CRITICAL CONSTANTS

Douglas Ambrose

This table gives the liquid - gas critical constants and normal boiling points of about 700 inorganic and organic substances. The properties tabulated are:

- T_b: Normal boiling point in K 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 K
- P_c: Critical pressure in MPa
- V_c: Critical molar volume in cm^3/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.

Many of the critical constants in this table are taken from reviews produced by the IUPAC Commission on Thermodynamics (References 2-6) and from the publications of the Design Institute for Physical Property Data (References 8-9). Compounds are listed by molecular formula in modified Hill order, with compounds not containing carbon preceding those that do contain carbon.

An asterisk following an entry indicates the value was obtained by extrapolation.

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Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
$AlBr_3$	Aluminum tribromide	528	763	2.89	310
$AlCl_3$	Aluminum trichloride	453 s	620	2.63	257
AlI_3	Aluminum triiodide	655	983		408
Ar	Argon	87.30	150.87	4.898	75
As	Arsenic	876 s	1673		35
$AsCl_3$	Arsenic(III) chloride	403	654		252
AsH_3	Arsine	210.7	373.1		
BBr_3	Boron tribromide	364	581		272
BCl_3	Boron trichloride	285.80	455	3.87	239
BF_3	Boron trifluoride	172	260.8	4.98	115
BI_3	Boron triiodide	483	773		356
B_2H_6	Diborane	180.7	289.8	4.05	
$BiBr_3$	Bismuth tribromide	726	1220		301
$BiCl_3$	Bismuth trichloride	720	1179	12.0	261
BrH	Hydrogen bromide	206.77	363.2	8.55	
BrI	Iodine bromide	389	719		139
Br_2	Bromine	332.0	588	10.34	127
Br_2Hg	Mercury(II) bromide	595	1012		
Br_3Ga	Gallium(III) bromide	552	806.7		303
Br_3HSi	Tribromosilane	382	610.0		305
Br_3P	Phosphorus(III) bromide	446.10	711		300
Br_3Sb	Antimony(III) bromide	553	904		300
Br_4Ge	Germanium(IV) bromide	459.50	718		392
Br_4Hf	Hafnium(IV) bromide	596 s	746		415

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
Br_4Si	Tetrabromosilane	427	663		382
Br_4Sn	Tin(IV) bromide	478	744		417
Br_4Ti	Titanium(IV) bromide	503	795.7		391
Br_4Zr	Zirconium(IV) bromide	633 s	805		424
Br_5Ta	Tantalum(V) bromide	622	974		461
$ClFO_3$	Perchloryl fluoride	226.40	368.4	5.37	161
ClF_2N	Nitrogen chloride difluoride	207	337.5	5.15	
ClF_2P	Phosphorus(III) chloride difluoride	225.90	362.4	4.52	
ClF_2PS	Phosphorus(V) sulfide chloride difluoride	279.5	439.2	4.14	
ClF_3Si	Chlorotrifluorosilane	203.1	307.7	3.46	
ClF_5	Chlorine pentafluoride	260.0	416	5.27	233
ClF_5S	Sulfur chloride pentafluoride	254.10	390.9		
ClH	Hydrogen chloride	188	324.7	8.31	81
ClH_4N	Ammonium chloride	611 s	1155	163.5	
ClH_4P	Phosphonium chloride	246 s	322.3	7.37	
ClNO	Nitrosyl chloride	267.7	440		
ClOV	Vanadyl chloride	400	636		171
Cl_2	Chlorine	239.11	416.9	7.991	123
Cl_2FP	Phosphorus(III) dichloride fluoride	287	463.0	4.96	
Cl_2F_2Si	Dichlorodifluorosilane	241	369.0	3.5	
Cl_2Hg	Mercury(II) chloride	577	973		174
Cl_2OSe	Selenium oxychloride	450	730	7.09	235
Cl_3FSi	Trichlorofluorosilane	285.40	438.6	3.58	
Cl_3Ga	Gallium(III) chloride	474	694		263
Cl_3HSi	Trichlorosilane	306	479		268
Cl_3P	Phosphorus(III) chloride	349.10	563		264
Cl_3Sb	Antimony(III) chloride	493.5	794		272
Cl_4Ge	Germanium(IV) chloride	359.70	553.2	3.861	330
Cl_4Hf	Hafnium(IV) chloride	590 s	725.7	5.42	314
Cl_4ORe	Rhenium(VI) oxytetrachloride	496	781		362
Cl_4OW	Tungsten(VI) oxytetrachloride	500.70	782		338
Cl_4Si	Tetrachlorosilane	330.80	508.1	3.593	326
Cl_4Sn	Tin(IV) chloride	387.30	591.9	3.75	351
Cl_4Te	Tellurium tetrachloride	660	1002	8.56	310
Cl_4Ti	Titanium(IV) chloride	409.60	638	4.66	339
Cl_4Zr	Zirconium(IV) chloride	604 s	778	5.77	319
Cl_5Mo	Molybdenum(V) chloride	541	850		369
Cl_5Nb	Niobium(V) chloride	527.2	803.5	4.88	397
Cl_5P	Phosphorus(V) chloride	433 s	646		
Cl_5Ta	Tantalum(V) chloride	512.50	767		402
Cl_6W	Tungsten(VI) chloride	619.90	923		422
Cs	Cesium	944	1938	9.4	341
FH	Hydrogen fluoride	293	461	6.48	69
FNO_2	Nitryl fluoride	200.7	349.5		
F_2	Fluorine	85.03	144.13	5.172	66
F_2HN	Difluoramine	250	403		
F_2N_2	*cis*-Difluorodiazine	167.40	272	7.09	
F_2N_2	*trans*-Difluorodiazine	161.70	260	5.57	
F_2O	Fluorine monoxide	128.40	215		
F_2Xe	Xenon difluoride	387.50 s	631	9.32	148
F_3N	Nitrogen trifluoride	144.40	234.0	4.46	126
F_3NO	Trifluoramine oxide	185.6	303	6.43	147
F_3P	Phosphorus(III) fluoride	171.6	271.2	4.33	
F_3PS	Phosphorus(V) sulfide trifluoride	220.90	346.0	3.82	
F_4N_2	Tetrafluorohydrazine	199	309	3.75	
F_4S	Sulfur tetrafluoride	232.70	364		
F_4Si	Tetrafluorosilane	187	259.0	3.72	
F_4Xe	Xenon tetrafluoride	388.90 s	612	7.04	188
F_5Nb	Niobium(V) fluoride	502	737	6.28	155

