FLAMMABILITY OF CHEMICAL SUBSTANCES

This table gives properties related to the flammability of about 900 chemical substances. The properties listed are:

t_B: Normal boiling point in °C (at 101.325 kPa pressure).

FP: Flash point, which is the minimum temperature at which the vapor pressure of a liquid is sufficient to form an ignitable mixture with air near the surface of the liquid. Flash point is not an intrinsic physical property but depends on the conditions of measurement (see Reference 1).

Fl. Limits: Flammable limits (often called explosive limits), which specify the range of concentration of the vapor in air (in percent by volume) for which a flame can propagate. Below the lower flammable limit, the gas mixture is too lean to burn; above the upper flammable limit, the mixture is too rich. Values refer to ambient temperature and pressure and are dependent on the precise test conditions. A ? indicates that one of the limits is not known.

IT: Ignition temperature (sometimes called autoignition temperature), which is the minimum temperature required for self-sustained combustion in the absence of an external ignition source. As in the case of flash point, the value depends on specified test conditions.

Even in cases where very careful measurements of flash point have been replicated in several laboratories, observed values can differ by 3 to 6°C (Reference 4). For more typical measurements, larger uncertainties should be assumed in both flash points and autoignition temperatures. The absence of a flash point entry in this table does not mean that the substance is nonflammable, but only that no reliable value is available.

Compounds are listed by molecular formula following the Hill convention. Substances not containing carbon are listed first, followed by those that contain carbon. To locate an organic compound by name or CAS Registry Number when the molecular formula is not known, use the table "Physical Constants of Organic Compounds" in Section 3 and its indexes to determine the molecular formula.

References

1. *Fire Protection Guide to Hazardous Materials, 11th Edition*, National Fire Protection Association, Quincy, MA, 1994.
2. Urben, P. G., Ed., *Bretherick's Handbook of Reactive Chemical Hazards, 5th Edition*, Butterworth-Heinemann, Oxford, 1995.
3. Daubert, T. E., Danner, R. P., Sibul, H. M., and Stebbins, C. C., *Physical and Thermodynamic Properties of Pure Compounds: Data Compilation*, extant 1994 (core with 4 supplements), Taylor & Francis, Bristol, PA.
4. *Report of Investigation: Flash Point Reference Materials*, National Institute of Standards and Technology, Standard Reference Materials Program, Gaithersburg, MD, 1995.

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
	Compounds not containing carbon				
B_2H_6	Diborane	−92.4	−90	1–98%	≈40
B_5H_9	Pentaborane(9)	60	30	0.4–?	35
BrH_3Si	Bromosilane	1.9	<0		≈20
Br_3HSi	Tribromosilane	109			≈20
Cl_2H_2Si	Dichlorosilane	8.3		4.1–99%	36
Cl_3HSi	Trichlorosilane	33	−50		104
GeH_4	Germane	−88.1			≈20
Ge_2H_6	Digermane	29			≈50
H_2	Hydrogen	−252.8		4–74%	
H_2S	Hydrogen sulfide	−59.55		4–44%	260
H_2S_2	Hydrogen disulfide	70.7	<22		
H_2Te	Hydrogen telluride	−2			−50
H_3N	Ammonia	−33.33		16–25%	
H_3P	Phosphine	−87.75		1.8–?	
H_4N_2	Hydrazine	113.55	38	5–100%	
H_4P_2	Diphosphine	63.5			≈20
H_4Si	Silane	−111.9	−112	1.4–?	≈20
H_6Si_2	Disilane	−14.3	−14		≈20
H_8Si_3	Trisilane	52.9	<0		≈20
P	Phosphorus (white)	280.5			38
	Compounds containing carbon				
CHN	Hydrogen cyanide	26	−18	6–40%	538
CH_2Cl_2	Dichloromethane	40		13–23%	556
CH_2N_2	Cyanamide		141		
CH_2O	Formaldehyde	−19.1	85	7.0–73%	424
$(CH_2O)_x$	Paraformaldehyde		70	7.0–73%	300
CH_2O_2	Formic acid	101	50	18–57%	434
CH_3Br	Bromomethane	3.5		10–16%	537
CH_3Cl	Chloromethane	−24.0		8.1–17.4%	632

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
CH_3Cl_3Si	Methyltrichlorosilane	65.6	–9	7.6–>20%	>404
CH_3NO	Formamide	220	154		
CH_3NO_2	Nitromethane	101.1	35	7.3–?	418
CH_4	Methane	–161.5		5.0–15.0%	537
CH_4Cl_2Si	Dichloromethylsilane	41	–9	6.0–55%	316
CH_4O	Methanol	64.6	11	6.0–36%	464
CH_4S	Methanethiol	5.9	–18	3.9–21.8%	
CH_5N	Methylamine	–6.3	0	4.9–20.7%	430
CH_6N_2	Methylhydrazine	87.5	–8	2.5–92%	194
CO	Carbon monoxide	–191.5		12.5–74%	609
COS	Carbon oxysulfide	–50		12–29%	
CS_2	Carbon disulfide	46	–30	1.3–50.0%	90
C_2ClF_3	Chlorotrifluoroethylene	–27.8		8.4–16.0%	
C_2F_4	Tetrafluoroethylene	–75.9		10.0–50.0%	200
C_2HCl_3	Trichloroethylene	87.2		8–10.5%	420
C_2HCl_3O	Dichloroacetyl chloride	108	66		
C_2H_2	Acetylene	–84.7		2.5–100%	305
$C_2H_2Cl_2$	1,1-Dichloroethylene	31.6	–28	6.5–15.5%	570
$C_2H_2Cl_2$	*cis*-1,2-Dichloroethylene	60.1	6	3–15%	460
$C_2H_2Cl_2$	*trans*-1,2-Dichloroethylene	48.7	2	6–13%	460
$C_2H_2F_2$	1,1-Difluoroethylene	–85.7		5.5–21.3%	
C_2H_3Br	Bromoethylene	15.8		9–15%	530
C_2H_3Cl	Chloroethylene	–13.3	–78	3.6–33.0%	472
$C_2H_3ClF_2$	1-Chloro-1,1-difluoroethane	–9.7		6–18%	632
C_2H_3ClO	Acetyl chloride	50.7	4		390
$C_2H_3Cl_2NO_2$	1,1-Dichloro-1-nitroethane	123.5	76		
$C_2H_3Cl_3$	1,1,1-Trichloroethane	74.0		8–10.5%	500
$C_2H_3Cl_3$	1,1,2-Trichloroethane	113.8	32	6–28%	460
$C_2H_3Cl_3Si$	Trichlorovinylsilane	91.5	21		
C_2H_3F	Fluoroethylene	–72		2.6–21.7%	
C_2H_3N	Acetonitrile	81.6	6	3.0–16.0%	524
C_2H_3NO	Methyl isocyanate	39.5	–7	5.3–26%	534
C_2H_4	Ethylene	–103.7		2.7–36%	450
$C_2H_4ClNO_2$	1-Chloro-1-nitroethane	124.5	56		
$C_2H_4Cl_2$	1,1-Dichloroethane	57.4	–17	5.4–11.4%	458
$C_2H_4Cl_2$	1,2-Dichloroethane	83.5	13	6.2–16%	413
C_2H_4O	Acetaldehyde	20.1	–39	4.0–60%	175
C_2H_4O	Ethylene oxide	10.6	–20	3.0–100%	429
$C_2H_4O_2$	Acetic acid	117.9	39	4.0–19.9%	463
$C_2H_4O_2$	Methyl formate	31.7	–19	4.5–23%	449
$C_2H_4O_3$	Ethaneperoxoic acid	110	41		
C_2H_5Br	Bromoethane	38.5		6.8–8.0%	511
C_2H_5Cl	Chloroethane	12.3	–50	3.8–15.4%	519
C_2H_5ClO	Ethylene chlorohydrin	128.6	60	4.9–15.9%	425
$C_2H_5Cl_3Si$	Trichloroethylsilane	100.5	22		
C_2H_5N	Ethyleneimine	56	–11	3.3–54.8%	320
$C_2H_5NO_2$	Nitroethane	114.0	28	3.4–17%	414
$C_2H_5NO_2$	Ethyl nitrite	18	–35	4.0–50%	90
$C_2H_5NO_3$	Ethyl nitrate	87.2	10	4–?	
C_2H_6	Ethane	–88.6		3.0–12.5%	472
$C_2H_6Cl_2Si$	Dichlorodimethylsilane	70.3	<21	3.4–9.5%	
C_2H_6O	Ethanol	78.2	13	3.3–19%	363
C_2H_6O	Dimethyl ether	–24.8	–41	3.4–27.0%	350
C_2H_6OS	2-Mercaptoethanol	158	74		
C_2H_6OS	Dimethyl sulfoxide	189	95	2.6–42%	215
$C_2H_6O_2$	Ethylene glycol	197.3	111	3.2–22%	398
$C_2H_6O_4S$	Dimethyl sulfate		83		188
C_2H_6S	Ethanethiol	35.1	–17	2.8–18.0%	300
C_2H_6S	Dimethyl sulfide	37.3	–37	2.2–19.7%	206
$C_2H_6S_2$	Dimethyl disulfide	109.8	24		
C_2H_7N	Ethylamine	16.5	–16	3.5–14%	385

