

## CRITICAL CONSTANTS

The parameters of the liquid–gas critical point are important constants in determining the behavior of fluids. This table lists the critical temperature, pressure, and molar volume, as well as the normal boiling point, for approximately 850 inorganic and organic substances. The properties and their units are:

$T_b$ : Normal boiling point in kelvins at a pressure of 101.325 kPa (1 atmosphere); an “s” following the value indicates a sublimation point (temperature at which the solid is in equilibrium with the gas at a pressure of 101.325 kPa)

$T_c$ : Critical temperature in kelvins

$P_c$ : Critical pressure in megapascals

$V_c$ : Critical molar volume in  $\text{cm}^3/\text{mol}$

The number of digits given for  $T_b$ ,  $T_c$ , and  $P_c$  indicates the estimated accuracy of these quantities; however, values of  $T_c$  greater than 750 K may be in error by 10 K or more. Although most  $V_c$  values are given to three figures, they cannot be assumed accurate to better than a few percent. All values are experimentally determined except for a few values, indicated by an asterisk\*, which are based on extrapolations. Methods of measurement are described and critiqued in Reference 1.

Many of the critical constants in this table are taken from reviews produced by the IUPAC Commission on Thermodynamics (References 1–8). Compounds are listed by molecular formula in modified Hill order, with compounds not containing carbon preceding those that do contain carbon.

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<b>Molecular formula</b>	<b>Name</b>	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	<b>Ref.</b>
AlBr <sub>3</sub>	Aluminum bromide	528	763	2.89	310	9
AlCl <sub>3</sub>	Aluminum chloride	453 s	620	2.63	257	9
AlI <sub>3</sub>	Aluminum iodide	655	983		408	9
Ar	Argon	87.30	150.87	4.898	75	9
As	Arsenic	876	1673		35	9
AsCl <sub>3</sub>	Arsenic(III) chloride	403	654		252	9
AsH <sub>3</sub>	Arsine	210.7	373.1			9
BBr <sub>3</sub>	Boron tribromide	364	581		272	9
BCl <sub>3</sub>	Boron trichloride	285.80	455	3.87	239	9
BF <sub>3</sub>	Boron trifluoride	172	260.8	4.98	115	9
BI <sub>3</sub>	Boron triiodide	482.7	773		356	9
B <sub>2</sub> H <sub>6</sub>	Diborane	180.8	289.8	4.05		9
BiBr <sub>3</sub>	Bismuth tribromide	726	1220		301	9
BiCl <sub>3</sub>	Bismuth trichloride	720	1179	12.0	261	9
BrH	Hydrogen bromide	206.77	363.2	8.55		9
BrI	Iodine bromide	389	719		139	9
Br <sub>2</sub>	Bromine	332.0	588	10.34	127	9
Br <sub>2</sub> Hg	Mercury(II) bromide	595	1012			9
Br <sub>3</sub> Ga	Gallium(III) bromide	552	806.7		303	9
Br <sub>3</sub> HSi	Tribromosilane	382	610.0		305	9
Br <sub>3</sub> P	Phosphorus(III) bromide	446.4	711		300	9
Br <sub>3</sub> Sb	Antimony(III) bromide	553	904		300	9
Br <sub>4</sub> Ge	Germanium(IV) bromide	459.50	718		392	9
Br <sub>4</sub> Hf	Hafnium(IV) bromide	596 s	746		415	9
Br <sub>4</sub> Si	Tetrabromosilane	427	663		382	9
Br <sub>4</sub> Sn	Tin(IV) bromide	478	744		417	9
Br <sub>4</sub> Ti	Titanium(IV) bromide	503	795.7		391	9
Br <sub>4</sub> Zr	Zirconium(IV) bromide	633 s	805		424	9
Br <sub>5</sub> Ta	Tantalum(V) bromide	622	974		461	9
ClFO <sub>3</sub>	Perchloryl fluoride	226.40	368.4	5.37	161	9
ClF <sub>2</sub> N	Nitrogen chloride difluoride	206	337.5	5.15		9
ClF <sub>2</sub> P	Phosphorus(III) chloride difluoride	225.9	362.4	4.52		9
ClF <sub>2</sub> PS	Phosphorothioc chloride difluoride	279.5	439.2	4.14		9
ClF <sub>3</sub> Si	Chlorotrifluorosilane	203.2	307.7	3.46		9
ClF <sub>5</sub>	Chlorine pentafluoride	260.1	416	5.27	233	9
ClF <sub>5</sub> S	Sulfur chloride pentafluoride	254.10	390.9			9
ClH	Hydrogen chloride	188	324.7	8.31	81	9
ClH <sub>4</sub> N	Ammonium chloride	611 s	1155	163.5		9
ClH <sub>4</sub> P	Phosphonium chloride	246 s	322.3	7.37		9
ClNO	Nitrosyl chloride	267.7	440			9
ClOV	Vanadyl chloride	400	636		171	9
Cl <sub>2</sub>	Chlorine	239.11	416.9	7.991	123	9
Cl <sub>2</sub> FP	Phosphorus(III) dichloride fluoride	287.00	463.0	4.96		9
Cl <sub>2</sub> F <sub>2</sub> Si	Dichlorodifluorosilane	241	369.0	3.5		9
Cl <sub>2</sub> Hg	Mercury(II) chloride	577	973		174	9
Cl <sub>2</sub> OSe	Selenium oxychloride	450	730	7.09	235	9
Cl <sub>3</sub> FSi	Trichlorofluorosilane	285.40	438.6	3.58		9
Cl <sub>3</sub> Ga	Gallium(III) chloride	474	694		263	9
Cl <sub>3</sub> HSi	Trichlorosilane	306	479		268	9
Cl <sub>3</sub> P	Phosphorus(III) chloride	349.3	563		264	9
Cl <sub>3</sub> Sb	Antimony(III) chloride	493.5	794		272	9
Cl <sub>4</sub> Ge	Germanium(IV) chloride	359.70	553.2	3.861	330	9
Cl <sub>4</sub> Hf	Hafnium(IV) chloride	590 s	725.7	5.42	314	9
Cl <sub>4</sub> ORe	Rhenium(VI) oxytetrachloride	496	781		362	9
Cl <sub>4</sub> OW	Tungsten(VI) oxytetrachloride	500.70	782		338	9
Cl <sub>4</sub> Si	Tetrachlorosilane	330.80	508.1	3.593	326	9
Cl <sub>4</sub> Sn	Tin(IV) chloride	387.30	591.9	3.75	351	9
Cl <sub>4</sub> Te	Tellurium tetrachloride	660	1002	8.56	310	9
Cl <sub>4</sub> Ti	Titanium(IV) chloride	409.60	638	4.66	339	9
Cl <sub>4</sub> Zr	Zirconium(IV) chloride	604 s	778	5.77	319	9

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
Cl <sub>5</sub> Mo	Molybdenum(V) chloride	541	850		369	9
Cl <sub>5</sub> Nb	Niobium(V) chloride	527.2	803.5	4.88	397	9
Cl <sub>5</sub> P	Phosphorus(V) chloride	433 s	646			9
Cl <sub>5</sub> Ta	Tantalum(V) chloride	512.50	767		402	9
Cl <sub>6</sub> W	Tungsten(VI) chloride	619.90	923		422	9
Cs	Cesium	944	1938	9.4	341	43
FH	Hydrogen fluoride	293	461	6.48	69	9
FNO <sub>2</sub>	Nitryl fluoride	200.8	349.5			9
F <sub>2</sub>	Fluorine	85.03	144.13	5.172	66	9
F <sub>2</sub> HN	Difluoramine	250	403			9
F <sub>2</sub> N <sub>2</sub>	<i>cis</i> -Difluorodiazine	167.40	272	7.09		9
F <sub>2</sub> N <sub>2</sub>	<i>trans</i> -Difluorodiazine	161.70	260	5.57		9
F <sub>2</sub> O	Fluorine monoxide	128.40	215			9
F <sub>2</sub> Xe	Xenon difluoride	387.50	631	9.32	148	9
F <sub>3</sub> N	Nitrogen trifluoride	144.40	234.0	4.46	126	9
F <sub>3</sub> NO	Trifluoramine oxide	185.7	303	6.43	147	9
F <sub>3</sub> P	Phosphorus(III) fluoride	171.4	271.2	4.33		9
F <sub>3</sub> PS	Phosphorothioc trifluoride	220.90	346.0	3.82		9
F <sub>4</sub> N <sub>2</sub>	Tetrafluorohydrazine	199	309	3.75		9
F <sub>4</sub> S	Sulfur tetrafluoride	232.70	364			9
F <sub>4</sub> Si	Tetrafluorosilane	187	259.0	3.72		9
F <sub>4</sub> Xe	Xenon tetrafluoride	388.90	612	7.04	188	9
F <sub>5</sub> Nb	Niobium(V) fluoride	502	737	6.28	155	9
F <sub>6</sub> Mo	Molybdenum(VI) fluoride	307.2	473	4.75	226	9
F <sub>6</sub> S	Sulfur hexafluoride	209.35	318.69	3.77	199	9
F <sub>6</sub> Se	Selenium hexafluoride	226.55	345.5			9
F <sub>6</sub> Te	Tellurium hexafluoride	234.25	356			9
F <sub>6</sub> U	Uranium(VI) fluoride	329.65	505.8	4.66	250	9
F <sub>6</sub> W	Tungsten(VI) fluoride	290.3	444	4.34	233	9
GaI <sub>3</sub>	Gallium(III) iodide	613	951		395	9
GeH <sub>4</sub>	Germane	185.1	312.2	4.95	147	9
GeI <sub>4</sub>	Germanium(IV) iodide	650	973		500	9
HI	Hydrogen iodide	237.60	424.0	8.31		9
H <sub>2</sub>	Hydrogen	20.28	32.97	1.293	65	9
H <sub>2</sub> O	Water	373.2	647.14	22.06	56	9
H <sub>2</sub> O <sub>2</sub>	Hydrogen peroxide	423.4	728*	22*		31
H <sub>2</sub> S	Hydrogen sulfide	213.60	373.2	8.94	99	9
H <sub>2</sub> Se	Hydrogen selenide	231.90	411	8.92		9
H <sub>3</sub> N	Ammonia	239.82	405.5	11.35	72	9
H <sub>3</sub> P	Phosphine	185.40	324.5	6.54		9
H <sub>4</sub> N <sub>2</sub>	Hydrazine	386.70	653	14.7		9
He	Helium	4.22	5.19	0.227	57	9
HfI <sub>4</sub>	Hafnium iodide	667 s	916		528	9
Hg	Mercury	629.88	1750	172.00	43	9
HgI <sub>2</sub>	Mercury(II) iodide	627	1072			9
I <sub>2</sub>	Iodine	457.6	819		155	9
I <sub>3</sub> Sb	Antimony(III) iodide	674	1102			9
I <sub>4</sub> Si	Tetraiodosilane	560.50	944		558	9
I <sub>4</sub> Sn	Tin(IV) iodide	637.50	968		531	9
I <sub>4</sub> Ti	Titanium(IV) iodide	650	1040		505	9
I <sub>4</sub> Zr	Zirconium(IV) iodide	704 s	960		530	9
K	Potassium	1032	2223*	16*	209*	20
Kr	Krypton	119.93	209.41	5.50	91	9
Li	Lithium	1615	3223*	67*	66*	20
NO	Nitric oxide	121.41	180	6.48	58	9
N <sub>2</sub>	Nitrogen	77.36	126.21	3.39	90	9
N <sub>2</sub> O	Nitrous oxide	184.67	309.57	7.255	97	9
N <sub>2</sub> O <sub>4</sub>	Nitrogen tetroxide	294.30	431	10.1	167	9
Na	Sodium	1156	2573*	35*	116*	20
Ne	Neon	27.07	44.4	2.76	42	9

