

## Section D Vapor Pressure Correlations Parameters

No.	Formula	Name	CAS #	Eq. #	A/A/Tc	B/B/a	C/C/b	Tc/c	to/d	n/Pc	E	F	Pvpmin, bar	Tmin, K	Pvpmax bar	Tmax, K
1	Ar	argon	7440-37-1	1	3.74141	304.2270	267.320						0.60	82.59	2	94.26
2	Br <sub>2</sub>	bromine	7726-95-6	1	4.00270	1119.680	221.380						0.06	266.00	2	354.25
3	BrD	deuterium bromide	13536-59-9	1	3.28728	505.680	220.600						0.30	185.20	2	221.89
4	BrF <sub>3</sub>	bromine trifluoride	7787-71-5	1	4.85464	1673.950	219.480						0.02	309.09	2	421.28
5	BrF <sub>5</sub>	bromine pentafluoride	7789-30-2	1	4.39858	1219.280	236.400						0.02	236.80	2	334.31
6	BrH	hydrogen bromide	10035-10-6	1	3.41243	540.8200	225.440						0.30	185.10	2	221.53
7	CBrClF <sub>2</sub>	bromochlorodifluoromethane	353-59-3	1	3.95850	933.0400	240.000						0.02	198.00	2	288.26
				2	3.95850	933.0400	240.000	426.90	3	2.26960	-54.789	3324.10	2	288.15	37.06	418.15
8	CBrF <sub>3</sub>	bromotrifluoromethane	75-63-8	1	3.89640	731.3100	245.700						0.02	158.10	2	230.85
				2	3.89640	731.3100	245.700	340.15	-53	2.39700	4.095	941.51	2.2	233.15	34.50	333.15
9	CBr <sub>2</sub> F <sub>2</sub>	dibromodifluoromethane	75-61-6	1	4.18780	1127.430	246.800						0.02	217.80	2	316.42
10	CClF <sub>3</sub>	chlorotrifluoromethane	75-72-9	1	3.90353	654.6560	249.390						0.02	140.61	2	205.48
				2	3.90353	654.6560	249.390	301.84	-76	2.46214	62.986	-2130.8	2.26	208.15	28.39	288.15
11	CCl <sub>2</sub> F <sub>2</sub>	dichlorodifluoromethane (R-12)	75-71-8	1	4.01171	868.0760	246.390						0.02	178.77	2	260.70
				2	4.01171	868.0760	246.390	385.10	-23	3.27101	104.141	-3216.3	2.19	263.15	39.92	383.15
12	CCl <sub>3</sub> F	trichlorofluoromethane (R-11)	75-69-4	1	4.00905	1043.313	236.950						0.02	218.98	2	317.57
				2	4.00905	1043.313	236.950	471.10	40	2.40860	75.083	-1375.6	2.04	318.15	36.89	458.15
13	CCl <sub>4</sub>	tetrachloromethane	56-23-5	1	4.10445	1265.632	232.148						0.02	259.00	2	373.76
14	CF <sub>4</sub>	tetrafluoromethane	75-73-0	1	3.95894	510.5950	257.200						0.02	106.20	2	155.54
				2	3.95894	510.5950	257.200	227.51	-120	2.41377	-93.740	7425.90	2.33	158.15	28.37	218.15
15	CHBrF <sub>2</sub>	bromodifluoromethane	1511-62-2	1	3.40030	640.3200	204.100						0.02	194.50	2	275.65
				2	3.40030	640.3200	204.130	412.00	-9	0.98620	189.780	-6582.6	1.88	273.15	44.70	403.15
16	CHClF <sub>2</sub>	chlorodifluoromethane (R-22)	75-45-6	1	4.13253	835.4620	243.460						0.02	173.13	2	247.74
				2	4.13253	836.4620	243.460	369.28	-30	2.76007	37.609	-369.26	2.01	248.15	48.82	368.15
17	CHCl <sub>2</sub> F	dichlorofluoromethane	75-43-4	1	4.02473	959.9340	230.030						0.02	210.83	2	300.91
				2	4.02473	959.9340	230.030	451.52	12	2.55869	9.610	574.28	2.15	303.15	45.58	443.15
18	CHCl <sub>3</sub>	trichloromethane	67-66-3	1	3.96288	1106.904	218.552						0.02	250.10	2	356.89
19	CHF <sub>3</sub>	trifluoromethane (R-23)	75-46-7	1	4.22140	707.3960	249.840						0.02	142.79	2	203.75
				2	4.22140	707.3960	249.840	298.97	-70	2.79148	70.243	2833.00	2.48	208.15	36.91	288.15
20	CH <sub>2</sub> Cl <sub>2</sub>	dichloromethane	75-09-2	1	4.07622	1070.070	223.240						0.02	235.20	2	333.36
21	CH <sub>2</sub> F <sub>2</sub>	difluoromethane	75-10-5	1	4.29712	833.1370	245.860						0.02	166.23	2	235.78
				2	4.29712	833.1370	245.860	351.36	-40	2.48212	61.006	-747.43	2.22	238.15	43.87	338.15
22	CH <sub>2</sub> O <sub>2</sub>	methanoic acid (formic acid)	64-18-6	3	588.00	-7.24917	0.44255	-0.35558	-0.96906	58.07					58.07	588.00
23	CH <sub>3</sub> Cl	chloromethane	74-87-3	1	4.16533	920.8600	245.580						0.02	184.60	2	265.87
24	CH <sub>3</sub> F	fluoromethane	593-53-3	1	4.19421	734.2220	253.570						0.02	144.17	2	208.17
				2	4.19421	734.2220	253.570	317.36	-73	2.60926	57.676	-1868.2	2.52	213.15	53.67	313.15
26	CH <sub>4</sub>	methane	74-82-8	1	3.76870	395.7440	266.681						0.15	92.64	2	120.59
				3	190.551	-6.02242	1.26652	-0.5707	-1.366	45.992					45.99	190.55

# Section D Vapor Pressure Correlations Parameters (Continued)

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27	CH <sub>4</sub> O	methanol	67-56-1	1	5.20277	1580.080	239.500						0.02	262.59	2	356.00
28	CH <sub>3</sub> S	methanethiol (methyl mercaptan)	74-93-1	3	512.64	-8.63571	1.17982	-2.4790	-1.0240	80.92					80.92	512.64
29	CH <sub>3</sub> N	methanamine (methyl amine)	74-89-5	1	4.15653	1015.547	238.706						0.02	207.80	2	297.85
30	CO	carbon monoxide	630-08-0	1	4.54420	1050.660	237.830	430.00	0	2.13900	-151.85	7356.00	0.02	203.61	2	282.93
32	C <sub>2</sub> Br <sub>2</sub> ClF <sub>3</sub>	1,2-dibromo-2-chloro-1,1,2-trifluoroethane	354-51-8	2	4.21300	899.0300	220.000						2.44	288.15	65.98	423.15
33	C <sub>2</sub> ClF <sub>3</sub>	1-chloro-1,1,2,2,2-pentafluoroethane	76-15-3	1	3.81912	291.7430	267.996						0.20	69.73	2	88.08
34	C <sub>2</sub> Cl <sub>2</sub> F <sub>4</sub>	1,1-dichloro-1,1,2,2,2-tetrafluoroethane	374-07-2	1	3.84523	1166.348	209.870						0.02	272.65	2	392.37
35	C <sub>2</sub> Cl <sub>2</sub> F <sub>4</sub>	1,2-dichloro-1,1,2,2-tetrafluoroethane	76-14-2	2	3.93652	795.2120	241.370	353.10	-33	2.47050	82.646	-1205.4	2.21	253.15	31.29	353.10
36	C <sub>2</sub> Cl <sub>3</sub> F <sub>3</sub>	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	1	3.83243	875.9380	225.460	418.70	10	2.12840	699.960	-66758	0.02	206.04	2	295.73
38	C <sub>2</sub> F <sub>6</sub>	hexafluoroethane	76-16-4	2	3.93549	930.7340	233.410	418.90	12	4.45933	849.560	-57942	2.17	298.15	31.95	418.15
39	C <sub>2</sub> HBrClF <sub>3</sub>	1-bromo-1-chloro-2,2,2-trifluoroethane	151-67-7	1	4.00134	1107.71	229.640						0.02	204.93	2	295.83
40	C <sub>2</sub> HBrClF <sub>3</sub>	1-bromo-2-chloro-1,1,2-trifluoroethane	354-06-3	2	4.00134	1107.719	229.640	487.40	55	2.89655	69.650	-2236.1	2.16	298.15	32.02	418.15
41	C <sub>2</sub> HClF <sub>4</sub>	1-chloro-1,1,2,2-tetrafluoroethane	354-25-6	1	3.68388	572.7330	233.650	293.04	-73	1.89050	156.827	-7370.8	0.02	237.83	2	342.87
42	C <sub>2</sub> HClF <sub>4</sub>	1-chloro-1,2,2,2-tetrafluoroethane	2837-89-0	2	3.68388	572.7330	233.650						2.02	343.15	31.79	483.15
43	C <sub>2</sub> HCl <sub>2</sub> F <sub>3</sub>	1,1-dichloro-2,2,2-trifluoroethane (R-123)	306-83-2	1	4.20682	1199.262	235.290						0.30	175.65	2	208.80
45	C <sub>2</sub> HF <sub>5</sub>	pentafluoroethane	354-33-6	2	3.98581	872.8360	231.260	395.85	-5	2.05345	4.517	-583.96	2.44	213.15	21.02	278.15
47	C <sub>2</sub> H <sub>2</sub>	ethyne (acetylene)	74-86-2	1	4.21161	1132.447	241.590	456.83	35	4.59524	179.953	-6961.2	0.02	240.92	2	344.91
49	C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>	1,1,1,2-tetrafluoroethane (R-134a)	811-97-2	2	4.25710	1006.840	248.600						0.02	246.15	2	348.14
50	C <sub>3</sub> H <sub>2</sub> F <sub>4</sub>	1,1,2,2-tetrafluoroethane (R-134)	359-35-3	1	4.25710	1006.840	248.560	399.87	-10	2.77560	-538.004	30952.0	1.93	278.15	36.33	398.15
				2	4.0536	900.49	234.389						0.14	222.00	2.59	286.00
				2	3.98581	872.8360	231.260	395.85	-5	2.05345	4.517	-583.96	2.34	283.15	29.00	383.15
				1	4.21161	1132.447	241.590						0.02	223.16	2	321.15
				2	4.21161	1132.447	241.590	456.83	35	4.59524	179.953	-6961.2	2.13	323.15	29.46	443.15
				2	4.13392	800.8690	242.090	339.17	-40	2.91989	164.960	-6993.2	0.02	168.36	2	240.01
				2	4.13392	800.8700	242.090						2.79	248.15	31.73	333.15
				1	3.67374	528.6700	228.790						1.20	191.44	2	201.11
				3	308.35	-6.87886	1.30164	-1.22474	-3.59556	61.39					61.39	308.35
				1	4.11874	850.8810	232.990						0.02	186.41	2	263.04
				2	4.11874	850.8810	232.990	374.26	-20	2.39793	31.124	2784.80	2.44	268.15	39.69	373.15
				1	4.12013	885.5970	235.900						0.02	190.05	2	269.75
				2	4.12013	885.5970	235.290	391.74	-10	1.97108	-196.89	17336.0	2.27	273.15	35.70	378.15