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
F_6Mo	Molybdenum(VI) fluoride	307.2	473	4.75	226
F_6S	Sulfur hexafluoride	209.4 s	318.69	3.77	199
F_6Se	Selenium hexafluoride	226.6 s	345.5		
F_6Te	Tellurium hexafluoride	234.3 s	356		
F_6U	Uranium(VI) fluoride	329.7 s	505.8	4.66	250
F_6W	Tungsten(VI) fluoride	290.3	444	4.34	233
GaI_3	Gallium(III) iodide	613	951	395	
GeH_4	Germane	185.0	312.2	4.95	147
GeI_4	Germanium(IV) iodide	650	973		500
HI	Hydrogen iodide	237.60	424.0	8.31	
H_2	Hydrogen	20.28	32.97	1.293	65
H_2O	Water	373.15	647.14	22.06	56
H_2O_2	Hydrogen peroxide	423.4	728*	22*	
H_2S	Hydrogen sulfide	213.60	373.2	8.94	99
H_2Se	Hydrogen selenide	231.90	411	8.92	
H_3N	Ammonia	239.82	405.5	11.35	72
H_3P	Phosphine	185.40	324.5	6.54	
H_4N_2	Hydrazine	386.70	653	14.7	
He	Helium	4.22	5.19	0.227	57
HfI_4	Hafnium iodide	667 s	916		528
Hg	Mercury	629.88	1750	172.00	43
HgI_2	Mercury(II) iodide	627	1072		
I_2	Iodine	457.6	819		155
I_3Sb	Antimony(III) iodide	674	1102		
I_4Si	Tetraiodosilane	560.50	944		558
I_4Sn	Tin(IV) iodide	637.50	968		531
I_4Ti	Titanium(IV) iodide	650	1040		505
I_4Zr	Zirconium(IV) iodide	704 s	960		530
K	Potassium	1032	2223*	16*	209*
Kr	Krypton	119.93	209.41	5.50	91
Li	Lithium	1615	3223*	67*	66*
NO	Nitric oxide	121.41	180	6.48	58
N_2	Nitrogen	77.36	126.21	3.39	90
N_2O	Nitrous oxide	184.67	309.57	7.255	97
N_2O_4	Nitrogen tetroxide	294.30	431	10.1	167
Na	Sodium	1156	2573*	35*	116*
Ne	Neon	27.07	44.4	2.76	42
O_2	Oxygen	90.20	154.59	5.043	73
O_2S	Sulfur dioxide	263.10	430.8	7.884	122
O_3	Ozone	161.80	261.1	5.57	89
O_3S	Sulfur trioxide	318	491.0	8.2	127
O_4Os	Osmium(VIII) oxide	408	678		
O_7Re_2	Rhenium(VII) oxide	633	942		334
P	Phosphorus	553.7	994		
Rb	Rubidium	961	2093*	16*	247*
Rn	Radon	211.5	377	6.28	
S	Sulfur	717.75	1314	20.7	
Se	Selenium	958	1766	27.2	
Xe	Xenon	165.04	289.77	5.841	118
$CBrClF_2$	Bromochlorodifluoromethane	269.5	426.88	4.254	246
$CBrF_3$	Bromotrifluoromethane	215.3	340.2	3.97	196
CBr_2F_2	Dibromodifluoromethane	298	471.3		
$CClF_3$	Chlorotrifluoromethane	191.7	302	3.870	180
CCl_2F_2	Dichlorodifluoromethane	243.3	384.95	4.136	217
CCl_2O	Carbonyl chloride	281	455	5.67	190
CCl_3F	Trichlorofluoromethane	296.8	471.1	4.47	247
CCl_4	Tetrachloromethane	350.0	556.6	4.516	276
CF_4	Tetrafluoromethane	145.1	227.6	3.74	140
$CHClF_2$	Chlorodifluoromethane	232.5	369.5	5.035	164

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
$CHCl_2F$	Dichlorofluoromethane	282.0	451.58	5.18	196
$CHCl_3$	Trichloromethane	334.32	536.4	5.47	239
CHF_3	Trifluoromethane	191.0	299.3	4.858	133
CHN	Hydrogen cyanide	299	456.7	5.39	139
CH_2Cl_2	Dichloromethane	313	510	6.10	
CH_2F_2	Difluoromethane	221.6	351.6	5.830	121
CH_2O_2	Formic acid	374	588		
CH_3Cl	Chloromethane	249.06	416.25	6.679	139
CH_3Cl_3Si	Methyltrichlorosilane	338.8	517	3.28	348
CH_3F	Fluoromethane	194.7	317.8	5.88	113
CH_3I	Iodomethane	315.70	528		
CH_3NO_2	Nitromethane	374.34	588	5.87	173
CH_4	Methane	111.8	190.56	4.599	98.60
CH_4O	Methanol	337.8	512.5	8.084	117
CH_4S	Methanethiol	279.0	470.0	7.23	145
CH_5ClSi	Chloromethylsilane	280	517.8		
CH_5N	Methylamine	266.83	430.7	7.614	
CH_6N_2	Methylhydrazine	360.7	567	8.24	271
CH_6Si	Methylsilane	215.7	352.5		
CO	Carbon monoxide	81.6	132.91	3.499	93
COS	Carbon oxysulfide	223	375	5.88	137
CO_2	Carbon dioxide	194.8 s	304.13	7.375	94
CS_2	Carbon disulfide	319	552	7.90	173
$C_2Br_2ClF_3$	1,2-Dibromo-1-chloro-1,2,2-trifluoroethane	366	560.7	3.61	368
$C_2Br_2F_4$	1,2-Dibromotetrafluoroethane	320.50	487.8	3.393	341
C_2ClF_3	Chlorotrifluoroethylene	245.3	379	4.05	212
C_2ClF_5	Chloropentafluoroethane	235.20	353.2	3.229	252
$C_2Cl_2F_4$	1,1-Dichlorotetrafluoroethane	277	418.6	3.30	294
$C_2Cl_2F_4$	1,2-Dichlorotetrafluoroethane	277.0	418.78	3.252	297
$C_2Cl_3F_3$	1,1,2-Trichloro-1,2,2-trifluoroethane	320.8	487.3	3.42	325
C_2Cl_4	Tetrachloroethylene	394.5	620.2		
$C_2Cl_4F_2$	1,1,2,2-Tetrachloro-1,2-difluoroethane	366.0	551		
C_2F_3N	Trifluoroacetonitrile	204.3	311.11	3.618	202
C_2F_4	Tetrafluoroethylene	197.2	306.5	3.94	172
C_2F_6	Hexafluoroethane	195.0	293		222
C_2HClF_2	1-Chloro-2,2-difluoroethylene	254.7	400.6	4.46	197
C_2HClF_4	1-Chloro-1,1,2,2-tetrafluoroethane	263	399.9	3.72	244
C_2HClF_4	1-Chloro-1,2,2,2-tetrafluoroethane	261	395.4	3.66	
$C_2HCl_2F_3$	1,2-Dichloro-1,1,2-trifluoroethane	301	461.6		278
$C_2HCl_2F_3$	2,2-Dichloro-1,1,1-trifluoroethane	300.97	456.83	3.661	278
C_2HCl_3	Trichloroethylene	360.36	544.2	5.02	
$C_2HF_3O_2$	Trifluoroacetic acid	346	491.3	3.258	204
C_2HF_5	Pentafluoroethane	224.7	339.41	3.639	209.7
C_2HF_5O	Trifluoromethyl difluoromethyl ether	237	354.49	3.33	
C_2H_2	Acetylene	188.4 s	308.3	6.138	112.2
$C_2H_2Cl_2$	*cis*-1,2-Dichloroethylene	333.3	544.2		
$C_2H_2Cl_2$	*trans*-1,2-Dichloroethylene	321.8	516.5	5.51	
$C_2H_2Cl_4$	1,1,2,2-Tetrachloroethane	419.7	661.15		
$C_2H_2F_2$	1,1-Difluoroethylene	187.5	302.9	4.46	154
$C_2H_2F_4$	1,1,1,2-Tetrafluoroethane	247.07	374.18	4.065	198
$C_2H_2F_4$	1,1,2,2-Tetrafluoroethane	253.2	391.8		191
$C_2H_3ClF_2$	1-Chloro-1,1-difluoroethane	263.5	410.34	4.048	225
$C_2H_3Cl_2F$	1,1-Dichloro-1-fluoroethane	305.2	477.5	4.194	255
$C_2H_3Cl_3$	1,1,1-Trichloroethane	347.24	545	4.30	
C_2H_3F	Fluoroethylene	201	327.9	5.24	144
$C_2H_3F_3$	1,1,1-Trifluoroethane	225.90	346.04	3.775	194
$C_2H_3F_3O$	Methyl trifluoromethyl ether	249	378.0	3.680	228
C_2H_3N	Acetonitrile	354.80	545.5	4.85	173
C_2H_4	Ethylene	169.5	282.34	5.041	131.1