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
O <sub>2</sub>	Oxygen	90.20	154.59	5.043	73	9
O <sub>2</sub> S	Sulfur dioxide	263.10	430.8	7.884	122	9
O <sub>3</sub>	Ozone	161.80	261.1	5.57	89	9
O <sub>3</sub> S	Sulfur trioxide	318	491.0	8.2	127	9
O <sub>4</sub> Os	Osmium(VIII) oxide	408	678			9
O <sub>7</sub> Re <sub>2</sub>	Rhenium(VII) oxide	633	942		334	9
P	Phosphorus	553.7	994			9
Rb	Rubidium	961	2093*	16*	247*	20
Rn	Radon	211.5	377	6.28		9
S	Sulfur	717.75	1314	20.7		9
Se	Selenium	958	1766	27.2		9
Xe	Xenon	165.03	289.77	5.841	118	34
CBrClF <sub>2</sub>	Bromochlorodifluoromethane	269.5	426.88	4.254	246	9
CBrF <sub>3</sub>	Bromotrifluoromethane	215.4	340.2	3.97	196	9
CBr <sub>2</sub> F <sub>2</sub>	Dibromodifluoromethane	295.91	471.3	4.45		9
CClF <sub>3</sub>	Chlorotrifluoromethane	191.8	302	3.870	180	9
CCl <sub>2</sub> F <sub>2</sub>	Dichlorodifluoromethane	243.4	384.95	4.136	217	9
CCl <sub>2</sub> O	Carbonyl chloride [Phosgene]	281	455	5.67	190	9
CCl <sub>3</sub> F	Trichlorofluoromethane	296.9	471.1	4.47	247	18
CCl <sub>4</sub>	Tetrachloromethane	350.0	556.6	4.516	276	9
CF <sub>3</sub> I	Trifluoroiodomethane	250.7	396.44	3.953	226	24
CF <sub>4</sub>	Tetrafluoromethane	145.2	227.6	3.74	140	9
CHBrF <sub>2</sub>	Bromodifluoromethane	258.6	411.98	5.132	275	47
CHClF <sub>2</sub>	Chlorodifluoromethane	232.5	369.5	5.035	164	18
CHCl <sub>2</sub> F	Dichlorofluoromethane	282.1	451.58	5.18	196	9
CHCl <sub>3</sub>	Trichloromethane	334.32	536.4	5.47	239	9
CHF <sub>3</sub>	Trifluoromethane	191.1	298.98	4.82	133	42
CHN	Hydrogen cyanide	299	456.7	5.39	139	9
CH <sub>2</sub> ClF	Chlorofluoromethane	264.1	427	5.70		37
CH <sub>2</sub> Cl <sub>2</sub>	Dichloromethane	313	510	6.10		9
CH <sub>2</sub> F <sub>2</sub>	Difluoromethane	221.6	351.56	5.83	123	42
CH <sub>2</sub> O <sub>2</sub>	Formic acid	374	588			7
CH <sub>3</sub> Cl	Chloromethane	249.06	416.25	6.679	139	9
CH <sub>3</sub> Cl <sub>3</sub> Si	Methyltrichlorosilane	338.8	517	3.28	348	9
CH <sub>3</sub> F	Fluoromethane	194.8	317.8	5.88	113	9
CH <sub>3</sub> I	Iodomethane	315.58	528			9
CH <sub>3</sub> NO <sub>2</sub>	Nitromethane	374.34	588	5.87	173	9
CH <sub>4</sub>	Methane	111.67	190.56	4.599	98.60	2
CH <sub>4</sub> O	Methanol	337.8	512.5	8.084	117	4
CH <sub>4</sub> S	Methanethiol	279.1	470	7.23	147	8
CH <sub>5</sub> ClSi	Chloromethylsilane	280	517.8			9
CH <sub>5</sub> N	Methylamine	266.83	430.7	7.614		9
CH <sub>6</sub> N <sub>2</sub>	Methylhydrazine	360.7	567	8.24	271	9
CH <sub>6</sub> Si	Methylsilane	215.7	352.4			8
CO	Carbon monoxide	81.7	132.91	3.499	93	9
COS	Carbon oxysulfide	223	375	5.88	137	9
CO <sub>2</sub>	Carbon dioxide	194.6 s	304.13	7.375	94	22
CS <sub>2</sub>	Carbon disulfide	319	552	7.90	173	9
C <sub>2</sub> Br <sub>2</sub> ClF <sub>3</sub>	1,2-Dibromo-1-chloro-1,2,2-trifluoroethane	366	560.7	3.61	368	9
C <sub>2</sub> Br <sub>2</sub> F <sub>4</sub>	1,2-Dibromotetrafluoroethane	320.50	487.8	3.393	341	9
C <sub>2</sub> ClF <sub>3</sub>	Chlorotrifluoroethene	245.4	379	4.05	212	9
C <sub>2</sub> ClF <sub>5</sub>	Chloropentafluoroethane	234.1	353.2	3.229	252	9
C <sub>2</sub> Cl <sub>2</sub> F <sub>4</sub>	1,1-Dichloro-1,2,2,2-tetrafluoroethane	276.6	418.6	3.30	294	9
C <sub>2</sub> Cl <sub>2</sub> F <sub>4</sub>	1,2-Dichloro-1,1,2,2-tetrafluoroethane	276.7	418.78	3.252	297	42
C <sub>2</sub> Cl <sub>3</sub> F <sub>3</sub>	1,1,1-Trichloro-2,2,2-trifluoroethane	318.7	482.9			40
C <sub>2</sub> Cl <sub>3</sub> F <sub>3</sub>	1,1,2-Trichloro-1,2,2-trifluoroethane	320.9	487.3	3.42	325	9
C <sub>2</sub> Cl <sub>4</sub>	Tetrachloroethene	394.5	620.2			9
C <sub>2</sub> Cl <sub>4</sub> F <sub>2</sub>	1,1,2,2-Tetrachloro-1,2-difluoroethane	366.0	551			9
C <sub>2</sub> Cl <sub>6</sub>	Hexachloroethane	457.85	695	3.34*	412*	12
C <sub>2</sub> F <sub>3</sub> N	Trifluoroacetone	204.4	311.11	3.618	202	9