51	C <sub>2</sub> H <sub>3</sub> ClF <sub>2</sub>	1-chloro-1,1-difluoroethane	75-68-3	1	4.05053	928.6450	238.690						0.02	195.98	2	282.13
				2	4.05053	928.6450	238.690	410.30	0	2.94747	115.850	-3920.5	2.07	283.15	35.82	403.15
52	C <sub>2</sub> H <sub>3</sub> Cl <sub>2</sub> F	1,1-dichloro-1-fluoroethane (R-141b)	1717-00-6	1	4.03117	1062.074	231.799						0.02	226.71	2	326.09
				2	4.03117	1062.074	231.790	477.35	40	4.49103	752.781	-43010	2.46	333.15	40.56	473.15
53	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	1,1,1-trifluoroethane (R-143a)	420-46-2	1	4.06800	801.3400	244.550						0.02	167.55	2	241.33
				2	4.06800	801.3400	244.550	346.30	-40	2.50293	63.440	-981.56	2.15	243.15	35.53	343.15
54	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	1,1,2-trifluoroethane (R-143)	430-66-0	1	4.13152	928.1770	221.270						0.02	211.07	2	294.19
				2	4.13152	928.1770	221.270	429.80	10	2.13500	8.924	-587.53	2.31	298.15	43.09	418.15
55	C <sub>2</sub> H <sub>4</sub>	ethene (ethylene)	74-85-1	1	3.91382	596.5260	256.370						0.02	123.06	2	181.90
				2	3.91382	596.5300	256.370	282.34	-99	2.79132	9.717	52.77	2.71	188.15	40.99	273.15
57	C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	1,1-dichloroethane	75-34-3	1	4.16780	1201.050	231.270						0.02	246.60	2	352.49
58	C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	1,2-dichloroethane	107-06-2	1	4.28356	1341.370	230.050						0.02	267.40	2	379.91
59	C <sub>2</sub> H <sub>4</sub> F <sub>2</sub>	1,1-difluoroethane (R-152a)	75-37-6	1	3.75231	735.1600	220.270						0.02	187.74	2	265.89
				2	3.75231	735.1600	220.270	386.41	-18	1.38810	72.728	-1421.1	2.19	268.15	45.16	386.74
60	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	ethanoic acid (acetic acid)	64-19-7	1	4.54456	1555.120	224.650						0.02	297.58	2	414.97
				3	592.71	-8.29430	0.97928	-0.21745	-5.72367	57.86					57.86	592.71
61	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	methyl methanoate (methyl formate)	107-31-3	1	4.29529	1125.200	230.560						0.02	230.30	2	324.29
62	C <sub>2</sub> H <sub>4</sub> Br	bromoethane	74-96-4	1	4.04485	1090.811	231.710						0.02	231.35	2	332.80
63	C <sub>2</sub> H <sub>5</sub> C	chloroethane	75-00-3	1	4.09088	1020.630	237.570						0.02	211.86	2	304.89
64	C <sub>2</sub> H <sub>5</sub> F	fluoroethane	353-36-6	1	4.21998	897.3680	250.660						0.02	174.10	2	251.47
				2	4.21998	897.3680	250.660	375.28	-20	2.97505	352.246	-24619	2.58	258.15	50.27	375.28
65	C <sub>2</sub> H <sub>6</sub>	ethane	74-84-0	1	3.95405	663.720	256.681						0.02	133.80	2	198.16
				3	305.33	-6.47500	1.41071	-1.1440	-1.8590	48.71					48.71	305.33
66	C <sub>2</sub> H <sub>6</sub> O	ethanol	64-17-5	1	5.33675	1648.220	230.918						0.02	276.50	2	369.54
				3	513.92	-8.68587	1.17831	-4.8762	1.5880	61.32					61.32	513.92
67	C <sub>2</sub> H <sub>6</sub> O	dimethyl ether	115-10-6	1	4.44136	1025.560	256.050						0.02	184.10	2	264.80
68	C <sub>2</sub> H <sub>5</sub> S	ethanethiol (ethyl mercaptan)	75-08-1	1	4.07696	1084.531	231.385						0.02	229.50	2	328.99
69	C <sub>2</sub> H <sub>6</sub> S	2-thiapropene (dimethylsulfide)	75-18-3	1	4.07369	1090.755	230.799						0.02	231.30	2	331.47
70	C <sub>2</sub> H <sub>7</sub> N	ethanamine (ethyl amine)	75-04-7	1	4.43400	1102.880	232.450						0.02	220.53	2	307.55
				2	3.88560	840.4800	200.000	456.35	23	2.09210	90.941	-3179.0	2.04	308.15	45.83	443.15
74	C <sub>3</sub> H <sub>2</sub> ClF <sub>3</sub> O	2-chloro-1,1,2-trifluoroethyl difluoromethyl ether (enflurane)	13838-16-9	3	475.03	-8.32915	2.37044	-3.75113	-4.6033	29.80					29.80	475.03
75	C <sub>3</sub> H <sub>2</sub> ClF <sub>3</sub> O	1-chloro-2,2,2-trifluoroethyl difluoromethyl ether (isoflurane)	26675-46-7	3	467.80	-8.08994	2.07729	-3.32	-4.2641	30.46					30.46	467.80
78	C <sub>3</sub> H <sub>3</sub> F <sub>5</sub>	1,1,1,2,2-pentafluoropropane (R-245cb)	1814-88-6	3	380.38	-7.67509	2.38205	-3.6522	0	31.483			0.74	248.00	9.95	326.00
83	C <sub>3</sub> H <sub>4</sub>	1-propyne (methyl acetylene)	74-99-7	1	4.24555	935.0900	243.580						0.02	186.87	2	266.63
84	C <sub>3</sub> H <sub>4</sub>	1,2-propadiene	463-49-0	1	2.83860	458.0600	196.070						0.02	178.00	2	257.00
				2	3.67520	734.5680	234.740	393.00	-20	1.13600	-264.98	16325.0	2.16	258.15	54.60	423.15
85	C <sub>3</sub> H <sub>6</sub>	propene (propylene)	115-07-1	1	3.95606	789.6240	247.580						0.02	165.20	2	241.61
				2	3.95606	789.6200	247.580	365.57	-41	2.67417	22.130	-199.34	1.74	238.15	44.67	363.15
86	C <sub>3</sub> H <sub>6</sub>	cyclopropane	75-19-4	1	4.03084	866.1500	248.000						0.02	176.30	2	257.37
				2	4.03084	866.1500	248.000	398.25	-26	2.66720	-2.153	567.17	2.058	258.15	55.75	398.25
87	C <sub>3</sub> H <sub>6</sub> Cl <sub>2</sub>	1,2-dichloropropane	78-87-5	3	578.00	-7.70557	2.62197	-2.74104	-3.08934	46.5			0.05333	293.67	2.7	406.5
88	C <sub>3</sub> H <sub>6</sub> O	2-propen-1-ol (allyl alcohol)	107-18-6	1	8.78252	4510.213	416.797						0.03	294.00	1	370.23

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89	C <sub>3</sub> H <sub>6</sub> O	propanone (acetone)	67-64-1	1	4.21840	1197.010	228.060						0.02	247.38	2	350.65
				3	508.10	-7.55098	1.60784	-1.9944	-3.2002	47.02					47.02	508.10
90	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	propanoic acid	79-09-4	1	4.75466	1662.582	209.046						0.02	321.72	2	437.41
				3	604.00	-8.14882	0.79590	-3.1836	-3.81338	45.30					45.30	604.00
91	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	methyl ethanoate (methyl acetate)	79-20-9	1	4.18621	1156.430	219.690						0.02	249.90	2	351.11
92	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	ethyl methanoate (ethyl formate)	109-94-4	1	4.07899	1101.000	215.980						0.02	247.80	2	348.60
93	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	dimethylcarbonate	616-38-6	3	557.00	-8.24279	3.25566	-4.2825	-2.1194	48			0.13322	310.56	2.7	397.5
94	C <sub>3</sub> H <sub>7</sub> Cl	1-chloropropane	540-54-5	1	4.07655	1125.009	229.860						0.02	238.09	2	341.29
95	C <sub>3</sub> H <sub>8</sub>	propane	74-98-6	1	3.92828	803.9970	247.040						0.02	168.90	2	247.76
				3	369.85	-6.76368	1.55481	-1.5872	-2.024	42.47					42.47	369.85
96	C <sub>3</sub> H <sub>8</sub> O	1-propanol	71-23-8	1	4.99991	1512.940	205.807						0.02	293.19	2	389.32
				3	536.78	-8.53706	1.96214	-7.6918	2.9450	51.68					51.68	536.78
97	C <sub>3</sub> H <sub>8</sub> O	2-propanol	67-63-0	1	5.24268	1580.920	219.610						0.02	281.28	2	373.46
				3	508.30	-8.73656	2.16240	-8.70785	4.77927	47.63					47.63	508.30
98	C <sub>3</sub> H <sub>6</sub> O	methyl ethyl ether	540-67-0	1	3.00683	504.4900	160.750						0.06	232.00	2	298.85
99	C <sub>3</sub> H <sub>8</sub> S	2-thiabutane (methyl ethyl sulfide)	624-89-5	1	4.06339	1182.562	224.784						0.02	253.50	2	362.68
100	C <sub>3</sub> H <sub>9</sub> N	1-propanamine (propyl amine)	107-10-8	1	4.34440	1186.390	226.210						0.02	258.31	2	340.36
				2	3.50110	759.5000	170.000	497.00	55	2.13340	1429.00	-80295	1.86	338.15	33.44	473.15
101	C <sub>3</sub> H <sub>9</sub> N	2-propanamine (methyl ethyl amine)	75-31-0	1	4.05530	1005.490	216.510						0.02	231.38	2	324.47
106	C <sub>4</sub> H <sub>4</sub> O	furan	110-00-9	1	4.11990	1070.200	830						0.02	228.20	2	324.56
107	C <sub>6</sub> H <sub>4</sub> S	thiophene	110-02-1	1	4.08416	1246.020	221.350						0.02	267.20	2	381.16
109	C <sub>4</sub> H <sub>6</sub>	1-butene	107-00-6	1	4.16676	1014.450	235.740						0.02	210.35	2	299.83
110	C <sub>4</sub> H <sub>6</sub>	1,3-butadiene	106-99-0	1	3.96640	927.2100	238.630						0.02	198.00	2	287.49
				2	3.96640	927.2100	238.630	425.00	2	2.51460	23.653	1970.80	2.04	348.15	41.90	343.15
111	C <sub>4</sub> H <sub>6</sub> O <sub>3</sub>	acetic anhydride	108-24-7	3	606.00	-8.35130	1.89050	-2.8357	-5.1156	40.00			0.02	210.20	2	305.67
112	C <sub>4</sub> H <sub>8</sub>	cyclobutane	287-23-0	1	4.04436	1025.500	241.430						2.161	308.15	49.90	460.00
				2	4.04436	1025.500	241.430	460.00	20	2.17400	0.000	0.00	0.02	196.41	2	285.88
113	C <sub>4</sub> H <sub>8</sub>	1-butene	106-98-9	1	3.91780	908.800	238.540						2.16	288.15	36.18	413.15
				2	3.91780	908.800	238.540	419.95	1	2.10580	-66.740	5100.70	0.02	201.83	2	293.29
114	C <sub>4</sub> H <sub>8</sub>	trans-2-butene	624-64-6	1	4.00827	967.5000	240.840						1.69	288.15	30.82	413.15
				2	4.00827	967.5000	240.840	428.63	8	2.71670	49.772	-1061.2	0.02	204.73	2	296.11
115	C <sub>4</sub> H <sub>8</sub>	cis-2-butene	590-18-1	1	4.00958	967.3200	237.873						2.14	298.15	34.81	423.15
				2	4.00958	967.3200	237.870	435.58	11	2.60300	47.148	-1082.1	0.02	195.77	2	285.41
116	C <sub>4</sub> H <sub>8</sub>	2-methylpropene	115-11-7	1	3.80956	866.2500	234.640						2.2	288.15	37.00	413.15
				2	3.80956	866.2500	234.640	417.90	0	1.59900	-150.96	9633.00	0.02	265.62	2	375.66
117	C <sub>4</sub> H <sub>8</sub> O	butanone (methyl ethyl ketone)	78-93-3	1	4.13860	1232.630	218.690						2.14	378.15	39.69	533.15
				2	4.13860	1232.630	218.690	536.80	87	2.31490	-4.900	3279.00	0.02	253.50	2	361.71
118	C <sub>4</sub> H <sub>6</sub> O	tetrahydrofuran	109-99-9	1	4.12142	1203.110	226.355						0.02	253.50	2	361.71
119	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	butanoic acid	107-92-6	1	4.82340	1731.708	195.955						0.02	342.70	2	460.12
				3	624.00	-8.42953	1.34333	-5.37332	-2.74438	40.30					40.30	624.00