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
$C_2H_4Br_2$	1,2-Dibromoethane	404.8	583.0	7.2	
$C_2H_4Cl_2$	1,1-Dichloroethane	330.5	523	5.07	236
$C_2H_4Cl_2$	1,2-Dichloroethane	356.7	561	5.4	225
$C_2H_4F_2$	1,1-Difluoroethane	248.20	386.7	4.50	181
C_2H_4O	Acetaldehyde	293.3	466		154
C_2H_4O	Ethylene oxide	283.8	469	7.19	140
$C_2H_4O_2$	Acetic acid	391.0	592.71	5.786	171
$C_2H_4O_2$	Methyl formate	304.8	487.2	5.998	172
C_2H_5Br	Bromoethane	311.7	503.9	6.23	215
C_2H_5Cl	Chloroethane	285.5	460.4	5.3	
C_2H_5F	Fluoroethane	235.6	375.31	5.028	
C_2H_6	Ethane	184.5	305.32	4.872	145.5
$C_2H_6Cl_2Si$	Dichlorodimethylsilane	343.5	520.4	3.49	350
C_2H_6O	Ethanol	351.44	514.0	6.137	168
C_2H_6O	Dimethyl ether	248.3	400.0	5.37	190
$C_2H_6O_2$	Ethylene glycol	470.5	718		
C_2H_6S	Ethanethiol	308.3	499	5.49	207
C_2H_6S	Dimethyl sulfide	310.48	503.0	5.53	201
C_2H_7N	Ethylamine	289.7	456	5.62	182
C_2H_7N	Dimethylamine	280.03	437.22	5.340	
$C_2H_8N_2$	1,2-Ethanediamine	390	613.1	6.707	
C_2N_2	Cyanogen	252.1	400	5.98	
C_3ClF_5O	Chloropentafluoroacetone	281	410.6	2.878	
C_3F_6O	Perfluoroacetone	245.7	357.14	2.84	329
C_3F_6O	Perfluorooxetane	244	361.8	3.094	272
C_3F_8	Perfluoropropane	236.6	345.1	2.680	299
$C_3F_8O_2$	Perfluorodimethoxymethane	263	372.3	2.333	363
C_3HF_7O	Trifluoromethyl 1,1,2,2-tetrafluoroethyl ether	270	387.7	2.640	337
$C_3H_2F_6$	1,1,1,2,3,3-Hexafluoropropane	279.3	412.38	3.412	269
$C_3H_2F_6O$	1,2,2,2-Tetrafluoroethyl difluoromethyl ether	296.50	428.95	3.050	315
$C_3H_3F_3$	3,3,3-Trifluoropropene	256	376.2	3.80	211
$C_3H_3F_5$	1,1,1,2,2-Pentafluoropropane	255.7	380.11	3.137	273
$C_3H_3F_5O$	Perfluoroethyl methyl ether	278.74	406.80	2.887	301
C_3H_3N	Acrylonitrile	350.5	540	4.660	
C_3H_3NO	Isoxazole	368	552.0		
C_3H_4	Allene	238.7	394	5.25	
C_3H_4	Propyne	250.0	402.4	5.63	163.5
C_3H_5Cl	3-Chloropropene	318.3	514		
$C_3H_5F_3O$	2,2,2-Trifluoroethyl methyl ether	304.77	448.98	3.513	277
C_3H_5N	Propanenitrile	370.29	561.3	4.26	229
C_3H_6	Propene	225.46	364.9	4.60	184.6
C_3H_6	Cyclopropane	240.34	398.0	5.54	162
C_3H_6O	Allyl alcohol	370.2	545.1		
C_3H_6O	Propanal	321	504.4	5.27	204
C_3H_6O	Acetone	329.20	508.1	4.700	209
C_3H_6O	Methyloxirane	308	482.2	4.92	186
$C_3H_6O_2$	Propanoic acid	414.30	604	4.53	222
$C_3H_6O_2$	Ethyl formate	327.5	508.5	4.74	229
$C_3H_6O_2$	Methyl acetate	330.02	506.55	4.75	228
C_3H_7Cl	1-Chloropropane	319.7	503	4.58	
C_3H_7NO	*N*,*N*-Dimethylformamide	426	649.6		262
C_3H_8	Propane	231.1	369.83	4.248	200
C_3H_8O	1-Propanol	370.3	536.8	5.169	218
C_3H_8O	2-Propanol	355.5	508.3	4.764	222
C_3H_8O	Ethyl methyl ether	280.5	437.8	4.40	221
$C_3H_8O_2$	Ethylene glycol monomethyl ether	397.3	597.6	5.285	263
C_3H_8S	1-Propanethiol	341.0	536.6		286
C_3H_8S	Ethyl methyl sulfide	339.8	533	4.26	
$C_3H_9BO_3$	Trimethyl borate	340.7	501.7	3.59	