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
C_2H_7N	Dimethylamine	6.8	20	2.8–14.4%	400
C_2H_7NO	Ethanolamine	171	86	3.0–23.5%	410
$C_2H_8N_2$	1,2-Ethanediamine	117	40	2.5–12.0%	385
$C_2H_8N_2$	1,1-Dimethylhydrazine	63.9	–15	2–95%	249
C_2N_2	Cyanogen	–21.1		6.6–32%	
C_3H_3Br	3-Bromo-1-propyne	89	10	3.0–?	324
C_3H_3N	2-Propenenitrile	77.3	0	3.0–17.0%	481
C_3H_4	Propyne	–23.2		2.1–12.5%	
C_3H_4ClN	3-Chloropropanenitrile	175.5	76		
$C_3H_4Cl_2$	2,3-Dichloropropene	94	15	2.6–7.8%	
C_3H_4O	Propargyl alcohol	113.6	36		
C_3H_4O	Acrolein	52.6	–26	2.8–31%	220
$C_3H_4O_2$	Propenoic acid	141	50	2.4–8.0%	438
$C_3H_4O_2$	2-Oxetanone	162	74	2.9–?	
$C_3H_4O_3$	Ethylene carbonate	248	143		
C_3H_5Br	3-Bromopropene	70.1	–1	4.4–7.3%	295
C_3H_5Cl	2-Chloropropene	22.6	–37	4.5–16%	
C_3H_5Cl	3-Chloropropene	45.1	–32	2.9–11.1%	485
C_3H_5ClO	Epichlorohydrin	118	31	3.8–21.0%	411
C_3H_5ClO	Propanoyl chloride	80	12		
$C_3H_5ClO_2$	2-Chloropropanoic acid	185	107		500
$C_3H_5ClO_2$	Ethyl chloroformate	95	16		500
$C_3H_5ClO_2$	Methyl chloroacetate	129.5	57	7.5–18.5%	
$C_3H_5Cl_2NO_2$	1,1-Dichloro-1-nitropropane	145	66		
$C_3H_5Cl_3$	1,2,3-Trichloropropane	157	71	3.2–12.6%	
$C_3H_5Cl_3Si$	Trichloro-2-propenylsilane	117.5	35		
C_3H_5N	Propanenitrile	97.1	2	3.1–14%	512
C_3H_5NO	3-Hydroxypropanenitrile	221	129		
$C_3H_5N_3O_9$	Trinitroglycerol				270
C_3H_6	Propene	–47.6		2.0–11.1%	455
C_3H_6	Cyclopropane	–32.8		2.4–10.4%	498
$C_3H_6ClNO_2$	1-Chloro-1-nitropropane	142	62		
$C_3H_6ClNO_2$	2-Chloro-2-nitropropane		57		
$C_3H_6Cl_2$	1,2-Dichloropropane	96.4	21	3.4–14.5%	557
$C_3H_6Cl_2O$	1,3-Dichloro-2-propanol	176	74		
$C_3H_6N_2$	Dimethylcyanamide	163.5	71		
C_3H_6O	Allyl alcohol	97.0	21	2.5–18.0%	378
C_3H_6O	Methyl vinyl ether	5.5			287
C_3H_6O	Propanal	48	–30	2.6–17%	207
C_3H_6O	Acetone	56.0	–20	2.5–12.8%	465
C_3H_6O	Methyloxirane	35	–37	3.1–27.5%	449
$C_3H_6O_2$	Propanoic acid	141.1	52	2.9–12.1%	465
$C_3H_6O_2$	Ethyl formate	54.4	–20	2.8–16.0%	455
$C_3H_6O_2$	Methyl acetate	56.8	–10	3.1–16%	454
$C_3H_6O_2$	1,3-Dioxolane	78	2		
$C_3H_6O_3$	Dimethyl carbonate	90.5	19		
$C_3H_6O_3$	1,3,5-Trioxane	114.5	45	3.6–29%	414
C_3H_7Br	1-Bromopropane	71.1			490
C_3H_7Cl	1-Chloropropane	46.5	<–18	2.6–11.1%	520
C_3H_7Cl	2-Chloropropane	35.7	–32	2.8–10.7%	593
C_3H_7ClO	2-Chloro-1-propanol	133.5	52		
C_3H_7ClO	1-Chloro-2-propanol	127	52		
$C_3H_7Cl_3Si$	Trichloropropylsilane	123.5	37		
C_3H_7N	Allylamine	53.3	–29	2.2–22%	374
C_3H_7NO	*N,N*-Dimethylformamide	153	58	2.2–15.2%	445
$C_3H_7NO_2$	1-Nitropropane	131.1	36	2.2–?	421
$C_3H_7NO_2$	2-Nitropropane	120.2	24	2.6–11.0%	428
$C_3H_7NO_3$	Propyl nitrate	110	20	2–100%	175
C_3H_8	Propane	–42.1	–104	2.1–9.5%	450
C_3H_8O	1-Propanol	97.2	23	2.2–13.7%	412
C_3H_8O	2-Propanol	82.3	12	2.0–12.7%	399

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
C_3H_8O	Ethyl methyl ether	7.4	–37	2.0–10.1%	190
$C_3H_8O_2$	1,2-Propylene glycol	187.6	99	2.6–12.5%	371
$C_3H_8O_2$	1,3-Propylene glycol	214.4			400
$C_3H_8O_2$	Ethylene glycol monomethyl ether	124.1	39	1.8–14%	285
$C_3H_8O_2$	Dimethoxymethane	42	–32	2.2–13.8%	237
$C_3H_8O_3$	Glycerol	290	199	3–19%	370
$C_3H_9BO_3$	Trimethyl borate	67.5	–8		
C_3H_9ClSi	Trimethylchlorosilane	60	–28		395
C_3H_9N	Propylamine	47.2	–37	2.0–10.4%	318
C_3H_9N	Isopropylamine	31.7	–37		402
C_3H_9N	Trimethylamine	2.8	–5	2.0–11.6%	190
C_3H_9NO	3-Amino-1-propanol	187.5	80		
C_3H_9NO	1-Amino-2-propanol	159.4	77		374
C_3H_9NO	*N*-Methyl-2-ethanolamine	158	74		
$C_3H_9O_3P$	Trimethyl phosphite	111.5	54		
$C_3H_9O_4P$	Trimethyl phosphate	197.2	107		
$C_3H_{10}N_2$	1,3-Propanediamine	139.8	24		
C_4Cl_6	Hexachloro-1,3-butadiene	215			610
$C_4H_2O_3$	Maleic anhydride	202	102	1.4–7.1%	477
C_4H_4	1-Buten-3-yne	5.1		21–100%	
$C_4H_4N_2$	Succinonitrile	266	132		
C_4H_4O	Furan	31.5	–36	2.3–14.3%	
$C_4H_4O_2$	Diketene	126.1	34		
C_4H_4S	Thiophene	84.0	–1		
C_4H_5Cl	2-Chloro-1,3-butadiene	59.4	–20	4.0–20.0%	
C_4H_5N	2-Butenenitrile	120.5	16		
C_4H_5N	Methylacrylonitrile	90.3	1	2–6.8%	
C_4H_5N	Pyrrole	129.7	39		
C_4H_6	1,3-Butadiene	–4.4		2.0–12.0%	420
C_4H_6	2-Butyne	26.9	–31	1.4–?	
C_4H_6O	Divinyl ether	28.3	<–30	1.7–27%	360
C_4H_6O	Ethoxyacetylene	50	<–7		
C_4H_6O	*trans*-2-Butenal	102.2	13	2.1–15.5%	232
C_4H_6O	3-Buten-2-one	81.4	–7	2.1–15.6%	491
C_4H_6O	Vinyloxirane	68	<–50		
$C_4H_6O_2$	Methacrylic acid	162.5	77	1.6–8.8%	68
$C_4H_6O_2$	Vinyl acetate	72.5	–8	2.6–13.4%	402
$C_4H_6O_2$	Methyl acrylate	80.7	–3	2.8–25%	468
$C_4H_6O_2$	2,3-Butanedione	88	27		
$C_4H_6O_2$	γ-Butyrolactone	204	98		
$C_4H_6O_3$	Acetic anhydride	139.5	49	2.7–10.3%	316
$C_4H_6O_3$	Propylene carbonate	242	135		
$C_4H_6O_6$	*L*-Tartaric acid		210		425
C_4H_7Br	1-Bromo-2-butene	104.5		4.6–12.0%	
$C_4H_7BrO_2$	Ethyl bromoacetate	168.5	48		
C_4H_7Cl	2-Chloro-1-butene	58.5	–19	2.3–9.3%	
C_4H_7Cl	3-Chloro-2-methylpropene	71.5	–12	3.2–8.1%	
C_4H_7ClO	2-Chloroethyl vinyl ether	108	27		
$C_4H_7ClO_2$	Ethyl chloroacetate	144.3	64		
C_4H_7N	Butanenitrile	117.6	24	1.6–?	501
C_4H_7N	2-Methylpropanenitrile	103.9	8		482
C_4H_7NO	Acetone cyanohydrin		74	2.2–12.0%	688
C_4H_7NO	2-Pyrrolidone	251	129		
C_4H_8	1-Butene	–6.2		1.6–10.0%	385
C_4H_8	*cis*-2-Butene	3.7		1.7–9.0%	325
C_4H_8	*trans*-2-Butene	0.8		1.8–9.7%	324
C_4H_8	Isobutene	–6.9		1.8–9.6%	465
C_4H_8	Cyclobutane	12.6	<10	1.8–?	
$C_4H_8Cl_2$	1,2-Dichlorobutane	124.1			275
$C_4H_8Cl_2$	1,4-Dichlorobutane	161	52		
$C_4H_8Cl_2O$	Bis(2-chloroethyl) ether	178.5	55	2.7–?	369

