetate				[81634-99-3]
	(313–358)	69.5	(298)	GC	[97/13][00/10]
	(299–313)	72	(306)	GC	[83/10]
$C_{12}H_{22}O_2$	(E) 3-decenyl acetate				[81634-98-2]
	(313–358)	70.1	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_2$	(Z) 4-decenyl acetate				[67452-27-1]
	(313–358)	69.0	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_2$	(E) 4-decenyl acetate				[69222-16-8]
	(313–358)	70.1	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_2$	(Z) 5-decenyl acetate				[67446-07-5]
	(313–358)	69.7	(298)	GC	[97/13][00/10]
	(299–313)	72	(306)	GC	[83/10]
$C_{12}H_{22}O_2$	(E) 5-decenyl acetate				[38421-90-8]
	(313–358)	70.6	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_2$	(Z) 6-decenyl acetate				[68760-70-3]
	(313–358)	70.1	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_2$	(E) 6-decenyl acetate				
	(313–358)	70.6	(298)	GC	[97/13][00/10]
	(299–313)	72	(306)	GC	[83/10]
$C_{12}H_{22}O_2$	(Z) 7-decenyl acetate				[13857-03-9]
	(313–358)	70.7	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_2$	(E) 7-decenyl acetate				[13857-04-0]
	(313–358)	71.1	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_2$	(Z) 8-decenyl acetate				[83808-51-9]
	(313–358)	71.5	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_2$	(E) 8-decenyl acetate				[83808-51-9]
	(313–358)	71.5	(298)	GC	[97/13][00/10]
$C_{12}H_{22}O_3$	heptyl levulinate				
	(393–558)	62.6	(408)	A	[87/5]
		60.0	(496)		[31/1]
$C_{12}H_{22}O_3$	3-pentyl-4-acetoxytetrahydro-2*H*-pyran				[18871-14-2]
	(383–453)	65.8	(398)	A	[87/5]
$C_{12}H_{22}O_4$	dipropyl adipate				[106-19-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(413–540)	63.6	(428)	A	[87/5]
$C_{12}H_{22}O_4$	isopentylmalonic acid, diethyl ester				[5398-08-3]
	(377–420)	64.1	(392)	A	[87/5]
$C_{12}H_{22}O_4$	(1-methylbutyl)malonic acid, diethyl ester				[22328-91-2]
	(395–516)	67.4	(410)	A	[87/5]
$C_{12}H_{22}O_4$	diisopentyl oxalate				[2051-00-5]
	(358–538)	58.6	(373)	A	[87/5][47/5]
$C_{12}H_{22}O_4S$	thiodiglycolic acid, diethyl ester				[4121-12-4]
	(298–383)	75.7	(313)	A	[87/5][99/16]
$C_{12}H_{22}O_5$	butyl[1-(butoxycarbonyl)ethyl] carbonate				
	(338–513)	68.1	(353)	A	[87/5]
$C_{12}H_{22}O_5$	pentyl[1-(ethoxycarbonyl)isopropyl] carbonate				
	(368–513)	63.8	(383)	A	[87/5]
$C_{12}H_{22}O_6$	lactic acid, O-ethoxycarbonyl, 2-butoxyethyl ester				
	(383–521)	74.6	(398)	A	[87/5]
$C_{12}H_{22}O_6$	dibutyl tartrate				[87-92-3]
	(428–511)	79.8	(443)	A	[87/5]
$C_{12}H_{22}O_6$	(*d*) diisobutyl tartrate				[4054-82-4]
	(390–597)	64.6	(405)	A	[87/5]
$C_{12}H_{22}S$	dicyclohexyl sulfide				[7133-46-2]
	(421–523)	69.0±0.7	(298)	EB	[97/7]
$C_{12}H_{23}N$	dicyclohexylamine				[101-83-7]
	(408–529)	54.0	(423)	A	[87/5]
$C_{12}H_{23}N$	lauronitrile				[2437-25-4]
		76.1±0.1	(298)	C	[77/5]
	(393–462)	65.2	(408)	EB	[71/4]
	(440–556)	60.7	(455)	A, EB	[87/5][71/4]
					[73/12]
$C_{12}H_{24}$	cyclododecane				[294-62-2]
		63.0	(298)	CGC	[98/11]
	(403–453)	62.8	(298)	CGC	[95/21]
	(386–441)	52.6	(401)	A, EB	[87/5][76/10]
	(440–529)	49.8	(455)	A, EB	[87/5][76/10]
$C_{12}H_{24}$	1-dodecene				[112-41-4]
		60.8±0.3	(298)	C	[76/5][77/1]
		60.3	(298)		[71/28]
	(396–493)	51.1	(411)	A	[87/5][50/6]
$C_{12}H_{24}$	hexylcyclohexane				[4292-75-5]
		55.9±0.5	(298)	GC	[87/17]
		59.0±0.5	(298)	GCC	[78/16]
		59.9	(298)		[71/28]
$C_{12}H_{24}$	heptylcyclopentane				[5617-42-5]
		60.8	(298)		[71/28]
$C_{12}H_{24}$	*trans* 2,2,4,6,6-pentamethyl-3-heptene				
	(291–318)	65.6±0.5	(305)	GS	[00/7]
	(291–318)	65.9±0.3	(298)	GS	[00/7]
$C_{12}H_{24}$	*cis* 2,2,4,6,6-pentamethyl-3-heptene				
	(288–318)	63.0±0.5	(303)	GS	[00/7]
	(288–318)	63.2±0.5	(298)	GS	[00/7]
$C_{12}H_{24}Cl_2$	1,12-dichlorododecane				
		73.1			[98/20]
$C_{12}H_{24}O$	cyclododecanol				[1724-39-6]
	(405–468)	68.8	(420)	A	[87/5]
	(467–557)	57.1	(482)	A	[87/5]
$C_{12}H_{24}O$	dodecanal				[112-54-9]
	(308–353)	70.2	(298)	CGC	[96/7][00/10]
	(350–530)	56.5	(365)	A	[87/5][47/5]
$C_{12}H_{24}O$	2-dodecanone				[6175-49-1]
	(350–520)	61.1	(365)	A	[87/5][47/5]
		71.8±0.6	(298)	C	[77/2]
	(386–609)	60.8	(401)	A	[87/5][75/8]
	(386–609)	48.1	(524)		[75/8]
$C_{12}H_{24}O$	ethyl p-menthyl ether				[19321-39-2]
	(366–414)	50.9	(381)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{12}H_{24}O$	1-heptylcyclopentanol				[20999-39-7]
	(395–524)	58.6	(410)	A	[87/5]
$C_{12}H_{24}O$	1-hexylcyclohexanol				[3964-63-4]
	(380–491)	53.5	(395)	A	[87/5]
$C_{12}H_{24}O$	(Z) 2-dodecen-1-ol				[69064-36-4]
	(333–373)	90.7	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 2-dodecen-1-ol				[69064-37-5]
	(333–373)	91.0	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(Z) 3-dodecen-1-ol				[32451-95-9]
	(333–373)	89.3	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 3-dodecen-1-ol				[68900-87-8]
	(333–373)	89.2	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(Z) 4-dodecen-1-ol				[40642-37-3]
	(333–373)	89.9	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 4-dodecen-1-ol				[81745-38-2]
	(333–373)	90.6	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(Z) 5-dodecen-1-ol				[40642-38-4]
	(333–373)	90.2	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 5-dodecen-1-ol				[62936-12-3]
	(333–373)	90.7	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(Z) 6-dodecen-1-ol				[40642-39-5]
	(333–373)	90.2	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 6-dodecen-1-ol				[52957-14-9]
	(333–373)	90.7	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(Z) 7-dodecen-1-ol				[20056-92-2]
	(333–373)	90.5	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 7-dodecen-1-ol				[16695-40-2]
	(333–373)	90.8	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(Z) 8-dodecen-1-ol				[40642-40-8]
	(333–373)	91.0	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 8-dodecen-1-ol				[42513-42-8]
	(333–373)	91.0	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(Z) 9-dodecen-1-ol				[35148-18-6]
	(333–373)	91.1	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 9-dodecen-1-ol				[35237-62-8]
	(333–373)	91.7	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(Z) 10-dodecen-1-ol				[35289-30-6]
	(333–373)	92.4	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O$	(E) 10-dodecen-1-ol				[35237-63-9]
	(333–373)	91.9	(298)	CGC	[00/10][94/13]
$C_{12}H_{24}O_2$	ethyl decanoate				[110-38-3]
	(404–440)	58.4±0.1	(422)	MM	[91/7]
	(404–440)	67.4±1.3	(298)	MM	[91/7]
	(359–515)	59.6	(374)	A	[87/5]
$C_{12}H_{24}O_2$	decyl acetate				[112-17-4]
	(313–358)	71.6	(298)	GC	[97/13][00/10]
	(363–515)	61.9	(378)	A	[87/5]
	(299–313)	72	(306)	GC	[83/10]
	(445–530)	56.3	(460)	DTA	[80/8]
$C_{12}H_{24}O_2$	4,5-dimethyl-2-heptyl-1,3-dioxolane				[61732-91-0]
	(333–453)	69.8	(346)	A	[87/5]
$C_{12}H_{24}O_2$	dodecanoic acid				[143-07-7]
	(393–573)	88.8	(408)	A	[87/5]
	(321–341)	95.8	(332)	ME, TE	[82/5]
		81.3	(437)	I	[43/7]
$C_{12}H_{24}O_2$	2-(1-ethylpentyl)-1,3-dioxepane				[61732-93-2]
	(333–373)	68.1	(348)	A	[87/5]
$C_{12}H_{24}O_2$	2-heptyl-1,3-dioxepane				[61732-92-1]
	(328–373)	70.3	(343)	A	[87/5]
$C_{12}H_{24}O_2$	3-heptyl-4-hydroxytetrahydro-2*H*-pyran				[62159-06-2]
	(383–453)	77.6	(398)	A	[87/5]
$C_{12}H_{24}O_2$	4-octyl-1,3-dioxane				[23433-02-5]
	(353–453)	65.5	(368)	A	[87/5]
$C_{12}H_{24}O_2$	methyl undecanoate				[1731-86-8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		66.1	(350)		[02/27]
		67.0±0.1	(340)		[02/27]
		70.8±0.4	(298)		[02/27]
	(433–473)	70.6	(298)	CGC	[95/21]
		71.4±0.3	(298)	C	[77/1]
	(393–473)	60.9	(408)	A, EST	[87/5][63/16]
$C_{12}H_{24}O_3$	pentyl 2-butoxypropionate				
	(373–398)	47.3	(385)	A	[87/5]
$C_{12}H_{24}O_3$	methyl 3-octyloxypropionate				[7419-98-9]
	(373–513)	59.8	(388)	A	[87/5]
$C_{12}H_{24}O_6$	18-crown-6				[17455-13-9]
		86.1±6.7	(298)	CGC	[00/9]
$C_{12}H_{25}Br$	1-bromododecane				[143-15-7]
		74.8±0.4	(298)	C	[76/6][77/1]
	(411–610)	62.2	(426)	A, EST	[87/5][61/13] [70/14]
$C_{12}H_{25}Cl$	1-chlorododecane				[112-52-7]
		73.9±1.4	(298)	GS	[01/1]
	(390–520)	70.5	(298)		[84/9][91/2]
		71.9±0.3	(298)	C	[77/1]
		70.3±0.5	(298)	C	[75/6]
	(389–519)	62.4	(404)	A, DTA	[87/5][69/5]
$C_{12}H_{25}Cl$	(*dl*) 2-chlorododecane				[2350-12-1]
	(283–328)	65.3	(298)	A	[87/5][70/14] [62/30]
$C_{12}H_{25}Cl$	(*dl*) 3-chlorododecane				[2350-12-1]
	(283–328)	65.9	(298)	A	[87/5][70/14] [62/30]
$C_{12}H_{25}Cl$	(*dl*) 4-chlorododecane				[2350-13-2]
	(283–328)	64.1	(298)	A	[87/5][70/14] [62/30]
$C_{12}H_{25}Cl$	(*dl*) 5-chlorododecane				[2350-14-3]
	(283–328)	65.9	(298)	A	[87/5][70/14] [62/30]
$C_{12}H_{25}Cl$	6-chlorododecane				[26535-66-0]
	(283–328)	65.5	(298)	A	[87/5][70/14] [62/30]
$C_{12}H_{25}F$	1-fluorododecane				[334-68-9]
	(288–328)	64.0±0.2	(298)	GS	[97/14]
	(374–533)	56.2	(389)	A, EST	[87/5][61/13] [70/14]
$C_{12}H_{25}I$	1-iodododecane				[4292-19-7]
	(426–636)	63.5	(441)	A, EST	[87/5][61/13] [70/14]
$C_{12}H_{25}NO$	N,N-diethylcaprylamide				[996-97-4]
	(373–510)	71.2	(388)	A	[87/5]
$C_{12}H_{26}$	dodecane				[112-40-3]
		62.1±0.2	(298)	GS	[01/1]
		60.3±0.8	(298)	CGC	[00/9]
		61.4	(299)	C	[96/22]
		58.1	(334)	C	[96/22]
		57.4	(344)	C	[96/22]
	(373–423)	60.7	(298)	CGC	[95/21]
	(363–413)	61.2	(298)	CGC	[95/21]
	(423–473)	61.2	(298)	CGC	[95/21]
		61.5	(298)		[94/12]
	(263–371)	65.7	(278)		[88/12]
	(278–400)	61.8	(293)	A	[87/5]
	(298–389)	61.1	(313)	GS	[86/6]
		61.8±0.5	(298)	C	[76/4]
		60.4±0.3	(298)	C	[72/29]
		61.3	(298)		[71/28]
	(400–492)	51.6	(415)	A, MM	[87/5][45/2]
$C_{12}H_{26}$	2-methylundecane				[7045-71-8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(356–484)	49.5	(371)	A	[87/5]
$C_{12}H_{26}$	(*dl*) 3-methylundecane				[1002-43-3]
	(357–485)	48.8	(372)	A	[87/5]
$C_{12}H_{26}$	4-methylundecane				[2980-69-0]
	(359–481)	51.6	(374)	A	[87/5]
$C_{12}H_{26}$	5-methylundecane				[1632-70-8]
	(357–480)	50.3	(372)	A	[87/5]
$C_{12}H_{26}$	2,3-dimethyldecane				[17312-44-6]
	(369–480)	50.0	(384)	A	[87/5]
$C_{12}H_{26}$	2,4-dimethyldecane				[2801-84-5]
	(348–472)	47.5	(363)	A	[87/5]
$C_{12}H_{26}$	2,4,6-trimethylnonane				[62184-10-5]
	(339–459)	46.4	(354)	A	[87/5]
$C_{12}H_{26}$	3,3,6,6-tetramethyloctane				[62199-46-6]
	(347–463)	52.9	(362)	A	[87/5]
$C_{12}H_{26}$	2,2,4,6,6-pentamethylheptane				[13475-82-6]
		49.0±0.2	(298)	C	[76/4]
$C_{12}H_{26}O$	ethyl decyl ether				[55962-01-1]
		65.9±0.1	(298)	C	[85/2]
$C_{12}H_{26}O$	dihexyl ether				[112-58-3]
		63.6±0.8	(298)	CGC	[00/9]
	(353–393)	63.5	(298)	CGC	[95/21]
	(372–510)	52.9	(387)	A	[87/5]
		64.1±0.1	(298)	C	[85/2]
$C_{12}H_{26}O$	octyl *tert*-butyl ether				
		61.4	(298)		[U/2][02/32]
$C_{12}H_{26}O$	isobutyl *tert*-octyl ether				
		51.6	(298)		[U/2][02/32]
$C_{12}H_{26}O$	butyl *tert*-octyl ether				
		52.9±0.4	(298)		[U/2][02/32]
$C_{12}H_{26}O$	1-dodecanol				[112-53-8]
	(303–348)	85.8	(327)	GS	[01/3]
	(303–348)	90.0	(298)	GS	[01/3]
	(373–423)	91.7	(298)	CGC	[95/21]
	(353–393)	91.7	(298)	CGC	[94/13][00/10]
	(303–413)	80.5	(358)		[92/14]
	(383–438)	73.8	(398)	A	[87/5]
	(505–550)	57.1	(520)	A	[87/5]
		84.7±0.5	(343)	C	[79/6]
		91.8±0.6	(298)	C	[79/6]
		92.0±0.6	(298)	C	[77/1]
	(297–363)	92.5	(312)		[73/26]
	(411–487)	67.6	(426)		[73/26]
	(425–550)	66.7	(440)	A, EB	[87/5][70/2]
	(400–538)	71.5	(415)	DTA	[69/5]
	(297–313)	95.4	(305)	ME	[65/15]
	(303–363)	83.3	(333)	A, ME	[87/5][62/12]
	(411–487)	67.6	(426)		[58/2]
$C_{12}H_{26}O$	2-dodecanol				[10203-28-8]
	(293–393)	87.0	(308)		[99/11]
	(293–343)	85.0	(318)	A, ME	[87/5][62/12]
$C_{12}H_{26}O$	(*dl*) 3-dodecanol				[10203-30-2]
	(293–343)	78.3	(318)	A, ME	[87/5][62/12]
$C_{12}H_{26}O$	4-dodecanol				[10203-32-4]
	(293–343)	80.6	(318)	A, ME	[87/5][62/12]
$C_{12}H_{26}O$	5-dodecanol				[10203-33-5]
	(293–343)	79.4	(318)	A, ME	[87/5][62/12]
$C_{12}H_{26}O$	6-dodecanol				[6836-38-0]
	(293–343)	81.5	(318)	A, ME	[87/5][62/12]
$C_{12}H_{26}O_2$	(*dl*) 3,4-diethyl-3,4-dimethoxyhexane				
	(302–332)	59.8±1.3	(317)	GS	[90/17]
$C_{12}H_{26}O_3$	diethylene glycol dibutyl ether				[112-73-2]
		73.8±1.7	(298)	GCG	[00/9]
	(293–528)	56.6	(308)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{12}H_{26}O_4$	2,2-*bis*(*tert*-butylperoxy)butane				[41407-59-4]
	(299–323)	77.1	(311)	A	[87/5]
$C_{12}H_{26}O_4$	tripropylene glycol monoisopropyl ether				
	(355–530)	56.9	(370)	A	[87/5][47/5]
$C_{12}H_{26}S$	1-dodecanethiol				[112-55-0]
	(420–581)	62.0	(435)		[99/16]
$C_{12}H_{26}S_2$	1,12-dodecanedithiol				[33528-63-1]
	(454–593)	77.8	(469)	A	[87/5][43/6]
					[99/16]
$C_{12}H_{26}S_2$	dihexyl disulfide				[10496-15-8]
	(435–601)	64.9	(450)		[99/16]
$C_{12}H_{27}N$	dodecylamine				[124-22-1]
	(443–545)	61.0	(458)	A, EST	[87/5][56/17]
	(356–521)	63.4	(371)		[47/5]
$C_{12}H_{27}N$	dihexylamine				[143-16-8]
	(408–569)	55.1	(423)	A	[87/5]
$C_{12}H_{27}N$	N,N-dimethyldecylamine				[1120-24-7]
	(405–564)	55.2	(420)	A	[87/5]
$C_{12}H_{27}N$	tributylamine				[102-82-9]
	(298–337)	64.4	(313)	A	[87/5]
	(333–487)	48.1	(348)	A	[87/5]
$C_{12}H_{27}N$	triisobutylamine				[1116-40-1]
	(305–452)	54.3	(320)	A	[87/5][47/5]
$C_{12}H_{27}O_4P$	tributyl phosphate				[126-73-8]
	(500–562)	61.4	(515)	A	[87/5]
$C_{12}H_{27}O_4P$	triisobutyl phosphate				[126-71-6]
	(411–537)	62.8	(426)	A	[87/5]
$C_{12}H_{27}P$	tributyl phosphine				[998-40-3]
	(353–428)	51.7±0.5	(390)		[01/9]
$C_{12}H_{28}N_2$	1,12-dodecanediamine				[4843-89-4]
	(313–353)	110.1	(328)	A	[87/5]
$C_{12}H_{28}N_2$	tetrapropyl hydrazine				[60678-69-5]
	(362–423)	65.2	(377)	A	[87/5]
$C_{12}H_{30}N_3P$	*tris*(diethylamino)phosphine				
		60.7±0.4			[59/24]
$C_{13}H_8O$	9-fluorenone				[486-25-9]
		NA			[83/17]
$C_{13}H_9ClO_2$	5-chloro-2-hydroxybenzophenone				[85-19-8]
	(367–493)	73.3	(382)	A, UV	[87/5][60/2]
$C_{13}H_9N$	acridine				[260-94-6]
	(423–621)	62.9	(465)		[83/4]
	(423–621)	62.1	(515)		[83/4]
	(423–621)	61.5	(595)		[83/4]
	(402–619)	66.2	(417)	A	[87/5][47/5]
$C_{13}H_{10}$	fluorene				[86-73-7]
	(323–473)	66.9	(398)	GC	[02/18]
		72.3	(298)	CGC	[98/11]
	(403–453)	72.2	(298)	CGC	[95/21]
	(323–363)	65.7	(298)	B	[94/4]
	(383–427)	63.3	(398)		[88/12]
	(402–568)	54.2	(417)	A	[87/5]
	(423–573)	56.6	(498)	I	[23/1]
$C_{13}H_{10}N_2$	N,N′-diphenylcarbondiimide				[622-16-2]
	(500–599)	65.6	(515)	A	[87/5]
$C_{13}H_{10}O$	benzophenone				[119-61-9]
	(433–673)	65.1	(448)	A	[87/5]
	(473–579)	62.2	(488)		[49/1][84/9]
	(530–575)	59.0	(545)		[1904/1][84/9]
$C_{13}H_{10}O$	xanthene				[92-83-1]
		64.5	(435)		[84/25]
		61.1	(475)		[84/25]
		59.2	(515)		[84/25]
		56.7	(555)		[84/25]
		54.4	(585)		[85/25]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(413–433)	88.7	(423)	A	[87/5][58/23]
$C_{13}H_{10}O$	9-hydroxyfluorene				[1689-64-1]
		NA			[83/17]
$C_{13}H_{10}O_2$	phenylbenzoate				[93-99-2]
	(379–587)	62.4	(394)	A	[87/5][47/5]
$C_{13}H_{10}O_3$	2,4-dihydroxybenzophenone				[131-56-6]
	(418–485)	87.1	(433)	A, UV	[87/5][60/2]
$C_{13}H_{10}O_3$	phenyl salicyate				[118-55-8]
	(423–587)	69.9	(438)	A, UV	[87/5][60/2]
$C_{13}H_{11}Cl$	chlorodiphenylmethane				[90-99-3]
	(381–450)	70.4	(396)	A	[87/5]
$C_{13}H_{11}F$	fluorodiphenylmethane				[579-55-5]
	(288–333)	69.8±0.4	(298)	GS	[97/14]
$C_{13}H_{11}N$	benzophenone imine				[1013-88-3]
	(308–338)	74.2±1.0	(323)	GS	[97/9]
	(308–338)	75.7±1.0	(298)	GS	[97/9]
	(373–422)	62.3	(388)	A	[87/5]
$C_{13}H_{11}N$	9-methylcarbazole				[1484-12-4]
	(373–673)	73.4	(400)	EB, IPM	[92/15]
	(373–673)	70.5	(440)	EB, IPM	[92/15]
	(373–673)	67.7	(480)	EB, IPM	[92/15]
	(373–673)	65.0	(520)	EB, IPM	[92/15]
	(373–673)	62.1	(560)	EB, IPM	[92/15]
	(373–673)	59.1	(600)	EB, IPM	[92/15]
	(373–673)	55.9	(640)	EB, IPM	[92/15]
	(348–384)	74.9	(366)	GS	[80/6]
$C_{13}H_{11}N_3O$	2-(2′-hydroxy-5′-methylphenyl)benzotriazole				[2440-22-4]
	(413–433)	79.1	(423)	ME	[84/1]
	(404–435)	70.6	(419)	A, UV	[87/5][60/2]
$C_{13}H_{12}$	3-methylbiphenyl				[643-93-6]
	(283–463)	69.6	(298)		[93/10]
$C_{13}H_{12}$	diphenylmethane				[101-81-5]
		65.7	(298)	GC	[02/37]
	(303–343)	66.4±0.5	(323)	GS	[99/8]
	(303–343)	67.9±0.5	(298)	GS	[99/8]
	(303–402)	63.7	(363)		[89/14]
	(295–383)	72.2	(310)	A	[87/5]
	(423–583)	56.7	(438)	A	[87/5]
		55.8	(445)		[81/1]
		49.0	(535)		[81/1]
		66.6±0.1	(298)	C	[72/28]
	(490–555)	54.2	(505)		[15/1][84/9]
$C_{13}H_{12}O$	benzyl phenyl ether				[946-80-5]
	(368–560)	58.8	(383)	A	[87/5][47/5]
$C_{13}H_{12}O$	diphenylmethanol				[91-01-0]
	(438–574)	65.4	(453)	A	[87/5]
$C_{13}H_{12}O$	ethyl 1-naphthyl ketone				[2876-63-3]
	(397–579)	74.1	(412)	A	[87/5][47/5]
$C_{13}H_{13}N$	N-methyldiphenylamine				[552-82-9]
	(376–555)	65.2	(391)	A	[87/5][47/5]
$C_{13}H_{13}N$	N-benzylaniline				[103-32-2]
	(316–343)	79.6±1.1	(330)		[97/21]
		79.5			[80/21]
	[Note: The value reported in [80/21] for the enthalpy of vaporization is larger than the value given for the enthalpy of sublimation.]				
$C_{13}H_{14}$	1,6,7-trimethylnaphthalene				[2245-38-7]
	(323–473)	68.6	(398)	GC	[02/18]
$C_{13}H_{14}$	1-isopropylnaphthalene				[6158-45-8]
	(402–541)	50.4	(417)	A	[87/5]
$C_{13}H_{14}$	2-isopropylnaphthalene				[2027-17-0]
	(402–541)	60.3	(417)	A	[87/5]
$C_{13}H_{14}N_2$	2,4′-diaminodiphenylmethane				[1208-52-2]
	(353–403)	111.5	(368)	A	[87/5]
$C_{13}H_{14}N_2$	4,4′-diaminodiphenylmethane				[101-77-9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(343–393)	109.3	(358)	A	[87/5]
	(486–545)	98.0	(501)	A	[87/5]
	(471–545)	100.6	(502)	A	[66/28]
$C_{13}H_{15}Cl_3O_3$	2,4,6-trichlorophenoxyacetic acid, pentyl ester				[120-39-8]
	(460–573)	78.8	(475)	A	[87/5]
$C_{13}H_{15}N$	1,2,3,4-tetrahydro-9-methylcarbazole				[17058-12-7]
	(370–655)	72.5	(400)	EB, IPM	[92/15]
	(370–655)	69.6	(440)	EB, IPM	[92/15]
	(370–655)	66.7	(480)	EB, IPM	[92/15]
	(370–655)	63.8	(520)	EB, IPM	[92/15]
	(370–655)	60.7	(560)	EB, IPM	[92/15]
	(370–655)	57.4	(600)	EB, IPM	[92/15]
	(370–655)	53.8	(640)	EB, IPM	[92/15]
$C_{13}H_{15}NO$	1-(1-isocyanato-1-methylethyl)-4-(1-methylethylbenzene)				
	(298–463)	68.5	(308)	DTA, T, HSA	[86/3]
$C_{13}H_{16}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, isopentyl ester				[67821-07-2]
	(460–573)	75.8	(475)	A	[87/5]
$C_{13}H_{16}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, pentyl ester				[1917-96-6]
	(444–573)	73.6	(459)	A	[87/5]
$C_{13}H_{16}N_2$	2-phenyl-2-piperidinoacetonitrile				
	(338–378)	73.2±0.4		GS	[97/10]
$C_{13}H_{17}NO$	1-(phenacyl)piperidine				[3626-62-8]
	(381–446)	51.4	(396)	A	[87/5][69/1]
	(382–450)	47.2	(416)		[69/1]
$C_{13}H_{17}NO$	1-(*m*-toluoyl)piperidine				[13290-48-7]
	(373–403)	53.8	(388)	A	[87/5][69/1]
$C_{13}H_{17}NO_3$	(*dl*) N-acetylphenylalanine, ether ester				[4134-09-2]
	(438–528)	82.4	(453)	A	[87/5]
$C_{13}H_{18}$	1,1,4,6-tetramethylindane				[941-60-6]
	(313–383)	59.4	(328)	A	[87/5]
	(313–469)	60.2	(328)	A	[87/5]
	(242–469)	51.9	(439)	A	[87/5]
$C_{13}H_{18}$	1,1,4,7-tetramethylindane				[1078-04-2]
	(313–388)	59.6	(328)	A	[87/5]
	(313–469)	60.4	(328)	A	[87/5]
	(431–469)	52.0	(446)	A	[87/5]
$C_{13}H_{18}O$	4,4-dimethyl-1-phenyl-3-pentanone				[5195-24-4]
	(405–520)	63.5	(420)	A	[87/5]
$C_{13}H_{18}O$	p-isopropyl-α-methylhydrocinnamaldehyde				[103-95-7]
	(283–499)	72.6	(298)	A	[87/5]
$C_{13}H_{18}O$	1-phenyl-1-heptanone				[1671-75-6]
	(373–550)	64.6	(388)	A	[87/5][47/5]
$C_{13}H_{19}NO$	3-phenylpropionic acid, N,N-diethylamide				
	(353–439)	46.5	(368)	A	[87/5]
$C_{13}H_{19}NO$	(4R,5R)-2,2,3,4-tetramethyl-5-phenyl-1,3-oxazolidine				[141271-51-4]
	(293–301)	61.6±1.8	(298)		[98/3]
$C_{13}H_{20}$	heptylbenzene				[1078-71-3]
	(423–527)	54.0	(438)	A	[87/5]
		64.9	(298)		[71/28]
$C_{13}H_{20}O$	butyl cumyl ether				
	(278–318)	63.8±0.5	(298)	GS	[01/18]
$C_{13}H_{20}O$	α-ionone				[127-41-3]
	(352–523)	62.0	(367)	A	[87/5][47/5]
	(286–333)	67.5	(301)	A, ME	[87/5][57/9]
$C_{13}H_{20}O$	β-ionone				[14901-07-6]
	(291–334)	69.0	(306)	A, ME	[87/5][57/9]
$C_{13}H_{20}O$	6,10-dimethyl-4,5,9-undecatrien-2-one				[16647-05-5]
	(349–421)	63.6±1.4	(385)		[88/4]
$C_{13}H_{20}O$	6,10-dimethyl-3,5,9-undecatrien-2-one				[141-10-6]
	(382–457)	67.6±1.1	(420)		[88/4]
$C_{13}H_{20}O$	4-(2,6,6-trimethyl-1-cyclohexen-1-yl)-3-buten-2-one				[79-77-6]
	(373–442)	49.6±1.1	(408)		[88/4]
$C_{13}H_{20}O_2$	1,3-dihydroxy-5-heptylbenzene				[500-67-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(443–504)	91.6	(458)	A, GC	[87/5][75/24]
$C_{13}H_{20}O_2$	1,3-dihydroxy-5-methyl-2-hexylbenzene				[41395-27-1]
	(433–493)	82.8	(448)	A, GC	[87/5][75/24]
$C_{13}H_{21}Cl_3OS$	2,3,3-trichloro-2-propenethioic acid, O-decyl ester				[76619-97-1]
	(483–503)	79.9		GC	[80/24]
$C_{13}H_{21}N$	N,N-dimethyl-3-methyl-3-phenyl-2-butaneamine				
	(283–330)	59.8±0.7	(307)	GS	[98/1]
	(283–330)	60.3±0.7	(298)	GS	[98/1]
$C_{13}H_{21}N$	N-methyl-2,3-dimethyl-3-phenyl-2-butaneamine				
	(285–332)	71.9±1.1	(309)	GS	[98/1]
	(285–332)	72.5±1.1	(298)	GS	[98/1]
$C_{13}H_{21}NO$	2-(diethylamino)-1-phenyl-1-propanone				
	(293–333)	71.6±1.0	(298)	GS	[94/3]
$C_{13}H_{22}$	2-allyl-*cis*-decahydronaphthalene				
	(296–320)	89.9	(308)	A	[87/5]
$C_{13}H_{22}$	2-allyl-*trans*-decahydronaphthalene				
	(296–320)	91.7	(308)	A	[87/5]
$C_{13}H_{22}$	dodecahydrofluorene				[5744-03-6]
	(332–525)	55.8	(347)	A	[87/5]
$C_{13}H_{22}$	1,3,5-trimethyladamantane				[707-35-7]
		51.7±0.2	(298)		[00/21][00/22]
$C_{13}H_{22}Cl_2O_4$	2,2-*bis*(chloromethyl)-1,3-propanediol dibutyrate				
	(454–572)	43.1	(469)	A	[87/5]
$C_{13}H_{22}O_2$	bornyl propionate				[78548-53-5]
	(337–508)	55.9	(352)	A	[87/5][47/5]
$C_{13}H_{24}Cl_4$	1,1,1,13-tetrachlorotridecane				[3922-33-6]
	(320–370)	97.4	(335)	A	[87/5]
$C_{13}H_{24}O$	5-methyl-2-ethyl-2-butyl-4-hexenal				[42023-59-6]
	(323–393)	69.1	(338)	A	[87/5]
$C_{13}H_{24}O_2$	decyl acrylate				[2156-96-9]
	(404–536)	59.6	(419)	A	[87/5]
$C_{13}H_{24}O_2$	oxa-2-cyclotetradecanone (tridecanolactone)				[1725-04-8]
	(375–405)	66.6±1.1	(390)	MM	[91/7]
	(375–405)	72.9±1.7	(298)	MM	[91/7]
	(393–443)	67.5	(408)	A	[87/5]
$C_{13}H_{24}O_2$	ethyl 10-undecenoate				[692-86-4]
	(404–532)	77.4	(419)	A	[87/5]
$C_{13}H_{24}O_3$	1,4-dioxa-5-cyclopentadecanone				[1898-91-1]
	(403–443)	69.6	(418)	A, GC	[87/5][71/33]
$C_{13}H_{24}O_3$	1,6-dioxa-7-cyclopentadecanone				[36575-54-9]
	(403–443)	75.7	(418)	A, GC	[87/5][71/33]
$C_{13}H_{24}O_3$	1,8-dioxa-9-cyclopentadecanone				[36575-53-8]
	(403–443)	66.5	(418)	A, GC	[87/5][71/33]
$C_{13}H_{24}O_3$	3-hexyl-4-acetoxytetrahydro-2*H*-pyran				[18871-17-5]
	(383–453)	72.1	(398)	A	[87/5]
$C_{13}H_{24}O_3$	octyl levulinate				[41780-57-8]
	(413–565)	66.3	(428)	A	[87/5]
		65.1	(507)		[33/6]
$C_{13}H_{24}O_4$	octyl 3-acetoxypropionate				
	(420–440)	88.4	(430)	A	[87/5]
$C_{13}H_{24}O_4$	ethylisopentylmalonic acid, ethyl methyl ester				[72030-39-8]
	(392–501)	73.1	(407)	A	[87/5]
$C_{13}H_{24}O_5$	octyl[1-(methoxycarbonyl)ethyl] carbonate				
	(391–566)	70.0	(406)	A	[87/5]
$C_{13}H_{24}O_5$	pentyl[1-(butoxycarbonyl)ethyl] carbonate				
	(348–513)	70.1	(363)	A	[87/5]
$C_{13}H_{25}N$	tridecanonitrile				[629-60-7]
	(380–566)	69.5	(395)	A	[87/5]
$C_{13}H_{25}NO$	1-octanoyl piperidine				[20299-83-6]
	(373–443)	50.0	(388)	A	[87/5]
$C_{13}H_{26}$	5-butyl-4-nonene				[7367-38-6]
	(310–361)	55.8	(325)	A, MG	[87/5][55/11]
$C_{13}H_{26}$	1-tridecene				[2437-56-1]
		65.3	(298)		[71/28]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(413–509)	53.9	(428)	A	[87/5][55/7]
$C_{13}H_{26}$	n-octylcyclopentane				[1795-20-6]
		65.8	(298)		[71/28]
$C_{13}H_{26}$	n-heptylcyclohexane				[5617-41-4]
		64.9	(298)		[71/28]
$C_{13}H_{26}O$	5-methyl-2-ethyl-2-butyl-4-hexene-1-ol				[53144-53-9]
	(333–393)	76.9	(348)	A	[87/5]
$C_{13}H_{26}O$	1-octylcyclopentanol				[30089-09-9]
	(468–541)	60.9	(483)	A	[87/5]
$C_{13}H_{26}O$	2-tridecanone				[593-08-8]
	(335–534)	69.6	(350)	A	[87/5]
	(424–510)	61.0	(439)	A	[87/5]
	(400–628)	49.6	(541)		[75/8]
	(335–431)	69.8	(348)	EB	[66/12]
	(360–535)	62.1	(375)		[47/5]
$C_{13}H_{26}O$	7-tridecanone				[462-18-0]
	(395–600)	62.7	(410)	A	[87/5]
	(396–623)	49.3	(536)		[75/8]
$C_{13}H_{26}O$	(Z) 7-tridecen-1-ol				[64470-31-1]
	(343–383)	95.1	(298)	CGC	[00/10][94/13]
$C_{13}H_{26}O$	(E) 7-tridecen-1-ol				[64437-28-1]
	(343–383)	95.6	(298)	CGC	[00/10][94/13]
$C_{13}H_{26}O$	(Z) 9-tridecen-1-ol				[52957-10-5]
	(343–383)	95.8	(298)	CGC	[00/10][94/13]
$C_{13}H_{26}O$	(E) 9-tridecen-1-ol				[52957-15-0]
	(343–383)	96.4	(298)	CGC	[00/10][94/13]
$C_{13}H_{26}O$	(Z) 11-tridecen-1-ol				[34010-24-7]
	(343–383)	97.1	(298)	CGC	[00/10][94/13]
$C_{13}H_{26}O$	(E) 1,1-tridecen-1-ol				[56195-34-7]
	(343–383)	97.2	(298)	CGC	[00/10][94/13]
$C_{13}H_{26}O$	6,10-dimethyl-2-undecanone				[1604-34-8]
	(379–473)	59.3±0.4	(426)		[88/4]
$C_{13}H_{26}O_2$	4,5-dimethyl-2-octyl-1,3-dioxolane				[5452-11-9]
	(333–453)	72.8	(348)	A	[87/5]
$C_{13}H_{26}O_2$	2-octyl-1,3-dioxepane				[61732-94-3]
	(323–373)	61.2	(338)	A	[87/5]
$C_{13}H_{26}O_2$	undecyl acetate				[1731-81-3]
	(333–378)	77.2	(298)	GC	[97/13][00/10]
$C_{13}H_{26}O_2$	isopropyl decanoate				[2311-59-3]
	(363–451)	60.8	(378)	A	[87/5]
$C_{13}H_{26}O_2$	propyl decanoate				[30673-60-0]
	(369–459)	62.4	(384)	A	[87/5]
$C_{13}H_{26}O_2$	methyl laurate				[111-82-0]
		71.4	(350)		[02/27]
		70.7±0.2	(356)		[02/27]
		76.6±0.4	(298)		[02/27]
	(295–452)	74.9	(310)		[01/10]
	(393–463)	76.8	(298)	GC	[97/28]
	(453–543)	53.3	(498)	GC	[93/9]
	(287–333)	83.6	(302)	A	[87/5]
		76.5±0.7	(298)	C,GC	[80/5]
		77.2±0.6	(298)	C	[77/1]
	(407–540)	63.6	(422)	A	[87/5][63/16]
	(336–409)	71.4	(351)	MG,OM	[52/13]
	(373–439)	62.3	(388)		[44/7]
$C_{13}H_{26}O_2$	tridecanoic acid				[638-53-9]
	(409–585)	90.1	(424)	A	[87/5]
	(328–350)	100.4±2.0	(340)	ME, TE	[82/4]
$C_{13}H_{26}O_3$	decyl lactate				[42175-34-8]
	(349–556)	76.6	(364)	A	[87/5]
$C_{13}H_{26}O_3$	octyl 3-ethoxypropionate				
	(398–543)	56.9	(413)	A	[87/5]
$C_{13}H_{26}O_3$	pentyl 3-pentyloxypropionate				[14144-56-0]
	(378–498)	62.3	(393)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{13}H_{27}Br$	1-bromotridecane				[765-09-3]
	(425–628)	64.6	(440)	A, EST	[87/5][61/13] [70/14]
$C_{13}H_{27}Cl$	1-chlorotridecane				[822-13-9]
	(414–611)	63.0	(429)	A, EST	[87/5][61/13] [70/14]
$C_{13}H_{27}F$	1-fluorotridecane				[1536-21-6]
	(387–558)	58.9	(402)	A, EST	[87/5][61/13] [70/14]
$C_{13}H_{27}I$	1-iodotridecane				[35599-77-0]
	(440–655)	66.1	(455)	A, EST	[87/5][61/13] [70/14]
$C_{13}H_{27}NO_2$	N-decyl lactamide				
	(413–483)	97.9	(428)	A	[87/5]
$C_{13}H_{27}NO_2$	O-decyl lactamide				
	(413–483)	95.0	(428)	A	[87/5]
$C_{13}H_{28}$	tridecane				[629-50-5]
		65.3	(309)	C	[96/22]
		64.9	(314)	C	[96/22]
		64.2	(324)	C	[96/22]
		63.3	(334)	C	[96/22]
		62.4	(344)	C	[96/22]
		62.3	(349)	C	[96/22]
		66.7	(298)		[94/12]
		65.6	(308)	C	[79/2]
		64.6	(318)	C	[79/2]
		61.7	(348)	C	[79/2]
		66.5±0.2	(298)	C	[79/2]
		66.4±0.3	(298)	C	[72/29]
		66.2	(298)		[71/28]
	(417–511)	54.5	(432)	A	[87/5][55/7]
$C_{13}H_{28}$	2-methyldodecane				[1560-97-0]
	(373–503)	52.5	(388)	A	[87/5]
$C_{13}H_{28}$	3-methyldodecane				[17312-57-1]
	(372–504)	51.4	(387)	A	[87/5]
$C_{13}H_{28}$	4-methyldodecane				[6117-97-1]
	(372–501)	52.0	(387)	A	[87/5]
$C_{13}H_{28}$	5-methyldodecane				[17453-93-9]
	(368–500)	50.6	(383)	A	[87/5]
$C_{13}H_{28}$	2,3-dimethylundecane				[17312-77-5]
	(383–500)	53.2	(398)	A	[87/5]
$C_{13}H_{28}$	2,4-dimethylundecane				[17312-80-0]
	(365–490)	52.1	(380)	A	[87/5]
$C_{13}H_{28}$	2,4,6-trimethyldecane				
	(352–478)	48.7	(367)	A	[87/5]
$C_{13}H_{28}$	5-ethyl-5-methyldecane				
	(273–307)	61.4±1.1	(290)	HSA	[95/27]
		60.5±1.1	(298)		[95/27]
		61.4±1.8	(298)	CGC	[95/27]
$C_{13}H_{28}$	5-butylnonane				[17312-63-9]
	(298–365)	52.6	(313)	A, MG	[87/5][55/11]
$C_{13}H_{28}O$	pentyl *tert*-octyl ether				
		55.9±0.3	(298)		[U/2][02/32]
$C_{13}H_{28}O$	1-tridecanol				[112-70-9]
	(307–348)	91.1	(327)	GS	[01/3]
	(307–348)	95.8	(298)	GS	[01/3]
	(313–373)	87.4	(343)		[92/14]
	(431–568)	69.2	(446)	A	[87/5]
$C_{13}H_{28}O$	2,2-dimethyl-3-*tert*-butyl-3-heptanol				[42930-67-6]
	(379–513)	58.3	(394)		[73/26]
$C_{13}H_{28}O$	3,3,5,5-tetramethyl-4-ethyl-4-heptanol				
	(393–526)	55.9	(408)		[73/26]
$C_{13}H_{28}O$	3,3,6-trimethyl-4-isopropyl-4-heptanol				
	(381–512)	59.1	(396)		[73/26]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{13}H_{28}O$	3,3,6-trimethyl-4-propyl-4-heptanol				
	(383–513)	60.1	(398)		[73/26]
$C_{13}H_{28}O$	2,2,5-trimethyl-3-*tert*-butyl-3-hexanol				[32579-70-7]
	(377–513)	57.6	(392)		[73/26]
$C_{13}H_{28}O_4$	tripropylene glycol, monobutyl ether				[57499-93-1]
	(374–543)	67.1	(389)	A	[87/5][47/5]
$C_{13}H_{28}S$	1-tridecanethiol				[19484-26-5]
	(433–598)	64.7	(448)		[99/16]
$C_{13}H_{29}N$	tridecylamine				[2869-34-3]
	(458–562)	60.1	(473)	A, EST	[87/5][56/17]
$C_{14}H_8Cl_4$	p,p′-DDE				[72-55-9]
	(343–453)	87.2	(398)	GC	[90/2]
$C_{14}H_8O_2$	9,10-anthraquinone				[84-65-1]
	(559–660)	64.3	(574)	A	[87/5]
$C_{14}H_8O_4$	1,4-dihydroxy-9,10-anthraquinone				[81-64-1]
	(469–633)	74.0	(484)	A	[87/5][47/5]
$C_{14}H_9Cl_5$	1,1,1-trichloro-2,2-*bis*(4-chlorophenyl)ethane (p,p′DDT)				[50-29-3]
		106.1±1.3	(398)	GS	[01/1]
	(343–453)	93.2	(398)	GC	[90/2]
$C_{14}H_9Cl_5$	1,1,1-trichloro-2-(4-chlorophenyl)2-(2-chlorophenyl)ethane (p,o′DDT)				[789-02-6]
	(343–453)	88.6	(398)	GC	[90/2]
$C_{14}H_9Cl_5$	DDT				
	(313–363)	83.7	(338)		[49/3]
$C_{14}H_{10}$	anthracene				[120-12-7]
	(323–473)	72.4	(398)	GC	[02/18]
		79.1	(298)	CGC	[01/1]
		79.8	(298)	CGC	[98/11]
	(453–503)	79.6	(298)	CGC	[95/21]
	(343–453)	69.7	(398)	GC	[90/2]
	(504–615)	58.6	(519)	A	[87/5]
	(500–616)	59.2	(558)	I	[23/1]
	(500–616)	60.3	(515)	I	[23/1][84/9]
	(496–614)	59.6	(555)	I	[22/1]
	(496–614)	60.7	(511)	I	[22/1][84/9]
$C_{14}H_{10}$	phenanthrene				[85-01-8]
	(323–473)	72.2	(398)	GC	[02/18]
		78.7	(298)	CGC	[98/11]
	(403–453)	78.5	(298)	CGC	[95/21]
	(343–453)	71.2	(398)	GC	[90/2]
	(391–613)	58.2	(406)	A	[87/5]
	(373–423)	69.6	(388)	A	[87/5][75/11]
		71.2	(372)		[77/22]
	(476–620)	57.2	(548)	I	[23/1]
	(476–620)	61.2	(491)	I	[23/1][84/9]
	(505–614)	59.3	(560)	I	[22/1]
	(505–614)	61.2	(520)	I	[22/1][84/9]
$C_{14}H_{10}$	diphenylacetylene				[501-65-5]
	(439–517)	63.8±0.2	(440)	EB	[02/17]
	(439–517)	60.9±0.2	(480)	EB	[02/17]
	(439–517)	58.1±0.3	(520)	EB	[02/17]
$C_{14}H_{10}Cl_4$	1,1-dichloro-2,2-*bis*(4-chlorophenyl)ethane p,p′-DDD				[72-54-8]
	(343–453)	88.5	(398)	GC	[90/2]
$C_{14}H_{10}Cl_4$	(2,2′,4,6′-tetrachloro-5-methyldiphenyl)methane				[121107-48-0]
		98.6	(298)	GC	[96/24]
$C_{14}H_{10}Cl_4$	(2,2′,4,5′-tetrachloro-5-methyldiphenyl)methane				[121107-46-8]
		101.0	(298)	GC	[96/24]
$C_{14}H_{10}Cl_4$	(2,2′,5,5′-tetrachloro-4-methyldiphenyl)methane				[121107-54-8]
		101.2	(298)	GC	[96/24]
$C_{14}H_{10}Cl_4$	(2,2′,4,4′-tetrachloro-5-methyldiphenyl)methane				[121107-44-6]
		101.3	(298)	GC	[96/24]
$C_{14}H_{10}Cl_4$	(2,2′,4,6′-tetrachloro-3-methyldiphenyl)methane				[121107-47-9]
		100.1	(298)	GC	[96/24]
$C_{14}H_{10}Cl_4$	(2′,3,4,6′-tetrachloro-6-methyldiphenyl)methane				[121107-83-5]
		101.1	(298)	GC	[96/24]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{14}H_{10}Cl_4$	(2,2′,4,4′-tetrachloro-3-methyldiphenyl)methane				[121107-43-5]
		101.8	(298)	GC	[96/24]
$C_{14}H_{10}Cl_4$	(2,3′,4,4′-tetrachloro-5-methyldiphenyl)methane				[121107-65-1]
		103.8	(298)	GC	[96/24]
$C_{14}H_{10}Cl_4$	(2′3,4,4′-tetrachloro-6-methyldiphenyl)methane				[121107-77-5]
		103.0	(298)	GC	[96/24]
$C_{14}H_{10}O_2$	benzil				[134-81-6]
	(401–620)	69.2	(416)	A	[87/5][47/5]
$C_{14}H_{10}O_3$	benzoic acid anhydride				[93-97-0]
	(416–633)	69.1	(431)	A	[87/5][47/5]
$C_{14}H_{11}F_3$	1,1,1-trifluoro-2,2-diphenylethane				[384-94-1]
	(286–328)	69.1±0.9	(298)	GS	[97/14]
$C_{14}H_{12}$	1-methylfluorene				[1730-37-6]
	(323–473)	71.1	(398)	GC	[02/18]
$C_{14}H_{12}$	9-methylfluorene				[2523-37-7]
	(318–358)	66.5	(298)	B	[94/4]
$C_{14}H_{12}$	9,10-dihydrophenanthene				[776-35-2]
	(417–453)	64.0	(432)	A	[87/5]
	(353–418)	72.3±0.6	(340)		[79/5]
	(353–418)	76.6±0.1	(298)		[79/5]
$C_{14}H_{12}$	1,1-diphenylethylene				[530-48-3]
	(360–550)	59.3	(375)	A	[87/5][47/5]
$C_{14}H_{12}$	*cis* 1,2-diphenylethylene (*cis* stilbene)				[645-49-8]
	(373–428)	66.5	(388)	A	[87/5]
$C_{14}H_{12}$	*trans* 1,2-diphenylethylene (*trans* stilbene)				[103-30-0]
		79.7	(298)	CGC	[98/11]
	(453–503)	79.8	(298)	CGC	[95/21]
	(403–453)	79.6	(298)	CGC	[95/21]
	(419–580)	65.5	(434)	A	[87/5]
$C_{14}H_{12}O$	benzyl phenyl ketone				[451-40-1]
	(396–594)	68.1	(411)	A	[87/5][47/5]
$C_{14}H_{12}O$	2-methylbenzophenone				[131-58-8]
	(435–580)	65.1	(450)	A	[87/5]
$C_{14}H_{12}O$	3-methylbenzophenone				[643-65-2]
	(445–585)	68.4	(460)	A	[87/5]
$C_{14}H_{12}O$	4-methylbenzophenone				[134-84-9]
	(450–492)	72.0	(465)	A	[87/5]
$C_{14}H_{12}O_2$	(*dl*) benzoin				[579-44-2]
	(408–616)	69.0	(423)	A	[87/5][47/5]
$C_{14}H_{12}O_2$	benzyl benzoate				[120-51-4]
	(497–602)	59.7	(512)	A, EB	[87/5][76/13]
	(297–353)	77.7	(312)	A, ME	[87/5][57/9]
$C_{14}H_{12}O_3$	benzyl salicylate				[118-58-1]
	(295–334)	78.7	(310)	A, ME	[87/5][55/8]
$C_{14}H_{12}O_3$	2-hydroxy-4-methoxybenzophenone				[131-57-7]
	(337–413)	74.7	(352)	A, UV	[87/5][60/2]
$C_{14}H_{12}O_4$	2,2′-dihydroxy-4-methoxybenzophenone				[131-53-3]
	(342–481)	75.6	(357)	A, UV	[87/5][60/2]
$C_{14}H_{13}N$	N-benzylbenzaldehyde-imine				
	(309–340)	83.4±1.2	(324)	GS	[97/9]
	(309–340)	85.0±1.2	(298)	GS	[97/9]
$C_{14}H_{14}$	(4-methylphenyl)phenylmethane				
	(293–333)	68.6±0.3	(313)	GS	[99/8]
	(293–333)	69.5±0.3	(298)	GS	[99/8]
$C_{14}H_{14}$	3,3′-dimethylbiphenyl				[612-75-9]
	(288–308)	71.9	(298)	A	[87/5]
$C_{14}H_{14}$	1,1-diphenylethane				[612-00-0]
	(293–328)	68.2±0.6	(313)	GS	[99/8]
	(293–328)	68.9±0.6	(298)	GS	[99/8]
	(348–405)	62.4	(363)	A	[87/5]
$C_{14}H_{14}$	1,2-diphenylethane				[103-29-7]
	(323–473)	67.4	(398)	GC	[02/18]
		66.2±0.2	(340)		[88/16]
	(333–413)	64.1	(373)		[89/14]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(359–557)	57.0	(374)	A	[87/5][47/5]
$C_{14}H_{14}N_2O_3$	4,4′-dimethoxyazoxybenzene				[1562-94-3]
	(395–418)	73.7	(406)	A	[87/5]
$C_{14}H_{14}O$	dibenzyl ether				[103-50-4]
	(275–417)	45.6	(290)	A	[87/5]
	(413–461)	59.4	(428)	A	[87/5]
$C_{14}H_{14}O$	isopropyl 2-naphthyl ketone				[59502-28-2]
	(406–586)	75.9	(421)	A	[87/5][47/5]
$C_{14}H_{14}O$	2-(1-phenylethyl)phenol				[52857-29-1]
	(443–521)	82.8	(458)	A	[87/5]
	(442–523)	72.8	(482)		[39/4]
$C_{14}H_{14}O$	4-(1-phenylethyl)phenol				[1988-89-2]