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
C_3H_9ClSi	Trimethylchlorosilane	333	497.8	3.20	366
C_3H_9N	Propylamine	320.37	497.0	4.72	
C_3H_9N	Isopropylamine	304.91	471.8	4.54	221
C_3H_9N	Trimethylamine	276.02	432.79	4.087	254
$C_4Br_2F_8$	1,4-Dibromooctafluorobutane	370	532.5	2.39	
C_4F_8	Perfluorocyclobutane	267.3	388.46	2.784	324
C_4F_{10}	Perfluorobutane	271.3	386.4	2.323	378
C_4F_{10}	Perfluoroisobutane	273	395.4		
$C_4H_2F_8O$	Perfluoroethyl 2,2,2-trifluoroethyl ether	301.04	421.68	2.330	409
$C_4H_3F_7O$	Perfluoropropyl methyl ether	307.38	437.70	2.481	377
$C_4H_3F_7O$	Perfluoroisopropyl methyl ether	302.56	433.30	2.553	369
C_4H_4O	Furan	304.7	490.2	5.50	218
C_4H_4S	Thiophene	357.2	579.4	5.69	219
$C_4H_5F_5O$	Perfluoroethyl ethyl ether	301.26	431.23	2.533	366
C_4H_5N	Pyrrole	402.94	639.7	6.34	200
C_4H_6	1,3-Butadiene	268.74	425	4.32	221
C_4H_6	1-Butyne	281.23	440	4.60	208
C_4H_6	2-Butyne	300.0	488.7		
$C_4H_6O_2$	γ-Butyrolactone	477	731.0	5.131	
$C_4H_6O_3$	Acetic anhydride	412.7	606	4.0	
C_4H_7N	Butanenitrile	390.8	585.4	3.88	
C_4H_8	1-Butene	266.89	419.5	4.02	240.8
C_4H_8	*cis*-2-Butene	276.86	435.5	4.21	233.8
C_4H_8	*trans*-2-Butene	274.03	428.6	4.10	237.7
C_4H_8	Isobutene	266.3	417.9	4.000	238.8
C_4H_8	Cyclobutane	285.8	460.0	4.98	210
C_4H_8O	Ethyl vinyl ether	308.7	475	4.07	
C_4H_8O	Butanal	348.0	537.2	4.32	258
C_4H_8O	2-Butanone	352.74	536.78	4.207	267
C_4H_8O	Tetrahydrofuran	338	540.1	5.19	224
C_4H_8OS	Ethyl thioacetate	389.5	590.55	4.075	319
$C_4H_8O_2$	Butanoic acid	436.90	624	4.03	290
$C_4H_8O_2$	2-Methylpropanoic acid	427.60	605	3.7	292
$C_4H_8O_2$	Propyl formate	354.0	538.0	4.06	285
$C_4H_8O_2$	Ethyl acetate	350.26	523.3	3.882	286
$C_4H_8O_2$	Methyl propanoate	353.0	530.6	4.004	282
$C_4H_8O_2$	1,4-Dioxane	374.7	587	5.21	238
C_4H_8S	Tetrahydrothiophene	394.2	632.0		
C_4H_9N	Pyrrolidine	359.71	568	6.00	238
C_4H_{10}	Butane	272.7	425.12	3.796	255
C_4H_{10}	Isobutane	261.42	407.8	3.640	259
$C_4H_{10}O$	1-Butanol	390.88	563.0	4.414	274
$C_4H_{10}O$	2-Butanol	372.66	536.2	4.202	269
$C_4H_{10}O$	2-Methyl-1-propanol	381.04	547.8	4.295	274
$C_4H_{10}O$	2-Methyl-2-propanol	355.5	506.2	3.972	275
$C_4H_{10}O$	Diethyl ether	307.7	466.74	3.638	280
$C_4H_{10}O$	Methyl propyl ether	312.3	476.25	3.801	
$C_4H_{10}O$	Isopropyl methyl ether	303.92	464.48	3.762	
$C_4H_{10}O_2$	1,2-Butanediol	463.7	680	5.21	303
$C_4H_{10}O_2$	1,3-Butanediol	480.7	676	4.02	305
$C_4H_{10}O_2$	1,4-Butanediol	508	727	6.22	
$C_4H_{10}O_2$	Ethylene glycol dimethyl ether	358	536	3.87	271
$C_4H_{10}O_2$	Propylene glycol monomethyl ether	392	579.8	4.113	
$C_4H_{10}S$	1-Butanethiol	371.7	570.1		324
$C_4H_{10}S$	Diethyl sulfide	365.3	557	3.96	318
$C_4H_{11}N$	Butylamine	350.15	531.9	4.25	277
$C_4H_{11}N$	*sec*-Butylamine	335.88	514.3	4.20	278
$C_4H_{11}N$	*tert*-Butylamine	317.19	483.9	3.84	292
$C_4H_{11}N$	Isobutylamine	340.90	519	4.07	278

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
$C_4H_{11}N$	Diethylamine	328.7	499.99	3.758	
$C_4H_{12}Si$	Tetramethylsilane	299.8	448.64	2.821	362
$C_4H_{12}Sn$	Tetramethylstannane	351	521.8	2.981	
C_5F_{12}	Perfluoropentane	302.3	420.59	2.045	473
$C_5H_2F_6O_2$	Hexafluoroacetylacetone	327.30	485.1	2.767	
$C_5H_4O_2$	Furfural	434.9	670	5.89	
C_5H_5N	Pyridine	388.38	620.0	5.67	243
$C_5H_6N_2$	2-Methylpyrazine	410	634.3	5.01	283
C_5H_6O	2-Methylfuran	338	527	4.72	247
C_5H_7N	1-Methylpyrrole	385.96	596.0	4.86	271
C_5H_7N	2-Methylpyrrole	420.7	654	5.08	266
C_5H_7N	3-Methylpyrrole	416.0	647	5.08	266
C_5H_8	1-Pentyne	313.3	493.5		
C_5H_8	Cyclopentene	317.3	506.5	4.80	245
C_5H_8O	Cyclopentanone	403.72	624.5	4.60	
C_5H_8O	3,4-Dihydro-2*H*-pyran	359	561.7	4.56	268
C_5H_9N	Pentanenitrile	414.5	610.3	3.58	
C_5H_9NO	*N*-Methyl-2-pyrrolidone	475	721.8		311
C_5H_{10}	1-Pentene	303.11	464.8	3.56	298.4
C_5H_{10}	*cis*-2-Pentene	310.08	475	3.69	
C_5H_{10}	*trans*-2-Pentene	309.49	471	3.52	
C_5H_{10}	2-Methyl-1-butene	304.3	470	3.8	
C_5H_{10}	3-Methyl-1-butene	293.3	452.7	3.53	304.9
C_5H_{10}	2-Methyl-2-butene	311.71	470	3.42	
C_5H_{10}	Cyclopentane	322.5	511.7	4.51	259
$C_5H_{10}O$	Cyclopentanol	413.57	619.5	4.9	
$C_5H_{10}O$	Allyl ethyl ether	340.8	518		
$C_5H_{10}O$	Pentanal	376	566.1	3.97	313
$C_5H_{10}O$	2-Pentanone	375.41	561.08	3.694	301
$C_5H_{10}O$	3-Pentanone	375.11	561.46	3.729	336
$C_5H_{10}O$	3-Methyl-2-butanone	367.48	553.4	3.85	310
$C_5H_{10}O$	Tetrahydropyran	361	572.2	4.77	263
$C_5H_{10}O$	2-Methyltetrahydrofuran	351	537	3.76	267
$C_5H_{10}O_2$	Pentanoic acid	459.3	643	3.58	340
$C_5H_{10}O_2$	3-Methylbutanoic acid	449.7	629	3.40	
$C_5H_{10}O_2$	Isobutyl formate	371.3	551	3.88	352
$C_5H_{10}O_2$	Propyl acetate	374.69	549.7	3.36	345
$C_5H_{10}O_2$	Isopropyl acetate	361.8	531		
$C_5H_{10}O_2$	Ethyl propanoate	372.3	546.0	3.362	345
$C_5H_{10}O_2$	Methyl butanoate	376.0	554.4	3.47	340
$C_5H_{10}O_2$	Methyl isobutanoate	365.7	540.8	3.43	339
$C_5H_{11}N$	Piperidine	379.37	594	4.94	288
C_5H_{12}	Pentane	309.21	469.7	3.370	311
C_5H_{12}	Isopentane	301.03	460.4	3.38	306
C_5H_{12}	Neopentane	282.63	433.8	3.196	307
$C_5H_{12}O$	1-Pentanol	411.13	588.1	3.897	326
$C_5H_{12}O$	2-Pentanol	392.5	560.3	3.675	329
$C_5H_{12}O$	3-Pentanol	389.40	559.6		325
$C_5H_{12}O$	2-Methyl-1-butanol	400.7	575.4	3.94	
$C_5H_{12}O$	3-Methyl-1-butanol	404.3	577.2	3.93	
$C_5H_{12}O$	2-Methyl-2-butanol	375.5	543.7	3.71	
$C_5H_{12}O$	3-Methyl-2-butanol	386.0	556.1	3.87	
$C_5H_{12}O$	Butyl methyl ether	343.31	512.78	3.371	329
$C_5H_{12}O$	Methyl *tert*-butyl ether	328.3	497.1	3.430	
$C_5H_{12}O$	Ethyl propyl ether	336.36	500.23	3.370	339
$C_5H_{12}O_2$	Ethylene glycol monopropyl ether	423.0	614.6		364
$C_5H_{12}O_3$	Diethylene glycol monomethyl ether	466	672	3.67	
$C_5H_{12}S$	3-Methyl-1-butanethiol	393	604		
C_6BrF_5	Bromopentafluorobenzene	410	601	3.0	