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
C_4H_8O	2-Buten-1-ol	121.5	27	4.2–35.3%	349
C_4H_8O	2-Methyl-2-propenol	114.5	33		
C_4H_8O	Ethyl vinyl ether	35.5	<–46	1.7–28%	202
C_4H_8O	1,2-Epoxybutane	63.4	–22	1.7–19%	439
C_4H_8O	Butanal	74.8	–22	1.9–12.5%	218
C_4H_8O	Isobutanal	64.5	–18	1.6–10.6%	196
C_4H_8O	2-Butanone	79.5	–9	1.4–11.4%	404
C_4H_8O	Tetrahydrofuran	65	–14	2–11.8%	321
C_4H_8OS	1,4-Oxathiane	147	42		
$C_4H_8O_2$	Butanoic acid	163.7	72	2.0–10.0%	443
$C_4H_8O_2$	2-Methylpropanoic acid	154.4	56	2.0–9.2%	481
$C_4H_8O_2$	Propyl formate	80.9	–3		455
$C_4H_8O_2$	Isopropyl formate	68.2	–6		485
$C_4H_8O_2$	Ethyl acetate	77.1	–4	2.0–11.5%	426
$C_4H_8O_2$	Methyl propanoate	79.8	–2	2.5–13%	469
$C_4H_8O_2$	3-Hydroxybutanal		66		250
$C_4H_8O_2$	1,4-Dioxane	101.5	12	2.0–22%	180
$C_4H_8O_2S$	Sulfolane	287.3	177		
$C_4H_8O_3$	Methyl lactate	144.8	49	2.2–?	385
$C_4H_8O_3$	Ethylene glycol monoacetate	188	102		
C_4H_9Br	1-Bromobutane	101.6	18	2.6–6.6%	265
C_4H_9Br	2-Bromobutane	91.2	21		
C_4H_9Cl	1-Chlorobutane	78.6	–12	1.9–10.1%	240
C_4H_9Cl	2-Chlorobutane	68.2	–10		
C_4H_9Cl	1-Chloro-2-methylpropane	68.5	–6	2.0–8.7%	
C_4H_9Cl	2-Chloro-2-methylpropane	50.9	0		
$C_4H_9Cl_3Si$	Butyltrichlorosilane	148.5	54		
C_4H_9N	Pyrrolidine	86.5	3		
C_4H_9NO	*N*-Ethylacetamide	205	110		
C_4H_9NO	*N,N*-Dimethylacetamide	165	70	1.8–11.5%	490
C_4H_9NO	Butanal oxime	154	58		
C_4H_9NO	2-Butanone oxime	152.5	≈70		
C_4H_9NO	Morpholine	128	37	1.4–11.2%	290
$C_4H_9NO_2$	*N*-Acetylethanolamine		179		460
$C_4H_9NO_3$	Butyl nitrate	133	36		
C_4H_{10}	Butane	–0.5	–60	1.9–8.5%	287
C_4H_{10}	Isobutane	–11.7	–87	1.8–8.4%	460
$C_4H_{10}N_2$	Piperazine	146	81		
$C_4H_{10}O$	1-Butanol	117.7	37	1.4–11.2%	343
$C_4H_{10}O$	2-Butanol	99.5	24	1.7–9.8%	405
$C_4H_{10}O$	2-Methyl-1-propanol	107.8	28	1.7–10.6%	415
$C_4H_{10}O$	2-Methyl-2-propanol	82.4	11	2.4–8.0%	478
$C_4H_{10}O$	Diethyl ether	34.5	–45	1.9–36.0%	180
$C_4H_{10}O$	Methyl propyl ether	39.1	–20	2.0–14.8%	
$C_4H_{10}O_2$	1,2-Butanediol	190.5	40		
$C_4H_{10}O_2$	1,3-Butanediol	207.5	121		395
$C_4H_{10}O_2$	1,4-Butanediol	235	121		
$C_4H_{10}O_2$	2,3-Butanediol	182.5			402
$C_4H_{10}O_2$	Ethylene glycol monoethyl ether	135	43	3–18%	235
$C_4H_{10}O_2$	Ethylene glycol dimethyl ether	85	–2		202
$C_4H_{10}O_2$	*tert*-Butyl hydroperoxide		27		
$C_4H_{10}O_2S$	2,2′-Thiodiethanol	282	160		298
$C_4H_{10}O_3$	Diethylene glycol	245.8	124	2–17%	224
$C_4H_{10}O_4S$	Diethyl sulfate	208	104		436
$C_4H_{10}S$	1-Butanethiol	98.5	2		
$C_4H_{10}S$	2-Butanethiol	85	–23		
$C_4H_{10}S$	2-Methyl-1-propanethiol	88.5	2		
$C_4H_{10}S$	2-Methyl-2-propanethiol	64.3	<–29		
$C_4H_{10}Se$	Diethyl selenide	108		2.5–?	
$C_4H_{11}N$	Butylamine	77.0	–12	1.7–9.8%	312
$C_4H_{11}N$	*sec*-Butylamine	63.5	–9		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
$C_4H_{11}N$	*tert*-Butylamine	44.0	–9	1.7–8.9%	380
$C_4H_{11}N$	Isobutylamine	67.7	–9	2–12%	378
$C_4H_{11}N$	Diethylamine	55.5	–23	1.8–10.1%	312
$C_4H_{11}NO$	2-Amino-1-butanol	178	74		
$C_4H_{11}NO$	2-Amino-2-methyl-1-propanol	165.5	67		
$C_4H_{11}NO_2$	Diethanolamine	268.8	172	2–13%	662
$C_4H_{12}Sn$	Tetramethylstannane	78	–12	1.9–?	
$C_4H_{13}N_3$	Diethylenetriamine	207	98	2–6.7%	358
$C_5H_4O_2$	Furfural	161.7	60	2.1–19.3%	316
C_5H_5N	Pyridine	115.2	20	1.8–12.4%	482
C_5H_6	2-Methyl-1-buten-3-yne	32	<–7		
$C_5H_6N_2$	2-Methylpyrazine	137	50		
C_5H_6O	3-Methylfuran	66	–30		
$C_5H_6O_2$	Furfuryl alcohol	171	75	1.8–16.3%	491
C_5H_7N	1-Methylpyrrole	115	16		
C_5H_7NO	2-Furanmethanamine	145.5	37		
$C_5H_7NO_2$	Ethyl cyanoacetate	205	110		
C_5H_8	2-Methyl-1,3-butadiene	34.0	–54	1.5–8.9%	395
C_5H_8	1-Pentyne	40.1	<–20		
C_5H_8	Cyclopentene	44.2	–29		395
C_5H_8O	3-Methyl-3-buten-2-one	98		1.8–9.0%	
C_5H_8O	Cyclopentanone	130.5	26		
C_5H_8O	3,4-Dihydro-2H-pyran	86	–18		
$C_5H_8O_2$	Allyl acetate	103.5	22		374
$C_5H_8O_2$	Isopropenyl acetate	94	26		432
$C_5H_8O_2$	Vinyl propanoate	91.2	1		
$C_5H_8O_2$	Ethyl acrylate	99.4	10	1.4–14%	372
$C_5H_8O_2$	Methyl methacrylate	100.5	10	1.7–8.2%	
$C_5H_8O_2$	2,4-Pentanedione	138	34		340
$C_5H_8O_3$	Methyl acetoacetate	171.7	77		280
C_5H_9NO	*N*-Methyl-2-pyrrolidone	202	96	1–10%	346
C_5H_{10}	1-Pentene	29.9	–18	1.5–8.7%	275
C_5H_{10}	*cis*-2-Pentene	36.9	<–20		
C_5H_{10}	*trans*-2-Pentene	36.3	<–20		
C_5H_{10}	2-Methyl-1-butene	31.2	–20		
C_5H_{10}	3-Methyl-1-butene	20.1	–7	1.5–9.1%	365
C_5H_{10}	2-Methyl-2-butene	38.5	–20		
C_5H_{10}	Cyclopentane	49.3	–25	1.5–?	361
$C_5H_{10}Cl_2$	1,5-Dichloropentane	179	>27		
$C_5H_{10}N_2$	3-(Dimethylamino)propanenitrile	173	65		
$C_5H_{10}O$	Cyclopentanol	140.4	51		
$C_5H_{10}O$	Pentanal	103	12		222
$C_5H_{10}O$	2-Pentanone	102.2	7	1.5–8.2%	452
$C_5H_{10}O$	3-Pentanone	101.9	13	1.6–?	450
$C_5H_{10}O$	Tetrahydropyran	88	–20		
$C_5H_{10}O$	2-Methyltetrahydrofuran	78	–11		
$C_5H_{10}O_2$	Pentanoic acid	186.1	96		400
$C_5H_{10}O_2$	3-Methylbutanoic acid	176.5			416
$C_5H_{10}O_2$	Butyl formate	106.1	18	1.7–8.2%	322
$C_5H_{10}O_2$	Isobutyl formate	98.2	5	2–9%	320
$C_5H_{10}O_2$	Propyl acetate	101.5	13	1.7–8%	450
$C_5H_{10}O_2$	Isopropyl acetate	88.6	2	1.8–8%	460
$C_5H_{10}O_2$	Ethyl propanoate	99.1	12	1.9–11%	440
$C_5H_{10}O_2$	Methyl butanoate	102.8	14		
$C_5H_{10}O_2$	3-Ethoxypropanal	135.2	38		
$C_5H_{10}O_2$	Tetrahydrofurfuryl alcohol	178	75	1.5–9.7%	282
$C_5H_{10}O_3$	Diethyl carbonate	126	25		
$C_5H_{10}O_3$	Ethylene glycol monomethyl ether acetate	143	49	1.5–12.3%	392
$C_5H_{10}O_3$	Ethyl lactate	154.5	46	1.5–?	400
$C_5H_{11}Br$	1-Bromopentane	129.8	32		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
$C_5H_{11}Cl$	1-Chloropentane	107.8	13	1.6–8.6%	260
$C_5H_{11}Cl$	2-Chloro-2-methylbutane	85.6		1.5–7.4%	345
$C_5H_{11}Cl$	1-Chloro-3-methylbutane	98.9	<21	1.5–7.4%	
$C_5H_{11}Cl_3Si$	Trichloropentylsilane	172	63		
$C_5H_{11}N$	Piperidine	106.2	16		
$C_5H_{11}N$	*N*-Methylpyrrolidine	81	–14		
$C_5H_{11}NO$	4-Methylmorpholine	116	24		
$C_5H_{11}NO_2$	Isopentyl nitrite	99.2			210
C_5H_{12}	Pentane	36.0	–40	1.4–8.0%	260
C_5H_{12}	Isopentane	27.8	–51	1.4–7.6%	420
C_5H_{12}	Neopentane	9.4	–65	1.4–7.5%	450
$C_5H_{12}N_2$	1-Methylpiperazine	138	42		
$C_5H_{12}N_2O$	Tetramethylurea	176.5	77		
$C_5H_{12}O$	1-Pentanol	137.9	33	1.2–10.0%	300
$C_5H_{12}O$	2-Pentanol	119.3	34	1.2–9.0%	343
$C_5H_{12}O$	3-Pentanol	116.2	41	1.2–9.0%	435
$C_5H_{12}O$	2-Methyl-1-butanol	128	50		385
$C_5H_{12}O$	3-Methyl-1-butanol	131.1	43	1.2–9.0%	350
$C_5H_{12}O$	2-Methyl-2-butanol	102.4	19	1.2–9.0%	437
$C_5H_{12}O$	3-Methyl-2-butanol	112.9	38		
$C_5H_{12}O$	2,2-Dimethyl-1-propanol	113.5	37		
$C_5H_{12}O$	Ethyl propyl ether	63.2	<–20	1.7–9.0%	
$C_5H_{12}O_2$	1,5-Pentanediol	239	129		335
$C_5H_{12}O_2$	2-Isopropoxyethanol	145	33		
$C_5H_{12}O_2$	2,2-Dimethyl-1,3-propanediol	208	129		399
$C_5H_{12}O_3$	Diethylene glycol monomethyl ether	193	96	1.38–22.7%	240
$C_5H_{12}S$	1-Pentanethiol	126.6	18		
$C_5H_{12}S$	3-Methyl-2-butanethiol		3		
$C_5H_{13}N$	Pentylamine	104.3	–1	2.2–22%	
$C_5H_{13}N$	Butylmethylamine	91	13		
$C_6H_2Cl_4$	1,2,4,5-Tetrachlorobenzene	244.5	155		
$C_6H_3ClN_2O_4$	1-Chloro-2,4-dinitrobenzene	315	194	2.0–22%	
$C_6H_3Cl_3$	1,2,4-Trichlorobenzene	213.5	105	2.5–6.6%	571
$C_6H_4ClNO_2$	1-Chloro-4-nitrobenzene	242	127		
$C_6H_4Cl_2$	*o*-Dichlorobenzene	180	66	2.2–9.2%	648
$C_6H_4Cl_2$	*m*-Dichlorobenzene	173	72		
$C_6H_4Cl_2$	*p*-Dichlorobenzene	174	66		
$C_6H_4Cl_2O$	2,4-Dichlorophenol	210	114		
C_6H_5Br	Bromobenzene	156.0	51		565
C_6H_5Cl	Chlorobenzene	131.7	28	1.3–9.6%	593
C_6H_5ClO	*o*-Chlorophenol	174.9	64		
C_6H_5ClO	*p*-Chlorophenol	220	121		
$C_6H_5Cl_2N$	3,4-Dichloroaniline	272	166		
$C_6H_5Cl_3Si$	Trichlorophenylsilane	201	91		
C_6H_5F	Fluorobenzene	84.7	–15		
$C_6H_5NO_2$	Nitrobenzene	210.8	88	1.8–?	482
$C_6H_5N_3O_4$	2,4-Dinitroaniline		224		
C_6H_6	1,5-Hexadien-3-yne	85	<–20	1.5–?	
C_6H_6	Benzene	80.0	–11	1.2–7.8%	498
$C_6H_6N_2O_2$	*p*-Nitroaniline	332	199		
C_6H_6O	Phenol	181.8	79	1.8–8.6%	715
$C_6H_6O_2$	1,2-Benzenediol	245	127		
$C_6H_6O_2$	Resorcinol		127	1.4–?	608
$C_6H_6O_2$	*p*-Hydroquinone	287	165		516
C_6H_7N	Aniline	184.1	70	1.3–11%	615
C_6H_7N	2-Methylpyridine	129.3	39		538
C_6H_7N	4-Methylpyridine	145.3	57		
C_6H_8ClN	Aniline, hydrochloride		193		
$C_6H_8Cl_2O_2$	Hexanedioyl dichloride		72		
$C_6H_8N_2$	Adiponitrile	295	93	1.0–?	550
$C_6H_8N_2$	*o*-Phenylenediamine	257	156	1.5–?	