	(447–517)	90.8	(462)	A	[87/5]
	(447–523)	75.4	(485)		[39/4]
$C_{14}H_{14}O_2$	2-(2-biphenyloxy)ethanol				[7501-02-2]
	(410–608)	71.9	(425)	A	[87/5]
$C_{14}H_{15}N$	dibenzylamine				[103-49-1]
	(391–573)	70.5	(406)	A	[87/5][47/5]
$C_{14}H_{15}N$	N,N-diphenyl-N-ethylamine				[606-99-5]
	(371–559)	63.2	(386)	A	[87/5][47/5]
$C_{14}H_{16}N_2O_2$	1,3-*bis*(1-isocyanato-1-methylethyl)benzene				
	(298–426)	65.2	(361)	HSA, T, DTA	[86/3]
$C_{14}H_{16}N_2O_2$	1,4-*bis*(1-isocyanato-1-methylethyl)benzene				
	(373–428)	74.0	(400)	HSA, T, DTA	[86/3]
$C_{14}H_{17}Cl_3O_3$	hexyl 2,4,5-trichlorophenoxyacetate				[2630-13-9]
	(460–573)	85.3	(475)	A	[87/5]
$C_{14}H_{18}$	1,2,3,4,5,6,7,8-octahydroanthracene				[1079-71-6]
	(437–498)	45.6	(452)	A	[87/5]
	(348–433)	NA		IPM	[82/16]
$C_{14}H_{18}$	1,2,3,4,5,6,7,8-octahydrophenanthrene				[5325-97-3]
	(402–570)	55.8	(417)	A	[87/5]
$C_{14}H_{18}Cl_2O_3$	hexyl 2,4-dichlorophenoxyacetate				[1917-95-9]
	(444–573)	81.3	(459)	A	[87/5]
$C_{14}H_{18}Cl_2O_3$	isohexyl 2,4-dichlorophenoxyacetate				
	(460–573)	69.1	(475)	A	[87/5][99/16]
$C_{14}H_{18}O$	α-pentylcinnamaldehyde				[122-40-7]
	(282–333)	75.3	(297)	A, ME	[87/5][55/8]
$C_{14}H_{18}O_4$	dipropyl phthalate				[131-16-8]
	(403–578)	73.2	(418)	A	[87/5]
$C_{14}H_{18}O_4$	diisopropyl phthalate				
		74.8	(430)	BG	[88/17]
$C_{14}H_{19}NO$	hexahydro-1-(phenylacetyl)-1*H*-azepine				[18494-61-6]
	(370–418)	53.9	(385)	A	[87/5][69/1]
	(371–420)	49.4	(396)		[69/1]
$C_{14}H_{20}$	1-cyclohexyl-1-phenylethane				[4413-16-5]
	(359–400)	70.8	(374)	A, MG	[87/5][55/11]
$C_{14}H_{20}$	1-cyclohexyl-2-phenylethane				[1603-61-8]
	(372–406)	60.7	(387)	A, MG	[87/5][55/11]
$C_{14}H_{20}$	1-cyclopentyl-3-phenylpropane				[2883-12-7]
	(373–540)	61.3	(388)	A, MG	[87/5][55/11]
$C_{14}H_{20}Cl_2$	1,2-dichloro-3,4,5,6-tetraethylbenzene				
	(378–575)	66.2	(393)		[87/5][47/5] [70/14]
$C_{14}H_{20}Cl_2$	1,4-dichloro-2,3,5,6-tetraethylbenzene				
	(364–570)	60.8	(379)		[87/5][47/5] [70/14]
$C_{14}H_{20}O$	(1-cyclohexyloxyethyl)benzene				[61812-55-3]
	(286–338)	69.8±0.5	(298)	GS	[02/29][02/38]
$C_{14}H_{20}O_3$	2-(4-*tert*-butylphenoxy)ethyl acetate				
	(391–578)	78.8	(406)	A	[87/5][47/5]
$C_{14}H_{20}O_5$	benzo-15-crown-5				[14098-44-3]
		98.9±1.3	(298)	CGC	[00/9]
$C_{14}H_{21}F_3N_2O_4$	proline, 1-[N-(trifluoroacetyl)-(*l*)-leucyl]methyl ester				
	(366–453)	105.8	(381)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{14}H_{22}$	1,4-di-*tert*-butylbenzene				[1012-72-2]
	(387–559)	63.0±0.6	(298)	EB	[97/8]
$C_{14}H_{22}$	1,3-di-*tert*-butylbenzene				[1014-60-4]
	(288–333)	58.9±0.5	(310)	GS	[98/19]
		59.6±0.5	(298)		[98/19]
	(346–374)	58.0	(360)	A	[87/5]
$C_{14}H_{22}$	octylbenzene				[2189-60-8]
	(293–462)	67.4	(308)		[93/10]
	(368–400)	63.1	(383)	A	[87/5]
	(316–399)	66.2	(336)	GS	[86/6]
$C_{14}H_{22}$	2-phenyloctane				[777-22-0]
	(361–392)	61.6	(376)	A	[87/5]
		70.0	(298)		[71/28]
$C_{14}H_{22}$	1,2,3,4-tetraethylbenzene				[642-32-0]
	(423–525)	62.6	(438)	A	[87/5]
$C_{14}H_{22}$	1,2,3,5-tetraethylbenzene				[38842-05-6]
	(413–521)	64.8	(428)	A	[87/5]
$C_{14}H_{22}$	1,2,4,5-tetraethylbenzene				[635-81-4]
	(338–521)	54.5	(353)	A	[87/5]
$C_{14}H_{22}O$	2,4-di-*tert*-butylphenol				[96-76-4]
	(333–368)	69.2±0.5	(350)	GS	[99/18]
		72.4±0.5	(298)		[99/18]
	(403–537)	60.1	(418)	A	[87/5]
$C_{14}H_{22}O$	2,6-di-*tert*-butylphenol				[128-39-2]
	(313–368)	63.5±0.2	(341)	GS	[99/19]
		66.0±0.2	(298)		[99/19]
	(386–530)	60.4	(401)	A	[87/5]
$C_{14}H_{22}O$	4-(1,1-diethylbutyl)phenol				[63264-81-3]
	(404–549)	69.5	(419)	A	[87/5]
$C_{14}H_{22}O$	2,4-diisobutylphenol				
	(448–598)	65.0	(463)	A	[87/5]
$C_{14}H_{22}O$	4-[(1,2-dimethyl-1-ethyl)butyl]phenol				[59048-99-6]
	(415–578)	64.7	(430)	A	[87/5]
$C_{14}H_{22}O$	4-[(1,3-dimethyl-1-ethyl)butyl]phenol				
	(409–571)	60.9	(424)	A	[87/5]
$C_{14}H_{22}O$	4-[(2,2-dimethyl-1-ethyl)butyl]phenol				
	(413–553)	67.0	(428)	A	[87/5]
$C_{14}H_{22}O$	β-irone				[79-70-9]
	(288–333)	72.1	(303)	A	[87/5]
$C_{14}H_{22}O$	α-isomethylionone				[127-51-5]
	(288–333)	69.5	(303)	A	[87/5]
$C_{14}H_{22}O$	4-[(1-methyl-1-ethyl)pentyl]phenol				[1988-35-8]
	(413–578)	62.8	(428)	A	[87/5]
$C_{14}H_{22}O$	α-methylionone				[127-42-4]
	(288–333)	70.1	(303)	A	[87/5]
$C_{14}H_{22}O$	β-methylionone				[127-43-5]
	(288–333)	70.3	(303)	A	[87/5]
$C_{14}H_{22}O$	4-(1,1,3,3-tetramethylbutyl)phenol				[140-66-9]
	(309–350)	68.8±0.3	(329)	GS	[99/18]
		70.7±0.3	(298)		[99/18]
	(381–563)	72.4	(396)	A	[87/5][59/1] [84/9]
$C_{14}H_{22}O_{11}$	diethylenel glycol, O,O-dicarboxylic acid, di[1-(methoxycarbonyl)-ethyl] ester				
	(403–493)	98.2	(418)	A	[87/5]
$C_{14}H_{23}N$	N,N-dimethyl-2,3-dimethyl-3-phenyl-2-butanamine				
	(280–335)	65.8±1.3	(308)	GS	[98/1]
	(280–335)	66.4±1.3	(298)	GS	[98/1]
$C_{14}H_{24}$	perhydrophenanthrene				[5743-97-5]
	(455–551)	55.7	(470)	EB	[00/16]
$C_{14}H_{24}N_2$	N,N′-di-sec-butyl-1,4-phenylenediamine				[101-96-2]
	(370–507)	70.3	(385)	A	[87/5]
$C_{14}H_{24}O$	2,2,5,9-tretamethyl-4,8-decanedienal				[53131-20-7]
	(353–416)	66.4	(368)	A	[87/5]
$C_{14}H_{24}O$	borneol butyrate				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(347–520)	59.6	(362)	A	[87/5][47/5]
$C_{14}H_{24}O$	(*dl*) borneol isobutyrate				[24717-86-0]
	(343–516)	58.8	(358)	A	[87/5][47/5]
$C_{14}H_{24}O$	geraniol butyrate				
	(369–531)	68.6	(384)	A	[87/5][47/5]
$C_{14}H_{24}O$	geraniol isobutyrate				
	(363–524)	67.8	(378)	A	[87/5][47/5]
$C_{14}H_{24}O_6$	1,1,1-*tris*(ethoxycarbonyl)pentane				
	(298–343)	81.4±0.4		GS	[95/8]
$C_{14}H_{26}$	1-cyclohexyl-3-cyclopentylpropane				[2883-07-0]
	(371–403)	64.5	(386)	A	[87/5]
$C_{14}H_{26}$	1,1-dicyclohexylethane				[2319-61-1]
	(370–402)	62.1	(385)	A	[87/5]
$C_{14}H_{26}$	1,2-dicyclohexylethane				[3321-50-4]
	(371–402)	65.4	(386)	A	[87/5]
$C_{14}H_{26}O$	*cis* 2,2,5,9-tetramethyl-4,8-decadiene-1-ol				[53965-17-6]
	(363–393)	94.0	(378)	A	[87/5]
$C_{14}H_{26}O$	*trans* 2,2,5,9-tetramethyl-4,8-decadiene-1-ol				[53965-18-7]
	(363–393)	86.3	(378)	A	[87/5]
$C_{14}H_{26}O$	(Z) 2-tetradecenal				[142628-55-5]
	(353–393)	82.5	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 2-tetradecenal				[51534-36-2]
	(353–393)	82.6	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 3-tetradecenal				[174155-51-2]
	(353–393)	79.4	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 3-tetradecenal				[174155-50-1]
	(353–393)	80.1	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 4-tetradecenal				[115018-49-0]
	(353–393)	79.2	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 4-tetradecenal				[115018-39-8]
	(353–393)	79.9	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 5-tetradecenal				[63851-42-3]
	(353–393)	78.4	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 5-tetradecenal				[174155-52-3]
	(353–393)	79.1	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 6-tetradecenal				[174155-53-4]
	(353–393)	78.5	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 6-tetradecenal				[174155-54-5]
	(353–393)	79.3	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 7-tetradecenal				[65128-96-3]
	(353–393)	78.7	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 7-tetradecenal				[37011-96-4]
	(353–393)	79.2	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 8-tetradecenal				[169054-69-7]
	(353–393)	78.8	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 8-tetradecenal				[174155-55-6]
	(353–393)	79.3	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 9-tetradecenal				[53939-27-8]
	(353–393)	79.1	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 9-tetradecenal				[71377-13-4]
	(353–393)	79.5	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 10-tetradecenal				[144525-16-6]
	(353–393)	79.6	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 10-tetradecenal				[148238-39-5]
	(353–393)	79.8	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 11-tetradecenal				[35237-64-0]
	(353–393)	80.3	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 11-tetradecenal				[35746-21-5]
	(353–393)	80.5	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(Z) 12-tetradecenal				[174155-56-7]
	(353–393)	80.8	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	(E) 12-tetradecenal				[124499-92-9]
	(353–393)	80.8	(298)	CGC	[96/7][00/10]
$C_{14}H_{26}O$	2-(1,2-dimethylpropyl)-5,6-dimethylheptenal				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(385–535)	60.0	(400)	EB	[87/3]
$C_{14}H_{26}O$	2-pentyl-2-nonenal				[3021-89-4]
	(385–553)	65.0	(409)	EB	[87/3]
$C_{14}H_{26}O_2$	decyl methacrylate				[3179-47-3]
	(350–541)	62.7	(365)	A	[87/5]
$C_{14}H_{26}O_2$	(Z) 2-dodecenyl acetate				[84801-15-0]
	(333–378)	79.7	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(E) 2-dodecenyl acetate				[84801-16-1]
	(333–378)	81.0	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(Z) 3-dodecenyl acetate				[38363-24-5]
	(333–378)	79.3	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(E) 3-dodecenyl acetate				[56218-63-4]
	(333–378)	79.8	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(Z) 4-dodecenyl acetate				[38363-25-6]
	(333–378)	78.6	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(E) 4-dodecenyl acetate				[38363-26-7]
	(333–378)	79.8	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(Z) 5-dodecenyl acetate				[16676-96-3]
	(333–378)	79.2	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(E) 5-dodecenyl acetate				[16676-97-4]
	(333–378)	80.0	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(Z) 6-dodecenyl acetate				[16974-12-2]
	(333–378)	79.3	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(E) 6-dodecenyl acetate				[29868-16-4]
	(333–378)	80.0	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(Z) 7-dodecenyl acetate				[14959-86-5]
	(333–378)	79.8	(298)	GC	[97/13][00/10]
	(303–317)	77.5	(310)	GC	[83/10]
$C_{14}H_{26}O_2$	(E) 7-dodecenyl acetate				[16695-41-3]
	(333–378)	80.2	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(Z) 8-dodecenyl acetate				[28079-04-1]
	(333–378)	80.2	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(E) 8-dodecenyl acetate				[38363-29-0]
	(333–378)	80.5	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(Z) 9-dodecenyl acetate				[16974-11-1]
	(333–378)	80.7	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(E) 9-dodecenyl acetate				[35148-19-7]
	(333–378)	81.0	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(Z) 10-dodecenyl acetate				[35148-20-0]
	(333–378)	81.4	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_2$	(E) 10-dodecenyl acetate				[35153-09-4]
	(333–378)	81.5	(298)	GC	[97/13][00/10]
$C_{14}H_{26}O_3$	1,7-dioxa-8-cyclohexadecanone				[5963-13-3]
	(403–453)	73.3	(418)	A	[87/5]
$C_{14}H_{26}O_3$	3-heptyl-4-acetoxytetrahydro-2*H*-pyran				[23144-23-2]
	(383–453)	74.4	(398)	A	[87/5]
$C_{14}H_{26}O_3$	nonyl levulinate				
	(423–571)	69.4	(438)	A	[87/5]
		68.4	(516)		[33/6]
$C_{14}H_{26}O_4$	dibutyl adipate				[105-99-7]
	(435–563)	68.7	(450)	A	[87/5]
$C_{14}H_{26}O_4$	diethyl isopentylmalonate				
	(388–526)	75.3	(403)	A	[87/5]
$C_{14}H_{26}O_4$	2-methylheptane-5,5-dicarboxylic acid, diethyl ester				
	(394–427)	70.1	(409)	A	[87/5]
$C_{14}H_{26}O_4$	diethyl decanedioate				[110-40-7]
	(398–579)	74.1	(413)	A	[87/5][47/5]
$C_{14}H_{26}O_5$	ethyl[1-(1-octyloxycarbonyl)ethyl]carbonate				
	(413–513)	74.0	(428)	A	[87/5]
$C_{14}H_{26}O_5$	hexyl[1-(1-butoxycarbonyl)ethyl]carbonate				
	(357–501)	72.1	(372)	A	[87/5]
$C_{14}H_{27}N$	myristonitrile				[629-63-0]
	(391–580)	71.4	(406)	A	[87/5]
		85.3±0.5	(298)	C	[77/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{14}H_{28}$	cyclotetradecane				[295-17-0]
		62.3±0.2	(343)		[92/4]
		65.3±0.2	(298)		[92/4]
$C_{14}H_{28}$	3-*tert*-butyl-1-methyl-4-isopropylcyclohexane				
	(329–505)	53.8	(344)	A	[87/5]
$C_{14}H_{28}$	(1-methylheptyl)cyclohexane				
	(364–397)	60.4	(379)	A	[87/5]
$C_{14}H_{28}$	octylcyclohexane				[1795-15-9]
	(367–399)	62.7	(382)	A	[87/5]
		69.8	(298)		[71/28]
$C_{14}H_{28}$	nonylcyclopentane				[2882-98-6]
		70.7	(298)		[71/28]
$C_{14}H_{28}$	1-tetradecene				[1120-36-1]
		70.2	(298)		[71/28]
	(430–527)	56.5	(445)	A	[87/5][55/7]
$C_{14}H_{28}$	2,2,3,5,5,6,6-heptamethyl-3-heptene				
	(303–355)	51.2	(318)	A, MG	[87/5][55/11]
$C_{14}H_{28}N_2O_2$	tetrapropyloxamide				
		67	(489)	TGA, DSC	[02/36]
$C_{14}H_{28}O$	1-octylcyclohexanol				[5770-04-7]
	(373–403)	105.6	(388)	A	[87/5]
$C_{14}H_{28}O$	(Z) 2-tetradecen-1-ol				[75039-85-9]
	(353–393)	101.1	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 2-tetradecen-1-ol				[75039-86-0]
	(353–393)	101.5	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 3-tetradecen-1-ol				[68892-27-3]
	(353–393)	99.8	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 3-tetradecen-1-ol				[68900-86-7]
	(353–393)	99.7	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 4-tetradecen-1-ol				[40642-41-9]
	(353–393)	100.0	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 4-tetradecen-1-ol				[59101-24-5]
	(353–393)	100.7	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 5-tetradecen-1-ol				[40642-42-0]
	(353–393)	100.3	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 5-tetradecen-1-ol				[62936-14-5]
	(353–393)	100.8	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 6-tetradecen-1-ol				[68760-63-4]
	(353–393)	100.0	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 6-tetradecen-1-ol				[68760-62-3]
	(353–393)	100.5	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 7-tetradecen-1-ol				[40642-43-1]
	(353–393)	99.9	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 7-tetradecen-1-ol				[37011-95-3]
	(353–393)	100.5	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 8-tetradecen-1-ol				[64470-32-2]
	(353–393)	100.3	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 8-tetradecen-1-ol				[64437-34-9]
	(353–393)	101.4	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 9-tetradecen-1-ol				[35153-15-2]
	(353–393)	100.6	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 9-tetradecen-1-ol				[52957-16-1]
	(353–393)	101.0	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 10-tetradecen-1-ol				[57393-02-9]
	(353–393)	101.1	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 10-tetradecen-1-ol				[64437-35-0]
	(353–393)	101.5	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 11-tetradecen-1-ol				[34010-15-6]
	(353–393)	101.7	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 11-tetradecen-1-ol				[35153-18-5]
	(353–393)	101.8	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(Z) 12-tetradecen-1-ol				[70711-48-7]
	(353–393)	102.5	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	(E) 12-tetradecen-1-ol				[70711-49-8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(353–393)	102.5	(298)	CGC	[00/10][94/13]
$C_{14}H_{28}O$	2-tetradecanone				[2345-27-9]
	(411–560)	65.6	(426)	A	[87/5]
	(549–643)	55.6	(564)	A	[87/5]
	(412–643)	51.6	(556)		[75/8]
	(372–551)	64.4	(387)	A	[87/5][47/5]
$C_{14}H_{28}O$	7-tetradecanone				[6137-34-4]
	(438–462)	66.9	(450)	A, ME	[87/5][38/8]
$C_{14}H_{28}O$	tetradecanal				[124-25-4]
	(343–383)	80.2	(298)	CGC	[96/7][00/10]
	(372–571)	63.4	(387)	A	[87/5][47/5]
$C_{14}H_{28}O_2$	dodecyl acetate				[112-66-3]
	(333–378)	81.8	(298)	GC	[97/13][00/10]
	(398–540)	70.5	(413)	A	[87/5]
$C_{14}H_{28}O_2$	ethyl dodecanoate				[106-33-2]
	(423–483)	80.0	(298)	GC	[97/28]
	(386–435)	67.2	(401)	A	[87/5]
$C_{14}H_{28}O_2$	methyl tridecanoate				[1731-88-0]
		74.0	(350)		[02/27]
		72.3±0.1	(368)		[02/27]
		80.0±0.5	(298)		[02/27]
		81.3±0.7	(298)	GC, C	[80/5]
		82.7±0.8	(298)	C	[77/1]
	(377–504)	72.6	(392)	A, EST	[87/5][63/16]
$C_{14}H_{28}O_2$	tetradecanoic acid				[544-63-8]
	(383–459)	100.4	(398)	A	[87/5]
	(423–599)	91.6	(438)	A	[87/5]
	(339–358)	104.1±2.0	(349)	ME, TE	[82/4]
		88.9	(455)	I	[43/7]
$C_{14}H_{28}O_3$	decyl 3-methoxypropionate				
	(403–513)	68.9	(418)	A	[87/5]
$C_{14}H_{29}Br$	1-bromotetradecane				[112-71-0]
	(437–645)	67.1	(452)	A, EST	[87/5][61/13] [70/14]
$C_{14}H_{29}Cl$	1-chlorotetradecane				[2425-54-9]
	(313–373)	80.2	(313)	GC	[80/14]
	(313–373)	78.0	(333)	GC	[80/14]
	(313–373)	74.4	(353)	GC	[80/14]
	(313–373)	72.9	(373)	GC	[80/14]
	(414–570)	68.7	(429)	A, DTA	[87/5][69/5]
$C_{14}H_{29}F$	1-fluorotetradecane				[593-33-9]
	(288–335)	73.5±0.4	(298)	GS	[97/14]
	(400–593)	61.4	(415)	A, EST	[87/5][61/13] [70/14]
$C_{14}H_{29}I$	1-iodotetradecane				[19218-94-1]
	(452–672)	68.6	(467)	A, EST	[87/5][61/13] [70/14]
$C_{14}H_{30}$	tetradecane				[629-54-4]
		72.1	(298)	GS	[01/1]
		72.0±2.4	(298)	CGC	[00/9]
		69.0	(324)	C	[96/22]
		68.6	(329)	C	[96/22]
		67.9	(334)	C	[96/22]
		66.8	(344)	C	[96/22]
		65.7	(359)	C	[96/22]
	(423–473)	71.2	(298)	CGC	[95/21]
	(363–413)	71.4	(298)	CGC	[95/21]
		71.7	(298)		[94/12]
	(313–433)	67.8	(328)	A	[87/5]
	(343–395)	64.1	(361)	GS	[86/6]
		70.1	(313)	C	[79/2]
		68.9	(328)	C	[79/2]
		71.8±0.6	(298)	C	[79/2]
		71.1±0.4	(298)	C	[72/29]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		71.7	(298)		[71/28]
	(432–529)	57.1	(447)	A	[87/5][55/7]
	(429–468)	57.8	(449)	ME	[38/8]
$C_{14}H_{30}$	2-methyltridecane				[1560-96-9]
	(388–530)	56.3	(403)	A	[87/5]
$C_{14}H_{30}$	3-methyltridecane				[6418-41-3]
	(389–521)	55.1	(404)	A	[87/5]
$C_{14}H_{30}$	4-methyltridecane				[26730-12-1]
	(386–520)	54.2	(401)	A	[87/5]
$C_{14}H_{30}$	5-methyltridecane				[25117-31-1]
	(385–518)	53.8	(400)	A	[87/5]
$C_{14}H_{30}$	7-methyltridecane				[26730-14-3]
	(357–389)	59.0	(372)	A	[87/5]
$C_{14}H_{30}$	2,3-dimethyldodecane				[6117-98-2]
	(385–519)	53.4	(400)	A	[87/5]
$C_{14}H_{30}$	2,4-dimethyldodecane				[6117-99-3]
	(379–509)	54.0	(394)	A	[87/5]
$C_{14}H_{30}$	2,4,6-trimethylundecane				
	(368–491)	53.2	(383)	A	[87/5]
$C_{14}H_{30}$	2,2,3,4,6,6-heptamethylheptane				[7225-67-4]
	(313–366)	54.5	(366)	A, MG	[87/5][55/11]
$C_{14}H_{30}$	hexaethylethane (3,3,4,4-tetraethylhexane)				[5171-86-8]
	(298–307)	63.9±1.2	(298)	GS	[97/29]
	(283–302)	65.7±1.2	(292)	GS	[73/30][95/27]
		65.0±1.2	(298)		[73/30]
$C_{14}H_{30}$	2,2,3,3,4,4,5,5-octamethylhexane				[65149-84-0]
	(288–325)	56.9±0.7	(298)	GS	[97/29]
$C_{14}H_{30}O$	diheptyl ether				[629-64-1]
	(360–547)	63.1	(375)	A	[87/5]
$C_{14}H_{30}O$	4-methylpentyl *tert*-octyl ether				
		57.5	(298)		[U/2][02/32]
$C_{14}H_{30}O$	3-methylpentyl *tert*-octyl ether				
		58.0	(298)		[U/2][02/32]
$C_{14}H_{30}O$	3,3-dimethylbutyl *tert*-octyl ether				
		56.4	(298)		[U/2][02/32]
$C_{14}H_{30}O$	hexyl *tert*-octyl ether				
		59.2	(298)		[U/2][02/32]
$C_{14}H_{30}O$	1-tetradecanol				[112-72-1]
	(312–346)	93.6	(328)	GS	[01/3]
	(312–346)	98.7	(298)	GS	[01/3]
	(333–438)	81.8	(386)		[92/14]
	(317–358)	109.0	(332)	A	[87/5]
		102.2±2.3	(298)	C	[77/1]
	(313–358)	106.4	(328)		[73/26]
	(424–569)	76.6	(439)	A	[87/5][69/5]
	(313–326)	104.2	(320)	ME	[65/15]
$C_{14}H_{30}O$	2-tetradecanol				[4706-81-4]
	(313–428)	95.7	(328)		[99/11]
$C_{14}H_{30}O_2$	2-(dodecyloxy)ethanol				[4536-30-5]
	(414–467)	71.5	(429)	A	[87/5]
$C_{14}H_{30}S$	1-tetradecanethiol				[2079-95-0]
	(446–614)	67.3	(461)		[99/16]
$C_{14}H_{30}S_2$	diheptyl disulfide				[10496-16-9]
	(458–630)	69.8	(473)		[99/16]
$C_{14}H_{31}N$	diheptylamine				[2470-68-0]
	(435–605)	60.0	(450)	A	[87/5]
$C_{14}H_{31}N$	N,N-dimethyldodecylamine				[112-18-5]
	(380–604)	64.4	(395)	A	[87/5]
$C_{14}H_{31}N$	tetradecylamine				[2016-42-4]
	(471–577)	62.4	(486)	A, EST	[87/5][56/17]
$C_{14}H_{31}O_2P$	diheptylphosphinic acid				
	(482–664)	64.1	(573)		[71/32]
$C_{15}H_8Cl_3NO_2$	2,2,4-trichloro-5-(2-naphthaleneylamino)-4-cyclopentene-1,3-dione				[77765-38-9]
	(453–483)	91.4	(468)	GC	[80/25]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{15}H_9N_3$	pyrido[2,3-f][1,7]phenanthroline				
	(648–707)	65.1	(663)	A	[87/5]
$C_{15}H_9N_3$	pyrido[3,2-f][1,7]phenanthroline				
	(648–706)	67.4	(663)	A	[87/5]
$C_{15}H_{10}N_2O_2$	2,2′-diisocyanatodiphenylmethane				[2536-05-2]
	(343–413)	90.1	(358)	A	[87/5]
$C_{15}H_{10}N_2O_2$	2,4′-diisocyanatodiphenylmethane				[5873-54-1]
	(343–413)	89.3	(358)	A	[87/5]
$C_{15}H_{10}N_2O_2$	4,4′-diisocyanatodiphenylmethane				[101-68-8]
	(343–413)	90.5	(358)	A	[87/5]
	(442–530)	93.8	(457)	A	[87/5]
	(442–530)	90.6	(483)	A	[66/28]
$C_{15}H_{11}NO_2$	1-methylamino-9,10-anthraquinone				[82-38-2]
	(433–493)	103.5	(448)	A	[87/5]
$C_{15}H_{12}$	2-methylanthracene				[613-12-7]
	(323–473)	76.1	(398)	GC	[02/18]
$C_{15}H_{12}$	9-methylanthracene				[779-02-0]
	(354–402)	98.9	(369)	A	[87/5]
	(423–587)	58.5	(465)		[83/4]
	(423–515)	58.1	(515)		[83/4]
	(423–515)	56.5	(555)		[83/4]
$C_{15}H_{12}$	1-methylphenanthrene				[832-69-9]
	(323–473)	76.3	(398)	GC	[02/18]
$C_{15}H_{12}O$	dibenzosuberone				[1210-35-1]
	(314–338)	90.0±1.5		GS	[98/4]
$C_{15}H_{12}O_2$	1,3-diphenyl-1,3-propanedione				[120-46-7]
	(368–383)	60.1	(375)	A	[87/5]
$C_{15}H_{14}Cl_3O_2PS$	(chloromethyl)thiophosphnic acid, O,O-*bis*(2-chloro-4-methylphenyl) ester				[57875-65-7]
	(343–365)	93.2	(354)	A	[87/5][99/16]
$C_{15}H_{14}O$	1,3-diphenylacetone				[102-04-5]
	(398–604)	65.7	(413)	A	[87/5][47/5]
$C_{15}H_{14}O_2$	2,2-diphenyl-1,3-dioxolane				[4359-34-6]
	(331–370)	84.6±0.6	(298)	GS	[02/32]
	(331–370)	81.2±0.6		GS	[98/21]
$C_{15}H_{14}O_2$	1-biphenyloxy-2,3-epoxypropane				[7144-65-2]
	(408–613)	80.0	(423)	A	[87/5]
$C_{15}H_{14}O_3$	2-hydroxy-4-ethoxybenzophenone				[15889-70-0]
	(373–433)	90.7	(403)	ME	[84/1]
$C_{15}H_{14}O_5$	2,2′-dihydroxy-4,4′-dimethoxybenzophenone				[131-54-4]
	(406–497)	77.4	(423)	A, UV	[87/5][60/2]
$C_{15}H_{15}Cl$	chloro-di-4-tolylmethane				[13389-70-3]
	(406–453)	75.2	(421)	A	[87/5]
$C_{15}H_{16}$	ditolylmethane				[1335-47-3]
	(573–673)	51.8	(588)		[64/11]
$C_{15}H_{16}$	1,1-diphenylpropane				1530-03-6]
	(298–343)	71.4±0.4	(321)	GS	[99/8]
	(298–343)	72.8±0.4	(298)	GS	[99/8]
$C_{15}H_{16}$	1,3-diphenylpropane				[1081-75-0]
	(342–577)	61.5	(357)	A	[87/5]
$C_{15}H_{16}N_4O_2$	3-methyl-3′-nitro-4-N,N-dimethylaminoazobenzene				
	(370–388)	98.6	(379)	A	[87/5]
$C_{15}H_{16}O$	di-(4-tolyl)methanol				[885-77-8]
	(413–478)	81.7	(428)	A	[87/5]
$C_{15}H_{16}O$	1-isovaleronaphthone				
	(409–593)	76.2	(424)	A	[87/5][47/5]
$C_{15}H_{16}O_2$	Bisphenol A				[80-05-7]
	(466–634)	102.2	(481)	A	[87/5][47/5]
$C_{15}H_{17}NO_2$	N-(2-hydroxy-3-phenoxypropyl)phenylamine				
	(343–373)	113.9	(358)	A	[87/5]
$C_{15}H_{18}$	1-pentylnaphthalene				[86-89-5]
	(415–535)	62.7	(430)	A	[87/5]
$C_{15}H_{18}O$	2,4,6-triallylphenol				[20490-22-6]
	(423–571)	61.0	(438)	A	[87/5]
$C_{15}H_{19}Cl_3O_3$	2,4,5-trichlorophenoxyacetic acid, heptyl ester				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(460–573)	92.3	(475)	A	[87/5]
$C_{15}H_{20}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, heptyl ester				[1917-96-0]
	(460–573)	88.3	(475)	A	[87/5]
$C_{15}H_{20}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, 1-propylbutyl ester				
	(460–573)	77.3	(475)	A	[87/5]
$C_{15}H_{20}Cl_2O_4$	2,4-dichlorophenoxyacetic acid, (1-methyl-2-butoxy)ethyl ester				[3966-11-8]
	(443–573)	82.5	(458)	A	[87/5]
$C_{15}H_{20}O_2$	helenine, alantolactone				[1407-13-3]
	(430–548)	112.7	(445)	A	[87/5]
$C_{15}H_{22}N_2O_2$	dicyclohexylmethane-4,4′-diisocyanate				[5124-30-1]
	(326–404)	80.4	(341)	A	[87/5]
$C_{15}H_{24}$	nonylbenzene				[1081-77-2]
	(316–415)	69.7	(331)	GS	[86/6]
		74.8	(298)		[71/28]
$C_{15}H_{24}$	1,3,5-triisopropylbenzene				[717-74-8]
	(283–323)	64.3±0.3	(303)	GS	[98/10]
	(283–323)	64.6±0.6	(298)	GS	[98/10]
	(282–388)	67.4	(297)		[93/10]
$C_{15}H_{24}$	1,3-di-*tert*-butyl-5-methylbenzene				
	(309–338)	61.8±0.9	(310)	GS	[98/19]
		63.3±0.9	(298)		[98/19]
$C_{15}H_{24}O$	2,4-di-*tert*-butyl-5-methylphenol				[497-39-2]
	(376–555)	67.0	(391)	A	[87/5][47/5]
$C_{15}H_{24}O$	2,4-di-*tert*-butyl-6-methylphenol				[616-55-7]
	(359–543)	59.8	(374)	A	[87/5]
$C_{15}H_{24}O$	2,6-di-*tert*-butyl-4-methylphenol				[128-37-0]
	(303–343)	87.8	(318)	A	[87/5]
	(358–536)	61.5	(373)	A	[87/5][47/5]
$C_{15}H_{24}O$	2-methyl-4-(1,1,3,3-tetramethylbutyl)phenol				[2219-84-3]
	(447–683)	67.1	(462)	A	[87/5]
$C_{15}H_{24}O$	3-methyl-4-(1,1,3,3-tetramethylbutyl)phenol				[2219-84-3]
	(436–549)	65.5	(451)	A	[87/5]
$C_{15}H_{24}O$	4-methyl-2-(1,1,3,3-tetramethylbutyl)phenol				[4979-46-8]
	(415–545)	65.0	(430)	A	[87/5]
$C_{15}H_{24}O$	4-(3′,6′-dimethyl-3′-heptyl)phenol				
		89.4	(298)	ME	[01/21]
$C_{15}H_{24}O$	4-nonylphenol				[104-40-5]
	(487–595)	65.0	(502)	A, EB	[87/5][76/13]
$C_{15}H_{24}O$	α-santalol				[115-71-9]
	(293–450)	58.3	(308)	A	[87/5]
$C_{15}H_{24}O_2$	2,5-di-*tert*-butyl-4-methoxyphenol				[1991-52-2]
	(423–453)	64.4	(438)	A	[87/5]
$C_{15}H_{24}O_2$	1,3-dimethoxy-5-heptylbenzene				[6121-64-8]
	(419–488)	75.5	(434)	A, GC	[87/5][75/24]
$C_{15}H_{24}O_2$	1,3-dimethoxy-5-methyl-2-hexylbenzene				[41442-51-7]
	(410–475)	72.3	(425)	A, GC	[87/5][75/24]
$C_{15}H_{24}O_6$	aconitic acid, tripropyl ester				[64617-28-3]
	(359–500)	72.3	(374)	A	[87/5]
$C_{15}H_{26}O$	guaiol				[489-86-1]
	(373–561)	62.2	(388)	A	[87/5]
$C_{15}H_{26}O_6$	camphorenic acid, triethyl ester				
	(423–574)	69.0	(438)	A	[87/5][47/5]
$C_{15}H_{26}O_6$	tripropyl 1,2,3-propanetricarboxylate				[5333-54-0]
	(360–460)	76.5	(375)	A	[87/5]
$C_{15}H_{26}O_6$	glycerol tributyrate				[60-01-1]
	(318–364)	81.4	(333)	A	[87/5]
$C_{15}H_{28}Cl_4$	1,1,1,15-tetrachloropentadecane				[3922-32-5]
	(340–392)	103.5	(355)	A	[87/5]
$C_{15}H_{28}O$	3,7,11-trimethyl-1-dodecyn-3-ol				[1604-35-9]
	(401–524)	43.2±1.1	(463)		[88/4][86/16]
$C_{15}H_{28}O_2$	dodecyl acrylate				[2156-97-0]
	(432–573)	64.6	(447)	A	[87/5]
$C_{15}H_{28}O_2$	pentadecanolide				[106-02-5]
	(363–443)	78.2	(378)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(310–320)	74.2	(315)	A, ME	[87/5][54/9]
$C_{15}H_{28}O_2$	(Z) 7-tridecenyl acetate				[34270-22-9]
	(343–388)	84.3	(298)	GC	[97/13][00/10]
$C_{15}H_{28}O_2$	(E) 7-tridecenyl acetate				[56577-30-1]
	(343–388)	84.8	(298)	GC	[97/13][00/10]
$C_{15}H_{28}O_2$	(Z) 9-tridecenyl acetate				[35835-78-0]
	(343–388)	85.1	(298)	GC	[97/13][00/10]
$C_{15}H_{28}O_2$	(E) 9-tridecenyl acetate				[52957-19-4]
	(343–388)	85.5	(298)	GC	[97/13][00/10]
$C_{15}H_{28}O_2$	(Z) 11-tridecenyl acetate				[33951-95-0]
	(343–388)	86.4	(298)	GC	[97/13][00/10]
$C_{15}H_{28}O_2$	(E) 11-tridecenyl acetate				[56195-36-9]
	(343–388)	86.4	(298)	GC	[97/13][00/10]
$C_{15}H_{28}O_3$	decyl levulinate				[37826-51-0]
	(423–580)	76.1	(438)	A	[87/5]
		72.0	(524)		[33/6]
$C_{15}H_{28}O_3$	1,6-dioxa-7-cycloheptadecanone				[6707-60-4]
	(403–463)	75.9	(418)	A	[87/5]
$C_{15}H_{28}O_5$	decyl[1-(methoxycarbonyl)ethyl]carbonate				
	(411–592)	73.8	(426)	A	[87/5]
$C_{15}H_{29}N$	pentadecanenitrile				[2570-26-5]
	(403–596)	75.5	(418)	A	[87/5]
$C_{15}H_{29}NO_3$	2-[2-ethyl(hexanoyloxy)]propionic acid, butylamide				
	(378–433)	81.0	(393)	A	[87/5]
$C_{15}H_{30}$	decylcyclopentane				[1795-21-7]
	(358–411)	71.1	(373)	A	[87/5]
		75.7	(298)		[71/28]
	(453–553)	59.7	(468)	A, MM	[87/5][54/7]
$C_{15}H_{30}$	nonylcyclohexane				[2883-02-5]
		74.7	(298)		[71/28]
$C_{15}H_{30}$	1-pentadecene				[13360-61-7]
	(375–407)	65.2	(390)	A	[87/5]
	(423–658)	53.2	(570)		[75/8]
		75.1	(298)		[71/28]
	(443–543)	59.3	(458)	A	[87/5][55/7]
$C_{15}H_{30}O$	(Z) 9-pentadecen-1-ol				[56218-94-1]
	(363–403)	105.3	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(E) 9-pentadecen-1-ol				[64437-40-7]
	(363–403)	105.9	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(Z) 10-pentadecen-1-ol				[64437-42-9]
	(363–403)	105.9	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(E) 10-pentadecen-1-ol				[64437-44-1]
	(363–403)	106.2	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(Z) 11-pentadecen-1-ol				[69282-63-9]
	(363–403)	106.3	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(E) 11-pentadecen-1-ol				[69222-14-6]
	(363–403)	106.5	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(Z) 12-pentadecen-1-ol				[158906-50-4]
	(363–403)	106.7	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(E) 12-pentadecen-1-ol				[69222-15-7]
	(363–403)	107.0	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(Z) 13-pentadecen-1-ol				[158906-51-5]
	(363–403)	107.7	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	(E) 13-pentadecen-1-ol				[158906-52-6]
	(363–403)	107.7	(298)	CGC	[00/10][94/13]
$C_{15}H_{30}O$	2-pentadecanone				[2345-28-0]
	(422–575)	67.8	(437)	A	[87/5]
	(559–658)	57.9	(574)	A	[87/5]
$C_{15}H_{30}O$	8-pentadecanone				[818-23-5]
	(443–568)	65.3	(458)	A	[87/5]
	(443–589)	65.4	(458)	A	[87/5][75/8]
	(444–590)	53.0	(567)		[75/8]
	(438–462)	61.9	(450)	A, ME	[87/5][38/8]
$C_{15}H_{30}O_2$	methyl tetradecanoate (methyl myristate)				[124-10-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		79.8	(350)		[02/27]
		76.0±0.2	(382)		[02/27]
		85.9±0.8	(298)		[02/27]
	(393–473)	86.6	(298)	GC	[97/28]
	(453–543)	65.3	(498)	GC	[93/9]
		86.2±1.0	(298)	GC, C	[80/5]
		87.0±0.9	(298)	C	[77/1]
	(389–519)	75.6	(404)	A	[87/5][63/16]
	(364–417)	77.4	(379)	MG, OM	[52/13]
$C_{15}H_{30}O_2$	isopropyl dodecanoate				[10233-13-3]
	(305–452)	81.5	(320)		[01/10]
	(390–469)	66.1	(405)	A	[87/5][48/8] [84/9]
$C_{15}H_{30}O_2$	propyl dodecanoate				[3681-78-5]
	(423–483)	84.7	(298)	GC	[97/28]
	(396–479)	66.9	(411)	A	[87/5][48/8] [84/9]
$C_{15}H_{30}O_2$	tridecyl acetate				[1072-33-9]
	(313–358)	87.2	(298)	GC	[97/13][00/10]
$C_{15}H_{30}O_2$	pentadecanoic acid				[1002-84-2]
	(431–613)	94.0	(446)	A	[87/5]
	(347–367)	108.5±2.0	(357)	ME, TE	[82/4]
$C_{15}H_{30}O_3$	dodecyl lactate				[6283-92-7]
	(367–583)	80.5	(382)	A	[87/5]
$C_{15}H_{30}O_3$	decyl 2-ethoxypropionate				[70160-09-7]
	(423–523)	69.8	(438)	A	[87/5]
$C_{15}H_{31}Br$	1-bromopentadecane				[629-72-1]
	(450–661)	69.5	(465)	A, EST	[87/5][61/13] [70/14]
$C_{15}H_{31}Cl$	1-chloropentadecane				[4862-03-7]
	(439–645)	55.4	(454)	A, EST	[87/5][61/13] [70/14]
$C_{15}H_{31}F$	1-fluoropentadecane				[1555-17-5]
	(413–593)	63.8	(428)	A, EST	[87/5][61/13] [70/14]
$C_{15}H_{31}I$	1-iodopentadecane				[35599-78-1]
	(464–673)	70.6	(479)	A, EST	[87/5][61/13] [70/14]
$C_{15}H_{31}NO_2$	N,N-dihexyl lactamide				
	(418–453)	79.4	(433)	A	[87/5]
$C_{15}H_{31}NO_2$	N-dodecyl lactamide				
	(408–476)	103.9	(423)	A	[87/5]
$C_{15}H_{32}$	pentadecane				[629-62-9]
		72.9	(334)	C	[96/22]
		71.8	(344)	C	[96/22]
	(453–503)	75.7	(298)	CGC	[95/21]
	(423–473)	76.2	(298)	CGC	[95/21]
	(363–413)	76.4	(298)	CGC	[95/21]
		76.8	(298)		[94/12]
	(366–409)	67.5	(381)	A	[87/5]
	(333–409)	66.4	(350)	GS	[86/6]
		75.4±1.2	(298)	C	[79/2]
		70.8	(353)	C	[79/2]
		68.8	(373)	C	[79/2]
		72.2±1.2	(333)	C	[79/2]
		76.2±0.4	(298)	C	[72/29]
		76.2	(298)		[71/28]
	(447–546)	59.6	(462)	A	[87/5][55/7]
	(430–464)	61.9	(447)	ME	[38/8]
$C_{15}H_{32}$	2-methyltetradecane				[1560-95-8]
	(402–537)	58.8	(417)	A	[87/5]
$C_{15}H_{32}$	3-methyltetradecane				[18435-22-8]
	(403–538)	58.4	(418)	A	[87/5]
$C_{15}H_{32}$	4-methyltetradecane				[25117-24-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(398–536)	55.9	(413)	A	[87/5]
$C_{15}H_{32}$	5-methyltetradecane				[25117-32-2]
	(398–535)	56.1	(413)	A	[87/5]
$C_{15}H_{32}$	2,3-dimethyltridecane				[18435-20-6]
	(399–537)	56.3	(414)	A	[87/5]
$C_{15}H_{32}$	2,4-dimethyltridecane				[61868-05-1]
	(393–523)	57.9	(408)	A	[87/5]
$C_{15}H_{32}$	2,4,6-trimethyldodecane				
	(382–508)	55.8	(397)	A	[87/5]
$C_{15}H_{32}O$	1-pentadecanol				[629-76-5]
	(319–358)	95.5	(339)	GS	[01/3]
	(319–358)	102.5	(298)	GS	[01/3]
	(353–393)	107.2	(298)	CGC	[94/13][00/10]
	(343–393)	92.4	(368)		[92/14]
	(438–600)	75.0	(453)	A	[87/5]
	(453–584)	72.4	(468)	A	[87/5]
$C_{15}H_{32}O_5$	tetrapropylene glycol monoisopropyl ether				
	(389–566)	71.5	(404)	A	[87/5][47/5]
$C_{15}H_{32}S$	1-pentadecanethiol				[25276-70-4]
	(459–629)	69.8	(474)		[99/16]
$C_{15}H_{33}N$	1-aminopentadecane				[2570-26-5]
	(400–594)	71.2	(415)	A, EST	[87/5][56/17]
$C_{16}H_{10}$	fluoranthene				[206-44-0]
	(323–473)	79.3	(398)	GC	[02/18]
	(343–453)	77.4	(398)	GC	[90/2]
	(503–658)	62.2	(518)	A	[87/5][55/10]
$C_{16}H_{10}$	pyrene				[129-00-0]
	(343–453)	78.6	(398)	GC	[90/2]
	(413–467)	76.0	(428)		[88/12]
	(398–458)	76.4	(440)		[80/12]
	(513–668)	73.0	(528)	A	[87/5][55/10]
$C_{16}H_{13}N$	N-phenyl-1-naphthylamine				[90-32-2]
	(338–368)	89.6	(353)	A	[87/5]
$C_{16}H_{13}N$	N-phenyl-2-naphthylamine				[135-88-6]
	(383–520)	88.7	(398)	A	[87/5]
$C_{16}H_{14}$	4,5,9,10-tetrahydropyrene				[781-17-9]
		70.9	(440)	EB,IPM	[93/12]
		68.1	(480)	EB, IPM	[93/12]
		65.3	(520)	EB, IPM	[93/12]
		62.5	(560)	EB, IPM	[93/12]
		59.5	(600)	EB, IPM	[93/12]
		56.4	(640)	EB, IPM	[93/12]
$C_{16}H_{14}$	1,2,3,10b-tetrahydrofluoranthene				[20279-21-4]
	(400–469)	68.0	(415)	A	[87/5]
$C_{16}H_{14}O_2$	benzyl cinnamate				[103-41-3]
	(446–623)	89.4	(461)	A	[87/5][47/5]
$C_{16}H_{16}$	1,2,3,6,7,8-hexahydropyrene				[1732-13-4]
		72.0	(440)	EB, IPM	[93/12]
		69.4	(480)	EB, IPM	[93/12]
		66.8	(520)	EB, IPM	[93/12]
		64.2	(560)	EB, IPM	[93/12]
		61.5	(600)	EB, IPM	[93/12]
$C_{16}H_{16}$	1,1-di(4-methylphenyl)ethene				
	(309–332)	100.3±1.4	(320)	GS	[99/21]
		101.0±1.4	(298)		[99/21]
$C_{16}H_{18}$	1-(2-tolyl)-2-(4-tolyl)ethane				
	(298–473)	85.6	(313)	A	[87/5][63/14]
$C_{16}H_{18}$	1,1-diphenylbutane				[719-79-9]
	(298–342)	75.9±0.6	(320)	GS	[99/8]
	(298–342)	77.2±0.6	(298)	GS	[99/8]
$C_{16}H_{18}$	2-methyl-1,1-diphenylpropane				[1634-11-3]
	(298–338)	72.0±0.5	(318)	GS	[99/8]
	(298–338)	73.2±0.5	(298)	GS	[99/8]
$C_{16}H_{18}$	1,1-*bis*(4-methylphenyl)ethane				[530-45-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(298–338)	75.3±0.6	(318)	GS	[99/8]
	(298–338)	76.5±0.6	(298)	GS	[99/8]
$C_{16}H_{18}Cl_4O_4$	dibutyl tetrachlorophthalate				[3015-66-5]
	(368–421)	99.7	(383)	A, T	[87/5][49/9] [99/16]
$C_{16}H_{18}O$	*bis*(α-methylbenzyl) ether				[93-96-9]
	(369–554)	62.1	(384)	A	[87/5][47/5]
$C_{16}H_{21}Cl_3O_3$	2,4,5-trichlorophenoxyacetic acid, (2-ethylhexyl) ester				[1928-47-8]
	(460–575)	85.4	(475)	A	[87/5]
$C_{16}H_{21}Cl_3O_3$	2,4,5-trichlorophenoxyacetic acid, octyl ester				[2630-15-1]
	(460–575)	92.2	(475)	A	[87/5]
$C_{16}H_{22}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, (2-ethylhexyl) ester				[1928-43-4]
	(460–575)	83.0	(475)	A	[87/5]