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
C <sub>2</sub> F <sub>4</sub>	Tetrafluoroethene	197.3	306.5	3.94	172	9
C <sub>2</sub> F <sub>6</sub>	Hexafluoroethane	195.1	293		222	9
C <sub>2</sub> HClF <sub>2</sub>	1-Chloro-2,2-difluoroethene	254.7	400.6	4.46	197	9
C <sub>2</sub> HClF <sub>4</sub>	1-Chloro-1,1,2,2-tetrafluoroethane	261.5	399.9	3.72	244	9
C <sub>2</sub> HClF <sub>4</sub>	1-Chloro-1,2,2,2-tetrafluoroethane	261	395.65	3.643	244	42
C <sub>2</sub> HCl <sub>2</sub> F <sub>3</sub>	1,2-Dichloro-1,1,2-trifluoroethane	302.7	461.6		278	19
C <sub>2</sub> HCl <sub>2</sub> F <sub>3</sub>	2,2-Dichloro-1,1,1-trifluoroethane	300.97	456.83	3.661	278	35
C <sub>2</sub> HCl <sub>3</sub>	Trichloroethene	360.36	544.2	5.02		9
C <sub>2</sub> HF <sub>3</sub> O <sub>2</sub>	Trifluoroacetic acid	346	491.3	3.258	204	9
C <sub>2</sub> HF <sub>5</sub>	Pentafluoroethane	225.1	339.17	3.620	208.0	29,30
C <sub>2</sub> HF <sub>5</sub> O	Trifluoromethyl difluoromethyl ether	235	354.0	3.33	192	25,45,46
C <sub>2</sub> H <sub>2</sub>	Acetylene	188.45	308.3	6.138	112.2	6
C <sub>2</sub> H <sub>2</sub> ClF <sub>3</sub>	2-Chloro-1,1,1-trifluoroethane	279.3	425.01		228	40
C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	<i>cis</i> -1,2-Dichloroethene	333.3	544.2			9
C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	<i>trans</i> -1,2-Dichloroethene	321.9	516.5	5.51		9
C <sub>2</sub> H <sub>2</sub> Cl <sub>4</sub>	1,1,2,2-Tetrachloroethane	418.4	661.15			9
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub>	1,1-Difluoroethene	187.5	302.9	4.46	154	9
C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>	1,1,1,2-Tetrafluoroethane	247.07	374.18	4.065	198	36
C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>	1,1,2,2-Tetrafluoroethane	253.3	391.74	4.615	191	19,42
C <sub>2</sub> H <sub>2</sub> F <sub>4</sub> O	Bis(difluoromethyl) ether	275	420.25	4.228	223	46
C <sub>2</sub> H <sub>3</sub> Cl	Chloroethene [Vinyl chloride]	259.4	432	5.67	179	12
C <sub>2</sub> H <sub>3</sub> ClF <sub>2</sub>	1-Chloro-1,1-difluoroethane	264.1	410.34	4.048	225	19,32
C <sub>2</sub> H <sub>3</sub> Cl <sub>2</sub> F	1,1-Dichloro-1-fluoroethane	305.2	477.5	4.194	255	26,42
C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub>	1,1,1-Trichloroethane	347.24	545	4.30		9
C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub>	1,1,2-Trichloroethane	387.0	602*	4.48*	281*	12
C <sub>2</sub> H <sub>3</sub> F	Fluoroethene	201	327.9	5.24	144	9
C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	1,1,1-Trifluoroethane	225.90	345.86	3.764	194	27,28
C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	1,1,2-Trifluoroethane	276.9	429.8	5.241	207	40
C <sub>2</sub> H <sub>3</sub> F <sub>3</sub> O	Methyl trifluoromethyl ether	249.49	378.02	3.588	228	47
C <sub>2</sub> H <sub>3</sub> N	Acetonitrile	354.80	545.6	4.884	173	14
C <sub>2</sub> H <sub>4</sub>	Ethylene [Ethene]	169.38	282.34	5.041	131	6
C <sub>2</sub> H <sub>4</sub> Br <sub>2</sub>	1,2-Dibromoethane	404.8	583.0	7.2		9
C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	1,1-Dichloroethane	330.5	523	5.07	236	9
C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	1,2-Dichloroethane	356.7	561	5.4	225	9
C <sub>2</sub> H <sub>4</sub> F <sub>2</sub>	1,1-Difluoroethane	249.10	386.7	4.50	181	9,19
C <sub>2</sub> H <sub>4</sub> O	Acetaldehyde	293.3	466		154	7
C <sub>2</sub> H <sub>4</sub> O	Oxirane [Ethylene oxide]	283.8	469	7.2	142	7
C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	Acetic acid	391.1	590.7	5.78	171	7
C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	Methyl formate	304.9	487.2	6.00	172	7
C <sub>2</sub> H <sub>5</sub> Br	Bromoethane	311.7	503.9	6.23	215	9
C <sub>2</sub> H <sub>5</sub> Cl	Chloroethane	285.5	460.4	5.3		9
C <sub>2</sub> H <sub>5</sub> F	Fluoroethane	235.5	375.31	5.028		9
C <sub>2</sub> H <sub>6</sub>	Ethane	184.6	305.32	4.872	145.5	2
C <sub>2</sub> H <sub>6</sub> Cl <sub>2</sub> Si	Dichlorodimethylsilane	343.5	520.4	3.49	350	9
C <sub>2</sub> H <sub>6</sub> O	Ethanol	351.44	514.0	6.137	168	4
C <sub>2</sub> H <sub>6</sub> O	Dimethyl ether	248.4	400.2	5.34	168	7
C <sub>2</sub> H <sub>6</sub> O <sub>2</sub>	1,2-Ethanediol	470.5	720	8		7,14
C <sub>2</sub> H <sub>6</sub> S	Ethanethiol	308.2	499	5.49	207	8
C <sub>2</sub> H <sub>6</sub> S	Dimethyl sulfide	310.48	503	5.53	203.7	8
C <sub>2</sub> H <sub>6</sub> S <sub>2</sub>	Dimethyl disulfide	382.89	615			8
C <sub>2</sub> H <sub>7</sub> N	Ethylamine	289.7	456	5.62	182	9
C <sub>2</sub> H <sub>7</sub> N	Dimethylamine	280.03	437.22	5.340		9
C <sub>2</sub> H <sub>8</sub> N <sub>2</sub>	1,2-Ethanediamine	390	613.1	6.707		11,12
C <sub>2</sub> N <sub>2</sub>	Cyanogen	252.1	400	5.98		9
C <sub>3</sub> ClF <sub>5</sub> O	Chloropentafluoroacetone	281	410.6	2.878		9
C <sub>3</sub> Cl <sub>2</sub> F <sub>6</sub>	1,3-Dichloro-1,1,2,2,3,3-hexafluoropropane	308.9	453	2.753		41
C <sub>3</sub> F <sub>6</sub> O	Perfluoroacetone	245.8	357.14	2.84	329	9
C <sub>3</sub> F <sub>6</sub> O	Perfluoroacetone	244.8	361.8	3.03	272	18,47
C <sub>3</sub> F <sub>8</sub>	Perfluoropropane	236.6	345.1	2.680	299	9
C <sub>3</sub> F <sub>8</sub> O <sub>2</sub>	Perfluorodimethoxymethane	263	372.3	2.333	363	18

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_3HF_7$	1,1,1,2,3,3,3-Heptafluoropropane	256.8	374.89	2.929	274	39,47
$C_3HF_6O$	Trifluoromethyl 1,1,2,2-tetrafluoroethyl ether	270	387.78	2.293	337	18,47
$C_3H_2F_6$	1,1,1,2,3,3-Hexafluoropropane	279.3	412.38	3.412	269	33
$C_3H_2F_6$	1,1,1,3,3,3-Hexafluoropropane	272.2	398.07			45
$C_3H_2F_6O$	1,2,2,2-Tetrafluoroethyl difluoromethyl ether	296.50	428.95	3.050	315	32
$C_3H_3F_3$	3,3,3-Trifluoropropene	256	376.2	3.80	211	9
$C_3H_3F_5$	1,1,1,3,3-Pentafluoropropane	288.5	427.20			45
$C_3H_3F_5$	1,1,1,2,2-Pentafluoropropane	255.8	380.11	3.137	273	9
$C_3H_3F_5$	1,1,2,2,3-Pentafluoropropane	298.2	447.57			45
$C_3H_3F_5O$	Methyl pentafluoroethyl ether	278.74	406.80	2.887	301	32
$C_3H_3F_5O$	Difluoromethyl 2,2,2-trifluoroethyl ether	302.39	443.99			38
$C_3H_3N$	Acrylonitrile	350.5	540	4.660		11,12
$C_3H_3NO$	Isoxazole	368	552.0			9
$C_3H_4$	Allene	238.8	394	5.25		6
$C_3H_4$	Propyne	250.0	402.4	5.63	163.5	6
$C_3H_5Cl$	3-Chloropropene	318.3	514			9
$C_3H_5F_3O$	2,2,2-Trifluoroethyl methyl ether	304.77	448.98	3.513	277	32
$C_3H_5N$	Propanenitrile	370.29	561.3	4.26	229	9
$C_3H_6$	Propene	225.46	364.9	4.60	185	6
$C_3H_6$	Cyclopropane	240.34	398.0	5.54	162	5
$C_3H_6Cl_2$	1,2-Dichloropropane	369.6	578.5			13
$C_3H_6Cl_2$	1,3-Dichloropropane	394.1	614.6			13
$C_3H_6O$	Allyl alcohol	370.2	545.1			4
$C_3H_6O$	Propanal	321	505	5.26	204	7
$C_3H_6O$	Acetone	329.20	508.1	4.700	213	7
$C_3H_6O$	Methyloxirane [1,2-Propylene oxide]	308	485	5.2	190	7
$C_3H_6O_2$	Propanoic acid	414.30	598.5	4.67	233	7
$C_3H_6O_2$	Ethyl formate	327.6	508.54	4.74	229	7
$C_3H_6O_2$	Methyl acetate	330.02	506.5	4.750	228	7
$C_3H_6O_3$	Dimethyl carbonate	363.7	557	4.80	252	7
$C_3H_7Cl$	1-Chloropropane	319.7	503	4.58		9
$C_3H_7Cl$	2-Chloropropane	308.9	484			13
$C_3H_7NO$	<i>N,N</i> -Dimethylformamide	426	649.6		262	9
$C_3H_8$	Propane	231.1	369.83	4.248	200	2
$C_3H_8O$	1-Propanol	370.4	536.8	5.169	218	4
$C_3H_8O$	2-Propanol	355.5	508.3	4.764	222	4
$C_3H_8O$	Ethyl methyl ether	280.6	437.9	4.38	222	7
$C_3H_8O_2$	1,2-Propylene glycol	460.8	676.4	5.941		7,14
$C_3H_8O_2$	1,3-Propylene glycol [Trimethylene glycol]	487.6	718.2	6.55		14,17
$C_3H_8O_2$	2-Methoxyethanol [Ethylene glycol monomethyl ether]	397.3	597.6	5.285	263	7,11,12
$C_3H_8O_2$	Dimethoxymethane [Methylal]	315	491	3.96	213	7
$C_3H_8O_3$	Glycerol	563	850	7.5		7
$C_3H_8S$	1-Propanethiol	341.0	537	4.6	286	8
$C_3H_8S$	Ethyl methyl sulfide	339.9	533	4.25		8
$C_3H_9BO_3$	Trimethyl borate	340.7	501.7	3.59		9
$C_3H_9ClSi$	Trimethylchlorosilane	333	497.8	3.20	366	9
$C_3H_9N$	Propylamine	320.37	497.0	4.72		9
$C_3H_9N$	Isopropylamine	304.91	471.8	4.54	221	9
$C_3H_9N$	Trimethylamine	276.02	432.79	4.087	254	9
$C_4Br_2F_8$	1,4-Dibromo-octafluorobutane	370	532.5	2.39		9
$C_4Cl_2F_6$	1,2-Dichloro-1,2,3,3,4,4-hexafluorocyclobutane	332.7	497*	2.73*	386*	12
$C_4F_8$	Perfluorocyclobutane	267.3	388.46	2.784	324	9
$C_4F_{10}$	Perfluorobutane	271.3	386.4	2.323	378	9
$C_4F_{10}$	Perfluoroisobutane	273	395.4			9
$C_4H_2F_8O$	Perfluoroethyl 2,2,2-trifluoroethyl ether	301.04	421.68	2.330	409	32
$C_4H_3F_7O$	Perfluoropropyl methyl ether	307.38	437.70	2.481	377	32
$C_4H_3F_7O$	Perfluoroisopropyl methyl ether	302.49	433.30	2.553	369	32
$C_4H_4O$	Furan	304.7	490.2	5.3	218	7
$C_4H_4O_4$	Maleic acid		620			7
$C_4H_4S$	Thiophene	357.2	580	5.70	219	8