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
$C_6H_8N_2$	Phenylhydrazine	243.5	88		
$C_6H_8N_2$	2,5-Dimethylpyrazine	155	64		
C_6H_8O	2,5-Dimethylfuran	93.5	7		
$C_6H_8O_4$	Dimethyl maleate	202	113		
C_6H_{10}	1,4-Hexadiene	65	–21	2.0–6.1%	
C_6H_{10}	2-Methyl-1,3-pentadiene	75.8	–12		
C_6H_{10}	4-Methyl-1,3-pentadiene	76.5	–34		
C_6H_{10}	2-Hexyne	84.5	–10		
C_6H_{10}	Cyclohexene	82.9	–12	1.2–?	310
$C_6H_{10}O$	Diallyl ether	94	–7		
$C_6H_{10}O$	Cyclohexanone	155.4	44	1.1–9.4%	420
$C_6H_{10}O$	Mesityl oxide	130	31	1.4–7.2%	344
$C_6H_{10}O_2$	Vinyl butanoate	116.7	20	1.4–8.8%	
$C_6H_{10}O_2$	Ethyl 2-butenoate	136.5	2		
$C_6H_{10}O_2$	Ethyl methacrylate	117	20		
$C_6H_{10}O_2$	2,5-Hexanedione	194	79		499
$C_6H_{10}O_3$	Ethyl acetoacetate	180.8	57	1.4–9.5%	295
$C_6H_{10}O_3$	Propanoic anhydride	170	63	1.3–9.5%	285
$C_6H_{10}O_4$	Adipic acid	337.5	196		420
$C_6H_{10}O_4$	Diethyl oxalate	185.7	76		
$C_6H_{10}O_4$	Ethylene glycol diacetate	190	88	1.6–8.4%	482
$C_6H_{11}Cl$	Chlorocyclohexane	142	32		
$C_6H_{11}NO$	Caprolactam	270	125		
$C_6H_{11}NO_2$	Nitrocyclohexane	205	88		
$C_6H_{11}NO_2$	4-Acetylmorpholine		113		
C_6H_{12}	1-Hexene	63.4	–26	1.2–6.9%	253
C_6H_{12}	*cis*-2-Hexene	68.8	–21		
C_6H_{12}	2-Methyl-1-pentene	62.1	–28		300
C_6H_{12}	4-Methyl-1-pentene	53.9	–7		300
C_6H_{12}	4-Methyl-*cis*-2-pentene	56.3	–32		
C_6H_{12}	4-Methyl-*trans*-2-pentene	58.6	–29		
C_6H_{12}	2-Ethyl-1-butene	64.7	<–20		315
C_6H_{12}	2,3-Dimethyl-1-butene	55.6	<–20		360
C_6H_{12}	2,3-Dimethyl-2-butene	73.3	<–20		401
C_6H_{12}	Cyclohexane	80.7	–20	1.3–8%	245
C_6H_{12}	Methylcyclopentane	71.8	–29	1.0–8.35%	258
C_6H_{12}	Ethylcyclobutane	70.8	–15	1.2–7.7%	210
C_6H_{12}	2-Methyl-2-pentene	67.3	<–7		
$C_6H_{12}Cl_2O_2$	1,2-Bis(2-chloroethoxy)ethane	232	121		
$C_6H_{12}O$	*cis*-3-Hexen-1-ol	156.5	54		
$C_6H_{12}O$	Butyl vinyl ether	94	–9		255
$C_6H_{12}O$	Isobutyl vinyl ether	83	–9		
$C_6H_{12}O$	Hexanal	131	32		
$C_6H_{12}O$	2-Ethylbutanal		21	1.2–7.7%	
$C_6H_{12}O$	2-Methylpentanal	117	17		199
$C_6H_{12}O$	2-Hexanone	127.6	25	1–8%	423
$C_6H_{12}O$	3-Hexanone	123.5	35	1–8%	
$C_6H_{12}O$	4-Methyl-2-pentanone	116.5	18	1.2–8.0%	448
$C_6H_{12}O$	Cyclohexanol	160.8	68	1–9%	300
$C_6H_{12}O_2$	Hexanoic acid	205.2	102		380
$C_6H_{12}O_2$	2-Methylpentanoic acid	195.6	107		378
$C_6H_{12}O_2$	Diethylacetic acid	194	99		400
$C_6H_{12}O_2$	Pentyl formate	130.4	26		
$C_6H_{12}O_2$	Butyl acetate	126.1	22	1.7–7.6%	425
$C_6H_{12}O_2$	*sec*-Butyl acetate	112	31	1.7–9.8%	
$C_6H_{12}O_2$	Isobutyl acetate	116.5	18	1.3–10.5%	421
$C_6H_{12}O_2$	Propyl propanoate	122.5	79		
$C_6H_{12}O_2$	Ethyl butanoate	121.5	24		463
$C_6H_{12}O_2$	Ethyl 2-methylpropanoate	110.1	13		
$C_6H_{12}O_2$	Diacetone alcohol	167.9	58	1.8–6.9%	643