$C_{16}H_{22}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, (1-methylheptyl) ester				[1917-97-1]
	(460–575)	83.0	(475)	A	[87/5]
$C_{16}H_{22}Cl_2O_3$	2,4-dichlorophenoxyacetic acid, octyl ester				[1928-44-5]
	(460–573)	87.9	(475)	A	[87/5]
$C_{16}H_{22}O_4$	dibutyl phthalate				[84-74-2]
		80.4	(462)		[88/17]
	(314–469)	94.0	(329)	A	[87/5]
	(468–605)	76.1	(483)	A	[87/5]
	(288–313)	91.7	(300)		[49/15]
$C_{16}H_{22}O_4$	di-sec-butyl phthalate				[4489-61-6]
	(313–373)	93.8	(328)	A, ME	[87/5][48/10]
$C_{16}H_{22}O_4$	dibutyl terephthalate				[1962-75-0]
	(393–483)	86.2	(408)	A	[87/5]
$C_{16}H_{25}Cl$	chloropentaethylbenzene				
	(363–558)	60.3	(378)	A	[87/5][47/5]
$C_{16}H_{26}$	decylbenzene				[104-72-3]
	(313–433)	78.0	(328)		[93/10]
	(371–427)	75.1	(386)	A	[87/5]
		79.8	(298)		[71/28]
	(475–571)	61.6	(490)	A, MM	[87/5][54/7]
$C_{16}H_{26}$	pentaethylbenzene				[605-01-6]
	(359–550)	56.5	(374)	A	[87/5][47/5]
$C_{16}H_{26}O$	2,6-di-*tert*-butyl-4-ethylphenol				[4130-42-1]
	(362–557)	62.8	(348)		[53/9]
	(362–557)	60.4	(373)		[53/9]
	(362–557)	58.6	(398)		[53/9]
	(362–557)	57.3	(423)		[53/9]
	(362–557)	52.6	(473)		[53/9]
$C_{16}H_{26}O$	4,6-di-*tert*-butyl-2-ethylphenol				[6287-47-4]
	(413–556)	61.9	(428)	A	[87/5]
	(413–562)	57.3	(423)		[53/9]
	(413–562)	52.6	(473)		[53/9]
$C_{16}H_{26}O$	2,4-di-*tert*-butyl-5,6-dimethylphenol				[70766-54-0]
	(431–565)	69.1	(446)	A	[87/5]
$C_{16}H_{26}O$	2,4-di-*tert*-butyl-5-ethylphenol				[19245-41-1]
	(384–563)	69.3	(399)	A	[87/5]
$C_{16}H_{26}O$	2,4,5-triisopropylbenzyl alcohol				
	(312–346)	113.1	(327)	A	[87/5]
$C_{16}H_{26}O_{11}$	diethylene glycol dicarboxylic acid, di[1-(ethoxycarbonyl)-ethyl] ester				
	(418–503)	99.3	(433)	A	[87/5]
$C_{16}H_{28}$	tricyclopentylmethane				[3752-92-9]
	(273–351)	77.8	(288)	A	[87/5][64/12]
	(371–429)	71.4	(386)	A	[87/5]
$C_{16}H_{30}O$	3-methylcyclopentadecanone				[541-91-3]
	(391–601)	63.5	(406)	A	[87/5]
$C_{16}H_{30}O$	(Z) 3-hexadecenal				[174155-58-9]
	(373–413)	89.9	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 3-hexadecenal				[174155-57-8]
	(373–413)	89.6	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 4-hexadecenal				[88373-69-7]
	(373–413)	88.7	(298)	CGC	[96/7][00/10]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{16}H_{30}O$	(E) 4-hexadecenal				[174155-59-0]
	(373–413)	88.9	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 5-hexadecenal				[88373-68-6]
	(373–413)	87.8	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 5-hexadecenal				[99142-11-7]
	(373–413)	88.6	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 6-hexadecenal				[88373-67-5]
	(373–413)	87.9	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 6-hexadecenal				[103346-18-5]
	(373–413)	88.5	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 7-hexadecenal				[56797-40-1]
	(373–413)	87.8	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 7-hexadecenal				[72698-27-2]
	(373–413)	88.6	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 8-hexadecenal				[66644-98-2]
	(373–413)	87.7	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 8-hexadecenal				[72698-28-3]
	(373–413)	88.4	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 9-hexadecenal				[56219-04-6]
	(373–413)	88.0	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 9-hexadecenal				[72698-29-4]
	(373–413)	88.6	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 10-hexadecenal				[68279-24-3]
	(373–413)	88.2	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 10-hexadecenal				[72698-30-7]
	(373–413)	88.8	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 11-hexadecenal				[53939-28-9]
	(373–413)	88.5	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 11-hexadecenal				[57491-33-5]
	(373–413)	89.2	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 12-hexadecenal				[72698-31-8]
	(373–413)	89.3	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 12-hexadecenal				[72698-32-9]
	(373–413)	89.3	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(Z) 13-hexadecenal				[71545-96-5]
	(373–413)	89.7	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O$	(E) 13-hexadecenal				[72698-33-0]
	(373–413)	90.0	(298)	CGC	[96/7][00/10]
$C_{16}H_{30}O_2$	dodecyl methacrylate				[142-90-5]
	(438–580)	64.9	(453)	A	[87/5]
$C_{16}H_{30}O_2$	oxa-2-cycloheptadecanone				[109-29-5]
	(403–463)	71.6	(418)	A	[87/5]
$C_{16}H_{30}O_2$	(Z) 2-tetradecenyl acetate				[51309-20-7]
	(353–398)	89.1	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 2-tetradecenyl acetate				[51309-21-8]
	(353–398)	90.3	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 3-tetradecenyl acetate				[54897-65-3]
	(353–398)	88.5	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 3-tetradecenyl acetate				[56221-90-0]
	(353–398)	89.2	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 4-tetradecenyl acetate				[54897-66-4]
	(353–398)	87.8	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 4-tetradecenyl acetate				[56209-67-7]
	(353–398)	89.0	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 5-tetradecenyl acetate				[35153-13-0]
	(353–398)	88.3	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 5-tetradecenyl acetate				[34010-13-4]
	(353–398)	89.1	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 6-tetradecenyl acetate				[39650-11-8]
	(353–398)	88.1	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 6-tetradecenyl acetate				[39650-10-7]
	(353–398)	88.9	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 7-tetradecenyl acetate				[16974-10-0]
	(353–398)	88.4	(298)	GC	[97/13][00/10]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{16}H_{30}O_2$	(E) 7-tetradecenyl acetate				[28540-79-6]
	(353–398)	89.0	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 8-tetradecenyl acetate				[35835-80-4]
	(353–398)	88.7	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 8-tetradecenyl acetate				[56218-64-5]
	(353–398)	89.2	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 9-tetradecenyl acetate				[16725-53-4]
	(353–398)	89.1	(298)	GC	[97/13][00/10]
	(303–317)	90	(310)	GC	[83/10]
$C_{16}H_{30}O_2$	(E) 9-tetradecenyl acetate				[23192-82-7]
	(353–398)	89.6	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 10-tetradecenyl acetate				[35153-16-3]
	(353–398)	89.6	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 10-tetradecenyl acetate				[35153-17-4]
	(353–398)	89.9	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 11-tetradecenyl acetate				[20711-10-8]
	(353–398)	90.0	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 11-tetradecenyl acetate				[33189-72-9]
	(353–398)	90.4	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(Z) 12-tetradecenyl acetate				[35153-20-9]
	(353–398)	90.9	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_2$	(E) 12-tetradecenyl acetate				[35153-21-0]
	(353–398)	90.8	(298)	GC	[97/13][00/10]
$C_{16}H_{30}O_3$	1,7-dioxa-8-cyclooctadecanone				[6720-22-5]
	(403–463)	73.3	(418)	A	[87/5]
$C_{16}H_{30}O_3$	1,9-dioxa-2-cyclooctadecanone				[36575-58-3]
	(403–463)	74.5	(418)	A	[87/5]
$C_{16}H_{30}O_4$	dipentyl adipate				[14027-78-2]
	(449–575)	74.7	(464)	A	[87/5]
$C_{16}H_{30}O_5$	octyl[1-(butoxycarbonyl)ethyl]carbonate				
	(374–503)	76.2	(389)	A	[87/5]
$C_{16}H_{31}N$	palmitonitrile				[629-79-8]
	(503–608)	70.1	(518)	A	[87/5]
$C_{16}H_{32}$	tetraisobutylene				
	(381–440)	54.5	(397)		[43/2]
$C_{16}H_{32}$	decylcyclohexane				[1795-16-0]
	(371–425)	76.7	(386)	A	[87/5]
		79.7	(298)		[71/28]
	(469–571)	61.6	(484)	A, MM	[87/5][54/7]
$C_{16}H_{32}$	undecylcyclopentane				[6785-23-5]
		80.6	(298)		[71/28]
$C_{16}H_{32}$	1-hexadecene				[629-73-2]
		80.3±0.4	(298)	C	[77/1]
		80.3±0.4	(298)	C	[76/5]
		80.1	(298)		[71/28]
	(461–558)	61.5	(476)	A	[87/5][54/7]
$C_{16}H_{32}O$	(Z) 3-hexadecen-1-ol				[141694-91-9]
	(373–413)	110.7	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 3-hexadecen-1-ol				[128999-42-8]
	(373–413)	110.8	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 4-hexadecen-1-ol				[145235-63-8]
	(373–413)	110.6	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 4-hexadecen-1-ol				[59101-23-4]
	(373–413)	111.5	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 5-hexadecen-1-ol				[106463-48-3]
	(373–413)	110.9	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 5-hexadecen-1-ol				[85388-16-5]
	(373–413)	111.4	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 6-hexadecen-1-ol				[40642-45-3]
	(373–413)	110.5	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 6-hexadecen-1-ol				[34500-33-9]
	(373–413)	111.0	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 7-hexadecen-1-ol				[24880-48-6]
	(373–413)	110.2	(298)	CGC	[00/10][94/13]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{16}H_{32}O$	(E) 7-hexadecen-1-ol				[51824-10-3]
	(373–413)	111.4	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 8-hexadecen-1-ol				[64437-46-3]
	(373–413)	110.4	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 8-hexadecen-1-ol				[64470-33-3]
	(373–413)	111.1	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 9-hexadecen-1-ol				[10378-01-5]
	(373–413)	110.6	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 9-hexadecen-1-ol				[64437-47-4]
	(373–413)	111.3	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 10-hexadecen-1-ol				[64437-48-5]
	(373–413)	111.0	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 10-hexadecen-1-ol				[54502-94-2]
	(373–413)	111.5	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 11-hexadecen-1-ol				[56683-54-6]
	(373–413)	111.3	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 11-hexadecen-1-ol				[61301-56-2]
	(373–413)	111.8	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 12-hexadecen-1-ol				[72698-34-1]
	(373–413)	111.8	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 12-hexadecen-1-ol				[72698-35-2]
	(373–413)	112.1	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(Z) 13-hexadecen-1-ol				[69282-65-1]
	(373–413)	112.3	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	(E) 13-hexadecen-1-ol				[69282-66-2]
	(373–413)	112.6	(298)	CGC	[00/10][94/13]
$C_{16}H_{32}O$	2-hexadecanone				[18787-63-8]
	(382–580)	72.3	(397)	A	[87/5]
$C_{16}H_{32}O$	hexadecanal				[629-80-1]
	(343–383)	89.7	(298)	CGC	[96/7][00/10]
	(394–594)	67.6	(409)	A	[87/5][47/5]
$C_{16}H_{32}O_2$	methyl pentadecanoate				[7132-64-1]
		82.1	(350)		[02/26]
		79.8±0.2	(372)		[02/26]
		89.3±0.8	(298)		[02/26]
	(433–473)	88.8	(298)	CGC	[95/21]
		91.6±0.9	(298)	GC,C	[80/5]
		93.5±1.0	(298)	C	[77/1]
	(295–303)	87.9±1.3	(299)		[68/20]
	(400–527)	78.3	(415)	A, EST	[87/5][63/16]
$C_{16}H_{32}O_2$	ethyl tetradecanoate				[124-06-1]
	(407–568)	71.8	(422)	A	[87/5]
$C_{16}H_{32}O_2$	butyl dodecanoate				[106-18-3]
	(423–483)	89.2	(298)	GC	[97/28]
	(343–383)	75.8	(358)	A	[87/5]
$C_{16}H_{32}O_2$	isobutyl dodecanoate				
	(345–452)	80.0	(360)		[01/10]
$C_{16}H_{32}O_2$	tetradecyl acetate				[638-59-5]
	(353–398)	91.7	(298)	GC	[97/13][00/10]
	(411–462)	72.7	(426)	A	[87/5]
$C_{16}H_{32}O_2$	hexadecanoic acid (palmitic acid)				[57-10-3]
	(440–625)	97.5	(455)	A	[87/5]
	(347–374)	110.2±2.0	(364)	ME, TE	[82/4]
		90.1	(475)	I	[43/7]
$C_{16}H_{33}Br$	1-bromohexadecane				[112-82-3]
		94.4±1.5	(298)	C	[96/6]
	(461–673)	71.9	(476)	A, EST	[87/5][61/13] [70/14]
$C_{16}H_{33}Cl$	1-chlorohexadecane				[4860-03-1]
		96.4±0.9	(298)	GS	[01/1]
		91.8±1.1	(298)	C	[77/1]
	(439–600)	73.3	(454)	DTA	[69/5]
$C_{16}H_{33}F$	1-fluorohexadecane				[408-38-8]
	(425–608)	66.1	(440)	A, EST	[87/5][61/13]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[70/14]
$C_{16}H_{33}I$	1-iodohexadecane				[544-77-4]
	(475–673)	73.0	(490)	A, EST	[87/5][61/13]
					[70/14]
$C_{16}H_{34}$	hexadecane				[544-76-3]
		81.8±1.3	(298)	CGC	[00/9]
	(453–503)	81.4	(298)	CGC	[95/21]
	(423–473)	81.4	(298)	CGC	[95/21]
	(363–413)	81.2	(298)	CGC	[95/21]
	(393–583)	68.5	(408)		[94/14]
		81.4	(298)		[94/12]
	(505–589)	59.8	(520)		[92/2]
	(323–423)	74.9	(338)	A	[87/5]
		66.9	(343)	GC	[77/34]
		66.2	(353)	GC	[77/34]
		65.6	(363)	GC	[77/34]
		64.9	(373)	GC	[77/34]
		64.2	(383)	GC	[77/34]
		81.4±0.4	(298)	C	[72/29]
		81.1	(298)		[71/28]
	(467–563)	61.7	(482)	A, MM	[87/5][54/7]
	(299–324)	93.4	(311)	ME	[49/14]
	(293–308)	80.2	(300)	ME	[49/17]
	(442–469)	65.7	(455)	ME	[38/8]
$C_{16}H_{34}$	2-methylpentadecane				[1560-93-6]
	(417–554)	62.0	(432)	A	[87/5]
$C_{16}H_{34}$	3-methylpentadecane				[2882-96-4]
	(417–555)	61.0	(432)	A	[87/5]
$C_{16}H_{34}$	4-methylpentadecane				[2801-87-8]
	(411–553)	57.8	(426)	A	[87/5]
$C_{16}H_{34}$	5-methylpentadecane				[25117-33-3]
	(408–551)	57.3	(423)	A	[87/5]
$C_{16}H_{34}$	7-methylpentadecane				[6165-40-8]
	(355–410)	66.3	(370)	A	[87/5]
$C_{16}H_{34}$	2,3-dimethyltetradecane				[18435-23-9]
	(412–554)	57.4	(427)	A	[87/5]
$C_{16}H_{34}$	2,4-dimethyltetradecane				[61868-06-2]
	(404–539)	60.6	(419)	A	[87/5]
$C_{16}H_{34}$	2,4,6-trimethyltridecane				
	(395–521)	59.1	(410)	A	[87/5]
$C_{16}H_{34}$	2,2,4,4,6,8,8-heptamethylnonane				[4390-04-9]
	(423–545)	52.4	(438)		[88/8]
$C_{16}H_{34}$	3,3.6,6-tetraethyloctane				
	(301–330)	73.0±1.9	(308)	HSA	[95/27]
		74.3±1.9	(298)		[95/27]
		72.3±1.8	(298)	CGC	[95/27]
$C_{16}H_{34}N_2$	*bis*(1,1,3,3-tetramethylbutyl)diazene				[39198-34-0]
		66.5±0.6	(298)	C	[76/3]
$C_{16}H_{34}O$	1-hexadecanol				[36653-82-4]
	(328–362)	100.4	(347)	GS	[01/3]
	(328–362)	108.8	(298)	GS	[01/3]
		112.5	(298)	CGC	[00/10]
	(343–463)	88.2	(403)		[92/14]
	(509–569)	68.9	(524)	A	[87/5]
	(415–487)	83.2	(430)	A	[87/5][74/13]
	(323–376)	112.3	(338)		[73/26]
	(418–463)	78.8	(423)		[73/26]
	(498–569)	70.0	(513)	A, EB	[87/5][70/2]
	(445–598)	77.3	(460)	DTA	[69/5]
	(323–335)	109.5	(329)	ME	[65/15]
$C_{16}H_{34}O$	2-hexadecanol				[14852-31-4]
	(333–453)	102.2	(348)		[99/11]
$C_{16}H_{34}O_3$	2[2-(dodecyloxy)ethoxy]ethanol				[3055-93-4]
	(448–489)	82.1	(463)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{16}H_{34}S$	1-hexadecanethiol				[2917-26-2]
	(470–643)	72.4	(485)		[99/16]
$C_{16}H_{34}S$	dioctyl sulfide				[2690-08-6]
	(465–550)	95.0±10.7	(298)	EB	[97/7]
$C_{16}H_{34}S_2$	dioctyl disulfide				[822-27-5]
	(479–656)	73.9	(494)		[99/16]
$C_{16}H_{35}N$	dioctylamine				[1120-48-5]
	(448–597)	87.1±1.3	(298)	EB	[96/4]
$C_{16}H_{35}N$	hexadecylamine				[143-27-1]
	(498–609)	66.9	(513)	A	[87/5]
$C_{16}H_{35}N$	N,N-dimethyl-2-pentylnonylamine				
	(401–552)	64.8	(425)	EB	[87/3]
$C_{16}H_{36}N_2$	tetrabutyl hydrazine				[60678-70-8]
	(392–453)	51.1	(407)	A	[87/5]
$C_{17}H_{10}O$	benzanthrone				[82-05-3]
	(498–673)	91.4	(513)	A	[87/5][47/5]
$C_{17}H_{12}$	1,2-benzofluorene				[238-84-6]
	(323–473)	83.7	(398)	GC	[02/18]
$C_{17}H_{12}$	2,3-benzofluorene				[243-17-4]
	(323–473)	84.7	(398)	GC	[02/18]
$C_{17}H_{13}N$	5-methyl-5*H*-indeno[2,1-b]quinoline				[6626-64-8]
	(375–388)	122.2	(381)	A	[87/5]
$C_{17}H_{18}O_3$	2-hydroxy-4-butoxybenzophenone				
	(393–443)	92.7	(418)	ME	[84/1]
$C_{17}H_{18}O_3$	4-(*tert*-butylphenyl) salicylate				[87-18-3]
	(336–438)	90.4	(351)	A, UV	[87/5][60/2]
$C_{17}H_{24}O_2$	menthyl benzoate				[6284-35-1]
	(396–574)	69.9	(411)	A	[87/5][47/5]
$C_{17}H_{28}$	undecylbenzene				[6742-54-7]
	(450–622)	66.7	(465)		[99/16]
		84.7	(298)		[71/28]
$C_{17}H_{28}O$	4-methyl-2,6-di-*tert*-pentylphenol				[56103-67-4]
	(438–556)	65.9	(453)	A	[87/5]
$C_{17}H_{28}O_2$	1,3-dimethoxy-2-nonylbenzene				[55095-35-7]
	(443–509)	79.2	(458)	A, GC	[87/5][75/24]
$C_{17}H_{32}$	1-heptadecyne				[26186-00-5]
	(438–607)	62.7	(453)		[99/16]
$C_{17}H_{32}$	2-heptadecyne				[61847-96-9]
	(446–619)	63.7	(461)		[99/16]
$C_{17}H_{32}$	3-heptadecyne				[61886-63-3]
	(438–607)	62.5	(453)		[99/16]
$C_{17}H_{32}Cl_4$	1,1,1,17-tetrachloroheptadecane				[93479-16-4]
	(351–418)	108.0	(366)	A	[87/5]
$C_{17}H_{32}O_2$	oxa-2-cyclooctadecanone				[5637-97-8]
	(403–463)	73.5	(418)	A	[87/5]
$C_{17}H_{32}O_2$	tetradecyl acrylate				[21643-42-5]
	(458–601)	69.4	(473)	A	[87/5]
$C_{17}H_{32}O_2$	(Z) 9-pentadecenyl acetate				[35835-77-9]
	(363–408)	93.6	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(E) 9-pentadecenyl acetate				[64437-41-8]
	(363–408)	94.3	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(Z) 10-pentadecenyl acetate				[64437-43-0]
	(363–408)	94.1	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(E) 10-pentadecenyl acetate				[64437-45-2]
	(363–408)	94.6	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(Z) 11-pentadecenyl acetate				[35153-25-4]
	(363–408)	94.6	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(E) 11-pentadecenyl acetate				[40535-40-8]
	(363–408)	94.9	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(Z) 12-pentadecenyl acetate				[70711-45-4]
	(363–408)	95.1	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(E) 12-pentadecenyl acetate				[73304-17-3]
	(363–408)	94.5	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(Z) 13-pentadecenyl acetate				[70711-46-5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(363–408)	95.9	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_2$	(E) 13-pentadecenyl acetate				
	(363–408)	95.9	(298)	GC	[97/13][00/10]
$C_{17}H_{32}O_3$	1,8-dioxa-9-cyclononadecanone				[1725-00-4]
	(403–463)	77.0	(418)	A	[87/5]
$C_{17}H_{32}O_4$	dibutyl nonadioate				[2917-73-9]
	(313–450)	88.4	(328)	A	[87/5]
$C_{17}H_{32}O_5$	nonyl[1-(butoxycarbonyl)ethyl]carbonate				
	(420–534)	73.8	(435)	A	[87/5]
$C_{17}H_{33}N$	heptadecanonitrile				[5399-02-0]
	(425–620)	81.2	(440)	A	[87/5]
$C_{17}H_{34}$	dodecylcyclopentane				[5634-30-0]
	(450–619)	68.0	(465)		[99/16]
		85.5	(298)		[71/28]
$C_{17}H_{34}$	undecylcyclohexane				[54105-66-7]
	(450–622)	67.0	(465)		[99/16]
		84.6	(298)		[71/28]
$C_{17}H_{34}$	1-heptadecene				[6765-39-5]
	(598–746)	55.5	(613)		[99/16]
	(376–432)	72.3	(391)	A	[87/5]
		84.9	(298)		[71/28]
$C_{17}H_{34}O$	2-heptadecanone				[2922-51-2]
	(402–593)	77.0	(417)	A	[87/5][47/5]
$C_{17}H_{34}O$	9-heptadecanone				[540-08-9]
	(439–482)	78.3	(454)	A, ME	[87/5][38/8]
$C_{17}H_{34}O_2$	methyl hexadecanoate (methyl palmitate)				[112-39-0]
		93.4	(350)		[02/27]
		83.3±0.4	(397)		[02/27]
		96.8±0.6	(298)		[02/27]
	(463–523)	96.4	(298)	GC	[97/28]
	(433–473)	93.2	(298)	CGC	[95/21]
	(453–543)	78.2	(498)	GC	[93/9]
	(287–322)	U69.6	(302)	A	[87/5]
	(411–543)	82.4	(426)	A	[87/5][63/16]
	(378–445)	82.6	(393)	MG, OM	[52/13]
	(422–475)	71.4	(437)		[48/8]
$C_{17}H_{34}O_2$	isopropyl tetradecanoate				[110-27-0]
	(413–466)	70.2	(428)	A	[87/5][48/8] [84/9]
$C_{17}H_{34}O_2$	propyl tetradecanoate				[14303-70-9]
	(420–474)	71.3	(435)	A	[87/5][48/8] [84/9]
$C_{17}H_{34}O_2$	heptadecanoic acid				[506-12-7]
	(449–637)	100.7	(464)	A	[87/5]
	(357–382)	112.7±2.0	(372)	ME, TE	[82/4]
$C_{17}H_{34}O_3$	tetradecyl lactate				[1323-03-1]
	(388–608)	86.4	(403)	A	[87/5]
$C_{17}H_{35}Br$	1-bromoheptadecane				[3508-00-7]
	(472–673)	71.6	(487)	A, EST	[87/5][61/13] [70/14]
$C_{17}H_{35}Cl$	1-chloroheptadecane				[62016-75-5]
	(450–673)	73.2	(465)	A, EST	[87/5][70/14] [61/13]
$C_{17}H_{35}F$	1-fluoroheptadecane				[117374-49-9]
	(437–623)	68.4	(452)	A, EST	[87/5][61/13] [70/14]
$C_{17}H_{35}I$	1-iodoheptadecane				[26825-83-2]
	(517–673)	73.0	(532)	A, EST	[87/5][61/13] [70/14]
$C_{17}H_{35}NO_2$	N-tetradecyllactamide				
	(413–491)	107.5	(428)	A	[87/5]
$C_{17}H_{36}$	heptadecane				[629-78-7]
		86.5	(298)		[94/12]
	(289–320)	91.1	(304)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(488–577)	62.9	(503)	A	[87/5]
		86.0±0.8	(298)	C	[72/29]
		86.2	(298)		[71/28]
	(445–470)	71.6	(457)	ME	[38/8]
$C_{17}H_{36}$	2-methylhexadecane				[1560-92-5]
	(428–569)	63.5	(443)	A	[87/5][59/15]
$C_{17}H_{36}$	3-methylhexadecane				[6418-43-5]
	(428–567)	63.4	(443)	A	[87/5][59/15]
$C_{17}H_{36}$	4-methylhexadecane				[25117-26-4]
	(420–567)	58.7	(435)	A	[87/5][59/15]
$C_{17}H_{36}$	5-methylhexadecane				[25117-34-4]
	(422–566)	59.8	(437)	A	[87/5][59/15]
$C_{17}H_{36}$	2,3-dimethylpentadecane				[2882-97-5]
	(424–569)	60.6	(439)	A	[87/5][59/15]
$C_{17}H_{36}$	2,4-dimethylpentadecane				[61868-07-3]
	(419–546)	65.2	(434)	A	[87/5][59/15]
$C_{17}H_{36}$	2,4,6-trimethyltetradecane				[101791-53-1]
	(411–534)	64.5	(426)	A	[87/5]
$C_{17}H_{36}$	4,4-dipropylundecane				
		78.0±1.8	(298)	CGC	[95/27]
$C_{17}H_{36}O$	1-heptadecanol				[1454-85-9]
	(460–620)	78.3	(475)	A	[87/5]
	(473–623)	75.9	(488)	A	[87/5]
$C_{17}H_{36}S$	1-heptadecanethiol				[53193-22-9]
	(481–657)	74.6	(496)		[99/16]
$C_{17}H_{37}N$	heptadecylamine				[4200-95-7]
	(522–636)	68.2	(537)	A	[87/5][56/17]
$C_{18}H_{12}$	benz[a]anthracene				[56-55-3]
	(343–453)	91.0	(398)	GC	[90/2]
$C_{18}H_{12}$	triphenylene				[217-59-4]
	(323–473)	88.5	(398)	GC	[02/18]
	(535–768)	67.7	(550)		[99/16]
$C_{18}H_{12}$	chrysene				[218-01-9]
	(323–473)	89.6	(398)	GC	[02/18]
$C_{18}H_{14}$	*o*-terphenyl				[84-15-1]
	(335–368)	81.0±0.4	(352)	GS	[97/1]
	(335–368)	84.2±0.4	(298)	GS	[97/1]
	(576–786)	60.5	(591)	DSC	[96/10]
	(343–462)	77.6	(403)		[89/14]
	(462–650)	68.5	(477)	A	[87/5]
$C_{18}H_{14}$	*m*-terphenyl				[92-06-8]
		97.2±0.3	(298)	CGC	[01/1]
	(462–691)	76.1	(477)	A	[87/5]
$C_{18}H_{14}$	*p*-terphenyl				[92-94-4]
	(323–473)	79.2	(398)	GC	[02/18]
	(499–700)	79.2	(514)	A	[87/5]
$C_{18}H_{14}N_4O_2$	1,4-*bis*[(4-hydroxyphenyl)azo]benzene				[21811-64-3]
	(473–533)	68.0	(488)	A	[87/5]
$C_{18}H_{15}N$	triphenylamine				[603-34-9]
	(473–640)	65.2	(488)	A	[87/5]
$C_{18}H_{15}NO_2$	N-9-anthryldiacetamide				[3808-37-5]
	(399–455)	106.3	(414)	A	[87/5]
$C_{18}H_{15}O_4P$	triphenyl phosphate				[115-86-6]
	(548–683)	81.4	(563)	IA	[87/5][57/8]
$C_{18}H_{15}P$	triphenylphosphine				[603-35-0]
	(483–660)	71.2	(498)	A	[87/5]
	(364–392)	91.4±2	(378)	TE, ME	[81/3]
$C_{18}H_{16}O_2$	2-*tert*-butyl-9,10-anthraquinone				[84-47-9]
	(483–523)	101.4	(498)	A	[87/5]
$C_{28}H_{18}$	2-(*tert*-butyl)anthracene				
	(323–473)	84.5	(398)	GC	[02/18]
$C_{18}H_{18}$	9-butylanthracene				[1498-69-7]
	(422–492)	77.1	(437)	A	[87/5]
	(328–373)	83.9	(343)	A	[87/5][64/12]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{18}H_{18}$	1-methyl-7-isopropylphenanthrene				[483-65-8]
	(539–678)	54.0	(554)	A	[87/5]
$C_{18}H_{22}$	1,6-diphenylhexane				[1087-49-6]
	(293–373)	88.0	(308)	A	[87/5][64/12]
$C_{18}H_{22}$	2,2-di(p-tolyl)butane				
	(298–473)	85.4	(313)		[99/16]
$C_{18}H_{22}$	1-p-tolyl-(1-p-propylphenyl)ethane				
	(298–473)	85.4	(313)		[99/16]
$C_{18}H_{22}$	1-o-tolyl-p-tolylbutane				
	(298–473)	85.4	(313)		[99/16]
$C_{18}H_{22}N_4$	*trans, trans*-1,6-diphenyl-3,3,4,4-tetramethyl-1,2,5,6-tetraazahexane				
	(348–388)	92.8±1.5	(368)	GS	[93/16]
$C_{18}H_{24}$	1,2,3,4,4a,7,8,9,10,12,12a-dodecahydrochrysene				[1610-22-6]
	(318–358)	84.2	(333)	A	[87/5][47/5]
$C_{18}H_{24}O_4$	butylcyclohexylphthalate				[84-64-0]
	(368–485)	94.3	(383)	A	[87/5]
$C_{18}H_{26}O_4$	diisopentylphthalate				[606-50-5]
	(390–610)	81.6	(405)	A	[87/5]
$C_{18}H_{26}O_4$	dipentylphthalate				[131-18-0]
	(323–390)	87.3	(338)	T	[49/9]
	(303–500)	99.4	(318)	A, ME	[87/5][48/10]
$C_{18}H_{28}$	1,2,3,4-tetrahydro-6-octylnaphthalene				[66553-12-6]
	(503–574)	103.3	(538)		[99/16]
$C_{18}H_{30}$	dodecylbenzene				[123-01-3]
		92.0	(275)		[00/4]
	(333–453)	83.2	(348)		[93/10]
	(496–609)	67.4	(511)	A	[87/5]
	(336–456)	80.6	(356)	GS	[86/6]
		89.6	(298)		[71/28]
$C_{18}H_{30}$	perhydrochrysene				[2090-14-4]
	(273–353)	82.4	(288)		[64/12]
$C_{18}H_{30}$	hexaethylbenzene				[604-88-6]
	(407–572)	62.6	(422)	A	[87/5][47/5]
$C_{18}H_{30}$	1,2,4,5-tetraisopropylbenzene				[635-11-0]
	(410–575)	61.1±0.3	(420)	EB	[02/20]
	(410–575)	56.8±0.3	(460)	EB	[02/20]
	(410–575)	52.3±0.5	(500)	EB	[02/20]
	(410–575)	47.5±0.9	(540)	EB	[02/20]
$C_{18}H_{30}O_2$	1,3-dimethoxy-4-decylbenzene				[59968-12-6]
	(443–493)	76.6	(458)	A, GC	[87/5][75/24]
$C_{18}H_{30}O_2$	1,3-dimethoxy-5-decylbenzene				[41442-52-8]
	(459–519)	78.4	(474)	A, GC	[87/5][75/24]
$C_{18}H_{30}O_4$	1,4-*bis*(1,1-diethoxyethyl)lbenzene				[47189-08-2]
	(329–347)	88.5	(338)	A	[87/5]
$C_{18}H_{30}O_6$	*trans* aconitic acid, tributyl ester				[7568-58-3]
	(385–483)	87.4	(400)	A	[87/5]
$C_{18}H_{30}O_6$	diethylene glycol dicarboxylic acid, di[1-(isopropoxycarbonyl) ethyl] ester				
	(418–493)	97.6	(433)	A	[87/5]
$C_{18}H_{30}O_6$	diethylene glycol dicarboxylic acid, di[1-(propoxycarbonyl) ethyl] ester				
	(418–514)	101.5	(433)	A	[87/5]
$C_{18}H_{32}$	9-butyltetrahydroanthracene				
	(420–456)	72.8	(435)	A	[87/5]
$C_{18}H_{32}$	1,2-dicyclohexylcyclohexane				[2456-43-1]
	(375–563)	72.8	(390)	A	[87/5]
$C_{18}H_{32}$	1,6-dicyclohexylcyclohexane				[1610-23-7]
	(288–373)	85.9	(303)	A	[87/5][64/12]
$C_{18}H_{32}O$	6,10,14-trimethyl-3,5-pentadecadien-2-one				[1604-32-6]
	(404–560)	43.4±0.5	(482)		[88/4]
$C_{18}H_{32}O_6$	tributyl 1,2,3-propanetricarboxylate				[38094-11-0]
	(385–482)	87.8	(400)	A	[87/5]
	(323–368)	81.9	(328)	T	[49/16]
$C_{18}H_{34}$	1-octadecyne				[629-89-0]
	(450–623)	64.9	(465)		[99/16]
$C_{18}H_{34}$	2-octadecyne				[61847-97-0]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(458–633)	65.7	(473)		[99/16]
$C_{18}H_{34}$	3-octadecyne				[61886-64-4]
	(449–622)	64.5	(464)		[99/16]
$C_{18}H_{34}O_2$	*cis* 9-octadecenoic acid				[112-80-1]
	(441–633)	83.8	(456)	A	[87/5]
$C_{18}H_{34}O_2$	*trans* 9-octadecenoic acid				[112-79-8]
	(444–635)	82.3	(459)	A	[87/5][47/5]
$C_{18}H_{34}O_2$	tetradecyl methacrylate				[2549-53-3]
	(463–611)	69.1	(478)	A	[87/5]
$C_{18}H_{34}O_2$	(Z) 3-hexadecenyl acetate				[141694-86-2]
	(373–418)	98.5	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 3-hexadecenyl acetate				[128984-60-1]
	(373–418)	99.1	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 4-hexadecenyl acetate				[65954-24-7]
	(373–418)	97.7	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 4-hexadecenyl acetate				[155055-27-9]
	(373–418)	98.9	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 5-hexadecenyl acetate				[34010-18-9]
	(373–418)	98.0	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 5-hexadecenyl acetate				[56218-65-6]
	(373–418)	98.8	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 6-hexadecenyl acetate				[34010-19-0]
	(373–418)	97.8	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 6-hexadecenyl acetate				[56218-66-7]
	(373–418)	98.6	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 7-hexadecenyl acetate				[23192-42-9]
	(373–418)	97.8	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 7-hexadecenyl acetate				[23192-83-8]
	(373–418)	98.5	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 8-hexadecenyl acetate				[56218-67-8]
	(373–418)	97.8	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 8-hexadecenyl acetate				[56218-68-9]
	(373–418)	98.6	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 9-hexadecenyl acetate				[34010-20-3]
	(373–418)	98.2	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 9-hexadecenyl acetate				[56218-69-0]
	(373–418)	98.9	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 10-hexadecenyl acetate				[56218-70-3]
	(373–418)	98.5	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 10-hexadecenyl acetate				[56218-71-4]
	(373–418)	99.1	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 11-hexadecenyl acetate				[34010-21-4]
	(373–418)	98.9	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 11-hexadecenyl acetate				[56218-72-5]
	(373–418)	99.5	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 12-hexadecenyl acetate				[56218-73-6]
	(373–418)	99.5	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 12-hexadecenyl acetate				[64789-90-8]
	(373–418)	99.8	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(Z) 13-hexadecenyl acetate				[56218-74-7]
	(373–418)	100.0	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_2$	(E) 13-hexadecenyl acetate				[69282-67-3]
	(373–418)	100.3	(298)	GC	[97/13][00/10]
$C_{18}H_{34}O_4$	dihexyl adipate				[110-33-8]
	(470–595)	80.4	(485)	A	[87/5]
$C_{18}H_{34}O_4$	dibutyl decanedioate				[109-43-3]
	(401–520)	94.3	(416)	A	[87/5]
$C_{18}H_{34}O_5$	decyl[1-(butoxycarbonyl)ethyl]carbonate				
	(391–503)	79.3	(406)	A	[87/5]
$C_{18}H_{34}O_6$	triethylene glycol, *bis*(2-ethylbutyrate)				[95-08-9]
	(313–528)	91.7	(328)	A	[87/5]
$C_{18}H_{35}N$	stearonitrile				[638-65-3]
	(478–631)	78.6	(493)	A	[87/5]
$C_{18}H_{36}$	tridecylcyclopentane				[6006-34-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(463–634)	70.9	(478)		[99/16]
		90.5	(298)		[71/28]
$C_{18}H_{36}$	dodecylcyclohexane				[1795-17-1]
		88.9±0.8	(298)	GCC	[78/16]
		89.5	(298)		[71/28]
	(299–324)	93.4	(311)	A, ME	[87/5][49/14]
$C_{18}H_{36}$	1-octadecene				[112-88-9]
	(399–589)	76.4	(414)	A	[87/5]
		90.0	(298)		[71/28]
$C_{18}H_{36}O$	(Z) 3-octadecen-1-ol				[41207-35-6]
	(393–433)	120.5	(298)	CGC	[00/10][94/13]
$C_{18}H_{36}O$	(E) 3-octadecen-1-ol				[41207-36-7]
	(393–433)	120.0	(298)	CGC	[00/10][94/13]
$C_{18}H_{36}O$	(Z) 9-octadecen-1-ol				[143-28-2]
	(393–433)	119.3	(298)	CGC	[00/10][94/13]
$C_{18}H_{36}O$	(E) 9-octadecen-1-ol				[506-42-3]
	(393–433)	120.1	(298)	CGC	[00/10][94/13]
$C_{18}H_{36}O$	(Z) 11-octadecen-1-ol				[57716-88-8]
	(393–433)	119.6	(298)	CGC	[00/10][94/13]
$C_{18}H_{36}O$	(E) 11-octadecen-1-ol				[62972-93-4]
	(393–433)	120.4	(298)	CGC	[00/10][94/13]
$C_{18}H_{36}O$	(Z) 13-octadecen-1-ol				[69820-27-5]
	(393–433)	120.8	(298)	CGC	[00/10][94/13]
$C_{18}H_{36}O$	(E) 13-octadecen-1-ol				[76836-10-7]
	(393–433)	121.2	(298)	CGC	[00/10][94/13]
$C_{18}H_{36}O$	6,10,14-trimethyl-2-pentadecanone				[502-69-2]
	(402–500)	56.0±0.6	(451)		[88/4]
$C_{18}H_{36}O$	octadecanal				[638-66-4]
	(413–616)	75.7	(428)	A	[87/5][47/5]
$C_{18}H_{36}O_2$	hexadecyl acetate				[629-70-9]
	(373–418)	102.3	(298)	GC	[97/13][00/10]
	(431–469)	70.3	(446)	A	[87/5]
$C_{18}H_{36}O_2$	ethyl palmitate				[628-97-7]
	(429–466)	73.9	(444)	A	[87/5]
	(298–318)	100.7	(308)	ME	[87/5][67/22]
$C_{18}H_{36}O_2$	methyl heptadecanoate				[1731-92-6]
		89.3	(350)		[02/27]
		89.0±0.7	(353)		[02/27]
		97.0±1.2	(298)		[02/27]
	(421–525)	84.4	(436)	A, EST	[87/5][63/16]
$C_{18}H_{36}O_2$	octadecanoic acid (stearic acid)				[55-11-4]
	(349–415)	124.3	(364)	A	[87/5]
	(457–649)	100.6	(472)	A	[87/5]
	(366–389)	118.9±2.0	(379)	ME, TE	[82/4]
		79.8	(515)	I	[43/7]
$C_{18}H_{37}Br$	1-bromooctadecane				[112-89-0]
	(430–673)	81.0	(445)	A, EST	[87/5][61/13] [70/14]
$C_{18}H_{37}Cl$	1-chlorooctadecane				[3386-33-2]
	(333–393)	96.9	(333)	GC	[80/14]
	(333–393)	93.4	(353)	GC	[80/14]
	(333–393)	88.4	(373)	GC	[80/14]
	(333–393)	86.7	(393)	GC	[80/14]
	(472–673)	74.2	(487)	A	[87/5][70/14]
$C_{18}H_{37}F$	1-fluorooctadecane				[1649-73-6]
	(477–633)	68.2	(492)	A, EST	[87/5][61/13] [70/14]
$C_{18}H_{37}I$	1-iodooctadecane				[629-93-6]
	(496–673)	77.2	(511)	A, EST	[87/5][61/13] [70/14]
$C_{18}H_{38}$	octadecane				[593-45-3]
		90.6±1.0	(298)	CGC	[02/44]
		91.3±2.9	(298)	GS	[01/1]
		91.4±1.3	(298)	CGC	[00/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(363–413)	91.8	(298)	CGC	[95/21]
	(423–473)	91.8	(298)	CGC	[95/21]
	(453–503)	92.8	(298)	CGC	[95/21]
	(413–588)	74.4	(428)		[94/14]
		91.4	(298)		[94/12]
	(501–548)	64.8	(516)		[87/5]
	(335–439)	80.0	(348)	GS	[86/6]
	(318–361)	84.3	(333)	A, GS	[87/5][79/11]
		72.5	(343)	GC	[77/34]
		71.8	(353)	GC	[77/34]
		71.1	(363)	GC	[77/34]
		70.5	(373)	GC	[77/34]
		69.8	(383)	GC	[77/34]
		90.8	(298)		[71/28]
	(447–474)	78.1	(460)	ME	[38/8]
	(447–590)	69.4	(462)		[1882/1][84/9]
$C_{18}H_{38}$	2-methylheptadecane				[1560-89-0]
	(442–581)	67.8	(457)	A	[87/5][59/15]
$C_{18}H_{38}$	3-methylheptadecane				[6418-44-6]
	(441–583)	65.6	(456)	A	[87/5][59/15]
$C_{18}H_{38}$	4-methylheptadecane				[26429-11-8]
	(429–580)	58.9	(444)	A	[87/5][59/15]
$C_{18}H_{38}$	5-methylheptadecane				[26730-95-0]
	(432–581)	61.1	(447)	A	[87/5][59/15]
$C_{18}H_{38}$	2,3-dimethylhexadecane				[61868-02-8]
	(466–583)	64.9	(481)	A	[87/5][59/15]
$C_{18}H_{38}$	2,4-dimethylhexadecane				[61868-08-4]
	(434–562)	69.0	(449)	A	[87/5][59/15]
$C_{18}H_{38}$	2,4,6-trimethylpentadecane				[101882-67-1]
	(420–550)	64.3	(435)	A	[87/5][99/16]
$C_{18}H_{38}$	4,9-diisopropyldodecane				[59/15]
	(368–424)	70.0	(383)	A	[87/5]
$C_{18}H_{38}O$	1-octadecanol				[112-92-5]
	(435–504)	86.4	(450)	A	[87/5]
	(500–573)	76.3	(515)	A	[87/5]
	(494–575)	76.9	(509)	A, EB	[87/5][70/2]
	(334–356)	113.5	(345)	A, ME	[87/5][65/15]
$C_{18}H_{38}S$	1-octadecanethiol				[2885-00-9]
	(492–670)	77.1	(507)	EST	[99/16]
$C_{18}H_{38}S_2$	dinonyl disulfide				[4485-77-2]
	(490–650)	78.3	(514)		[99/16]
$C_{18}H_{38}O_4$	2-[2-(2-[dodecyloxy]ethoxy)ethoxy]ethanol				[3055-94-5]
	(475–523)	102.7	(490)	A	[87/5]
$C_{18}H_{39}N$	N,N-dimethylhexadecylamine				[112-69-6]
	(483–671)	67.3	(498)	A	[87/5]
$C_{18}H_{39}N$	dinonylamine				[2044-21-5]
	(486–676)	67.7	(501)	A	[87/5]
$C_{18}H_{39}N$	N-ethylhexadecylamine				[5877-76-9]
	(406–613)	66.4	(421)	A	[87/5][47/5]
$C_{18}H_{39}N$	octadecylamine				[124-30-1]
	(450–635)	76.2	(465)	A	[87/5]
$C_{19}H_{13}NO$	2-(1-naphthyl)-5-phenyloxazole				[846-63-9]
	(510–595)	89.2	(525)	A	[87/5]
$C_{19}H_{16}$	triphenylmethane				[519-73-3]
		94.6	(298)	CGC	[98/11]
	(453–503)	95.0	(298)	CGC	[95/21]
	(343–462)	82.0	(403)		[89/14]
	(512–643)	58.6	(527)	A	[87/5]
$C_{19}H_{17}NO_2$	1-piperidinoanthraquinone				[4946-83-2]
	(395–404)	82.0	(399)	A	[87/5]
$C_{19}H_{20}O_2$	3-(diphenylmethyl)-3-methyl-2,4-pentanedione				
	(353–386)	83.1±0.5	(370)	GS	[95/28]
$C_{19}H_{20}O_4$	butyl benzyl phthalate				[85-68-7]
	(416–516)	89.0	(431)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{19}H_{20}O_4$	dibenzyl ethylmalonate				[74254-53-8]
	(403–483)	94.1	(418)	A	[87/5]
$C_{19}H_{24}$	dicumenylmethane				[25566-92-1]
	(303–402)	71.0	(318)		[99/16]
	(608–704)	57.9	(623)		[99/16]
	(323–402)	73.7	(338)	A	[87/5]
$C_{19}H_{30}$	7-phenyl-6-tridecene				
	(391–449)	77.2	(406)	A, MG	[87/5][55/11]
$C_{19}H_{32}$	tridecylbenzene				[123-02-4]
	(473–651)	72.0	(488)		[99/16]
	(343–463)	90.0	(358)		[90/13]
		94.6	(298)		[71/28]
$C_{19}H_{32}$	7-phenyltridecane				[2400-01-3]
	(413–470)	76.2	(428)	A, MG	[87/5][55/11]
$C_{19}H_{32}O_2$	methyl linolenate				[301-00-8]
	(423–503)	102.1	(298)	GC	[97/28]
	(394–459)	87.7	(409)	A, MG, OM	[87/5][52/13]
$C_{19}H_{34}$	tricyclohexylmethane				[1610-24-8]
	(333–365)	81.4	(348)	A	[87/5][64/12]
	(428–605)	73.3	(443)	A	[87/5]
