## **Appendix**



## **Property Data Bank**

The listing of compounds is by the total carbon number. Within each carbon number class, subgroups are indexed by the number of hydrogens and, further, by additional atoms in alphabetical order.

The symbols and equations used are shown below. The enthalpy and Gibbs energy of formation at 298.2 K (DELHF and DELGF) are for the *ideal-gas state*. The reference states chosen for the elements are as follows:

Ideal gases at one atmosphere: Ar, Cl<sub>2</sub>, D<sub>2</sub>, F<sub>2</sub>, He, H<sub>2</sub>, Kr, Ne, O<sub>2</sub>, Rn, T<sub>2</sub>, and Xe. Al (crystal); As (crystal); B (crystal); Br<sub>2</sub> (liquid); C (graphite); Hg (liquid); I<sub>2</sub> (crystal); P (solid, red); S (crystal, rhombic); Se (crystal); Si (crystal); Ti (crystal, alpha); U (crystal).

MolWt = molecular weight, g/mol

Tfp = normal freezing point, K

Tb = normal boiling point (at 1 atm), K

Tc = critical temperature, K

Pc = critical pressure, bar

Vc = critical volume, cm<sup>3</sup>/mole

Zc = critical compressibility factor, PcVc/RTc

Omega = Pitzer's acentric factor

Dipm = dipole moment, debyes

CPVAP A, CPVAP B, CPVAP C, CPVAP D = constants to calculate the isobaric heat capacity of the ideal gas, with Cp in  $J/(mol \cdot K)$  and T in kelvins:

Vapor pressure: Pvp = vapor pressure, in bars
Pc = critical pressure, in bars
Tc = critical temperature, in kelvins
T = temperature, in kelvins

There is a choice of equations as noted in the tables:

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Equation (1):  \begin{aligned} & \text{In } (\text{Pvp/Pc}) = (1-x)^{-1} [(\text{VP A})x + (\text{VP B})x^{1.5} + (\text{VP C})x^3 + (\text{VP D})x^6] \\ & x = 1-T/\text{Tc} \end{aligned}  Equation (2):  \begin{aligned} & \text{In } \text{Pvp} = \text{VP A} - (\text{VP B})/\text{T} + (\text{VP C}) \text{ In T} + (\text{VP D})(\text{Pvp})/\text{T}^2 \end{aligned}  Equation (3):  \begin{aligned} & \text{In } \text{Pvp} = \text{VP A} - (\text{VP B})/[\text{T} + (\text{VP C})] \\ & \text{LDEN} = \text{liquid density, } g/\text{cm}^3 \\ & \text{TDEN} = \text{temperature for LDEN, K} \end{aligned}
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(See note above on reference states.)

No	Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mole	Zc	Omega	Dipm debye
1	AlBr3	aluminum tribromide	266.694	370.7	528.	763.	28.9	310.	0.141	0.399	5.0
2 3	A1C13 A1I3	aluminum trichloride aluminum triiodide	133.341 407.697	467. 464.	453. 655.	620. 983.	26.3	259. 408.	0.132	0.660	2.0 2.3
4 5	Ar As	argon arsenic	39.948 74.922	83.8	87.3 888.	150.8 1673.	48.7 223.	74.9 34.9	0.291 0.056	0.001 0.121	0.0
6	AsC13	arsenic trichloride	181.281	264.7	403.	654.		252.			1.6
7	BBr3	boron tribromide	250.568	227.	364.	581.		272.			0.0
8	BC13	boron trichloride	117.191	165.9	285.8	455.	38.7	239.5	0.245	0.140	0.0
9 10	BF3 BI3	boron trifluoride boron triiodide	67.805 391.55	146.5 323.1	172. 483.	260.8 773.	49.9	114.7 356.	0.264	0.393	0.0
11	Br2	bromine	159.808	266.0	331.9	588.	103.	127.2	0.268	0.108	0.2
12	BrI	iodine bromide	206.813	315.	389.	719.		139.			1.2
13	Br3P	phosphorus tribromide	270.723	233.	446.1	711.		300.			0.5
14 15	Br4Si Br4Ti	silicon tetrabromide titanium tetrabromide	347.702 367.536	278.6 312.	427. 503.	663. 795.7		382. 391.			0.0
16	C1F03	perchloryl fluoride	102.448	125.5	226.4	368.4	53.7	160.8	0.282	0.170	0.0
17	C1F2N	nitrogen chloride difluoride	87.456		207.	337.5	51.5			0.154	
18	C1F2P	phosphorus chloride difluoride	104.423		225.9	362.4 439.2	45.2			0.164 0.202	
19 20	C1F2PS C1F5	thiophosphoryl chloride difluoride chlorine pentafluoride	130.443		279. 260.0	416.	41.4 52.7	233.	0.355	0.216	
21	CINO	nitrosyl chloride	65.459	213.5	267.7	440.					1.8
22	C12	chlorine	70.906	172.2	239.2	416.9	79.8	123.8	0.285	0.090	0.0
23	C12FP C13P	phosphorus dichloride	120.878 137.333	161.	287.0 349.1	463.0 563.	49.6	264.		0.174	0.9
24 25	C14Si	phosphorus trichloride silicon tetrachloride	169.898	204.3	330.8	503. 508.1	35.9	325.7	0.277	0.232	0.9

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
1	AlBr3	aluminum tribromide	6.494E+1	6.098E-2	-7.306E-5	2.978E-8	-4.233E+5	-4.522E+5
2	A1C13	aluminum trichloride	5.054E+1	1.037E-1	-1.202E-4	4.793E-8	-5.849E+5	-5.704E+5
3	A113	aluminum triiodide	6.270E+1	6.802E-2	-8.113E-5	3.298E-8	-2.052E+5	-2.531E+5
4	Ar	argon	2.080E+1	O. O. L. L.	O. 110L 5	3. L. JOL 0	0.0	0.0
5	As	arsenic					0.0	0.0
6	AsC13	arsenic trichloride						
7	BBr3	boron tribromide	4.331E+1	1.160E-1	-1.267E-4	4.849E-8	-2.043E+5	-2.312E+5
8	BC13	boron trichloride	3.261E+1	1.390E-1	-1.461E-4	5.439E-8	-4.032E+5	-3.882E+5
9	BF3	boron trifluoride	1.858E+1	1.399E-1	-1.217E-4	3.916E-8	-1.136E+6	-1.120E+6
10	BI3	boron triiodide	4.937E+1	1.028E-1	-1.159E-4	4.529E-8	7.118E+4	2.089E+4
11	Br2	bromine	3.386E+1	1.125E-2	-1.192E-5	4.534E-9	3.093E+4	3.136E+3
12	BrI	iodine bromide	3.402E+1	1.229E-2	-1.420E-5	5.847E-9	4.091E+5	3.714E+3
13	Br3P	phosphorus tribromide	6.102E+1	7.421E-2	-8.899E-5	3.631E-8	-1.285E+5	-1.575E+5
14	Br4Si	silicon tetrabromide	7.466E+1	1.097E-1	-1.298E-4	5.246E-8	-4.159E+5	-4.324E+5
15	Br4Ti	titanium tetrabromide	8.499E+1	7.785E-2	-9.361E-5	3.826E-8	-5.506E+5	-5.695E+5
16	C1F03	perchloryl fluoride	1.245E+1	2.390E-1	-2.346E-4	8.321E-8	-2.144E+4	5.062E+4
17	C1F2N	nitrogen chloride difluoride						
18	C1F2P	phosphorus chloride difluoride						
19	C1F2PS	thiophosphoryl chloride difluoride						
20	C1F5	chlorine pentafluoride	3.098E+1	3.203E-1	-3.685E-4	1.462E-7	-2.386E+5	-1.469E+5
21	CINO	nitrosyl chloride	3.410E+1	4.472E-2	-3.340E-5	1.015E-8	5.263E+4	6.699E+4
22	C12	chlorine	2.693E+1	3.384E-2	-3.869E-5	1.547E-8	0.0	0.0
23	C12FP	phosphorus dichloride fluoride					-	· • =
24	C13P	phosphorus trichloride	4.849E+1	1.131E-1	-1.334E-4	5.380E-8	-2.713E+5	-2.577E+5
25	C14Si	silicon tetrachloride	5.658E+1	1.636E-1	-1.897E-4	7.565E-8	-6.577E+5	-6.178E+5