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
C_6ClF_5	Chloropentafluorobenzene	391.11	570.81	3.238	376
$C_6Cl_2F_4$	1,2-Dichlorotetrafluorobenzene	430.9	626	5.32	
$C_6Cl_3F_3$	1,3,5-Trichloro-2,4,6-trifluorobenzene	471.6	684.8	3.27	448
C_6F_6	Hexafluorobenzene	353.41	516.73	3.273	335
C_6F_{10}	Perfluorocyclohexene	325.2	461.8		
C_6F_{12}	Perfluoro-1-hexene	330.2	454.4		
C_6F_{12}	Perfluorocyclohexane	326.0	457.2	2.43	
C_6F_{14}	Perfluorohexane	329.8	448.77	1.868	606
C_6F_{14}	Perfluoro-2-methylpentane	330.8	455.3	1.923	532
C_6F_{14}	Perfluoro-3-methylpentane	331.5	450	1.69	
C_6F_{14}	Perfluoro-2,3-dimethylbutane	333.0	463	1.87	525
C_6HF_5	Pentafluorobenzene	358.89	530.97	3.531	324
C_6HF_5O	Pentafluorophenol	418.8	609	4.0	348
C_6HF_{11}	Undecafluorocyclohexane	335.2	477.7		
$C_6H_2F_4$	1,2,3,4-Tetrafluorobenzene	367.5	550.83	3.791	313
$C_6H_2F_4$	1,2,3,5-Tetrafluorobenzene	357.5	535.25	3.747	
$C_6H_2F_4$	1,2,4,5-Tetrafluorobenzene	363.3	543.35	3.801	
$C_6H_4F_2$	*p*-Difluorobenzene	362	556	4.40	
C_6H_5Br	Bromobenzene	429.21	670	4.52	324
C_6H_5Cl	Chlorobenzene	404.87	632.4	4.52	308
C_6H_5F	Fluorobenzene	357.88	560.09	4.551	269
C_6H_5I	Iodobenzene	461.6	721	4.52	351
C_6H_6	Benzene	353.24	562.05	4.895	256
C_6H_6O	Phenol	455.02	694.2	6.13	
C_6H_7N	Aniline	457.32	699	4.89	287
C_6H_7N	2-Methylpyridine	402.53	621.0	4.60	292
C_6H_7N	3-Methylpyridine	417.29	645.0	4.65	288
C_6H_7N	4-Methylpyridine	418.51	645.7	4.70	292
C_6H_{10}	1,5-Hexadiene	332.5	508		
C_6H_{10}	Cyclohexene	356.13	560.4		
$C_6H_{10}O$	Cyclohexanone	428.58	653.0	4.0	
$C_6H_{10}O_2$	Ethyl *trans*-2-butenoate	411	599		
$C_6H_{10}S$	Diallylsulfide	411.8	653		
$C_6H_{11}N$	Hexanenitrile	436.80	633.8	3.30	
C_6H_{12}	1-Hexene	336.63	504.0	3.21	355.1
C_6H_{12}	Cyclohexane	353.88	553.8	4.08	308
C_6H_{12}	Methylcyclopentane	345.0	532.7	3.79	318
$C_6H_{12}O$	Hexanal	404	591	3.46	
$C_6H_{12}O$	2-Hexanone	400.8	587.0	3.32	
$C_6H_{12}O$	3-Hexanone	396.7	582.82	3.320	
$C_6H_{12}O$	4-Methyl-2-pentanone	389.7	571	3.27	
$C_6H_{12}O$	Cyclohexanol	433.99	647.1	4.401	
$C_6H_{12}O_2$	Hexanoic acid	478.4	662	3.20	
$C_6H_{12}O_2$	Pentyl formate	403.5	576	3.46	
$C_6H_{12}O_2$	Isopentyl formate	396.7	578		
$C_6H_{12}O_2$	Butyl acetate	399.3	579		
$C_6H_{12}O_2$	Isobutyl acetate	389.7	561	3.16	
$C_6H_{12}O_2$	Propyl propanoate	395.7	578		
$C_6H_{12}O_2$	Ethyl butanoate	394.7	566	3.06	421
$C_6H_{12}O_2$	Ethyl 2-methylpropanoate	383.3	553	3.07	421
$C_6H_{12}O_2$	Methyl pentanoate	400.5	567	3.19	
$C_6H_{12}O_3$	Ethylene glycol monoethyl ether acetate	429.6	611	3.18	441
$C_6H_{12}O_3$	Paraldehyde	397.5	563		
C_6H_{14}	Hexane	341.88	507.6	3.025	368
C_6H_{14}	2-Methylpentane	333.41	497.7	3.04	368
C_6H_{14}	3-Methylpentane	336.42	504.6	3.12	368
C_6H_{14}	2,2-Dimethylbutane	322.88	489.0	3.10	358
C_6H_{14}	2,3-Dimethylbutane	331.08	500.0	3.15	361