$C_{19}H_{34}O_2$	linoleic acid, methyl ester (methyl linoleate)				[112-62-9]
	(423–503)	102.2	(298)	GC	[97/28]
	(453–543)	77.2	(498)	GC	[93/9]
	(391–459)	86.3	(406)	A, MG, OM	[87/5][52/13]
$C_{19}H_{36}$	1,1-dicyclohexylheptane				[2090-15-5]
	(293–368)	87.8	(330)	A	[87/5][99/16]
	(422–458)	73.8	(437)	A, MG	[87/5][55/11]
$C_{19}H_{36}$	1-nonadecyne				[26186-01-6]
	(462–637)	66.9	(477)		[99/16]
$C_{19}H_{36}$	2-nonadecyne				[61847-98-1]
	(469–648)	67.8	(484)		[99/16]
$C_{19}H_{36}$	3-nonadecyne				[61886-65-5]
	(460–635)	66.5	(475)		[99/16]
$C_{19}H_{36}O_2$	methyl *cis*-9-octadecenoate (methyl oleate)				[112-62-9]
	(423–503)	103.3	(298)	GC	[97/28]
	(433–473)	99.6	(298)	CGC	[95/21]
	(453–543)	77.2	(498)	GC	[93/9]
		106.8±1.0	(298)	GCC	[80/5]
	(428–486)	83.0	(443)	A	[87/5][64/13]
	(401–458)	86.7	(416)	MG, OM	[52/13]
$C_{19}H_{36}O_2$	methyl elaidate				[1937-62-8]
	(453–543)	77.2	(498)	GC	[93/9]
$C_{19}H_{36}O_3$	methyl ricinoleate				[141-24-2]
	(453–543)	89.3	(498)	GC	[93/9]
$C_{19}H_{36}O_5$	undecyl[1-(butoxycarbonyl)ethyl]carbonate				
	(438–637)	77.0	(453)	A	[87/5]
$C_{19}H_{37}NO$	octadecyl isocyanate				[112-96-9]
	(388–494)	77.8	(403)	A	[87/5]
$C_{19}H_{37}NO_3$	2-[2-ethyl-(hexanoyloxy)]-N,N-dibutylpropionamide				
	(403–448)	83.0	(418)	A	[87/5]
$C_{19}H_{38}$	tridecylcyclohexane				[6006-33-3]
	(474–651)	72.2	(489)		[99/16]
		94.5	(298)		[71/28]
$C_{19}H_{38}$	7-cyclohexyltridecane				[13151-92-3]
	(391–449)	75.6	(406)	A, MG	[87/5][55/11]
$C_{19}H_{38}$	tetradecylcyclopentane				[1795-22-8]
	(475–648)	73.6	(490)		[99/16]
		95.4	(298)		[71/28]
$C_{19}H_{38}$	7-(cyclopentylmethyl)tridecane				[55044-77-4]
	(389–446)	76.5	(404)	A, MG	[87/5][55/11]
$C_{19}H_{38}$	1-nonadecene				[18435-45-5]
	(560–604)	63.3	(575)	A	[87/5]
		95.0	(298)		[71/28]
$C_{19}H_{38}O_2$	methyl stearate				[112-61-8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		98.0	(350)		[02/27]
		90.0±0.3	(401)		[02/27]
		105.9±1.4	(298)		[02/27]
	(463–523)	106.2	(298)	GC	[97/28]
	(453–543)	75.4	(498)	GC	[93/9]
	(427–484)	83.2	(442)	A	[87/5][64/13]
$C_{19}H_{38}O_2$	propyl palmitate				[2239-78-3]
	(439–477)	74.5	(454)	A	[87/5][48/8] [84/9]
$C_{19}H_{38}O_2$	isopropyl palmitate				[142-91-6]
	(433–471)	73.6	(448)	A	[87/5][48/8] [84/9]
$C_{19}H_{38}O_2$	nonadecanoic acid				[646-30-0]
	(511–659)	94.4	(526)	A	[87/5]
	(371–394)	121.8	(386)	ME, TE	[82/4]
$C_{19}H_{38}O_3$	hexadecyl lactate				[35274-05-6]
	(405–556)	90.5	(420)	A	[87/5]
$C_{19}H_{38}O_3$	3-octyloxypropionic acid, octyl ester				
	(443–513)	73.6	(458)	A	[87/5]
$C_{19}H_{39}Br$	1-bromononadecane				[4434-66-6]
	(493–673)	77.9	(508)	A, EST	[87/5][61/13] [70/14]
$C_{19}H_{39}Cl$	1-chlorononadecane				[62016-76-6]
	(483–673)	76.3	(498)	A	[87/5][70/14]
$C_{19}H_{39}F$	1-fluorononadecane				[1480-63-3]
	(458–648)	72.5	(473)	A, EST	[87/5][61/13] [70/14]
$C_{19}H_{39}I$	1-iodononadecane				[62127-51-9]
	(506–673)	79.1	(521)	A, EST	[87/5][61/13] [70/14]
$C_{19}H_{39}NO_2$	N-hexadecyl lactamide				
	(423–508)	111.0	(438)	A	[87/5]
$C_{19}H_{39}NO_2$	N,N-dioctyl lactamide				
	(453–488)	99.3	(468)	A	[87/5]
$C_{19}H_{40}$	nonadecane				[629-92-5]
	(423–588)	76.2	(438)		[94/14]
		96.4	(298)		[94/12]
	(456–606)	73.0	(471)	A	[87/5]
		95.8	(298)		[71/28]
$C_{19}H_{40}$	2-methyloctadecane				[1560-88-9]
	(451–595)	67.5	(466)	A	[87/5][99/16] [59/15]
$C_{19}H_{40}$	3-methyloctadecane				[6561-44-0]
	(455–597)	69.2	(470)	A	[87/5][99/16] [59/15]
$C_{19}H_{40}$	4-methyloctadecane				[10544-95-3]
	(445–596)	63.3	(460)	A	[87/5][99/16] [59/15]
$C_{19}H_{40}$	5-methyloctadecane				[25117-35-5]
	(445–595)	63.8	(460)	A	[87/5][99/16] [59/15]
$C_{19}H_{40}$	2,3-dimethylheptadecane				[61868-03-9]
	(447–598)	64.1	(462)		[99/16][59/15]
	(493–598)	67.2	(508)	A	[87/5]
$C_{19}H_{40}$	2,4-dimethylheptadecane				[61868-09-5]
	(444–574)	70.6	(459)	A	[87/5][99/16] [59/15]
$C_{19}H_{40}$	2,4,6-trimethylhexadecane				[102013-94-5]
	(435–568)	67.3	(450)	A	[87/5][99/16] [59/15]
$C_{19}H_{40}$	7-hexyltridecane				[7225-66-3]
	(411–444)	75.2	(426)	A	[87/5]
$C_{19}H_{40}O$	1-nonadecanol				[1454-84-8]
	(479–640)	81.7	(494)	A	[87/5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(494–635)	80.0	(509)	A	[87/5]
$C_{19}H_{40}S$	1-nonadecanethiol				[53193-23-0]
	(502–682)	79.2	(517)	EST	[99/16]
$C_{19}H_{41}N$	nonadecylamine				[14130-05-3]
	(532–647)	72.7	(547)	A, EST	[87/5][56/17]
$C_{20}H_{10}$	corannulene				[5821-51-2]
		115.5±2.5	(298)	CGC	[02/44]
$C_{20}H_{12}$	perylene				[198-55-0]
		123.1±1.7	(298)	CGC	[02/44]
	(323–473)	89.9	(398)	GC	[02/18]
$C_{20}H_{12}$	benzo[a]pyrene				[50-32-8]
	(323–473)	91.0	(398)	GC	[02/18]
	(343–453)	95.5	(398)	GC	[90/2]
$C_{20}H_{12}$	benzo[e]pyrene				[192-97-2]
	(343–453)	92.0	(398)	GC	[90/2]
$C_{20}H_{12}$	benzo[k]fluoranthene				[207-08-9]
	(323–473)	88.5	(398)	GC	[02/18]
$C_{20}H_{12}$	benzo[b]fluoranthene				[205-99-2]
	(323–473)	89.7	(398)	GC	[02/18]
$C_{20}H_{14}$	9-phenylanthracene				[602-55-1]
	(323–473)	91.6	(398)	GC	[02/18]
	(430–510)	84.4	(445)	A	[87/5]
	(435–513)	86.2	(450)		[99/16][74/35]
$C_{20}H_{14}O_4$	dibenzoyl resorcinol				[94-01-9]
	(399–493)	76.0	(414)	A, UV	[87/5][60/2]
$C_{20}H_{16}$	7,12-dimethylbenz[a]anthracene				[313-74-6]
	(323–473)	88.9	(398)	GC	[02/18]
	(396–408)	112.9	(402)	A, ME	[87/5][64/22] [99/16]
$C_{20}H_{16}$	5,6-dimethylchrysene				[3697-27-6]
	(380–394)	121.7	(387)	A	[87/5]
$C_{20}H_{22}N_2O_2$	1,4-*bis*(propylamino)anthraquinone				
	(409–463)	118.3	(424)	A	[87/5]
$C_{20}H_{24}O_6$	dibenzo-18-crown-6				[14187-32-7]
		137.0±7.4	(298)	CGC	[00/9]
$C_{20}H_{26}O_4$	dicyclohexyl phthalate				[84-61-7]
	(391–475)	97.0	(406)	A	[87/5]
$C_{20}H_{28}$	2-butyl-3-hexylnaphthalene				[55000-56-1]
	(422–485)	80.8	(437)		[63/24][84/9] [99/16]
$C_{20}H_{16}$	triphenylethylene				[58-72-0]
	(353–443)	89.7	(398)		[89/14]
$C_{20}H_{28}$	7-butyl-1-hexylnaphthalene				[55000-55-0]
	(418–481)	78.1	(433)		[63/24][84/9] [99/16]
$C_{20}H_{28}$	1,4-dimethyl-5-octylnaphthalene				[55000-53-8]
	(432–496)	81.6	(447)		[63/24][84/9] [99/16]
$C_{20}H_{28}$	2,6-dimethyl-3-octylnaphthalene				[55000-54-9]
	(430–494)	80.8	(445)		[63/24][84/9] [99/16]
$C_{20}H_{30}$	hexacyclopropylethane				[26902-55-6]
	(333–373)	85.8±0.2	(298)	GS	[95/27]
$C_{20}H_{30}O_4$	dihexyl phthalate				[84-75-3]
	(453–533)	92.0	(468)	A	[87/5]
	(343–387)	103.0	(358)	A, ME	[87/5][48/10]
$C_{20}H_{32}$	1,2,3,4-tetrahydro-6-butyl-7-hexylnaphthalene				[66538-96-3]
	(413–475)	78.1	(428)		[63/24][84/9] [99/16]
$C_{20}H_{32}$	1,2,3,4-tetrahydro-7-butyl-1-hexylnaphthalene				[66205-02-5]
	(409–471)	76.7	(424)		[63/24][84/9] [99/16]
$C_{20}H_{32}$	1,2,3,4-tetrahydro-2,6-dimethyl-7-octylnaphthalene				[55255-59-9]
	(418–480)	79.4	(433)		[63/24][84/9]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
					[99/16]
$C_{20}H_{32}$	1,2,3,4-tetrahydro-5,8-dimethyl-1-octylnaphthalene				[55255-58-8]
	(419–481)	78.6	(434)		[63/24][84/9]
					[99/16]
$C_{20}H_{34}$	9-cyclohexyltetradecahydroanthracene				[55255-70-4]
	(419–488)	74.5	(434)	A	[87/5]
$C_{20}H_{34}$	tetradecylbenzene				[1459-10-5]
	(485–665)	74.5	(500)		[99/16]
		99.6	(298)		[71/28]
$C_{20}H_{34}O_2$	ethyl linolenate				[1191-41-9]
	(447–491)	72.7	(462)	A	[87/5]
$C_{20}H_{34}O_{11}$	diethylene glycol dicarboxylic acid, di[1-(butoxycarbonyl)ethyl] ester				
	(433–525)	103.6	(448)	A	[87/5]
$C_{20}H_{34}O_{11}$	diethylene glycol dicarboxylic acid, di[1-(sec-butoxycarbonyl)ethyl] ester				
	(418–513)	103.1	(433)	A	[87/5]
$C_{20}H_{34}O_{11}$	diethylene glycol dicarboxylic acid, di[1-(isobutoxycarbonyl)ethyl] ester				
	(415–513)	103.1	(430)	A	[87/5]
$C_{20}H_{36}O_2$	ethyl linoleate				[544-35-4]
	(448–497)	72.6	(463)	A	[87/5]
$C_{20}H_{36}O_6$	(syn-*cis*/anti-*cis*) dicyclohexano-18-crown-6				
		124.2±4.0	(298)	CGC	[00/9]
$C_{20}H_{38}$	2-butyl-3-hexyldecahydronaphthalene				[66455-55-8]
	(407–472)	76.9	(422)		[63/24][84/9]
					[99/16]
$C_{20}H_{38}$	7-butyl-1-hexyldecahydronaphthalene				[66455-54-7]
	(407–467)	80.0	(422)		[63/24][84/9]
					[99/16]
$C_{20}H_{38}$	1,4-dimethyl-5-octyldecahydronaphthalene				[54964-83-9]
	(404–466)	73.9	(419)		[63/24][84/9]
					[99/16]
$C_{20}H_{38}$	2,6-dimethyl-3-octyldecahydronaphthalene				[54964-85-1]
	(406–469)	76.4	(421)		[63/24][84/9]
$C_{20}H_{38}$	3,4-dicyclohexyl-3,4-dimethylhexane				[26527-76-4]
	(343–365)	78.4	(359)		[99/16][80/16]
$C_{20}H_{38}$	1-eicosyne				[765-27-5]
	(473–651)	68.9	(488)		[99/16]
$C_{20}H_{38}$	2-eicosyne				[61847-99-2]
	(480–661)	69.8	(495)		[99/16]
$C_{20}H_{38}$	3-eicosyne				[61886-66-6]
	(470–648)	68.4	(485)		[99/16]
$C_{20}H_{38}O$	3,7,11,15-tetramethyl-1-hexadecyn-3-ol				[29171-23-1]
	(403–457)	43.8±1.9	(430)		[88/4]
$C_{20}H_{38}O_2$	ethyl oleate				[111-62-6]
	(384–481)	92.4	(399)	A	[87/5]
$C_{20}H_{38}O_2$	hexadecyl methacrylate				[2495-27-4]
	(431–541)	73.1	(446)	A	[87/5]
$C_{20}H_{38}O_2$	(Z) 3-octadecenyl acetate				
	(393–438)	108.7	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_2$	(E) 3-octadecenyl acetate				
	(393–438)	109.3	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_2$	(Z) 9-octadecenyl acetate				[693-80-1]
	(393–438)	107.8	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_2$	(E) 9-octadecenyl acetate				[22147-38-2]
	(393–438)	108.7	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_2$	(Z) 11-octadecenyl acetate				[6186-98-7]
	(393–438)	108.4	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_2$	(E) 11-octadecenyl acetate				[69282-64-0]
	(393–438)	109.1	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_2$	(Z) 13-octadecenyl acetate				[60037-58-3]
	(393–438)	108.7	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_2$	(E) 13-octadecenyl acetate				
	(393–438)	109.8	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_2$	(Z) 15-octadecenyl acetate				
	(393–438)	110.2	(298)	GC	[97/13][00/10]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{20}H_{38}O_2$	(E) 15-octadecenyl acetate				
	(393–438)	110.5	(298)	GC	[97/13][00/10]
$C_{20}H_{38}O_4$	dioctyl succinate				[14491-66-8]
	(503–523)	94.2	(513)	A	[87/5]
$C_{20}H_{38}O_4$	dipentyl sebacate				[6819-09-6]
	(353–408)	99.2	(368)	A	[87/5]
$C_{20}H_{38}O_5$	dodecyl[1-(butoxycarbonyl)ethyl] carbonate				
	(408–498)	82.8	(423)	A	[87/5]
$C_{20}H_{40}$	1-eicosene				[3452-07-1]
	(478–638)	74.3	(493)		[99/16]
	(573–615)	65.0	(588)	A	[87/5]
		100.0	(298)		[71/28]
$C_{20}H_{40}$	tetradecylcyclohexane				[1795-18-2]
	(486–665)	74.7	(501)		[99/16]
		99.4	(298)		[71/28]
$C_{20}H_{40}$	pentadecylcyclopentane				[4669-01-6]
	(486–661)	76.5	(501)		[99/16]
		100.3	(298)		[71/28]
$C_{20}H_{40}O$	3,7,11,15-tetramethyl-1-hexadecen-3-ol				[60046-87-9]
	(439–468)	67.0±2.0	(453)		[88/4]
$C_{20}H_{40}O_2$	octadecyl acetate				[822-23-1]
	(393–438)	113.5	(298)	GC	[97/13][00/10]
	(341–500)	94.3	(356)	A	[87/5]
$C_{20}H_{40}O_2$	butyl palmitate				[111-06-8]
	(353–383)	93.8	(368)	A	[87/5]
$C_{20}H_{40}O_2$	decyl decanoate				[1654-86-0]
	(341–398)	97.8	(356)	A	[87/5]
$C_{20}H_{40}O_2$	eicosanoic acid				[506-30-9]
	(477–670)	114.5	(492)	A	[87/5]
	(380–404)	125.5	(392)	ME, TE	[82/4]
$C_{20}H_{40}O_2$	ethyl stearate				[111-61-5]
	(454–469)	111.9	(461)	A	[87/5]
	(310–328)	106.8	(319)	A, ME	[87/5][67/22]
$C_{20}H_{40}O_2$	methyl nonadecanoate				[1731-94-8]
		101.2	(350)		[02/27]
		105.0±2.4	(326)		[02/27]
		109.5±2.7	(298)		[02/27]
	(441–529)	90.1	(456)	A, EST	[87/5][63/16]
$C_{20}H_{40}O_2$	2-ethylhexyl laurate				
	(371–452)	91.4	(386)		[01/10]
	(443–503)	104.5	(298)	GC	[97/28]
$C_{20}H_{41}Br$	1-bromoeicosane				[4276-49-7]
	(502–673)	79.8	(517)	A, EST	[87/5][61/13] [70/14]
$C_{20}H_{41}Cl$	1-chloroeicosane				[42217-02-7]
	(492–673)	78.3	(507)	A	[87/5][70/14]
$C_{20}H_{41}F$	1-fluoroeicosane				[676-44-8]
	(468–663)	74.3	(483)	A, EST	[87/5][61/13] [70/14]
$C_{20}H_{41}I$	1-iodoeicosane				[34994-81-5]
	(516–673)	80.9	(531)	A, EST	[87/5][61/13] [70/14]
$C_{20}H_{42}$	5-butylhexadecane				[6912-07-8]
	(423–457)	77.3	(438)	A, MG	[87/5][55/11]
$C_{20}H_{42}$	2,3-dimethyloctadecane				[61868-04-0]
	(458–612)	65.7	(473)	A	[87/5][59/15]
$C_{20}H_{42}$	2,4-dimethyloctadecane				[61868-10-8]
	(456–583)	75.8	(471)	A	[87/5][59/15]
$C_{20}H_{42}$	eicosane				[112-95-8]
		102.6±1.0	(298)	CGC	[02/44]
		102.8±2.2	(298)	GS	[01/1]
		101.1±2.0	(298)	CGC	[00/9]
	(453–503)	103.5	(298)	CGC	[95/21]
	(433–583)	78.0	(448)		[94/14]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		101.8	(298)		[94/12]
	(347–388)	110±2	(368)	TE	[94/2]
	(345–470)	79.0	(360)	TE, ME, GS	[91/9]
	(388–625)	80.8	(440)	EB, IPM	[89/1]
	(388–625)	68.3	(540)	EB, IPM	[89/1]
	(363–460)	89.6	(378)		[88/12]
	(528–620)	71.1	(543)	A	[87/5]
	(344–380)	93.3	(359)	A, GS	[87/5][79/11]
		100.8	(298)		[71/28]
$C_{20}H_{42}$	2-methylnonadecane				[1560-86-7]
	(465–607)	72.4	(480)	A	[87/5][59/19]
$C_{20}H_{42}$	3-methylnonadecane				[6418-45-7]
	(463–609)	71.3	(478)	A	[87/5][59/15]
$C_{20}H_{42}$	4-methylnonadecane				[25117-27-5]
	(460–609)	68.4	(475)	A	[87/5][59/15]
$C_{20}H_{42}$	5-methylnonadecane				[57160-72-2]
	(462–609)	69.1	(477)	A	[87/5][59/15]
$C_{20}H_{42}$	4-propylheptadecane				[55044-10-5]
	(425–459)	79.2	(440)	A, MG	[87/5][55/11]
$C_{20}H_{42}$	2,4,6-trimethylheptadecane				[102155-32-8]
	(449–579)	71.9	(464)	A	[87/5][99/16]
$C_{20}H_{42}O$	1-eicosanol				[629-96-9]
	(488–653)	83.5	(503)	A	[87/5]
	(493–648)	83.4	(508)	A	[87/5]
	(339–358)	118.9	(348)	ME	[87/5][65/15]
$C_{20}H_{42}O_5$	3,6,9,12-tetraoxa-1-tetracosanol				[5274-68-0]
	(501–543)	135.5	(516)	A	[87/5]
$C_{20}H_{42}S$	1-eicosanethiol				[13373-97-2]
	(512–694)	81.3	(527)	EST	[99/16]
$C_{20}H_{42}S_2$	didecyl disulfide				[10496-18-1]
	(518–702)	83.4	(533)	EST	[99/16]
$C_{20}H_{43}N$	didecylamine				[1120-49-6]
	(506–705)	70.9	(521)	A	[87/5]
$C_{20}H_{43}N$	N,N-diethylhexadecylamine				[30951-88-3]
	(412–628)	71.9	(427)	A	[87/5][47/5]
$C_{20}H_{43}N$	N,N-dimethyloctadecylamine				[124-28-7]
	(504–701)	74.7	(519)	A	[87/5]
$C_{20}H_{43}N$	eicosylamine				[10525-37-8]
	(543–659)	74.5	(558)	A	[87/5][56/17]
$C_{21}H_8F_{28}O_8$	pentaerythritol, tetraperfluorobutyrate				
	(293–433)	35.5	(308)	IA	[87/5][57/8]
$C_{21}H_{16}$	3-methylcholanthrene				[56-49-5]
	(323–473)	93.8	(398)	GC	[02/18]
$C_{21}H_{19}F$	1-fluoro-3,3,3-triphenylpropane				
	(349–384)	95.9±0.6	(298)	GS	[97/14]
$C_{21}H_{21}O_4P$	phosphoric acid, tri(2-tolyl) ester				[78-30-8]
	(293–700)	86.8	(308)	A, I	[87/5][57/8]
$C_{21}H_{21}O_4P$	phosphoric acid, tri(3-tolyl) ester				[563-04-2]
	(398–530)	123.2	(413)	A	[87/5]
$C_{21}H_{21}O_4P$	phosphoric acid, tri(4-tolyl) ester				[78-32-0]
	(388–530)	104.9	(408)	A	[87/5]
$C_{21}H_{21}P$	*tris*(4-tolyl)phosphine				[1038-95-5]
	(372–394)	126±5	(385)	ME, TE	[81/3]
$C_{21}H_{24}O_2$	3-(diphenylmethyl)-3-propyl-2,4-pentanedione				
	(364–392)	96.7±1.7	(378)	GS	[95/28]
$C_{21}H_{26}O_3$	2-hydroxy-4-(2-ethylhexyloxy)benzophenone				
	(393–443)	98.7	(418)	ME	[84/1]
$C_{21}H_{26}O_3$	2-hydroxy-4-octyloxybenzophenone				
	(413–453)	102.1	(433)	ME	[84/1]
$C_{21}H_{26}O_3$	2-hydroxy-4-butoxy-5-*tert*-butylbenzophenone				
	(403–453)	90.2	(428)	ME	[84/1]
$C_{21}H_{30}$	1-undecylnaphthalene				[7225-71-0]
	(436–502)	84.3	(451)	A, MG	[87/5][55/11]
$C_{21}H_{36}$	pentadecylbenzene				[2131-18-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(495–677)	77.0	(510)		[99/16]
		104.6	(298)		[71/28]
$C_{21}H_{36}O_6$	triisopentyl *trans* aconitate				
	(396–499)	88.3	(411)	A	[87/5]
$C_{21}H_{36}O_6$	tripentyl *trans* aconitate				[64617-29-4]
	(403–505)	91.4	(418)	A	[87/5]
$C_{21}H_{38}O_6$	glycerol tricaproate				[621-70-5]
	(356–410)	94.2	(371)	A, T	[87/5][49/16]
$C_{21}H_{38}O_6$	triisopentyl 1,2,3-propanetricarboxylate				
	(396–508)	88.2	(411)	A	[87/5]
$C_{21}H_{38}O_6$	tripentyl 1,2,3-propanetricarboxylate				[5333-53-9]
	(404–508)	90.2	(419)	A	[87/5]
$C_{21}H_{40}$	1-undecyldecahydronaphthalene				[66326-27-0]
	(426–488)	83.3	(411)	A	[87/5]
$C_{21}H_{42}$	1-heneicosene				[1599-68-4]
	(392–628)	92.8	(407)		[99/16]
$C_{21}H_{42}$	hexadecylcyclopentane				[6812-39-1]
	(498–674)	79.2	(513)		[99/16]
		105.3	(298)		[71/28]
$C_{21}H_{42}$	pentadecylcyclohexane				[6006-95-7]
	(496–677)	77.2	(511)		[99/16]
		104.4	(298)		[71/28]
$C_{21}H_{42}O_2$	methyl eicosanoate				[1120-28-1]
		109.2	(350)		[02/27]
		97.8±0.2	(406)		[02/27]
		116.4±1.5	(298)		[02/27]
	(463–523)	116.2	(298)	GC	[97/28]
	(453–543)	76.9	(498)	GC	[93/9]
	(450–540)	92.4	(465)	A, EST	[87/5][63/16]
$C_{21}H_{42}O_2$	isopropyl stearate				[112-10-7]
	(453–483)	76.6	(468)	A	[87/5]
$C_{21}H_{42}O_2$	ethyl nonadecanoate				[18281-04-4]
	(312–328)	111.0	(320)	A, ME	[87/5][67/22]
$C_{21}H_{42}O_2$	propyl stearate				[3634-92-2]
	(458–483)	87.9	(470)	A	[87/5]
$C_{21}H_{43}NO_2$	N-octadecyl lactamide				
	(434–542)	112.8	(449)	A	[87/5]
$C_{21}H_{44}$	heneicosane				[629-94-7]
		109.4±2.6	(298)	CGC	[97/17]
	(365–400)	110±2	(382)	TE	[94/2]
	(352–478)	84.7	(367)	TE, ME, GS	[91/9]
	(422–630)	88.4	(437)	A, EST	[87/5][66/8]
$C_{21}H_{44}$	2-methyleicosane				[1560-84-5]
	(473–621)	70.3	(488)	A	[87/5]
$C_{21}H_{44}$	3-methyleicosane				[6418-46-8]
	(477–620)	74.5	(492)	A	[87/5][99/16] [59/15]
$C_{21}H_{44}$	4-methyleicosane				[25117-28-6]
	(471–621)	70.2	(486)	A	[87/5][99/16] [59/15]
$C_{21}H_{44}$	5-methyleicosane				[25117-36-6]
	(519–621)	73.2	(534)	A	[87/5][99/16] [59/15]
$C_{21}H_{44}$	2,3-dimethylnonadecane				[75163-99-4]
	(493–635)	68.8	(508)	A	[87/5][99/16] [59/15]
$C_{21}H_{44}$	2,4-dimethylnonadecane				[115209-60-4]
	(465–594)	77.0	(480)	A	[87/5][99/16] [59/15]
$C_{21}H_{44}$	2,4,6-trimethyloctadecane				[11400-79-2]
	(460–576)	74.9	(475)	A	[87/5][99/16]
$C_{21}H_{44}$	8-hexylpentadecane				[13475-75-7]
	(405–466)	78.5	(420)	A	[87/5]
$C_{21}H_{45}PO$	trioctylphosphine oxide				

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(507–638)	70.8	(573)		[71/32]
$C_{22}H_{12}$	benzo[ghi]perylene				[191-24-2]
	(323–473)	96.1	(398)	GC	[02/18]
$C_{22}H_{14}$	dibenz[a,c]anthracene				[215-58-7]
	(323–473)	97.5	(398)	GC	[02/18]
$C_{22}H_{14}$	dibenz[a,h]anthracene				[53-70-3]
	(323–473)	99.4	(398)	GC	[02/18]
$C_{22}H_{22}$	tribenzylmethane				[4742-04-5]
	(395–648)	79.0	(521)		[99/16]
$C_{22}H_{18}O_4$	dibenzyl phthalate				[523-31-9]
	(445–513)	121.4	(460)	A	[87/5]
$C_{22}H_{38}$	hexadecylbenzene				[1459-09-2]
	(505–688)	79.5	(520)		[99/16]
$C_{22}H_{38}$	1,1-*bis*(decahydro-1-naphthyl)ethane				[54934-70-2]
	(432–503)	77.3	(447)	A, MG	[87/5][55/11]
$C_{22}H_{38}$	1,2-*bis*(decahydro-1-naphthyl)ethane				[54934-69-9]
	(440–507)	89.3	(455)	A	[87/5]
$C_{22}H_{38}$	1,5-dicylopentyl-3-(2-cyclopentylethyl)-2-pentene				[54934-71-3]
	(427–492)	81.4	(442)	A, MG	[87/5][55/11]
$C_{22}H_{40}$	1,5-dicylopentyl-3-(2-cyclopentylethyl)-2-pentane				[55255-85-1]
	(430–494)	83.6	(445)	A, MG	[87/5][55/11]
$C_{22}H_{42}O_2$	butyl oleate				[142-77-8]
	(353–393)	97.7	(368)	A	[87/5]
$C_{22}H_{42}O_2$	*cis* 13-docosenoic acid (erucic acid)				[112-86-7]
	(479–655)	98.2	(494)	A	[87/5]
$C_{22}H_{42}O_2$	*trans* 13-docosenoic acid				[506-33-2]
	(482–656)	103.4	(497)	A	[87/5]
$C_{22}H_{42}O_4$	dioctyl adipate				[123-79-5]
	(373–493)	99.0	(388)	A	[87/5]
$C_{22}H_{42}O_6$	*bis*(2-butoxyethyl) sebacoate				[141-19-5]
	(368–423)	120.3	(383)	A, ME	[87/5][48/10]
$C_{22}H_{44}$	1-docosene				[1599-67-3]
	(401–640)	95.6	(416)		[99/16]
$C_{22}H_{44}$	hexadecylcyclohexane				[6812-38-0]
	(507–689)	79.6	(522)		[99/16]
		109.3	(298)		[71/28]
$C_{22}H_{44}O_2$	butyl stearate				[123-95-5]
	(352–399)	99.9	(367)	A, T	[87/5][49/9]
$C_{22}H_{44}O_2$	ethyl eicosanoate				[18281-05-5]
	(318–460)	113.7	(333)	A	[87/5]
$C_{22}H_{44}O_2$	methyl heneicosanoate				[6064-90-0]
	(459–529)	95.6	(474)	A, EST	[87/5][63/16]
$C_{22}H_{44}O_2$	docosanoic acid				[112-85-6]
	(373–600)	122.3	(388)	A	[87/5]
$C_{22}H_{46}$	docosane				[629-97-0]
		114.9±0.3	(298)	CGC	[02/44]
		115.6±1.9	(298)	CGC	[97/17]
	(453–503)	115.6	(298)	CGC	[95/21]
	(453–573)	84.3	(468)		[94/14]
	(372–410)	124±2	(391)	TE	[94/2]
	(358–490)	89.9	(373)	TE, ME, GS	[91/9]
	(353–462)	100.9	(368)		[88/12]
	(431–642)	91.3	(446)	A, EST	[87/5][66/8]
$C_{22}H_{46}$	2-methylheneicosane				[1560-82-3]
	(485–640)	76.1	(500)	A	[87/5]
$C_{22}H_{46}$	3-methylheneicosane				[6418-47-9]
	(484–631)	74.4	(499)	A	[87/5][99/16] [59/15]
$C_{22}H_{46}$	4-methylheneicosane				[25117-29-7]
	(497–632)	70.9	(494)	A	[87/5][99/16] [59/15]
$C_{22}H_{46}$	5-methylheneicosane				[25117-37-7]
	(483–632)	73.9	(498)	A	[87/5][99/16]
$C_{22}H_{46}$	2,4-dimethyleicosane				[75163-98-3]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(471–603)	77.5	(486)	A	[87/5][99/16] [59/15]
$C_{22}H_{46}$	2,4,6-trimethylnonadecane				[102886-19-1]
	(470–587)	77.3	(485)	A	[87/5][99/16] [59/15]
$C_{22}H_{46}$	8-heptylpentadecane				[71005-15-7]
	(298–313)	107.7	(305)	A	[87/5]
$C_{22}H_{46}O$	1-docosanol				[661-19-8]
	(344–459)	115.3	(351)	A, ME	[87/5][65/15]
$C_{22}H_{46}S$	1-docosanethiol				[7773-83-3]
	(437–680)	107.7	(452)	EST	[99/16]
$C_{23}H_{24}O_6$	*tris*(ethoxycarbonyl)-9-fluorenylmethane				
	(359–393)	107.5±0.7		GS	[95/8]
$C_{23}H_{26}O_6$	1,1,1-*tris*(ethoxycarbonyl)-2,2-diphenylethane				
	(344–394)	109.3±1.0		GS	[95/8]
$C_{23}H_{40}$	heptadecylbenzene				[14752-75-1]
	(414–664)	98.5	(429)		[99/16]
$C_{23}H_{42}O_3$	tetrahydrofurfuryl oleate				[5420-17-7]
	(353–398)	98.7	(368)	A	[87/5]
$C_{23}H_{44}O_2$	methyl erucate				[1120-34-9]
	(463–523)	123.8	(298)	GC	[97/28]
	(453–543)	93.5	(498)	GC	[93/9]
$C_{23}H_{45}NO_3$	2-lauryloxy-N,N-dibutylpropionamide				
	(443–458)	90.6	(450)	A	[87/5]
$C_{23}H_{46}$	9-cyclohexylheptadecane				[55124-77-1]
	(456–492)	83.9	(471)	A	[87/5]
$C_{23}H_{46}$	hexadecylcyclohexane				[19781-73-8]
	(414–664)	97.6	(429)		[99/16]
$C_{23}H_{46}$	1-tricosene				[18835-32-0]
	(409–652)	98.5	(424)		[99/16]
$C_{23}H_{46}O_2$	methyl docosanoate (methyl behenate)				[929-77-1]
	(463–523)	126.1	(298)	GC	[97/28]
	(453–543)	81.0	(498)		[93/9]
	(467–539)	98.2	(482)	A	[87/5][63/16]
$C_{23}H_{46}O_3$	decyl 3-decyloxypropionate				
	(453–523)	90.2	(468)	A	[87/5]
$C_{23}H_{48}$	9-hexylheptadecane				[55124-79-3]
	(450–486)	82.6	(465)	A	[87/5]
$C_{23}H_{48}$	2-methyldocosane				[1560-81-2]
	(495–652)	79.7	(510)	A	[87/5]
$C_{23}H_{48}$	4-methyldocosane				[25117-30-0]
	(493–643)	76.3	(508)	A	[87/5][99/16] [59/15]
$C_{23}H_{48}$	5-methyldocosane				[25163-52-4]
	(492–644)	75.6	(507)	A	[87/5][99/16] [59/15]
$C_{23}H_{48}$	tricosane				[638-67-5]
		118.7±0.1	(298)	GS	[01/1]
		119.7±2.3	(298)	CGC	[00/9]
		120.5±2.0	(298)	CGC	[91/17]
	(370–416)	123±1	(393)	TE	[94/2]
	(370–490)	92.0	(385)	TE, ME, GS	[91/9]
	(314–353)	110.4	(329)	A	[87/5]
	(440–653)	94.0	(455)	A, EST	[87/5][66/8]
$C_{23}H_{48}S$	1-tricosanethiol				[66375-01-7]
	(444–690)	110.1	(459)	EST	[99/16]
$C_{24}H_{12}$	coronene				[191-07-1]
		148.0±0.5	(298)	CGC	[02/44]
	(323–473)	104.2	(398)	GC	[02/18]
$C_{24}H_{18}$	1,3,5-triphenylbenzene				[612-71-5]
		140.0	(298)	CGC	[98/11]
	(500–735)	77.5	(515)	A	[87/5]
	(454–500)	118.0	(469)	A	[87/5][74/29]
$C_{24}H_{20}O_6$	glycerol tribenzoate				[614-33-5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(423–476)	123.5	(438)	A, T	[87/5][49/6]
$C_{24}H_{27}NO_4$	*bis*[N,N-(2-hydroxy-3-phenoxy)propyl]phenylamine				[3088-05-9]
	(388–423)	131.0	(403)	A	[87/5]
$C_{24}H_{30}O_4$	dibenzyl sebacate				[140-24-9]
	(368–550)	114.3	(383)	A	[87/5]
	(405–463)	112.2	(420)	T	[49/9]
	(373–432)	121	(388)	T	[39/3]
$C_{24}H_{38}O_4$	*bis*(2-ethylhexyl)phthalate				[117-81-7]
	(373–660)	102.5	(388)	A	[87/5]
	(385–440)	110.7	(390)	T	[49/9]
$C_{24}H_{38}O_4$	*bis*(1-methylheptyl)phthalate				[131-15-7]
	(393–435)	93.1	(408)	A	[87/5]
$C_{24}H_{38}O_4$	*bis*(6-methylheptyl)phthalate				[131-20-4]
	(383–490)	92.4	(398)	A	[87/5]
$C_{24}H_{38}O_4$	dioctyl phthalate				[117-84-0]
	(423–523)	99.5	(438)	A	[87/5]
	(383–433)	107.6	(398)	T	[49/9]
$C_{24}H_{42}$	hexapropylbenzene				[2456-68-0]
	(458–606)	68.4	(473)	A	[87/5][37/8]
$C_{24}H_{42}$	octadecylbenzene				[4445-07-2]
	(423–675)	101.0	(438)		[99/16]
$C_{24}H_{42}O_6$	*trans* trihexyl aconitate				[64617-30-7]
	(423–512)	98.2	(438)	A	[87/5]
$C_{24}H_{42}O_{11}$	di[1-(2-ethylbutyloxycarbonyl)ethyl] diethylene glycol dicarboxylate				
	(448–538)	110.1	(463)	A	[87/5]
$C_{24}H_{42}O_{11}$	di[1-(2-hexyloxycarbonyl)ethyl] diethylene glycol dicarboxylate				
	(443–548)	111.0	(458)	A	[87/5]
$C_{24}H_{44}$	9-decyltetradecahydroanthracene				
	(501–536)	103.2	(516)	A	[87/5]
$C_{24}H_{44}$	9-decyltetradecahydrophenanthrene				
	(502–542)	92.0	(517)	A	[87/5]
$C_{24}H_{44}O_6$	O-acetylricinoleic acid, butyl ester				[140-04-5]
	(378–423)	105.2	(393)	A	[87/5]
$C_{24}H_{44}O_6$	trihexyl 1,2,3-propanetricarboxylate				[38094-13-2]
	(422–526)	98.1	(437)	A	[87/5]
$C_{24}H_{44}O_6$	glycerol triheptanoate				
	(401–452)	84.4	(416)		[01/10]
$C_{24}H_{46}O_4$	*bis*(3,5,5-trimethylhexyl)adipate				[20270-50-2]
	(353–413)	107.6	(368)	A, ME	[87/5][48/10]
$C_{24}H_{48}$	octadecylcyclohexane				[4445-06-1]
	(422–675)	100.3	(437)		[99/16]
$C_{24}H_{48}$	1-tetracosene				[10192-32-2]
	(418–663)	101.0	(433)		[99/16]
$C_{24}H_{48}O_2$	ethyl docosanoate				[5908-87-2]
	(327–344)	127.5	(335)	A, ME	[87/5][67/12]
$C_{24}H_{48}O_2$	methyl tricosanoate				[2433-97-8]
	(473–528)	99.8	(488)	A, EST	[87/5][63/16]
$C_{24}H_{49}Cl$	1-chlorotetracosane				[6422-18-0]
	(543–774)	72.4	(558)	A	[87/5][70/14]
$C_{24}H_{50}$	2-methyltricosane				[1928-30-9]
	(450–664)	89.3	(465)	A	[87/5]
$C_{24}H_{50}$	5-methyltricosane				[22331-09-5]
	(503–653)	79.6	(518)	A	[87/5][99/16] [59/15]
$C_{24}H_{50}$	tetracosane				[646-31-1]
		126.8±0.4	(298)	CGC	[02/44]
		125.7±1.6	(298)	CGC	[00/9]
		126.2±2.3	(298)	CGC	[97/17]
	(453–588)	92.6	(468)		[94/14]
	(386–425)	126±2	(405)	TE	[94/2]
	(382–523)	95.2	(397)	TE, ME, GS	[91/9]
	(451–497)	86.2±4.6	(474)	GS	[90/14]
	(373–463)	111.2	(388)		[88/12]
	(498–573)	86.6	(513)	A, EST	[87/5][66/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{24}H_{50}$	12-methyltricosane				[22331-52-8]
	(435–454)	84.5	(445)	GC	[82/14][99/16]
$C_{24}H_{50}S$	1-tetracosanethiol				[16331-24-1]
	(451–700)	112.2	(466)	EST	[99/16]
$C_{24}H_{51}N$	trioctylamine				[1116-76-3]
	(415–536)	110.4±1.5	(298)	EB	[96/4]
	(505–702)	70.6	(520)	A	[87/5]
$C_{25}H_{26}$	3-phenylethyl-1,5-diphenyl-2-pentene				[55334-57-1]
	(469–541)	86.8	(484)		[99/16]
$C_{25}H_{28}$	3-phenylethyl-1,5-diphenylpentane				[66374-88-7]
	(498–542)	87.3	(513)	A	[87/5][99/16]
$C_{25}H_{34}O_3$	2-hydroxy-4-dodecyloxybenzophenone				
	(413–453)	115.5	(433)	ME	[84/1]
$C_{25}H_{36}$	1-phenyl-3-phenethylundecane				[7225-70-9]
	(456–521)	91.9	(471)	A	[87/5][99/16]
$C_{25}H_{38}$	1-pentadecylnaphthalene				[55191-63-4]
	(474–524)	98.1	(489)	A	[87/5]
	(474–540)	96.7	(489)	A	[87/5]
$C_{25}H_{40}$	1-cyclohexyl-6-cyclopentyl-3-phenethylhexane				[55334-30-0]
	(486–525)	87.7	(501)	A	[87/5][99/16]
$C_{25}H_{40}$	1,7-dicyclopentyl-4-(2-phenethyl)heptane				[55334-31-1]
	(487–525)	92.0	(502)	A, MG	[87/5][55/11] [99/16]
$C_{25}H_{42}$	1-hexadecylindane				[334-29-2]
	(495–536)	87.0	(510)	A, MG	[87/5][55/11] [99/16]
$C_{25}H_{42}$	5-pentadecyl-1,2,3,4-tetrahydronaphthalene				[66374-91-2]
	(471–534)	99.4	(486)	A	[87/5][99/16]
$C_{25}H_{44}$	nonadecylbenzene				[29136-19-4]
	(431–686)	103.6	(446)		[99/16]
$C_{25}H_{44}$	1,5-dicyclohexyl-3-(2-cyclohexylethyl)-2-pentene				[66374-92-3]
	(485–524)	88.0	(500)	A, MG	[87/5][55/11]
$C_{25}H_{44}$	1,7-dicyclopentyl-4-(3-cyclopentylpropyl)-3-heptene				[66374-93-4]
	(483–522)	89.0	(498)	A, MG	[87/5][55/11]
$C_{25}H_{44}$	3-octyl-1-phenylundecane				[5637-96-7]
	(476–513)	89.4	(491)	A	[87/5]
$C_{25}H_{44}$	9-(2-phenylethyl)heptadecane				[5637-96-7]
	(448–513)	88.3	(463)	A, MG	[87/5][55/11]
$C_{25}H_{44}$	9-(4-tolyl)octadecane				[4445-08-3]
	(472–507)	92.0	(487)	A, MG	[87/5][55/11] [99/16]
$C_{25}H_{44}$	6-octyl(hexylhydrobenz[de]anthracene)				[7225-65-2]
	(467–534)	93.8	(482)		[99/16]
$C_{25}H_{46}$	1-cyclohexyl-3-(cyclohexylethyl)-6-cyclopentylhexane				[55401-70-2]
	(487–524)	91.4	(502)	A	[87/5]
$C_{25}H_{46}$	4-(2-cyclohexylethyl)-1,7-dicyclopentylheptane				
	(471–524)	88.8	(486)	A	[87/5]
$C_{25}H_{46}$	1,5-dicyclohexyl-3-(2-cyclohexylethyl)pentane				[2090-16-6]
	(318–418)	107.6	(333)	A	[87/5][64/12]
	(488–528)	86.2	(503)	A	[87/5]
$C_{25}H_{46}$	1,7-dicyclopentyl-4-(3-cyclopentylpropyl)heptane				[55429-35-1]
	(457–525)	87.6	(472)	A	[87/5]
	(486–525)	88.9	(501)	A, MG	[87/5][55/11]
$C_{25}H_{48}$	1-cyclohexyl-3-(2-cyclohexylethyl)undecane				[7225-69-6]
	(480–516)	95.2	(495)	A, MG	[87/5][55/11]
$C_{25}H_{48}$	1-cyclopentyl-4-(3-cyclopentylpropyl)dodecane				[7225-68-5]
	(480–518)	88.5	(495)	A, MG	[87/5][55/11]
$C_{25}H_{48}$	1-hexyldecylhexahydroindane				[55401-73-5]
	(492–532)	87.6	(507)	A, MG	[87/5][55/11]
$C_{25}H_{48}$	1-pentadecyldecahydronaphthalene				[66359-82-8]
	(464–529)	93.4	(479)	A, MG	[87/5][55/11]
$C_{25}H_{48}O_4$	dioctyl nonanedioate				[2064-80-4]
	(393–523)	104.3	(408)	A	[87/5]
$C_{25}H_{50}$	nonadecylcyclohexane				[22349-03-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(430–686)	102.8	(445)		[99/16]
$C_{25}H_{50}$	1-pentacosene				[16980-85-1]
	(426–674)	103.7	(441)		[99/16]
$C_{25}H_{50}$	9-(2-cyclohexylethyl)heptadecane				[25446-35-9]
	(490–513)	88.6	(495)	A, MG	[87/5][55/11]
$C_{25}H_{50}$	9-(3-cyclopentylpropyl)heptadecane				[5638-09-5]
	(476–514)	86.9	(491)	A	[87/5][99/16]
$C_{25}H_{50}$	9-octyl-8-heptadecene				[24306-18-1]
	(441–500)	92.3	(456)	A	[87/5][99/16]
$C_{25}H_{50}O_2$	methyl tetracosanoate				[2442-49-1]
	(422–452)	146.2	(437)		[01/10]
	(483–536)	100.8	(498)	A	[87/5]
$C_{25}H_{50}O_2$	ethyl tricosanoate				[18281-07-7]
	(336–359)	121.8	(347)	A, ME	[87/5][67/12]
$C_{25}H_{52}$	9-octylheptadecane				[7225-64-1]
	(470–505)	93.4	(485)	A, MG	[87/5][55/11]
$C_{25}H_{52}$	pentacosane				[629-99-2]
		128.6±2.2	(298)	GS	[01/1]
		127.6±0.8	(298)	CGC	[00/9]
		129.8±2.9	(298)	CGC	[97/17]
	(397–434)	126±1	(415)	TE	[94/2]
	(390–531)	97.6	(405)	TE, ME, GS	[91/9]
	(461–498)	90.9±5.7	(479)	GS	[90/14]
	(457–675)	99.2	(472)	A, EST	[87/5][66/8]
$C_{25}H_{52}$	12-ethyltricosane				[79370-85-7]
	(435–454)	84.6	(444)	GC	[82/14][99/16]
$C_{25}H_{52}$	2-methyltetracosane				[1560-78-7]
	(425–670)	104.6	(440)		[99/16]
$C_{25}H_{52}$	5,5-*bis*(3,3′-dimethylbutyl)-2,2,8,8-tetramethylnonane				
		91.9±1.8	(298)	CGC	[95/27]
$C_{25}H_{52}$	7,7-dihexyltridecane				
		115.3±1.8	(298)	CGC	[95/27]
$C_{25}H_{52}S$	1-pentacosanethiol				[66359-74-8]
	(458–709)	114.2	(473)	EST	[99/16]
$C_{26}H_{18}$	9,10-diphenylanthracene				[1499-10-1]
	(323–473)	102.7	(398)	GC	[02/18]
$C_{26}H_{18}$	9,9′-bifluorenyl				[1530-12-7]
	(383–408)	95.7		B	[94/4]
$C_{26}H_{18}N_2O_4$	disperse violet 31				
	(453–523)	59.9	(468)	A	[87/5]
$C_{26}H_{32}$	6-octyl-1,2,3,4-tetrahydronaphthacene				
	(503–574)	103.2	(518)	A	[87/5]
$C_{26}H_{34}$	9-dodecylanthracene				[2883-70-7]
	(495–566)	99.4	(510)	A	[87/5]
$C_{26}H_{34}$	9-dodecylphenathrene				[3788-61-2]
	(495–568)	95.7	(510)	A	[87/5]
$C_{26}H_{38}$	1,1-diphenyltetradecane				[55268-63-8]
	(467–530)	98.2	(482)	A	[87/5]
$C_{26}H_{38}$	1,1-di(4-tolyl)dodecane				[55268-62-7]
	(466–529)	98.3	(481)	A	[87/5]
$C_{26}H_{40}$	5-octyl-1,2,3,4,4a,5,7,8,9,10,12,12a-dodecahydronaphthacene				[95258-25-6]
	(479–549)	91.9	(494)	A, MG	[87/5][55/11] [99/16]
$C_{26}H_{42}$	1,1-*bis*(dodecahydroacenaphthylene-5-yl)ethane				
	(482–541)	110.9	(497)	A, MG	[87/5][55/11]
$C_{26}H_{42}O_4$	*bis*(3,5,5-trimethylhexyl)phthalate				[14103-61-8]
	(333–393)	113.6	(348)	A	[87/5]
$C_{26}H_{42}O_4$	dinonyl phthalate				[84-76-4]
	(333–393)	108.9	(348)	A	[87/5]
$C_{26}H_{46}$	1,4-didecylbenzene				[2655-95-0]
	(468–536)	95.2	(483)	A	[87/5]
$C_{26}H_{46}$	1-phenyleicosane				[2398-68-7]
	(499–538)	94.7	(514)	A, MG	[87/5][55/11]
$C_{26}H_{46}$	2-phenyleicosane				[2398-66-5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(492–531)	90.4	(507)	A, MG	[87/5][55/11]
$C_{26}H_{46}$	3-phenyleicosane				[2400-02-4]
	(489–526)	92.1	(504)	A, MG	[87/5][55/11]
$C_{26}H_{46}$	4-phenyleicosane				[2400-03-5]
	(487–527)	88.2	(502)	A, MG	[87/5][55/11]
$C_{26}H_{46}$	5-phenyleicosane				[2400-04-6]
	(485–521)	94.3	(500)	A, MG	[87/5][55/11]
$C_{26}H_{46}$	7-phenyleicosane				[2398-64-3]
	(483–520)	93.8	(498)	A, MG	[87/5][55/11]
$C_{26}H_{46}$	9-phenyleicosane				[2398-65-4]
	(483–520)	91.9	(498)	A, MG	[87/5][55/11]
$C_{26}H_{46}$	8-(4-tolyl)nonadecane				[55191-36-1]
	(482–517)	94.5	(497)	A	[87/5]
$C_{26}H_{48}$	9-dodecyltetrahydroanthracene				[55401-75-7]
	(501–536)	102.7	(519)		[99/16]
$C_{26}H_{48}$	9-dodecyltetrahydrophenanthrene				[55334-01-5]
	(502–542)	90.8	(522)		[99/16]
$C_{26}H_{50}$	9-[α-(*cis*-bicyclo[3.3.0]octyl)methyl]heptadecane				[700004-11-1]
	(455–518)	92.3	(470)	A	[87/5][99/16]
$C_{26}H_{50}$	1,1-*bis*(4-methylcyclohexyl)dodecane				[55334-09-3]
	(484–520)	93.5	(499)	A, MG	[87/5][55/11]
$C_{26}H_{50}$	1,1-dicyclohexyltetradecane				[55334-08-2]
	(493–529)	97.7	(508)	A, MG	[87/5][55/11]
$C_{26}H_{50}$	1,1-dicyclopentylhexadecane				[55401-76-8]
	(471–525)	113.1	(486)	A, MG	[87/5][55/11]
$C_{26}H_{50}$	2-hexadecylbicyclopentyl				[55334-11-7]
	(495–532)	97.7	(510)	A, MG	[87/5][55/11]
$C_{26}H_{50}O_4$	(*dl*) *bis*(2-ethylhexyl)sebacate				[122-62-3]
	(308–453)	114.9	(323)	A	[87/5]
$C_{26}H_{50}O_4$	dioctyl sebacate				[2432-87-3]
	(413–523)	107.1	(428)	A	[87/5]
$C_{26}H_{52}$	1-cyclohexyleicosane				[4443-55-4]
	(499–538)	94.2	(514)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	2-cyclohexyleicosane				[4443-56-5]
	(494–530)	98.3	(509)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	3-cyclohexyleicosane				[4443-57-6]
	(492–530)	94.0	(507)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	4-cyclohexyleicosane				[4443-58-7]
	(488–524)	98.3	(503)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	5-cyclohexyleicosane				[4443-59-8]
	(488–524)	98.3	(503)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	7-cyclohexyleicosane				[4443-60-1]
	(486–523)	93.6	(501)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	9-cyclohexyleicosane				[4443-61-2]
	(486–523)	93.6	(501)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	1-cyclopentylheneicosane				[6703-82-8]