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
1 2 3 4 5	AlBr3 AlCl3 AlI3 Ar As	aluminum tribromide aluminum trichloride aluminum triiodide argon arsenic	1	-5.90501	1.12627	-0.76787	-1.62721	84	TC	1.31 1.373	473 90
6 7 8 9	AsC13 BBr3 BC13 BF3 BI3	arsenic trichloride horon tribromide boron trichloride boron trifluoride boron triiodide	2 2	46.103 61.138	4443.16 3481.19	-5.404 -7.963	2228 <b>.</b> 576.	230 160	TC TC	2.163 2.643 1.349 2.811 3.35	291 284
11 12 13 14 15	Br2 BrI Br3P Br4Si Br4Ti	bromine iodine bromide phosphorous tribromide silicon tetrabromide titanium tetrabromide	3	9.2239	2582.32	-51.56		259	354	3.119 2.852 2.772	288
16 17 18 19 20	C1F03 C1F2N C1F2P C1F2PS C1F5	penchloryl fluoride nitrogen chloride difluoride phosphorous chloride difluoride thiophosphoryl chloride difluoride chlorine pentafluoride								2.003	399
21 22 23 24 25	C1NO C12 C12FP C13 P C14Si	nitrosyl chloride chlorine phosphorous dichloride fluoride phosphorus trichloride silicon tetrachloride	2 1 3	29.760 -6.34074 9.1817	3748.59 1.15037 2634.16	-2.819 -1.40416	900. -2.23220	230 206 238	TC TC 364	1.42 1.563 1.574 1.48	

No	Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mol	Zc	Omega	Dipm debye
26	C14Ti	titanium tetrachloride	189.712	243.	409.6	638.	46.6	339.2	0.298	0.268	0.0
27	C15P	phosphorus pentachloride	208.260	148.	433.	646.					0.8
28	D2	deuterium (equilibrium)	4.032	18.7	23.6	38.2	16.5	60.3	0.313	-0.137	0.0
29	D2	deuterium (normal)	4.032	18.6	23.5	38.4	16.6			-0.160	0.0
30	D20	deuterium oxide	20.031	277.0	374.6	644.0	216.6	56.6	0.225	0.351	1.9
31	FNO2	nitryl fluoride	65.003		213.2	349.5					0.5
32	F2	fluorine	37.997	53.5	85.0	144.3	52.2	66.3	0.288	0.054	0.0
33	F2N2	cis-difluorodiazine	66.010		167.5	272.	70.9			0.252	
34	F2N2	trans-difluorodiazine	66,010		161.7	260.	55.7			0.217	
35	F20	oxygen difluoride	53.995	50.	128.4	215.	49.6				0.2
36	F2Xe	xenon difluoride	169,296		387.5	631.	93.2	148.6	0.264	0.317	
37	F3N	nitrogen trifluoride	71.002	66.4	144.4	234.0	45.3			0.135	0.2
38	F3NO	trifluoroamine oxide	87.001		186.	303.	64.3	146.9	0.375	0.212	
39	F3P	phosphorus trifluoride	87.968		178.	271.2	43.3			0.326	
40	F3PS	thiophosphoryl trifluoride	120.034		220.9	346.0	38.2			0.187	0.6
41	F4N2	tetrafluorohydrazine	104.016	105.	199.	309.	37.5			0.206	0.3
42	F4S	sulfur tetrafluoride	108.058	152.	232.7	364.					1.0
43	F4Si	silicon tetrafluoride	104.09	183.0	187.	259.0	37.2			0.753	0.0
44	F4Xe	xenon tetrafluoride	207.292	387.	388.9	612.	70.4	188.6	0.261	0.357	
45	F6S	sulfur hexafluoride	146.054	222.5	209.6	318.7	37.6	198.8	0.282	0.286	0.0
46	F6U	uranium hexafluoride	352.018	337.	329.	505.8	46.6	250.0	0.277	0.318	0.0
47	He	helium-3	3.017		3.19	3.31	1.14	72.9	0.302	-0.473	0.0
48	He	helium-4	4.003		4.25	5.19	2.27	57.4	0.302	-0.365	0.0
49	Hg	mercury	200.61	234.3	630.	1765.	1510.	42.7	0.439	-0.167	
50	I2	iodine	253.82	386.8	457.5	819.		155.			1.3

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
26	C14Ti	titanium tetrachloride	7.064E+1	1.224E-1	-1.443E-4	5.819E-8	-7.637E+5	-7.272E+5
27	C15P	phosphorus pentachloride	6.946E+1	2.079E-1	-2.455E-4	9.914E-8	-3.429E+5	-2.785E+5
28	D2	deuterium (equilibrium)	3.025E+1	-6.615E-3	1.170E-5	-3.684E-9	0.0	0.0
29	D2	deuterium (normal)					0.0	0.0
30	D20	deuterium oxide	3.182E+1	3.045E-3	2.033E-5	-9.737E-9	-2.494E+5	-2.348E+5
31	FN02	nitryl fluoride	1.778E+1	1.416E-1	-1.254E-4	4.140E-8	-1.089E+5	-6.649E+4
32	F2	fluorine	2.322E+1	3.657E-2	-3.613E-5	1.204E-8	0.0	0.0
33	F2N2	cis-difluorodiazine	1.121E+1	1.754E-1	-1.688E-4	5.898E-8	6.866E+4	1.088E+5
34	F2N2	trans-difluorodiazine	2.254E+1	1.377E-1	-1.258E-4	4.232E-8	8.122E+4	1.205E+5
35	F20	oxygen difluoride	2.207E+1	9.875E-2	-1.028E-4	3.796E-8	2.453E+4	4.178E+4
36	F2Xe	xenon difluoride						
37	F3N	nitrogen trifluoride	1.141E+1	1.948E-1	-2.023E-4	7.454E-8	-1.316E+5	-9.010E+4
38	F3NO	trifluoroamine oxide	1.513E+1	2.446E-1	-2.528E-4	9.375E-8	-1.633E+5	-9.646E+4
39	F3P	phosphorus trifluoride	2.179E+1	1.733E-1	-1.852E-4	6.974E-8	-9.378E+5	-9.253E+5
40	F3PS	thiophosphoryl trifluoride	2.492E+1	2.326E-1	-2.472E-4	9.275E-8	-9.923E+5	-9.743E+5
41	F 4N2	tetrafluorohydrazine	3.553E+0	3.509E-1	-3.637E-4	1.338E-7	-8.374E+3	7.988E+4
42	F4S	sulfur tetrafluoride	2.542E+1	2.420E-1	-2.653E-4	1.017E-7	-7.813E+5	-7.406E+5
43	F4S1	silicon tetrafluoride	2.678E+1	2.157E-1	-2.204E-4	8.031E-8	-1.616E+6	-1.574E+6
44	F4Xe	xenon tetrafluoride					-1.876E+5	
45	F 6S	sulfur hexafluoride	-6.599E-1	4.639E-1	-5.089E-4	1.953E-7	-1.222E+6	-1.118E+6
46	F6U	uranium hexafluoride					-2.139E+6	-2.060E+6
47	He	helium-3	2.080E+1				0.0	0.0
48	He	helium-4	2.080E+1				0.0	0.0
49	Hg	mercury	2.080E+1				6.134E+4	3.186E+4
50	IŽ	iodine	3.559E+1	6.515E-3	-6.988E-6	2.834E-9	6.247E+4	1.938E+4