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_4H_5F_5O$	Perfluoroethyl ethyl ether	301.26	431.23	2.533	366	32
$C_4H_5N$	Pyrrrole	402.94	639.7	6.34	200	10
$C_4H_6$	1,3-Butadiene	268.74	425	4.32	221	6
$C_4H_6$	1-Butyne	281.23	440	4.60	208	6
$C_4H_6$	2-Butyne	300.1	488.7			9
$C_4H_6O_2$	Vinyl acetate	346.0	519.2	4.185		7
$C_4H_6O_2$	$\gamma$ -Butyrolactone	477	731	5.13		7,11
$C_4H_6O_3$	Acetic anhydride	412.7	606	4.0		7
$C_4H_6O_3$	Propylene carbonate	515	762.7	4.14		17
$C_4H_7N$	Butanenitrile	390.8	585.4	3.88		9
$C_4H_8$	1-Butene	266.89	419.5	4.02	240.8	6
$C_4H_8$	<i>cis</i> -2-Butene	276.86	435.5	4.21	233.8	6
$C_4H_8$	<i>trans</i> -2-Butene	274.03	428.6	4.10	237.7	6
$C_4H_8$	Isobutene	266.3	417.9	4.000	238.8	6
$C_4H_8$	Cyclobutane	285.8	460.0	4.98	210	9
$C_4H_8O$	Ethyl vinyl ether	308.7	475	4.07		7
$C_4H_8O$	Butanal	348.0	537	4.32	258	7
$C_4H_8O$	Isobutanal	337.7	544	5.1		7
$C_4H_8O$	2-Butanone [Methyl ethyl ketone]	352.74	536.7	4.207	267	7
$C_4H_8O$	Tetrahydrofuran	338	540.5	5.19	224	7
$C_4H_8OS$	<i>S</i> -Ethyl thioacetate	389.6	590.55	4.075	319	11,12
$C_4H_8O_2$	Butanoic acid	436.90	615.2	4.06	292	7
$C_4H_8O_2$	2-Methylpropanoic acid	427.60	605.0	3.70	290	7
$C_4H_8O_2$	Propyl formate	354.1	538.0	4.06	285	7
$C_4H_8O_2$	Isopropyl formate	341.4	535	3.95		7
$C_4H_8O_2$	Ethyl acetate	350.26	523.3	3.87	286	7
$C_4H_8O_2$	Methyl propanoate	353.0	530.7	4.00	282	7
$C_4H_8O_2$	1,4-Dioxane	374.7	588	5.21	238	7
$C_4H_8S$	Tetrahydrothiophene	394.3	632	5.4		8
$C_4H_9Cl$	1-Chlorobutane	351.6	539.2			13
$C_4H_9Cl$	2-Chlorobutane	341.4	518.6			13
$C_4H_9Cl$	2-Chloro-2-methylpropane	324.1	500			13
$C_4H_9N$	Pyrrrolidine	359.71	568	6.00	238	10
$C_4H_{10}$	Butane	272.7	425.12	3.796	255	2
$C_4H_{10}$	Isobutane	261.42	407.8	3.640	259	5
$C_4H_{10}O$	1-Butanol	390.88	563.0	4.414	274	4
$C_4H_{10}O$	2-Butanol [sec-Butyl alcohol]	372.66	536.2	4.202	269	4
$C_4H_{10}O$	2-Methyl-1-propanol [Isobutyl alcohol]	381.04	547.8	4.295	274	4
$C_4H_{10}O$	2-Methyl-2-propanol [tert-Butyl alcohol]	355.6	506.2	3.972	275	4
$C_4H_{10}O$	Diethyl ether	307.7	466.7	3.644	281	7
$C_4H_{10}O$	Methyl propyl ether	312.3	476.2	3.801		7
$C_4H_{10}O$	Isopropyl methyl ether	303.92	464.4	3.762		7
$C_4H_{10}O_2$	2-Methyl-1,3-propanediol	484.8	708.0	5.35		17
$C_4H_{10}O_2$	1,2-Butanediol	463.7	680	5.21	303	7,23
$C_4H_{10}O_2$	1,3-Butanediol	480.7	676	4.02	305	7,23
$C_4H_{10}O_2$	1,4-Butanediol [Tetramethylene glycol]	508	723.8	5.52		17
$C_4H_{10}O_2$	1,2-Dimethoxyethane [Ethylene glycol dimethyl ether]	357.7	540	3.90	308	7
$C_4H_{10}O_2$	1,2-Propylene glycol monomethyl ether	392	579.8	4.113		11,12
$C_4H_{10}O_3$	Diethylene glycol	519.0	750	4.7		7
$C_4H_{10}S$	1-Butanethiol	371.7	570	4.0	324	8
$C_4H_{10}S$	Diethyl sulfide	365.3	557.8	3.90	317.6	8,15
$C_4H_{10}S_2$	Diethyl disulfide	427.2	642			8
$C_4H_{11}N$	Butylamine	350.15	531.9	4.25	277	10
$C_4H_{11}N$	<i>sec</i> -Butylamine	335.88	514.3	4.20	278	10
$C_4H_{11}N$	<i>tert</i> -Butylamine	317.19	483.9	3.84	292	10
$C_4H_{11}N$	Isobutylamine	340.90	519	4.07	278	10
$C_4H_{11}N$	Diethylamine	328.7	499.99	3.758		9
$C_4H_{12}N_2O$	<i>N</i> -(2-Aminoethyl)ethanolamine	512	739.2	4.65		17
$C_4H_{12}Si$	Tetramethylsilane	299.8	448.6	2.821	361.6	8
$C_4H_{12}Sn$	Tetramethylstannane	351	521.8	2.981		8

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_4H_{13}N_3$	Bis(2-aminoethyl)amine	480	709.8	4.38		14,17
$C_5F_{12}$	Perfluoropentane	302.4	420.59	2.045	473	9
$C_5H_2F_6O_2$	Hexafluoroacetylacetone	327.30	485.1	2.767		9
$C_5H_4O_2$	Furfural	434.9	670*	5.89*		7
$C_5H_5N$	Pyridine	388.38	620.0	5.67	243	10
$C_5H_6N_2$	2-Methylpyrazine	410	634.3	5.01	283	9
$C_5H_6O$	2-Methylfuran	337.9	528	4.7	247	7
$C_5H_7N$	1-Methylpyrrole	385.96	596.0	4.86	271	10
$C_5H_7N$	2-Methylpyrrole	420.8	654	5.08	266	10
$C_5H_7N$	3-Methylpyrrole	416.1	647	5.08	266	10
$C_5H_8$	1-Pentyne	313.3	493.5			9
$C_5H_8$	Cyclopentene	317.4	506.5	4.80	245	6
$C_5H_8O$	Cyclopentanone	403.72	624	4.60		7
$C_5H_8O$	3,4-Dihydro-2H-pyran	359	562	4.56	268	7
$C_5H_9N$	Pentanenitrile	414.5	610.3	3.58		9
$C_5H_9NO$	N-Methyl-2-pyrrolidone	475	721.8		311	9
$C_5H_{10}$	1-Pentene	303.11	464.8	3.56	298.4	6
$C_5H_{10}$	cis-2-Pentene	310.08	475	3.69		6
$C_5H_{10}$	trans-2-Pentene	309.49	471	3.52		9
$C_5H_{10}$	2-Methyl-1-butene	304.4	470	3.8		9
$C_5H_{10}$	3-Methyl-1-butene	293.3	452.7	3.53	304.9	6
$C_5H_{10}$	2-Methyl-2-butene	311.71	470	3.42		6
$C_5H_{10}$	Cyclopentane	322.5	511.7	4.51	259	5
$C_5H_{10}O$	Cyclopentanol	413.57	619.5	4.9		4
$C_5H_{10}O$	Allyl ethyl ether	340.8	518			7
$C_5H_{10}O$	Pentanal	376	567	3.97	313	7
$C_5H_{10}O$	2-Pentanone [Methyl propyl ketone]	375.41	561.1	3.683	321	7
$C_5H_{10}O$	3-Pentanone [Diethyl ketone]	374.9	561.4	3.729	331	7
$C_5H_{10}O$	3-Methyl-2-butanone	367.48	553.0	3.80	308	7
$C_5H_{10}O$	Tetrahydropyran	361	572	4.77	263	7
$C_5H_{10}O$	2-Methyltetrahydrofuran	351	537	3.76	267	7
$C_5H_{10}O_2$	Pentanoic acid	459.3	637.2	3.63	346	7
$C_5H_{10}O_2$	3-Methylbutanoic acid	449.7	629	3.40		7
$C_5H_{10}O_2$	Isobutyl formate	371.4	551	3.88	355	7
$C_5H_{10}O_2$	Propyl acetate	374.69	549.7	3.36	345	7
$C_5H_{10}O_2$	Isopropyl acetate	361.8	531.0	3.31	344	7
$C_5H_{10}O_2$	Ethyl propanoate	372.3	546.7	3.45	342	7
$C_5H_{10}O_2$	Methyl butanoate	376.0	554.5	3.47	340	7
$C_5H_{10}O_2$	Methyl isobutanoate	365.7	540.7	3.43	339	7
$C_5H_{10}O_3$	2-Methoxyethyl acetate	416	630.0			7
$C_5H_{11}Cl$	1-Chloropentane	381.6	571.2			13
$C_5H_{11}Cl$	2-Chloro-2-methylbutane	358.8	509.1			13
$C_5H_{11}N$	Piperidine	379.37	594	4.94	288	10
$C_5H_{12}$	Pentane	309.21	469.7	3.370	311	2
$C_5H_{12}$	Isopentane	301.03	460.4	3.38	306	5
$C_5H_{12}$	Neopentane	282.63	433.8	3.196	307	5
$C_5H_{12}O$	1-Pentanol	411.13	588.1	3.897	326	4
$C_5H_{12}O$	2-Pentanol	392.5	560.3	3.675	329	4
$C_5H_{12}O$	3-Pentanol	389.40	559.6		325	4
$C_5H_{12}O$	2-Methyl-1-butanol	400.7	575.4	3.94		4
$C_5H_{12}O$	3-Methyl-1-butanol	404.3	577.2	3.93		4
$C_5H_{12}O$	2-Methyl-2-butanol	375.6	543.7	3.71		4
$C_5H_{12}O$	3-Methyl-2-butanol	386.1	556.1	3.87		4
$C_5H_{12}O$	Butyl methyl ether	343.31	512.7	3.37	329	7
$C_5H_{12}O$	Methyl tert-butyl ether	328.2	497.1	3.430		7
$C_5H_{12}O$	Ethyl propyl ether	336.36	500.2	3.370	339	7
$C_5H_{12}O_2$	2-Propoxyethanol	423.0	615	3.65	364	7
$C_5H_{12}O_2$	Diethoxymethane	361	531.7			7
$C_5H_{12}O_2$	1,2-Dimethoxypropane	369	543.0			7
$C_5H_{12}O_2$	2,2-Dimethoxypropane	356	510			7



Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_5H_{12}O_3$	Diethylene glycol monomethyl ether	466	672	3.67		11,12
$C_5H_{12}S$	3-Methyl-1-butanethiol	389	594			8
$C_6BrF_5$	Bromopentafluorobenzene	410	601	3.0		9
$C_6ClF_5$	Chloropentafluorobenzene	391.11	570.81	3.238	376	9
$C_6Cl_2F_4$	1,2-Dichloro-3,4,5,6-tetrafluorobenzene	430.9	626	5.32		9
$C_6Cl_3F_3$	1,3,5-Trichloro-2,4,6-trifluorobenzene	471.6	684.8	3.27	448	9
$C_6F_6$	Hexafluorobenzene	353.41	516.73	3.273	335	9
$C_6F_{10}$	Perfluorocyclohexene	325.2	461.8			9
$C_6F_{12}$	Perfluoro-1-hexene	330.2	454.4			9
$C_6F_{12}$	Perfluorocyclohexane	325.95	457.2	2.43		9
$C_6F_{14}$	Perfluorohexane	329.8	448.77	1.868	606	9
$C_6F_{14}$	Perfluoro-2-methylpentane	330.8	455.3	1.923	532	9
$C_6F_{14}$	Perfluoro-3-methylpentane	331.6	450	1.69		9
$C_6F_{14}$	Perfluoro-2,3-dimethylbutane	333.0	463	1.87	525	9
$C_6HF_5$	Pentafluorobenzene	358.89	530.97	3.531	324	9
$C_6HF_5O$	Pentafluorophenol	418.8	609	4.0	348	9
$C_6HF_{11}$	Undecafluorocyclohexane	335.2	477.7			9
$C_6H_2F_4$	1,2,3,4-Tetrafluorobenzene	367.5	550.83	3.791	313	9
$C_6H_2F_4$	1,2,3,5-Tetrafluorobenzene	357.6	535.25	3.747		9
$C_6H_2F_4$	1,2,4,5-Tetrafluorobenzene	363.4	543.35	3.801		9
$C_6H_3ClF_2$	1-Chloro-2,4-difluorobenzene	400	609.6			13
$C_6H_3ClF_2$	1-Chloro-2,5-difluorobenzene	401	612.5			13
$C_6H_3ClF_2$	1-Chloro-3,4-difluorobenzene	400	609.2			13
$C_6H_3ClF_2$	1-Chloro-3,5-difluorobenzene	391.7	592.0			13
$C_6H_3F_3$	1,2,3-Trifluorobenzene	368	560.3			13
$C_6H_3F_3$	1,2,4-Trifluorobenzene	363	551.1			13
$C_6H_3F_3$	1,3,5-Trifluorobenzene	348.7	530.9			13
$C_6H_4BrF$	1-Bromo-2-fluorobenzene	427	669.6			13
$C_6H_4BrF$	1-Bromo-3-fluorobenzene	423	652.0			13
$C_6H_4BrF$	1-Bromo-4-fluorobenzene	424.7	654.8			13
$C_6H_4ClF$	1-Chloro-2-fluorobenzene	410.8	633.8			13
$C_6H_4ClF$	1-Chloro-3-fluorobenzene	400.8	615.9			13
$C_6H_4ClF$	1-Chloro-4-fluorobenzene	403	620.1			13
$C_6H_4Cl_2$	<i>m</i> -Dichlorobenzene	446	685.7			13
$C_6H_4F_2$	<i>o</i> -Difluorobenzene	367	566.0			13
$C_6H_4F_2$	<i>m</i> -Difluorobenzene	355.8	548.4			13
$C_6H_4F_2$	<i>p</i> -Difluorobenzene	362	556.9	4.40		9,13
$C_6H_5Br$	Bromobenzene	429.21	670	4.52	324	9
$C_6H_5Cl$	Chlorobenzene	404.87	633.4	4.52	308	9,13
$C_6H_5F$	Fluorobenzene	357.88	560.09	4.551	269	9
$C_6H_5I$	Iodobenzene	461.6	721	4.52	351	9
$C_6H_6$	Benzene	353.24	562.05	4.895	256	3
$C_6H_6O$	Phenol	455.02	694.2	5.93		7
$C_6H_7N$	Aniline	457.32	699	4.89	287	9
$C_6H_7N$	2-Methylpyridine [2-Picoline]	402.53	621.0	4.60	292	10
$C_6H_7N$	3-Methylpyridine [3-Picoline]	417.29	645.0	4.65	288	10
$C_6H_7N$	4-Methylpyridine [4-Picoline]	418.51	645.7	4.70	292	10
$C_6H_{10}$	1,5-Hexadiene	332.6	508			6
$C_6H_{10}$	Cyclohexene	356.13	560.4			6
$C_6H_{10}O$	Cyclohexanone	428.58	665	4.6		7
$C_6H_{10}O$	2-Methylcyclopentanone	412.7	631			7
$C_6H_{10}O$	Mesityl oxide	403	605	4.00	353	7
$C_6H_{10}O_2$	Ethyl <i>trans</i> -2-butenate	411	599			7
$C_6H_{10}S$	Diallyl sulfide	411.8	653			8
$C_6H_{11}Cl$	Chlorocyclohexane	415	586			13
$C_6H_{11}N$	Hexanenitrile	436.80	633.8	3.30		9
$C_6H_{12}$	1-Hexene	336.63	504.0	3.21	355.1	6
$C_6H_{12}$	Cyclohexane	353.88	553.8	4.08	308	5
$C_6H_{12}$	Methylcyclopentane	345.0	532.7	3.79	318	5
$C_6H_{12}O$	Butyl vinyl ether	367	540	3.20	384	7

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_6H_{12}O$	Hexanal	404	592	3.46	378	7
$C_6H_{12}O$	2-Hexanone [Butyl methyl ketone]	400.8	587.1	3.30	377	7
$C_6H_{12}O$	3-Hexanone [Ethyl propyl ketone]	396.7	583.0	3.320	378	7
$C_6H_{12}O$	4-Methyl-2-pentanone [Isobutyl methyl ketone]	389.7	574.6	3.270		7
$C_6H_{12}O$	3,3-Dimethyl-2-butanone	379.3	570.9	3.43	382	7
$C_6H_{12}O$	Cyclohexanol	433.99	647.1	4.401		11,12
$C_6H_{12}O_2$	Hexanoic acid	478.4	655	3.38	413	7
$C_6H_{12}O_2$	Pentyl formate	403.6	576	3.46	412	7
$C_6H_{12}O_2$	Isopentyl formate	396.7	578			7
$C_6H_{12}O_2$	Butyl acetate	399.3	575.6	3.14		7
$C_6H_{12}O_2$	<i>sec</i> -Butyl acetate	385	571	3.01		7
$C_6H_{12}O_2$	Isobutyl acetate	389.7	561	2.99	401	7
$C_6H_{12}O_2$	Propyl propanoate	395.7	570	3.06		7
$C_6H_{12}O_2$	Ethyl butanoate	394.5	568.8	3.1	415	7
$C_6H_{12}O_2$	Ethyl 2-methylpropanoate	383.3	554	3.1	415	7
$C_6H_{12}O_2$	Methyl pentanoate	400.6	590	3.20	422	7
$C_6H_{12}O_3$	1,2-Propylene glycol monomethyl ether acetate	420	597.8	3.01	432	7
$C_6H_{12}O_3$	2-Ethoxyethyl acetate	429.6	608.0	3.17	443	7,23
$C_6H_{12}O_3$	Paraldehyde	397.5	563			7
$C_6H_{12}S$	Cyclohexanethiol	432.0	684		401	8
$C_6H_{13}Cl$	1-Chlorohexane	408.3	599			13
$C_6H_{13}Cl$	3-Chloro-3-methylpentane	389	528			13
$C_6H_{14}$	Hexane	341.88	507.6	3.025	368	2
$C_6H_{14}$	2-Methylpentane	333.41	497.7	3.04	368	5
$C_6H_{14}$	3-Methylpentane	336.42	504.6	3.12	368	5
$C_6H_{14}$	2,2-Dimethylbutane	322.88	489.0	3.10	358	5
$C_6H_{14}$	2,3-Dimethylbutane	331.08	500.0	3.15	361	5
$C_6H_{14}O$	2-Methoxy-2-methylbutane	359.3	535	3.20	374	7
$C_6H_{14}O$	1-Hexanol	430.8	610.3	3.417	387	4
$C_6H_{14}O$	2-Hexanol	413	585.9	3.31	384	4
$C_6H_{14}O$	3-Hexanol	408	582.4	3.36	383	4
$C_6H_{14}O$	2-Methyl-1-pentanol	422	604.4	3.45		4
$C_6H_{14}O$	4-Methyl-1-pentanol	425.1	603.5			4
$C_6H_{14}O$	2-Methyl-2-pentanol	394.3	559.5			4
$C_6H_{14}O$	4-Methyl-2-pentanol	404.8	574.4			4
$C_6H_{14}O$	2-Methyl-3-pentanol	399.7	576.0	3.46		4
$C_6H_{14}O$	3-Methyl-3-pentanol	395.6	575.6	3.52		4
$C_6H_{14}O$	Dipropyl ether	363.23	530.6	3.028		7
$C_6H_{14}O$	Diisopropyl ether	341.6	500.3	2.832	386	7
$C_6H_{14}O$	<i>tert</i> -Butyl ethyl ether	345.8	509.4	2.934	395	7
$C_6H_{14}O$	Methyl pentyl ether	372	546.5	3.042	391	7
$C_6H_{14}O_2$	1-Propoxy-2-propanol	423	605.1	3.051		14
$C_6H_{14}O_2$	2-Butoxyethanol	441.6	634	3.27	424	7
$C_6H_{14}O_2$	1,1-Diethoxyethane [Acetal]	375.40	540	3.22		7
$C_6H_{14}O_2$	1,2-Diethoxyethane [Ethylene glycol diethyl ether]	394.4	542			7
$C_6H_{14}O_3$	Diethylene glycol monoethyl ether [Carbitol]	469	670	3.167		11,12
$C_6H_{14}O_3$	Diethylene glycol dimethyl ether	435	617			7
$C_6H_{14}O_4$	Triethylene glycol	558	780	3.3		7
$C_6H_{15}N$	Dipropylamine	382.5	555.8	3.63		9
$C_6H_{15}N$	Diisopropylamine	357.1	523.1	3.02		9
$C_6H_{15}N$	Triethylamine	362	535.6	3.032	389	9
$C_7F_8$	Perfluorotoluene	377.7	534.47	2.705	428	9
$C_7F_{14}$	Perfluoro-1-heptene	354.2	478.2			9
$C_7F_{14}$	Perfluoromethylcyclohexane	349.5	485.91	2.019	570	9
$C_7F_{16}$	Perfluoroheptane	355.7	474.8	1.62	664	9
$C_7HF_{15}$	1 <i>H</i> -Pentadecafluoroheptane	369.2	495.8			9
$C_7H_3F_5$	2,3,4,5,6-Pentafluorotoluene	390.7	566.52	3.126	384	9
$C_7H_4BrF_3$	1-Bromo-2-(trifluoromethyl)benzene	440.7	656.5			13
$C_7H_4BrF_3$	1-Bromo-3-(trifluoromethyl)benzene	424.7	627.1			13
$C_7H_4BrF_3$	1-Bromo-4-(trifluoromethyl)benzene	433	629.8			13