	(498–537)	93.8	(513)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	11-cyclopentylheneicosane				[6703-81-7]
	(486–524)	92.4	(501)	A, MG	[87/5][55/11]
$C_{26}H_{52}$	1-hexacosene				[18835-33-1]
	(434–684)	106.1	(449)		[99/16]
$C_{26}H_{54}$	5-butyldocosane				[55282-16-1]
	(482–518)	94.0	(497)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	7-butyldocosane				[55282-15-0]
	(480–514)	97.2	(495)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	9-butyldocosane				[55282-14-9]
	(479–516)	91.9	(494)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	11-butyldocosane				[13475-76-8]
	(480–516)	93.3	(495)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	5,14-dibutyloctadecane				[55282-13-8]
	(458–508)	89.3	(473)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	6,11-dipentylhexadecane				[15874-03-0]
	(468–504)	88.9	(483)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	3-ethyl-5-(2-ethylbutyl)octadecane				[55282-12-7]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(467–503)	88.4	(482)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	11-(1-ethylpropyl)heneicosane				[55282-11-6]
	(474–509)	93.5	(489)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	2-methylpentacosane				[629-87-8]
	(433–680)	107.2	(448)		[99/16]
$C_{26}H_{54}$	12-propyltricosane				[79370-84-6]
	(435–454)	91.0	(445)		[82/14][99/16]
$C_{26}H_{54}$	3-ethyltetracosane				[55282-17-2]
	(490–529)	90.0	(505)	A	[87/5]
$C_{26}H_{54}$	hexacosane				[630-01-3]
		139.3±0.5	(298)	CGC	[02/44]
		136.4±0.2	(298)	GS	[01/1]
		140.0±2.2	(298)	CGC	[97/17]
	(391–437)	132±1	(414)	TE	[94/2]
	(404–546)	97.6	(419)	TE, ME, GS	[91/9]
	(455–519)	99.0±3.8	(487)	GS	[90/14]
	(466–685)	101.6	(481)	A, EST	[87/5][66/8]
	(478–530)	94.5	(493)	A	[87/5]
$C_{26}H_{54}$	7-hexyleicosane				[55333-99-8]
	(479–512)	101.1	(494)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	11-neopentylheneicosane				[55282-10-5]
	(476–511)	93.0	(491)	A, MG	[87/5][55/11]
$C_{26}H_{54}$	11-pentylheneicosane				[14739-72-1]
	(478–512)	96.3	(493)	A, MG	[87/5][55/11]
$C_{26}H_{54}S$	1-hexacosanethiol				[16331-25-2]
	(465–718)	116.2	(480)	EST	[99/16]
$C_{27}H_{19}NO$	2,5-*bis*(1,1′-biphenylyl)oxazole				[2083-09-2]
	(595–685)	109.7	(610)	A	[87/5]
$C_{27}H_{40}$	5-pentadecylacenaphthene				[55334-13-9]
	(500–568)	105.7	(515)	A, MG	[87/5][55/11]
$C_{27}H_{46}O$	cholesterol				[57-88-5]
	(411–447)	114.9	(426)	A	[87/5]
$C_{27}H_{48}$	5-α-cholestane				[481-21-0]
		108.4	(352)		[00/4]
	(481–538)	115.6	(496)	A	[87/5]
$C_{27}H_{48}$	henicosylbenzene				[40775-09-5]
	(446–705)	108.4	(461)		[99/16]
$C_{27}H_{48}$	11-phenylheneicosane				[6703-80-6]
	(491–529)	93.5	(506)	A, MG	[87/5][55/11]
$C_{27}H_{50}$	5-pentadecyldodecahydroacenaphthalene				[55282-69-4]
	(486–554)	98.1	(501)	A	[87/5]
$C_{27}H_{50}O_6$	glycerol trioctanoate				[538-23-8]
	(396–453)	116.0	(411)	A, T	[87/5][49/16]
$C_{27}H_{54}$	11-cyclohexylheneicosane				[6703-99-7]
	(485–529)	107.0	(500)	A	[87/5]
$C_{27}H_{54}$	11-(cyclopentylmethyl)heneicosane				[6703-79-3]
	(492–529)	94.4	(507)	A	[87/5]
$C_{27}H_{54}$	henicosylcyclohexane				[26718-82-1]
	(445–460)	107.8	(460)		[99/16]
$C_{27}H_{54}$	1-heptacosene				[15306-27-1]
	(441–694)	108.7	(456)		[99/16]
$C_{27}H_{54}$	1-decyl-1-undecylcyclohexane				
		133.6±1.8	(298)	CGC	[95/27]
$C_{27}H_{56}$	heptacosane				[593-49-7]
	(401–441)	132±1	(423)	TE	[94/2]
	(508–570)	94.2	(523)	ME, TE, GS	[91/9]
	(401–441)	116.9±3.0	(421)	TE	[90/13]
	(473–695)	104.3	(488)	A, EST	[87/5][66/8]
$C_{27}H_{56}$	2-methylhexacosane				[1561-02-0]
	(441–690)	109.6	(456)		[99/16]
$C_{27}H_{56}$	8-hexyl-8-pentylhexadecane				
		125.7±1.8	(298)	CGC	[95/27]
$C_{27}H_{56}$	8,8-dipentylheptadecane				
		128.1±1.8	(298)	CGC	[95/27]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{27}H_{56}$	10-hexyl-10-methyleicosane				
		129.9±1.8	(298)	CGC	[95/27]
$C_{27}H_{56}$	5-ethyl-5-methyltetracosane				
		133.8±1.8	(298)	CGC	[95/27]
$C_{27}H_{56}S$	1-heptacosanethiol				[66291-85-8]
	(471–727)	118.3	(486)	EST	[99/16]
$C_{28}H_{14}$	phenanthro[1,10,9,8-opqra]perylene				[190-39-6]
	(580–630)	180.5	(595)	A	[87/5]
$C_{28}H_{22}$	9,9′-dimethyl-9,9′-bifluorenyl				
	(368–403)	94.6		B	[94/4]
$C_{28}H_{32}$	1,7-diphenyl-4-(3-phenylpropyl)-3-heptene				[55282-03-6]
	(488–556)	98.0	(503)	A, MG	[87/5][55/11]
$C_{28}H_{34}$	1,7-diphenyl-4-(3-phenylpropyl)heptane				[55282-64-9]
	(490–557)	100.3	(505)	A, MG	[87/5][55/11]
$C_{28}H_{44}O$	ergosterol				[57-87-4]
	(421–454)	118.7	(436)	A	[87/5]
$C_{28}H_{46}O_4$	diisodecyl phthalate				[26761-40-0]
	(371–496)	79.3	(386)	A	[87/5]
$C_{28}H_{50}$	docosylbenzene				[5634-22-0]
	(453–715)	110.8	(468)		[99/16]
$C_{28}H_{50}$	2-decyl-1-phenyldodecane				[55334-72-0]
	(497–532)	102.5	(512)	A	[87/5]
$C_{28}H_{50}O_{11}$	di[1-(2-ethylhexyl)oxycarbonyl]ethyl diethylene glycol dicarboxylate				
	(463–553)	116.6	(478)	A	[87/5]
$C_{28}H_{50}O_{11}$	di[1-(octyloxycarbony)ethyl] diethylene glycol dicarboxylate				
	(463–564)	112.5	(478)	A	[87/5]
$C_{28}H_{52}$	1,7-dicyclohexyl-4-(3-cyclohexylpropyl)heptane				[55334-73-1]
	(482–549)	98.7	(497)	A, MG	[87/5][55/11]
$C_{28}H_{54}$	1-cyclohexyl-2-(cyclohexylmethyl)pentadecane				[55255-74-8]
	(501–536)	105.4	(516)	A, MG	[87/5][55/11]
$C_{28}H_{56}$	docosylcyclohexane				[61828-07-7]
	(452–715)	110.0	(467)		[99/16]
$C_{28}H_{56}$	1-octacosene				[18835-34-2]
	(448–703)	111.0	(463)		[99/16]
$C_{28}H_{56}$	11-(cyclohexylmethyl)heneicosane				
	(499–538)	94.2	(514)	A, MG	[87/5][55/11]
$C_{28}H_{56}$	2,2,4,10,12,12-hexamethyl-7-(3,5,5-trimethylhexyl)-6-tridecene				[55255-73-7]
	(426–488)	83.8	(441)	A, MG	[87/5][55/11]
$C_{28}H_{58}$	2-methylheptacosane				[1561-00-8]
	(448–700)	111.9	(463)		[99/16]
$C_{28}H_{58}$	2,2,4,10,12,12-hexamethyl-7-(3,5,5-trimethylhexyl)tridecane				[3035-75-4]
	(308–393)	98.5	(323)	A	[87/5][64/12]
	(429–491)	84.9	(444)	A, MG	[87/5][55/11]
$C_{28}H_{58}$	7-hexyldocosane				[55373-86-9]
	(506–531)	100.7	(518)	A	[87/5]
$C_{28}H_{58}$	octacosane				[630-02-4]
		150.8±0.5	(298)	CGC	[02/44]
		150.7±1.7	(298)	CGC	[00/9]
		152.4±2.9	(298)	CGC	[97/17]
	(483–588)	100.5	(498)		[94/14]
	(407–456)	135±3	(431)	TE	[94/2]
	(426–493)	105.5	(441)	TE, ME, GS	[91/9]
	(473–515)	103.1±3.0	(494)	GS	[90/14]
	(450–575)	100.6	(500)	EB, IPM	[89/1]
	(450–575)	98.1	(560)	EB, IPM	[89/1]
	(300–390)	131.7	(315)	A	[87/5]
	(481–705)	106.6	(496)	A, EST	[87/5][66/8]
$C_{28}H_{58}$	9-octyleicosane				[13475-77-9]
	(460–530)	106.8	(475)	A	[87/5]
$C_{28}H_{58}S$	1-octacosanethiol				[16331-26-3]
	(477–736)	120.2	(492)	EST	[99/16]
$C_{29}H_{50}$	11-(2,5-dimethylphenyl)-10-heneicosene				
	(471–534)	99.2	(486)	A, MG	[87/5][55/11]
$C_{29}H_{52}$	tricosylbenzene				[61828-04-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(459–724)	113.2	(474)		[99/16]
$C_{29}H_{52}$	1-nonacosene				[18835-35-3]
	(455–713)	113.3	(470)		[99/16]
$C_{29}H_{52}$	11-(2,5-dimethylphenyl)heneicosane				[55373-91-6]
	(472–535)	100.8	(487)	A, MG	[87/5][55/11]
$C_{29}H_{58}$	tricosylcyclohexane				[61828-08-8]
	(459–724)	112.3	(474)		[99/16]
$C_{29}H_{60}$	2-methyloctacosane				[1560-98-1]
	(455–709)	114.2	(470)		[99/16]
$C_{29}H_{60}$	nonacosane				[630-03-5]
	(423–457)	137±3	(440)	TE	[94/2]
	(423–456)	137.1±3.0	(439)	TE	[90/13]
	(488–714)	109.0	(503)	A, EST	[87/5][66/8]
$C_{29}H_{60}S$	1-nonacosanethiol				[66213-92-1]
	(483–744)	122.0	(498)	EST	[99/16]
$C_{30}H_{30}$	1,1,6,6-tetraphenylhexane				[2819-41-2]
	(511–579)	108.1	(526)	A, MG	[87/5][55/11]
$C_{30}H_{34}$	1,10-di(1-naphthyl)decane				[40339-27-3]
	(540–616)	108.6	(555)	A, MG	[87/5][55/11]
$C_{30}H_{54}$	1,10-*bis*(decahydro-1-naphthyl)decane				[55268-64-9]
	(520–583)	119.7	(535)	A, MG	[87/5][55/11]
$C_{30}H_{54}$	1,1,6,6-tetracyclohexylhexane				[55281-91-9]
	(501–569)	103.0	(516)	A	[87/5]
$C_{30}H_{54}$	tetracosylbenzene				[61828-05-5]
	(466–732)	115.3	(481)		[99/16]
$C_{30}H_{54}O_6$	*trans*, *tris*(2-ethylhexyl) aconitate				[52193-50-7]
	(437–551)	97.1	(452)	A	[87/5]
$C_{30}H_{54}O_6$	*tris*(2-ethylhexyl) 1,2,3-propanetricarboxylate				[5400-99-7]
	(438–551)	97.9	(453)	A	[87/5]
$C_{30}H_{60}$	tetracosylcyclohexane				[61828-09-9]
	(465–733)	114.6	(480)		[99/16]
$C_{30}H_{60}$	1-tricontene				[18435-53-5]
	(462–721)	115.4	(477)		[99/16]
$C_{30}H_{62}$	2,6,10,15,19,23-hexamethyltetracosane (squalane)				[111-01-3]
	(363–513)	116.2	(378)	A	[87/5]
$C_{30}H_{62}$	9-octyldocosane				[55319-83-0]
	(518–588)	109.3	(533)	A	[87/5]
$C_{30}H_{62}$	triacontane				[638-68-6]
		164.5±0.4	(298)	CGC	[00/9]
	(422–487)	143±2	(454)	TE	[94/2]
	(495–723)	111.3	(510)	A, EST	[87/5][66/8]
$C_{30}H_{62}$	2-methylnonacosane				[1560-75-4]
	(461–718)	116.8	(476)		[99/16]
$C_{30}H_{62}S$	1-triacontanethiol				[66213-99-8]
	(488–751)	124.0	(503)	EST	[99/16]
$C_{30}H_{63}N$	tridecylamine				[2869-34-3]
	(545–759)	76.8	(560)	A	[87/5]
$C_{31}H_{34}$	1,1-di(1-naphthyl)-1-undecene				[56247-76-8]
	(518–588)	109.3	(533)	A	[87/5]
$C_{31}H_{48}$	1-(1-decylundec-1-enyl)naphthalene				[55319-81-8]
	(499–567)	105.1	(514)	A, MG	[87/5][55/11]
$C_{31}H_{52}O_3$	α-tocopherol acetate				[58-95-7]
	(466–524)	60.1±1.3	(496)		[88/4]
$C_{31}H_{56}$	1,1-*bis*(decahydro-1-naphthyl)undecane				[55373-96-1]
	(525–561)	110.5	(540)	A, MG	[87/5][55/11]
$C_{31}H_{56}$	pentacosylbenzene				[61828-06-6]
	(472–741)	117.5	(487)		[99/16]
$C_{31}H_{56}$	13-phenylpentacosane				[6006-90-2]
	(495–560)	106.7	(510)	A, MG	[87/5][55/11]
$C_{31}H_{60}$	1-(1-decylundecyl)decahydronaphthalene				[55320-00-8]
	(523–560)	107.0	(538)	A, MG	[87/5][55/11]
$C_{31}H_{62}$	1-hentriacontene				[18435-54-6]
	(468–730)	117.7	(483)		[99/16]
$C_{31}H_{62}$	pentacosylcyclohexane				[61828-10-2]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(472–741)	116.6	(487)		[99/16]
$C_{31}H_{62}$	13-cyclohexylpentaconsane				[6697-15-0]
	(495–560)	106.7	(510)	A, MG	[87/5][55/11]
$C_{31}H_{64}$	2-methyltriacontane				[1560-72-1]
	(468–726)	118.8	(483)		[99/16]
$C_{31}H_{64}$	11-decylheneicosane				[55320-06-4]
	(298–313)	110.9	(305)	A, MG	[87/5][55/11]
$C_{31}H_{64}$	hentriacontane				[630-04-6]
	(433–474)	146±2	(450)	TE	[94/2]
	(503–732)	113.8	(518)	A, EST	[87/5][66/8]
$C_{31}H_{64}S$	1-hentriacontanethiol				[534-24-9]
	(494–759)	125.7	(509)	EST	[99/16]
$C_{32}H_{58}$	hexacosylbenzene				[13024-80-1]
	(478–749)	119.6	(493)		[99/16]
$C_{32}H_{64}$	1-dotriacontene				[18435-55-7]
	(474–738)	119.8	(489)		[99/16]
$C_{32}H_{64}$	hexacosylcyclohexane				[61828-11-3]
	(478–749)	118.6	(493)		[99/16]
$C_{32}H_{66}$	11-decyldocosane				[55401-55-3]
	(523–559)	108.7	(538)	A, MG	[87/5][55/11]
$C_{32}H_{66}$	dotriacontane				[544-85-4]
	(437–477)	147±1	(456)	TE	[94/2]
	(361–395)	130.5	(376)	A	[87/5]
	(510–741)	116.0	(535)	A, EST	[87/5][66/8]
$C_{32}H_{66}$	9-octyltetracosane				[55401-54-2]
	(501–563)	114.8	(516)	A, MG	[87/5][55/11]
$C_{32}H_{66}$	2-methylhentriacontane				[1720-12-3]
	(474–735)	120.9	(489)		[99/16]
$C_{32}H_{66}S$	1-dotriacontanethiol				[66256-05-1]
	(499–766)	127.5	(514)	EST	[99/16]
$C_{33}H_{54}O_6$	tri(2-ethylhexyl)trimellitate				
	(331–371)	81.1	(346)	ME	[00/11]
$C_{33}H_{54}O_6$	triisooctyltrimellitate				
	(331–372)	79.0	(346)	ME	[00/11]
$C_{33}H_{60}$	heptacosylbenzene				[61828-25-9]
	(484–756)	121.5	(499)		[99/16]
$C_{33}H_{62}O_6$	glycerol tricaprate				[621-71-6]
	(437–485)	124.6	(452)	A	[87/5]
$C_{33}H_{66}$	heptacosylcyclohexane				[61828-12-4]
	(484–757)	120.6	(499)		[99/16]
$C_{33}H_{66}$	1-tritriacontene				[61868-11-9]
	(480–746)	121.8	(495)		[99/16]
$C_{33}H_{68}$	tritriacontane				[630-05-7]
	(438–480)	148±1	(458)	TE	[94/2]
	(517–749)	118.0	(532)	A, EST	[87/5][66/8]
$C_{33}H_{68}$	2-methyldotriacontane				[1720-11-2]
	(480–743)	122.9	(495)		[99/16]
$C_{33}H_{68}S$	1-tritriacontanethiol				[66214-20-8]
	(504–773)	129.1	(519)	EST	[99/16]
$C_{34}H_{62}$	octacosylbenzene				[61828-26-0]
	(490–764)	123.4	(505)		[99/16]
$C_{34}H_{68}$	octacosylcyclohexane				[61828-13-5]
	(490–764)	122.4	(505)		[99/16]
$C_{34}H_{68}$	1-tetratriacontene				[61868-12-0]
	(486–754)	123.7	(501)		[99/16]
$C_{34}H_{70}$	11-decyltetracosane				[55429-84-0]
	(537–574)	113.1	(552)	A, MG	[87/5][55/11]
$C_{34}H_{70}$	9-octylhexacosane				[55429-83-9]
	(537–575)	110.3	(552)	A, MG	[87/5][55/11]
$C_{34}H_{70}$	tetratriacontane				[14167-59-0]
	(446–497)	152±2	(471)	TE	[94/2]
	(372–402)	149.7	(387)	A	[87/5]
	(523–756)	120.3	(538)	A, EST	[87/5][66/8]
$C_{34}H_{70}$	2-methyltritriacontane				[66214-27-5]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(486–750)	124.8	(501)		[99/16]
$C_{34}H_{70}S$	1-tetratriacontanethiol				[66214-28-6]
	(509–780)	130.7	(524)	EST	[99/16]
$C_{35}H_{64}$	15-phenylnonacosane				[56247-97-3]
	(523–550)	126.5	(536)	A, MG	[87/5][55/11]
$C_{35}H_{64}$	nonacosylbenzene				[61828-27-1]
	(495–771)	125.4	(510)		[99/16]
$C_{35}H_{70}$	nonacosylcyclohexane				[61828-14-6]
	(495–771)	124.4	(510)		[99/16]
$C_{35}H_{70}$	1-pentatriacontene				[61868-13-1]
	(492–761)	125.5	(507)		[99/16]
$C_{35}H_{70}$	15-cyclohexylnonacosane				[55521-27-2]
	(548–581)	129.0	(563)	A, MG	[87/5][55/11]
$C_{35}H_{72}$	pentatriacontane				[630-07-9]
	(529–764)	122.4	(544)	A, EST	[87/5][66/8]
$C_{35}H_{72}$	2-methyltetratriacontane				[14167-65-8]
	(491–758)	126.9	(506)		[99/16]
$C_{35}H_{72}S$	1-pentatriacontanethiol				[66576-86-1]
	(514–787)	132.2	(529)	EST	[99/16]
$C_{36}H_{60}O_6$	triisononanyltrimellitate				
	(334–372)	102.2	(349)	ME	[00/11]
$C_{36}H_{62}O_4$	ditetradecyl phthalate				[2915-60-8]
	(416–465)	126.0	(431)	T	[87/5][49/9]
$C_{36}H_{66}$	triacontylbenzene				[50715-02-1]
	(501–778)	127.0	(516)		[99/16]
$C_{36}H_{72}$	1-hexatriacontene				[61868-14-2]
	(497–768)	127.4	(512)		[99/16]
$C_{36}H_{72}$	triacontylcyclohexane				[61828-15-7]
	(500–778)	126.3	(515)		[99/16]
$C_{36}H_{74}$	hexatriacontane				[630-06-8]
	(452–516)	157±2	(484)	TE	[94/2]
	(535–571)	124.4	(550)	A, EST	[87/5][66/8]
$C_{36}H_{74}$	13-undecylpentacosane				[55517-89-0]
	(548–580)	132.9	(563)	A, MG	[87/5][55/11]
$C_{36}H_{74}$	2-methylpentatriacontane				[66576-73-6]
	(497–765)	128.7	(512)		[99/16]
$C_{36}H_{74}S$	1-hexatriacontanethiol				[66577-23-9]
	(518–793)	134.0	(533)	EST	[99/16]
$C_{36}H_{75}N$	tridodecylamine				[102-87-4]
	(579–807)	82.1	(594)	A	[87/5]
$C_{37}H_{68}$	hexatriacontylbenzene				[61828-28-2]
	(506–785)	128.8	(521)		[99/16]
$C_{37}H_{70}O_6$	1-caprylic-2-lauryl-3-myristic glycerol				[30283-10-4]
	(464–526)	131.7	(479)	A, T	[87/5][49/16]
$C_{37}H_{74}$	hentriacontylcyclohexane				[61828-16-8]
	(505–785)	128.1	(520)		[99/16]
$C_{37}H_{74}$	1-heptatriacontene				[61868-15-3]
	(502–775)	129.2	(517)		[99/16]
$C_{37}H_{76}$	heptatriacontane				[7194-84-5]
	(471–511)	155±2	(491)	TE	[94/2]
	(541–778)	126.4	(556)	A, EST	[87/5][66/8]
$C_{37}H_{76}$	2-methylhexatriacontane				[66577-06-8]
	(502–772)	130.5	(517)		[99/16]
$C_{37}H_{76}S$	1-heptatriacontanethiol				[66577-07-9]
	(523–799)	135.3	(538)	EST	[99/16]
$C_{38}H_{70}$	dotriacontylbenzene				[61828-29-3]
	(511–791)	130.4	(526)		[99/16]
$C_{38}H_{74}O_4$	ditetradecyl sebacate				[26719-47-1]
	(431–483)	135.5	(446)	A, T	[87/5][49/9]
$C_{38}H_{76}$	dotriacontylcyclohexane				[61828-17-9]
	(510–792)	129.8	(525)		[99/16]
$C_{38}H_{76}$	1-octatriacontene				[61868-16-4]
	(507–782)	131.0	(522)		[99/16]
$C_{38}H_{78}$	octatriacontane				[7194-85-6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(471–511)	160±2	(491)	TE	[94/2]
	(546–785)	128.5	(561)	A, EST	[87/5][66/8]
$C_{38}H_{78}$	2-methylheptatriacontane				[66576-92-9]
	(507–779)	132.2	(522)		[99/16]
$C_{38}H_{78}S$	1-octatriacontanethiol				[66576-93-0]
	(527–805)	136.7	(542)	EST	[99/16]
$C_{39}H_{72}$	17-phenyltritriacontane				[55517-74-3]
	(544–571)	147.1	(557)	A, MG	[87/5][55/11]
$C_{39}H_{72}$	tritriacontylbenzene				[61828-30-6]
	(516–798)	132.0	(531)		[99/16]
$C_{39}H_{74}O_6$	glycerol trilaurate				[538-24-9]
		221.1		TGA	[02/33]
	(458–520)	137.6	(473)	A, T	[87/5][49/16]
$C_{39}H_{78}$	1-nontriacontene				[61868-17-5]
	(512–788)	132.5	(527)		[99/16]
$C_{39}H_{78}$	triatriacontylcyclohexane				[61828-18-0]
	(515–798)	131.4	(530)		[99/16]
$C_{39}H_{78}$	17-cyclohexyltritricontane				[55517-75-4]
	(570–602)	131.9	(585)	A, MG	[87/5][55/11]
$C_{39}H_{80}$	nonatriacontane				[7194-86-7]
	(552–791)	130.3	(567)	A, EST	[87/5][66/8]
$C_{39}H_{80}$	2-methyloctatriacontane				[66576-59-8]
	(512–785)	133.8	(527)		[99/16]
$C_{39}H_{80}S$	1-nonatriacontanethiol				[66576-60-1]
	(531–811)	138.1	(546)	EST	[99/16]
$C_{40}H_{74}$	tetratriacontylbenzene				[61828-31-7]
	(520–804)	133.8	(535)		[99/16]
$C_{40}H_{80}$	1-tetracontene				[61868-18-6]
	(517–794)	134.0	(532)		[99/16]
$C_{40}H_{80}$	tetratriacontylcyclohexane				[61828-19-1]
	(520–804)	132.9	(535)		[99/16]
$C_{40}H_{82}$	tetracontane				[4181-95-7]
	(557–798)	132.2	(572)	A, EST	[87/5][66/8]
$C_{40}H_{82}$	2-methylnonatricontane				[66576-48-5]
	(517–791)	135.3	(532)		[99/16]
$C_{40}H_{82}S$	1-tetracontanethiol				[66576-49-6]
	(535–817)	139.6	(550)	EST	[99/16]
$C_{41}H_{76}$	pentatriacontylbenzene				[61828-32-8]
	(525–810)	135.2	(540)		[99/16]
$C_{41}H_{82}$	1-hentetracontene				[66576-37-2]
	(521–800)	135.8	(536)		[99/16]
$C_{41}H_{82}$	pentatriacontylcyclohexane				[61828-20-4]
	(524–810)	134.5	(539)		[99/16]
$C_{41}H_{84}$	hentetracontane				[7194-87-8]
	(562–804)	134.1	(577)	A, EST	[87/5][66/8]
$C_{41}H_{84}$	2-methyltetracontane				[66575-38-3]
	(521–797)	137.1	(536)		[99/16]
$C_{41}H_{84}S$	1-hentetracontanethiol				[66576-39-4]
	(539–822)	140.8	(554)	EST	[99/16]
$C_{42}H_{78}$	hexatriacontylbenzene				[61828-33-9]
	(529–815)	129.0	(544)		[99/16]
$C_{42}H_{84}$	1-dotetracontene				[21807-60-3]
	(526–806)	137.1	(541)		[99/16]
$C_{42}H_{84}$	hexatriactonylcyclohexane				[61828-21-5]
	(529–816)	135.8	(544)		[99/16]
$C_{42}H_{86}$	dotetracontane				[7098-20-6]
	(567–810)	136.0	(582)	A, EST	[87/5][66/8]
$C_{42}H_{86}$	2-methylhentetracontane				[66576-40-7]
	(526–803)	138.5	(541)		[99/16]
$C_{42}H_{86}$	2,2,4,15,17,17-hexamethyl-7,12-*bis*(3,5,5-trimethylhexyl)octadecane				[55470-97-8]
	(512–575)	118.3	(527)	A, MG	[87/5][55/11]
$C_{42}H_{86}S$	1-dotetracontanethiol				[66576-41-8]
	(543–828)	142.1	(558)	EST	[99/16]
$C_{42}H_{87}N$	tritetradecylamine				[27911-72-4]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(609–848)	86.6	(624)	A	[87/5]
$C_{43}H_{80}$	heptatriacontylbenzene				[66576-74-7]
	(533–821)	138.3	(548)		[99/16]
$C_{43}H_{86}$	heptatriacontylcyclohexane				[66576-75-8]
	(533–821)	137.4	(548)		[99/16]
$C_{43}H_{86}$	1-tritetracontene				[66576-76-9]
	(530–812)	138.7	(545)		[99/16]
$C_{43}H_{88}$	tritetracontane				[66576-76-9]
	(572–820)	137.7	(587)	A, EST	[87/5][66/8]
$C_{43}H_{88}$	2-methyldotetracontane				[66576-77-0]
	(530–809)	140.0	(545)		[99/16]
$C_{43}H_{88}S$	1-tritetracontanethiol				[66576-78-1]
	(547–833)	143.2	(562)	EST	[99/16]
$C_{44}H_{82}$	octatriacontylbenzene				[66576-79-2]
	(537–826)	139.7	(552)		[99/16]
$C_{44}H_{88}$	octatriacontylcyclohexane				[66576-80-5]
	(537–827)	138.7	(552)		[99/16]
$C_{44}H_{88}$	1-tetratetracontene				[66576-81-6]
	(534–818)	140.1	(549)		[99/16]
$C_{44}H_{90}$	tetratetracontane				[7098-22-8]
	(577–821)	139.3	(592)	A, EST	[87/5][66/8]
$C_{44}H_{90}$	2-methyltritetracontane				[66576-82-7]
	(534–815)	141.5	(549)		[99/16]
$C_{44}H_{90}S$	1-tetratetracontanethiol				[66576-83-8]
	(551–838)	144.1	(566)	EST	[99/16]
$C_{45}H_{84}$	nontriacontylbenzene				[66576-61-2]
	(541–832)	141.0	(556)		[99/16]
$C_{45}H_{86}O_6$	(*dl*) 1-lauric-2-myristic-3-plamitic glycerol				[60138-25-2]
	(491–551)	147.8	(506)	A, T	[87/5][49/16]
$C_{45}H_{86}O_6$	(*dl*) 1-myristic-2-capric-3-stearic glycerol				
	(490–551)	148.4	(505)	A, T	[87/5][49/16]
$C_{45}H_{86}O_6$	glycerol trimyristate				[555-45-3]
		199.1		TGA	[02/33]
	(488–551)	147.8	(503)	A, T	[87/5][49/16]
$C_{45}H_{90}$	nonatriacontylcyclohexane				[66576-62-3]
	(541–832)	140.1	(556)		[99/16]
$C_{45}H_{90}$	1-pentatetracontene				[66576-63-4]
	(538–823)	141.5	(553)		[99/16]
$C_{45}H_{92}$	pentatetracontane				[7098-23-9]
	(582–827)	141.0	(597)	A, EST	[87/5][66/8]
$C_{45}H_{92}$	2-methyltetratetracontane				[66576-64-5]
	(538–820)	142.9	(553)		[99/16]
$C_{45}H_{92}S$	1-pentatetracontanethiol				[66576-65-6]
	(554–843)	145.6	(569)	EST	[99/16]
$C_{46}H_{86}$	tetracontylbenzene				[66576-67-8]
	(545–837)	142.3	(560)		[99/16]
$C_{46}H_{92}$	1-hexatetracontene				[66576-68-9]
	(542–828)	142.8	(557)		[99/16]
$C_{46}H_{92}$	tetracontylcyclohexane				[66576-69-0]
	(545–837)	141.3	(560)		[99/16]
$C_{46}H_{94}$	hexatetracontane				[7098-24-0]
	(586–832)	142.8	(601)	A, EST	[87/5][66/8]
$C_{46}H_{94}$	2-methylpentatetracontane				[66564-10-1]
	(542–826)	144.2	(557)		[99/16]
$C_{46}H_{94}S$	1-hexatetracontanethiol				[66564-11-2]
	(557–847)	146.7	(572)	EST	[99/16]
$C_{47}H_{88}$	hentetracontylbenzene				[66564-12-3]
	(549–842)	143.5	(564)		[99/16]
$C_{47}H_{90}O_6$	(*dl*) 1-myristic-2-lauric-3-stearic glycerol				
	(493–558)	150.5	(508)	A, T	[87/5][49/16]
$C_{47}H_{90}O_6$	(*dl*) 1-palmitic-2-capric-3-stearic glycerol				
	(507–559)	154.8	(522)	A, T	[87/5][49/16]
$C_{47}H_{94}$	hentetracontylcyclohexane				[66564-13-4]
	(548–842)	142.8	(563)		[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{47}H_{94}$	1-heptatetracontene				[66576-01-0]
	(546–833)	143.9	(561)		[99/16]
$C_{47}H_{96}$	heptatetracontane				[7098-25-1]
	(591–837)	144.2	(606)	A, EST	[87/5][66/8]
$C_{47}H_{96}$	2-methylhexatetracontane				[66576-02-1]
	(546–831)	145.3	(561)		[99/16]
$C_{47}H_{96}S$	1-heptatetracontanethiol				[66576-03-2]
	(561–852)	147.6	(576)	EST	[99/16]
$C_{48}H_{90}$	dotetracontylbenzene				[66576-04-3]
	(552–846)	144.9	(567)		[99/16]
$C_{48}H_{96}$	dotetracontylcyclohexane				[66576-05-4]
	(552–847)	143.9	(567)		[99/16]
$C_{48}H_{96}$	1-octatetracontene				[66576-06-5]
	(549–838)	145.4	(564)		[99/16]
$C_{48}H_{98}$	octatetracontane				[7098-26-2]
	(595–843)	145.9	(610)	A, EST	[87/5][66/8]
$C_{48}H_{98}$	2-methylheptatetracontane				[66576-07-6]
	(550–836)	146.5	(565)		[99/16]
$C_{48}H_{98}S$	1-octatetracontanethiol				[66576-08-7]
	(564–856)	148.7	(579)	EST	[99/16]
$C_{49}H_{92}$	tritetracontylbenzene				[66576-09-8]
	(556–851)	145.9	(571)		[99/16]
$C_{49}H_{94}O_6$	(*dl*) 1-palmitic-2-lauryl-3-stearic glycerol				
	(506–567)	160.0	(521)	A, T	[87/5][49/16]
$C_{49}H_{98}$	1-nonatetracontene				[66576-19-1]
	(553–843)	146.4	(568)		[99/16]
$C_{49}H_{98}$	tritetracontylcyclohexane				[66576-11-2]
	(556–852)	144.9	(571)		[99/16]
$C_{49}H_{100}$	nonatetracontane				[7098-27-3]
	(599–847)	147.5	(614)	A, EST	[87/5][66/8]
$C_{49}H_{100}$	2-methyloctatetracontane				[66576-12-3]
	(553–840)	147.9	(568)		[99/16]
$C_{49}H_{100}S$	1-nonatetracontanethiol				[66576-13-4]
	(567–861)	149.7	(582)	EST	[99/16]
$C_{50}H_{94}$	tetratetracontylbenzene				[66576-14-5]
	(559–856)	147.1	(574)		[99/16]
$C_{50}H_{100}$	1-pentacontene				[63911-02-4]
	(556–848)	147.8	(571)		[99/16]
$C_{50}H_{100}$	tetratetracontylcyclohexane				[66576-15-6]
	(559–856)	146.2	(574)		[99/16]
$C_{50}H_{102}$	pentacontane				[6596-40-3]
	(603–852)	149.0	(618)	A, EST	[87/5][66/8]
$C_{50}H_{102}$	2-methylnonatetracontane				[66576-16-7]
	(557–845)	148.8	(572)		[99/16]
$C_{50}H_{102}S$	1-pentacontanethiol				[66576-17-8]
	(570–865)	150.7	(585)	EST	[99/16]
$C_{51}H_{96}$	pentatetracontylbenzene				[66576-18-9]
	(562–860)	148.3	(577)		[99/16]
$C_{51}H_{98}O_6$	1-myristic-2-palmitic-3-stearic glycerol				[60138-20-7]
	(508–572)	157.9	(523)	A, T	[87/5][49/16]
$C_{51}H_{98}O_6$	glycerol tripalmitate				[555-44-2]
		474.3		TGA	[02/33]
	(506–572)	160.8	(521)	A, T	[87/5][49/16]
$C_{51}H_{102}$	1-henpentacontene				[66576-19-0]
	(560–852)	148.6	(575)		[99/16]
$C_{51}H_{102}$	pentatetracontylcyclohexane				[66576-20-3]
	(562–861)	147.4	(577)		[99/16]
$C_{51}H_{104}$	henpentacontane				[7667-76-7]
	(607–857)	150.6	(622)	A, EST	[87/5][66/8]
$C_{51}H_{104}$	2-methylpentacontane				[66575-81-3]
	(560–850)	150.0	(575)		[99/16]
$C_{51}H_{104}S$	1-henpentacontanethiol				[66575-82-4]
	(573–869)	151.6	(588)	EST	[99/16]
$C_{52}H_{98}$	hexatetracontylbenzene				[66575-84-6]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(566–864)	149.1	(581)		[99/16]
$C_{52}H_{104}$	1-dopentacontene				[66575-85-7]
	(563–857)	149.8	(578)		[99/16]
$C_{52}H_{104}$	hexatetracontylcyclohexane				[66575-86-8]
	(565–865)	148.5	(580)		[99/16]
$C_{52}H_{106}$	dopentacontane				[7719-79-1]
	(611–861)	152.0	(626)	A, EST	[87/5][66/8]
$C_{52}H_{106}$	2-methylhenpentacontane				[66575-87-9]
	(563–854)	151.2	(578)		[99/16]
$C_{52}H_{106}S$	1-dopentacontanethiol				[66575-88-0]
	(575–873)	152.6	(590)	EST	[99/16]
$C_{53}H_{100}$	heptatetracontylbenzene				[66575-89-1]
	(569–868)	150.1	(584)		[99/16]
$C_{53}H_{106}$	heptatetracontylcyclohexane				[66563-49-3]
	(568–869)	149.6	(583)		[99/16]
$C_{53}H_{106}$	1-tripentacontene				[66577-50-2]
	(566–861)	150.9	(581)		[99/16]
$C_{53}H_{108}$	tripentacontane				[7719-80-4]
	(615–866)	153.4	(630)	A, EST	[87/5][66/8]
$C_{53}H_{108}$	2-methyldopentacontane				[66575-90-4]
	(566–858)	152.3	(581)		[99/16]
$C_{53}H_{108}S$	1-tripentacontanethiol				[66575-91-5]
	(578–877)	153.7	(593)	EST	[99/16]
$C_{54}H_{102}$	octatetracontylbenzene				[66575-92-6]
	(572–873)	151.1	(587)		[99/16]
$C_{54}H_{108}$	octatetracontylcyclohexane				[66575-93-7]
	(571–873)	150.6	(586)		[99/16]
$C_{54}H_{110}$	1-tetrapentacontene				[66575-94-8]
	(569–865)	151.9	(584)		[99/16]
$C_{54}H_{110}$	tetrapentacontane				[5856-66-6]
	(618–870)	155.0	(633)	A, EST	[87/5][66/8]
$C_{54}H_{110}$	2-methyltripentacontane				[66575-95-9]
	(569–863)	153.4	(584)		[99/16]
$C_{54}H_{110}S$	1-tetrapentacontanethiol				[66575-96-0]
	(581–881)	154.4	(596)	EST	[99/16]
$C_{55}H_{104}$	nontetracontylbenzene				[66575-98-2]
	(575–877)	152.1	(590)		[99/16]
$C_{55}H_{110}$	nonatetracontylcyclohexane				[66575-99-3]
	(574–877)	151.6	(589)		[99/16]
$C_{55}H_{110}$	1-pentapentacontene				[66576-00-9]
	(572–869)	152.9	(587)		[99/16]
$C_{55}H_{112}$	pentapentacontane				[5846-40-2]
	(622–874)	156.3	(637)	A, EST	[87/5][66/8]
$C_{55}H_{112}$	2-methyltetrapentacontane				[66575-60-8]
	(572–867)	154.3	(587)		[99/16]
$C_{55}H_{112}S$	1-pentapentacontanethiol				[66575-61-9]
	(584–885)	155.0	(599)	EST	[99/16]
$C_{56}H_{106}$	pentacontylbenzene				[66575-62-0]
	(577–880)	153.2	(592)		[99/16]
$C_{56}H_{108}$	1-hexapentacontene				[66575-63-1]
	(575–873)	154.5	(588)		[99/16]
$C_{56}H_{108}$	pentacontylcyclohexane				[66575-64-2]
	(577–881)	152.4	(592)		[99/16]
$C_{56}H_{114}$	hexapentacontane				[7719-82-6]
	(625–878)	157.8	(640)	A, EST	[87/5][66/8]
$C_{56}H_{114}$	2-methylpentapentacontane				[66575-65-3]
	(575–871)	155.9	(588)		[99/16]
$C_{56}H_{114}S$	1-hexapentacontanethiol				[66575-66-4]
	(586–888)	156.0	(601)	EST	[99/16]
$C_{57}H_{108}$	henpentacontylbenzene				[66575-67-5]
	(580–884)	154.1	(595)		[99/16]
$C_{57}H_{108}O_6$	1,3-distearic-2-oleic glycerol				[2846-04-0]
	(523–593)	165.8	(538)	A, T	[87/5][49/16]
$C_{57}H_{108}O_6$	glycerol tristearate				[555-43-1]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		220.8		TGA	[02/33]
	(521–588)	167.5	(536)	A, T	[87/5][49/16]
$C_{57}H_{114}$	henpentacontylcyclohexane				[66575-68-6]
	(580–885)	153.3	(595)		[99/16]
$C_{57}H_{114}$	1-heptapentacontene				[66575-69-7]
	(578–877)	154.6	(593)		[99/16]
$C_{57}H_{116}$	heptapentacontane				[5856-67-7]
	(629–882)	158.9	(644)	A, EST	[87/5][66/8]
$C_{57}H_{116}$	2-methylhexapentacontane				[66575-70-0]
	(578–875)	155.9	(593)		[99/16]
$C_{57}H_{116}S$	1-heptapentacontanethiol				[66575-75-1]
	(589–892)	156.7	(604)	EST	[99/16]
$C_{58}H_{110}$	dopentacontylbenzene				[66575-73-3]
	(583–888)	155.7	(598)		[99/16]
$C_{58}H_{116}$	dopentacontylcyclohexane				[66575-74-4]
	(582–888)	154.3	(597)		[99/16]
$C_{58}H_{116}$	1-octapentacontene				[66575-75-5]
	(580–881)	155.8	(595)		[99/16]
$C_{58}H_{118}$	octapentacontane				[7667-78-9]
	(632–886)	160.3	(647)	A, EST	[87/5][66/8]
$C_{58}H_{118}$	2-methylheptapentacontane				[66575-76-6]
	(581–879)	156.8	(596)		[99/16]
$C_{58}H_{118}S$	1-octapentacontanethiol				[66575-77-7]
	(591–895)	157.4	(606)	EST	[99/16]
$C_{59}H_{112}$	tripentacontylbenzene				[66575-78-8]
	(585–891)	155.9	(600)		[99/16]
$C_{59}H_{118}$	tripentacontylcyclohexane				[66575-80-2]
	(585–892)	155.0	(600)		[99/16]
$C_{59}H_{118}$	1-nonapentacontene				[66575-79-9]
	(583–885)	156.4	(598)		[99/16]
$C_{59}H_{120}$	nonapentacontane				[7667-70-0]
	(635–890)	161.8	(650)	A, EST	[87/5][66/8]
$C_{59}H_{120}$	2-methyloctapentacontane				[66575-49-3]
	(583–882)	157.9	(598)		[99/16]
$C_{59}H_{120}S$	1-nonapentacontanethiol				[66575-50-6]
	(593–899)	158.3	(608)	EST	[99/16]
$C_{60}H_{114}$	tetrapentacontylbenzene				[66575-51-7]
	(588–895)	156.6	(603)		[99/16]
$C_{60}H_{120}$	1-hexacontene				[66575-52-8]
	(586–888)	157.1	(601)		[99/16]
$C_{60}H_{120}$	tetrapentacontylcyclohexane				[66575-53-9]
	(587–895)	156.0	(602)		[99/16]
$C_{60}H_{122}$	hexacontane				[7667-80-3]
	(638–893)	163.0	(653)	A, EST	[87/5][66/8]
$C_{60}H_{122}$	2-methylnonapentacontane				[66575-54-0]
	(586–886)	158.5	(601)		[99/16]
$C_{60}H_{122}S$	1-hexacontanethiol				[66575-55-1]
	(595–902)	159.1	(610)	EST	[99/16]
$C_{61}H_{116}$	pentapentacontylbenzene				[66563-50-6]
	(590–898)	157.5	(605)		[99/16]
$C_{61}H_{122}$	1-henhexacontene				[66563-51-7]
	(588–891)	158.0	(603)		[99/16]
$C_{61}H_{122}$	pentapentacontylcyclohexane				[66563-52-8]
	(590–899)	156.6	(605)		[99/16]
$C_{61}H_{124}$	henhexacontane				[7667-81-4]
	(642–897)	163.9	(657)	A, EST	[87/5][66/8]
$C_{61}H_{124}$	2-methylhexacontane				[66563-53-9]
	(588–889)	159.4	(603)		[99/16]
$C_{61}H_{124}S$	1-henhexacontanethiol				[66563-54-0]
	(597–905)	159.6	(612)	EST	[99/16]
$C_{62}H_{118}$	hexapentacontylbenzene				[66563-55-1]
	(592–902)	158.4	(607)		[99/16]
$C_{62}H_{124}$	1-dohexacontene				[66563-56-2]
	(590–895)	158.6	(605)		[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{62}H_{126}$	hexapentacontylcyclohexane				[66563-57-3]
	(592–902)	157.5	(607)		[99/16]
$C_{62}H_{126}$	dohexacontane				[7719-83-7]
	(645–901)	165.2	(660)	A, EST	[87/5][66/8]
$C_{62}H_{126}$	2-methylhenhexacontane				[66563-58-4]
	(590–892)	160.1	(605)		[99/16]
$C_{62}H_{122}S$	1-dohexacontanethiol				[66563-59-5]
	(599–908)	160.1	(614)	EST	[99/16]
$C_{63}H_{120}$	heptapentacontylbenzene				[66563-60-8]
	(595–905)	158.9	(610)		[99/16]
$C_{63}H_{126}$	heptapentacontylcyclohexane				[66563-61-9]
	(594–905)	158.2	(609)		[99/16]
$C_{63}H_{126}$	1-trihexacontene				[66563-62-0]
	(593–899)	159.8	(608)		[99/16]
$C_{63}H_{128}$	trihexacontane				[7719-84-8]
	(647–904)	116.7	(662)	A, EST	[87/5][66/8]
$C_{63}H_{128}$	2-methyldohexacontane				[66563-63-1]
	(593–897)	161.3	(608)		[99/16]
$C_{63}H_{128}S$	1-trihexacontanethiol				[66563-64-2]
	(602–911)	161.1	(617)	EST	[99/16]
$C_{64}H_{122}$	octapentacontylbenzene				[66563-65-3]
	(597–908)	159.5	(612)		[99/16]
$C_{64}H_{128}$	octapentacontylcyclohexane				[66563-66-4]
	(596–908)	158.8	(611)		[99/16]
$C_{64}H_{128}$	1-tetrahexacontene				[66563-36-8]
	(595–902)	160.5	(610)		[99/16]
$C_{64}H_{130}$	tetrahexacontane				[7719-87-1]
	(650–907)	168.3	(665)	A, EST	[87/5][66/8]
$C_{64}H_{130}$	2-methyltrihexacontane				[66563-37-9]
	(595–900)	161.9	(610)		[99/16]
$C_{64}H_{130}S$	1-tetrahexacontanethiol				[66563-38-0]
	(604–914)	161.6	(619)	EST	[99/16]
$C_{65}H_{124}$	nonapentacontylbenzene				[66563-39-1]
	(599–911)	160.1	(614)		[99/16]
$C_{65}H_{130}$	nonapentacontylcyclohexane				[66563-40-4]
	(599–912)	159.9	(614)		[99/16]
$C_{65}H_{130}$	1-pentahexacontene				[66563-41-5]
	(597–905)	161.1	(612)		[99/16]
$C_{65}H_{132}$	pentahexacontane				[7719-88-2]
	(653–910)	169.0	(668)	A, EST	[87/5][66/8]
$C_{65}H_{132}$	2-methyltetrahexacontane				[66563-42-6]
	(597–903)	162.5	(612)		[99/16]
$C_{65}H_{132}S$	1-pentahexacontanethiol				[66563-43-7]
	(606–917)	162.1	(621)	EST	[99/16]
$C_{66}H_{126}$	hexacontylbenzene				[66563-44-8]
	(602–914)	161.2	(617)		[99/16]
$C_{66}H_{132}$	hexacontylcyclohexane				[66563-45-9]
	(601–915)	160.5	(616)		[99/16]
$C_{66}H_{132}$	1-hexahexacontene				[66563-46-0]
	(599–908)	161.7	(614)		[99/16]
$C_{66}H_{134}$	hexahexacontane				[7719-89-3]
	(656–914)	170.0	(671)	A, EST	[87/5][66/8]
$C_{66}H_{134}$	2-methylpentahexacontane				[66563-47-1]
	(599–906)	163.1	(614)		[99/16]
$C_{66}H_{134}S$	1-hexahexacontanethiol				[66563-48-2]
	(607–920)	162.8	(622)	EST	[99/16]
$C_{67}H_{128}$	henhexacontylbenzene				[66563-72-2]
	(603–917)	162.1	(618)		[99/16]
$C_{67}H_{134}$	henhexacontylcyclohexane				[66563-73-3]
	(603–917)	160.9	(618)		[99/16]
$C_{67}H_{134}$	1-heptahexacontene				[66563-74-4]
	(601–911)	162.3	(616)		[99/16]
$C_{67}H_{136}$	heptahexacontane				[7719-90-6]
	(659–937)	170.9	(674)	A, EST	[87/5][66/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{67}H_{136}$	2-methylhexahexacontane				[66563-75-5]
	(601–909)	163.7	(616)		[99/16]
$C_{67}H_{136}S$	1-heptahexacontanethiol				[66563-76-6]
	(609–922)	163.2	(624)	EST	[99/16]
$C_{68}H_{130}$	dohexacontylbenzene				[66563-75-5]
	(605–920)	162.6	(620)		[99/16]
$C_{68}H_{136}$	dohexacontylcyclohexane				[66563-78-8]
	(605–920)	161.5	(620)		[99/16]
$C_{68}H_{136}$	1-octahexacontene				[66563-79-9]
	(603–913)	162.8	(618)		[99/16]
$C_{68}H_{138}$	octahexacontane				[7719-91-7]
	(661–920)	172.3	(676)	A, EST	[87/5][66/8]
$C_{68}H_{138}$	2-methylheptahexacontane				[66563-80-2]
	(603–912)	164.3	(618)		[99/16]
$C_{68}H_{138}S$	1-octahexacontanethiol				[66563-81-3]
	(611–925)	163.6	(626)	EST	[99/16]
$C_{69}H_{132}$	trihexacontylbenzene				[66563-82-4]
	(607–923)	163.1	(622)		[99/16]
$C_{69}H_{138}$	1-nonhexacontene				[66563-83-5]
	(605–916)	163.4	(620)		[99/16]
$C_{69}H_{138}$	trihexacontylcyclohexane				[66563-93-7]
	(607–923)	162.0	(622)		[99/16]
$C_{69}H_{140}$	nonahexacontane				[7719-92-8]
	(664–923)	173.2	(679)	A, EST	[87/5][66/8]
$C_{69}H_{140}$	2-methyloctahexacontane				[66563-94-8]
	(605–914)	164.9	(620)		[99/16]
$C_{69}H_{140}S$	1-nonahexacontanethiol				[66577-83-1]
	(612–928)	164.4	(627)	EST	[99/16]
$C_{70}H_{134}$	tetrahexacontylbenzene				[66577-84-2]