No Formula	n Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
26 C14Tf	titanium tetrachloride								1.70	298
27 C15P 28 D2	phosphorous pentachloride deuterium (equilibrium)	3	6.6752	157.89	0.0		19	25	0.165	22.7
29 D2 30 D20	deuterium (normal) deuterium oxide								1.105	298
31 FNO2 32 F2	nitryl fluoride fluorine	1	-6.18224	1 10062	1 16656	1 501.67	c A	TC	1 61	0.5
32 F2 33 F2N2 34 F2N2	cis-difluorodiazine	1	-0.10224	1.18062	-1.16555	-1.50167	64	TC	1.51	85
35 F20	trans-difluorodiazine oxygen difluoride								1.521	128
36 F2Xe 37 F3N	xenon difluoride nitrogen trifluoride	2	32.599	1970.37	-3.81	509.	130	TC	1.54	144
38 F3NO 39 F3P	fluoroamine oxide	۲.	32.333	19/0.3/	-3.01	309.	130	10	3.1	172
40 F3PS	phosphorous trifluoride thiophosphoryl trifluoride								3.1	1/2
41 F4N2 42 F4S	tetrafluorohydrazine sulfur tetrafluoride	3	7.4561	1218,59	-73.24		161	224	1.5	163
43 F4Si	silicon tetrafluoride	3	7.4501	1210.59	-/3.24		101	224	1.936	195
44 F4Xe 45 F6S	xenon tetrafluoride sulfur hexafluoride	3	12.7583	2524.78	-11.16		159	220	1.83	223
46 F6U 47 He	uranium hexafluoride helium-3									
48 He	helium-4	1	-3.97466	1.00074	1.50056	-0.43020	2	TC	0.123	-
49 Hg 50 I2	mercury iodine	3	9.5395	3709.23	-68.16		383	487	13.594 3.74	293 453

No	Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mol	Zc	Omega	Dipm debye
51	I4S i	silicon tetraiodide	535.706	393.7	560.5	944.		558.			
52	I4Ti	titanium tetraiodide	555.520	423.	650.	1040.		505.			
53	Kr	krypton	83.800	115.8	119.9	209.4	55.0	91.2	0.288	0.005	0.0
54	NO	nitric oxide	30.006	109.5	121.4	180.	64.8	57.7	0.250	0.588	0.2
55	N02	nitrogen dioxide	46.006	261.9	294.3	431.	101.	167.8	0.473	0.834	0.4
56	N2	nitrogen	28.013	63.3	77.4	126.2	33.9	89.8	0.290	0.039	0.0
57	N20	nitrous oxide	44.013	182.3	184.7	309.6	72.4	97.4	0.274	0.165	0.2
58	Ne	neon	20.183	24.5	27.1	44.4	27.6	41.6	0.311	-0.029	0.0
59	02	oxygen	31.999	54.4	90.2	154.6	50.4	73.4	0.288	0.025	0.0
60	02\$	sulfur dioxide	64.063	197.7	263.2	430.8	78.8	122.2	0.269	0.256	1.6
61	03	ozone	47.998	80.5	181.2	261.1	55.7	88.9	0.228	0.691	0.6
62	03S	sulfur trioxide	80.058	290.	318.	491.0	82.1	127.3	0.256	0.481	0.0
63	P	phosphorous	30.974		553.	994.					
64	Rn	radon	222.00	202.	211.4	377.	62.8			-0.008	
65	S	sulfur	32.066		717.8	1314.	207.			0.171	
66	Se	selenium	78.96		1010.	1766.	272.			0.346	
67	T2	tritium	6.32		25.0	40.0		58.			0.0
68	Хe	xenon	131,300	161.3	165.0	289.7	58.4	118.4	0.287	0.008	0.0
69	HBr	hydrogen bromide	80.912	187.1	206.8	363.2	85.5			0.088	0.8
70	HC1	hydrogen chloride	36.461	159.0	188.1	324.7	83.1	80.9	0.249	0.133	1.1
71	HD	hydrogen deuteride	3.023	16.6	22.1	36.0	14.8	62.7	0.310	-0.179	0.0
72	HF	hydrogen fluoride	20.006	190.	293.	461.	64.8	69.2	0.117	0.329	1.9
73	ΗI	hydrogen iodide	127.912	222.4	237.6	424.0	83.1			0.049	0.5
74	HF2N	difluoroamine	53.011		250.	403.					
75	H2	hydrogen (equilibrium)	2.016	14.0	20.3	33.0	12.9	64.3	0.303	-0.216	0.0

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
51	I4Si	silicon tetraiodide	8.479E+1	7.800E-2	-9.340E-5	3.806E-8	-1.105E+5	-1.598E+
52	I4Ti	titanium tetraiodide	9.575E+1	4.253E-2	-5.179E-5	2.135E-8	-2.775E+5	-3.282E
53	Kr	krypton	2.080E+1				0.0	0.0
54	NO.	nitric oxide	2.935E+1	-9.378E-4	9.747E-6	-4.187E-9	9.043E+4	8.675E
55	NO 2	nitrogen dioxide	2.423E+1	4.836E-2	-2.081E-5	0.293E-9	3.387E+4	5.200E
56	N2	nitrogen	3.115E+1	-1.357E-2	2.680E-5	-1.168E-8	0.0	0.0
57	N20	nitrous oxide	2.162E+1	7.281E-2	-5.778E-5	1.830E-8	8.160E+4	1.037E
58	Ne	neon	2.080E+1				0.0	0.0
59	02	oxygen	2.811E+1	-3.680E-6	1.746E-5	-1.065E-8	0.0	0.0
60	02\$	sulfur dioxide	2.385E+1	6.699E-2	-4.961E-5	1.328E-8	-2.971E+5	-3.004E
61	03	ozone	2.054E+1	8.009E-2	-6.243E-5	1.697E-8	1.428E+5	1.629E
62	038	sulfur trioxide	1.921E+1	1.374E-1	-1.176E-4	3.700E-8	-3.960E+5	-3.713E
63	Р	phosphorous	2.080E+1				3.341F+5	2.922E
64	Rn	radon	2.080E+1				0.0	0.0
65	\$	sulfur					2.792E+5	2.386E
. 66	Se	selenium						
67	T2	tritium						
68	Хe	xenon	2.080E+1				0.0	0.0
69	HBr	hydrogen bromide	3.065E+1	-9.462E-3	1.722E-5	-6.238E-9	-3.626E+4	-5.330E+
70	HC 1	hydrogen chloride	3.067E+1	-7.201E-3	1.246E-5	-3.898E-9	-9.236E+4	-9.533E
71	HD	hydrogen deuteride	2.947E+1	-1.329E-3	1.311E-6	1.279E-9	3.220E+2	-1.465E+
72	HF	hydrogen fluoride	2.906E+1	6.611E-4	-2.032E-6	2.504E-9	-2.713E+5	-2.734E-
73	HI	hydrogen iodide	3.116E+1	-1.428E-2	2.972E-5	-1.353E-8	2.638E+4	1.591E
74	HF2N	difluoroamine			-			
75	H2	hydrogen (equilibrium)	2.714E+1	9.274E-3	-1.381E-5	7.645E-9	0.0	0.0