120	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	2-methylpropanoic acid	79-31-2	1	3.71153	1097.830	141.740						0.02	334.00	2	453.31
				3	605.00	-8.53258	1.30605	-5.2242	-2.05813	37.00					37.00	605.00
123	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	methyl propanoate	554-12-1	1	3.98745	1129.570	204.240						0.02	267.50	2	375.32
124	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	ethyl ethanoate (ethyl acetate)	141-78-6	1	4.13361	1195.130	212.470						0.02	265.50	2	372.51
125	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	propyl methanoate (propyl formate)	110-74-7	1	3.97008	1132.300	204.080						0.02	268.90	2	377.68
126	C <sub>4</sub> H <sub>8</sub> Cl	2-chlorobutane	78-86-4	1	4.12220	1245.200	234.400						0.02	252.60	2	364.62
127	C <sub>4</sub> H <sub>10</sub>	butane	106-97-8	1	3.93266	935.7730	238.789						0.02	200.50	2	292.03
				3	425.25	-7.01763	1.67770	-1.9739	-2.1720	37.92					37.92	425.25
128	C <sub>4</sub> H <sub>10</sub>	2-methylpropane (isobutane)	75-28-5	1	4.00272	947.5400	248.870						0.02	190.40	2	280.25
				2	4.00272	947.5400	248.870	408.14	-5	2.67050	-19.640	2792.00	1.863	278.15	19.87	373.15
129	C <sub>4</sub> H <sub>10</sub> N <sub>2</sub>	piperazine	110-85-0	3	661.00	-8.10664	3.36281	-4.52962	-3.8278	58			0.90976	418.00	2.7	460.48
130	C <sub>4</sub> H <sub>10</sub> O	1-butanol	71-36-3	1	4.64930	1395.140	182.739						0.02	310.18	2	411.26
				3	563.05	-8.40615	2.23010	-8.2486	-0.7110	44.24					44.24	563.05
131	C <sub>4</sub> H <sub>10</sub> O	2-methyl-1-propanol (isobutanol)	78-83-1	1	4.34504	1190.380	166.670						0.02	303.40	2	400.84
				3	547.78	-8.31460	2.13678	-8.4832	-0.79774	43.04					43.04	547.78
132	C <sub>4</sub> H <sub>10</sub> O	2-methyl-2-propanol (tert-butanol)	75-65-0	1	4.44484	1154.480	177.650						0.02	283.00	2	374.10
				3	506.20	-8.47927	2.47845	-9.27918	-2.53992	39.73					39.73	506.20
133	C <sub>4</sub> H <sub>10</sub> O	2-butanol (sec-butanol)	78-92-2	3	536.01	-8.09820	1.64406	-7.4900	-5.27355	41.98					41.98	536.01
134	C <sub>4</sub> H <sub>10</sub> O	diethyl ether	60-29-7	1	4.10962	1090.640	231.200						0.02	229.71	2	328.31
				3	466.74	-7.43301	1.78847	-2.4793	-3.2811	36.50					36.50	466.74
135	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>	1,2-dimethoxyethane	110-71-4	3	537.00	-8.0898	2.53555	-3.4809	-3.65036	39.60			0.13332	305.86	2.7	392.29
136	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>	1,2-butanediol	26171-83-5	3	680.00	-9.98662	5.09869	-9.38593	-2.85378	52.10			0.02	372.55	2.7	506.40
137	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>	1,3-Butanediol	107-88-0	3	676.00	-9.29011	3.03108	-9.27334	-1.05346	40.20			0.006902	364.98	2.32	512.05
138	C <sub>4</sub> H <sub>10</sub> S	3-thiapentane (diethyl sulfide)	352-93-2	1	4.05326	1257.833	218.662						0.02	273.10	2	389.71
139	C <sub>4</sub> H <sub>11</sub> N	1-butanamine (butyl amine)	109-73-9	1	4.30770	1276.870	220.520						0.02	265.20	2	371.32
				2	3.90120	1041.310	191.000	526.80	84	2.03520	1398.00	-126749.	1.82	368.15	30.36	503.15
141	C <sub>4</sub> H <sub>11</sub> N	2-methyl-1-propanamine (isobutyl amine)	78-81-9	1	3.90070	1055.560	203.350						0.02	258.31	2	363.04
143	C <sub>5</sub> H <sub>5</sub> N	pyridine	110-86-1	1	4.16749	1373.026	214.690						0.02	292.51	2	413.57
				2	4.16750	1373.030	214.690	620.00	127	2.71070	-45.881	3987.76	1.98	413.15	52.26	613.15
144	C <sub>5</sub> H <sub>6</sub> O	2-methylfuran	534-22-5	1	3.70410	991.2000	203.290						0.02	253.30	2	361.13
145	C <sub>5</sub> H <sub>8</sub>	1-pentyne	627-19-0	1	4.00260	1068.100	227.000						0.02	233.00	2	334.00
147	C <sub>5</sub> H <sub>8</sub> O	cyclopentanone	120-92-3	3	624.50	-7.36589	1.54092	-2.28143	-3.0514	46.00					46.00	624.50
148	C <sub>5</sub> H <sub>10</sub>	cyclopentane	287-92-3	1	4.06783	1152.574	234.510						0.02	238.50	2	344.62
149	C <sub>5</sub> H <sub>10</sub>	1-pentene	109-67-1	1	3.96914	1044.010	233.450						0.02	223.89	2	324.32
				2	3.96914	1044.010	233.450	464.78	38	2.57510	122.880	-4873.4	1.66	318.15	25.17	443.15
150	C <sub>5</sub> H <sub>10</sub>	cis-2-pentene	627-20-3	1	3.96798	1052.440	228.693						0.02	229.40	2	331.46
151	C <sub>5</sub> H <sub>10</sub>	2-methyl-2-butene	513-35-9	1	4.09149	1124.330	236.630						0.02	230.69	2	333.14
152	C <sub>5</sub> H <sub>10</sub>	3-methyl-1-butene	563-45-1	1	3.94945	1012.370	236.647						0.02	215.73	2	221.50
				2	3.94945	1012.370	236.650	453.15	28	2.72220	95.875	-3435.8	1.67	308.15	35.50	453.15
153	C <sub>5</sub> H <sub>10</sub> O	cyclopentanol	96-41-3	3	619.50	-7.40984	1.71852	-6.8471	-4.36177	49.00					49.00	619.50
154	C <sub>5</sub> H <sub>10</sub> O	2-pentanone (methyl propyl ketone)	107-87-9	1	4.15140	1316.730	215.380						0.02	282.84	2	399.74
				2	4.15140	1316.730	215.380	561.10	120	2.06640	-348.80	52963.0	2.18	403.15	36.08	558.15
155	C <sub>5</sub> H <sub>10</sub> O	3-pentanone (diethyl ketone)	96-22-0	1	4.42708	1481.170	233.010						0.02	281.90	2	399.12