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
$C_6H_{14}O$	1-Hexanol	430.8	610.3	3.417	387
$C_6H_{14}O$	2-Hexanol	413	585.9	3.31	384
$C_6H_{14}O$	3-Hexanol	408	582.4	3.36	383
$C_6H_{14}O$	2-Methyl-1-pentanol	422	604.4	3.45	
$C_6H_{14}O$	4-Methyl-1-pentanol	425.1	603.5		
$C_6H_{14}O$	2-Methyl-2-pentanol	394.3	559.5		
$C_6H_{14}O$	4-Methyl-2-pentanol	404.8	574.4		
$C_6H_{14}O$	2-Methyl-3-pentanol	399.7	576.0	3.46	
$C_6H_{14}O$	3-Methyl-3-pentanol	395.5	575.6	3.52	
$C_6H_{14}O$	Dipropyl ether	363.23	530.6	3.028	
$C_6H_{14}O$	Diisopropyl ether	341.66	500.32	2.832	386
$C_6H_{14}O$	Methyl pentyl ether	372	546.53	3.042	391
$C_6H_{14}O_2$	Ethylene glycol monobutyl ether	441.6	633.9		424
$C_6H_{14}O_2$	1,1-Diethoxyethane	375.40	527		
$C_6H_{14}O_3$	Diethylene glycol monoethyl ether	469	670	3.167	
$C_6H_{15}N$	Dipropylamine	382.5	555.8	3.63	
$C_6H_{15}N$	Diisopropylamine	357.0	523.1	3.02	
$C_6H_{15}N$	Triethylamine	362	535.6	3.032	389
C_7F_8	Perfluorotoluene	377.7	534.47	2.705	428
C_7F_{14}	Perfluoro-1-heptene	354.2	478.2		
C_7F_{14}	Perfluoromethylcyclohexane	349.5	485.91	2.019	570
C_7F_{16}	Perfluoroheptane	355.7	474.8	1.62	664
C_7HF_{15}	1*H*-Pentadecafluoroheptane	369.2	495.8		
$C_7H_3F_5$	2,3,4,5,6-Pentafluorotoluene	390.7	566.52	3.126	384
C_7H_5N	Benzonitrile	464.3	699.4	4.21	
C_7H_6O	Benzaldehyde	452.2	695	4.65	
C_7H_8	Toluene	383.78	591.75	4.108	316
C_7H_8O	*o*-Cresol	464.19	697.6	5.01	
C_7H_8O	*m*-Cresol	475.42	705.8	4.56	309
C_7H_8O	*p*-Cresol	475.13	704.6	5.15	
C_7H_8O	Benzyl alcohol	478.46	715	4.3	
C_7H_8O	Anisole	426.9	646.1	4.222	341
C_7H_9N	*o*-Methylaniline	473.5	707	4.37	
C_7H_9N	*m*-Methylaniline	476.5	707	4.28	
C_7H_9N	*p*-Methylaniline	473.6	706	4.58	
C_7H_9N	*N*-Methylaniline	469.4	701	5.20	
C_7H_9N	2,3-Dimethylpyridine	434.27	655.4	4.10	356
C_7H_9N	2,4-Dimethylpyridine	431.53	647	3.95	361
C_7H_9N	2,5-Dimethylpyridine	430.13	645	3.85	361
C_7H_9N	2,6-Dimethylpyridine	417.16	624	3.85	361
C_7H_9N	3,4-Dimethylpyridine	452.25	684	4.20	355
C_7H_9N	3,5-Dimethylpyridine	444.99	668	4.05	361
C_7H_{14}	1-Heptene	366.79	537.3	2.92	409
C_7H_{14}	Cycloheptane	391.5	604.2	3.82	353
C_7H_{14}	Methylcyclohexane	374.08	572.1	3.48	369
C_7H_{14}	Ethylcyclopentane	376.7	569.5	3.40	375
C_7H_{14}	1,1-Dimethylcyclopentane	360.7	547	3.45	
C_7H_{14}	*cis*-1,2-Dimethylcyclopentane	372.7	565	3.45	
C_7H_{14}	*trans*-1,2-Dimethylcyclopentane	365.0	553	3.45	
C_7H_{14}	*cis*-1,3-Dimethylcyclopentane	364.0	551	3.45	
C_7H_{14}	*trans*-1,3-Dimethylcyclopentane	364.8	553	3.45	
$C_7H_{14}O$	2-Heptanone	424.20	611.5	3.436	
$C_7H_{14}O_2$	Heptanoic acid	495.4	679	2.90	
$C_7H_{14}O_2$	Pentyl acetate	422.4	600	2.68	470
$C_7H_{14}O_2$	Isopentyl acetate	415.7	599		
$C_7H_{14}O_2$	Isobutyl propanoate	410	592		
$C_7H_{14}O_2$	Propyl butanoate	416.2	600		
$C_7H_{14}O_2$	Propyl isobutanoate	408.5	589		
$C_7H_{14}O_2$	Ethyl pentanoate	419.3	570		