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
51	I4S†	silicon tetraiodide									
52	I4Ti	titanium tetraiodide									
53	Kr	krypton	2	24.097	1408.77	-2.579	336.	115	TC	2.42	120
54	NO	nitric oxide	2	54.894	2465.78	-7.211	209.	115	TC	1.28	121
55	NO2	nitrogen dioxide	2	55.242	6073.34	-6.094	780.	270	ŤĊ	1.45	293
56	N2	nitrogen	1	-6.09676	1.13670	-1.04072	-1.93306	63	TC	0.804	78
57	N20	nitrous oxide	2	39.824	2867.98	-4.655	557.	190	TC	1.226	184
58	Ne	neon	1	-6.07686	1.59402	-1.06092	4.06656	25	ŤČ	1.204	
59	02	oxygen	1	-6.28275	1.73619	-1.81349	-2.53645E	-2 54	TC	1.149	
60	028	sulfur dioxide	2	48.882	4552.50	-5.666	990.	235	TC	1.455	
61	03	оzоле	3	9.1225	1272.18	-22.16		109	174	1.356	161
62	0.38	sulfur trioxide	2	132.94	10420.1	-17.38	1200.	300	TC	1.78	318
63	P	phosphorous								· <del>-</del>	_
64	Rn	radon								4.4	211
55	S	sulfur									
56	Se	selenium									
67	T2	tritium									
68	Хe	xenon	2	24.809	1951.76	-2.544	603.	170	TC	3.06	165
69	HBr	hydrogen bromide	2	21.482	2394.35	-1.843	653.	200	TC	2.16	216
70	HC1	hydrogen chloride	2	31.994	2626.67	-3.443	538.	180	TC	1.193	188
71	НО	hydrogen deuteride									
72	HF	hydrogen fluoride	1	-9.74369	4.68946	-2.98358	9.65825	273	TC	0.967	293
73	ΗI	hydrogen iodide	2	27.264	3013.08	-2.673	923.	235	TC	2.80	237
74	HF2N	difluoroamine									
75	H2	hydrogen (equilibrium)	1	-5.57929	2.60012	-0.85506	1.70503	14	TC	0.071	20

Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Ome ga	Dipm debye
H2	hydrogen (normal)	2.016	14.0	20.4	33.2	13.0	65.1	0.306	-0.218	0.0
H20	water	18.015	273.2	373.2	647.3	221.2	57.1	0.235	0.344	1.8
H2S	hydrogen sulfide	34.080	189.6	213.5	373.2	89.4	98.6	0.284	0.097	0.9
H3As	arsine	77.946	159.7	218.	373.1					0.2
H3N	ammonia	17.031	195.4	239.8	405.5	113.5	72.5	0.244	0.250	1.5
н3Р	phosphine	33.998	140.	185.4	324.5	65.4			0.038	0.6
H4C1N	ammonium chloride	53.492		793.	882.	16.4			3.92	
H4C1P	phosphonium chloride	70.459		246.	322.3	73.7			1.64	
H4N2	hydrazine	32.045	274.7	386.7	653.	147.			0.316	3.0
14S i	silane	32.122	88.2	161.	269.7	48.4			0.068	0.0
H6B2	diborane	27.668	108.	185.6	289.8	40.5			0.217	0.0
CBrC1F2	bromochlorodifluoromethane	165.364		269.	426.9	42.5	245.5	0.294	0.184	
CBr2F2	dibromodifluoromethane	209.815	132.	298.	471.3	41.3				0.7
:BrF3	trifluorobromomethane	148.910		215.3	340.2	39.7	195.9	0.275	0.171	0.7
C1F3	chlorotrifluoromethane	104.459	92.0	193.2	302.0	38.7	180.4	0.278	0.198	0.5
C12F2	dichlorodifluoromethane	120.914	115.4	245.2	385.0	41.4	216.7	0.280	0.204	0.5
CC120	phosgene	98.916	145.0	281.	455.	56.7	190.1	0.285	0.205	1.1
CC13F	trichlorofluoromethane	137.368	162.0	296.9	471.2	44.1	247.8	0.279	0.189	0.5
CC14	carbon tetrachloride	153.823	250.	349.9	556.4	45.6	275.9	0.272	0.193	0.0
D4	deuteromethane	20.071		111.7	189.2	46.6	98.2	0.291	0.032	0.0
F4	carbon tetrafluoride	88.005	86.4	145.1	227.6	37.4	139.6	0.276	0.177	0.0
CO	carbon monoxide	28.010	68.1	81.7	132.9	35.0	93.2	0.295	0.066	0.1
cos	carbonyl sulfide	60.070	134.3	223.	378.8	63.5	136.3	0.275	0.105	0.7
C02	carbon dioxide	44.010	216.6		304.1	73.8	93.9	0.274	0.239	0.0
CS2	carbon disulfide	76.131	161.3	319.	552.	79.0	160.	0.276	0.109	0.0

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
76	Н2	hydrogen (normal)						
77	H20	water	3.224E+1	1.924E-3	1.055E-5	-3.596E-9	-2.420E+5	-2.288E+5
78	H2S	hydrogen sulfide	3.194E+1	1.436E-3	2.432E-5	-1.176E-8	-2.018E+4	-3.308E+4
79	H3As	arsine					1.825E+5	1.578E+5
80	H3N	ammonia	2.731E+1	2.383E-2	1.707E-5	-1.185E-8	-4.572E+4	-1.616E+4
81 82	Н3Р Н4С1 <b>N</b>	phosphine ammonium chloride	2.323E+1	4.401E-2	1.303E-5	-1.593E-8	2.290E+4	2.541E+4
83	H4C1P	phosphonium chloride						
84	H4N2	hydrazine	9.768E+0	1.895E-1	-1.657E-4	6.025E-8	9.525E+4	1.586E+5
85	H4S1	silane	1.118E+1	1.220E-1	-5.548E-5	6.840E-9	3.266E+4	5.518E+4
86 87 88	H6B2 CBrC1F2 CBr2F2	diborane bromochlorodifluoromethane dibromodifluoromethane					3.140E+4	8.332E+4
89	CBrF3	trifluorobromomethane	2.188E+1	2.159E-1	-2.114E-4	7.464E-8	-6.494F+5	-6.975E+5
90	CC1F3	chlorotrifluoromethane	2.281E+1	1.911E-1	-1.576E-4	4.459E-8	-6.950E+5	-6.544E+5
91	CC12F2	dichlorodifluoromethane	3.160E+1	1.782E-1	-1.509E-4	4.342E-8	-4.815E+5	-4.425E+5
92	CC120	phosgene	2.809E+1	1.361E-1		5.070E-8	-2.211E+5	-2.069E+5
93	CC13F	trichlorofluoromethane	4.098E+1	1.668E-1	-1.416E-4	4.146E-8	-2.847E+5	-2.455E+5
94	CC14	carbon tetrachloride	4.072E+1	2.049E-1	-2.270E-4	8.843E-8	-1.005E+5	-5.828E+4
95	CD4	deuteromethane	1.249E+1	1.010E-1	-2.199E-5	-8.458E-9	-8.830E+4	-5.954E+4
96	CF4	carbon tetrafluoride	1.398E+1	2.026E-1	-1.625E-4	4.513E-8	-9.337E+5	-8.890E+5
97	CO	carbon monoxide	3.087E+1	-1.285E-2	2.789E-5	-1.272E-8	-1.106E+5	-1.374E+5
98	cos	carbonyl sulfide	2.357E+1	7.984E-2	-7.017E-5	2.453E-8	-1.385E+5	-1.658E+5
99	CO2	carbon dioxide	1.980E+1	7.344E-2	-5.602E-5	1.715E-8	-3.938E+5	-3.946E+5
100	CS2	carbon disulfide	2.74 <b>4</b> E+1	8.127E-2	-7.666E-5	2.673E-8	1.171E+5	6.695E+4