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
$C_6H_{12}O_3$	Ethylene glycol monoethyl ether acetate	156.4	56	2–8%	379
$C_6H_{12}O_3$	Paraldehyde	124.3	36	1.3–?	238
$C_6H_{12}S$	Cyclohexanethiol	158.9	43		
$C_6H_{13}Cl$	1-Chlorohexane	135	35		
$C_6H_{13}N$	Cyclohexylamine	134	31	1.9–9.4%	293
$C_6H_{13}NO$	*N*-Butylacetamide	229	116		
$C_6H_{13}NO$	2,6-Dimethylmorpholine	146.6	44		
$C_6H_{13}NO$	*N*-Ethylmorpholine	138.5	32		
$C_6H_{13}NO_2$	4-Morpholineethanol	227	99		
C_6H_{14}	Hexane	68.7	–22	1.1–7.5%	225
C_6H_{14}	2-Methylpentane	60.2	<–29	1.0–7.0%	264
C_6H_{14}	3-Methylpentane	63.2	–7	1.2–7.0%	278
C_6H_{14}	2,2-Dimethylbutane	49.7	–48	1.2–7.0%	405
C_6H_{14}	2,3-Dimethylbutane	57.9	–29	1.2–7.0%	405
$C_6H_{14}N_2O$	1-Piperazineethanol	246	124		
$C_6H_{14}O$	1-Hexanol	157.6	63		
$C_6H_{14}O$	2-Methyl-1-pentanol	149	54	1.1–9.65%	310
$C_6H_{14}O$	4-Methyl-2-pentanol	131.6	41	1.0–5.5%	
$C_6H_{14}O$	2-Ethyl-1-butanol	147	57		
$C_6H_{14}O$	Dipropyl ether	90.0	21	1.3–7.0%	188
$C_6H_{14}O$	Diisopropyl ether	68.5	–28	1.4–7.9%	443
$C_6H_{14}O$	Butyl ethyl ether	92.3	4		
$C_6H_{14}O_2$	2,5-Hexanediol	218	110		
$C_6H_{14}O_2$	2-Methyl-2,4-pentanediol	197.1	102	1–9%	306
$C_6H_{14}O_2$	Ethylene glycol monobutyl ether	168.4	69	4–13%	238
$C_6H_{14}O_2$	1,1-Diethoxyethane	102.2	–21	1.6–10.4%	230
$C_6H_{14}O_2$	Ethylene glycol diethyl ether	119.4	27		205
$C_6H_{14}O_3$	1,2,6-Hexanetriol		191		
$C_6H_{14}O_3$	Diethylene glycol monoethyl ether	196	96		
$C_6H_{14}O_3$	Diethylene glycol dimethyl ether	162	67		
$C_6H_{14}O_3$	Trimethylolpropane		149		
$C_6H_{14}O_4$	Triethylene glycol	285	177	0.9–9.2%	371
$C_6H_{15}N$	Hexylamine	132.8	29		
$C_6H_{15}N$	Butylethylamine	107.5	18		
$C_6H_{15}N$	Dipropylamine	109.3	17		299
$C_6H_{15}N$	Diisopropylamine	83.9	–1	1.1–7.1%	316
$C_6H_{15}N$	Triethylamine	89	–7	1.2–8.0%	249
$C_6H_{15}NO_2$	Diisopropanolamine	250	127		374
$C_6H_{15}NO_3$	Triethanolamine	335.4	179	1–10%	
$C_6H_{15}N_3$	1-Piperazineethanamine	220	93		
$C_6H_{15}O_4P$	Triethyl phosphate	215.5	115		454
$C_6H_{16}N_2$	*N,N*-Diethylethylenediamine	144	46		
$C_7H_3ClF_3NO_2$	1-Chloro-4-nitro-2-(trifluoromethyl)benzene	232	135		
$C_7H_4ClF_3$	1-Chloro-2-(trifluoromethyl)benzene	152.2	59		
$C_7H_4F_3NO_2$	1-Nitro-3-(trifluoromethyl)benzene	202.8	103		
C_7H_5ClO	Benzoyl chloride	197.2	72		
C_7H_5ClO	4-Chlorobenzaldehyde	213.5	88		
$C_7H_5Cl_3$	(Trichloromethyl)benzene	221	127		211
$C_7H_5F_3$	(Trifluoromethyl)benzene	102.1	12		
$C_7H_6N_2O_4$	1-Methyl-2,4-dinitrobenzene		207		
C_7H_6O	Benzaldehyde	179.0	63		192
$C_7H_6O_2$	Benzoic acid	249.2	121		570
$C_7H_6O_2$	Salicylaldehyde	197	78		
$C_7H_6O_3$	Salicylic acid		157	1.1–?	540
C_7H_7Br	*o*-Bromotoluene	181.7	79		
C_7H_7Br	*p*-Bromotoluene	184.3	85		
C_7H_7Cl	(Chloromethyl)benzene	179	67	1.1–?	585
$C_7H_7NO_2$	*o*-Nitrotoluene	222	106		
$C_7H_7NO_2$	*m*-Nitrotoluene	232	106		
$C_7H_7NO_2$	*p*-Nitrotoluene	238.3	106		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
C_7H_8	Toluene	110.6	4	1.1–7.1%	480
C_7H_8	Bicyclo[2.2.1]hepta-2,5-diene	89.5	–21		
C_7H_8O	*o*-Cresol	191.0	81	1.4–?	599
C_7H_8O	*m*-Cresol	202.2	86	1.1–?	558
C_7H_8O	*p*-Cresol	201.9	86	1.1–?	558
C_7H_8O	Benzyl alcohol	205.3	93		436
C_7H_8O	Anisole	153.7	52		475
$C_7H_8O_2$	4-Methoxyphenol	243	132		421
$C_7H_8O_3S$	*p*-Toluenesulfonic acid		184		
C_7H_9N	*o*-Methylaniline	200.3	85		482
C_7H_9N	*p*-Methylaniline	200.4	87		482
C_7H_9NO	*o*-Anisidine	224	118		
$C_7H_{10}O$	3-Cyclohexene-1-carboxaldehyde	105	57		
$C_7H_{10}O_4$	3,3-Diacetoxy-1-propene	180	82		
C_7H_{12}	4-Methylcyclohexene	102.7	–1		
$C_7H_{12}O_2$	Butyl acrylate	145	29	1.7–9.9%	292
$C_7H_{12}O_2$	Isobutyl acrylate	132	30		427
$C_7H_{12}O_2$	Cyclohexyl formate	162	51		
$C_7H_{12}O_4$	Diethyl malonate	200	93		
C_7H_{14}	1-Heptene	93.6	–1		260
C_7H_{14}	*trans*-2-Heptene	98	<0		
C_7H_{14}	Cycloheptane	118.4	<21	1.1–6.7%	
C_7H_{14}	Methylcyclohexane	100.9	–4	1.2–6.7%	250
C_7H_{14}	Ethylcyclopentane	103.5	<21	1.1–6.7%	260
$C_7H_{14}O$	2-Heptanone	151.0	39	1.1–7.9%	393
$C_7H_{14}O$	3-Heptanone	147	46		
$C_7H_{14}O$	4-Heptanone	144	49		
$C_7H_{14}O$	5-Methyl-2-hexanone	144	36	1.0–8.2%	191
$C_7H_{14}O$	*cis*-2-Methylcyclohexanol	165	65		296
$C_7H_{14}O$	*trans*-2-Methylcyclohexanol	167.5	65		296
$C_7H_{14}O$	*cis*-3-Methylcyclohexanol	174.5	70		295
$C_7H_{14}O$	*trans*-3-Methylcyclohexanol	174.5	70		295
$C_7H_{14}O$	*cis*-4-Methylcyclohexanol	173	70		295
$C_7H_{14}O$	*trans*-4-Methylcyclohexanol	174	70		295
$C_7H_{14}O_2$	Pentyl acetate	149.2	16	1.1–7.5%	360
$C_7H_{14}O_2$	Isopentyl acetate	142.5	25	1.0–7.5%	360
$C_7H_{14}O_2$	*sec*-Pentyl acetate	130.5	32		
$C_7H_{14}O_2$	Butyl propanoate	146.8	32		426
$C_7H_{14}O_2$	Propyl butanoate	143.0	37		
$C_7H_{15}NO_2$	Ethyl *N*-butylcarbamate	202	92		
C_7H_{16}	Heptane	98.5	–4	1.05–6.7%	204
C_7H_{16}	2-Methylhexane	90.0	–1	1.0–6.0%	280
C_7H_{16}	3-Methylhexane	92	–4		280
C_7H_{16}	2,3-Dimethylpentane	89.7	–56	1.1–6.7%	335
C_7H_{16}	2,4-Dimethylpentane	80.4	–12		
C_7H_{16}	2,2,3-Trimethylbutane	80.8	<0		412