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
$C_7H_{14}O_2$	Ethyl 3-methylbutanoate	408.2	588		
C_7H_{16}	Heptane	371.7	540.2	2.74	428
C_7H_{16}	2-Methylhexane	363.19	530.4	2.74	421
C_7H_{16}	3-Methylhexane	365	535.2	2.81	404
C_7H_{16}	3-Ethylpentane	366.7	540.6	2.89	416
C_7H_{16}	2,2-Dimethylpentane	352.3	520.5	2.77	416
C_7H_{16}	2,3-Dimethylpentane	362.93	537.3	2.91	393
C_7H_{16}	2,4-Dimethylpentane	353.64	519.8	2.74	418
C_7H_{16}	3,3-Dimethylpentane	359.21	536.4	2.95	414
C_7H_{16}	2,2,3-Trimethylbutane	354.01	531.1	2.95	398
$C_7H_{16}O$	1-Heptanol	449.60	632.6	3.058	435
$C_7H_{16}O$	2-Heptanol	432	608.3	3.021	442
$C_7H_{16}O$	3-Heptanol	430	605.4		434
$C_7H_{16}O$	4-Heptanol	429	602.6		432
$C_8F_{16}O$	Perfluoro-2-butyltetrahydrofuran	375.8	500.2	1.607	588
C_8F_{18}	Perfluorooctane	379.0	502	1.66	
C_8H_7N	4-Methylbenzonitrile	490.2	723		
C_8H_7N	Indole	526.7	794	4.8	356
C_8H_8O	Acetophenone	475	713	4.40	380
$C_8H_8O_3$	Methyl salicylate	496.1	709		
C_8H_{10}	Ethylbenzene	409.34	617.15	3.609	374
C_8H_{10}	*o*-Xylene	417.7	630.3	3.732	370
C_8H_{10}	*m*-Xylene	412.27	617.0	3.541	375
C_8H_{10}	*p*-Xylene	411.52	616.2	3.511	378
$C_8H_{10}O$	*o*-Ethylphenol	477.7	703.0		
$C_8H_{10}O$	*m*-Ethylphenol	491.6	718.8		
$C_8H_{10}O$	*p*-Ethylphenol	491.1	716.4		
$C_8H_{10}O$	2,3-Xylenol	490.1	722.8		
$C_8H_{10}O$	2,4-Xylenol	484.13	707.6		
$C_8H_{10}O$	2,5-Xylenol	484.3	706.9		
$C_8H_{10}O$	2,6-Xylenol	474.22	701.0		
$C_8H_{10}O$	3,4-Xylenol	500	729.8		
$C_8H_{10}O$	3,5-Xylenol	494.89	715.6		
$C_8H_{10}O$	Phenetole	442.96	647	3.42	
$C_8H_{11}N$	*N*-Ethylaniline	476.2	698		
$C_8H_{11}N$	*N,N*-Dimethylaniline	467.30	687	3.63	
$C_8H_{14}O_4$	Diethyl succinate	490.9	663		
$C_8H_{15}N$	Octanenitrile	478.40	674.4	2.85	
C_8H_{16}	1-Octene	394.44	567.0	2.68	468
C_8H_{16}	Cyclooctane	422	647.2	3.56	410
C_8H_{16}	Ethylcyclohexane	405.0	609	3.04	
C_8H_{16}	*cis*-1,2-Dimethylcyclohexane	403.0	606	2.95	
C_8H_{16}	*trans*-1,2-Dimethylcyclohexane	396.7	596	2.94	
C_8H_{16}	*cis*-1,3-Dimethylcyclohexane	393.3	591	2.94	
C_8H_{16}	*trans*-1,3-Dimethylcyclohexane	397.7	598	2.94	
C_8H_{16}	*trans*-1,4-Dimethylcyclohexane	392.5	587.7		
$C_8H_{16}O_2$	Octanoic acid	512	695	2.64	
$C_8H_{16}O_2$	2-Ethylhexanoic acid	501	674.6	2.778	528
$C_8H_{16}O_2$	Isopentyl propanoate	433.4	611		
$C_8H_{16}O_2$	Isobutyl butanoate	430.1	611		
$C_8H_{16}O_2$	Isobutyl isobutanoate	421.8	602		
$C_8H_{16}O_2$	Propyl 3-methylbutanoate	429.1	609		
$C_8H_{16}O_4$	Diethylene glycol monoethyl ether acetate	491.7	663	2.73	
C_8H_{18}	Octane	398.82	568.7	2.49	492
C_8H_{18}	2-Methylheptane	390.81	559.7	2.50	488
C_8H_{18}	3-Methylheptane	392.0	563.6	2.55	464
C_8H_{18}	4-Methylheptane	390.87	561.7	2.54	476
C_8H_{18}	3-Ethylhexane	391.8	565.5	2.61	455
C_8H_{18}	2,2-Dimethylhexane	380.01	549.8	2.53	478

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
C_8H_{18}	2,3-Dimethylhexane	388.77	563.5	2.63	468
C_8H_{18}	2,4-Dimethylhexane	382.7	553.5	2.56	472
C_8H_{18}	2,5-Dimethylhexane	382.27	550.0	2.49	482
C_8H_{18}	3,3-Dimethylhexane	385.12	562.0	2.65	443
C_8H_{18}	3,4-Dimethylhexane	390.88	568.8	2.69	466
C_8H_{18}	3-Ethyl-2-methylpentane	388.81	567.1	2.70	442
C_8H_{18}	3-Ethyl-3-methylpentane	391.42	576.5	2.81	455
C_8H_{18}	2,2,3-Trimethylpentane	383	563.5	2.73	436
C_8H_{18}	2,2,4-Trimethylpentane	372.37	543.8	2.57	468
C_8H_{18}	2,3,3-Trimethylpentane	388.0	573.5	2.82	455
C_8H_{18}	2,3,4-Trimethylpentane	386.7	566.4	2.73	460
C_8H_{18}	2,2,3,3-Tetramethylbutane	379.60	567.8	2.87	461
$C_8H_{18}O$	1-Octanol	468.31	652.5	2.777	497
$C_8H_{18}O$	2-Octanol	453	629.6	2.754	519
$C_8H_{18}O$	3-Octanol	444	628.5		515
$C_8H_{18}O$	4-Octanol	449.5	625.1		515
$C_8H_{18}O$	4-Methyl-3-heptanol	443	623.5		
$C_8H_{18}O$	5-Methyl-3-heptanol	445	621.2		
$C_8H_{18}O$	2-Ethyl-1-hexanol	457.8	640.6	2.8	
$C_8H_{18}O$	Dibutyl ether	413.43	584.1	3.01	
$C_8H_{18}O$	Di-*tert*-butyl ether	380.38	550		
$C_8H_{19}N$	Dibutylamine	432.8	607.5	3.11	
$C_8H_{19}N$	Diisobutylamine	412.8	584.4	3.20	
$C_8H_{20}Si$	Tetraethylsilane	427.9	603.7	2.602	
C_9F_{20}	Perfluorononane	398.5	524	1.56	
C_9H_7N	Quinoline	510.31	782	4.86	371
C_9H_7N	Isoquinoline	516.37	803	5.10	374
C_9H_{10}	Indan	451.12	684.9	3.95	
C_9H_{12}	Propylbenzene	432.39	638.35	3.200	440
C_9H_{12}	Isopropylbenzene	425.56	631.0	3.209	
C_9H_{12}	*o*-Ethyltoluene	438.4	651	3.38	
C_9H_{12}	*m*-Ethyltoluene	434.5	637	3.25	
C_9H_{12}	*p*-Ethyltoluene	435	640.2	3.23	
C_9H_{12}	1,2,3-Trimethylbenzene	449.27	664.5	3.454	
C_9H_{12}	1,2,4-Trimethylbenzene	442.53	649.1	3.232	
C_9H_{12}	1,3,5-Trimethylbenzene	437.89	637.3	3.127	
$C_9H_{13}N$	2-Methyl-*N*,*N*-dimethylaniline	467.3	668	3.12	
C_9H_{18}	1-Nonene	420.1	594.0		526
C_9H_{18}	Cyclononane	451.6	682	3.34	
C_9H_{18}	1α,3α,5α-1,3,5-Trimethylcyclohexane	413.7	602.2		
$C_9H_{18}O$	2-Nonanone	468.5	651.9	2.482	
$C_9H_{18}O$	5-Nonanone	461.60	640		
$C_9H_{18}O_2$	Nonanoic acid	527.7	711	2.40	
$C_9H_{18}O_2$	Isopentyl butanoate	452	619		
$C_9H_{18}O_2$	Isobutyl 3-methylbutanoate	441.7	621		
C_9H_{20}	Nonane	423.97	594.6	2.29	555
C_9H_{20}	2-Methyloctane	416.4	582.8	2.31	
C_9H_{20}	2,2-Dimethylheptane	405.8	576.7	2.35	
C_9H_{20}	2,2,5-Trimethylhexane	397.24	569.8		
C_9H_{20}	2,2,3,3-Tetramethylpentane	413.4	607.5	2.74	
C_9H_{20}	2,2,3,4-Tetramethylpentane	406.2	592.6	2.60	
C_9H_{20}	2,2,4,4-Tetramethylpentane	395.44	574.6	2.49	
C_9H_{20}	2,3,3,4-Tetramethylpentane	414.7	607.5	2.72	
$C_9H_{20}O$	1-Nonanol	486.52	670.7	2.528	572
$C_9H_{20}O$	2-Nonanol	466.7	649.6	2.53	575
$C_9H_{20}O$	3-Nonanol	468	648.0		577
$C_9H_{20}O$	4-Nonanol	465.7	645.1		575
$C_{10}F_8$	Perfluoronaphthalene	482	673.1		
$C_{10}F_{18}$	Perfluorodecalin	415	566	1.52	