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	T DE N
76	Н2	hydrogen (normal)									
77	H20	water	1	-7.76451	1.45838	-2.77580	-1.23303	275	TC	0.998	293
78	H2S	hydrogen sulfide	2	36.067	3132.31	-3.985	653.	205	TC	0.993	
79	H3As	arsine								1.604	209
80	H3N	ammonia	2	45.327	4104.67	-5.146	615.	220	TC	0.639	273
81	н3Р	phosphine								1.529	298
82	H4C1N	ammonium chloride									
83	H4C1P	phosphonium chloride									
84	H4N2	hydrazine	2	49.476	6951.84	-5.286	1222.	350	TC	1.008	293
85	H4Si	silane								0.68	88
86	H6B2	diborane	3	8.0390	1200.78	-31.22		118	181	0.470	153
87	CBrC1F2	bromochlorodifluoromethane	3	9.1295	2154.39	-32.87		178	283	•••••	•
88	CBr2F2	dibromodifluoromethane	3	9.8485	2720.78	-19.35		247	296	2.462	288
89	CBrF3	trifluorobromomethane								1.538	298
90	CC1F3	chlorotrifluoromethane	1	-6.78845	1.24435	-2.32601	1.45543	233	TC	1.298	243
91	CC12F2	dichlorodifluoromethane	1	-7.01657	1.73224	-2.97909	-0.37723	155	TC	1.750	158
92	CC120	phosgene	1	-7.08177	1.60461	-2.57153	-1.88377	216	TC	1.381	293
93	CC13F	trichlorofluoromethane	2	42.089	4464.14	-4.753	2138.	260	TC	1.494	290
94	CC14	carbon tetrachloride	1	-7.07139	1.71497	-2.89930	-2.49466	250	TC	1.584	298
95	CD4	deuteromethane									
96	CF4	carbon tetrafluoride	3	9.4341	1244.55	-13.06		93	148	1.33	193
97	CO	carbon monoxide	1	-6.20798	1.27885	-1.34533	-2.56842	71	TC	0.803	81
98	COS	carbonyl sulfide	1	-6.40952	1.21015	-1.54976	-2.10074	162	TC	1.274	
99	C02	carbon dioxide	1	-6.95626	1.19695	-3.12614	2.99448	217	TC		
100	CS2	carbon disulfide	1	-6.63896	1.20395	-0.37653	-4.32820	277	TC	1.293	273

No	Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mol	Zc	Omega	Dipm debye
101	CHC1F2	chlorodifluoromethane	86.469	113.	232.4	369.3	49.7	165.6	0.268	0.221	1.4
102	CHC12F	dichloromonofluoromethane	102.923	138.	282.1	451.6	51.8	196.4	0.271	0.210	1.3
103	CHC13	chloroform	119.378	209.6	334.3	536.4	53.7	238.9	0.293	0.218	1.1
104	CHF3	fluoroform	70.013	110.	191.0	299.3	48.6	132.7	0.259	0.260	1.6
105	CHN	hydrogen cyanide	27.026	259.9	298.9	456.7	53.9	138.8	0.197	0.388	3.0
106	CH2Br2	dibromomethane	173.835	220.6	370.	583.	71.				1.9
107	CH2C12	dichloromethane	84.933	178.1	313.0	510.	63.			0.199	1.8
108	CH2F2	difluoromethane	52.023		221.5	351.6	58.3	120.8	0.241	0.271	2.0
109	CH20	formaldehyde	30.026	156.	254.	408.	65.9			0.253	2.3
110	CH202	formic acid	46.025	281.5	373.8	580.					1.5
111	CH3Br	methyl bromide	94.939	179.5	276.6	464.	66.1				1.8
112	CH3C1	methyl chloride	50.488	175.4	249.1	416.3	67.0	138.9	0.269	0.153	1.9
113	CH3F	methyl fluoride	34.033	131.4	194.7	315.0	56.	113.2	0.240	0.187	1.8
114	CH3I	methyl iodide	141.939	206.7	315.7	528.	65.9				1.6
115	CH3N02	nitromethane	61.041	244.6	374.3	588.	63.1	173.2	0,208	0.310	3.1
116	CH4	methane	16.043	90.7	111.6	190.4	46.0	99.2	0.288	0.011	0.0
117	CH40	methanol	32.042	175.5	337.7	512.6	80.9	118.0	0.224	0.556	1.7
118	CH4S	methyl mercaptan	48.107	150.	279.1	470.0	72.3	144.8	0.268	0.153	1.3
119	CH5N	methyl amine	31.058	179.7	266.8	430.0	74.3			0.292	1.3
120	CH6N2	methyl hydrazine	46.072		362.	567.	82.4	271.2	0.474	0.425	1.7
121	CH6Si	methyl silane	46.145	116.7	215.6	352.5					0.7
122	C2Br2C1F3		ane276.277	182.7	366.	560.7	36.1	368.	0.285	0.248	-
	C2Br2F4	1.2-dibromotetrafluoroethane	259.822	163.	320.4	487.8	33.9	341.	0.285	0.245	
	C2C1F3	chlorotrifluoroethene	116.469	116.	245.3	379.	40.5	212.	0.272	0.252	0.4
	C2C1F5	chloropentafluoroethane	154.467	167.	235.2	353.2	32.3	251.8	0.277	0.279	0.3
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No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
101	CHC1F2	chlorodifluoromethane	1.730E+1	1.618E-1	-1.170E-4	3.058E-8	-5.020E+5	-4.709E+5
102	CHC12F	dichloromonofluoromethane	2.366E+1	1.581E-1	-1.200E-4	3.264E-8	-2.989E+5	-2.684E+5
103	CHC13	chloroform	2.400E+1	1.893E-1	-1.841E-4	6.657E-8	-1.013E+5	-6.858E+4
104	CHF3	fluoroform	8.156E+0	1.813E-1	-1.379E-4	3.938E-8	-6.975E+5	-6.628E+5
105	CHN	hydrogen cyanide	2.186E+1	6.062E-2	-4.961E-5	1.815E-8	1.306E+5	1.202E+5
106	CH2Br2	dibromomethane	2.500E+1	2.517E-1	-1.833E-4	5.646E-8	-3.890E+4	-1.059E+4
107	CH2C12	dichloromethane	1.295E+1	1.623E-1	-1.302E-4	4.208E-8	-9.546E+4	-6.891E+4
108	CH2F2	difluoromethane	1.179E+1	1.181E-1	-4.843E-5	2.125E-9	-4.509E+5	-4.229E+5
109	CH20	formaldehyde	2.348E+1	3.157E-2	2.985E-5	-2.300E-8	-1.160E+5	-1.100E+5
110	CH202	formic acid	1.171E+1	1.358E-1	-8.411E-5	2.017E-8	-3.789E+5	-3.512E+5
111	CH3Br	methyl bromide	1.443E+1	1.091E-1	-5.401E-5	1.000E-8	-3.768E+4	-2.818E+4
112	CH3C1	methyl chloride	1.388E+1	1.014E-1	-3.889E-5	2.567E-9	-8.637E+4	-6.293E+4
113	CH3F	methyl fluoride	1.382E+1	8.616E-2	-2.071E-5	-1.985E-9	-2.340E+5	-2.101E+5
114	CH3I	methyl iodide	1.081E+1	1.389E-1	-1.041E-4	3.486E-8	1.398E+4	1.566E+4
115	CH3N02	nitromethane	7.423E+0	1.978E-1	-1.081E-4	2.085E-8	-7.478E+4	-6.950E+3
116	CH4	methane	1.925E+1	5.213E-2	1.197E-5	-1.132E-8	-7.490E+4	-5.087E+4
117	C H40	methanol	2.115E+1	7.092E-2	2.587E-5	-2.852E-8	-2.013E+5	-1.626E+5
118	CH4S	methyl mercaptan	1.327E+1	1.457E-1	-8.545E-5	2.075E-8	-2.299E+4	-9.923E+3
119	CH5N	methyl amine	1.148E+1	1.427E-1	-5.334E-5	4.752E-9	-2.303E+4	3.228E+4
120	CH6N2	methyl hydrazine					8.541E+4	1.780E+5
121	CH6Si	methyl silane						
122	C2Br2C1F3	1,2-dibromo-1-chlorotrifluoroethane						
	C2Br2F4	1,2-dibromotetrafluoroethane					-7.662E+5	
124	C2C1F3	chlorotrifluoroethene					-5.317E+5	
125	C2C1F5	chloropentafluoroethane	2.783E+1	3.492E-1	-2.891E-4	8.139E-8		