# Section D Vapor Pressure Correlations Parameters (Continued)

No.	Formula	Name	CAS #	Eq. #	A/A/Tc	B/B/a	C/C/b	Tc/c	to/d	n/Pc	E	F	Pvpmin, bar	Tmin, K	Pvpmax bar	Tmax, K
156	C <sub>5</sub> H <sub>10</sub> O	3-methyl-2-butanone (methyl isopropyl ketone)	563-80-4	1	3.46583	955.4300	181.730						0.02	276.40	2	393.31
157	C <sub>5</sub> H <sub>10</sub> O	2-methyltetrahydrofuran	96-47-9	1	3.95009	1175.510	217.802						0.02	263.44	2	377.49
158	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	pentanoic acid	109-52-4	1	4.16920	1405.800	151.800						0.02	361.00	2	484.78
				3	643.00	-8.76701	1.54990	-6.19961	-4.21927	35.80					35.80	643.00
159	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	3-methylbutanoic acid	503-74-2	1	4.58470	1676.300	189.500						0.02	350.00	2	474.97
				3	629.00	-8.67381	1.62939	-6.51756	-2.08757	34.00					34.00	629.00
160	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	methyl butanoate	623-42-7	1	4.10641	1271.060	207.210						0.02	284.90	2	399.96
				2	4.10641	1271.060	207.210	554.45	120	2.46460	543.870	-34817.6	2.17	403.15	31.80	548.15
161	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	ethyl propanoate	105-37-3	1	4.14400	1274.700	209.000						0.02	282.40	2	395.85
163	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	propyl ethanoate (propyl acetate)	109-60-4	1	4.05548	1233.46	203.080						0.02	284.40	2	398.60
164	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	2-methylpropyl methanoate (isobutyl formate)	542-55-2	1	3.98450	1195.900	202.500						0.03	288.00	2	395.32
165	C <sub>5</sub> H <sub>11</sub> Cl	1-chloropentane	543-59-9	1	3.93641	1271.160	215.000						0.02	283.72	2	407.81
166	C <sub>5</sub> H <sub>12</sub>	pentane	109-66-0	1	3.97786	1064.840	232.014						0.02	228.71	2	330.75
				3	469.80	-7.30698	1.75845	-2.1629	-2.9130	33.75					33.75	469.80
167	C <sub>5</sub> H <sub>12</sub>	2-methylbutane	78-78-4	1	3.92023	1022.880	233.460						0.02	221.72	2	322.32
				2	3.92023	1022.880	233.460	460.43	36	2.14912	-227.07	19674.0	1.766	318.15	15.77	413.15
168	C <sub>5</sub> H <sub>12</sub>	2,2-dimethylpropane (neopentane)	463-82-1	1	3.83916	938.2340	235.249						0.40	259.33	2	303.08
				2	3.83916	938.2340	235.249	433.78	17	2.42328	34.505	580.56	1.7142	298.15	16.28	393.15
169	C <sub>5</sub> H <sub>12</sub> O	1-pentanol	71-41-0	1	4.39646	1336.010	166.320						0.02	326.01	2	433.05
				3	588.15	-8.98005	3.91624	-9.9081	-2.1910	39.09					39.09	588.15
170	C <sub>5</sub> H <sub>12</sub> O	2-pentanol	6032-29-7	1	4.42349	1291.212	173.130						0.008	298.12	0.735	383.34
171	C <sub>5</sub> H <sub>12</sub> O	2-methyl-1-butanol	137-32-6	1	4.48266	1360.367	173.220						0.004	298.12	0.711	393.70
172	C <sub>5</sub> H <sub>12</sub> O	2-methyl-2-butanol	75-85-4	1	3.64420	863.4000	135.300						0.02	299.00	2	396.11
173	C <sub>5</sub> H <sub>12</sub> O	3-methyl-1-butanol	123-51-3	1	4.07851	1128.190	146.470						0.02	321.90	2	425.34
175	C <sub>5</sub> H <sub>12</sub> O	ethyl propyl ether	628-32-0	1	3.83648	1052.470	210.880						0.02	252.40	2	359.96
176	C <sub>5</sub> H <sub>12</sub> S	3-methyl-1-butanethiol (isopentyl mercaptan)	541-31-1	1	4.03981	1342.509	214.446						0.02	292.60	2	417.78
177	C <sub>6</sub> ClF <sub>5</sub>	chloropentafluorobenzene	344-07-0	3	570.81	-8.10119	1.95485	-2.79778	-4.1940	32.37					32.37	570.81
178	C <sub>6</sub> F <sub>6</sub>	hexafluorobenzene	392-56-3	3	516.73	-8.04104	1.93510	-2.9390	-4.5480	32.75					32.75	516.73
184	C <sub>6</sub> HF <sub>5</sub>	pentafluorobenzene	363-72-4	3	530.97	-7.86799	1.71659	-2.53582	-4.59937	35.37					35.37	530.97
185	C <sub>6</sub> H <sub>2</sub> F <sub>4</sub>	1,2,4,5-tetrafluorobenzene	327-54-8	3	543.35	-7.85347	1.94620	-2.8652	-3.80563	37.99					37.99	543.35
186	C <sub>6</sub> H <sub>5</sub> Cl	chlorobenzene	108-90-7	1	4.02012	1378.790	211.700						0.02	302.50	2	432.18
				2	4.02012	1378.790	211.700	632.43	137	2.20300	18.280	674.77	1.82	428.15	44.07	630.15
187	C <sub>6</sub> H <sub>6</sub>	benzene	71-43-2	1	3.98523	1184.240	217.572						0.05	279.64	2	377.06
				3	562.16	-7.01433	1.55256	-1.8479	-3.7130	48.98					48.98	562.16
188	C <sub>6</sub> H <sub>6</sub> O	phenol	108-95-2	1	4.26960	1523.420	175.400						0.02	353.00	2	481.62

189	C <sub>6</sub> H <sub>7</sub> N	benzeneamine (aniline)	62-53-3	1	4.40870	1692.770	200.440						0.02	349.86	2	484.81
				2	4.40870	1692.770	200.440	699.00	197	4.90600	452.800	-239100	2.2	488.15	40.30	673.15
190	C <sub>8</sub> H <sub>9</sub> N	2-methylpyridine (2-picoline)	109-06-8	1	4.15550	1415.410	211.730						0.02	303.19	2	428.63
191	C <sub>8</sub> H <sub>9</sub> N	3-methylpyridine (3-picoline)	108-99-6	1	4.18930	1492.130	212.530						0.02	314.03	2	444.37
192	C <sub>8</sub> H <sub>9</sub> N	4-methylpyridine (4-picoline)	108-89-4	1	4.16750	1481.571					210.650		0.02	315.05	2	445.68
194	C <sub>6</sub> H <sub>10</sub>	Cyclohexene	110-83-8	3	560.40	-9.08102	5.75488	-5.17505	-1.0489	49.05			0.06417	285.39	1.04	356.99
195	C <sub>6</sub> H <sub>10</sub> O	cyclohexanone	108-94-1	3	653.00	-7.49380	1.63094	-2.12212	-3.91327	40.00					40.00	653.00
196	C <sub>6</sub> H <sub>10</sub> O	4-methyl-3-penten-2-one (mesityloxide)	141-79-7	3	605.00	-8.68118	3.99203	-4.81662	-1.73164	40			0.02	303.67	1.985	428.56
197	C <sub>6</sub> H <sub>12</sub>	cyclohexane	110-82-7	1	3.93002	1182.774	220.618						0.06	282.11	2	378.46
				2	3.93002	1182.770	220.618	553.50	25	3.40407	10.048	-126.96	1.9871	378.15	40.48	553.15
198	C <sub>6</sub> H <sub>12</sub>	methylcyclopentane	96-37-7	1	4.18199	1295.543	238.390						0.02	255.06	2	368.58
				2	4.18199	1295.543	238.390	532.79	80	2.70504	-741.05	43373.0	2.26	373.15	37.50	532.79
199	C <sub>6</sub> H <sub>12</sub>	1-hexene	592-41-6	1	3.98260	1148.620	225.340						0.02	249.98	2	359.80
				2	3.98260	1148.620	225.340	504.03	72	2.45920	106.260	-3773.6	1.91	358.15	26.86	493.15
200	C <sub>8</sub> H <sub>12</sub>	4-methylpent-1-ene	691-37-2	1	3.96019	1121.302	229.687						0.02	241.60	2	349.90
201	C <sub>6</sub> H <sub>12</sub> O	cyclohexanol	108-93-0	3	650.00	-7.12838	1.40189	-5.60756	-9.57158	42.60					42.60	650.00
202	C <sub>6</sub> H <sub>12</sub> O	2-hexanone (methyl butyl ketone)	591-78-6	1	4.15330	1395.800	208.980						0.02	302.68	2	426.50
203	C <sub>6</sub> H <sub>12</sub> O	3-hexanone (ethyl propyl ketone)	589-38-8	1	4.11658	1359.880	207.300						0.02	299.60	2	422.25
204	C <sub>6</sub> H <sub>12</sub> O	4-methyl-2-pentanone (methyl isobutyl ketone)	108-10-1	1	3.82220	1190.6904	195.450						0.02	293.40	2	415.85
				3	574.60	-7.70040	1.69968	-2.80448	-3.81623	32.70					32.70	574.60
205	C <sub>6</sub> H <sub>12</sub> O	butylvinylether	111-34-2	3	540.50	-8.04744	2.31158	-2.91499	-4.09565	32.00			0.13332	311.89	2.7	403.37
206	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	hexanoic acid	142-62-1	3	662.00	-8.86570	1.95079	-7.80315	-2.85006	32.00					32.00	662.00
208	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	ethyl butanoate	105-54-4	1	3.27456	921.5600	160.380						0.02	298.00	2	422.69
209	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	propyl propanoate	106-36-5	1	4.44890	1545.300	225.300						0.02	299.20	2	420.40
211	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	butyl ethanoate (butyl acetate)	123-86-4	1	4.50000	1596.700	229.300						0.02	301.00	2	424.11
212	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	2-methylpropyl ethanoate (isobutyl acetate)	110-19-0	1	4.35460	1462.400	219.700						0.02	295.00	2	414.22
214	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	3-methylbutyl methanoate (isopentyl formate)	110-45-2	1	4.24880	1439.400	215.100						0.02	300.00	2	422.66
215	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	2-ethoxyethylacetate	111-15-9	3	610.60	-9.64168	4.58179	-6.25993	-4.12066	31.80			0.02	330.00	2.7	468.70
216	C <sub>6</sub> H <sub>14</sub>	hexane	110-54-3	1	4.00139	1170.875	224.317						0.02	254.24	2	365.25
				3	507.90	-7.53998	1.83759	-2.5438	-3.1630	30.35					30.35	507.90
217	C <sub>6</sub> H <sub>14</sub>	2-methylpentane	107-83-5	1	3.98332	1145.800	227.815						0.02	246.90	2	356.50
				2	3.98332	1145.800	227.820	497.50	69	2.27660	0.000	0.00	1.583	348.15	24.60	483.15
218	C <sub>6</sub> H <sub>14</sub>	3-methylpentane	96-14-0	1	3.99283	1162.370	228.286						0.02	249.00	2	359.72
				2	3.99283	1162.370	228.290	504.40	72	5.74154	690.900	-40238.	1.917	358.15	26.42	493.15
219	C <sub>6</sub> H <sub>14</sub>	2,2-dimethylbutane	75-83-2	1	3.89590	1090.160	230.517						0.02	237.40	2	345.89
				2	3.89590	1090.160	230.520	488.70	59	2.17300	0.000	0.00	1.611	338.15	24.71	473.15
220	C <sub>6</sub> H <sub>14</sub>	2,3-dimethylbutane	79-29-8	1	3.93486	1127.400	228.966						0.02	244.20	2	354.43
				2	3.93486	1127.400	228.970	499.90	67	2.51900	332.500	-24950.	1.682	348.15	24.69	483.15
221	C <sub>6</sub> H <sub>14</sub> O	1-hexanol	111-27-3	1	4.18948	1295.590	152.510						0.02	340.80	2	453.83
				3	610.70	-9.49034	5.13288	-10.5817	-5.1540	34.70					34.70	610.70
222	C <sub>6</sub> H <sub>14</sub> O	2-hexanol	626-93-7	1	4.93223	1696.190	204.430						0.02	324.50	2	434.97