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
$C_{10}F_{22}$	Perfluorodecane	417.4	542	1.45	
$C_{10}H_8$	Naphthalene	491.1	748.4	4.05	407
$C_{10}H_9N$	1-Naphthylamine	573.8	850	5.0	438
$C_{10}H_9N$	2-Naphthylamine	579.3	850	4.9	438
$C_{10}H_{12}$	1,2,3,4-Tetrahydronaphthalene	480.8	720	3.65	408
$C_{10}H_{14}$	Butylbenzene	456.46	660.5	2.89	497
$C_{10}H_{14}$	Isobutylbenzene	445.94	650	3.05	
$C_{10}H_{14}$	1-Isopropyl-4-methylbenzene	450.3	652	2.8	
$C_{10}H_{14}$	*p*-Diethylbenzene	456.9	657.9	2.803	
$C_{10}H_{14}$	1,2,4,5-Tetramethylbenzene	470.0	676	2.9	
$C_{10}H_{14}O$	Thymol	505.7	698		
$C_{10}H_{16}$	*d*-Limonene	451	653		470
$C_{10}H_{16}$	α-Pinene	429	644		454
$C_{10}H_{16}$	(+)-3-Carene	444	658		487
$C_{10}H_{18}$	1,3-Decadiene	442	615		
$C_{10}H_{18}$	*cis*-Decahydronaphthalene	469.0	702.3	3.20	
$C_{10}H_{18}$	*trans*-Decahydronaphthalene	460.5	687.1		
$C_{10}H_{20}$	1-Decene	443.7	617	2.22	584
$C_{10}H_{20}O$	Decanal	481.7	674.2		
$C_{10}H_{20}O$	Menthol	489	694		
$C_{10}H_{20}O_2$	Decanoic acid	541.8	726	2.23	
$C_{10}H_{20}O_2$	Ethyl octanoate	481.7	659		
$C_{10}H_{20}O_4$	Diethylene glycol monobutyl ether acetate	518	681	3.15	
$C_{10}H_{22}$	Decane	447.30	617.7	2.11	624
$C_{10}H_{22}$	3,3,5-Trimethylheptane	428.9	609.5	2.32	
$C_{10}H_{22}$	2,2,3,3-Tetramethylhexane	433.5	623.0	2.51	
$C_{10}H_{22}$	2,2,5,5-Tetramethylhexane	410.6	581.4	2.19	
$C_{10}H_{22}O$	1-Decanol	504.3	687.3	2.315	649
$C_{10}H_{22}O$	2-Decanol	484	668.6		646
$C_{10}H_{22}O$	3-Decanol		666.1		643
$C_{10}H_{22}O$	4-Decanol	483.7	663.7		643
$C_{10}H_{22}O$	5-Decanol	474	663.2		646
$C_{10}H_{22}S$	Diisopentylsulfide	484	664		
$C_{11}H_{10}$	1-Methylnaphthalene	517.8	772	3.60	
$C_{11}H_{10}$	2-Methylnaphthalene	514.3	761		
$C_{11}H_{22}O_2$	Ethyl nonanoate	500.2	674		
$C_{11}H_{24}$	Undecane	469.1	639	1.98	689
$C_{11}H_{24}O$	1-Undecanol	516	703.6	2.147	718
$C_{12}H_8$	Acenaphthylene	553	792	3.20	
$C_{12}H_9N$	Carbazole	627.84	901.8	3.13	454
$C_{12}H_{10}$	Biphenyl	529.3	773	3.38	497
$C_{12}H_{10}O$	Diphenyl ether	531.2	766.8		
$C_{12}H_{12}$	2,7-Dimethylnaphthalene	538	775	3.23	601
$C_{12}H_{18}$	Hexamethylbenzene	536.6	758		
$C_{12}H_{24}$	1-Dodecene	487.0	658	1.93	
$C_{12}H_{26}$	Dodecane	489.47	658	1.82	754
$C_{12}H_{26}O$	1-Dodecanol	532	719.4	1.994	
$C_{13}H_9N$	Acridine	618.01	891.1	3.21	548
$C_{13}H_9N$	Phenanthridine	622.0	895	3.6	548
$C_{13}H_{11}N$	9-Methylcarbazole	616.79	890	3.38	572
$C_{13}H_{12}$	Diphenylmethane	538.2	760	2.71	563
$C_{13}H_{26}O_2$	Methyl dodecanoate	540	712		
$C_{13}H_{28}$	Tridecane	508.62	675	1.68	823
$C_{13}H_{28}O$	1-Tridecanol	546.8	734	1.935	
$C_{14}H_{10}$	Anthracene	613.1	869.3		554
$C_{14}H_{10}$	Phenanthrene	613	869		
$C_{14}H_{30}$	Tetradecane	526.73	693	1.57	894
$C_{14}H_{30}O$	1-Tetradecanol	562	747	1.81	

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CRITICAL CONSTANTS (continued)

Mol. Form.	Name	T_b/K	T_c/K	P_c/MPa	V_c/cm^3 mol^{-1}
$C_{15}H_{32}$	Pentadecane	543.8	708	1.48	966
$C_{16}H_{34}$	Hexadecane	560.01	723	1.40	1034
$C_{16}H_{34}$	2,2,4,4,6,8,8-Heptamethylnonane	519.5	692		
$C_{16}H_{34}O$	1-Hexadecanol	607	770	1.61	
$C_{17}H_{36}$	Heptadecane	575.2	736	1.34	1103
$C_{17}H_{36}O$	1-Heptadecanol	606	780	1.50	
$C_{18}H_{14}$	*o*-Terphenyl	605	857	2.99	731
$C_{18}H_{14}$	*m*-Terphenyl	636	883	2.48	724
$C_{18}H_{14}$	*p*-Terphenyl	649	908	2.99	729
$C_{18}H_{38}$	Octadecane	589.5	747	1.29	1189
$C_{18}H_{38}O$	1-Octadecanol	616.7	790	1.44	
$C_{19}H_{40}$	Nonadecane	603.1	755	1.16	
$C_{20}H_{42}$	Eicosane	616	768	1.07	
$C_{20}H_{42}O$	1-Eicosanol	582	809	1.30	
$C_{21}H_{44}$	Heneicosane	629.7	778	1.03	
$C_{22}H_{46}$	Docosane	641.8	786	0.98	
$C_{23}H_{48}$	Tricosane	653	790	0.92	
$C_{24}H_{50}$	Tetracosane	664.5	800	0.87	

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