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
102 103	CHC1F2 CHC12F CHC13 CHF3	chlorodifluoromethane dichloromonofluoromethane chloroform fluoroform	1 2 1 1	-6.99913 47.943 -6.95546 -7.41994	1.23014 4629.02 1.16625 1.65884	-2.49377 -5.590 -2.13970 -3.14962	-2.21052 1665. -3.44421 -0.84938	170 250 215 125	TC TC TC TC	1.23 1.38 1.489 1.246	
_	CHN	hydrogen cyanide	2	31.122	4183.37	-3.004	1635.	280	TC	0.688	
107 108 109	CH2Br2 CH2C12 CH2F2 CH2O CH2O2	dibromomethane dichloromethane difluoromethane formaldehyde formic acid	1 1 1 3	-7.35739 -7.44206 -7.29343 10.3680	2.17546 1.51914 1.08395 3599.58	-4.07038 -2.75319 -1.63882 -26.09	3.50701 -0.97949 -2.30677	233 155 184 271	TC TC TC 409	2.50 1.317 0.815 1.226	253
112 113 114	CH3Br CH3C1 CH3F CH3I CH3NO2	methyl bromide methyl chloride methyl fluoride methyl iodide nitromethane	1 1 1 1	-7.43951 -6.86672 -6.78099 -6.51125 -8.41688	3.15408 1.52273 0.828379 0.888786 2.76466	-4.67922 -1.92919 -1.41137 -1.36624 -3.65341	2.33796 -2.61459 -2.41700 -3.03652 -1.01376	184 175 135 259 328	TC TC TC TC TC	1.737 0.915 0.843 2.279 1.138	293 213 293
117 118 119	CH4 CH40 CH4S CH5N CH6N2	methane methanol methyl mercaptan methyl amine methyl hydrazine	1 1 1 1 3	-6.00435 -8.54796 -6.79300 -7.52772 8.5222	1.18850 0.76982 1.52687 1.81615 2319.84	-0.83408 -3.10850 -2.45989 -4.20677 -91.70	-1.22833 1.54481 -1.34839 -1.22275	91 288 222 200 270	TC TC TC TC 400	0.425 0.791 0.866 0.703	293 293
122 123 124	CH6Si C2Br2C1F3 C2Br2F4 C2C1F3 C2C1F5	methyl silane 1,2-dibromo-1-chlorotrifluoroethane 1,2-dibromotetrafluoroethane chlorotrifluoroethene chloropentafluoroethane	1 1 1 1	-7.75667 -7.30588 -7.73622 -7.69084	2.65450 1.65554 2.58699 2.41233	-4.26722 -3.20770 -4.21453 -4.48383	-0.10090 -1.65654 -0.15430 1.92058	184 225 116 174	TC TC TC TC	2.175 1.305 1.26	

No For	rmula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
126 C2C	C12F4	1,1-dichlorotetrafluoroethane	170.922	179.	277.0	418.6	33.0	294.2	0.279	0.263	
127 C2C		1,2-dichlorotetrafluoroethane	170.922	179.	276.2	418.9	32.6	293.8	0.275	0.246	0.5
128 C2C		1,2,2-trichlorotrifluoroethane	187.380	238.2	320.8	487.3	34.1	325.5	0.274	0.256	
129 C2C 130 C2C		tetrachloroethene 1,1,2,2-tetrachlorodifluoroethane	165.834 203.831	251. 298.0	394.4 366.0	620.2 551.	47.6 38.7	289.6	0.250		0.0
131 C2F	F3N	trifluoroacetonitrile	95.023		205.5	311.1	36.2	202.	0.283	0.267	
132 C2F		perfluoroethene	100.016	130.7	197.2	306.5	39.4	172.	0.267	0.223	
133 C2F		perfluoroethane	138,012	172.4	194.9	293.0	30.6	222.	0.279		0.0
134 C2N		cyanogen	52.035	245.3	252.0	400.	59.8			0.278	0.2
135 С2Н	HUIFZ	1-chloro-2,2-difluoroethene	98.479		254.6	400.6	44.6	197.	0.264	0.220	
136 C2H	HC1F4	chloro-1,1,2,2,-tetrafluoroethane	136.475		263.	399.9	37.2	244.	0.273	0.281	
137 C2H	HC 13	trichloroethene	131.389	186.8	360.4	572.	50.5	256.	0.265	0.213	0.9
138 C2H		pentachloroethane	202.295	244.	435.	646.	34.8				1.0
139 C2H		trifluoroacetíc acid	114.024	257.9	346.	491.3	32.6	204.	0.163	0.540	2.3
140 C2H	12	acetylene	26.038		188.4	308.3	61.4	112.7	0.270	0.190	0.0
141 C2H	H2C12	cis-1,2-dichloroethene	96.944	192.7	333.3	537.	56.				1.8
142 C2H		trans-1,2-dichloroethene	96.944	223.	321.9	513.	48.1			0.232	0.0
143 C2H	H2C14	1,1,2,2-tetrachloroethane	167.850	237.	419.4	661.2	58.4				1.5
144 C2H		1,1-difluoroethene	64.035	129.	187.5	302.9	44.6	154.1	0.273	0.140	1.4
145 C2H	H20	ketene	42.038	138.	232.	380.	65.	145.	0.30	0.21	1.4
146 C2H	H3C1	vinyl chloride	62,499	119.4	259.8	425.	51.5	169.	0.265	0.122	1.5
140 C2H		1-chloro-1.1-difluoroethane	100.496	142.	263.4	409.6	43.3	231.	0.294	0.251	2.1
148 C2H		acetyl chloride	78.498	160.2	323.9	508.0	58.7	204.	0.280	0.344	2.4
149 C2H	H3C13	1,1,1-trichloroethane	133.405	240.	347.2	545.	43.0			0.217	1.7
150 C2H	H3C13	1,1,2-trichloroethane	133.405	235.8	386.7	606.	51.4				1.4

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
126	C2C12F4	1,1-dichlorotetrafluoroethane	4.045E+1	3.278E-1	-2.752E-4	7.821E-8		
127	C2C12F4	1,2-dichlorotetrafluoroethane	3.878E+1	3.440E-1	-2.950E-4	8.508E -8	-8.985E+5	
128	C2C13F3	1,2,2-trichlorotrifluoroethane	6.114E+1	2.874E-1	-2.420E-4	6.904E-8	-7.457E+5	
	C2C14 C2C14F2	tetrachloroethene 1,1,2,2-tetrachlorodifluoroethane	4.597E+1	2.255E-1	-2.294E-4	8.382E-8	-1.214E+4	2.261E+4
131	C2F3N	trifluoroacetonitrile	2.213E+1	2.519E-1	-2.361E-4	8.207E-8	-4.957E+5	-4.622E+5
	C 2F 4	perfluoroethene	2.901E+1	2.277E-1	-2.036E-4	6.778E-8	-6.590E+5	-6.241E+5
	C2F6	perfluoroethane	2.682E+1	3.458E-1	-2.869E-4	8.135E <i>-</i> 8	-1.344E+6	-1.258E+6
	C2N2 C2HC1F2	cyanogen 1-chloro-2,2-difluoroethene	3.594E+1	9.253E-2	-8.148E -5	2.950E-8	3.092E+5	2.974E+5
136	C2HC1F4	chloro-1,1,2,2,-tetrafluoroethane						
	C2HC13	trichloroethene	3.017E+1	2.287E-1	-2.229E-4	8.244E-8	-5.862E+3	1.989E+4
	C2HC15 C2HF302	pentachloroethane trifluoroacetic acid	4.394E+1	3.374E-1	-3.356E-4	1.213E-7	-1.424E+5	-6.670E+4
140	C2H2	acetylene	2.682E+1	7.578E-2	-5.007E-5	1.412E-8	2.269E+5	2.093E+5
141	C2H2C12	cis-1,2-dichloroethene	1.161E+1	2.358E-1	-2.100E-4	7.242E-8	1.880E+3	2.437E+4
	C2H2C12	trans-1,2-dichloroethene	1.828E+1	2.100E-1	-1.764E-4	5.804E-8	4.190E+3	2.660E+4
	C2H2C14	1,1,2,2-tetrachloroethane	2.767E+1	3,251E-1	-2.974E-4	1.028E-7	-1.528E+5	-8.583E+4
	C2H2F2	1,1-difluoroethene	3.073E+0	2.445E-1	-2.099E -4	7.021E-8	-3.454E+5	-3.217E+5
1 45	C2H20	ketene	6.385E+0	1.638E-1	-1.084E-4	2.698E-8	-6.113E+4	-6.033E+4
	C2H3C1	vinyl chloride	5.949E+0	2.019E-1	-1.536E-4	4.773E-8	3.517E+4	5.154E+4
	C2H3C1F2	1-chloro-1,1-difluoroethane	1.682E+1	2.757E-1	-1.992E-4	5.305E-8		
	C2H3C10 C2H3C13	acetyl chloride 1,1,1-trichloroethane	2.502E+1	1.711E-1	-9.856E-5	2.219E-8	-2.441E+5	-2.064E+5
_	C2H3C13	1,1,2-trichloroethane	6.322F+0	3.431E-1	-2.958E-4	9.793E-8	-1.386E+5	-7.754E+4