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
C <sub>7</sub> H <sub>5</sub> N	Benzonitrile	464.3	699.4	4.21		9
C <sub>7</sub> H <sub>6</sub> F <sub>2</sub>	2,4-Difluorotoluene	390	581.4			13
C <sub>7</sub> H <sub>6</sub> F <sub>2</sub>	2,5-Difluorotoluene	391	587.8			13
C <sub>7</sub> H <sub>6</sub> F <sub>2</sub>	2,6-Difluorotoluene	385	581.8			13
C <sub>7</sub> H <sub>6</sub> F <sub>2</sub>	3,4-Difluorotoluene	385	598.5			13
C <sub>7</sub> H <sub>6</sub> O	Benzaldehyde	452.0	695	4.7		7
C <sub>7</sub> H <sub>7</sub> F	2-Fluorotoluene	388	591.2			13
C <sub>7</sub> H <sub>7</sub> F	3-Fluorotoluene	388	591.8			13
C <sub>7</sub> H <sub>7</sub> F	4-Fluorotoluene	389.8	592.1			13
C <sub>7</sub> H <sub>8</sub>	Toluene	383.78	591.80	4.110	316	3,15
C <sub>7</sub> H <sub>8</sub> O	<i>o</i> -Cresol	464.19	697.6	4.17		7
C <sub>7</sub> H <sub>8</sub> O	<i>m</i> -Cresol	475.42	705.8	4.36		7
C <sub>7</sub> H <sub>8</sub> O	<i>p</i> -Cresol	475.13	704.6	4.07		7
C <sub>7</sub> H <sub>8</sub> O	Benzyl alcohol	478.46	715	4.3		9
C <sub>7</sub> H <sub>8</sub> O	Anisole [Methoxybenzene]	426.9	646.5	4.24	341	7,11,12
C <sub>7</sub> H <sub>9</sub> N	2-Methylaniline	473.5	707	4.37		9
C <sub>7</sub> H <sub>9</sub> N	3-Methylaniline	476.5	707	4.28		9
C <sub>7</sub> H <sub>9</sub> N	4-Methylaniline	473.6	706	4.58		9
C <sub>7</sub> H <sub>9</sub> N	<i>N</i> -Methylaniline	469.4	701	5.20		9
C <sub>7</sub> H <sub>9</sub> N	2,3-Dimethylpyridine	434.27	655.4	4.10	356	23
C <sub>7</sub> H <sub>9</sub> N	2,4-Dimethylpyridine	431.53	647	3.95	361	23
C <sub>7</sub> H <sub>9</sub> N	2,5-Dimethylpyridine	430.13	645	3.85	361	23
C <sub>7</sub> H <sub>9</sub> N	2,6-Dimethylpyridine	417.16	624	3.85	361	23
C <sub>7</sub> H <sub>9</sub> N	3,4-Dimethylpyridine	452.25	684	4.20	355	23
C <sub>7</sub> H <sub>9</sub> N	3,5-Dimethylpyridine	444.99	668	4.05	361	23
C <sub>7</sub> H <sub>14</sub>	1-Heptene	366.79	537.3	2.92	409	6
C <sub>7</sub> H <sub>14</sub>	Cycloheptane	391.6	604.2	3.82	353	5
C <sub>7</sub> H <sub>14</sub>	Methylcyclohexane	374.08	572.1	3.48	369	5
C <sub>7</sub> H <sub>14</sub>	Ethylcyclopentane	376.7	569.5	3.40	375	5
C <sub>7</sub> H <sub>14</sub>	1,1-Dimethylcyclopentane	360.7	547	3.45		21
C <sub>7</sub> H <sub>14</sub>	<i>cis</i> -1,2-Dimethylcyclopentane	372.7	565	3.45		21
C <sub>7</sub> H <sub>14</sub>	<i>trans</i> -1,2-Dimethylcyclopentane	365.1	553	3.45		21
C <sub>7</sub> H <sub>14</sub>	<i>cis</i> -1,3-Dimethylcyclopentane	364.0	551	3.45		21
C <sub>7</sub> H <sub>14</sub>	<i>trans</i> -1,3-Dimethylcyclopentane	364.9	553	3.45		21
C <sub>7</sub> H <sub>14</sub> O	Heptanal	426.0	617	3.16	434	7
C <sub>7</sub> H <sub>14</sub> O	2-Heptanone [Methyl pentyl ketone]	424.20	611.4	2.97	436	7
C <sub>7</sub> H <sub>14</sub> O	3-Heptanone [Ethyl butyl ketone]	420	606.6		433	7
C <sub>7</sub> H <sub>14</sub> O	4-Heptanone	417	602.0		434	7
C <sub>7</sub> H <sub>14</sub> O	5-Methyl-2-hexanone [Methyl isopentyl ketone]	417	604.1			7
C <sub>7</sub> H <sub>14</sub> O	2-Methyl-3-hexanone	408	593.3			7
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Heptanoic acid	495.4	678	3.16		7
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Pentyl acetate	422.4	599	2.73	470	7,23
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Isopentyl acetate	415.7	586.1	2.76		7
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Butyl propanoate	420.0	594.5			7
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Isobutyl propanoate	410	584			7
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Propyl butanoate	416.2	593.1	2.72		7
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Propyl isobutanoate	408.6	579.4			7
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Ethyl pentanoate	419.3	593.3			7
C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Ethyl 3-methylbutanoate	408.2	582.4			7
C <sub>7</sub> H <sub>14</sub> O <sub>3</sub>	Ethyl 3-ethoxypropanoate	439	621.0	2.66	458	7
C <sub>7</sub> H <sub>15</sub> Cl	1-Chloroheptane	433.6	614			13
C <sub>7</sub> H <sub>16</sub>	Heptane	371.6	540.2	2.74	428	2
C <sub>7</sub> H <sub>16</sub>	2-Methylhexane	363.19	530.4	2.74	421	5
C <sub>7</sub> H <sub>16</sub>	3-Methylhexane	365	535.2	2.81	404	5
C <sub>7</sub> H <sub>16</sub>	3-Ethylpentane	366.7	540.6	2.89	416	5
C <sub>7</sub> H <sub>16</sub>	2,2-Dimethylpentane	352.4	520.5	2.77	416	5
C <sub>7</sub> H <sub>16</sub>	2,3-Dimethylpentane	362.93	537.3	2.91	393	5
C <sub>7</sub> H <sub>16</sub>	2,4-Dimethylpentane	353.64	519.8	2.74	418	5
C <sub>7</sub> H <sub>16</sub>	3,3-Dimethylpentane	359.21	536.4	2.95	414	5
C <sub>7</sub> H <sub>16</sub>	2,2,3-Trimethylbutane	354.01	531.1	2.95	398	5

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_7H_{16}O$	2-Ethoxy-2-methylbutane	375	546	2.935	463	7
$C_7H_{16}O$	1-Heptanol	449.60	632.6	3.058	435	4
$C_7H_{16}O$	2-Heptanol	432	608.3	3.021	442	4
$C_7H_{16}O$	3-Heptanol, (S)	430	605.4		434	4
$C_7H_{16}O$	4-Heptanol	429	602.6		432	4
$C_7H_{16}O_2$	1-Butoxy-2-propanol	444.7	624.9	2.739		14
$C_7H_{16}O_2$	1- <i>tert</i> -Butoxy-2-methoxyethane		574			7
$C_7H_{16}O_2$	2,2-Diethoxypropane	387	510.7			7
$C_7H_{16}O_3$	Diethylene glycol monopropyl ether	486	680	3.00	489	7
$C_7H_{20}Si_2$	Bis(trimethylsilyl)methane	406	573.9	1.99		8
$C_8F_{16}O$	Perfluoro-2-butyltetrahydrofuran	375.8	500.2	1.607	588	9
$C_8F_{18}$	Perfluorooctane	379.1	502	1.66		9
$C_8H_6S$	Benzo[b]thiophene	494	764	4.76	379	8
$C_8H_7N$	4-Methylbenzotrile	490.2	723			9
$C_8H_7N$	1 <i>H</i> -Indole	526.8	794	4.8	356	10
$C_8H_8$	Styrene	418	635.2	3.87		15
$C_8H_8O$	Acetophenone	475	709.6	4.01	388	7,23
$C_8H_8O_2$	Phenyl acetate	469	685.7	3.59		17
$C_8H_8O_3$	Methyl salicylate	496.1	709			7
$C_8H_{10}$	Ethylbenzene	409.34	617.15	3.609	374	3,15
$C_8H_{10}$	<i>o</i> -Xylene	417.7	630.3	3.732	370	3
$C_8H_{10}$	<i>m</i> -Xylene	412.27	617.0	3.541	375	3
$C_8H_{10}$	<i>p</i> -Xylene	411.52	616.2	3.511	378	3
$C_8H_{10}O$	2-Ethylphenol	477.7	703.0			7
$C_8H_{10}O$	3-Ethylphenol	491.6	716.4			7
$C_8H_{10}O$	4-Ethylphenol	491.1	716.4			7
$C_8H_{10}O$	2,3-Xylenol	490.1	722.8			7
$C_8H_{10}O$	2,4-Xylenol	484.13	707.6			7
$C_8H_{10}O$	2,5-Xylenol	484.3	706.9			7
$C_8H_{10}O$	2,6-Xylenol	474.22	701.0			7
$C_8H_{10}O$	3,4-Xylenol	500	729.8			7
$C_8H_{10}O$	3,5-Xylenol	494.89	715.6			7
$C_8H_{10}O$	$\alpha$ -Methylbenzenemethanol	478	699	3.77		14
$C_8H_{10}O$	Ethoxybenzene	442.96	647	3.4		7
$C_8H_{10}O$	2-Methylanisole	444	662.0			7
$C_8H_{10}O$	3-Methylanisole	448.7	665.3			7
$C_8H_{10}O$	4-Methylanisole	448.7	666			7
$C_8H_{11}N$	<i>N</i> -Ethylaniline	476.2	698			9
$C_8H_{11}N$	<i>N,N</i> -Dimethylaniline	467.30	687	3.63		9
$C_8H_{14}O_4$	Diethyl succinate	490.9	663			7
$C_8H_{15}N$	Octanenitrile	478.40	674.4	2.85		9
$C_8H_{16}$	1-Octene	394.44	567.0	2.68	468	6
$C_8H_{16}$	Cyclooctane	422	647.2	3.56	410	5
$C_8H_{16}$	Ethylcyclohexane	405.1	609	3.04		21
$C_8H_{16}$	<i>cis</i> -1,2-Dimethylcyclohexane	403.0	606	2.95		21
$C_8H_{16}$	<i>trans</i> -1,2-Dimethylcyclohexane	396.7	596	2.94		21
$C_8H_{16}$	<i>cis</i> -1,3-Dimethylcyclohexane	393.3	591	2.94		21
$C_8H_{16}$	<i>trans</i> -1,3-Dimethylcyclohexane	397.7	598	2.94		21
$C_8H_{16}$	<i>trans</i> -1,4-Dimethylcyclohexane	392.6	587.7			5
$C_8H_{16}O$	Octanal	444	639	2.96	488	7
$C_8H_{16}O$	2-Octanone [Hexyl methyl ketone]	445.7	632.7		497	7
$C_8H_{16}O$	3-Octanone [Ethyl amyl ketone]	440.7	627.7		497	7
$C_8H_{16}O$	4-Octanone [Butyl propyl ketone]	436	623.8		497	7
$C_8H_{16}O$	2-Methyl-3-heptanone [Butyl isopropyl ketone]	431	614.9			7
$C_8H_{16}O$	5-Methyl-3-heptanone	434	619.0			7
$C_8H_{16}O_2$	Octanoic acid	512	693	2.87	519	7
$C_8H_{16}O_2$	2-Ethylhexanoic acid	501	674	2.78	528	7
$C_8H_{16}O_2$	Hexyl acetate	444.7	618.4			7
$C_8H_{16}O_2$	Isopentyl propanoate	433.4	611			7
$C_8H_{16}O_2$	Butyl butanoate	439	612.1			7