# Section D Vapor Pressure Correlations Parameters (Continued)

No.	Formula	Name	CAS #	Eq. #	A/A/Tc	B/B/a	C/C/b	Tc/c	to/d	n/Pc	E	F	Pvpmin, bar	Tmin, K	Pvpmax bar	Tmax, K
223	C <sub>6</sub> H <sub>14</sub> O	3-hexanol	623-37-0	1	6.16250	2662.265	296.620						0.008	298.00	1	411.00
224	C <sub>6</sub> H <sub>14</sub> O	2-methyl-1-pentanol	105-30-6	1	6.19790	2625.143	276.330						0.003	298.00	1	423.00
225	C <sub>6</sub> H <sub>14</sub> O	2-methyl-2-pentanol	590-36-3	1	3.27663	811.0500	126.600						0.02	309.50	2	419.12
227	C <sub>6</sub> H <sub>14</sub> O	4-methyl-1-pentanol	626-89-1	1	4.17605	1273.350	153.560						0.02	336.40	2	448.19
228	C <sub>6</sub> H <sub>14</sub> O	4-methyl-2-pentanol	108-11-2	1	4.66180	1566.760	204.790						0.02	315.00	2	427.65
232	C <sub>7</sub> F <sub>16</sub>	hexadecylfluoroheptane (perfluoroheptane)	335-57-9	3	475.00	-9.18955	3.15138	-5.41934	-4.11174	16.5			0.13335	303.68	2.7	389.70
233	C <sub>7</sub> H <sub>3</sub> F <sub>3</sub>	pentafluorotoluene	771-56-2	3	566.52	-8.08717	1.76131	-2.72838	-4.13797	31.24					31.24	566.52
234	C <sub>7</sub> H <sub>8</sub>	toluene	108-88-3	1	4.05043	1327.62000	217.62500						0.02	286.44	2	409.61
				3	591.80	-7.31600	1.59425	-1.93165	-3.72220	41.06					41.06	591.80
235	C <sub>7</sub> H <sub>8</sub> O	benzyl alcohol	100-51-6	3	715.00	-7.29099	1.17084	-4.7167	-5.5300	43.00					43.00	715.00
236	C <sub>7</sub> H <sub>8</sub> O	2-methylphenol (o-cresol)	95-48-7	1	4.18340	1534.540	176.300						0.02	357.80	2	492.11
				2	4.18340	1534.540	176.300	697.60	200	1.70720	463.530	-36925	2.05	493.15	50.00	697.57
237	C <sub>7</sub> H <sub>8</sub> O	3-methylphenol (m-cresol)	108-39-4	1	4.21530	1556.830	167.600						0.02	368.80	2	503.28
				2	4.21530	1556.830	167.600	705.70	215	2.19340	-549.69	67638.0	1.99	503.15	45.60	705.69
238	C <sub>7</sub> H <sub>8</sub> O	4-methylphenol (p-cresol)	106-44-5	1	4.18050	1525.320	163400						0.02	369.10	2	502.93
				2	4.18050	1525.320	163400	704.50	215	2.10170	65.801	77063	2.01	503.15	51.50	704.49
239	C <sub>7</sub> H <sub>9</sub> N	2,3-dimethylpyridine (2,3 lutidine)	583-61-9	1	4.18570	1536.350	206400						0.02	327.90	2	462.24
240	C <sub>7</sub> H <sub>9</sub> N	2,4-dimethylpyridine (2,4 lutidine)	108-47-4	1	4.20962	1542.940	208.630						0.02	325.65	2	459.28
241	C <sub>7</sub> H <sub>9</sub> N	2,5-dimethylpyridine (2,5 lutidine)	589-93-5	1	4.20857	1541.780	209.850						0.02	324.20	2	457.87
242	C <sub>7</sub> H <sub>9</sub> N	2,6-dimethylpyridine (2,6 lutidine)	108-48-5	1	4.08748	1407.250	201.001						0.02	315.34	2	443.79
243	C <sub>7</sub> H <sub>9</sub> N	3,4-dimethylpyridine (3,4 lutidine)	583-58-4	1	4.18920	1605.140	204.550						0.02	341.10	2	481.43
244	C <sub>7</sub> H <sub>9</sub> N	3,5-dimethylpyridine (3,5 lutidine)	591-22-0	1	4.21290	1595.150	207.240						0.02	335.73	2	473.68
245	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>	Butyl-2-propenoate (Butylacrylate)	141-32-2	3	644.00	-7.59083	1.96932	-3.05837	-4.17604	45.40			0.02	318.51	1.0133	419.77
246	C <sub>7</sub> H <sub>14</sub>	cycloheptane	291-64-5	1	3.96330	1322.21997	215.297						0.02	291.40	2	418.89
				2	3.96330	1322.220	215.297	604.30	129	2.52840	250.300	-13243.	1.5443	408.15	33.70	593.15
247	C <sub>7</sub> H <sub>14</sub>	methylcyclohexane	108-87-2	1	3.98232	1290.968	223.701						0.02	276.68	2	400.13
				2	3.98232	1290.97	223.701	572.19	115	2.79424	53.706	2916.13	1.9059	398.15	34.71	572.19
248	C <sub>7</sub> H <sub>14</sub>	ethylcyclopentane	1640-89-7	1	4.00408	1293.712	220.120						0.02	279.88	2	402.39
				2	4.00408	1293.712	220.120	569.52	110	2.66692	561.915	-45612.	2.30	408.15	33.60	569.52
249	C <sub>7</sub> H <sub>14</sub>	cis-1,3-dimethylcyclopentane	2532-58-3	1	4.00405	1259.821	223.530						0.02	270.52	2	389.83
250	C <sub>7</sub> H <sub>14</sub>	trans-1,3-dimethylcyclopentane	1759-58-6	1	3.95279	1232.161	221.420						0.02	269.74	2	389.15
251	C <sub>7</sub> H <sub>14</sub>	1-heptene	592-76-7	1	4.02677	1258.340	219.300						0.02	273.62	2	391.59
				2	4.02677	1258.340	219.300	537.30	103	2.61660	290.600	-17516.	1.83	388.15	23.23	523.15
252	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	heptanoic acid	111-14-8	3	679.00	-8.94240	2.20536	-8.82144	-1.9710	29.00					29.00	679.00
255	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	propyl butanoate	105-66-8	1	3.40455	1019.490	156.600						0.02	316.00	2	445.04
256	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	2-methylpropyl propanoate	540-42-1	1	3.56180	1042.300	156.500						0.03	321.60	2	436.30
259	C <sub>7</sub> H <sub>16</sub>	heptane	142-82-5	1	4.02023	1263.909	216.432						0.02	277.71	2	396.53
				3	540.15	-7.77404	1.85614	-2.8298	-3.5070	27.35					27.35	540.15



260	C <sub>7</sub> H <sub>16</sub>	2-methylhexane	591-76-4	1	3.99739	1235.520	219.497						0.02	270.55	2	387.88
				2	3.99739	1235.520	219.500	530.10	100	2.04000	575.200	-40292	1.548	378.15	21.38	513.15
261	C <sub>7</sub> H <sub>16</sub>	3-methylhexane	589-34-4	1	3.99571	1242.018	219.435						0.02	271.90	2	389.82
				2	3.99571	1242.020	219.440	535.20	100	1.89740	267.300	-9936.0	1.471	378.15	20.51	513.15
262	C <sub>7</sub> H <sub>16</sub>	3-ethylpentane	617-78-7	1	4.00449	1254.055	220.136						0.02	272.90	2	391.62
				2	4.00449	1254.060	220.140	540.50	103	2.38910	565.800	-38997	1.404	378.15	19.64	513.15
263	C <sub>7</sub> H <sub>16</sub>	2,2-dimethylpentane	590-35-2	1	3.94392	1191.959	223.498						0.02	260.90	2	376.84
				2	3.94392	1191.906	223.500	520.40	89	2.20020	515.600	-33215	1.59	368.15	21.68	503.15
264	C <sub>7</sub> H <sub>16</sub>	2,3-dimethylpentane	565-59-3	1	3.98066	1238.986	221.942						0.04	281.56	2	387.89
				2	3.98066	1238.990	221.940	537.30	99	1.97920	282.400	-12835.	1.553	378.15	20.74	513.15
265	C <sub>7</sub> H <sub>16</sub>	2,4-dimethylpentane	108-08-7	1	3.95442	1193.612	221.807						0.02	262.40	2	378.01
				2	3.95442	1193.160	221.810	519.70	90	1.92600	224.400	-4163.0	1.538	368.15	21.54	503.15
266	C <sub>7</sub> H <sub>16</sub>	3,3-dimethylpentane	562-49-2	1	3.94912	1227.020	225.121						0.02	265.20	2	384.36
				2	3.94912	1227.020	225.120	536.30	96	2.15280	420.700	-24617	1.707	378.15	21.38	513.15
267	C <sub>7</sub> H <sub>16</sub>	2,2,3-trimethylbutane	464-06-2	1	3.91555	1199.397	225.908						0.02	260.90	2	379.04
				2	3.91555	1199.400	225.910	531.10	91	1.98860	309.700	-16910.	1.507	368.15	20.09	503.15
268	C <sub>7</sub> H <sub>16</sub> O	1-heptanol	111-70-6	1	4.01991	1274.890	140.940						0.02	355.10	2	475.03
				3	632.50	-9.68778	5.35716	-10.1672		-8.0100	31.35				31.35	632.50
272	C <sub>8</sub> H <sub>8</sub> O	MethylPhenylKetone (Acetophenone)	98-86-2	3	713.00	-8.9386	4.01161	-4.5941		-2.57768	44.00		0.02	360.46	2.7	520.00
273	C <sub>8</sub> H <sub>10</sub>	ethylbenzene	100-41-4	1	4.06861	1415.770	212.300						0.02	306.32	2	436.63
				3	617.20	-7.53139	1.75439	-2.42012		-3.57146	36.00				36.00	617.20
274	C <sub>8</sub> H <sub>10</sub>	1,2-dimethylbenzene (o-xylene)	95-47-6	1	4.09789	1458.706	212.041						0.02	312.75	2	445.30
				3	630.33	-7.60491	1.75383	-2.27531		-3.73771	37.35				37.35	630.33
275	C <sub>8</sub> H <sub>10</sub>	1,3-dimethylbenzene (m-xylene)	108-38-3	1	4.14051	1468.703	216.120						0.02	308.54	2	439.56
				3	617.05	-7.67717	1.80240	-2.47745		-3.66068	35.38				35.38	617.05
276	C <sub>8</sub> H <sub>10</sub>	1,4-dimethylbenzene (p-xylene)	106-42-3	1	4.10494	1446.832	214.627						0.02	307.81	2	438.88
				3	616.23	-7.71694	1.89119	-2.39695		-3.63026	35.16				35.16	616.23
277	C <sub>8</sub> H <sub>10</sub> O	2-ethylphenol	90-00-6	1	4.13365	1550.440	171.074						0.02	367.90	2	506.61
278	C <sub>8</sub> H <sub>10</sub> O	3-ethylphenol	620-17-7	1	4.16568	1572.260	159.52399						0.02	381.72	2	520.46
279	C <sub>8</sub> H <sub>10</sub> O	4-ethyl-phenol	123-07-9	1	4.13227	1545.23999	156.468						0.02	381.67	2	520.01
280	C <sub>8</sub> H <sub>10</sub> O	2,3-dimethylphenol (2,3 xlenol)	526-75-0	1	4.12202	1576.780	166.173						0.02	377.86	2	519.64
281	C <sub>8</sub> H <sub>10</sub> O	2,4-dimethylphenol (2,4 xlenol)	105-67-9	1	4.18688	1592.780	170.004						0.02	373.76	2	513.04
282	C <sub>8</sub> H <sub>10</sub> O	2,5-dimethylphenol (2,5 xlenol)	95-87-4	1	4.13449	1563.140	167.453						0.02	373.66	2	513.46
283	C <sub>8</sub> H <sub>10</sub> O	2,6-dimethylphenol (2,6 xlenol)	576-26-1	1	4.19336	1627.230	187.547						0.02	361.76	2	503.66
284	C <sub>8</sub> H <sub>10</sub> O	3,4-dimethylphenol (3,4 xlenol)	95-65-8	1	4.21183	1627.780	160.041						0.02	388.50	2	529.34
285	C <sub>8</sub> H <sub>10</sub> O	3,5-dimethylphenol (3,5 xlenol)	108-68-9	1	4.26229	1645.270	164.821						0.02	384.32	2	523.67
286	C <sub>8</sub> H <sub>16</sub>	cyclooctane	292-64-8	1	3.98125	1434.670	209.712						0.02	316.00	2	453.27
				2	3.98125	1434.670	209.712	647.20	162	2.30600	325.500	-31112.	1.787	448.15	31.30	633.15
287	C <sub>8</sub> H <sub>16</sub>	<i>trans</i> -1,4-dimethylcyclohexane	2207-04-7	1	4.02425	1457.08	205.99						0.02	321.75	2	458.51
288	C <sub>8</sub> H <sub>16</sub>	1-octene	111-66-0	1	4.05985	1355.460	213.050						0.02	295.47	2	420.71
				2	4.05985	1355.460	213.050	566.65	131	2.68960	512.500	-40092.	1.88	418.15	21.34	553.15
289	C <sub>8</sub> H <sub>16</sub> O <sub>2</sub>	octanoic acid	124-07-2	3	695.00	-9.04015	2.16529	-8.66117		-4.69516	26.40				26.40	695.00