	(609–925)	163.6	(624)		[99/16]
$C_{70}H_{140}$	1-heptacontene				[66577-85-3]
	(607–919)	163.9	(622)		[99/16]
$C_{70}H_{140}$	tetrahexacontylcyclohexane				[66577-86-4]
	(608–926)	162.8	(623)		[99/16]
$C_{70}H_{142}$	heptacontane				[7719-93-9]
	(666–926)	174.4	(681)	A, EST	[87/5][66/8]
$C_{70}H_{142}$	2-methylnonahexacontane				[66577-87-5]
	(607–917)	165.4	(622)		[99/16]
$C_{70}H_{142}S$	1-heptacontanethiol				[66577-88-6]
	(614–930)	164.8	(621)	EST	[99/16]
$C_{71}H_{136}$	pentahexacontylbenzene				[66577-89-7]
	(611–928)	164.4	(626)		[99/16]
$C_{71}H_{142}$	1-henheptacontene				[66577-90-0]
	(609–922)	164.4	(624)		[99/16]
$C_{71}H_{142}$	pentahexacontylcyclohexane				[66577-91-1]
	(610–928)	163.3	(625)		[99/16]
$C_{71}H_{144}$	henheptacontane				[7667-82-5]
	(669–928)	175.2	(684)	A, EST	[87/5][66/8]
$C_{71}H_{144}$	2-methylheptacontane				[66577-92-2]
	(609–920)	165.9	(624)		[99/16]
$C_{71}H_{144}S$	1-henheptacontanethiol				[66577-93-3]
	(616–933)	165.1	(631)	EST	[99/16]
$C_{72}H_{138}$	hexahexacontylbenzene				[66577-94-4]
	(613–931)	164.5	(628)		[99/16]
$C_{72}H_{144}$	1-doheptacontene				[66577-95-5]
	(610–924)	165.3	(625)		[99/16]
$C_{72}H_{144}$	hexahexacontylcyclohexane				[66577-96-6]
	(612–931)	163.8	(627)		[99/16]
$C_{72}H_{146}$	doheptacontane				[7668-83-6]
	(671–931)	176.4	(686)	A, EST	[87/5][66/8]
$C_{72}H_{146}$	2-methylhenheptacontane				[66577-97-7]
	(611–923)	166.4	(626)		[99/16]
$C_{72}H_{146}S$	1-doheptacontanethiol				[66577-98-8]
	(617–935)	165.8	(632)	EST	[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{73}H_{140}$	heptahexacontylbenzene				[66577-99-9]
	(614–933)	165.4	(629)		[99/16]
$C_{73}H_{146}$	heptahexacontylcyclohexane				[66578-00-5]
	(614–933)	164.2	(629)		[99/16]
$C_{73}H_{146}$	1-triheptacontene				[66578-01-6]
	(612–927)	165.7	(627)		[99/16]
$C_{73}H_{148}$	triheptacontane				[7667-84-7]
	(674–934)	177.1	(689)	A, EST	[87/5][66/8]
$C_{73}H_{148}$	2-methyldoheptacontane				[66578-02-7]
	(613–926)	166.9	(628)		[99/16]
$C_{73}H_{148}S$	1-triheptacontanethiol				[66577-64-8]
	(619–938)	166.2	(634)	EST	[99/16]
$C_{74}H_{142}$	octahexacontylbenzene				[66577-65-9]
	(616–936)	165.8	(631)		[99/16]
$C_{74}H_{148}$	octahexacontylcyclohexane				[66577-66-0]
	(615–936)	165.0	(630)		[99/16]
$C_{74}H_{148}$	1-tetraheptacontene				[66577-67-1]
	(614–930)	166.2	(629)		[99/16]
$C_{74}H_{150}$	tetraheptacontane				[7667-85-8]
	(676–936)	178.2	(691)	A, EST	[87/5][66/8]
$C_{74}H_{150}$	2-methyltriheptacontane				[66577-68-2]
	(615–928)	167.4	(630)		[99/16]
$C_{74}H_{150}S$	1-tetraheptacontanethiol				[66577-69-3]
	(620–940)	166.9	(635)	EST	[99/16]
$C_{75}H_{144}$	nonahexacontylbenzene				[66577-70-6]
	(618–938)	166.3	(633)		[99/16]
$C_{75}H_{150}$	nonahexacontylcyclohexane				[66577-71-7]
	(617–632)	165.4	(632)		[99/16]
$C_{75}H_{150}$	1-pentaheptacontene				[66577-72-8]
	(616–932)	166.7	(631)		[99/16]
$C_{75}H_{152}$	pentaheptacontane				[7667-86-9]
	(678–939)	179.4	(693)	A, EST	[87/5][66/8]
$C_{75}H_{152}$	2-methyltetraheptacontane				[66577-73-9]
	(616–931)	168.2	(631)		[99/16]
$C_{75}H_{152}S$	1-pentaheptacontanethiol				[66577-74-0]
	(622–942)	167.2	(637)	EST	[99/16]
$C_{76}H_{146}$	heptacontylbenzene				[66577-75-1]
	(619–941)	167.0	(634)		[99/16]
$C_{76}H_{152}$	heptacontylcyclohexane				[66577-76-2]
	(619–941)	165.8	(634)		[99/16]
$C_{76}H_{152}$	1-hexaheptacontene				[66577-77-3]
	(617–935)	167.5	(632)		[99/16]
$C_{76}H_{154}$	hexaheptacontane				[7667-87-0]
	(680–941)	180.4	(695)	A, EST	[87/5][66/8]
$C_{76}H_{154}$	2-methylpentaheptacontane				[66577-78-4]
	(618–933)	168.7	(633)		[99/16]
$C_{76}H_{154}S$	1-hexaheptacontanethiol				[66577-79-5]
	(623–945)	169.8	(638)	EST	[99/16]
$C_{77}H_{148}$	henheptacontylbenzene				[66577-80-8]
	(621–943)	167.4	(636)		[99/16]
$C_{77}H_{154}$	henheptacontylcyclohexane				[66577-81-9]
	(620–943)	166.6	(635)		[99/16]
$C_{77}H_{154}$	1-heptaheptacontene				[66577-82-0]
	(619–937)	167.9	(634)		[99/16]
$C_{77}H_{156}$	heptaheptacontane				[7719-94-0]
	(682–944)	181.4	(697)	A, EST	[87/5][66/8]
$C_{77}H_{156}$	2-methylhexaheptacontane				[66575-56-2]
	(620–936)	169.1	(635)		[99/16]
$C_{77}H_{156}S$	1-heptaheptacontanethiol				[66575-57-3]
	(625–947)	168.2	(640)	EST	[99/16]
$C_{78}H_{150}$	doheptacontylbenzene				[66327-30-8]
	(622–945)	167.3	(637)		[99/16]
$C_{78}H_{156}$	doheptacontylcyclohexane				[66327-31-9]
	(622–945)	166.9	(637)		[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{78}H_{156}$	1-octaheptacontene				[66327-32-0]
	(621–940)	168.3	(636)		[99/16]
$C_{78}H_{158}$	octaheptacontane				[7719-85-9]
	(685–946)	181.8	(700)	A, EST	[87/5][66/8]
$C_{78}H_{158}$	2-methylheptaheptacontane				[66327-33-1]
	(621–939)	169.9	(636)		[99/16]
$C_{78}H_{158}S$	1-octaheptacontanethiol				[66375-13-1]
	(626–949)	168.8	(641)	EST	[99/16]
$C_{79}H_{152}$	triheptacontylbenzene				[66327-34-2]
	(623–947)	168.0	(638)		[99/16]
$C_{79}H_{158}$	1-nonaheptacontene				[66327-35-3]
	(622–942)	169.1	(637)		[99/16]
$C_{79}H_{158}$	triheptacontylcyclohexane				[66327-36-4]
	(623–948)	167.7	(638)		[99/16]
$C_{79}H_{160}$	nonaheptacontane				[7719-86-0]
	(687–949)	182.7	(702)	A, EST	[87/5][66/8]
$C_{79}H_{160}$	2-methyloctaheptacontane				[66327-37-5]
	(622–940)	167.8	(637)		[99/16]
$C_{79}H_{160}S$	1-nonaheptacontanethiol				[66327-38-6]
	(628–952)	169.1	(643)	EST	[99/16]
$C_{80}H_{154}$	tetraheptacontylbenzene				[66327-39-7]
	(625–949)	168.4	(640)		[99/16]
$C_{80}H_{160}$	1-octacontene				[66327-40-0]
	(624–945)	169.4	(639)		[99/16]
$C_{80}H_{160}$	tetraheptacontylcyclohexane				[66327-41-1]
	(625–950)	168.0	(640)		[99/16]
$C_{80}H_{162}$	octacontane				[7667-88-1]
	(689–951)	183.6	(704)	A, EST	[87/5][66/8]
$C_{80}H_{162}$	2-methylnonaheptacontane				[66327-42-2]
	(624–943)	170.2	(639)		[99/16]
$C_{80}H_{162}S$	1-octacontanethiol				[66327-43-3]
	(629–954)	169.6	(644)	EST	[99/16]
$C_{81}H_{156}$	pentaheptacontylbenzene				[66327-44-4]
	(636–952)	169.1	(641)		[99/16]
$C_{81}H_{162}$	1-henoctacontene				[66327-45-5]
	(625–946)	169.3	(640)		[99/16]
$C_{81}H_{162}$	pentaheptacontylcyclohexane				[66327-46-6]
	(627–952)	168.4	(642)		[99/16]
$C_{81}H_{164}$	henoctacontane				[7667-89-2]
	(691–953)	184.5	(706)	A, EST	[87/5][66/8]
$C_{81}H_{164}$	2-methyloctancontane				[66327-47-7]
	(625–945)	170.9	(640)		[99/16]
$C_{81}H_{164}S$	1-henoctacontanethiol				[66327-48-8]
	(630–955)	169.4	(645)	EST	[99/16]
$C_{82}H_{158}$	hexaheptacontylbenzene				[66327-49-9]
	(628–954)	169.4	(643)		[99/16]
$C_{82}H_{164}$	1-dooctacontene				[66327-50-2]
	(626–949)	157.6	(641)		[99/16]
$C_{82}H_{164}$	hexaheptacontylcyclohexane				[66327-09-1]
	(627–954)	168.5	(642)		[99/16]
$C_{82}H_{166}$	dooctacontane				[7719-95-1]
	(693–955)	185.3	(708)	A, EST	[87/5][66/8]
$C_{82}H_{166}$	2-methylhenoctacontane				[66327-10-4]
	(627–947)	171.3	(642)		[99/16]
$C_{82}H_{166}S$	1-dooctacontanethiol				[66327-11-5]
	(631–957)	170.0	(646)	EST	[99/16]
$C_{83}H_{160}$	heptaheptacontylbenzene				[66327-12-6]
	(628–955)	169.6	(643)		[99/16]
$C_{83}H_{166}$	heptaheptaconylcyclohexane				[66327-13-7]
	(629–956)	168.9	(644)		[99/16]
$C_{83}H_{166}$	1-trioctacontene				[66327-14-8]
	(628–951)	170.4	(643)		[99/16]
$C_{83}H_{168}$	trioctacontane				[7667-90-5]
	(694–957)	186.5	(709)	A, EST	[87/5][66/8]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{83}H_{168}$	2-methyldooctacontane				[66327-15-9]
	(628–949)	171.1	(643)		[99/16]
$C_{83}H_{168}S$	1-trioctacontanethiol				[66327-16-0]
	(633–959)	170.2	(648)	EST	[99/16]
$C_{84}H_{162}$	octaheptacontylbenzene				[66327-17-1]
	(630–957)	169.9	(645)		[99/16]
$C_{84}H_{168}$	octaheptacontylcyclohexane				[66327-18-2]
	(630–958)	169.5	(645)		[99/16]
$C_{84}H_{168}$	1-tetraoctacontene				[66327-19-3]
	(629–953)	170.1	(644)		[99/16]
$C_{84}H_{170}$	tetraoctacontane				[7667-91-6]
	(696–960)	187.3	(711)	A, EST	[87/5][66/8]
$C_{84}H_{170}$	2-methyltrioctacontane				[66327-20-6]
	(629–951)	171.8	(644)		[99/16]
$C_{84}H_{170}S$	1-tetraoctacontanethiol				[66327-21-7]
	(634–962)	170.8	(649)	EST	[99/16]
$C_{85}H_{164}$	nonheptacontylbenzene				[66327-22-8]
	(631–960)	170.6	(646)		[99/16]
$C_{85}H_{170}$	nonheptacontylcyclohexane				[66327-23-9]
	(632–960)	169.8	(647)		[99/16]
$C_{85}H_{170}$	1-pentaoctacontene				[66327-24-0]
	(630–955)	170.9	(645)		[99/16]
$C_{85}H_{172}$	pentaoctacontane				[7719-96-2]
	(698–962)	187.9	(713)	A, EST	[87/5][66/8]
$C_{85}H_{172}$	2-methyltetraoctacontane				[66327-25-1]
	(631–953)	172.1	(646)		[99/16]
$C_{85}H_{172}S$	1-pentaoctacontanethiol				[66327-26-2]
	(634–963)	170.8	(649)	EST	[99/16]
$C_{86}H_{166}$	octacontylbenzene				[66327-27-3]
	(633–962)	170.9	(648)		[99/16]
$C_{86}H_{172}$	1-hexaoctacontene				[66327-28-4]
	(631–957)	171.5	(646)		[99/16]
$C_{86}H_{172}$	octacontylcyclohexane				[66327-29-5]
	(632–962)	169.9	(647)		[99/16]
$C_{86}H_{174}$	hexaoctacontane				[7667-92-7]
	(700–964)	188.6	(715)	A, EST	[87/5][66/8]
$C_{86}H_{174}$	2-methylpentaoctacontane				[66426-88-3]
	(632–956)	172.8	(647)		[99/16]
$C_{86}H_{174}S$	1-hexaoctacontanethiol				[66326-89-4]
	(636–965)	171.1	(651)	EST	[99/16]
$C_{87}H_{168}$	henoctacontylbenzene				[66326-90-7]
	(633–963)	171.0	(648)		[99/16]
$C_{87}H_{174}$	henoctacontylcyclohexane				[66326-91-8]
	(633–964)	170.6	(648)		[99/16]
$C_{87}H_{174}$	1-heptaoctacontene				[66326-92-9]
	(633–959)	171.8	(648)		[99/16]
$C_{87}H_{176}$	heptaoctacontane				[7667-93-8]
	(702–966)	189.3	(717)	A, EST	[87/5][66/8]
$C_{87}H_{176}$	2-methylhexaoctacontane				[66326-93-0]
	(633–957)	172.6	(648)		[99/16]
$C_{87}H_{176}S$	1-heptaoctacontanethiol				[66326-94-1]
	(637–967)	171.7	(652)	EST	[99/16]
$C_{88}H_{170}$	dooctacontylbenzene				[66326-95-2]
	(635–965)	171.3	(650)		[99/16]
$C_{88}H_{176}$	dooctacontylcyclohexane				[66326-96-3]
	(635–966)	170.8	(650)		[99/16]
$C_{88}H_{176}$	1-octaoctacontene				[66326-97-4]
	(634–961)	172.5	(649)		[99/16]
$C_{88}H_{178}$	octaoctacontane				[7667-94-9]
	(703–967)	190.4	(718)	A, EST	[87/5][66/8]
$C_{88}H_{178}$	2-methylheptaoctacontane				[66326-98-5]
	(634–959)	173.3	(649)		[99/16]
$C_{88}H_{178}S$	1-octacontanethiol				[66326-99-6]
	(639–969)	171.9	(654)	EST	[99/16]

TABLE 6. Enthalpies of vaporization of organic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{89}H_{172}$	trioctacontylbenzene				[66327-00-2]
	(636–967)	172.0	(651)		[99/16]
$C_{89}H_{178}$	1-nonaoctacontene				[66327-01-3]
	(635–962)	172.3	(650)		[99/16]
$C_{89}H_{178}$	trioctacontylcyclohexane				[66327-02-4]
	(636–968)	171.5	(651)		[99/16]
$C_{89}H_{180}$	nonaoctacontane				[7719-76-8]
	(705–969)	190.9	(720)	A, EST	[87/5][66/8]
$C_{89}H_{180}$	2-methyloctaoctacontane				[66327-03-5]
	(636–962)	173.6	(651)		[99/16]
$C_{89}H_{180}S$	1-nonaoctacontanethiol				[66327-04-6]
	(639–970)	171.9	(654)	EST	[99/16]
$C_{90}H_{174}$	tetraoctacontylbenzene				[66327-05-7]
	(637–968)	171.7	(652)		[99/16]
$C_{90}H_{182}$	nonacontane				[7667-51-8]
	(707–971)	191.6	(722)	A, EST	[87/5][66/8]
$C_{91}H_{184}$	hennonacontane				[7719-97-3]
	(708–973)	192.5	(723)	A, EST	[87/5][66/8]
$C_{92}H_{186}$	dononacontane				[7667-95-0]
	(710–975)	193.0	(725)	A, EST	[87/5][66/8]
$C_{93}H_{188}$	trinonacontane				[7667-96-1]
	(711–977)	194.1	(726)	A, EST	[87/5][66/8]
$C_{94}H_{190}$	tetranonacontane				[1574-32-9]
	(713–978)	194.5	(728)	A, EST	[87/5][66/8]
$C_{95}H_{192}$	pentanonacontane				[7667-97-2]
	(714–980)	195.4	(729)	A, EST	[87/5][66/8]
$C_{96}H_{194}$	hexanonacontane				[7763-13-5]
	(716–982)	195.8	(731)	A, EST	[87/5][66/8]
$C_{97}H_{196}$	heptanonacontane				[7670-25-9]
	(717–983)	196.6	(732)	A, EST	[87/5][66/8]
$C_{98}H_{198}$	octanonacontane				[7670-26-0]
	(719–985)	196.9	(734)	A, EST	[87/5][66/8]
$C_{99}H_{200}$	nonanonacontane				[7670-27-1]
	(720–986)	197.8	(735)	A, EST	[87/5][66/8]
$C_{100}H_{202}$	hectane				[6703-98-6]
	(721–988)	198.5	(736)	A, EST	[87/5][66/8]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
Al					
C_3H_9Al	trimethylaluminum				[75-24-1]
	(336–400)	39.8	(351)		[63/5]
		63.2±1.7			[63/34][82/15]
		41.1		BG	[46/13]
$C_4H_{10}AlCl$	diethylaluminum chloride				[96-10-6]
	(278–318)	50.5	(293)		[91/1]
	(273–473)	53.9	(373)		[91/1]
$C_4H_{11}Al$	diethylaluminum hydride				[871-27-2]
		57.7±2.1			[67/33][82/15]
					[65/27]
		46.9			[65/27]
$C_6H_{15}Al$	triethylaluminum				[97-93-8]
		73.2±2.1			[67/33][82/15]
					[65/27]
		60.2			[65/27]
		54.1		BG	[46/13]
$C_6H_{15}AlO$	diethylaluminum ethoxide				[1586-92-1]
	(403–463)	48.7±0.8	(433)		[74/16]
$C_7H_{17}AlO$	diethylaluminum propoxide				
	(398–463)	51.0±0.8	(430)		[74/16]
$C_8H_{19}Al$	diisobutylaluminum hydride				[1191-15-7]
		42.3±2.1			[67/33][82/15]
					[65/27]
		35.6			[65/27]
$C_9H_{21}Al$	tripropylaluminum				[102-67-0]
		42.5±1.2			[67/33][82/15]
$C_9H_{21}AlO_3$	aluminum isopropoxide				[555-31-7]
	(353–399)	48.1±6.3	(376)		[72/18]
$C_{12}H_{27}Al$	triisobutylaluminum				[100-99-2]
	(273–322)	38.3	(298)		[64/20]
$C_{12}H_{27}AlO_3$	tributoxyaluminum				[3085-30-1]
	(503–533)	104.1	(518)	A, I	[87/5][57/26]
$C_{12}H_{27}AlO_3$	triisobutoxyaluminum				[3453-79-0]
	(500–550)	139.4	(515)	A, I	[87/5][57/26]
$C_{12}H_{27}AlO_3$	tri-sec-butoxyaluminum				[2269-22-9]
	(425–469)	81.5	(440)	A, I	[87/5][57/26]
$C_{15}H_{12}AlF_9O_6$	*tris*(1,1,1-trifluoro-2,4-pentanedionato)aluminum(III)				[14354-59-7]
	(349–411)	58.7±0.7	(380)	BG	[88/18]
	(392–484)	69.6±0.5	(438)		[78/10]
$C_{15}H_{21}AlO_6$	*tris*(pentane-2,4-dionato)aluminum(III)				[13963-57-0]
	(430–530)	78.7±0.9	(298)	T	[86/11]
AlB_3H_{12}	aluminum borohydride				
	(231–290)	30.0	(260)		[40/13]
As					
$CAsCl_2F_3S$	dichloro (trifluoromethylthio)arsine				
	(293–373)	37.1	(333)		[60/25]
CH_3AsBr_2	methyl dibromoarsine				[676-70-0]
	(293–333)	49.9	(313)		[48/12]
CH_3AsCl_2	methyl dichloroarsine				[593-89-5]
	(273–313)	41.0	(293)		[48/12]
CH_3AsF_2	methyl difluorarsine				
	(244–350)	35.5	(297)	MM	[46/15]
$C_2AsClF_6S_2$	chloro *bis*(trifluoromethylthio)arsine				
	(293–373)	39.6	(333)		[60/25]
$C_2H_2AsCl_3$	*β*-chlorovinyldichloroarsine				
	(339–383)	U88.3	(354)		[47/3]
$C_2H_2AsCl_3$	*cis*-2-chlorovinyldichloroarsine				
	(341–382)	48.5	(356)		[48/4]
$C_2H_2AsCl_3$	*trans*-2-chlorovinyldichloroarsine				
	(323–423)	54.5	(338)		[50/1]
$C_2H_2AsCl_3$	2-chlorovinyldichloroarsine				[541-25-3]
	(293–333)	53.4	(313)		[48/12]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_2H_2AsF_6N$	(amino) *bis*(trifluoromethyl)arsine				
	(313–358)	31.8	(335)		[59/22]
$C_2H_5AsCl_2$	ethyl dichloroarsine				[598-14-1]
	(293–333)	44.6	(313)		[48/12]
$C_2H_5AsF_2$	ethyl difluorarsine				
	(248–367)	33.9	(307)	MM	[46/15]
C_3AsF_9S	*bis*(trifluoromethyl) trifluoromethylthioarsine				
	(263–312)	34.0	(287)		[62/32]
C_3AsF_9Se	*bis*(trifluoromethyl) trifluoromethylselenoarsine				
	(227–295)	34.8	(261)		[62/32]
$C_3H_4AsF_6N$	(methylamino) *bis*(trifluoromethyl)arsine				
	(293–355)	34.9	(324)		[59/22]
$C_3H_7AsCl_2$	propyl dichloroarsine				[926-53-4]
	(293–333)	49.2	(313)		[48/12]
C_3H_9As	trimethyl arsine				[593-88-4]
	(240–280)	27.7±0.2	(260)		[01/9]
		28.9±1.3			[56/24][82/15]
$C_3H_9AsO_3$	trimethyl arsenite				[6596-95-8]
	(300–335)	42.3±1.3	(298)		[53/16][70/31]
$C_4HAs_2F_{12}N$	imino*bis*[*bis*(trifluoromethyl)arsine]				
	(357–398)	38.9	(377)		[59/22]
$C_4H_6AsF_6N$	(ethylamino) *bis*(trifluoromethyl)arsine				
	(292–368)	32.8	(330)		[59/22]
$C_4H_6AsF_6N$	(dimethylamino) *bis*(trifluoromethyl)arsine				
	(296–358)	35.6	(327)		[59/22]
$C_4H_{11}As$	diethyl arsine				[692-42-2]
	(281–366)	35.2	(273)	MM	[01/5]
	(281–366)	34.2	(298)	MM	[01/5]
$C_4H_{12}AsN$	(dimethylamino) dimethylarsine				
	(274–342)	36.7			[59/20]
$C_5AsF_{13}Se$	heptafluoropropylseleno *bis*(trifluoromethyl)arsine				
	(277–348)	40.3	(312)		[62/32]
$C_5H_7AsCl_2$	*bis*(2-chlorovinyl)methylarsine				
	(293–333)	55.6	(313)		[48/12]
$C_5H_{11}AsBr_2$	pentyl dibromoarsine				
	(293–333)	60.0	(313)		[48/12]
$C_5H_{15}AsN_2$	*bis*(dimethylamino) methylarsine				
	(273–333)	39.2			[59/20]
$C_6H_5AsCl_2$	phenyl dichloroarsine				[696-28-6]
	(313–333)	58.4	(323)		[48/12]
	(335–529)	48.7	(350)		[47/5]
C_6H_9As	trivinylarsine				
	(295–339)	35.6	(310)		[57/15][84/9]
$C_6H_{12}AsN$	cyano(ethyl)propylarsine				
	(293–313)	54.6	(303)		[48/12]
$C_6H_{15}As$	triethylarsine				[617-75-4]
	(273–339)	38.1±1.5	(306)		[01/9]
	(290–379)	38.5±0.7	(334)		[01/9]
		43.1±4.2			[63/37][82/15]
$C_6H_{15}AsO_3$	arsenic (III) triethoxide				
		47.9±1.1		DSC	[96/7]
	(305–340)	50.6±4.2	(298)		[53/16][70/31]
$C_6H_{18}AsN_3$	*tris*(dimethylamino)arsine				
	(288–359)	45.8			[59/20]
$C_8H_{12}AsNO_3$	dimethyl arsanilate				
	(288–433)	48.8	(303)		[47/5]
$C_9H_{21}As$	triisopropylarsine				
	(346–405)	45.2±0.5	(376)		[01/9]
$C_9H_{21}As$	tripropylarsine				[5852-57-3]
	(314–420)	44.0±0.7	(367)		[95/5][01/9]
$C_9H_{21}AsO_3$	arsenic (III) tripropoxide				[15606-91-4]
		51.2±1.8		DSC	[96/7]
$C_9H_{21}AsO_3$	arsenic (III) triisopropoxide				
		80.1±0.9		DSC	[96/7]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{10}H_{16}AsNO_3$	diethyl arsanilate				
	(311–454)	54.2	(326)	A	[87/5][47/5]
$C_{12}H_{27}AsO_3$	arsenic (III) tributoxide				[3141-10-4]
		64.0±1.8		DSC	[96/7]
$C_{12}H_{27}AsO_3$	arsenic (III) triisobutoxide				
		75.7±1.2		DSC	[96/7]
$C_{13}H_{10}AsN$	diphenylarsine carbonitrile				[23525-22-6]
	(296–326)	84.6	(311)	A	[87/5]
$C_{15}H_{33}As$	tripentylarsine				
	(408–466)	62.3	(432)		[32/4]
$C_{18}H_{15}As$	triphenylarsine				[603-32-7]
	(493–563)	75.7	(508)	A	[87/5]
AsF_3	arsenic trifluoride				[7784-35-2]
		35.8	(293)		[41/11]
AsH_3	arsine				[7784-42-1]
		16.7	(210)		[55/19]
As_2S_2	arsenic (II) sulfide				[1303-32-8]
	(663–838)	69.6	(750)		[68/25]
B					
CH_3BO	borine carbonyl				
	(134–209)	19.7	(194)		[47/5]
$CH_{11}B_5$	1-methylpentaborane (9)				
	(241–349)	32.7	(295)		[63/26]
C_2BF_5	perfluorovinyldifluoroborine				[32038-87-2]
	(177–238)	26.6	(207)	T	[60/12]
$C_2BCl_2F_3$	perfluorovinyldichloroborine				[758-99-6]
	(238–301)	31.5	(269)	T	[60/12]
$C_2H_3BF_2$	vinyldifluoroborane				[358-95-2]
	(178–228)	22.6	(203)	T	[60/10]
$C_2H_3BCl_2$	vinyldichloroborane				[3677-80-3]
	(237–282)	27.7	(260)	T	[60/10]
$C_2H_5BCl_2O$	ethoxydichloroborane				
		35.1±0.8	(298)		[31/3][70/31]
$C_2H_6BCl_2N$	dimethylaminodichloroborane				
		37.2±1.3	(298)		[51/14][70/31]
$C_2H_6B_4$	carborane-4				
	(241–287)	26.2	(272)		[63/3]
C_2H_6O-BF_3	dimethyl ether—boron trifluoride complex				
	(311–346)	53.1	(328)		[60/7]
$C_2H_6ClBO_2$	dimethoxychloroborane				
		34.3±1.2	(298)		[31/3][70/31]
C_2H_6S-BH_3	dimethyl sulfide—borane complex				[13292-87-0]
	(273–314)	44.9	(293)		[99/16]
$C_2H_7B_5$	2,4-dicarba-closo-heptaborane				[20693-69-0]
	(273–323)	31.6	(288)	I	[76/17]
C_2H_8BSb	dimethylstibinoborine				
	(234–273)	32.1	(254)		[59/6]
$C_2H_{10}BP$	dimethylphosphine borine				
	(303–383)	45.1	(318)		[53/4]
$C_2H_{11}B_2N$	N-dimethylaminodiborane				
	(220–267)	29.3	(252)		[55/14]
$C_2H_{13}B_5$	1-ethylpentaborane (9)				
	(273–383)	35.0	(328)		[63/26]
$C_3BF_9S_3$	*tris*(trifluoromethylthio)borane				[36884-78-3]
	(242–298)	33.9	(270)		[99/16]
$C_3H_5BF_2$	allyldifluoroborane				
	(194–249)	28.0	(221)	T	[60/10]
$C_3H_7BF_2$	propyldifluoroborane				
	(195–248)	29.4	(221)	T	[60/10]
$C_3H_9BO_3$	trimethylborate				[121-43-7]
	(304–340)	34.2	(319)		[67/2]
C_3H_9B	trimethylborane				
		20.2±0.1			[61/13][61/15]
		23.9		BG	[46/13]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_3H_9BS	dimethyl(methylthio)borane				[19163-05-4]
	(227–304)	31.6	(265)		[99/16]
$C_3H_9BS_2$	methyl*bis*(methylthio)borane				[19163-08-7]
	(300–373)	44.7	(315)		[99/16]
$C_3H_9BS_3$	*tris*(methylthio)borane				[997-49-9]
	(325–462)	44.9	(394)		[99/16]
	(303–493)	51.6	(398)		[67/8]
	(303–493)	54.0±0.8	(298)		[67/8]
$C_3H_9B_3O_3$	methylboric acid anhydride				
	(273–327)	37.4	(288)		[40/4]
$C_3H_{12}BN$	borine trimethylamine				
	(136–195)	19.9	(180)		[37/6]
$C_3H_{15}B_5$	1-isopropylpentaborane (9)				
	(273–398)	37.2	(335)		[63/26]
C_4BClF_6	*bis*(perfluorovinyl)chloroborine				
	(280–322)	35.6	(301)	T	[60/12]
C_4H_6BF	divinylfluoroborane				
	(193–273)	25.8	(233)	T	[60/10]
C_4H_6BCl	divinylchloroborane				
	(275–298)	33.0	(286)	T	[60/10]
$C_5H_{10}O\text{-}BF_3$	tetrahydopyran—boron trifluoride complex				
	(323–368)	60.9	(345)		[60/8]
$C_4H_{10}O\text{-}BF_3$	diethyl ether—boron trifluoride complex				
	(283–353)	55.1	(318)		[60/7]
$C_4H_{10}BClO_2$	diethoxychloroborane				
		38.9±0.8	(298)		[31/3][70/31]
$C_4H_{12}BClN_2$	*bis*(dimethylamino)chloroborane				
		41.8±2.1	(298)		[51/14][70/31]
$C_4H_{11}N\text{-}C_3H_9B$	N,N-dimethylethylamine—trimethylborane complex				
	(303–339)	58.2	(321)		[60/9]
$C_4H_{12}B_2O_4$	tetramethoxydiboron				
	(273–348)	44.0	(310)		[60/13]
		44.7			[72/32]
$C_4H_{17}B_5$	1-sec-butylpentaborane (9)				
	(299–428)	41.4	(364)		[63/26]
$C_5H_{16}B_{10}$	isopropenyl-o-carborane				
	(323–473)	36.7	(398)		[63/46]
$C_5H_{16}B_{10}O_2$	1-acetoxymethyl-o-carborane				[19528-60-0]
		56.5	(569)		[74/31]
$C_5H_{19}B_5$	1-methyl-2-sec-butylpentaborane				
	(301–423)	41.0	(362)		[63/26]
C_6BF_9	*tris*(perfluorovinyl)borine				
	(297–335)	41.1	(316)	T	[60/12]
$C_6H_5BBr_2$	phenylboron dibromide				
	(391–433)	43.9±2.1	(412)	T	[67/1]
$C_6H_5BCl_2$	phenylboron dichloride				
	(273–318)	33.7±0.8	(296)	T	[67/1]
$C_6H_{12}BCl_3O_3$	*tris*(2-chloroethyl) orthoborate				
	(390–448)	57.7	(419)		[46/9]
$C_6H_{13}BO_2$	1-butaneboronic acid, cyclic ethylene ester				[10173-39-4]
		40.2	(329)		[70/29]
$C_6H_{15}B$	triethylborane				[97-94-9]
		33.6	(293)		[83/1]
		36.8±0.4			[63/32][82/15]
$C_6H_{15}BO_3$	triethylborate				[150-46-9]
	(302–382)	41.0	(317)		[67/2]
	(302–382)	38.2	(391)		[67/2]
$C_6H_{15}BS_3$	triethylthioborane				
		61.5±2.1			[66/27][70/31]
$C_6H_{15}B_3O_3$	triethylboroxin				
	(347–424)	46.0	(362)	EB	[90/19]
$C_6H_{16}BN$	(N-ethylamino)diethylborane				
		60.7±0.8			[67/32][82/15]
$C_6H_{17}B_5Br_2Si_2$	2,4-*bis*(bromodimethylsilyl)-2,4-dicarbo-closo-heptaborane (7)				[66798-29-6]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(388–463)	53.1	(403)	I	[79/25]
$C_6H_{17}B_5Cl_2Si_2$	2,4-*bis*(chlorodimethylsilyl)-2,4-dicarbo-closo-heptaborane (7)				[28699-83-4]
	(359–439)	46.2	(374)	I	[79/25]
$C_6H_{18}BN$	triethylaminoborane				
		69.7±0.8			[67/32][70/31]
$C_6H_{18}BN_3$	*tris*(triethylamino)borane				
		46.9±0.8			[51/14][70/31]
$C_6H_{19}B_5Si_2$	2,4-*bis*(dimethylsilyl)-2,4-dicarba-closo-heptaborane				[59351-11-0]
	(373–453)	41.3	(388)	I	[76/17]
$C_6H_{20}B_2N_2$	dimethylaminomethyl borane cyclic dimer				
	(311–357)	57.8	(314)		[66/6]
$C_6H_{20}B_{10}$	1-butyl-o-carbaborane (12)				
	(433–534)	77.3±3.8	(298)	EB	[79/26]
	(433–534)	50.6±1.3	(571)	EB	[79/26]
$C_6H_{20}B_{10}$	1-isobutyl-o-carbaborane (12)				
	(427–536)	72.8±2.1	(298)	EB	[79/26]
	(427–536)	49.1±0.9	(564)	EB	[79/26]
$C_6H_{20}B_{10}$	1-butyl-m-carbaborane (12)				
	(406–527)	67.7±0.8	(298)	EB	[79/26]
	(406–527)	46.7±0.6	(537)	EB	[79/26]
$C_6H_{20}B_{10}$	1-isobutyl-m-carbaborane (12)				
	(400–488)	64.1±2.8	(298)	EB	[79/26]
	(400–488)	44.6±1.3	(532)	EB	[79/26]
$C_7H_{15}BO_2$	1-butaneboronic acid, cyclic trimethylene ester				[30169-71-2]
		43.1	(348)		[70/29]
$C_7H_{15}B_3F_3N_3$	1,2,3,4,5-pentamethyl-6-(trifluorovinyl)borazaine				[20453-68-3]
	(280–324)	18.4	(302)		[99/16]
$C_7H_{22}B_{10}$	1-pentyl-o-carbaborane (12)				
	(446–549)	84.3±6.0	(298)	EB	[79/26]
	(446–549)	52.0±1.5	(571)	EB	[79/26]
$C_7H_{22}B_{10}$	1-pentyl-m-carbaborane (12)				
	(421–544)	74.6±2.4	(298)	EB	[79/26]
	(421–544)	48.6±0.8	(555)	EB	[79/26]
$C_8H_{17}BO_2$	1-butaneboronic acid, cyclic tetramethylene ester				[31044-62-9]
		76.6	(364)		[70/29]
$C_8H_{18}BBr$	dibutylboron bromide				[5674-70-4]
	(293–363)	50.6	(328)		[53/11]
$C_8H_{18}BCl$	dibutylboron chloride				[1730-69-4]
	(293–363)	48.2	(328)		[53/11]
$C_8H_{19}BO_2$	1-butaneboronic acid, diethyl ester				[10394-51-1]
		43.3	(346)		[70/29]
$C_8H_{20}B_2O$	tetraethyldiboroxane				
	(343–421)	42.9	(358)	EB	[90/19]
$C_8H_{20}B_2O_4$	tetraethoxydiboron				
	(273–358)	52.9	(315)		[60/13]
$C_8H_{24}B_2N_4$	tetra(dimethylamino)diboron				
	(296–408)	52.7	(352)		[60/14]
$C_8H_{24}B_{10}$	1-hexyl-o-carbaborane (12)				
	(458–530)	93.5±6.0	(298)	EB	[79/26]
	(458–530)	54.1±2.1	(601)	EB	[79/26]
$C_8H_{24}B_{10}$	1-hexyl-m-carbaborane (12)				
	(434–544)	79.8±2.4	(298)	EB	[79/26]
	(434–544)	50.7±1.0	(572)	EB	[79/26]
$C_8H_{23}B_5Si_2$	2,4-*bis*(trimethylsilyl)-2,4-dicarba-closo-heptaborane				[59351-10-9]
	(373–473)	45.0	(388)	I	[76/17]
$C_9H_{11}BO_2$	benzeneboronic acid, cyclic trimethylene ester				[4406-77-3]
		47.3	(426)		[70/29]
$C_9H_{15}BCl_6O_3$	*tris*(2,2′-dichloroisopropyl) orthoborate				
	(488–513)	77.0	(465)		[46/9]
$C_9H_{21}B$	tripropylborane				
		41.8±1.3			[63/33][82/15]
	(273–393)	40.0		BG	[46/13]
$C_9H_{21}B$	triisopropylborane				[1776-66-5]
		41.8±1.3			[63/33][82/15]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(273–393)	40.0		BG	[46/13]
$C_9H_{21}BO_3$	tripropylborate				[688-71-1]
	(340–453)	52.3	(355)		[80/15]
	(358–452)	47.6	(452)		[67/2]
$C_9H_{21}BO_3$	triisopropylborate				[5419-55-6]
	(338–412)	42.4	(412)		[67/2]
$C_9H_{21}BS_3$	tri(propylthio)borane				[998-38-9]
	(423–483)	76.2	(453)		[67/8]
	(423–483)	87.0±2.1	(298)		[67/8]
$C_9H_{22}BNO$	butyl(dimethylamino)methoxyborane				
	(369–427)	48.1	(384)	EB	[73/17]
		58.2±2.5	(298)		[73/17]
$C_{10}H_{13}BO_2$	benzeneboronic acid, cyclic tetramethylene ester				[4406-76-2]
		57.3	(441)		[70/29]
$C_{10}H_{15}BO_2$	benzeneboronic acid, diethyl ester				[31044-59-4]
		67.4	(332)		[70/29]
$C_{11}H_{24}B_{10}O_3$	3-methyl-3-(7-isopropyl-*m*-carboranoylperoxy)-1-butyne				
	(353–368)	140.6±4.4	(360)	ME	[99/17]
$C_{12}H_{10}BBr$	diphenylboron bromide				[5123-17-1]
	(436–516)	60.2±2.5	(476)	T	[67/1]
$C_{12}H_{10}BCl$	diphenylboron chloride				[3677-81-4]
	(363–485)	41.4±2.1	(424)	T	[67/1]
$C_{12}H_{21}B$	dodecahydro-9-boraphenalene				[16664-33-8]
	(304–404)	53.1	(319)	A	[87/5]
$C_{12}H_{27}B$	tributylboron				[122-56-5]
	(293–363)	54.7	(328)		[53/11]
$C_{12}H_{27}BO_3$	tributylborate				[688-74-4]
	(380–504)	58.1	(395)		[80/15]
	(390–491)	55.9	(405)		[67/2]
$C_{12}H_{27}BO_3$	triisobutylborate				[13195-76-1]
	(372–472)	51.7	(483)		[67/2]
$C_{12}H_{27}BS_3$	tri(butylthio)borane				[998-46-9]
	(440–503)	83.9	(471)		[67/8]
	(440–503)	95.8±2.1	(298)		[67/8]
$C_{15}H_{32}B_{10}O_5$	2,5-dimethyl-(2-*tert*-butylperoxy-5-*m*-carboranoylperoxy)-3-hexyne				
	(353–366)	86.8±5.4	(360)	ME	[99/17]
$C_{15}H_{33}BO_3$	tripentylborate				
	(410–505)	67.7	(425)		[80/15]
$C_{15}H_{33}BS_3$	tri(penthylthio)borane				
	(446–503)	92.3	(474)		[67/8]
	(446–503)	104.6±2.1	(298)		[67/8]
$C_{18}H_{12}BCl_3O_3$	*tris*(4-chlorophenoxy)borane				[7539-58-2]
	(428–476)	30.6±0.9	(452)	MM	[73/2]
$C_{18}H_{12}BCl_3O_3$	*tris*(3-chlorophenoxy)borane				[42080-72-8]
	(476–524)	49.6±1.6	(500)	MM	[73/2]
$C_{18}H_{15}B$	triphenylborane				[960-71-4]
	(423–568)	64.3	(438)	A	[87/5]
	(423–548)	64.4±2.1	(486)		[67/1]
$C_{21}H_{12}BN_3O_3$	*tris*(4-cyanophenoxy)borane				
	(448–506)	46.2±2.0	(477)	MM	[73/2]
$C_{21}H_{21}BO_3$	*tris*(4-methylphenoxy)borane				[14643-62-0]
	(475–525)	76.1±1.7	(500)	MM	[73/2]
$C_{21}H_{21}BO_3$	*tris*(3-methylphenoxy)borane				
	(477–523)	77.1±2.2	(500)	MM	[73/2]
$C_{21}H_{21}BO_6$	*tris*(3-methoxyphenoxy)borane				[42080-76-2]
	(440–496)	57.8±2.4	(468)	MM	[73/2]
$C_{21}H_{21}BO_6$	*tris*(4-methoxyphenoxy)borane				[42080-75-1]
	(448–500)	42.4±2.7	(474)	MM	[73/2]
B_2D_6	perdeuterodiborane				
	(118–179)	15.3	(164)		[61/29]
B_2H_6	diborane				[19287-45-7]
	(118–179)	15.3	(164)		[61/29]
		14.2	(180)	C	[59/19]
		12.6	(210)	C	[59/19]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		10.5	(240)	C	[59/19]
		7.3	(270)	C	[59/19]
$B_3Br_3H_3N_3$	2,4,6-tribromoborazine				[13703-88-3]
	(404–415)	47.0±5.1	(409)	I	[66/1]
$B_3Cl_3H_3N_3$	2,4,6-trichloroborazine				[933-18-6]
	(363–409)	49.6±0.2	(386)	I	[66/1]
	(360–386)	47.8	(373)		[55/18]
Be					
C_2H_6Be	dimethyl beryllium				[506-63-8]
	(373–453)	88.7	(388)		[52/4]
$C_{10}H_8BeF_6O_4$	*bis*(1,1,1-trifluoro-2,4-pentanedionato)beryllium(II)				[13939-10-1]
	(387–474)	59.8±0.4	(431)	BG	[88/18]
$C_{10}H_{14}BeO_4$	*bis*(2,4-pentanedionato)beryllium(II)				[10210-64-7]
	(382–511)	65.7±1.1	(447)	BG	[88/18]
$C_{22}H_{38}BeO_4$	*bis*(2,2,6,6-tetramethylheptane-3,5-dionato)beryllium				[36915-22-7]
	(383–525)	65.1	(454)	BG	[88/18]
BeF_2	beryllium fluoride				[7787-49-7]
	(823–1223)	222.8	(1923)	TE, ME, GS	[63/26]
	(802–1021)	209.6	(911)		[58/16]
	(821–1002)	196.6	(911)		[58/17]
	(745–968)	212.9	(856)	GS	[54/16]
Bi					
CH_5Bi	methylbismuthine				[66172-95-0]
	(190–258)	29.9	(224)		[61/28]
C_2H_7Bi	dimethylbismuthine				[1438-45-4]
	(206–250)	32.7	(228)		[61/28]
C_3H_9Bi	trimethylbismuthine				[593-91-9]
	(215–380)	35.8	(298)		[61/28]
		36.0±1.3			[54/18][82/15]
		34.8		BG	[46/13]
C_6H_9Bi	trivinylbismuthine				[65313-35-1]
	(293–346)	48.5	(308)		[57/15][84/9]
$C_6H_{15}Bi$	triethylbismuthine				
		46.0±4.2			[63/37][82/15]
	(301–343)	43.9	(322)		[57/15]
Br					
BrF_3	bromine trifluoride				
	(311–428)	45.9	(326)		[52/19]
BrF_5	bromine pentafluoride				[7789-30-2]
	(297–314)	30.6	(304)		[56/21]
	(213–297)	31.2	(255)		[31/2]
Br_2	bromine				[7726-95-6]
	(343–383)	29.8	(358)		[73/36]
	(297–389)	31.3	(312)		[55/23]
Br_3FO_3	perbromyl fluoride				
	(188–291)	25.3	(250)		[72/36]
HBr	hydrogen bromide				[10035-10-6]
		17.6	(206)	C	[28/6]
Cd					
C_2H_6Cd	dimethyl cadmium				[506-82-1]
	(271–378)	37.1±0.1	(324)		[85/8][01/9]
	(270–295)	38.9	(282)		[56/4]
		37.9±0.1			[49/22][82/15]
		35.4		BG	[46/13]
$C_4H_{10}Cd$	diethyl cadmium				[592-02-9]
	(286–362)	46.0±0.4	(324)		[85/8][01/9]
		46.0±2.1			[49/21][82/15]
$C_6H_{14}Cd$	dipropyl cadmium				[5905-48-6]
	(312–373)	54.2±0.4	(342)		[85/8][01/9]
$C_8H_{18}Cd$	dibutyl cadmium				[3431-67-2]
	(336–376)	67.7±1.2	(356)		[85/8][01/9]
$CdCl_2$	cadmium chloride				[10108-64-2]
	(875–1026)	132.6	(950)		[58/28]
Cl					

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$ClFO_3$	perchloryl fluoride				
	(164–228)	19.2	(226)	MM	[58/5]
		19.3	(226)	C	[58/5]
ClF_3	chlorine trifluoride				
	(299–317)	27.5	(313)		[97/16]
	(226–303)	28.4	(288)		[51/11]
ClNO	nitrosyl chloride				[2696-92-6]
	(203–258)	25.3	(230)		[49/24]
Cl_2O_6	dichlorine hexaoxide				
	(273–318)	52.3	(295)		[90/18]
HCl	hydrogen chloride				[7647-01-0]
		16.2	(188)	C	[28/4]
Co					
C_3CoNO_4	cobalt nitrosyl tricarbonyl				
	(272–353)	36.3	(287)		[47/5]
C_4HCoO_4	hydridocobalt tetracarbonyl				
	(273–295)	28.0		GS	[80/19]
$C_4H_3CoO_4Si$	silyl tetracarbonyl cobalt				[14652-62-1]
	(263–357)	37.8	(310)	T	[69/36]
$C_7H_5CoO_2$	(cyclopendienyl) cobalt dicarbonyl				
	(313–369)	52.1±0.7			[00/19]
$C_8H_2Co_2O_8Si$	silylene *bis*(tetracarbonylcobalt)				[23591-62-0]
	(297–335)	38.7	(316)	T	[69/36]
Cr					
C_6CrO_6	chromium hexacarbonyl				[13007-92-6]
	(309–424)	62.5	(324)		[47/5]
$C_{10}H_{10}Cr$	chromocene				[1271-24-5]
	(452–519)	49.5±1.5	(485)		[84/32]
$C_{15}H_{12}CrF_9O_6$	*tris*(1,1,1-trifluoro-2,4-pentanedionato)chromium(III)				[14592-89-2]
	(424–486)	76.7±0.6	(455)		[78/11]
$C_{15}H_{21}CrO_6$	*tris*(2,4-pentanedionato)chromium(III)				[21679-31-2]
	(490–536)	82.2±2.0	(513)	BG	[88/18]
$C_{16}H_{20}Cr$	*bis*(ethylbenzene)chromium				
		75.3±8.4			[73/32][82/15]
$C_{20}H_{28}Cr$	*bis*(1,2-diethylbenzene)chromium				
		75.3±8.4			[73/32][82/15]
$C_{21}H_{30}Cr$	(1,2-diisopropylbenzene)isopropylbenzenechromium				
		100.4±8.4			[73/32][82/15]
$C_{24}H_{36}Cr$	*bis*(1,2-diisopropylbenzene)chromium				
		100.4±8.4			[73/32][82/15]
Cu					
$C_6H_{12}CuN_2S_4$	*bis*(dimethyldithiocarbamate)copper				[137-29-1]
	(443–473)	147.4	(458)		[99/16]
$C_{14}H_{28}CuN_2S_4$	*bis*(dipropyldithiocarbamate)copper				[14358-07-5]
	(422–453)	118.4	(437)		[99/16]
$C_{16}H_{20}CuF_6O_4$	*bis*(pivaloyltrifluoroacetonato)copper				
	(381–443)	76.5±2.0		GS	[93/14]
$C_{16}H_{20}CuF_6O_4$-($C_{10}H_{20}O_5$)	*bis*(pivaloyltrifluoroacetonato)copper 15-crown-5 complex				
	(368–443)	80.2±2.0		GS	[93/14]
$C_{18}H_{36}CuN_2S_4$	*bis*(dibutyldithiocarbamate)copper				[13927-71-4]
	(423–468)	121.8	(445)		[99/16]
$C_{18}H_{36}CuN_2S_4$	*bis*(diisobutyldithiocarbamate)copper				[51205-55-1]
	(425–445)	101.8	(435)		[99/16]
$C_{22}H_{38}CuO_6$	*bis*(2,2,6,6-tetramethylheptane-3,5-dionato)copper(II)				[14040-05-2]
	(468–519)	77.8±0.8			[79/20]
Dy					
$C_{33}H_{57}DyO_6$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)dyprosium(III)				[15522-69-7]
	(456–500)	86.2		BG	[69/28]
Er					
$C_{33}H_{57}ErO_6$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)erbium(III)				[14319-09-6]
	(454–490)	85.6		BG	[69/28]
Eu					
$C_{33}H_{57}EuO_6$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)europium(III)				[15522-71-1]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(466–490)	87.4		BG	[69/28]
F					
F_3NO	trifluoroamine oxide				[13847-65-9]
	(116–191)	16.1			[68/30]
F_5I	iodine pentafluoride				[7783-66-6]
	(283–378)	39.3	(330)		[71/35]
HF	hydrogen fluoride				[7664-39-3]
	(240–290)	25.2	(265)		[34/8]
	(190–320)	25.2	(255)		[24/1]
Fe					
$C_4H_6FeO_4Si_2$	tetracarbonyl disilyl iron				[26469-80-7]
	(329–377)	43.8	(353)	T	[69/38]
C_5FeO_5	iron pentacarbonyl				[13463-40-6]
	(254–304)	40.1±0.5	(279)		[74/27]
	(266–353)	39.0	(309)		[70/25]
		38.1±0.4	(298)		[59/14]
		40.2±0.8			[59/18][82/15]
	(266–378)	37.6	(281)		[47/5]
$C_7H_6FeO_3$	1,3-butadiene iron tricarbonyl				
		49.0±4.2			[76/23][82/15]
$C_{10}H_{10}Fe$	ferrocene				[102-54-5]
	(456–523)	47.3	(471)	A	[87/5][99/16]
	(451–523)	49.8	(466)	A	[87/5]
	(519–604)	44.7	(561)		[72/34]
		47.3	(456)		[52/21]
$C_{15}H_{12}F_9FeO_6$	*tris*(1,1,1-trifluoro-2,4-pentanedionato)iron(III)				[14526-22-8]
	(392–428)	87.0±1.2	(410)		[78/11]
Ga					
C_3H_9Ga	trimethyl gallium				[1445-79-0]
		33.1±0.8			[58/18][82/15]
		32.6			[33/14][58/20]
$C_4H_{10}ClGa$	diethylgallium chloride				[30914-08-0]
	(273–333)	59.9	(303)		[91/1]
C_6H_9Ga	trivinyl gallium				[1188-13-2]
	(298–373)	U72.6	(335)		[62/27]
	[Note: Decomposition noted above 333 K.]				