$C_7H_{16}N_2O$	4-Morpholinepropanamine	220	104		
$C_7H_{16}O$	2-Heptanol	159	71		
$C_7H_{16}O$	3-Heptanol	157	60		
$C_7H_{16}O$	2,4-Dimethyl-3-pentanol	138.7	49		
$C_7H_{16}O$	2,3,3-Trimethyl-2-butanol	131	<0		375
$C_7H_{17}N$	Heptylamine	156	54		
$C_7H_{18}N_2$	*N,N*-Diethyl-1,3-propanediamine	168.5	59		
$C_8H_4O_3$	Phthalic anhydride	295	152	1.7–10.5%	570
$C_8H_6O_4$	Phthalic acid		168		
$C_8H_6O_4$	Terephthalic acid		260		496
C_8H_7ClO	α-Chloroacetophenone	247	118		
C_8H_7N	Benzeneacetonitrile	233.5	113		
C_8H_8	Styrene	145	31	0.9–6.8%	490
C_8H_8O	Phenyloxirane	194.1	74		498
C_8H_8O	Benzeneacetaldehyde	195	71		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
C_8H_8O	Acetophenone	202	77		570
$C_8H_8O_2$	Benzeneacetic acid	265.5	>100		
$C_8H_8O_2$	Phenyl acetate	196	80		
$C_8H_8O_2$	Methyl benzoate	199	83		
$C_8H_8O_2$	2-Methoxybenzaldehyde	243.5	118		
$C_8H_8O_3$	Methyl salicylate	222.9	96		454
C_8H_9Cl	1-Chloro-4-ethylbenzene	184.4	64		
C_8H_9NO	Acetanilide	304	169		530
$C_8H_9NO_2$	Methyl 2-aminobenzoate	256	>100		
C_8H_{10}	Ethylbenzene	136.1	21	0.8–6.7%	432
C_8H_{10}	*o*-Xylene	144.5	32	0.9–6.7%	463
C_8H_{10}	*m*-Xylene	139.1	27	1.1–7.0%	527
C_8H_{10}	*p*-Xylene	138.3	27	1.1–7.0%	528
$C_8H_{10}O$	*p*-Ethylphenol	217.9	104		
$C_8H_{10}O$	Benzeneethanol	218.2	96		
$C_8H_{10}O$	α-Methylbenzyl alcohol	205	93		
$C_8H_{10}O$	Phenetole	169.8	63		
$C_8H_{10}O$	Benzyl methyl ether	170	135		
$C_8H_{10}O$	4-Methylanisole	175.5	60		
$C_8H_{10}O_2$	2-Phenoxyethanol	245	121		
$C_8H_{11}N$	*N*-Ethylaniline	203.0	85		
$C_8H_{11}N$	*N,N*-Dimethylaniline	194.1	63		371
$C_8H_{11}N$	2,3-Xylidine	221.5	97	1.0–?	
$C_8H_{11}N$	2,6-Xylidine	215	96		
$C_8H_{11}N$	α-Methylbenzylamine	187	79		
$C_8H_{11}N$	5-Ethyl-2-picoline	178.3	68	1.1–6.6%	
$C_8H_{11}NO$	*N*-Phenylethanolamine	279.5	152		
$C_8H_{11}NO$	*o*-Phenetidine	232.5	115		
$C_8H_{11}NO$	*p*-Phenetidine	254	116		
C_8H_{12}	1,5-Cyclooctadiene	150.8	35		
C_8H_{12}	4-Vinylcyclohexene	128	16		269
$C_8H_{12}O_4$	Diethyl maleate	223	121		350
$C_8H_{12}O_4$	Diethyl fumarate	214	104		
$C_8H_{14}O_2$	Cyclohexyl acetate	173	58		335
$C_8H_{14}O_2$	Butyl methacrylate	160	52		
$C_8H_{14}O_3$	Butanoic anhydride	200	54	0.9–5.8%	279
$C_8H_{14}O_3$	2-Methylpropanoic anhydride	183	59	1.0–6.2%	329
$C_8H_{14}O_3$	Butyl acetoacetate		85		
$C_8H_{14}O_4$	Ethyl succinate	217.7	90		
$C_8H_{14}O_5$	Diethylene glycol diacetate	200	135		
$C_8H_{14}O_6$	Diethyl tartrate	281	93		
$C_8H_{15}ClO$	Octanoyl chloride	195.6	82		
C_8H_{16}	1-Octene	121.2	21		230
C_8H_{16}	2,4,4-Trimethyl-1-pentene	101.4	–5	0.8–4.8%	391
C_8H_{16}	2,4,4-Trimethyl-2-pentene	104.9	2		305
C_8H_{16}	Ethylcyclohexane	131.9	35	0.9–6.6%	238
C_8H_{16}	*cis*-1,2-Dimethylcyclohexane	129.8	16		304
C_8H_{16}	*trans*-1,2-Dimethylcyclohexane	123.5	11		304
C_8H_{16}	*cis*-1,4-Dimethylcyclohexane	124.4	16		
C_8H_{16}	Propylcyclopentane	131			269
$C_8H_{16}O$	Octanal	171	52		
$C_8H_{16}O$	2-Ethylhexanal	163	44	0.85–7.2%	190
$C_8H_{16}O$	2-Octanone	172.5	52		
$C_8H_{16}O_2$	Hexyl acetate	171.5	45		
$C_8H_{16}O_2$	sec-Hexyl acetate	147.5	45		
$C_8H_{16}O_2$	2-Ethylbutyl acetate	162.5	54		
$C_8H_{16}O_2$	Pentyl propanoate	168.6	41		378
$C_8H_{16}O_2$	Butyl butanoate	166	53		
$C_8H_{16}O_2$	Isobutyl butanoate	156.9	50		
$C_8H_{16}O_2$	Isobutyl isobutanoate	148.6	38	0.96–7.59%	432
$C_8H_{16}O_2$	Ethyl hexanoate	167	49		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
$C_8H_{16}O_2$	1,4-Cyclohexanedimethanol	283	167		316
$C_8H_{16}O_3$	Pentyl lactate		79		
$C_8H_{16}O_4$	Diethylene glycol monoethyl ether acetate	218.5	110		425
$C_8H_{17}Cl$	1-Chlorooctane	181.5	70		
$C_8H_{17}Cl$	3-(Chloromethyl)heptane	172	60		
C_8H_{18}	Octane	125.6	13	1.0–6.5%	206
C_8H_{18}	2,3-Dimethylhexane	115.6	7		438
C_8H_{18}	2,4-Dimethylhexane	109.5	10		
C_8H_{18}	3-Ethyl-2-methylpentane	115.6	<21		460
C_8H_{18}	2,2,3-Trimethylpentane	110	<21		346
C_8H_{18}	2,2,4-Trimethylpentane	99.2	−12		418
C_8H_{18}	2,3,3-Trimethylpentane	114.8	<21		425
$C_8H_{18}O$	1-Octanol	195.1	81		
$C_8H_{18}O$	2-Octanol	180	88		
$C_8H_{18}O$	2-Ethyl-1-hexanol	184.6	73	0.88–9.7%	231
$C_8H_{18}O$	Dibutyl ether	140.2	25	1.5–7.6%	194
$C_8H_{18}O_2$	2-Ethyl-1,3-hexanediol	244	127		360
$C_8H_{18}O_2$	2,2,4-Trimethyl-1,3-pentanediol	235	113		346
$C_8H_{18}O_2$	Di-*tert*-butyl peroxide	111	18		
$C_8H_{18}O_3$	Diethylene glycol diethyl ether	188	82		
$C_8H_{18}O_4$	2,5,8,11-Tetraoxadodecane	216	111		
$C_8H_{18}O_5$	Tetraethylene glycol	328	182		
$C_8H_{18}S$	1-Octanethiol	199.1	69		
$C_8H_{18}S$	Dibutyl sulfide	185	76		
$C_8H_{19}N$	Octylamine	179.6	60		
$C_8H_{19}N$	Dibutylamine	159.6	47	1.1–6%	
$C_8H_{19}N$	Diisobutylamine	139.6	29		
$C_8H_{19}N$	2-Ethylhexylamine	169.2	60		
$C_8H_{20}O_4Si$	Ethyl silicate	168.8	52		
$C_8H_{23}N_5$	Tetraethylenepentamine	341.5	163		321
$C_9H_6N_2O_2$	Toluene-2,4-diisocyanate	251	127	0.9–9.5%	
C_9H_7N	Quinoline	237.1			480
C_9H_{10}	*o*-Methylstyrene	169.8	53	0.8–11.0%	538
C_9H_{10}	*m*-Methylstyrene	164	53	0.8–11.0%	538
C_9H_{10}	*p*-Methylstyrene	172.8	53	0.8–11.0%	538