# Section D Vapor Pressure Correlations Parameters (Continued)

No.	Formula	Name	CAS #	Eq. #	A/A/Tc	B/B/a	C/C/b	Tc/c	to/d	n/Pc	E	F	Pvpmin, bar	Tmin, K	Pvpmax bar	Tmax, K
296	C <sub>8</sub> H <sub>18</sub>	octane	111-65-9	1	4.05075	1356.360	209.635						0.02	299.42	2	425.23
				3	568.95	-8.04937	2.03865	-3.3120	-3.6480	24.90					24.90	568.95
297	C <sub>8</sub> H <sub>18</sub>	2-methylheptane	592-27-8	1	4.03877	1335.220	213.415						0.03	299.81	2	416.95
				2	4.03877	1335.220	213.415	559.60	128	2.47135	255.100	-7424.0	1.6088	408.15	19.73	543.15
298	C <sub>8</sub> H <sub>18</sub>	3-methylheptane	589-81-1	1	4.01533	1326.140	211.813						0.04	306.32	2	418.36
				2	4.01533	1326.140	211.813	563.67	129	2.43555	315.600	-15218.	1.5543	408.15	19.13	543.15
299	C <sub>8</sub> H <sub>18</sub>	4-methylheptane	589-53-7	1	4.02214	1325.704	212.367						0.02	292.50	2	417.05
				2	4.02214	1325.740	212.367	561.74	128	2.41333	240.700	-8481.0	1.6055	408.15	19.63	543.15
300	C <sub>8</sub> H <sub>18</sub>	3-ethylhexane	619-99-8	1	4.01533	1327.930	212.645						0.02	292.90	2	418.01
				2	4.01533	1327.930	212.645	565.49	129	2.39952	227.500	-2817.0	1.5687	408.15	19.17	543.15
301	C <sub>8</sub> H <sub>18</sub>	2,2-dimethylhexane	590-73-8	1	3.95748	1271.180	214.830						0.02	283.00	2	405.96
				2	3.95748	1271.180	214.830	549.87	117	2.40185	301.200	-17401	1.6476	398.15	20.05	533.15
302	C <sub>8</sub> H <sub>18</sub>	2,3-dimethylhexane	584-94-1	1	3.99236	1314.290	214.059						0.02	290.00	2	415.13
				2	3.99236	1314.290	214.059	563.49	126	2.33502	185.000	-3318.0	1.6871	408.15	19.87	543.15
303	C <sub>8</sub> H <sub>18</sub>	2,4-dimethylhexane	589-43-5	1	3.97399	1285.850	214.600						0.02	285.20	2	408.63
				2	3.97399	1285.850	214.600	553.52	119	2.36737	149.300	482.00	1.5404	398.15	19.25	533.15
304	C <sub>8</sub> H <sub>18</sub>	2,5-dimethylhexane	592-13-2	1	3.98112	1285.470	214.248						0.02	285.20	2	408.20
305	C <sub>8</sub> H <sub>18</sub>	3,3-dimethylhexane	563-16-6	1	3.97403	1306.960	217.376						0.02	286.10	2	411.59
				2	3.97403	1306.960	217.376	562.02	122	2.39488	144.900	-2353.0	1.8412	408.15	20.57	543.15
306	C <sub>8</sub> H <sub>18</sub>	3,4-dimethylhexane	583-48-2	1	4.00310	1329.400	214.836						0.02	291.40	2	417.40
				2	4.00310	1329.400	214.836	568.85	128	2.50297	320.500	-18497.	1.596	408.15	18.98	543.15
307	C <sub>8</sub> H <sub>18</sub>	3-ethyl-2-methylpentane	609-26-7	1	3.98610	1317.050	215.229						0.02	289.50	2	415.31
				2	3.98610	1317.050	215.229	567.09	126	2.38973	174.900	-4584.0	1.6811	408.15	19.54	543.15
308	C <sub>8</sub> H <sub>18</sub>	3-ethyl-3-methylpentane	1067-08-9	1	3.98950	1345.920	219.584						0.02	290.10	2	418.46
				2	3.98950	1345.920	219.584	576.58	129	2.43672	182.800	-7717.0	1.5622	408.15	18.05	543.15
309	C <sub>8</sub> H <sub>18</sub>	2,2,3-trimethylpentane	564-02-3	1	3.94826	1293.940	218.355						0.02	283.90	2	409.56
				2	3.94826	1293.940	218.355	563.50	120	2.45345	162.400	-5383.0	1.934	408.15	20.84	543.15
310	C <sub>8</sub> H <sub>18</sub>	2,2,4-trimethylpentane (isooctane)	540-84-1	1	3.93646	1257.850	220.767						0.02	275.50	2	398.38
				2	3.93646	1257.850	220.767	543.90	124	2.13261	134.500	12998.0	1.9889	398.15	25.42	543.15
311	C <sub>8</sub> H <sub>18</sub>	2,3,3-trimethylpentane	560-21-4	1	3.96421	1325.810	220.161						0.02	287.00	2	414.91
				2	3.96421	1325.810	220.161	573.56	125	2.37930	76.300	1851.00	1.7032	408.15	18.93	543.15
312	C <sub>8</sub> H <sub>18</sub>	2,3,4-trimethylpentane	565-75-3	1	3.97700	1314.310	217.481						0.04	300.19	2	413.19
				2	3.97700	1314.310	217.481	566.41	124	2.39574	169.400	-4867.0	1.7713	408.15	19.98	543.15
313	C <sub>8</sub> H <sub>18</sub> O	2,2,3,3-tetramethylbutane	594-82-1	1	3.90420	1270.100	219.500						0.90	375.20	2	406.00
314	C <sub>8</sub> H <sub>18</sub> O	1-octanol	111-87-5	1	3.90225	1274.800	131.990						0.02	368.80	2	495.15
				3	652.50	-10.01437	5.90629	-10.4026	-9.0480	28.60					28.60	652.50
315	C <sub>8</sub> H <sub>18</sub> O	2-octanol	123-96-6	1	3.51370	1060.400	122.500						0.02	354.00	2	480.72
				3	638.00	-9.37352	4.73760	-8.3382	-11.646	28.90					28.90	638.00
317	C <sub>8</sub> H <sub>18</sub> O	4-octanol	589-62-8	1	5.08522	1816.393	190.020						0.0001	283.00	0.02	353.00
318	C <sub>8</sub> H <sub>18</sub> O	2-ethyl-1-hexanol	104-76-7	3	640.50	-9.61812	5.17861	-9.1144	-11.004	27.99					27.99	640.50