$C_6H_{15}Ga$	triethyl gallium				[1115-99-7]
	(299–387)	43.1±1.6	(343)		[01/9][01/24]
		38.5±0.4			[73/31][82/15]
$C_9H_{21}Ga$	triisopropyl gallium				[54614-59-9]
	(298–373)	49.0	(335)		[62/27]
$C_9H_{21}Ga$	tripropyl gallium				[29868-77-7]
	(316–385)	46.6±0.5	(350)		[01/9]
	(298–373)	49.2	(335)		[62/27]
$C_{11}H_{24}GaNS_2$	di-*tert*-butyl gallium dimethyldithiocarbamate				
	(374–427)	43±1		TGA	[99/33]
$C_{11}H_{24}GaNS_2$	dibutyl gallium dimethyldithiocarbamate				
	(385–424)	53±1		TGA	[99/33]
$C_{11}H_{24}GaNS_2$	di-sec-butyl gallium dimethyldithiocarbamate				
	(366–425)	44±1		TGA	[99/33]
$C_{12}H_{27}Ga$	tributyl gallium				[15677-44-8]
	(330–378)	51.6±1.3	(354)		[01/9]
	(426–507)	56.2	(441)	A	[87/5]
$C_{13}H_{28}GaNS_2$	di-*tert*-butyl gallium diethyldithiocarbamate				
	(372–419)	48±6		TGA	[99/33]
$C_{15}H_{12}F_9GaO_6$	*tris*(1,1,1-trifluoro-2,4-pentanedionato)gallium(III)				[15453-83-5]
	(401–459)	75.6±0.5	(430)		[78/10]
$C_{15}H_{32}GaNS_2$	di-*tert*-butyl gallium dipropyldithiocarbamate				
	(365–424)	46±1		TGA	[99/33]
Gd					
$C_{33}H_{57}GdO_6$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)gadolinium(III)				[14768-15-1]
	(456–500)	90.2		BG	[69/28]
Ge					
$CHCl_5Ge$	trichloro(dichloromethyl)germane				

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(303–423)	47.9	(318)		[75/29]
CH_2Cl_4Ge	trichloro(chloromethyl)germane				
	(303–423)	45.9	(318)		[75/29]
CH_3Cl_3Ge	methyltrichlorogermane				
	(293–385)	37.4	(308)		[71/12]
CH_4Cl_2Ge	methyldichlorogermane				
	(281–346)	34.5	(313)	SG	[61/1]
	(273–290)	33.1	(281)		[61/27]
CH_5BrGe	methylbromogermane				
	(273–333)	33.3	(303)	SG	[61/1]
CH_5ClGe	methyl chlorogermane				
	(241–263)	25.8	(252)		[61/27]
CH_6Ge	methylgermane				[1449-65-6]
	(159–230)	16.6	(194)	SG	[61/1]
	(164–197)	21.4	(181)		[61/27]
CH_6GeS	(methylthio)germane				[16643-16-8]
	(223–291)	29.8	(257)		[99/16]
$C_2H_5Cl_3Ge$	trichloro(ethyl)germane				
	(293–415)	41.9	(308)		[71/12]
C_2H_7ClGe	dimethylchlorogermane				
	(273–288)	29.4	(280)		[61/27]
C_2H_8Ge	dimethylgermane				[1449-64-5]
	(196–228)	26.5	(212)		[61/27]
$C_2H_{10}Ge_2$	1,1-dimethyldigermane				[23830-51-5]
	(259–295)	31.8	(277)		[69/39]
$C_2H_{10}Ge_2$	1,2-dimethyldigermane				[23830-52-6]
	(258–295)	29.3	(277)		[69/39]
C_3H_9ClGe	trimethylchlorogermane				[1529-47-1]
	(293–363)	36.3	(308)		[72/19]
	(273–341)	34.4	(307)	SG	[61/1]
C_3H_9FGe	trimethylfluorogermane				[661-37-0]
	(285–345)	32.4	(315)	SG	[61/1]
$C_3H_{12}Ge_2$	1,1,2-trimethyldigermane				[23830-53-7]
	(268–294)	33.5	(281)		[69/39]
$C_4H_9Cl_3Ge$	butyltrichlorogermanium				
	(313–453)	49.2	(328)		[75/30]
	(337–377)	45.8	(352)		[72/10]
$C_4H_{12}Ge$	tetramethylgermane				[865-52-1]
		28.1±0.1	(285)	C	[70/25]
		27.6±2.1			[69/27][82/15]
$C_4H_{12}GeO$	trimethylmethoxygermane				[6163-67-3]
	(273–335)	32.4	(304)	SG	[61/1]
$C_4H_{12}GeO_4$	tetramethoxygermane				
		40.2±0.4			[70/32][77/23]
	(303–385)	44.0	(344)		[58/26]
$C_5H_{11}Cl_3Ge$	pentyltrichlorogermanium				[25425-26-7]
	(323–473)	51.9	(338)		[75/30]
	(305–475)	49.7	(320)		[72/10]
$C_6H_5Cl_3Ge$	phenyltrichlorogermane				[1074-29-9]
	(343–473)	55.4	(358)		[72/13]
$C_6H_{13}Cl_3Ge$	hexyltrichlorogermanium				[35460-93-6]
	(315–491)	51.1	(329)		[72/10]
$C_6H_{15}BrGe$	bromotriethylgermane				[1067-10-3]
	(303–463)	48.3	(318)		[71/12]
$C_6H_{18}Ge_2O$	hexamethyldigermoxane				
	(291–345)	44.1	(318)	SG	[61/1]
$C_6H_{30}ClGeN_3$	*tris*(diethylamino)chlorogermane				
	(363–493)	64.4	(378)		[70/12]
$C_7H_7Cl_3Ge$	benzyltrichlorogermane				[6181-21-1]
	(373–473)	58.8	(388)		[72/13]
$C_7H_{15}Cl_3Ge$	heptyltrichlorogermanium				[1190-86-9]
	(323–506)	52.3	(338)		[72/10]
$C_8H_{20}Ge$	pentyl(trimethyl)germane				
	(303–423)	44.3	(318)		[75/30]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_{20}Ge$	tetraethylgermane				[597-63-7]
	(253–293)	43.4	(273)	GS	[92/5]
		45.7±0.4	(298)	C	[77/7]
	(337–436)	46.1	(352)		[74/12]
		44.8±1.3			[64/27][82/15]
$C_8H_{20}GeO_4$	tetraethoxygermane				
		43.1±0.4			[70/32][77/23]
	(328–414)	47.9	(371)		[58/26]
$C_8H_{24}Ge_4O_4$	octomethylcyclotetragermoxane				[7749-82-8]
	(333–473)	51.4	(403)		[72/17]
$C_{10}H_{25}GeN$	triethyl(diethylamino)germane				[756-66-1]
	(303–463)	50.9	(318)		[70/12]
		46.0±4.8			[71/30][82/15]
$C_{10}H_{25}GeO_2$	*tert*-butylperoxytriethylgermane				
		43.5±4.2			[71/29][82/15]
$C_{12}H_{28}Ge$	tetrapropylgermane				[994-65-0]
	(353–493)	54.7	(368)	A	[87/5]
		61.5±4.2			[64/28][82/15]
$C_{12}H_{28}GeO_4$	tetrapropoxygermane				
	(343–453)	63.3	(358)	A	[87/5]
	(369–465)	55.0	(417)		[58/26]
$C_{12}H_{28}GeO_4$	tetraisopropoxygermane				
	(313–453)	60.4	(328)	A	[87/5]
	(355–444)	54.9	(400)		[58/26]
$C_{12}H_{30}Ge_2Hg$	*bis*(triethylgermyl)mercury				[4149-28-4]
	(383–403)	64.8	(393)		[72/15]
		62.8±4.2			[72/31][82/15]
$C_{12}H_{30}Ge_2$	hexaethyldigermane				
		62.8			[63/35][82/15]
$C_{12}H_{30}Ge_2O$	hexaethyldigermoxane				
		58.6±4.2			[71/29][82/15]
$C_{16}H_{12}Ge$	(diethynyl)diphenylgermane				
	(305–337)	110.8	(320)	A	[87/5]
$C_{16}H_{36}GeO_4$	tetrabutoxygermane				[25063-27-8]
	(394–519)	62.4	(456)		[58/26]
$C_{16}H_{36}GeO_4$	tetraisobutoxygermane				
	(369–482)	59.9	(426)		[58/26]
$C_{16}H_{36}GeO_4$	tetra-sec-butoxygermane				
	(365–475)	59.9	(420)		[58/26]
$C_{16}H_{36}GeO_4$	tetra-*tert*-butoxygermane				
	(364–460)	53.8	(412)		[58/26]
$C_{18}H_{42}Ge_2Hg$	*bis*(triisopropylgermyl)mercury				[24004-54-4]
	(373–483)	68.7	(388)		[72/15]
		54.4±4.2			[72/31][82/15]
$C_{24}H_{20}GeO_4$	tetraphenoxygermane				
		37.4±0.4			[70/32][77/23]
Ge_4H_{10}	tetragermane				
		32.8			[59/25]
Ge_5H_{12}	pentagermane				
		34.6			[59/25]
GeH_6Si	germylsilane				
	(190–250)	25.0	(220)		[63/27]
GeI_4	germanium tetraiodide				[13450-95-8]
	(419–613)	64.2±0.2	(419)		[99/22]
Hg					
C_2H_6Hg	dimethyl mercury				[593-74-8]
	(275–367)	36.7±0.1	(321)		[01/9]
		34.6±0.8			[50/12][82/15]
$C_2F_6HgS_2$	*bis*(trifluoromethylthio)mercury				
	(353–423)	49.9	(368)		[99/16]
$C_4H_{10}Hg$	diethyl mercury				[627-44-1]
		44.8±1.7			[51/12][82/15]
		44.9			[35/7]
$C_6H_{14}Hg$	dipropyl mercury				[628-85-3]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		55.2±1.3			[52/20][82/15]
$C_6H_{14}Hg$	diisopropyl mercury				[1071-39-2]
		53.6±1.7			[52/20][82/15]
$C_{12}H_{30}Ge_2Hg$	*bis*(triethylgermyl)mercury				[4149-28-4]
	(383–403)	64.8	(393)		[72/15]
$C_{12}H_{30}HgSi_2$	*bis*(triethylsilyl)mercury				[4149-29-5]
	(383–433)	64.0	(398)		[72/15]
$C_{18}H_{42}Ge_2Hg$	*bis*(triisopropylgermyl)mercury				[24004-54-4]
	(373–483)	68.7	(388)		[72/15]
HgI_2	mercuric iodide				[7774-29-0]
	(537–610)	147.4	(574)	UV	[02/7]
Ho					
$C_{33}H_{57}HoO_6$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)holmium(III)				[15522-73-3]
	(458–500)	84.6		BG	[69/28]
I					
HI	hydrogen iodide				[10034-85-2]
		19.8	(238)	C	[29/4]
In					
$C_6H_{15}In$	triethyl indium				[923-34-2]
	(326–376)	45.0±0.7	(351)		[01/9][01/24]
$C_9H_{21}In$	tripropyl indium				[3015-98-3]
	(400–483)	52.0	(441)		[99/16]
$C_9H_{21}In$	triisopropyl indium				[17144-80-8]
	(318–366)	52.3±0.7	(342)		[01/9]
	(394–478)	51.0	(336)		[99/16]
$C_{12}H_{27}In$	tributyl indium				[15676-66-1]
	(444–539)	58.5	(459)	A	[87/5]
$C_{15}H_{12}F_9InO_6$	*tris*(1,1,1-trifluoro-2,4-pentanedionato)indium(III)				[15453-87-9]
	(398–478)	77.4±0.6	(438)		[78/10]
Li					
C_4H_9Li	butyl lithium				[109-72-8]
		107.1±2.9			[61/24][82/15]
	[Note: Authors of [61/24] noted that the experimental data was not very reproducible, and subject to considerable error.]				
Lu					
$C_{33}H_{57}LuO_6$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)lutetium(III)				[15497-45-2]
	(448–490)	83.6		BG	[69/28]
Mn					
$C_5H_3MnO_5Si$	silyl pentacarbonyl manganese				[15770-61-3]
	(294–391)	39.6	(343)	T	[69/37][67/40]
$C_{10}H_{10}Mn$	*bis*(cyclopentadienyl)manganese				[1271-27-8]
	(378–435)	58.0	(393)	A	[87/5]
$C_{10}O_{10}MnRe$	manganese rhenium decacarbonyl				[14693-30-2]
	(440–463)	56.5	(451)		[71/14]
$C_{10}O_{10}Mn_2$	dimanganese decacarbonyl				[10170-69-1]
	(428–463)	60.7±1.3	(446)		[71/14]
Mo					
MoF_6	molybdenum hexafluoride				[7783-77-9]
	(318–363)	27.4	(340)		[68/27]
N					
BrClFN	bromochlorofluoroammonia				
	(240–310)	30.2	(275)		[96/31]
BrF_2N	bromodifluoroammonia				[15605-95-5]
	(180–250)	23.2	(215)		[96/31]
Br_2FN	dibromofluoroammonia				[145543-67-5]
	(280–350)	33.6	(315)		[96/31]
Br_3N	nitrogen tribromide				[15162-90-0]
	(380–450)	44.1	(415)		[96/31]
Cl_2FN	dichlorofluoroammonia				
	(200–280)	25.7	(240)		[96/31]
Cl_3N	nitrogen trichloride				[10025-85-1]
	(280–440)	32.9	(360)		[96/31]
HNO_3	nitric acid				[7697-37-2]
	(273–356)	38.6	(312)		[66/30]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
NH_3	ammonia				[7664-41-7]
	(293–392)	22.7	(308)		[79/24]
	(199–241)	23.5	(239)		[37/13]
		23.4	(239)	C	[37/13]
NO	nitric oxide				
		13.8	(212)	C	[29/3]
N_2	nitrogen				[7727-37-9]
	(63–126)	6.1	(78)		[67/42]
		5.6	(77)		[33/16]
N_2F_4	tetrafluorohydrazine				[10036-47-2]
		26.4	(200)		[58/15]
N_2H_4	hydrazine				[302-01-2]
	(288–353)	44.5	(303)		[49/13]
N_2O	nitrous oxide				[10024-94-2]
	(182–236)	16.1	(221)		[45/5]
Nb					
$C_{10}H_{25}NbO_5$	pentaethylniobate				
	(376–414)	107.6	(391)	A	[87/5]
Nd					
$C_{33}H_{57}NdO_6$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)neodymium(III)				[15492-47-4]
	(491–510)	99.1		BG	[69/28]
Ni					
C_3NiO_3-C_3F_9P	*tris*(trifluoromethyl)phosphine—nickel tricarbonyl complex				
	(273–323)	31.2	(298)		[58/21]
C_4NiO_4	nickel tetracarbonyl				[13463-39-3]
	(277–412)	29.8	(344)		[70/35]
		27.6±1.3			[57/24][82/15]
		28.0			[55/17]
		27.2	(298)		[55/17]
		30.2±0.1			[53/14]
	(250–315)	29.5	(265)		[47/5]
		30.1			[42/9][55/17]
		27.2			[1903/1][55/17]
$C_6H_{12}N_2NiS_4$	*bis*(dimethyldithiocarbamate)nickel				[15521-65-0]
	(448–478)	139.9	(463)		[99/16]
$C_{14}H_{28}N_2NiS_4$	*bis*(dipropyldithiocarbamate)nickel				[14516-30-4]
	(433–462)	126.1	(448)		[99/16]
$C_{18}H_{36}N_2NiS_4$	*bis*(dibutyldithiocarbamate)nickel				[13927-77-0]
	(438–562)	136.6	(500)		[99/16]
$C_{18}H_{36}N_2NiS_4$	*bis*(diisobutyldithiocarbamate)nickel				[28371-07-5]
	(453–473)	124.0	(463)		[99/16]
$C_{22}H_{44}N_2NiS_4$	*bis*[*bis*(3-methylbutyl)dithiocarbamate]nickel				[55935-69-8]
	(429–468)	164.5	(448)		[99/16]
O					
H_2O_2	hydrogen peroxide				[7722-84-1]
	(277–363)	48.5	(320)		[24/2]
Os					
$C_{10}H_{10}Os$	osmocene				[1273-81-0]
	(506–563)	56.3±1.3	(535)		[84/11]
$C_{10}O_{10}Os_3$	triosmium dodecacarbonyl				[15696-40-9]
	(497–543)	101.7	(420)		[74/19]
P (see table 6 for organophosphorous compounds)					
Br_3P	tribromophosphine				[7789-60-8]
		48.5			[96/23[63/31]
Cl_3P	trichlorophosphine				[7719-12-2]
		32.6			[96/23[63/31]
F_2HOP	hydrophosphoryl difluoride				
	(220–271)	36.1	(245)	T	[67/36]
F_2HPS	hydrothiophosphoryl difluoride				
	(188–258)	29.1	(223)	T	[67/36]
F_2N_3OP	difluorophosphoryl azide				
		36.4	(296)		[72/23]
$F_3N_3P_3$	trimeric phosphonitrilic fluoride				

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
		32.1			[58/27]
$F_4N_4P_4$	tetrameric phosphonitrilic fluoride				
		37.3			[58/27]
F_6NP_3	*tris*(difluorophosphino)amine				
		31.2			[75/38]
PH_3	phosphine				[7803-51-2]
		14.6±0.1	(186)		[39/5]
		14.6	(185)		[37/15]
F_5P	phosphorous pentafluoride				[7647-19-0]
	(179–189)	17.2	(184)	QM	[37/16]
Pb					
C_2H_8Pb	dimethylplumbane				
	(173–223)	25.5	(198)		[60/26]
$C_3H_{10}Pb$	trimethylplumbane				
	(193–243)	31.1	(218)		[60/26]
$C_4H_{12}Pb$	tetramethyllead				[75-74-1]
		38.1±0.4			[59/17][82/15]
	(298–308)	35.7	(303)		[29/6]
$C_5H_9F_5Pb$	(pentafluoroethyl)trimethyllead				
	(295–329)	39.1	(312)	T	[60/11]
$C_8H_{20}Pb$	tetraethyllead				[78-00-2]
		56.6±1.0	(298)	C	[80/4]
	(311–456)	57.3	(326)		[47/5]
		56.9±2.5			[56/22][82/15]
	(273–343)	56.3	(308)		[36/9]
	(351–423)	56.7	(387)		[35/7]
Pr					
$C_{33}H_{57}O_6Pr$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)praseodymium(III)				[15492-48-5]
	(495–530)	109.2		BG	[69/28]
Re					
$C_{10}O_{10}MnRe$	manganese rhenium decacarbonyl				[14693-30-2]
	(440–463)	56.5	(451)		[71/14]
$C_{10}O_{10}Re_2$	dirhenium decacarbonyl				[14285-68-8]
	(454–483)	68.7	(468)		[71/14]
Ru					
C_5O_5Ru	ruthenium pentacarbonyl				
	(243–323)	42.2	(283)		[91/16]
$C_{10}H_{10}Ru$	ruthenocene				[1287-13-4]
	(479–544)	53.6±1.4	(511)		[84/11]
S					
Br_2OS	thionyl bromide				[507-16-4]
	(313–439)	43.6	(330)		[99/16]
Br_2S_2	disulfur dibromide				[13172-31-1]
	(365–503)	53.9	(380)		[99/16]
Br_2FO_2S	sulfuryl bromide fluoride				[13536-61-3]
	(236–333)	32.0	(251)		[99/16]
ClF_2NO_2S	difluoroamidosulfuryl chloride				
	(232–290)	31.2	(261)		[71/19]
ClFOS	thionyl chloride fluoride				[14177-25-4]
	(212–304)	27.7	(227)		[99/16]
$ClFO_2S$	sulfuryl chloride fluoride				[13637-84-8]
	(211–300)	29.0	(226)		[99/16]
$ClFO_5S_2$	pyrosulfuryl chloride fluoride				[13637-85-9]
	(284–396)	40.8	(299)		[99/16]
$ClHO_3S$	chlorosulfonic acid				[7790-94-5]
	(324–454)	45.8	(339)		[99/16]
Cl_2OS	thionyl chloride				[7719-09-7]
	(257–372)	32.4	(272)		[99/16]
Cl_2O_2S	sulfuryl chloride				[7791-25-5]
	(357–365)	34.5	(272)		[99/16]
$Cl_2O_5S_2$	pyrosulfuryl dichloride				[7791-27-7]
	(325–450)	44.7	(340)		[99/16]
Cl_2S	sulfur chloride				[10545-99-0]
	(265–348)	43.8	(280)		[99/16]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
Cl_2S_2	disulfur dichloride				[10025-67-9]
	(306–439)	41.1	(321)		[99/16]
FHO_3S	fluorosulfonic acid				[7789-21-1]
	(343–459)	55.7	(358)		[99/16]
FNS	thiazyl fluoride				[18820-63-8]
	(270–299)	21.7	(285)		[99/16]
F_2HPS	hydrothiophosphoryl difluoride				
	(188–258)	29.1	(223)	T	[67/36]
F_2N_2S	dinitrogen sulfur difluoride				[500010-01-5]
	(192–281)	23.9	(207)		[99/16]
F_2OS	thionyl fluoride				[7783-42-8]
	(173–244)	23.7	(188)		[99/16]
F_2O_2S	sulfuryl fluoride				[2699-79-8]
	(160–233)	20.0	(175)		[99/16]
F_2O_4S	peroxysulfuryl difluoride				
	(198–248)	25.7	(223)		[75/40]
$F_2O_5S_2$	pyrosulfuryl difluoride				[13036-75-4]
	(240–346)	31.4	(255)		[99/16]
$F_2O_8S_3$	trisulfur octoxide difluoride				[13709-33-6]
	(296–419)	40.7	(311)		[99/16]
F_2S_2	disulfur difluoride				[16860-99-4]
	(153–196)	14.9	(168)		[99/16]
F_3NO_3S	N,N-difluorohydroxylamine-O-fluorosulfonate				
	(206–272)	24.6	(239)		[63/28]
F_3NS	N-fluorosulfur difluoride amide				
	(213–246)	24.1	(230)		[69/26]
F_3NS	nitrogen fluoride sulfide				[15930-75-3]
	(184–268)	23.1	(199)		[99/16]
F_4OS	sulfur oxide tetrafluoride				[13809-54-1]
	(166–240)	21.4	(181)		[99/16]
$F_4O_5S_2$	disulfur pentoxide tetrafluoride				[44982-62-9]
	(246–353)	18.0	(261)		[99/16]
F_4S	sulfur tetrafluoride				[7783-60-0]
	(170–250)	21.1	(185)		[99/16]
	(160–224)	24.6	(192)		[55/16]
$F_6O_3S_2$	pentafluorosulfur fluorosulfane				
	(228–273)	32.2	(250)		[62/36]
$F_{10}O_2S_2$	thiosulfuryl decafluoride				[12395-41-4]
	(239–344)	31.8	(242)		[99/16]
$F_{10}S_2$	disulfur decafluoride				[5714-22-7]
	(226–322)	30.1	(241)		[99/16]
	(222–273)	29.6	(237)		[62/36]
$F_{14}O_2S_3$	*bis*(pentafluorosulfato)tetrafluoro sulfur ($SF_5OSF_4OSF_5$)				[108021-40-5]
		33.4			[63/45]
$F_{10}O_2S_2$	(pentafluorosulfato)tetrafluoro sulfur peroxide ($SF_5OSF_4OOSF_4OSF_5$)				
		47.5			[63/45]
H_2S	hydrogen sulfide				[7783-06-4]
	(185–228)	19.5	(200)		[99/16]
	(228–363)	18.6	(243)		[99/16]
H_2S_2	dihydrogen disulfide				[13465-07-1]
	(256–367)	34.0	(271)		[99/16]
		33.8±0.1	(293)	C	[58/14]
H_2S_3	dihydrogen trisulfide				[13845-23-3]
	(328–474)	43.1	(343)		[99/16]
		45.5±0.2	(293)	C	[58/14]
H_2S_4	dihydrogen tetrasulfide				[13465-25-5]
	(384–547)	52.2	(399)		[99/16]
		56.8±0.3	(293)	C	[58/14]
H_2S_5	dihydrogen pentasulfide				[13465-24-4]
	(426–592)	61.5	(441)		[99/16]
		68.4±0.6	(293)	C	[58/14]
SO_2	sulfur dioxide				[7446-09-5]
	(200–263)	24.9	(263)		[38/11]
		24.9	(263)	C	[38/11]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
SO_3	sulfur trioxide				[7446-11-9]
	(290–318)	46.7	(290)		[85/14]
	(290–318)	45.5±0.8	(298)		[85/14]
	(353–473)	32.4	(368)		[63/43]
Sb					
CH_5Sb	methylstibine				[23362-09-6]
	(223–273)	27.4	(248)		[59/6]
C_2H_7Sb	dimethylstibine				[23362-10-9]
	(241–273)	30.8	(257)		[59/6]
C_2H_8BSb	dimethylstibinoborine				
	(234–273)	32.1	(254)		[59/6]
$C_3Cl_2F_9Sb$	*tris*(trifluoromethyl)antimony dichloride				
	(243–323)	38.8	(283)		[57/28]
C_3F_9Sb	*tris*(trifluoromethyl)stibine				
	(215–343)	34.7	(279)		[57/28]
C_3H_9Sb	trimethylstibine				[594-10-5]
		28.9±1.3			[55/15][82/15]
		31.2		BG	[46/13]
$C_4H_{12}Sb_2$	tetramethylbistibine				
	(325–358)	46.9	(341)		[59/6]
C_6H_9Sb	trivinylstibine				[5613-68-3]
	(293–363)	38.7	(308)		[57/15][84/9]
$C_6H_{15}Sb$	triethylstibine				[617-85-6]
	(193–333)	39.9±1.3	(306)		[01/9]
		43.5±4.2			[63/37][82/15]
		41.8		BG	[46/13]
$C_{18}H_{15}Sb$	triphenylantimony				[603-36-1]
	(503–553)	83.3	(518)	A	[87/5]
Sc					
$C_{15}H_{12}F_9O_6Sc$	*tris*(1,1,1-trifluoro-2,4-pentanedionato)scandium(III)				[14634-68-5]
	(397–457)	82.2±0.8	(427)		[78/11]
Se					
$CBrF_3Se$	trifluoromethylselenyl bromide				
		30.9			[80/22]
$CClF_3Se$	trifluoromethylselenyl chloride				
		27.6			[80/22]
COSe	carbon oxyselenide				[1603-84-5]
	(221–252)	22.1	(236)		[99/16]
	(156–251)	21.7	(236)		[47/5]
		22.1	(211)		[37/12]
CSSe	carbon selenide sulfide				[5951-19-9]
	(226–359)	35.5	(241)		[99/16]
	(273–357)	33.6	(288)		[14/1][84/9]
CSe_2	carbon diselenide				[506-80-9]
	(230–290)	39.1	(245)		[99/16]
	(290–337)	35.9	(305)		[99/16]
		37.2±0.8			[66/26][82/15]
	(273–323)	39.0	(288)		[47/2][84/9]
CHF_3Se	trifluoromethaneselenol				[55446-31-6]
		22.5			[80/22]
CH_3FO_3Se	fluoroselenic acid, methyl ester				[17697-13-1]
		46.9			[67/41]
CH_3F_3SeSi	silyl trifluoromethyl selenide				
	(213–277)	28.0	(245)		[62/31]
C_2BrF_5Se	(pentafluoroethane) selenyl bromide				[6123-59-7]
	(242–293)	34.5	(267)		[99/16]
C_2ClF_5Se	(pentafluoroethane) selenyl chloride				[6123-50-8]
	(215–289)	30.3	(252)		[99/16]
C_2F_3NOSe	trifluoromethyl selenium isocyanate				[20334-48-9]
	(233–284)	29.5	(259)		[68/18]
C_2F_3NSSe	trifluoromethyl selenium thiocyanate				[21438-06-2]
	(233–383)	25.9	(258)		[68/18]
C_2F_3NSSe	trifluoromethane sulphenyl selenocyanate				
	(263–313)	33.3	(288)		[63/42]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
C_2F_3NSe	trifluoromethyl selenocyanate				[1717-4903]
		37.9			[80/22]
	(233–273)	37.6	(253)		[68/18]
$C_2F_3NSe_2$	trifluoromethyl selenium selenocyanate				[20563-91-1]
	(223–268)	26.6	(245)		[68/18]
CF_6Se	*bis*(trifluoromethyl)selenide				[371-79-9]
		24.4			[80/22]
CF_6Se_2	*bis*(difluoromethyl) diselenide				[372-65-6]
		33.1			[80/22]
$C_2H_3F_3Se$	methyl(trifluoromethyl)selenide				[1544-45-2]
	(209–294)	27.7	(251)		[99/16][63/41]
C_2H_6Se	dimethyl selenide				[593-79-3]
	(280–318)	30.3±0.1	(295)		[99/16][97/30]
	(278–313)	31.9	(295)	I	[94/9]
$C_2H_6Se_2$	dimethyl diselenide				[7101-31-7]
	(288–313)	74.9	(300)	I	[94/9]
		42.0±1.0	(298)	C	[89/12]
C_3AsF_9Se	*bis*(trifluoromethyl) trifluoromethylselenoarsine				
	(227–295)	34.8	(261)		[62/32]
C_3BrF_7Se	(heptafluoro-1-propane) selenyl bromide				[662-44-2]
	(251–298)	35.0	(274)		[99/16][63/41]
C_3ClF_7Se	(heptafluoro-1-propane) selenyl chloride				[662-46-4]
	(223–289)	33.4	(256)		[99/16][63/41]
C_3F_5NSe	pentafluoroethyl selenocyanate				[20334-51-4]
	(254–293)	32.0	(273)		[68/18]
$C_3H_2F_6Se_2$	*bis*[(trifluoromethyl)seleno]methane				[691-25-8]
	(273–359)	35.4	(315)		[99/16][63/41]
$C_3H_3F_5Se$	methyl pentafluoroethyl selenide				[6123-56-4]
	(234–286)	31.9	(260)		[99/16]
$C_3H_3F_7SeSi$	(heptafluoropropyl)selenyl silane				[1647-59-2]
	(233–393)	33.1	(263)		[99/16][62/31]
$C_3H_4F_5NSe$	(pentafluoroethyl)seleno methylamine				[6123-53-1]
	(243–318)	33.8	(280)		[99/16]
C_3H_5FOSe	fluoroselenoacetic acid, Se-methyl ester				[367-52-2]
	(273–333)	46.3	(303)		[99/16]
$C_3H_5F_3Se$	ethyl(trifluoromethyl)selenide				[690-25-5]
	(223–254)	31.6	(238)		[99/16][63/41]
$C_3H_6F_3NSe$	N,N-dimethyl(trifluoromethyl)selenenamide				
	(231–321)	28.1	(276)		[63/41]
$C_4F_{10}Se$	*bis*(pentafluoroethyl)selenide				[6123-61-1]
	(232–295)	31.6	(263)		[99/16]
$C_4F_{10}Se_2$	*bis*(pentafluoroethyl) diselenide				[6123-49-5]
	(272–318)	40.0	(295)		[99/16]
$C_4HF_{10}NSe_2$	*bis*[(pentafluoroethyl)seleno]amine				[6123-55-3]
	(270–322)	38.3	(296)		[99/16]
$C_4H_3F_7Se$	methyl(heptafluoropropyl) selenide				[662-45-3]
	(232–324)	30.8	(278)		[99/16][63/41]
C_4H_4Se	selenophene				[288-05-1]
	(234–300)	40.8	(272)		[99/16]
		38.1±0.7	(298)	C	[89/12]
	(234–387)	34.0	(249)		[47/5]
$C_4H_5F_5Se$	ethyl(pentafluoroethyl) selenide				[6123-57-5]
	(241–311)	34.8	(276)		[99/16]
$C_4H_6F_5NSe$	1,1,2,2,2-pentafluoro-N,N-dimethylethane selenamide				[6123-52-0]
	(256–320)	34.8	(288)		[99/16]
C_4H_6Se	divinyl selenide				[57796-75-5]
		42.0±1.0	(298)	C	[89/12]
C_4H_8OSe	1,4-oxaselenane				[5368-46-7]
	(352–429)	46.6	(367)		[99/16]
$C_4H_{10}Se$	diethyl selenide				[627-53-2]
	(243–381)	39.7	(258)		[99/16]
		38.9±1.0	(298)	C	[89/12]
		38.9±4.2			[36/5][82/15]
	(298–308)	36.8	(303)		[29/6]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_4H_{10}Se_2$	diethyl diselenide				[628-39-7]
		47.1±0.9	(298)	C	[89/12]
$C_5AsF_{13}Se$	heptafluoropropylseleno *bis*(trifluoromethyl)arsine				
	(277–348)	40.3	(312)		[62/32]
$C_5H_3F_{10}NSe_2$	N,N-*bis*[(pentafluoroethyl)seleno]methylamine				[6123-54-2]
	(282–324)	38.3	(303)		[99/16]
$C_5H_5F_7Se$	ethyl(heptafluoropropyl) selenide				[755-44-2]
	(243–333)	36.0	(288)		[99/16][63/41]
$C_5H_6F_7NSe$	N,N-dimethyl(heptafluoropropyl)selenenamide				
	(228–321)	30.8	(274)		[63/41]
$C_6F_{14}Se$	*bis*(heptafluoropropyl) selenide				[755-81-7]
	(228–343)	34.5	(286)		[99/16][63/41]
$C_6F_{14}Se_2$	*bis*(heptafluoropropyl) diselenide				[755-51-1]
	(260–348)	37.7	(304)		[99/16][63/41]
C_6H_6Se	benzene selenol				[645-96-5]
	(331–458)	45.4	(395)		[99/16]
$C_6H_{14}Se$	diisopropyl selenide				[37773-02-7]
		43.1±1.0	(298)	C	[89/12]
C_7H_8Se	methyl phenyl selenide				[4346-64-9]
	(273–291)	52.5	(282)		[99/16]
$C_8H_{18}Se$	dibutyl selenide				[14835-66-6]
		47.3±1.0	(298)	C	[89/12]
$C_{10}H_{22}Se$	dipentyl selenide				[14835-67-7]
		51.9±1.0	(298)	C	[89/12]
$C_{12}H_{10}Se$	diphenyl selenide				[1132-39-4]
	(379–575)	63.4	(394)		[99/16]
	(378–575)	61.9	(393)	A	[87/5]
		63.6±2.5			[73/33][82/15]
Cl_2OSe	selenium oxychloride				[7791-23-3]
	(352–476)	59.1	(367)		[99/16]
	(353–453)	46.9	(403)		[71/24]
D_2Se	hydrogen selenide—d_2				[13536-95-3]
	(202–256)	22.2	(217)		[99/16]
F_2OSe	seleninyl difluoride				[7783-43-9]
	(316–420)	52.1	(331)		[99/16]
		46.9±0.8	(298)	C	[79/27]
F_4Se	selenium tetrafluoride				[13465-66-2]
	(297–398)	46.4	(312)		[99/16]
F_6O_2Se	*trans bis*(fluoroxy) tetrafluoroselenium				
	(241–286)	26.5	(263)		[70/13]
Si					
CH_2Cl_4OSi	chloromethoxytrichlorosilane				
	(273–323)	9.3	(288)		[58/3]
CH_3Cl_3Si	methyltrichlorosilane				[75-79-6]
	(328–358)	30.7	(343)		[67/26]
	(287–337)	31.2	(302)	I	[54/1]
		31.0±2.1			[69/30][82/15]
CH_4Cl_2Si	(dichloromethyl)silane				
	(283–319)	32.5	(301)		[57/27]
CH_4Cl_2Si	methyldichlorosilane				[75-54-7]
	(275–314)	28.3	(290)	I	[54/1]
CH_5ClSi	(chloromethyl)silane				
	(246–297)	27.5	(271)		[57/27]
CH_5BrSi	methylbromosilane				
	(283–295)	28.5	(289)		[58/24]
CH_6OSi	methoxysilane				[2171-96-2]
	(184–216)	25.8	(201)		[61/5]
CH_8Si_2	methyldisilane				[13498-43-6]
	(190–273)	26.8	(231)	T	[66/16]
$C_2H_3Cl_3Si$	trichlorovinylsilane				[75-94-5]
	(291–356)	34.2	(306)	I	[54/1]
$C_2H_3Cl_5Si$	1,2-dichloroethyltrichlorosilane				[684-00-4]
	(375–453)	45.7	(390)	I	[54/1]
$C_2H_4Cl_6Si_2$	*bis*(trichlorosilyl)ethane				

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(364–432)	48.6	(379)	I	[54/1]
C_2H_4Si	silylacetylene				
	(215–251)	22.0	(233)		[63/39]
$C_2H_5Cl_3Si$	trichloroethylsilane				[115-21-9]
	(303–363)	35.1	(318)		[70/37]
	(301–368)	35.9	(316)	I	[54/1]
$C_2H_5F_3OSi$	ethoxytrifluorosilane				
	(206–248)	26.8	(227)		[49/26]
$C_2H_6Cl_2Si$	dichlorodimethylsilane				[75-78-5]
	(301–345)	31.5	(316)	I	[54/1]
$C_2H_6Cl_2Si$	dichloroethylsilane				[1789-58-8]
	(279–346)	31.5	(294)	I	[54/1]
	(301–345)	31.6	(316)		[54/4]
$C_2H_6Cl_4Si_2$	1,1,2,2-tetrachloro-1,2-dimethyldisilane				
	(300–375)	42.4	(337)		[67/23]
$C_2H_6F_3NSi$	1,1,1-trifluoro-N,N-dimethylaminosilane				
	(225–288)	28.5	(273)		[61/4]
$C_2H_{10}Si_2$	1,2-dimethyldisilane				[870-26-8]
	(227–273)	25.4	(258)		[62/6]
$C_2H_{11}NSi_2$	N,N-dimethyldisilanylamine				
	(207–273)	35.4	(240)	T	[63/30]
$C_3H_4Cl_3NSi$	trichloro-β-cyanoethylsilane				
	(343–443)	53.5	(358)		[78/12]
$C_3H_5Cl_3Si$	allyltrichlorosilane				[107-37-9]
	(319–388)	40.1	(333)	I	[54/1]
$C_3H_6Cl_4Si$	γ-chloropropyltrichlorosilane				[2550-06-3]
	(313–443)	49.7	(328)		[72/14]
	(360–452)	46.4	(375)	I	[54/1]
$C_3H_6Cl_4Si$	β-chloropropyltrichlorosilane				
	(313–443)	46.9	(328)		[72/14]
$C_3H_8Cl_2OSi$	dichloroethoxymethylsilane				
	(239–373)	38.0	(254)		[47/5]
C_3H_9BrSi	bromotrimethylsilane				[2857-97-8]
		32.6±2.1			[67/34][82/15]
C_3H_9ClSi	chlorotrimethylsilane				[75-77-4]
	(274–325)	30.8	(289)		[64/8]
	(276–329)	30.2	(291)		[54/1]
		30.1±1.7			[67/34][82/15]
$C_3H_{10}OSi$	trimethylsilanol				[1066-40-6]
	(291–357)	46.8	(306)	A	[87/5]
		45.6±1.7			[69/30][82/15]
	(291–358)	44.2	(324)	I	[53/15]
$C_3H_{11}NSi$	N,N-dimethyl(methylsilyl)amine				
	(273–317)	28.2	(296)		[58/24]
$C_3H_{13}NSi_2$	N-methyldi(methylsilyl)amine				
	(303–351)	32.2	(327)		[58/24]
$C_3H_{15}NSi_3$	tri(methylsilyl)amine				
	(323–378)	33.7	(350)		[58/24]
$C_4H_8Cl_6SSi_2$	2,5-*bis*(trichlorosilyl)thiophene				
	(374–519)	55.6	(388)		[81/24]
$C_4H_8Cl_2Si$	dichloroethylvinylsilane				[10138-21-3]
	(318–395)	38.1	(333)	I	[54/1]
$C_4H_9F_6NSi_2$	1,1,1-trifluoro-N-(1-methylpropyl)-N-(trifluorosilyl)silanamine				[28245-41-2]
	(193–233)	25.8	(213)		[73/30]
$C_4H_{10}Cl_2Si$	dichlorodiethylsilane				[1719-53-5]
	(321–401)	39.2	(336)	I	[54/1]
$C_4H_{10}F_3NSi$	(N,N-diethylamino)trifluorosilane				[28245-37-6]
	(208–274)	27.4	(241)		[74/34]
$C_4H_{10}F_3NSi$	(N-*tert*-butylamino)trifluorosilane				[28245-40-1]
	(208–250)	33.6	(229)		[73/34]
$C_4H_{10}Si$	1-methylsilacyclobutane				[765-33-3]
		25.1	(298)	C	[91/4]
$C_4H_{12}Si$	diethylsilane				[542-91-6]
		30.0±0.4			[72/30][82/15]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_4H_{12}Cl_2OSi_2$	1,3-dichlorotetramethyldisiloxane				[2401-73-2]
	(303–403)	40.3	(318)		[71/11]
$C_4H_{12}O_3Si$	methyltrimethoxysilane				[1185-55-3]
		34.3±0.6	(298)	C	[88/15]
		34.3±0.3	(298)	EB	[85/13]
$C_4H_{12}O_4Si$	tetramethoxysilane				[681-84-5]
	(364–393)	38.0	(379)	EB	[89/5]
		41.4±0.7	(298)	C	[88/15]
		41.4±0.2	(298)	EB	[85/13]
	(309–394)	41.0	(324)		[80/15]
$C_4H_{12}Si$	tetramethylsilane				[75-76-3]
		26.0±0.6	(298)	C	[88/15]
		26.2±0.4			[72/30][82/15]
		24.2±0.1	(299)	C	[41/5]
$C_4H_{13}NSi$	N,1,1,1-tetramethylsilanamine				[16513-17-0]
		37.4±0.8	(298)	C	[91/6]
		36.0±2.1			[67/34][82/15]
$C_4H_{14}N_2Si$	*bis*(dimethylamino)silane				
	(288–344)	32.4	(316)	T	[64/29]
$C_4H_{16}N_2Si_2$	N,N,N′,N′-tetramethyldisilanylamine				
	(311–354)	39.3	(332)	T	[63/30]
$C_5H_6Cl_2SSi_2$	2-(methyldichlorosilyl)thiophene				
	(341–467)	46.4	(356)		[81/24]
$C_5H_9F_6NOSSi$	S,S-*bis*(trifluoromethyl)-N-(trimethylsilyl)sulfoximine				[34556-30-4]
		33.5	(378)	I	[72/25]
$C_5H_{10}F_3NSi$	1-(trifluorosilyl)piperidine				[33552-49-7]
	(250–282)	33.9	(266)		[73/34]
$C_5H_{12}Si$	1,2-dimethylsilacyclobutane				
		33.1	(298)	C	[91/4]
$C_5H_{12}Si$	1,1-dimethylsilacyclobutane				[2295-12-7]
		32.1	(356)		[75/31]
		33.0±0.8	(298)	I	[74/22]
		34.7±2.1			[72/30][82/15]
$C_5H_{12}Si$	vinyltrimethylsilane				[754-05-2]
		33.1±0.6	(298)	C	[88/15]
$C_5H_{14}OSi$	ethoxytrimethylsilane				[1825-62-3]
		38.4±0.6	(298)	C	[88/15]
		38.4±0.3	(298)	EB	[85/13]
	(223–349)	35.1	(238)		[47/5]
$C_5H_{14}O_3SSi$	trimethoxy[(methylthio)methyl]silane				[57557-66-1]
		40.2±0.6	(298)	C	[89/11]
$C_5H_{14}Si$	methyldiethylsilane				[760-32-7]
		34.6±0.7	(298)	C	[88/15]
$C_5H_{15}NSi$	pentamethylsilanamine				[2083-91-2]
		33.6±0.8	(298)	C	[91/6]
		31.8±1.7			[67/34][82/15]
	(313–357)	31.7	(335)		[58/24]
$C_5H_{20}O_5Si_5$	1,3,5,7,9-pentamethylcyclopentasiloxane				[6166-86-5]
		47.0±0.9	(298)	C	[91/5]
$C_6H_4Cl_4Si$	(2-chlorophenyl)trichlorosilane				[2003-90-9]
	(406–472)	52.1	(439)	EB	[74/22]
$C_6H_4Cl_4Si$	(3-chlorophenyl)trichlorosilane				[2003-89-6]
	(398–463)	50.7	(430)	EB	[74/22]
$C_6H_5Cl_3Si$	phenyl trichlorosilane				[98-13-5]
	(333–453)	51.1	(348)		[70/37]
	(375–470)	47.9	(390)	I	[54/1]
$C_6H_5F_3Si$	trifluorophenylsilane				[368-47-8]
	(242–371)	40.1	(257)		[47/5]
$C_6H_8Cl_4SSi_2$	2,5-*bis*(methyldichlorosilyl)thiophene				
	(405–522)	55.7	(420)		[81/24]
$C_6H_9F_6NSi$	1,1,1-trimethyl-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-silanamine				[17599-55-2]
		30.5	(358)	I	[72/24]
$C_6H_{10}Cl_2Si$	diallydichlorosilane				
	(254–390)	47.9	(269)		[47/5]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_6H_{11}NSi_2$	N-phenyldisilazane				
	(298–356)	34.9	(327)	T	[69/33]
$C_6H_{12}Si_2$	1,1,3,3-tetramethyl-1,3-disilacyclobutane				[1627-98-1]
		39.5	(391)		[75/31]
$C_6H_{12}Si$	1-methyl-1-vinylsilacyclobutane				
		33.1	(298)	C	[91/4]
$C_6H_{14}Si$	1,1,2-trimethylsilacyclobutane				[30681-90-4]
		36.0	(298)	C	[91/4]
$C_6H_{14}Si$	1,1-dimethylsilacyclopentane				
		37.7±2.1			[72/30][82/15]
$C_6H_{14}Si$	1,1,3-trimethylsilacyclobutane				[2295-13-8]
		35.5	(298)	C	[91/4]
$C_6H_{15}ClSi$	chlorotriethylsilane				[994-30-9]
	(268–419)	42.9	(419)		[47/5]
$C_6H_{15}FO_3Si$	triethoxyfluorosilane				
	(291–373)	40.3	(332)	I	[49/26]
$C_6H_{15}NOSi_2$	pentamethyldisilanyl isocyanate				
	(320–377)	44.2	(348)		[63/40]
$C_6H_{16}OSi$	propoxytrimethylsilane				[1825-63-4]
		34.3±0.6	(298)	C	[88/15]
		34.3±0.3	(298)	C	[85/13]
$C_6H_{16}OSi$	isopropoxytrimethylsilane				[1825-64-5]
		31.8±0.6	(298)	C	[88/15]
		31.8±0.4	(298)	EB	[85/13]
$C_6H_{16}OSi$	triethylsilanol				[597-52-4]
	(298–413)	50.6	(355)	I	[53/15]
$C_6H_{16}O_2Si$	diethoxydimethylsilane				[78-62-6]
		43.1±0.7	(298)	C	[88/15]
		43.1±0.3	(298)	EB	[85/13]
	(254–386)	43.3	(269)		[47/5]
$C_6H_{16}O_3SSi$	trimethoxy[2-(methylthio)ethyl]silane				[66785-19-1]
		45.2±0.7	(298)	C	[89/11]
$C_6H_{16}O_3SSi$	[(ethylthio)methyl]trimethoxysilane				[53696-79-0]
		41.4±0.6	(298)	C	[89/11]
$C_6H_{16}Si$	dimethyldiethylsilane				[756-81-0]
		38.9±0.6	(298)	C	[88/15]
$C_6H_{16}Si$	triethylsilane				[617-86-7]
		37.4±0.6	(298)	C	[88/15]
	(303–373)	33.5		EB, I	[75/34]
		36.4±1.3			[72/30][82/15]
$C_6H_{16}Si_2$	1,1,3,3-tetramethyl-1,3-disilacyclobutane				[1627-98-1]
		36.7±1.1	(298)	I	[74/23]
		41.0±2.1			[72/30][82/15]
$C_6H_{17}B_5Br_2Si_2$	2,4-*bis*(bromodimethylsilyl)-2,4-dicarbo-closo-heptaborane (7)				[66798-29-6]
	(388–463)	53.1	(403)	I	[79/25]
$C_6H_{17}B_5Cl_2Si_2$	2,4-*bis*(chlorodimethylsilyl)-2,4-dicarbo-closo-heptaborane (7)				[28699-83-4]
	(359–439)	46.2	(374)	I	[79/25]
$C_6H_{18}Cl_2O_2Si_3$	1,5-dichlorohexamethyltrisiloxane				
	(299–457)	49.8	(314)		[47/5]
$C_6H_{18}OSi_2$	hexamethyldisiloxane				[107-46-0]
	(300–383)	36.9	(315)	EB	[86/4]
	(293–361)	33.1	(327)		[71/15]
		37.2±1.7			[64/26][82/15]
	(309–411)	36.0	(324)	EB	[61/15]
		34.6±0.1	(332)	C	[61/15]
		33.1±0.1	(351)	C	[61/15]
		31.3±0.1	(373)	C	[61/15]
		37.2±1.7			[47/5]
$C_6H_{18}O_3Si_3$	hexamethylcyclotrisiloxane				[541-05-9]
	(342–419)	40.8	(357)	EB	[86/4]
	(353–403)	39.7	(368)		[74/18]
	(339–407)	39.0	(373)		[71/15]
	(343–388)	39.7	(365)		[53/20]
$C_6H_{18}Si_2$	hexamethyldisilane				[1450-14-2]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(305–387)	36.3	(320)	EB	[86/12]
		37.4±0.4			[72/30][82/15]
	(288–310)	37.2			[59/26][86/12]
	(294–334)	36.8			[41/12][86/12]
$C_6H_{19}B_5Si_2$	2,4-*bis*(dimethylsilyl)-2,4-dicarba-closo-heptaborane				[59351-11-0]
	(373–453)	41.3	(388)	I	[76/17]
$C_6H_{19}NSi_2$	hexamethyldisilazane				[999-97-3]
		42.2±0.9	(298)	C	[91/6]
	(294–395)	36.0	(344)		[72/19]
		41.4±2.1			[66/22][82/15]
$C_6H_{19}N_3Si$	*tris*(dimethylamino)silane				
	(309–387)	41.1	(348)	T	[64/29]
$C_6H_{21}N_3Si_3$	hexamethylcyclotrisilazane				[1009-93-4]
	(342–456)	45.6	(399)		[72/19]
$C_7H_8Cl_2Si$	benzyl dichlorosilane				[18173-99-4]
	(318–467)	58.5	(333)		[47/5][99/16]
$C_7H_8Cl_2Si$	phenyldichloromethylsilane				[149-74-6]
	(309–479)	51.2	(323)		[47/5][99/16]
$C_7H_8Cl_2Si$	dichloro-4-tolylsilane				[13272-80-5]
	(319–469)	58.0	(334)		[47/5][99/16]
$C_7H_8F_2Si$	difluoromethylphenylsilane				[328-57-4]
	(303–413)	44.6	(318)		[99/16]
$C_7H_9F_8NOSSi$	2,2,3,3,4,4,5,5-octafluoro-1,1,2,3,4,5-hexahydro-1-[(trifluoromethyl)-silyl]imino]thiophene-1-oxide				[77589-40-3]
		31.4	(383)		[81/16]
$C_7H_9F_9N_2OSSi$	1,1,1-trifluoro-N-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]-N′-(trimethylsilyl)methanesulfonimidamide				[62609-67-0]
		39.3	(429)	I	[77/19][99/16]
$C_7H_{16}O_3SSi$	trimethoxy[(2-propenylthio)methyl]silane				[57877-58-4]
		38.6±0.5	(298)	C	[89/11]
$C_7H_{17}ClSi$	(1-chloroethyl)diethylmethylsilane				[18817-17-9]
	(353–445)	41.8	(400)		[99/16]
$C_7H_{18}OSi$	butyl trimethylsilyl ether				[1825-65-6]
	(344–397)	38.5	(359)	EB	[69/13][84/9]
$C_7H_{18}O_3SSi$	trimethoxy[3-(methylthio)propyl]silane				[94358-36-8]
		43.5±0.6	(298)	C	[89/11]
$C_7H_{18}O_3SSi$	[2-(ethylthio)ethyl]trimethoxysilane				[40532-52-3]
		41.4±0.7	(298)	C	[89/11]
$C_7H_{18}O_3Si$	triethoxymethylsilane				[2031-67-6]
		45.1±0.7	(298)	C	[88/15]
		45.1±0.4	(298)	EB	[85/13]
	(272–416)	45.2	(287)		[47/5]
$C_7H_{18}SSi$	(n-butylthio)trimethylsilane				
		40.6±2.1			[67/34][82/15]
$C_7H_{18}Si$	methyltriethylsilane				[757-21-1]
		40.5±0.6	(298)	C	[88/15]
$C_7H_{18}Si$	methyldipropylsilane				[999-03-1]
		35.9±0.7	(298)	C	[88/15]
$C_7H_{18}Si$	methyldiisopropylsilane				[18442-00-7]
		32.4±0.8	(298)	C	[88/15]
$C_7H_{19}NSi$	N,N-diethyl-1,1,1-trimethylsilanamine				[996-50-9]
		37.9±0.8	(298)	C	[91/6]
$C_7H_{20}Si_2$	methylene-*bis*(trimethylsilane)				[2117-28-4]
	(323–407)	40.3±0.3		QM	[76/25]
	(323–407)	40.3±0.3	(365)		[75/25][75/31]
$C_7H_{21}NSi_2$	N,1,1,1-tetramethyl-N-(trimethylsilyl)silanamine				[920-68-3]
		38.1±0.8	(298)	C	[91/6]
		38.9±2.1			[67/34][82/15]
$C_8H_{10}Cl_2OSi$	dichloroethoxyphenylsilane				[18236-80-1]
	(325–496)	56.3	(340)		[99/16]
$C_8H_{10}Cl_2Si$	dichloroethylphenylsilane				[1125-27-5]
	(316–503)	51.3	(331)		[99/16]
$C_8H_{11}ClSi$	chlorodimethylphenylsilane				[768-33-2]
	(302–467)	52.2	(317)		[99/16]
	(303–466)	49.7	(318)		[47/5]
$C_8H_{11}FSi$	fluorodimethylphenylsilane				[454-57-9]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(303–423)	49.6	(318)		[99/16]
$C_8H_{12}Si$	tetravinylsilane				[1112-55-6]
		42.7±0.7	(298)	C	[88/15]
$C_8H_{12}Si$	dimethylphenylsilane				[766-77-8]
	(298–432)	45.3	(293)		[47/5]
$C_8H_{16}Cl_4O_4Si$	*tetrakis*(2-chloroethoxy)silane				[18290-84-1]
	(447–500)	81.1	(473)		[99/16][46/9]
$C_8H_{18}F_3NOSi_2$	$CF_3C[OSi(CH)_3]=NSi(CH_3)_3$				
	(316–350)	41.8	(333)		[70/27]
$C_8H_{18}O_3Si$	vinyltriethoxysilane				[78-08-0]
		50.2±0.8	(298)	C	[88/15]
		50.2±0.4	(298)	EB	[85/13]
	(334–421)	46.2	(349)	I	[54/1]
$C_8H_{20}Cl_2OSi_2$	1,3-dichloro-1,1,3,3-tetraethyldisiloxane				[18825-03-1]
	(343–463)	53.6	(358)		[71/11][99/16]
$C_8H_{20}O_3SSi$	[3-(ethylthio)propyl]trimethoxysilane				[57557-74-1]
		41.8±0.6	(298)	C	[89/11]
$C_8H_{20}O_3SSi$	[(butylthio)methyl]trimethoxysilane				[57557-68-3]
		41.6±0.6	(298)	C	[89/11]
$C_8H_{20}O_3SSi$	trimethoxy[[(2-methylpropyl)thio]methyl]silane				[57557-69-4]
		38.7±0.6	(298)	C	[89/11]
$C_8H_{20}O_3SSi$	[[(1,1-dimethylethyl)thio]methyl]trimethoxysilane				[57557-70-7]
		50.6±0.7	(298)	C	[89/11]
$C_8H_{20}O_3Si$	ethyltriethoxysilane				[78-07-9]
	(338–426)	47.0	(353)	I	[54/1]
$C_8H_{20}O_4Si$	tetraethoxysilane				[78-10-4]
	(323–442)	53.9	(298)	SG	[95/10]
	(323–442)	52.3	(298)	SG	[95/10]
	(404–437)	40.9	(419)	EB	[89/5]
		48.5±0.3	(298)	EB	[85/13]
	(313–440)	50.0	(328)		[80/15]
	(273–344)	U33.9			[73/16]
	(289–441)	49.5	(304)		[47/5]
$C_8H_{20}Si$	dimethyldipropylsilane				[995-89-1]
		40.2±0.6	(298)	C	[88/15]
$C_8H_{20}Si$	tetraethylsilane				[631-36-7]
		39.0±0.7	(298)	C	[88/15]
		39.7±2.1			[72/30][82/15]
	(272–426)	43.3	(287)		[47/5]
$C_8H_{20}Si$	ethyldipropylsilane				[998-14-1]
		37.9±0.6	(298)	C	[88/15]
$C_8H_{20}Si$	ethyldiisopropylsilane				[17591-40-1]
		38.1±0.7	(298)	C	[88/15]
$C_8H_{21}NO_3Si$	γ-aminopropyltriethoxysilane				
	(363–492)	55.8	(388)		[76/24]
$C_8H_{23}B_5Si_2$	2,4-*bis*(trimethylsilyl)-2,4-dicarba-closo-heptaborane				[59351-10-9]
	(373–473)	45.0	(388)	I	[76/17]
$C_8H_{24}Si_3$	octamethyltrisilane				
		46.0±0.8			[72/30][82/15]
$C_8H_{24}Cl_2O_3Si_4$	1,7-dichloro-1,1,3,3,5,5,7,7-octamethyltetrasiloxane				[2474-02-4]
	(326–495)	53.8	(341)		[99/16]
$C_8H_{24}N_4Si$	*tetrakis*(dimethylamino)silane				
	(361–415)	40.0	(388)	T	[64/29]
$C_8H_{24}O_2Si_3$	octamethyltrisiloxane				[107-51-7]
	(346–446)	43.2	(361)	EB	[86/4]
		39.7±2.1			[72/30][82/15]
	(345–417)	40.2	(381)		[71/16]
$C_8H_{24}O_4Si_4$	octamethylcyclotetrasiloxane				[556-67-2]
		57.0±0.8	(298)	C	[91/5]
	(361–469)	47.6	(376)	EB	[86/4]
	(334–423)	44.1	(378)		[71/15]
	(303–428)	56.1	(298)	I	[54/13]
	(303–428)	48.5	(373)	I	[54/13]
	(303–428)	45.6	(398)	I	[54/13]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_8H_{28}N_4Si_4$	octamethylcyclotetrasilazane				[1020-84-4]
	(388–513)	52.3	(450)		[72/19]
$C_9H_{14}OSi$	phenoxytrimethylsilane				[1529-17-5]
		56.9±0.8	(298)	C	[88/15]
$C_9H_{20}OSi$	cyclohexyl trimethylsilyl ether				[13871-89-1]
	(364–441)	45.1	(379)	EB	[69/13]
$C_9H_{22}O_3SSi$	triethoxy[(ethylthio)methyl]silane				[53696-83-6]
		42.3±0.6	(298)	C	[89/11]
$C_9H_{22}Si$	propyltriethylsilane				[994-44-5]
		40.0±0.7	(298)	C	[88/15]
$C_9H_{22}Si$	tripropylsilane				[998-29-8]
		39.1±0.7	(298)	C	[88/15]
$C_9H_{22}Si$	methyldibutylsilane				[999-35-9]
		36.2±0.7	(298)	C	[88/15]
$C_9H_{23}NSi$	1,1,1-triethyl-N-(1-methylethyl)silanamine				[5277-20-3]
		38.6±0.8	(298)	C	[91/6]
$C_9H_{23}NSi$	1,1,1-triethyl-N-propylsilanamine				[17887-11-5]
		41.5±0.8	(298)	C	[91/6]
$C_9H_{24}Si_2$	1,3-propanediyl-*bis*(trimethylsilane)				[2295-05-8]
	(338–443)	43.1±0.5		QM	[76/25]
	(338–443)	43.1±0.5	(390)		[75/25][75/31]
$C_9H_{27}NSi_3$	*tris*(trimethylsilyl)amine				
		54.4±8.4			[67/34][82/15]
$C_{10}H_{11}NSi_4$	1,1,3,3-tetramethyl-1,3-*bis*(trimethylsilyl)disilazane				
	(378–435)	58.0	(393)	A	[87/5]
$C_{10}H_{16}OSi$	(2-methoxyphenyl)trimethylsilane				[704-43-8]
		59.4±0.8	(298)	C	[88/15]
$C_{10}H_{16}OSi$	(3-methoxyphenyl)trimethylsilane				[17876-90-3]
		56.1±0.8	(298)	C	[88/15]
$C_{10}H_{16}OSi$	(4-methoxyphenyl)trimethylsilane				[877-68-9]
		56.9±0.8	(298)	C	[88/15]
$C_{10}H_{16}OSi$	*m*-tolyl trimethylsilyl ether				[17902-31-7]
	(371–398)	49.7	(384)	EB	[69/13]
$C_{10}H_{16}OSi$	*p*-tolyl trimethylsilyl ether				[17902-32-8]
	(374–402)	49.8	(388)	EB	[69/13]
$C_{10}H_{16}O_3SSi$	trimethoxy[(phenylthio)methyl]silane				[57557-71-8]
		56.4±0.7	(298)	C	[89/11]
$C_{10}H_{20}O_2Si$	diallyl(diethoxy)silane				[13081-67-9]
	(342–459)	48.3	(357)	A	[87/5]
$C_{10}H_{24}O_2Si$	dipropyldiethoxysilane				[2031-63-2]
		46.5±0.7	(298)	C	[88/15]
		46.4±0.3	(298)	EB	[85/13]
$C_{10}H_{24}O_3SSi$	triethoxy[2-(ethylthio)ethyl]silane				[57557-72-9]
		46.9±0.7	(298)	C	[89/11]
$C_{10}H_{24}Si$	diethyldipropylsilane				[994-59-2]
		41.5±0.7	(298)	C	[88/15]
$C_{10}H_{24}Si$	methyltripropylsilane				[995-24-4]
		42.6±0.6	(298)	C	[88/15]
$C_{10}H_{24}Si$	ethyldibutylsilane				[998-61-8]
		39.9±0.7	(298)	C	[88/15]
$C_{10}H_{24}Si$	ethyldiisobutylsilane				[17591-42-3]
		39.8±0.7	(298)	C	[88/15]
$C_{10}H_{25}NO_2Si_3$	1,1,1,3,5,5,5-heptamethyl-3-(2-cyanoethyl)trisiloxane				
	(367–511)	59.5	(382)	A	[87/5]
$C_{10}H_{25}NSi$	pentaethylsilanamine				[6022-10-2]
		42.2±1.0	(298)	C	[91/6]
$C_{10}H_{25}NSi$	N-(1,1-dimethylethyl)-1,1,1-triethylsilanamine				[17940-20-4]
		40.3±0.9	(298)	C	[91/6]
$C_{10}H_{28}O_4Si_3$	1,5-diethoxy-1,1,3,3,5,5-hexamethyltrisiloxane				[17928-13-1]
	(314–470)	56.2	(329)	A	[87/5]
$C_{10}H_{30}O_3Si_4$	methyl *tris*(trimethylsiloxy)silane				
	(362–476)	49.5	(377)	EB	[86/4]
$C_{10}H_{30}O_3Si_4$	decamethyl tetrasiloxane				
	(366–479)	50.3	(381)	EB	[86/4]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(343–454)	48.2	(358)	A	[87/5][71/16]
$C_{10}H_{30}O_5Si_5$	decamethyl cyclopentasiloxane				
		59.0±1.0	(298)	C	[91/5]
	(383–496)	52.1	(398)	EB	[86/4]
	(364–472)	49.0	(379)	A	[87/5][71/15]
		48.1±2.1			[72/30][82/15]
$C_{10}H_{30}Si_4$	decamethyltetrasilane				
		52.3±1.7			[72/30][82/15]
$C_{10}H_{31}NSi_4$	*bis*(pentamethyldisilanyl)amine				
	(376–435)	57.8	(405)		[63/40]
	[Note: Molecular formula given in paper is not consistent with chemical name.]				