C_9H_{10}	Isopropenylbenzene	165.4	54	1.9–6.1%	574
$C_9H_{10}O$	1-Phenyl-1-propanone	217.5	99		
$C_9H_{10}O$	4-Methylacetophenone	226	96		
$C_9H_{10}O_2$	Ethyl benzoate	212	88		490
$C_9H_{10}O_2$	Benzyl acetate	213	90		460
$C_9H_{10}O_2$	Methyl 2-phenylacetate	216.5	91		
$C_9H_{11}NO$	4-Methylacetanilide	307	168		
C_9H_{12}	Propylbenzene	159.2	30	0.8–6.0%	450
C_9H_{12}	Isopropylbenzene	152.4	36	0.9–6.5%	424
C_9H_{12}	*o*-Ethyltoluene	165.2			440
C_9H_{12}	*m*-Ethyltoluene	161.3			480
C_9H_{12}	*p*-Ethyltoluene	162			475
C_9H_{12}	1,2,3-Trimethylbenzene	176.1	44	0.8–6.6%	470
C_9H_{12}	1,2,4-Trimethylbenzene	169.3	44	0.9–6.4%	500
C_9H_{12}	1,3,5-Trimethylbenzene	164.7	50	1–5%	559
$C_9H_{12}O$	α–Ethylbenzyl alcohol	219	100		
$C_9H_{12}O_2$	Ethylene glycol monobenzyl ether	256	129		352
$C_9H_{12}O_3S$	Ethyl *p*-toluenesulfonate		158		
$C_9H_{13}N$	Amphetamine	203	<100		
$C_9H_{14}O$	Phorone	197.5	85		
$C_9H_{14}O$	Isophorone	215.2	84	0.8–3.8%	460
$C_9H_{14}O_6$	Triacetin	259	138	1.0–?	433
C_9H_{16}	Octahydroindene	167			296
$C_9H_{16}O_2$	Allyl hexanoate	186	66		
C_9H_{18}	1-Nonene	146.9	26		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
C_9H_{18}	Propylcyclohexane	156.7			248
C_9H_{18}	Isopropylcyclohexane	154.8			283
C_9H_{18}	Butylcyclopentane	156.6			250
$C_9H_{18}O$	2-Nonanone	195.3	60	0.9–5.9%	360
$C_9H_{18}O$	Diisobutyl ketone	169.4	49	0.8–7.1%	396
$C_9H_{18}O_2$	Pentyl butanoate	186.4	57		
$C_9H_{18}O_2$	Isopentyl butanoate	179	59		
$C_9H_{18}O_2$	Butyl 3-methylbutanoate		53		
C_9H_{20}	Nonane	150.8	31	0.8–2.9%	205
C_9H_{20}	3-Ethyl-4-methylhexane	140	24		
C_9H_{20}	4-Ethyl-2-methylhexane	133.8	<21	0.7–?	280
C_9H_{20}	2,2,5-Trimethylhexane	124.0	13		
C_9H_{20}	3,3-Diethylpentane	146.3		0.7–5.7%	290
C_9H_{20}	3-Ethyl-2,4-dimethylpentane	136.7	390		
C_9H_{20}	2,2,3,3-Tetramethylpentane	140.2	<21	0.8–4.9%	430
C_9H_{20}	2,2,3,4-Tetramethylpentane	133.0	<21		
$C_9H_{21}BO_3$	Triisopropyl borate	140	28		
$C_9H_{21}N$	Tripropylamine	156	41		
$C_9H_{21}NO_3$	Triisopropanolamine		160		320
$C_{10}H_7Cl$	1-Chloronaphthalene	259	121		>558
$C_{10}H_8$	Naphthalene	217.9	79	0.9–5.9%	526
$C_{10}H_8O$	2-Naphthol	285	153		
$C_{10}H_9N$	1-Naphthalenamine	300.8	157		
$C_{10}H_{10}O_2$	Safrole	234.5	100		
$C_{10}H_{10}O_4$	Dimethyl phthalate	283.7	146	0.9–?	490
$C_{10}H_{10}O_4$	Dimethyl isophthalate	282	138		
$C_{10}H_{10}O_4$	Dimethyl terephthalate	288	153		518
$C_{10}H_{11}NO_2$	Acetoacetanilide		185		
$C_{10}H_{12}$	1,2,3,4-Tetrahydronaphthalene	207.6	71	0.8–5.0%	385
$C_{10}H_{12}O_2$	Isopropyl benzoate	216	99		
$C_{10}H_{12}O_2$	Ethyl phenylacetate	227	99		
$C_{10}H_{14}$	Butylbenzene	183.3	71	0.8–5.8%	410
$C_{10}H_{14}$	*sec*-Butylbenzene	173.3	52	0.8–6.9%	418
$C_{10}H_{14}$	*tert*-Butylbenzene	169.1	60	0.7–5.7%	450
$C_{10}H_{14}$	Isobutylbenzene	172.7	55	0.8–6.0%	427
$C_{10}H_{14}$	*p*-Cymene	177.1	47	0.7–5.6%	436
$C_{10}H_{14}$	1,2,3,4-Tetramethylbenzene	205	74		427
$C_{10}H_{14}$	1,2,3,5-Tetramethylbenzene	198	71		427
$C_{10}H_{14}$	1,2,4,5-Tetramethylbenzene	196.8	54		
$C_{10}H_{14}$	*o*-Diethylbenzene	184	57		395
$C_{10}H_{14}$	*m*-Diethylbenzene	181.1	56		450
$C_{10}H_{14}$	*p*-Diethylbenzene	183.7	55	0.7–6.0%	430
$C_{10}H_{14}O$	Butyl phenyl ether	210	82		
$C_{10}H_{14}O_2$	4-*tert*-Butyl-1,2-benzenediol	285	130		
$C_{10}H_{15}N$	*N*-Butylaniline	243.5	107		
$C_{10}H_{15}N$	*N,N*-Diethylaniline	216.3	85		630
$C_{10}H_{15}NO_2$	*N*-Phenyl-*N,N*-diethanolamine		196	0.7–?	387
$C_{10}H_{16}$	Dipentene	178	45		237
$C_{10}H_{16}$	*d*-Limonene	178	45	0.7–6.1%	237
$C_{10}H_{16}$	α-Pinene	156.2	33		255
$C_{10}H_{16}$	β-Pinene	166	38		275
$C_{10}H_{16}$	β-Phellandrene	171.5	49		
$C_{10}H_{16}O$	Camphor	207.4	66	0.6–3.5%	466
$C_{10}H_{18}$	*trans*-Decahydronaphthalene	187.3	54	0.7–5.4%	255
$C_{10}H_{18}O$	Borneol		66		
$C_{10}H_{18}O$	Linalol	198	71		
$C_{10}H_{18}O$	α-Terpineol	220	90		
$C_{10}H_{18}O$	Cineole	176.4	48		
$C_{10}H_{18}O$	*trans*-Geraniol	230	>100		
$C_{10}H_{18}O_4$	Dibutyl oxalate	241	104		
$C_{10}H_{19}NO_2$	*N-tert*-Butylaminoethyl methacrylate		96		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
$C_{10}H_{20}$	1-Decene	170.5	<55		235
$C_{10}H_{20}$	Butylcyclohexane	180.9			246
$C_{10}H_{20}$	Isobutylcyclohexane	171.3			274
$C_{10}H_{20}$	*tert*-Butylcyclohexane	171.5			342
$C_{10}H_{20}O$	Citronellol	224	96		
$C_{10}H_{20}O_2$	2-Ethylhexyl acetate	199	71	0.76–8.14%	268
$C_{10}H_{20}O_2$	Ethyl octanoate	208.5	79		
$C_{10}H_{21}N$	*N*-Butylcyclohexanamine		93		
$C_{10}H_{22}$	Decane	174.1	51	0.8–5.4%	210
$C_{10}H_{22}$	2-Methylnonane	167.1			210
$C_{10}H_{22}$	3-Ethyloctane	166.5			230
$C_{10}H_{22}$	4-Ethyloctane	163.7			229
$C_{10}H_{22}O$	1-Decanol	231.1	82		288
$C_{10}H_{22}O$	Dipentyl ether	190	57		170
$C_{10}H_{22}O_2$	Ethylene glycol dibutyl ether	203.3	85		
$C_{10}H_{22}O_5$	Tetraethylene glycol dimethyl ether	275.3	141		
$C_{10}H_{22}S$	Dipentyl sulfide		85		
$C_{10}H_{23}N$	Decylamine	220.5	99		
$C_{10}H_{23}N$	Dipentylamine	202.5	51		
$C_{11}H_{10}$	1-Methylnaphthalene	244.7			529
$C_{11}H_{12}O_3$	Ethyl benzoylacetate		141		