319	C <sub>8</sub> H <sub>19</sub> N	n-octanamine(Octylamine)	111-86-4	3	641.00	-7.99396	1.40573	-2.98188	-6.60435	26.17			0.02	434.49	2.7	494.5
322	C <sub>9</sub> H <sub>7</sub> N	quinoline	91-22-5	1	4.19490	1812.250	195.450						0.02	385.18	2	543.11
				2	4.19490	1812.250	195.450	782.00	247	1.73760	28.233	-2288.0	2.01	543.15	44.70	773.15
325	C <sub>9</sub> H <sub>12</sub>	propylbenzene	103-65-1	1	4.07664	1491.800	207.250						0.02	324.19	2	461.01
				2	4.07664	1491.800	207.250	638.28	170	2.19580	0.000	0.00	2.097	463.15	31.80	638.28
326	C <sub>9</sub> H <sub>12</sub>	1-methylethylbenzene	98-82-8	1	4.06112	1460.766	207.830						0.02	318.92	2	453.81
327	C <sub>9</sub> H <sub>12</sub>	1-ethyl-4-methylbenzene	622-96-8	1	4.10862	1517.577	207.900						0.02	326.56	2	463.82
328	C <sub>9</sub> H <sub>12</sub>	1,2,3-trimethylbenzene	526-73-8	1	4.17110	1598.241	207.620						0.02	337.80	2	478.50
329	C <sub>9</sub> H <sub>12</sub>	1,2,4-trimethylbenzene	95-63-6	1	4.17692	1579.353	209.290						0.02	332.64	2	471.34
330	C <sub>9</sub> H <sub>12</sub>	1,3,5-trimethylbenzene (mesitylene)	108-67-8	1	4.22541	1581.360	210.010						0.02	330.06	2	466.10
331	C <sub>9</sub> H <sub>18</sub>	1-nonene	124-11-8	1	4.07920	1436.200	205.690						0.02	316.02	2	447.59
				2	4.07920	1436.200	205.690	593.20	157	2.60900	655.800	-55549	1.6	438.15	17.99	573.15
332	C <sub>9</sub> H <sub>18</sub> O <sub>2</sub>	nonanoic acid	112-05-0	3	711.00	-9.10090	2.49646	-9.98583	-2.13513	24.30					24.30	711.00
333	C <sub>9</sub> H <sub>18</sub> O <sub>2</sub>	3-methylbutyl butanoate	106-27-4	1	4.50447	1805.080	222.300						0.02	342.00	2	480.28
334	C <sub>9</sub> H <sub>20</sub>	nonane	111-84-2	1	4.07356	1438.030	202.694						0.02	319.57	2	451.64
				3	594.90	-8.32886	2.25707	-3.8257	-3.7320	22.90					22.90	594.90
335	C <sub>9</sub> H <sub>20</sub>	2-methyloctane	3221-61-2	1	4.03660	1399.900	204.000						0.02	313.00	2	444.00
336	C <sub>9</sub> H <sub>20</sub>	2,2-dimethylheptane	1071-26-7	1	3.95530	1346.100	208.000						0.02	303.00	2	433.00
337	C <sub>9</sub> H <sub>20</sub>	2,2,5-trimethylhexane	3522-94-9	1	3.97372	1332.86	211.81						0.02	296.30	2	424.25
338	C <sub>9</sub> H <sub>20</sub>	2,2,3,3-tetramethylpentane	7154-79-2	1	3.95319	1397.690	213.780						0.02	306.60	2	442.00
339	C <sub>9</sub> H <sub>20</sub>	2,2,3,4-tetramethylpentane	1186-53-4	1	3.95552	1373.790	214.780						0.02	301.40	2	434.20
340	C <sub>9</sub> H <sub>20</sub>	2,2,4,4-tetramethylpentane	1070-87-7	1	3.92055	1324.65	216.08						0.02	292.79	2	423.04
341	C <sub>9</sub> H <sub>20</sub>	2,3,3,4-tetramethylpentane	16747-38-9	1	3.99105	1422.030	215.256						0.02	307.81	2	443.27
342	C <sub>9</sub> H <sub>20</sub> O	1-nonanol	143-08-8	1	3.83303	1297.750	125.000						0.02	382.10	2	515.58
				3	671.50	-9.91542	5.13670	-8.8075	-12.497	26.30					26.30	671.50
345	C <sub>10</sub> H <sub>8</sub>	naphthalene	91-20-3	1	4.13555	1733.710	201.859						0.02	368.44	2	523.40
				3	748.40	-7.61444	1.91553	-2.5075	-3.2300	40.50					40.50	748.40
351	C <sub>10</sub> H <sub>14</sub>	butylbenzene	104-51-8	1	4.10345	1575.470	201.200						0.02	343.50	2	486.20
352	C <sub>10</sub> H <sub>14</sub>	2-methylpropylbenzene	538-93-2	1	4.05978	1529.960	204.640						0.02	334.19	2	475.50
353	C <sub>10</sub> H <sub>14</sub>	1,4-diethylbenzene	105-05-5	1	4.12958	1592.590	202.440						0.02	343.95	2	486.60
354	C <sub>10</sub> H <sub>14</sub>	1-(1-methylethyl)-4-methylbenzene	99-87-6	1	4.17215	1606.890	208.570						0.02	338.28	2	479.60
355	C <sub>10</sub> H <sub>14</sub>	1,2,4,5-tetramethylbenzene	95-93-2	1	4.18329	1660.560	200.640						0.02	354.80	2	500.20
356	C <sub>10</sub> H <sub>18</sub>	cis-bicyclo[4.4.0]decane (cis-decalin)	493-01-6	1	4.00019	1594.460	203.392						0.02	349.53	2	500.79
357	C <sub>10</sub> H <sub>18</sub>	trans-bicyclo[4.4.0]decane (trans-decalin)	493-02-7	1	3.98171	1564.683	206.259						0.02	342.33	2	492.00
359	C <sub>10</sub> H <sub>20</sub> O <sub>2</sub>	decanoic acid	334-48-5	3	726.00	-9.07060	2.77535	-11.1014	-2.43545	22.30					22.30	726.00
360	C <sub>10</sub> H <sub>22</sub>	decane	124-18-5	1	4.06853	1495.170	193.858						0.02	338.53	2	476.15
				3	617.65	-8.60643	2.44659	-4.2925	-3.9080	21.05					21.05	617.65
361	C <sub>10</sub> H <sub>22</sub>	2,2,5-trimethylheptane	20291-95-6	1	4.00345	1417.400	203.800						0.02	318.00	2	452.00
362	C <sub>10</sub> H <sub>22</sub>	3,3,5-trimethylheptane	7154-80-5	1	3.98014	1435.430	205.490						0.02	320.00	2	458.00
363	C <sub>10</sub> H <sub>22</sub>	2,2,3,3-tetramethylhexane	13475-81-5	1	3.96928	1464.03	209.06						0.02	322.38	2	463.20
364	C <sub>10</sub> H <sub>22</sub>	2,2,5,5-tetramethylhexane	1071-81-4	1	4.00614	1377.98	207.00						0.02	307.68	2	438.06

# Section D Vapor Pressure Correlations Parameters (Continued)

No.	Formula	Name	CAS #	Eq. #	A/A/Tc	B/B/a	C/C/b	Tc/c	to/d	n/Pc	E	F	Pvpmin, bar	Tmin, K	Pvpmax bar	Tmax, K
365	C <sub>10</sub> H <sub>22</sub> O	1-decanol	112-30-1	1	3.84905	1369.000	125.078						0.02	394.80	2	533.92
				3	689.00	-9.75478	4.18634	-7.0572	-15.980	24.10					24.10	689.00
366	C <sub>10</sub> H <sub>24</sub> N <sub>4</sub>	octamethylethenetetramine	996-70-3	3	680.00	-8.33725	2.87447	-4.08037	-3.54204	24			0.02	357.70	1.208	485.20
367	C <sub>11</sub> H <sub>10</sub>	1-methylnaphthalene	90-12-0	1	4.16082	1826.948	195.002						0.02	389.93	2	551.40
368	C <sub>11</sub> H <sub>10</sub>	2-methylnaphthalene	91-57-6	1	4.19340	1840.268	198.395						0.02	387.07	2	547.50
369	C <sub>11</sub> H <sub>24</sub>	undecane	1120-21-4	1	4.09710	1569.570	187.700						0.02	356.25	2	499.00
				3	638.85	-8.85076	2.60205	-4.7305	-4.0810	19.55					19.55	638.85
370	C <sub>11</sub> H <sub>24</sub> O	1-undecanol	112-42-5	3	705.00	-9.85733	3.97841	-6.6002	-16.691	22.40					22.40	705.00
371	C <sub>12</sub> H <sub>10</sub>	1,1'-biphenyl	92-52-4	1	4.18870	1841.480	185.150						0.02	400.77	2	561.60
				2	4.18870	1841.480	185.150	770.00	270	2.75420	0.000	0.00	1.87	623.15	31.90	841.69
374	C <sub>12</sub> H <sub>18</sub>	1,3,5-triethylbenzene	102-25-0	3	679.00	-9.35738	3.7883	-5.45184	-2.91351	24.35			0.02	371.64	2.7	534.70
375	C <sub>12</sub> H <sub>20</sub>	1,3-dimethyltricyclo [3.3.1.1 <sup>3,7</sup> ]decane (1,3- dimethyladamantane)	702-79-4	3	708.00	-8.17338	3.28872	-3.47324	-2.48597	30.00			0.02	352.17	2.7	526.20
377	C <sub>12</sub> H <sub>26</sub>	dodecane	112-40-3	1	4.12285	1639.270	181.840						0.02	372.89	2	520.24
				3	658.65	-9.08593	2.77846	-5.1985	-4.1730	18.30					18.30	658.65
378	C <sub>12</sub> H <sub>26</sub> O	1-dodecanol	112-53-8	3	720.00	-9.91901	3.61884	-5.8537	-18.204	20.80					20.80	720.00
379	C <sub>13</sub> H <sub>12</sub>	diphenylmethane	101-81-5	1	4.18060	1862.640	181.650						0.02	408.20	2	571.70
				2	4.18060	1862.640	181.650	770.00	270	2.01000	260.720	0.00	1.876	633.15	30.70	813.15
380	C <sub>13</sub> H <sub>28</sub>	tridecane	629-50-5	1	4.13246	1690.670	174.220						0.02	388.85	2	540.19
				3	676.00	-9.32959	2.89925	-5.5550	-4.4700	17.10					17.10	676.00
381	C <sub>13</sub> H <sub>28</sub> O	1-tridecanol	112-70-9	3	734.00	-9.99402	3.36986	-5.4865	-18.592	19.35					19.35	734.00
382	C <sub>14</sub> H <sub>10</sub>	phenanthrene	85-01-8	1	4.37081	2329.540	195.280						0.02	461.60	2	650.00
383	C <sub>14</sub> H <sub>10</sub>	anthracene	120-12-7	1	4.79891	2819.630	247.020						0.02	460.00	2	653.00
384	C <sub>14</sub> H <sub>22</sub>	1,4-di(trimethylmethyl)benzene (p-ditertbutylbenzene)	1012-72-2	3	708.00	-9.28468	3.89231	-5.55138	-3.34144	23			0.02	387.02	2.7	559.10
385	C <sub>14</sub> H <sub>30</sub>	tetradecane	629-59-4	1	4.13790	1740.880	167.720						0.02	403.69	2	559.15
				3	693.00	-9.54470	3.06637	-6.0070	-4.5300	16.10					16.10	693.00
386	C <sub>14</sub> H <sub>30</sub> O	1-tetradecanol	112-72-1	3	747.00	-10.13519	3.27661	-5.3447	-18.711	18.10					18.10	747.00
387	C <sub>15</sub> H <sub>32</sub>	pentadecane	629-62-9	1	4.14849	1789.950	161.380						0.02	417.80	2	576.90
				3	708.00	-9.80239	3.29217	-6.5317	-4.5840	15.15					15.15	708.00
388	C <sub>15</sub> H <sub>32</sub> O	1-pentadecanol	629-76-5	3	759.00	-10.32431	3.32013	-5.4784	-18.263	17.00					17.00	759.00
389	C <sub>16</sub> H <sub>34</sub>	hexadecane	544-76-3	1	4.15357	1830.510	154.450						0.02	431.47	2	593.80
				3	722.00	-10.03664	3.41426	-6.8627	-4.8630	14.35					14.35	722.00
390	C <sub>16</sub> H <sub>34</sub>	2,2,4,4,6,8,8-heptamethylnonane	4390-04-9	3	693.00	-8.90870	2.27470	-3.6490	-6.6600	15.70					15.70	693.00
391	C <sub>16</sub> H <sub>34</sub> O	1-hexadecanol	4485-13-6	3	770.00	-10.54087	3.47260	-6.0770	-15.939	16.10					16.10	770.00
392	C <sub>17</sub> H <sub>36</sub>	heptadecane	629-78-7	1	4.13920	1865.100	149.200						0.02	443.50	2	610.00
				3	735.00	-10.23600	3.54177	-7.1898	-5.0000	13.70					13.70	735.00
393	C <sub>17</sub> H <sub>36</sub> O	1-heptadecanol	1454-85-9	3	780.00	-10.73125	3.55515	-6.3591	-15.696	15.00					15.00	780.00
397	C <sub>18</sub> H <sub>38</sub>	octadecane	593-45-3	1	4.12710	1894.300	143.300						0.02	455.00	2	625.00
				3	746.00	-10.47230	3.69655	-7.5779	-5.1090	13.00					13.00	746.00
398	C <sub>18</sub> H <sub>38</sub> O	1-octadecanol	112-92-5	3	790.00	-10.91637	3.57835	-6.6199	-15.060	14.40					14.40	790.00