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_8H_{16}O_2$	Isobutyl butanoate	430.1	611			7
$C_8H_{16}O_2$	Isobutyl isobutanoate	421.8	602			7
$C_8H_{16}O_2$	Propyl 3-methylbutanoate	429.1	609			7
$C_8H_{16}O_2$	Ethyl hexanoate	440	615.2			7
$C_8H_{16}O_2$	Methyl heptanoate	447	628			7
$C_8H_{16}O_3$	2-Butoxyethyl acetate	465	640.7	2.694	549	7
$C_8H_{16}O_4$	Diethylene glycol monoethyl ether acetate	491.7	673.5	2.59		17
$C_8H_{17}Cl$	1-Chlorooctane	456.7	643			13
$C_8H_{18}$	Octane	398.82	568.7	2.49	492	2
$C_8H_{18}$	2-Methylheptane	390.81	559.7	2.50	488	5
$C_8H_{18}$	3-Methylheptane	392.1	563.6	2.55	464	5
$C_8H_{18}$	4-Methylheptane	390.87	561.7	2.54	476	5
$C_8H_{18}$	3-Ethylhexane	391.8	565.5	2.61	455	5
$C_8H_{18}$	2,2-Dimethylhexane	380.01	549.8	2.53	478	5
$C_8H_{18}$	2,3-Dimethylhexane	388.77	563.5	2.63	468	5
$C_8H_{18}$	2,4-Dimethylhexane	382.7	553.5	2.56	472	5
$C_8H_{18}$	2,5-Dimethylhexane	382.27	550.0	2.49	482	5
$C_8H_{18}$	3,3-Dimethylhexane	385.12	562.0	2.65	443	5
$C_8H_{18}$	3,4-Dimethylhexane	390.88	568.8	2.69	466	5
$C_8H_{18}$	3-Ethyl-2-methylpentane	388.81	567.1	2.70	442	5
$C_8H_{18}$	3-Ethyl-3-methylpentane	391.42	576.5	2.81	455	5
$C_8H_{18}$	2,2,3-Trimethylpentane	383	563.5	2.73	436	5
$C_8H_{18}$	2,2,4-Trimethylpentane [Isooctane]	372.37	543.8	2.57	468	5
$C_8H_{18}$	2,3,3-Trimethylpentane	388.0	573.5	2.82	455	5
$C_8H_{18}$	2,3,4-Trimethylpentane	386.7	566.4	2.73	460	5
$C_8H_{18}$	2,2,3,3-Tetramethylbutane	379.60	567.8	2.87	461	9
$C_8H_{18}O$	1-Octanol	468.31	652.5	2.777	497	4
$C_8H_{18}O$	2-Octanol	452.5	629.6	2.754	519	4
$C_8H_{18}O$	3-Octanol	444	628.5		515	4
$C_8H_{18}O$	4-Octanol	449.5	625.1		515	4
$C_8H_{18}O$	4-Methyl-3-heptanol	443	623.5			4
$C_8H_{18}O$	5-Methyl-3-heptanol	445	621.2			4
$C_8H_{18}O$	2-Ethyl-1-hexanol	457.8	640.6	2.8		4
$C_8H_{18}O$	Dibutyl ether	413.43	584	3.0		7
$C_8H_{18}O$	Di- <i>tert</i> -butyl ether	380.38	550			9
$C_8H_{18}O_2$	1- <i>tert</i> -Butoxy-2-ethoxyethane	421.2	585			7
$C_8H_{18}O_3$	Diethylene glycol monobutyl ether	504	692	2.79		7
$C_8H_{18}O_3$	Diethylene glycol diethyl ether	461	612			7
$C_8H_{18}O_5$	Tetraethylene glycol	601	800	3.2		7
$C_8H_{18}S$	1-Octanethiol	472.3	667		504	8
$C_8H_{18}S$	Dibutyl sulfide	458	650	2.48		8
$C_8H_{19}N$	Dibutylamine	432.8	607.5	3.11		9
$C_8H_{19}N$	Diisobutylamine	412.8	584.4	3.20		9
$C_8H_{20}Si$	Tetraethylsilane	427.9	605	2.50	587	8
$C_9F_{20}$	Perfluorononane	398.5	524	1.56		9
$C_9H_7N$	Quinoline	510.31	782	4.86	371	10
$C_9H_7N$	Isoquinoline	516.37	803	5.10	374	10
$C_9H_{10}$	Indan	451.12	684.9	3.95		3
$C_9H_{12}$	Propylbenzene	432.39	638.35	3.200	440	3
$C_9H_{12}$	Isopropylbenzene [Cumene]	425.56	631.0	3.209		3
$C_9H_{12}$	2-Ethyltoluene	438.4	651	3.38		21
$C_9H_{12}$	3-Ethyltoluene	434.5	637	3.25		21
$C_9H_{12}$	4-Ethyltoluene	435	640.2	3.23		3
$C_9H_{12}$	1,2,3-Trimethylbenzene	449.27	664.5	3.454		3
$C_9H_{12}$	1,2,4-Trimethylbenzene	442.53	649.1	3.232		3
$C_9H_{12}$	1,3,5-Trimethylbenzene [Mesitylene]	437.89	637.3	3.127		3
$C_9H_{12}O$	2-Methoxy-1,4-dimethylbenzene	467	677.3			7
$C_9H_{12}O$	1-Methoxy-2,4-dimethylbenzene	465	682			7
$C_9H_{13}N$	2-Methyl- <i>N,N</i> -dimethylaniline	467.3	668	3.12		9
$C_9H_{18}$	1-Nonene	420.1	594.0		526	6

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_9H_{18}$	Cyclononane	451.6	682	3.34		21
$C_9H_{18}$	1 $\alpha$ ,3 $\alpha$ ,5 $\beta$ -1,3,5-Trimethylcyclohexane	413.7	602.2			5
$C_9H_{18}O$	Nonanal	464	659	2.68	543	7
$C_9H_{18}O$	2-Nonanone [Heptyl methyl ketone]	468.5	652.2	2.48	560	7,11,12
$C_9H_{18}O$	3-Nonanone [Ethyl hexyl ketone]	463	648.1		560	7
$C_9H_{18}O$	4-Nonanone [Pentyl propyl ketone]	460.7	643.7		560	7
$C_9H_{18}O$	5-Nonanone [Dibutyl ketone]	461.60	641.4	2.32	560	7
$C_9H_{18}O_2$	Nonanoic acid	527.7	712	2.35		7
$C_9H_{18}O_2$	Isopentyl butanoate	452	619			7
$C_9H_{18}O_2$	Isobutyl 3-methylbutanoate	441.7	621			7
$C_9H_{18}O_2$	Ethyl heptanoate	460	634			7
$C_9H_{20}$	Nonane	423.97	594.6	2.29	555	2
$C_9H_{20}$	2-Methyloctane	416.4	582.8	2.31		5
$C_9H_{20}$	2,2-Dimethylheptane	405.9	576.7	2.35		5
$C_9H_{20}$	2,2,5-Trimethylhexane	397.24	569.8			5
$C_9H_{20}$	2,2,3,3-Tetramethylpentane	413.4	607.5	2.74		5
$C_9H_{20}$	2,2,3,4-Tetramethylpentane	406.2	592.6	2.60		5
$C_9H_{20}$	2,2,4,4-Tetramethylpentane	395.44	574.6	2.49		5
$C_9H_{20}$	2,3,3,4-Tetramethylpentane	414.7	607.5	2.72		5
$C_9H_{20}O$	1-Nonanol	486.52	670.7	2.528	572	4
$C_9H_{20}O$	2-Nonanol	466.7	649.6	2.53	575	4
$C_9H_{20}O$	3-Nonanol	468	648.0		577	4
$C_9H_{20}O$	4-Nonanol	465.7	645.1		575	4
$C_{10}F_8$	Perfluoronaphthalene	482	673.1			9
$C_{10}F_{18}$	Perfluorodecalin	415	566	1.52		9
$C_{10}F_{22}$	Perfluorodecane	417.4	542	1.45		9
$C_{10}H_8$	Naphthalene	491.1	748.4	4.05	407	3
$C_{10}H_9N$	1-Naphthylamine	573.9	850	5.0	438	10
$C_{10}H_9N$	2-Naphthylamine	579.4	850	4.9	438	10
$C_{10}H_{12}$	1,2,3,4-Tetrahydronaphthalene [Tetralin]	480.8	720	3.65	408	4
$C_{10}H_{14}$	Butylbenzene	456.46	660.5	2.89	497	3
$C_{10}H_{14}$	Isobutylbenzene	445.94	650	3.05		4
$C_{10}H_{14}$	1-Isopropyl-4-methylbenzene [ <i>p</i> -Cymene]	450.3	652	2.8		3
$C_{10}H_{14}$	<i>p</i> -Diethylbenzene	456.9	657.9	2.803		3
$C_{10}H_{14}$	1,2,4,5-Tetramethylbenzene [Durene]	470.0	676	2.9		3
$C_{10}H_{14}O$	Thymol	505.7	698			7
$C_{10}H_{16}$	<i>d</i> -Limonene	451	653		470	6
$C_{10}H_{16}$	$\alpha$ -Pinene	429.4	644		454	6
$C_{10}H_{16}$	3-Carene, (+)	444	658		487	6
$C_{10}H_{18}$	1,3-Decadiene	442	615			9
$C_{10}H_{18}$	<i>cis</i> -Decahydronaphthalene	469.0	702.3	3.20		9
$C_{10}H_{18}$	<i>trans</i> -Decahydronaphthalene	460.5	687.1			9
$C_{10}H_{20}$	1-Decene	443.7	617	2.22	584	6
$C_{10}H_{20}O$	Decanal	481.7	674	2.60	599	7
$C_{10}H_{20}O$	2-Decanone [Methyl octyl ketone]	483	671.8		625	7
$C_{10}H_{20}O$	3-Decanone [Ethyl heptyl ketone]	476	667.6		628	7
$C_{10}H_{20}O$	4-Decanone [Hexyl propyl ketone]	479.7	662.9		628	7
$C_{10}H_{20}O$	5-Decanone [Butyl pentyl ketone]	477	661.0		628	7
$C_{10}H_{20}O$	5-Methyl-2-isopropylcyclohexanol [Menthol]	489	694			9
$C_{10}H_{20}O_2$	Decanoic acid [Capric acid]	541.9	722	2.10	638	7
$C_{10}H_{20}O_2$	2-Ethylhexyl acetate	472	642	2.09	681	7
$C_{10}H_{20}O_2$	Ethyl octanoate	481.7	649			7
$C_{10}H_{20}O_4$	Diethylene glycol monobutyl ether acetate	518	693.9	2.15		17
$C_{10}H_{22}$	Decane	447.30	617.7	2.11	624	2
$C_{10}H_{22}$	3,3,5-Trimethylheptane	428.9	609.5	2.32		5
$C_{10}H_{22}$	2,2,3,3-Tetramethylhexane	433.5	623.0	2.51		5
$C_{10}H_{22}$	2,2,5,5-Tetramethylhexane	410.6	581.4	2.19		5
$C_{10}H_{22}O$	1-Decanol	504.3	687.3	2.315	649	4
$C_{10}H_{22}O$	2-Decanol	484	668.6		646	4
$C_{10}H_{22}O$	3-Decanol	486	666.1		643	4