$C_{11}H_{14}O_2$	Butyl benzoate	250.3	107		
$C_{11}H_{16}$	*p-tert*-Butyltoluene	190	68		
$C_{11}H_{16}$	Pentylbenzene	205.4	66		
$C_{11}H_{16}$	1,3-Diethyl-5-methylbenzene	205			455
$C_{11}H_{16}$	Pentamethylbenzene	232	93		427
$C_{11}H_{16}O$	4-*tert*-Butyl-2-methylphenol	237	118		
$C_{11}H_{17}N$	*p-tert*-Pentylaniline	260.5	102		
$C_{11}H_{20}O_2$	2-Ethylhexyl acrylate		82		252
$C_{11}H_{22}$	Pentylcyclohexane	203.7			239
$C_{11}H_{22}O$	2-Undecanone	231.5	89		
$C_{11}H_{22}O_2$	Nonyl acetate	210	68		
$C_{11}H_{24}$	Undecane	195.9	69		
$C_{11}H_{24}$	2-Methyldecane	189.3			225
$C_{11}H_{24}O$	2-Undecanol	228	113		
$C_{12}H_9Br$	4-Bromo-1,1′-biphenyl	310	144		
$C_{12}H_{10}$	Biphenyl	256.1	113	0.6–5.8%	540
$C_{12}H_{10}Cl_2Si$	Dichlorodiphenylsilane	305	142		
$C_{12}H_{10}O$	*o*-Phenylphenol	286	124		530
$C_{12}H_{10}O$	Diphenyl ether	258.0	112	0.8–1.5%	618
$C_{12}H_{11}N$	2-Aminobiphenyl	299			450
$C_{12}H_{11}N$	Diphenylamine	302	153		634
$C_{12}H_{12}$	1-Ethylnaphthalene	258.6			480
$C_{12}H_{14}O_4$	Diethyl phthalate	295	161	0.7–?	457
$C_{12}H_{14}O_4$	Diethyl terephthalate	302	117		
$C_{12}H_{16}$	Cyclohexylbenzene	240.1	99		
$C_{12}H_{16}O_3$	Pentyl salicylate	270	132		
$C_{12}H_{17}NO$	*N*-Butyl-*N*-phenylacetamide	281	141		
$C_{12}H_{18}$	1,5,9-Cyclododecatriene	240	71		
$C_{12}H_{20}O_4$	Dibutyl maleate	280	141		
$C_{12}H_{22}O_4$	Dimethyl sebacate		145		
$C_{12}H_{22}O_6$	Dibutyl tartrate	320	91		284
$C_{12}H_{23}N$	Dicyclohexylamine		>99		
$C_{12}H_{24}$	1-Dodecene	213.8	79		
$C_{12}H_{24}O_2$	Ethyl decanoate	241.5	>100		
$C_{12}H_{25}Br$	1-Bromododecane	276	144		
$C_{12}H_{26}$	Dodecane	216.3	74	0.6–?	203
$C_{12}H_{26}O$	1-Dodecanol	259	127		275
$C_{12}H_{26}O$	2-Butyl-1-octanol	246.5	110		
$C_{12}H_{26}O_3$	Diethylene glycol dibutyl ether	256	118		310
$C_{12}H_{26}S$	1-Dodecanethiol	277	128		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
$C_{12}H_{27}BO_3$	Tributyl borate	234	93		
$C_{12}H_{27}N$	Tributylamine	216.5	63		
$C_{12}H_{27}O_4P$	Tributyl phosphate	289	146		
$C_{13}H_{12}$	2-Methylbiphenyl	255.5	137		502
$C_{13}H_{12}$	Diphenylmethane	265.0	130		485
$C_{13}H_{14}N_2$	*p,p′*-Diaminodiphenylmethane	398	220		
$C_{13}H_{26}$	1-Tridecene	232.8	79		
$C_{13}H_{26}O$	2-Tridecanone	263	107		
$C_{13}H_{28}$	Tridecane	235.4	79		
$C_{13}H_{28}O$	1-Tridecanol		121		
$C_{14}H_8O_2$	9,10-Anthracenedione	377	185		
$C_{14}H_{10}$	Anthracene	339.9	121	0.6–?	540
$C_{14}H_{10}$	Phenanthrene	340	171		
$C_{14}H_{12}O_2$	Benzyl benzoate	323.5	148		480
$C_{14}H_{12}O_3$	Benzyl salicylate	320	>100		
$C_{14}H_{14}$	1,1-Diphenylethane	272.6	>100		440
$C_{14}H_{14}O$	Dibenzyl ether	298	135		
$C_{14}H_{16}$	1-Butylnaphthalene	289.3	360		
$C_{14}H_{16}N_2O_2$	*o*-Dianisidine		206		
$C_{14}H_{23}N$	*N,N*-Dibutylaniline	274.8	110		
$C_{14}H_{28}$	1-Tetradecene	233	110		235
$C_{14}H_{30}$	Tetradecane	253.5	112	0.5–?	200
$C_{14}H_{30}O$	1-Tetradecanol	289	141		
$C_{15}H_{18}$	1-Pentylnaphthalene	307	124		
$C_{15}H_{24}$	Nonylbenzene	280.5	99		
$C_{15}H_{24}O$	2,6-Di-*tert*-butyl-4-methylphenol	265	127		
$C_{15}H_{26}O_6$	Tributyrin	307.5	180	0.5–?	407
$C_{15}H_{33}N$	Tripentylamine	242.5	102		
$C_{16}H_{14}O$	1,3-Diphenyl-2-buten-1-one	342.5	177		
$C_{16}H_{18}$	2-Butyl-1,1′-biphenyl		>100		430
$C_{16}H_{22}O_4$	Dibutyl phthalate	340	157	0.5–?	402
$C_{16}H_{26}$	Decylbenzene	298	107		
$C_{16}H_{34}$	Hexadecane	286.8	136		202
$C_{16}H_{34}O$	Dioctyl ether	283	>100		205
$C_{16}H_{35}N$	Bis(2-ethylhexyl)amine		132		
$C_{17}H_{20}N_2O$	*N,N′*-Diethylcarbanilide		150		
$C_{17}H_{34}O$	2-Heptadecanone	320	120		
$C_{17}H_{36}O$	1-Heptadecanol	333	154		
$C_{18}H_{14}$	*o*-Terphenyl	332	163		
$C_{18}H_{14}$	*m*-Terphenyl	363	191		
$C_{18}H_{15}O_3P$	Triphenyl phosphite	360	218		
$C_{18}H_{15}O_4P$	Triphenyl phosphate		220		
$C_{18}H_{15}P$	Triphenylphosphine		180		
$C_{18}H_{30}$	Dodecylbenzene	328	140		
$C_{18}H_{32}O_7$	Butyl citrate		157		368
$C_{18}H_{34}O_2$	Oleic acid	360	189		363
$C_{18}H_{34}O_4$	Dibutyl sebacate	344.5	178	0.4–?	365
$C_{18}H_{36}O_2$	Stearic acid		196		395
$C_{18}H_{37}Cl_3Si$	Trichlorooctadecylsilane		89		
$C_{18}H_{38}$	Octadecane	316.3	>100		227
$C_{18}H_{38}O$	1-Octadecanol				450
$C_{19}H_{16}$	Triphenylmethane	359	>100		
$C_{19}H_{38}O$	2-Nonadecanone		124		
$C_{19}H_{38}O_2$	Methyl stearate	443	153		
$C_{19}H_{40}$	Nonadecane	329.9	>100		230
$C_{20}H_{14}O_4$	Diphenyl phthalate		224		
$C_{20}H_{28}$	1-Decylnaphthalene	379	177		
$C_{20}H_{42}$	Eicosane	343	>100		232
$C_{21}H_{21}O_4P$	Tri-*o*-cresyl phosphate	410	225		385
$C_{21}H_{26}O_3$	4-Octylphenyl salicylate		216		416
$C_{21}H_{32}O_2$	Methyl abietate		180		

Mol. form.	Name	t_B/°C	FP/°C	Fl. limits	IT/°C
$C_{22}H_{42}O_2$	Butyl oleate		180		
$C_{22}H_{42}O_4$	Bis(2-ethylhexyl) adipate		206	0.4–?	377
$C_{22}H_{44}O_2$	Butyl stearate	343	160		355
$C_{23}H_{46}O_2$	Pentyl stearate		185		
$C_{24}H_{20}Sn$	Tetraphenylstannane	420	232		
$C_{24}H_{38}O_4$	Bis(2-ethylhexyl) phthalate	384	218		
$C_{25}H_{48}O_4$	Bis(2-ethylhexyl) azelate		227	0.3–?	374