399	C <sub>19</sub> H <sub>40</sub>	nonadecane	629-92-5	1	4.14020	1932.800	137.600				0.02	466.50	2	639.00
				3	758.00	-10.68217	3.98054	-8.3030	-4.9950	12.30			12.30	758.00
400	C <sub>19</sub> H <sub>40</sub> O	1-nonadecanol	1454-84-8	3	799.00	-11.22657	4.03454	-7.7867	-11.970	13.80			13.80	799.00
401	C <sub>20</sub> H <sub>42</sub>	eicosane	112-95-8	1	4.27710	2032.700	132.100				0.02	481.10	2	652.00
				3	769.00	-10.97958	4.25588	-8.9573	-5.0430	11.60			11.60	769.00
402	C <sub>20</sub> H <sub>42</sub> O	1-eicosanol	629-96-9	3	809.00	-11.23154	3.66900	-7.0775	-14.321	13.00			13.00	809.00
407	ClD	deuterium chloride	7698-05-7	1	4.06086	668.2000	249.499				0.15	160.44	2	201.37
408	ClFO <sub>3</sub>	perchloryl fluoride	7616-94-6	1	4.02009	791.7270	243.880				0.02	167.80	2	242.15
409	ClF <sub>5</sub>	chlorine pentafluoride	13637-63-3	1	3.39423	653.0600	206.60				0.02	194.80	2	277.68
410	ClH	hydrogen chloride	7647-01-0	1	4.29490	745.7800	258.88				0.15	159.97	2	201.00
411	ClH <sub>3</sub> N	ammonium chloride	12125-02-9	1	6.48060	3703.700	232.00				0.02	494.00	2	640.5.0
412	ClNO	nitrogen oxychloride	2696-92-6	1	4.48644	1094.730	249.70				0.04	209.40	2	285.01
413	Cl <sub>2</sub>	chlorine	7782-50-5	1	4.06280	861.3400	246.33				0.02	176.31	2	255.79
414	DH	deuterium hydride	13983-20-5	1	3.14102	77.13490	275.62				0.08	15.73	2	24.69
415	DI	deuterium iodide	14104-45-1	1	2.72964	414.6800	187.87				0.40	217.80	2	256.03
416	D <sub>2</sub>	deuterium	7782-39-0	1	3.14102	77.13490	275.62				0.02	15.20	2	18.97
417	D <sub>2</sub>	deuterium, normal	800000-54-8	1	3.25315	83.52510	275.22				0.10	17.57	2	26.23
418	D <sub>2</sub> O	deuterium oxide	7789-20-0	1	5.04327	1616.760	219.54				0.20	335.17	2	394.54
420	D <sub>3</sub> N	trideuteroammonia	13550-49-7	1	4.61234	966.2260	240.80				0.05	195.75	2	256.46
422	FH	hydrogen fluoride	7664-39-3	1	4.80588	1475.600	287.88				0.02	212.10	2	312.83
423	FNO <sub>2</sub>	nitrogen dioxyfluoride	10022-50-1	1	3.95830	654.55	238.00				0.02	151.00	2	214.12
424	F <sub>2</sub>	fluorine	7782-41-4	1	3.89078	304.3500	266.54				0.02	61.00	2	91.39
428	F <sub>2</sub> O	oxygen difluoride	7783-41-7	1	4.36109	545.0500	269.91				0.02	93.10	2	137.40
430	F <sub>3</sub> N	nitrogen trifluoride	7783-54-2	1	3.90456	501.9130	216.00				0.02	146.72	2	196.43
433	F <sub>4</sub> S	sulfur tetrafluoride	7783-60-0	1	3.96440	823.4000	248.00				0.02	170.00	2	249.92
435	F <sub>6</sub> S	sulfur hexafluoride	2551-62-4	1	5.54090	1096.500	262.00				0.02	162.00	2	220.40
436	F <sub>6</sub> U	uranium hexafluoride	7783-81-5	3	503.35	-7.37599	1.8001	-2.69686	-3.13299	45.31			45.31	503.35
437	HI	hydrogen iodide	10034-85-2	1	2.69803	405.3300	186.13				0.40	217.90	2	256.12
438	H <sub>2</sub>	hydrogen	1333-74-0	1	2.93954	66.79540	275.65				0.05	10.25	2	22.82
439	H <sub>2</sub>	hydrogen, normal	800000-51-5	1	2.94928	67.50780	275.70				0.05	13.33	2	22.94
440	H <sub>2</sub> O	water	7732-18-5	1	5.11564	1687.537	230.17				0.01	273.20	16	473.20
				3	647.300	-7.77224	1.45684	-2.71942*	-1.41336*		0.01	273.20	221	647.30
441	H <sub>2</sub> S	hydrogen sulfide	7783-06-4	1	4.22882	806.9330	251.39				0.20	185.51	2	227.20
442	H <sub>2</sub> S <sub>2</sub>	dihydrogen disulfide	13465-07-1	1	4.05500	1199.000	225.00				0.02	256.00	2	367.55
443	H <sub>2</sub> S <sub>3</sub>	dihydrogen trisulfide	13845-23-3	1	3.93200	1488.000	209.00				0.02	328.00	2	473.96
444	H <sub>2</sub> S <sub>4</sub>	dihydrogen tetrasulfide	13845-25-5	1	4.07000	1772.000	196.00				0.02	384.00	2	547.30
445	H <sub>2</sub> S <sub>5</sub>	dihydrogen pentasulfide	13845-24-4	1	4.44500	2104.000	189.00				0.02	426.00	2	591.88
446	H <sub>2</sub> Se	hydrogen selenide	7783-07-5	1	4.76030	927.6000	240.00				0.02	177.00	2	213.00
447	H <sub>3</sub> N	ammonia	7664-41-7	1	4.48540	926.1320	240.17				0.05	193.03	2	254.31
				3	405.500	-7.28322	1.5716	-1.85672	-2.39312	113.530			113.5	405.50
448	H <sub>3</sub> P	phosphine	7803-51-2	1	3.84049	645.5120	256.07				0.03	137.44	2	199.46
449	H <sub>4</sub> N <sub>2</sub>	hydrazine	302-01-2	1	4.92680	1679.07	227.70				0.02	298.90	2	408.43

# Section D Vapor Pressure Correlations Parameters (Continued)

No.	Formula	Name	CAS #	Eq. #	A/A/Tc	B/B/a	C/C/b	Tc/c	to/d	n/Pc	E	F	Pvpmin, bar	Tmin, K	Pvpmax bar	Tmax, K
450	He	helium	7440-59-7	1	1.68360	8.15480	273.71						0.02	1.85	2	5.34
451	He	helium-3	14762-55-1	1	1.39750	5.59400	273.84						0.02	1.12	2	4.41
452	I2	iodine	7553-56-2	1	4.14310	1611.900	205.18						0.15	392.49	2	487.51
453	Kr	krypton	7439-90-9	1	3.75560	416.3800	264.45						0.50	111.34	2	129.23
454	NO	nitrogen monoxide (nitric oxide)	10102-43-9	1	5.86790	682.9386	268.27						0.15	106.94	2	127.56
455	N <sub>2</sub>	nitrogen	7727-37-9	1	3.61947	255.68	266.55						0.08	60.81	2	83.65
				3	126.20	-6.11102	1.2189	-0.69366	-1.89893	34.00					34.00	126.20
456	N <sub>2</sub> O	dinitrogen oxide (nitrous oxide)	10024-97-2	1	4.12884	654.2600	247.16						0.80	180.82	2	196.91
457	N <sub>2</sub> O <sub>4</sub>	dinitrogen tetroxide (nitrogen dioxide)	10544-72-6	1	4.50989	1185.722	234.18						0.10	254.17	2	320.69
458	Ne	neon	7440-01-9	1	3.20934	78.38000	270.55						0.40	24.33	2	29.55
460	O <sub>2</sub>	oxygen	7782-44-7	1	3.81634	319.0130	266.70						0.02	64.29	2	97.20
461	O <sub>2</sub> S	sulfur dioxide	7446-09-5	1	4.40720	999.9000	237.19						0.02	199.71	2	279.47
462	O <sub>3</sub>	ozone	10028-15-6	1	3.96200	552.5000	251.00						0.02	120.00	2	173.07
463	O <sub>3</sub> S	sulfur trioxide	7446-11-9	1	6.17575	1735.310	236.50						0.15	284.50	2	332.04
464	Rn	radon	10043-92-2	1	4.62040	884.4100	255.00						0.02	158.00	2	222.90
465	S	sulfur	7704-34-9	1	3.96853	2500.120	186.30						0.02	527.98	2	768.55
466	Se	selenium	7782-49-2	1	4.75650	4213.000	202.00						0.02	724.00	2	1017.00
468	Xe	xenon	7440-63-3	1	3.76779	566.2820	258.66						0.60	156.43	2	177.84

\*For water the exponents on the last two terms are 3 and 6.