$C_{11}H_{18}O_3SSi$	trimethoxy[[(phenylmethyl)thio]methyl]silane				[53696-80-3]
		56.1±0.7	(298)	C	[89/11]
$C_{11}H_{20}OSi$	triallylethoxy silane				[17962-20-8]
	(349–473)	48.4	(364)	A	[87/5]
$C_{11}H_{20}OSi_2$	pentamethylphenyl disiloxane				[14920-92-4]
	(347–474)	53.3	(362)	A	[87/5]
	(347–474)	44.4	(410)		[74/32]
$C_{11}H_{20}O_3Si_3$	1,1,3,3,5-pentamethyl-5-phenylcyclotrisiloxane				
	(396–503)	48.0	(450)		[74/17]
$C_{11}H_{24}O_3Si$	vinyltripropoxysilane				
		52.3±0.9	(298)	C	[88/15]
		52.3±0.4	(298)	EB	[85/13]
$C_{11}H_{26}Si$	ethyltripropylsilane				[994-63-8]
		41.0±0.7	(298)	C	[88/15]
$C_{11}H_{26}Si$	methyldipentylsilane				[1001-48-5]
		40.3±0.7	(298)	C	[88/15]
$C_{11}H_{26}Si$	methyldi(2,2-dimethylpropyl)silane				
		38.1±0.1	(298)	C	[88/15]
$C_{11}H_{27}NSi$	1,1,1-triethyl-N-(1-methylbutyl)silanamine				[133943-80-3]
		46.9±1.0	(298)	C	[91/6]
$C_{11}H_{28}O_4Si_4$	8,8,10,10,12,12-hexamethyl-7,9,11,13-tetrasiloxa-6,8,10,12-tetrasilaspiro[5,7]tridecane				[35331-58-9]
	(393–504)	47.6	(408)	A	[87/5]
	(393–504)	48.8	(449)		[74/17]
$C_{11}H_{28}O_4Si_4$	hexamethyl(silacyclohexyl)cyclotetrasiloxane				
	(403–504)	48.89	(453)		[74/21]
$C_{12}H_9Cl_3Si$	2-(trichlorosilyl)biphenyl				[18030-62-1]
	(461–552)	67.1	(476)	A	[87/5]
$C_{12}H_9Cl_3Si$	4-(trichlorosilyl)biphenyl				[18030-61-0]
	(479–573)	75.7	(494)	A	[87/5]
$C_{12}H_{10}Cl_2Si$	dichlorodiphenylsilane				[80-10-4]
	(465–555)	62.5	(480)	A, I	[87/5][54/1]
		69.5±4.2			[66/23][82/15]
$C_{12}H_{10}F_2Si$	difluorodiphenylsilane				[312-40-3]
	(392–516)	50.7	(407)	A	[87/5]
$C_{12}H_{13}NSi$	(N,N-diphenylamino)silane				
	(425–495)	50.4	(460)	T	[69/34]
$C_{12}H_{20}Cl_8O_4Si$	*tris*(2,2′-dichloroisopropyl) orthosilicate				
	(517–532)	U172.7(524)			[46/9]
$C_{12}H_{20}O_3Si$	triethoxyphenylsilane				[780-69-8]
		58.3±0.9	(298)	C	[88/15]
	(344–506)	61.8	(359)		[47/5]
$C_{12}H_{28}O_4Si$	tetrapropoxysilane				[682-01-9]
		49.8±0.8	(298)	C	[88/15]
	(307–563)	66.9	(322)	A	[87/5]
		49.8±0.4	(298)	EB	[85/13]
$C_{12}H_{28}O_4Si$	tetraisopropoxysilane				[1992-48-9]
	(327–438)	52.7	(342)		[80/15]
$C_{12}H_{28}Si$	tetrapropylsilane				[994-66-1]
		42.2±0.7	(298)	C	[88/15]
$C_{12}H_{28}Si$	tributylsilane				[998-41-4]
		42.9±0.7	(298)	C	[88/15]
$C_{12}H_{28}Si$	triisobutylsilane				[6485-81-0]
		40.0±0.7	(298)	C	[88/15]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{12}H_{28}Si$	ethyldipentylsilane				[17591-43-4]
		41.2±0.7	(298)	C	[88/15]
$C_{12}H_{28}Si$	ethyldiisopentylsilane				[18159-61-0]
		42.6±0.7	(298)	C	[88/15]
$C_{12}H_{30}HgSi_2$	*bis*(triethylsilyl)mercury				
	(383–433)	64.0	(398)		[72/15]
$C_{12}H_{30}O_3Si_3$	hexaethyl cyclotrisiloxane				[2031-79-0]
	(385–524)	57.9	(400)	A	[87/5]
	(434–516)	58.7	(449)	A	[87/5][54/1]
$C_{12}H_{31}N_3Si$	N,N,N′,N′,N″,N″-hexamethylsilanetriamine				[15730-66-2]
		58.4±1.0	(298)	C	[91/6]
$C_{12}H_{36}O_4Si_5$	dodecamethyl pentasiloxane				[141-63-9]
	(395–515)	55.4	(410)	EB	[86/4]
	(389–498)	50.3	(404)	A	[87/5][71/16]
		53.1±2.1			[72/30][82/15]
$C_{12}H_{36}O_6Si_6$	dodecamethyl cyclohexasiloxane				[540-97-6]
	(411–531)	56.1	(426)	EB	[86/4]
	(340–509)	62.6	(355)	A	[87/5][71/15]
$C_{12}H_{48}O_4Si_5$	*tetrakis*(trimethylsiloxy)silane				
	(398–494)	52.3	(413)	EB	[86/4]
$C_{13}H_{14}Si$	methyldiphenylsilane				[776-76-1]
		64.6±0.8	(298)	C	[88/15]
$C_{13}H_{26}O_2Si_3$	1,1,1,3,5,5,5-heptamethyl-3-phenyl trisiloxane				[546-44-1]
	(357–492)	61.5	(372)	A	[87/5]
$C_{13}H_{26}O_4Si_4$	2,4,4,6,6,8,8-heptamethyl-2-phenylcyclotetrasiloxane				[10448-09-6]
	(397–514)	65.6	(412)	A	[87/5]
$C_{13}H_{30}O_3SSi$	[3-(butylthio)propyl]triethoxysilane				[57557-75-2]
		47.1±0.6	(298)	C	[89/11]
$C_{13}H_{30}Si$	decyltrimethylsilane				
	(340–513)	57.8	(355)		[47/5]
$C_{13}H_{30}Si$	methyldihexylsilane				[1001-46-3]
		42.6±0.7	(298)	C	[88/15]
$C_{14}H_{16}O_2Si$	diphenoxydimethylsilane				[6843-66-9]
		64.4±0.9	(298)	C	[88/15]
$C_{14}H_{16}Si$	ethyldiphenylsilane				[7535-07-1]
		66.1±0.8	(298)	C	[88/15]
$C_{14}H_{32}Si$	triethyloctylsilane				[10175-53-8]
	(347–535)	56.1	(361)		[47/5]
$C_{14}H_{32}Si$	ethyldihexylsilane				[17591-45-6]
		44.8±0.7	(298)	C	[88/15]
$C_{14}H_{32}Si$	dipropyldibutylsilane				
		44.0±0.8	(298)	C	[88/15]
$C_{14}H_{33}NSi$	N,N-dibutyl-1,1,1-triethylsilanamine				[17995-32-3]
		56.3±1.0	(298)	C	[91/6]
$C_{14}H_{33}NSi$	1,1,1-triethyl-N,N-*bis*(1-methylpropyl)silanamine				[133943-79-0]
		51.4±0.9	(298)	C	[91/6]
$C_{14}H_{33}NSi$	1,1,1-triethyl-N-octylsilanamine				[133943-81-4]
		59.1±1.0	(298)	C	[91/6]
$C_{14}H_{42}O_5Si_6$	tetradecamethyl hexasiloxane				[107-52-8]
	(449–545)	56.9	(464)	EB	[86/4]
	(397–522)	56.6	(412)	A	[87/5][71/16]
$C_{14}H_{42}O_7Si_7$	tetradecamethyl cycloheptasiloxane				[107-50-6]
	(359–537)	58.6	(374)	A	[87/5]
	(431–548)	60.6	(446)	EB	[86/4]
$C_{15}H_{34}Si$	propyltributylsilane				[994-78-5]
		45.0±0.8	(298)	C	[88/15]
$C_{15}H_{34}Si$	tripentylsilane				[6485-78-5]
		48.1±0.8	(298)	C	[88/15]
$C_{15}H_{34}Si$	triisopentylsilane				[17922-08-6]
		43.8±0.7	(298)	C	[88/15]
$C_{15}H_{34}Si$	dodecyltrimethylsilane				[17908-09-7]
	(364–546)	62.0	(379)		[47/5]
$C_{16}H_{20}O_2Si$	*bis*(2-methylphenoxy)dimethylsilane				[17964-48-6]
		63.6±0.8	(298)	C	[88/15]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{16}H_{20}O_2Si$	*bis*(3-methylphenoxy)dimethylsilane				[17964-47-5]
		61.5±0.8	(298)	C	[88/15]
$C_{16}H_{20}O_2Si$	*bis*(4-methylphenoxy)dimethylsilane				[17964-49-7]
		65.3±0.9	(298)	C	[88/15]
$C_{16}H_{20}O_2Si$	diethoxydiphenylsilane				[2553-19-7]
	(385–569)	71.5	(399)		[47/5]
$C_{16}H_{22}O_3Si_3$	1,1,3,3-tetramethyl-5,5-diphenylcyclotrisiloxane				[1693-51-2]
	(439–523)	66.9	(481)		[74/17]
$C_{16}H_{22}O_3Si_3$	*cis* 1,1,3,5-tetramethyl-3,5-diphenylcyclotrisiloxane				[31751-60-7]
	(423–541)	66.0	(532)		[72/19]
$C_{16}H_{22}O_3Si_3$	*trans* 1,1,3,5-tetramethyl-3,5-diphenylcyclotrisiloxane				[31751-59-4]
	(397–535)	66.4	(466)		[72/19]
$C_{16}H_{32}O_4Si_4$	6,12,18,24-tetraoxa-5,7,13,19-tetrasilatetraspiro[4,1,4,1,4,1,4,1]-tetracosane				[177-49-1]
	(452–583)	67.6	(467)	A	[87/5]
$C_{16}H_{32}O_4Si_4$	tetra(silacyclopentyl)cyclotetrasiloxane				
	(452–583)	69.5	(517)		[74/21]
$C_{16}H_{36}O_4Si$	tetrabutoxysilane				[4766-57-8]
		52.0±1.0	(298)	C	[88/15]
	(333–479)	79.6	(348)	A	[87/5]
$C_{16}H_{40}O_4Si_4$	octaethyl cyclotetrasiloxane				[1451-99-6]
	(420–574)	69.2	(435)	A	[87/5]
$C_{16}H_{46}O_7Si_6$	1,11-diethoxy-1,1,3,3,5,7,7,9,9,11,11-dodecamethylhexasiloxane				[18143-15-2]
	(376–547)	66.9	(391)	A	[87/5]
$C_{16}H_{48}O_6Si_7$	hexadecamethylheptasiloxane				[541-01-5]
	(443–468)	63.8	(459)	EB	[86/4]
	(443–551)	60.8	(458)	A	[87/5][71/16]
$C_{16}H_{48}O_8Si_8$	hexadecamethyl cyclooctasiloxane				[556-68-3]
	(378–563)	66.6	(391)	A	[87/5]
	(454–576)	64.5	(469)	EB	[86/4]
$C_{17}H_{26}O_4Si_4$	hexamethyl(silaacenaphthenyl)cyclotetrasiloxane				
	(466–548)	68.6	(507)		[74/21]
$C_{17}H_{32}O_2Si$	3-methyl-3-[2-cyclohexylpropylperoxy]-1-trimethylsilyl-1-butyne				
	(307–318)	74.2±2.0		ME	[99/23]
$C_{17}H_{38}Si$	tetradecyltrimethylsilane				
	(393–573)	70.9	(408)		[47/5]
$C_{18}H_{28}O_4Si_4$	2,2,4,4,6,8-hexamethyl-6,8-diphenylcyclotetrasiloxane				[18604-02-9]
	(459–576)	70.5	(474)	A	[87/5]
$C_{18}H_{40}Si$	trihexylsilane				[2929-52-4]
		51.0±0.7	(298)	C	[88/15]
$C_{18}H_{40}Si$	ethyldioctylsilane				[51502-64-8]
		47.3±0.7	(298)	C	[88/15]
$C_{18}H_{54}O_7Si_8$	octadecamethyl octasiloxane				[556-69-4]
	(378–563)	67.7	(393)	A	[87/5]
	(464–586)	68.4	(479)	EB	[86/4]
$C_{18}H_{54}O_9Si_9$	octadecamethyl cyclononasiloxane				[556-71-8]
	(463–584)	67.9	(478)	A	[87/5]
	(473–578)	68.0	(488)	EB	[86/4]
$C_{19}H_{18}O_3Si$	methyltriphenoxysilane				[3439-97-2]
		71.5±0.9	(298)	C	[88/15]
$C_{20}H_{20}OSi$	ethoxytriphenylsilane				[1516-80-9]
	(440–617)	89.7	(455)		[47/5]
$C_{20}H_{24}ClOSi_2$	1,3-dimethyl-1,1,3-triphenyl-3-chlorodisiloxane				
	(468–626)	69	(547)		[74/17]
$C_{20}H_{32}O_4Si_4$	tetrasilacyclopentylcyclotetrasiloxane				
	(452–583)	69.5	(518)		[74/21]
$C_{20}H_{44}O_4Si$	*tetrakis*(1-ethylpropoxy)silane				
	(371–427)	89.2	(386)	A	[87/5]
$C_{20}H_{58}O_9Si_8$	1,15-diethoxy-1,1,3,3,5,5,7,7,9,9,1,1,13,13,15,15-hexadecamethyl-octasiloxane				
	(406–585)	79.7	(421)	A	[87/5]
$C_{20}H_{60}O_8Si_9$	eicosamethylnonasiloxane				[2652-13-3]
	(417–581)	85.9	(432)	A	[87/5]
$C_{20}H_{60}O_{10}Si_{10}$	eicosamethylcyclodecasiloxane				[18772-36-6]
	(480–603)	71.3	(495)	A	[87/5]
$C_{21}H_{22}Si$	tribenzylsilane				[1747-92-8]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(460–637)	81.9	(475)	A	[87/5]
$C_{21}H_{24}OSi_2$	1,1,3-trimethyl-1,3,3-triphenyl disiloxane				[14920-93-5]
	(494–624)	80.0	(509)	A	[87/5]
	(495–624)	64.4	(560)		[74/17]
$C_{21}H_{24}O_3Si_3$	*trans* trimethyltriphenylcyclotrisiloxane				
	(483–586)	76.1	(534)		[72/16]
$C_{21}H_{24}O_3Si_3$	*cis* trimethyltriphenylcyclotrisiloxane				
	(473–551)	80.6	(512)		[72/16]
$C_{21}H_{46}Si$	triheptylsilane				[18753-02-1]
		57.4±0.8	(298)	C	[88/15]
$C_{21}H_{46}Si$	methyldidecylsilane				[51502-65-9]
		57.4±0.8	(298)	C	[88/15]
$C_{22}H_{24}O_3Si$	methyl*tris*(2-methylphenoxy)silane				[55893-94-2]
		68.2±0.9	(298)	C	[88/15]
$C_{22}H_{24}O_3Si$	methyl*tris*(3-methylphenoxy)silane				[55893-95-3]
		66.9±0.8	(298)	C	[88/15]
$C_{22}H_{24}O_3Si$	methyl*tris*(4-methylphenoxy)silane				[55893-96-4]
		70.3±0.9	(298)	C	[88/15]
$C_{22}H_{40}O_4Si$	dimethyldi-[3-methyl-3-*tert*-amylperoxy-1-butynyl]silane				
	(318–338)	92.0±1.6		ME	[99/23]
$C_{22}H_{48}Si$	ethyldidecylsilane				[51502-66-0]
		58.7±0.8	(298)	C	[88/15]
$C_{22}H_{66}O_{11}Si_{11}$	docosamethyl cycloundecasiloxane				[18766-38-6]
	(496–620)	74.5	(511)	A	[87/5]
$C_{23}H_{30}O_3Si_3$	1,1,1,3,5-pentamethyl-3,5,5-triphenyltrisiloxane				67102-99-2]
	(521–678)	69.8	(536)	A	[87/5]
$C_{24}H_{22}N_2Si$	N,N,N′N′-tetraphenyl silane diamine				[22519-45-5]
	(410–473)	59.1	(425)	A	[87/5]
	(410–473)	57.3	(441)	T	[69/34]
$C_{24}H_{52}O_4Si$	tetrahexyloxysilane				[7425-86-7]
	(454–573)	87.0	(469)	A	[87/5]
$C_{24}H_{52}Si$	trioctylsilane				[18765-09-8]
		59.8±0.8	(298)	C	[88/15]
$C_{24}H_{72}O_{12}Si_{12}$	tetracosamethyl cyclododecasiloxane				[18919-94-3]
	(508–636)	76.6	(523)	A	[87/5]
$C_{26}H_{26}OSi_2$	1,3-dimethyl-1,1,3,3-tetraphenyldisiloxane				[807-28-3]
	(518–616)	93.3	(533)	A	[87/5]
	(518–685)	64.4	(602)		[74/17]
$C_{27}H_{30}O_2Si$	3-methyl-3-*tert*-butylperoxy-1-triphenylsilyl-1-butyne				
	(378–398)	115.9±3.2		ME	[99/23]
$C_{27}H_{58}Si$	trinonylsilane				[51502-67-1]
		61.8±0.8	(298)	C	[88/15]
$C_{28}H_{28}O_4Si$	*tetrakis*(2-methylphenoxy)silane				[16714-40-2]
		76.2±1.0	(298)	C	[88/15]
$C_{28}H_{28}O_4Si$	*tetrakis*(3-methylphenoxy)silane				[16714-54-8]
		73.6±0.9	(298)	C	[88/15]
$C_{28}H_{28}O_4Si$	*tetrakis*(4-methylphenoxy)silane				[16714-41-3]
		97.1±1.0	(298)	C	[88/15]
$C_{28}H_{32}O_2Si$	3-methyl-3-*tert*-amylperoxy-1-triphenylsilyl-1-butyne				
	(378–393)	120.3±5.8		ME	[99/23]
$C_{28}H_{32}O_2Si_3$	1,1,1,3-tetramethyl-3,5,5,5-tetraphenyltrisiloxane				[67103-00-8]
	(549–678)	82.6	(564)	A	[87/5]
$C_{28}H_{32}O_2Si_3$	1,1,3,5-tetramethyl-1,3,5,5-tetraphenyltrisiloxane				[67142-05-6]
	(566–666)	90.9	(581)	A	[87/5]
$C_{28}H_{32}O_2Si_3$	1,3,3,5-tetramethyl-1,1,5,5-tetraphenyltrisiloxane				[3982-82-9]
	(544–686)	88.3	(559)	A	[87/5]
$C_{29}H_{34}O_2Si$	3-methyl-3-*tert*-hexylperoxy-1-triphenylsilyl-1-butyne				
	(383–398)	126.3±3.0		ME	[99/23]
$C_{30}H_{40}F_{30}O_3Si_4$	1,1,1,3,5,5,5-hepta(γ-trifluoropropyl)-3-*tris*(γ-trifluoropropyl)siloxytrisiloxane				
	(502–652)	64.3	(671)		[74/34]
$C_{30}H_{64}Si$	*tris*(decyl)silane				[18765-73-6]
		65.3±0.8	(298)	C	[88/15]
$C_{33}H_{34}O_2Si_3$	1,1,3-trimethyl-1,3,5,5,5-pentaphenyltrisiloxane				[67103-01-9]
	(603–711)	91.3	(618)	A	[87/5]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{33}H_{34}O_2Si_3$	1,3,5-trimethyl-1,1,3,5,5-pentaphenyltrisiloxane				[3390-61-2]
	(575–625)	87.3	(590)	A	[87/5]
$C_{33}H_{34}O_4Si_4$	1,3,5-trimethyl-1,3,5,7,7-pentaphenylcyclotetrasiloxane				
	(523–676)	86.9	(600)		[74/17]
AsH_9Si_3	trisilylarsine				
	(258–287)	41.0	(272)		[62/34]
Br_3HSi	tribromosilane				[7789-57-3]
	(273–393)	34.8	(333)		[34/4]
Cl_2H_2Si	dichlorosilane				[4109-96-0]
	(290–350)	22.2±0.7			[86/14]
Cl_3HSi	trichlorosilane				[10025-78-2]
	(303–325)	24.9	(314)		[67/24]
	(275–305)	27.2	(290)	I	[54/1]
Cl_4Si	silicon tetrachloride				[10026-04-7]
	(298–313)	29.9	(305)		[73/29]
	(273–326)	30.4	(288)		[64/8]
	(275–330)	30.2	(290)	I	[54/1]
	(273–333)	30.1	(303)		[36/4]
FH_3Si	fluorosilane				[13537-33-2]
	(145–167)	18.5	(156)		[44/9]
FH_5Si_2	disilanyl fluoride				
	(178–227)	26.3	(202)	T	[63/30]
F_2H_2Si	difluorosilane				[13824-36-7]
	(151–167)	19.9	(159)		[44/9]
F_2H_4NPSi	silylaminodifluorophosphine				
	(200–273)	34.3	(236)		[72/39]
F_3ISi	trifluoroiodosilane				
	(139–227)	21.3	(183)		[73/35]
F_3HSi	trifluorosilane				[13465-71-9]
	(156–168)	20.1	(162)		[44/9]
H_5ISi_2	disilanyl iodide				
	(274–363)	33.9	(318)		[60/6]
H_7NSi_2	disilazane				
	(177–250)	23.4	(213)	SG	[69/35]
H_9PSi_3	trisilylphosphine				
	(243–284)	36.4	(263)		[62/35]
H_9SbSi_3	trisilylstibine				
		32.0			[63/44]
$H_{10}Si_4$	tetrasilane				
	(273–369)	35.6		T	[46/14]
$H_{10}OSi_4$	*bis*(disilanyl) ether				
	(273–363)	36.4	(318)		[60/6]
Sn					
C_3H_9BrSn	trimethyltin bromide				
		47.3±4.2			[57/22][82/15]
C_3H_9ISn	trimethyltin iodide				
		48.1±4.2			[57/22][82/15]
$C_4H_9F_3Sn$	(trifluoromethyl)trimethyltin				
	(276–323)	37.5	(300)	T	[60/11]
$C_4H_{12}Sn$	tetramethyltin				[594-27-4]
	(273–350)	32.6±0.2	(311)		[01/9]
	(313–393)	31.3		GC	[92/21]
		31.1±0.1	(298)	C	[80/4]
		32.8±0.1	(298)		[70/1]
		33.1±1.3			[63/36][82/15]
		30.5	(298)		[36/1]
	(273–308)	33.4	(290)	I	[30/2]
	(308–355)	31.6	(331)	I	[30/2]
		33.1	(298)	I	[30/2]
	(298–308)	31.6	(303)		[29/6]
$C_5H_9F_5Sn$	(pentafluoroethyl)trimethyltin				
	(295–329)	35.6	(312)	T	[60/11]
$C_5H_{12}Sn$	trimethylvinyltin				
		37.2±2.1			[59/16][82/15]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_5H_{14}Sn$	ethyl trimethyltin				[3531-44-0]
		37.7±1.7			[63/36][82/15]
	(243–381)	38.4	(258)		[47/5]
	(273–336)	37.0	(304)	I	[30/2]
	(336–384)	34.9	(360)	I	[30/2]
$C_6H_{16}Sn$	trimethylpropyltin				[3531-45-1]
	(261–405)	43.8	(276)		[47/5]
	(286–328)	41.4	(307)	I	[30/2]
	(328–405)	38.0	(366)	I	[30/2]
$C_6H_{16}Sn$	trimethylisopropyltin				
		40.6±2.1			[66/24][82/15]
$C_6H_{18}Sn_2$	hexamethyldistannane				
		50.2±4.2			[57/22][82/15]
$C_7H_{18}OSn$	triethylmethoxystannane				[1067-21-6]
	(312–435)	49.9	(273)	MM	[01/5]
	(312–435)	48.7	(298)	MM	[01/5]
$C_7H_{18}Sn$	*tert*-butyltrimethyltin				
		54.0±4.2			[66/24][82/15]
$C_8H_{12}Sn$	tetravinyltin				[1112-55-6]
	(313–393)	40.5		GC	[92/21]
$C_8H_{15}F_5Sn$	(pentafluoroethyl)triethyltin				
	(303–343)	39.2	(323)	T	[60/11]
$C_8H_{20}Sn$	tetraethyltin				[597-64-8]
	(293–455)	46.6±0.6	(374)		[01/9]
	(313–393)	42.4		GC	[92/21]
		50.6±0.2	(298)	C	[80/4]
		51.0±2.1			[63/36][82/15]
$C_9H_{14}Sn$	phenyltrimethyltin				[934-56-5]
		52.3±4.2			[59/16][82/15]
$C_{10}H_{16}Sn$	benzyltrimethyltin				[4314-94-7]
		56.5±4.2			[59/16][82/15]
$C_{10}H_{24}O_2Sn$	triethyltin *tert*-butylperoxide				
		48.8±2.1			[71/29][82/15]
$C_{10}H_{25}NSn$	(N,N-diethylamino)triethyltin				
		50.2±4.2			[71/30][82/15]
$C_{12}H_{27}BrSn$	tributyltin bromide				
		83.7±12.6			[59/16][82/15]
$C_{12}H_{20}Sn$	tetraallyltin				[7393-43-3]
	(333–393)	52.0		GC	[92/21]
$C_{12}H_{28}Sn$	tetrapropyl tin				[2176-98-9]
	(343–457)	55.0±0.7	(400)		[01/9]
	(333–393)	60.8	GC		[92/21]
	(361–470)	52.5	(376)	A	[87/5]
		65.4±2.5	(298)	C	[80/4]
		66.9±2.1			[63/36][82/15]
		60.7			[35/7]
$C_{12}H_{28}Sn$	tetraisopropyl tin				[2949-42-0]
	(342–441)	48.0±0.7	(392)		[01/9]
	(333–393)	56.4		GC	[92/21]
		64.9±4.2			[66/24][82/15]
$C_{15}H_{26}OSn$	*bis*(triethyltin)oxide				
		52.3±2.1			[71/29][82/15]
$C_{15}H_{26}O_2Sn$	triethyltin dimethylphenylperoxide				
		56.5±2.1			[71/29][82/15]
$C_{12}H_{36}Sn_2$	hexaethyldistannane				
		62.8±4.2			[66/25][82/15]
$C_{16}H_{36}Sn$	tetrabutyl tin				[1461-25-2]
	(389–462)	67.8±0.5	(425)		[01/9]
		82.8±2.1			[63/36][82/15]
$C_{16}H_{36}Sn$	tetraisobutyl tin				[3531-43-9]
	(391–451)	53.6±1.1	(421)		[01/9]
SnI_4	stannic iodide				[7790-47-8]
	(418–523)	57.2	(423)		[36/7]
Sm					

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{33}H_{57}O_6Sm$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)samarium(III)				[15492-50-9]
	(468–500)	93.0	BG		[69/28]
Ta					
$C_{10}H_{25}O_5Ta$	pentaethyltantalate				
	(388–424)	72.6	(403)	A	[87/5]
Tb					
$C_{33}H_{57}O_6Tb$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)terbium(III)				[15492-51-0]
	(454–500)	87.0		BG	[69/28]
Te					
C_2H_6Te	dimethyl telluride				[593-80-6]
	(298–367)	34.4	(313)		[99/16]
	(273–372)	35.6±0.1	(323)		[97/30][96/29]
	(267–369)	36.9	(282)	BG	[96/30]
	(267–369)	36.1±1.0	(298)	BG	[96/30]
		37.4±0.7	(298)	C	[89/12]
		36.0±2.1			[88/1]
C_4H_6Te	divinyl telluride				[63000-06-6]
		44.8±0.8	(298)	C	[89/12]
		38.1±2.1			[88/1]
$C_4H_{10}Te$	diethyl telluride				[627-54-3]
	(295–411)	41.8	(310)		[99/16]
	(273–415)	41.6±0.2	(344)		[96/29]
		41.6±0.8	(298)	C	[89/12]
$C_6H_{14}Te$	dipropyl telluride				[64501-17-3]
	(298–434)	45.5±0.3	(366)		[96/29]
		46.5±0.7	(298)	C	[89/12]
$C_6H_{14}Te$	diisopropyl telluride				
	(298–399)	40.4±0.1	(349)		[96/29]
$C_6H_{14}Te_2$	dipropyl ditelluride				[79971-42-9]
		52.7±1.0	(298)	C	[89/12]
$C_8H_{18}Te$	dibutyl telluride				[38788-38-4]
	(303–423)	53.4±0.1	(358)		[96/29]
		51.0±1.0	(298)	C	[89/12]
$C_8H_{18}Te$	diisobutyl telluride				
	(303–410)	47.6±0.1	(356)		[96/29]
$C_8H_{18}Te$	di-sec-butyl telluride				
	(303–372)	49.6±0.9	(338)		[96/29]
$C_8H_{18}Te_2$	dibutyl ditelluride				[77129-69-2]
		57.3±1.0	(298)	C	[89/12]
$C_{10}H_{22}Te$	dipentyl telluride				
	(343–403)	59.5±0.8	(373)		[96/29]
$C_{10}H_{22}Te$	diisopentyl telluride				
	(343–403)	51.9±0.7	(373)		[96/29]
$TeCl_4$	tellurium tetrachloride				
	(506–660)	77.0	(583)	GS	[30/7]
Ti					
$C_8H_{24}N_4Ti$	titanium tetradimethylamide				[3275-24-9]
	(353–418)	53.8±3.0	(383)		[84/33][01/23]
$C_{12}H_{28}O_4Ti$	tetraisopropyl titanate				
	(336–459)	62.3	(351)	A	[87/5]
$C_{12}H_{28}O_4Ti$	tetrapropyl titanate				
	(411–479)	111.9	(426)	A	[87/5]
$C_{16}H_{36}O_4Ti$	tetrabutoxy titanium				
	(462–564)	89.7	(477)	A	[87/5]
	(443–493)	85.0±3.1	(458)	A	[87/5][78/13]
$C_{16}H_{36}O_4Ti$	tetraisobutoxy titanium				
	(436–529)	77.4	(451)	A	[87/5]
$C_{16}H_{36}O_4Ti$	tetra-sec-butoxy titanium				
	(378–414)	76.8	(393)	A	[87/5]
	(370–476)	67.1	(385)	A	[87/5]
$C_{16}H_{36}O_4Ti$	tetra-*tert*-butoxy titanium				
	(386–486)	55.9	(401)	A	[87/5]
	(322–388)	62.6	(337)	SG	[58/13][84/9]
		66.1±3.3	(298)	SG	[58/13][66/20]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
$C_{16}H_{36}O_4Ti$	titanium (IV) tetrabutylate				
	(323–418)	47.6±0.7	(370)		[02/39]
$C_{16}H_{40}N_4Ti$	titanium (IV) *tetrakis*(diethylamide)				
	(423–463)	94.6±4.0	(443)		[01/23]
$C_{20}H_{44}O_4Ti$	*tetrakis*(1,1-dimethylpropoxy)titanium				
	(397–430)	67.8	(412)	A	[87/5]
	(361–423)	71.0	(376)	SG	[58/13][84/9]
		77.4±3.8	(298)	SG	[58/13][66/20]
$C_{20}H_{44}O_4Ti$	*tetrakis*(1-ethylpropoxy)titanium				
	(385–445)	103.6	(400)	A	[87/5]
$C_{20}H_{44}O_4Ti$	*tetrakis*(3-methylbutoxy)titanium				
	(407–493)	119.7	(422)	A	[87/5]
$C_{20}H_{44}O_4Ti$	tetrapentoxytitanium				
	(484–558)	103.4	(499)	A	[87/5]
$C_{20}H_{44}O_4Ti$	tetra-*tert*-pentoxytitanium				
	(361–423)	71.1	(376)	A	[87/5]
$C_{24}H_{52}O_4Ti$	*tetrakis*(1,1-dimethylbutoxy)titanium				
	(414–454)	94.6	(429)	A	[87/5]
$C_{24}H_{52}O_4Ti$	*tetrakis*(1-methyl-ethylpropoxy)titanium				
	(412–460)	86.2	(427)	A	[87/5]
$C_{24}H_{52}O_4Ti$	tetrahexyloxy titanium				
	(520–581)	94.8	(535)	A	[87/5]
Cl_4Ti	titanium (IV) tetrachloride				[7550-45-0]
	(250–423)	37.5	(265)		[66/29]
	(363–415)	37.9	(378)		[59/29]
	(313–357)	39.8	(335)	I	[53/19]
I_4Ti	titanium (IV) tetraiodide				[7720-83-4]
	(433–643)	58.5	(538)		[47/15]
Tl					
C_3H_9Tl	trimethylthallium				[3003-15-4]
	(311–360)	40.6	(335)	I, MM	[65/1]
	(328–349)	37.9	(338)	I	[46/6]
$C_6H_{15}Tl$	triethylthallium				[687-82-1]
	(282–465)	41.9	(297)		[47/5]
Tm					
$C_{33}H_{57}O_6Tm$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)thulium(III)				[15631-58-0]
	(446–490)	84.1		BG	[69/28]
U					
UF_6	uranium hexafluoride				[7783-81-5]
	(337–389)	29.5	(352)		[53/18]
V					
$C_{12}H_{17}O_4V$	vanadic acid, tributyl ester				[1801-76-9]
	(395–435)	90.2	(410)	A	[87/5]
$C_{12}H_{17}O_4V$	vanadic acid, triisobutyl ester				[19120-62-8]
	(383–418)	82.2	(398)	A	[87/5]
$C_{12}H_{17}O_4V$	vanadic acid, tri-sec-butyl ester				[17838-66-3]
	(378–413)	82.4	(393)	A	[87/5]
$C_{12}H_{17}O_4V$	vanadic acid, tri-*tert*-butyl ester				[1686-24-4]
	(348–385)	714	(363)	A	[87/5]
W					
WF_6	tungsten hexafluoride				[7783-82-6]
	(290–343)	25.8	(316)		[68/27]
Xe					
XeF_2	xenon difluoride				[13709-36-9]
	(553–663)	53.5	(568)		[83/15]
XeF_4	xenon tetrafluoride				[13709-61-0]
	(553–663)	60.0	(568)		[83/15]
Yb					
$C_{33}H_{57}O_6Yb$	*tris*(2,2,6,6-tetramethylheptane-3,5-dionato)ytterbium(III)				[15492-52-1]
	(444–494)	82.8		BG	[69/28]
Zn					
C_2H_6Zn	dimethyl zinc				
	(273–313)	30.4±0.1			[97/30]
		29.5±0.4			[49/21][82/15]

TABLE 7. Enthalpies of vaporization of select organo-metallic and inorganic compounds, 1880–2002—Continued

Molecular formula	Compound (Temperature range/K)	$\Delta_{vap}H_m$ (kJ mol^{-1})	Mean temperature (T_m/K)	Method	CAS registry number Reference
	(248–318)	29.9	(283)	BG	[46/13]
$C_4H_{10}Zn$	diethyl zinc				[557-20-0]
		37.9	(298)		[83/1]
		40.2±2.1			[49/21][82/15]
	(250–391)	39.9	(265)		[47/5]
		40.2		BG	[46/13]
$C_6H_{14}Zn$	dipropyl zinc				[628-91-1]
		43±2			[02/43]
	(313–370)	42.1±0.4	(341)		[84/34]
		45.6±2.5			[49/21][82/15]
		39.5			[49/25]
		40.3		BG	[46/13]
$C_6H_{14}Zn$	diisopropyl zinc				[625-81-0]
	(303–345)	41.8±0.5	(324)		[84/34]
	(310–338)	47.4	(324)		[46/4]
$C_8H_{18}Zn$	dibutyl zinc				[1119-90-0]
	(305–379)	50.7±0.3	(342)		[84/13]
		54.4±3.3			[49/21][82/15]
		45.3			[49/25]
		42.9		BG	[46/13]
$C_8H_{18}Zn$	di-sec-butyl zinc				[7446-94-8]
	(287–372)	40.9±0.2	(330)		[84/13]
$C_8H_{18}Zn$	diisobutyl zinc				
	(288–372)	44.6±0.2	(330)		[84/13]
$C_8H_{18}Zn$	di-*tert*-butyl zinc				[7446-94-8]
	(300–322)	49.3±0.8	(311)		[84/13]
$C_{10}H_{22}Zn$	dipentyl zinc				[14402-93-8]
		48.6			[49/25]
$C_{12}H_{26}Zn$	dihexyl zinc				[13822-55-4]
		56.2			[49/25]
$C_{14}H_{30}Zn$	diheptyl zinc				[14402-95-0]
		62.3			[49/25]
Cl_2Zn	zinc chloride				[7646-85-7]
	(695–826)	134.5	(760)		[58/28]
Zr					
$C_{16}H_{36}O_4Zr$	tetra-*tert*-butoxy zirconium				
	(374–587)	56.6	(389)	A	[87/5]
$C_{20}H_{44}O_4Zr$	*tetrakis*(1,1-dimethylpropoxy)zirconium				
	(392–426)	68.0	(407)	A	[87/5]
$C_{20}H_{44}O_4Zr$	tetra-*tert*-pentoxyzirconium				
	(361–435)	74.1	(361)	A	[87/5]
$C_{24}H_{52}O_4Zr$	*tetrakis*(1,1-dimethylbutoxy)zirconium				
	(406–449)	93.3	(421)	A	[87/5]
$C_{24}H_{52}O_4Zr$	*tetrakis*(1-methyl-1-ethylpropoxy)zirconium				
	(423–460)	91.4	(438)	A	[87/5]

TABLE 8. References to Tables 6 and 7

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9. References for Introductory Material

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