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN	
126	C2C12F4	1,1-dichlorotetrafluoroethane	1	-7.33582	1.62482	-3.06234	-2.42281	217	TC	1.455	298	
127	C2C12F4	1,2-dichlorotetrafluoroethane	1	-7.15825	1.10752	-2.12022	-4.54857	180	TC	1.48	277	
128	C2C13F3	1,2,2-trichlorotrifluoroethane	1	<b>-7.</b> 26519	1.39273	-2.50843	-5.26657	238	TC	1.580	289	
	C2C14	tetrachloroethene	1	<b>-7.36067</b>	1.82732	-3.47735	-1.00033	252	TC	1.62	293	
1 30	C2C14F2	1,1,2,2-tetrachlorodifluoroethane	1	<i>-</i> 7.80715	1.69009	-3.12042	-3.29269	299	TC	1.65	298	
131	C2F3N	trifluoroacetonitrile	3	9.7917	1781.77	-23.28		142	206			
132	C2F 4	perfluoroethene	1	-6.74371	0.62458	-1.94752	-3.78881	145	TC	1.519	197	
133	C2F6	perfluoroethane	1	-7.32301	1.50248	-2.64678	-4.93429	173	TC	1.590	195	
134	C2N2	cyanogen	2	51.703	4390.80	-6,185	1130.	250	TC	0.954	252	
135	C2HC1F2	1-chloro-2,2-difluoroethene	1	-7.19815	1.77543	-3.50534	-0.68772	136	TC			
136	C2HC1F4	chloro-1,1,2,2,-tetrafluoroethane	1	-7.56490	1.81516	-3.54300	-1.04102	157	TC			
137	C2HC13	trichloroethene	1	-7.38190	1.94817	-3.03294	-5.34536	291	TC	1.462	293	
138	C2HC15	pentachloroethane	1	-7.50052	1.16078	-3.48149	-1.04212	312	TC	1.671		
139	C2HF302	trifluoroacetic acid	3	7.5356	2828.94	-57,11		285	345	1.535		
1 40	C2H2	acetylene	1	-6.90128	1.26873	-2.09113	-2.75601	192	TC	0.615	189	
141	C2H2C12	cis-1,2-dichloroethene	1	-6.97612	1,11972	-1.88483	-3.32030	274	TC	1.282	298	
142	C2H2C12	trans-1.2-dichloroethene	1	-6.69776	1.08543	-2.90387	-0.25533	258	TC	1.255		
143	C2H2C14	1,1,2,2-tetrachloroethane	1	-7.98542	2.49931	-4.07076	-0.69180	303	TC	1.600		
144	C2H2F2	1,1-difluoroethene	1	-6.58895	0.90734	-0.82882	0.11779	130	TC	0.617	297	
145	C2H20	ketene	3	9.3995	1849.21	-35.15	-	170	255			
146	C2H3C1	vinyl chloride	1	-6.50008	1.21422	-2.57867	-2.00937	208	TC	0.969	259	
147	C2H3C1F2	1-chloro-1,1-difluoroethane	1	-7.83556	2.79382	-4.42364	0.06334	143	TC	1.10	303	
148	C2H3C10	acetyl chloride	1	-7.94455	1.81437	-2.09194	-1.98959	267	TC	1.104		
149	C2H3C13	1,1,1-trichloroethane	1	-7.31317	2.04642	-3.77747	-0.45475	247	TC	1.339		
1 50	C2H3C13	1,1,2-trichloroethane	1	-7.71341	2.15518	-3.96435	-0.54604	323	TC	1.441	293	

No	Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
	C2H3F	vinyl fluoride	46.044	130.0	201.0	327.9	52.4	144.	0.277	0.157	1.4
	C2H3F3 C2H3N	<pre>1,1,1-trifluoroethane acetonitrile</pre>	84.041 41.053	161.9 229.3	225.6 354.8	346.3 545.5	37.6 48.3	194. 173.	0.253 0.184	0.251 0.327	2.3 3.5
	C2H3NO	methyl isocyanate	57.052	223.5	312.	491.	55.7	1/5.	0.104	0.327	3.5
	C2H4	ethylene	28.054	104.0	169.3	282.4	50.4	130.4	0.280	0.089	0.0
	C2H4Rr2	1,2-dibromoethane	187.862	283.3	404.7	646.	53.5			0.795	1.0
	C2H4C12	1,1-dichloroethane	98.960	176.2	330.5	523.	50.7	236.	0.275	0.240	2.0
	C2H4C12	1,2-dichloroethane	98.960	237.5	356.7	566.	53.7	225.	0.259	0.278	1.8
	C2H4F2	1,1-difluoroethane	66.051	156.2	248.2	386.7	45.0	181.	0.253	0.256	2.3
160	C2H40	acetaldehyde	44.054	150.2	294.	461.	55.7	154.	0.220	0.303	2.5
161	C2H40	ethylene oxide	44.054	161.	283.7	469.	71.9	140.	0.259	0.202	1.9
	C2H402	acetic acid	60.052	289.8	391.1	592.7	57.9	171.	0.201	0.447	1.3
	C2H402	methyl formate	60.052	174.2	304.9	487.2	60.0	172.	0.255	0.257	1.8
	C2H5Br	ethyl bromide	108.966	154.6	311.5	503.9	62.3	215.	0.320	0.229	2.0
165	C2H5C1	ethyl chloride	64.515	136.8	285.5	460.4	52.7	199.	0.274	0.191	2.0
166	C2H5F	ethyl fluoride	48.060	129.9	235.5	375.3	50.2	169.	0.272	0.215	2.0
167	C2H5I	ethyl iodide	155.967	165.	345.6	554.	47.0				1.7
168	C2H6	ethane	30.070	89.9	184.6	305.4	48.8	148.3	0.285	0.099	0.0
169	C2H60	dimethyl ether	46.069	131.7	248.3	400.0	52.4	178.	0.287	0.200	1.3
170	C2H60	ethanol	46.069	159.1	351.4	513.9	61.4	167.1	0.240	0.644	1.7
171	C2H602	ethylene glycol	62,069	260.2	470.5	(645.)	(77.)				2.2
172	C2H6S	ethyl mercaptan	62.134	125.3	308.2	499.	54.9	207.	0.274	0.191	1.5
	C2H6S	dimethyl sulfide	62.130	174.9	310.5	503.0	55.3	201.	0.266	0.191	1.5
	C2H7N	ethyl amine	45.085	192.	289.7	456.4	56.4	182.	0.270	0.289	1.3
175	C2H7N	dimethylamine	45.085	181.0	280.0	437.7	53.1			0.302	1.0
		-									