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/MPa$	$V_c/cm^3 mol^{-1}$	Ref.
$C_{10}H_{22}O$	4-Decanol	483.7	663.7		643	4
$C_{10}H_{22}O$	5-Decanol	474	663.2		646	4
$C_{10}H_{22}S$	Diisopentyl sulfide	484	664			8
$C_{11}H_{10}$	1-Methylnaphthalene	517.9	772	3.60		3
$C_{11}H_{10}$	2-Methylnaphthalene	514.3	761			3
$C_{11}H_{16}$	Pentylbenzene	478.6	675	2.58		16
$C_{11}H_{22}O$	2-Undecanone	504.7	688		692	7
$C_{11}H_{22}O$	3-Undecanone	500	685		692	7
$C_{11}H_{22}O$	4-Undecanone		681		692	7
$C_{11}H_{22}O$	5-Undecanone	500	679		692	7
$C_{11}H_{22}O$	6-Undecanone	501	678		692	7
$C_{11}H_{22}O_2$	Undecanoic acid		728	2.13		48
$C_{11}H_{22}O_2$	Ethyl nonanoate	500.2	664			7
$C_{11}H_{24}$	Undecane	469.1	639	1.98	689	2
$C_{11}H_{24}O$	1-Undecanol	518	703.6	2.147	718	4
$C_{12}H_8$	Acenaphthylene	553	792	3.20		21
$C_{12}H_8O$	Dibenzofuran	560	824	3.64	495	7
$C_{12}H_8S$	Dibenzothiophene	605.7	897	3.86	512	8
$C_{12}H_9N$	Carbazole	627.84	901.8	3.13	454	10
$C_{12}H_{10}$	Biphenyl	529.3	773	3.38	497	3
$C_{12}H_{10}O$	Diphenyl ether	531.2	767			7
$C_{12}H_{12}$	2,7-Dimethylnaphthalene	538	775	3.23	601	3
$C_{12}H_{18}$	Hexylbenzene	499.3	695	2.35		16
$C_{12}H_{18}$	Hexamethylbenzene	536.6	758			3
$C_{12}H_{20}O$	[1,1'-Bicyclohexyl]-2-one	537	787			7
$C_{12}H_{24}$	1-Dodecene	487.0	658	1.93		6
$C_{12}H_{24}O$	2-Dodecanone	519.7	702		752	7
$C_{12}H_{24}O$	3-Dodecanone		701		752	7
$C_{12}H_{24}O$	4-Dodecanone		697		759	7
$C_{12}H_{24}O$	5-Dodecanone		695		759	7
$C_{12}H_{24}O$	6-Dodecanone		694		762	7
$C_{12}H_{24}O_2$	Dodecanoic acid		743	1.93		48
$C_{12}H_{26}$	Dodecane	489.47	658	1.82	754	2
$C_{12}H_{26}O$	1-Dodecanol	533	719.4	1.994		4
$C_{13}H_9N$	Acridine	618.01	891.1	3.21	548	10
$C_{13}H_9N$	Phenanthridine	622.1	895	3.6	548	10
$C_{13}H_{10}O$	Benzophenone	578.6	830	3.35	568	7
$C_{13}H_{11}N$	9-Methyl-9H-carbazole	616.79	890	3.38	572	10
$C_{13}H_{12}$	Diphenylmethane	538.2	760	2.71	563	3
$C_{13}H_{20}$	Heptylbenzene	513	708	2.14		16
$C_{13}H_{26}O$	2-Tridecanone	536	717		820	7
$C_{13}H_{26}O$	3-Tridecanone		716		823	7
$C_{13}H_{26}O$	4-Tridecanone		712		823	7
$C_{13}H_{26}O$	5-Tridecanone		710		826	7
$C_{13}H_{26}O$	6-Tridecanone		709		826	7
$C_{13}H_{26}O$	7-Tridecanone	534	708		830	7
$C_{14}H_{28}O_2$	Tridecanoic acid		763	1.64		48
$C_{13}H_{26}O_2$	Methyl dodecanoate	540	712			7
$C_{13}H_{28}$	Tridecane	508.62	675	1.68	823	2
$C_{13}H_{28}O$	1-Tridecanol	547	734	1.935		9
$C_{14}H_{10}$	Anthracene	613.1	869.3		554	9
$C_{14}H_{10}$	Phenanthrene	613	869			4
$C_{14}H_{22}$	Octylbenzene	537	725	1.98		16
$C_{14}H_{28}O$	2-Tetradecanone		728		896	7
$C_{14}H_{28}O$	3-Tetradecanone		727		896	7
$C_{14}H_{28}O$	4-Tetradecanone		725		900	7
$C_{14}H_{28}O$	7-Tetradecanone		723		904	7
$C_{14}H_{28}O_2$	Tetradecanoic acid		763	1.64		48
$C_{14}H_{30}$	Tetradecane	526.73	693	1.57	894	2
$C_{14}H_{30}O$	1-Tetradecanol	560	747	1.81		9

Molecular formula	Name	$T_b/K$	$T_c/K$	$P_c/\text{MPa}$	$V_c/\text{cm}^3\text{mol}^{-1}$	Ref.
$\text{C}_{15}\text{H}_{30}\text{O}_2$	Pentadecanoic acid		777	1.57		48
$\text{C}_{15}\text{H}_{32}$	Pentadecane	543.8	708	1.48	966	2
$\text{C}_{16}\text{H}_{26}$	Decylbenzene	566	752	1.72		16
$\text{C}_{16}\text{H}_{32}\text{O}_2$	Hexadecanoic acid		785	1.49		48
$\text{C}_{16}\text{H}_{34}$	Hexadecane	560.01	723	1.40	1034	2
$\text{C}_{16}\text{H}_{34}$	2,2,4,4,6,8,8-Heptamethylnonane	519.5	692			5
$\text{C}_{16}\text{H}_{34}\text{O}$	1-Hexadecanol	585	770	1.61		9
$\text{C}_{17}\text{H}_{28}$	Undecylbenzene	589	763	1.64		16
$\text{C}_{17}\text{H}_{34}\text{O}_2$	Heptadecanoic acid		792	1.37		48
$\text{C}_{17}\text{H}_{36}$	Heptadecane	575.2	736	1.34	1103	2
$\text{C}_{17}\text{H}_{36}\text{O}$	1-Heptadecanol	597	780	1.50		9
$\text{C}_{18}\text{H}_{14}$	<i>o</i> -Terphenyl	605	857	2.99	731	3
$\text{C}_{18}\text{H}_{14}$	<i>m</i> -Terphenyl	636	883	2.48	724	3
$\text{C}_{18}\text{H}_{14}$	<i>p</i> -Terphenyl	649	908	2.99	729	3
$\text{C}_{18}\text{H}_{36}\text{O}_2$	Octadecanoic acid		803	1.33		48
$\text{C}_{18}\text{H}_{38}$	Octadecane	589.5	747	1.29	1189	2
$\text{C}_{18}\text{H}_{38}\text{O}$	1-Octadecanol	608	790	1.44		9
$\text{C}_{19}\text{H}_{32}$	Tridecylbenzene	619	790	1.54		16
$\text{C}_{19}\text{H}_{40}$	Nonadecane	603.1	755	1.16		3
$\text{C}_{20}\text{H}_{40}\text{O}_2$	Eicosanoic acid		820	1.20		48
$\text{C}_{20}\text{H}_{42}$	Eicosane	616	768	1.07		3
$\text{C}_{20}\text{H}_{42}\text{O}$	1-Eicosanol [Arachic alcohol]	629	809	1.30		9
$\text{C}_{21}\text{H}_{44}$	Heneicosane	629.7	778	1.03		2
$\text{C}_{22}\text{H}_{44}\text{O}_2$	Docosanoic acid		837	1.11		48
$\text{C}_{22}\text{H}_{46}$	Docosane	641.8	786	0.98		2
$\text{C}_{23}\text{H}_{48}$	Tricosane	653	790	0.92		2
$\text{C}_{24}\text{H}_{50}$	Tetracosane	664.5	800	0.87		2
$\text{C}_{30}\text{H}_{50}$	Squalene	694.5	795.9	0.59		15