No Form	ıla Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
151 C2H3F	vinyl fluoride					-1.172E+5	
152 C2H3F	· · · · · · · · · · · · · · · · · · ·	5.744E+0	3.141E-1	-2.597E-4	8.415E-8	-7.461E+5	-6.792E+5
153 C2H3N		2.048E+1	1.196E-1	-4.492E-5	3.203E-9	8.792E+4	1.057E+5
154 C2H3N		3.576E+1	1.040E-1		-1.687E-8	-9.000E+4	1.03/2/3
155 C2H4	ethyl ene	3.806E+0	1.566E-1	-8.348E-5	1.755E-8	5.234E+4	6.816E+4
156 C2H4F	r2 1,2-dibromoethane	2.500E+1	2.517E-1	-1.833E-4	5.646E-8	-3.894E+4	-1.060E+4
157 C2H40	12 1,1-dichloroethane	1.247E+1	2.696E-1	-2.050E-4	6.301E-8	-1.300E+5	-7.314E+4
158 C2H40	12 1,2-dichloroethane	2.049E+1	2.310E-1	-1.438E-4	3.389E-8	-1.298E+5	-7.390E+4
159 C2H4F		8.675E+1	2.396E-1	-1.457E-4	3.394E-8	-4.940E+5	-4.365E+5
160 C2H40	acetaldehyde	7.716E+0	1.823E-1	-1.007E-4	2.380E-8	-1.644E+5	-1.334E+5
161 C2H40	ethylene oxide	-7.519E+0	2.222E-1	-1.256E-4	2.592E-8	-5.267E+4	-1.310E+4
162 C2H40	2 acetic acid	4.840E+0	2.549E-1	-1.753E-4	4.949E-8	-4.351E+5	-3.769E+5
163 C2H40	2 methyl formate	1.432E+0	2.700E-1	-1.949E-4	5.702E-8	-3.500E+5	-2.974E+5
164 C2H5B		6.657E+0	2.348E-1	-1.472E-4	3.804E-8	-6.406E+4	-2.633E+4
165 C2H50	l ethyl chloride	-5.527E-1	2.606E-1	-1.840E-4	5.548E-8	-1.118E+5	-6.004E+4
166 C2H5F	ethyl fluoride	4.346E+0	2.180E-1	-1.166E-4	2.410E-8	-2.617E+5	-2.097E+5
167 C2H5I	ethyl iodide	1.011E+1	2.253E-1	-1.382E-4	3.531E-8	-8.370E+3	2.135E+4
168 C2H6	ethane	5.409E+0	1.781E-1	-6.938E-5	8.713E-9	-8.474E+4	-3.295E+4
169 C2H60		1.702E+1	1.791E-1	-5.234E-5	-1.918E-9	-1.842E+5	-1.130E+5
170 C2H60	ethanol	9.014E+0	2.141E-1	-8.390E-5	1.373E-9	-2.350E+5	-1.684E+5
171 C2H60	2 ethylene glycol	3.570E+1	2.483E-1	-1.497E-4	3.010E-8	-3.896E+5	-3.047E+5
172 C2H6S		1.492E+1	2.351E-1	-1.356E-4	3.162E-8	-4.614E+4	-4.670E+3
173 C2H69		2.430E+1	1.875E-1	-6.875E-5	4.099E-9	-3.756E+4	6.950E+3
174 C2H7N		3.693E+0	2.752E-1	-1.583E-4	3.808E-8	-4.605E+4	3.730E+4
175 C2H7N	dimethylamine	-1.717E-1	2.695E-1	-1.329E-4	2.339E-8	-1.880E+4	6.800E+4

No	Formula	Na me	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
151	C2H3F	vinyl fluoride	1	-6.80471	1.67182	-3.29094	-0.69493	114	TC	0.681	263
152	C2H3F3	1,1,1-trifluoroethane	1	-7.87141	2.78418	-4.55799	0.56876	163	TC		
153	C2H3N	acetonitrile	2	40.774	5392.43	-4.357	2615.	300	TC	0.782	293
	C2H3N0	methy! isocyanate	3	9.7056	2480.37	-56.31		230	340	0.958	293
155	C2H4	ethyl ene	1	-6.32055	1.16819	-1.55935	-1.83552	105	TC	0.577	163
156	C2H4Br2	1,2-dibromoethane	1	-7.45007	2.22849	-3.97795	-0.24734	290	TC	2,180	293
	C2H4C12	1,1-dichloroethane	2	49.613	5422.68	-5.726	2380.	280	TC	1.168	298
158	C2H4C12	1,2-dichloroethane	1	-7.36864	1.76727	-3.34295	-1.43530	260	TC	1.250	289
	C2H4F2	1,1-difluoroethane	1	-7.40625	1.76980	-3.44560	-1.09392	157	TC	1.012	247
160	C2H40	acetaldehyde	1	-7.04687	0.12142	-2.66037E-2	-5.90300	273	TC	0.778	2 93
161	C2H40	ethylene oxide	1	-6.56234	0.42696	-1.25638	-3.18133	238	TC	0.899	273
	C2H4O2	acetic acid	1	-7.83183	5.51929E-4	0.24709	-8.50462	304	TC	1.049	293
163	C2H402	methyl formate	1	-6.99601	0.89328	-2.52294	-3.16636	220	TC	0.974	293
164	C2H5Br	ethyl bromide	1	-9.14807	5.49831	-6.68657	6.27287	301	TC	1.451	298
165	C2H5C1	ethyl chloride	1	-7.23667	2.11017	-3.53882	0.34775	217	TC	0.896	293
166	C2H5F	ethyl fluoride	1	-6.82738	0.59267	-0.73934	-3.69185	266	TC		
167	C2H5I	ethyl iodide	1	-6.50172	1.05321	-3.16148	-0.64188	290	TC	1.950	293
168	C2H6	ethane	1	-6.34307	1.01630	-1.19116	-2.03539	133	TC	0.548	183
169	C2H60	dimethyl ether	1	-7.12597	1.81710	-3.10058	-0.91638	194	TC	0.667	293
170	C2H60	ethanol	1	-8.51838	0.34163	-5.73683	8.32581	293	TC	0.789	293
171	C2H602	ethylene glycol	3	13,6299	6022.18	-28.25		364	494	1.114	293
172	C2H6S	ethyl mercaptan	1	-6.96578	1.50970	-2.73740	-1.73828	273	TC	0.839	293
	C2H6S	dimethyl sulfide	1	-6.94973	1.43646	-2.51444	-2.47611	222	TC	0.848	
174	C2H2N	ethyl amine	1	-7.20059	1.20679	-3.71972	-4.33511	215	TC	0.683	2 93
175	C2H7N	dimethylamine	1	-7.90295	2.81577	-6.31338	-0.22407	240	TC	0.656	293

No Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
176 C2H7NO	monoethanolamine	61.084	283.5	443.5	614.	44.5	196.	0.17		2.6
177 C2H8N2 178 C3C1F50	ethylenediamine	60.099	284.	390.4	593.	62.8	206.	0.26	0.51	1.9
179 C3F60	chloropentafluoroacetone perfluoroacetone	182.475 166.020		281.0 245.7	410.6 357.1	28.8 28.4	220	0 214	0.347 0.365	
180 C3F8	perfluoropropane	188.017	90.	236.5	345.1	26.8	329. 299.8	0.314 0.280	0.305	
181 C3H3F3	trifluoropropene	96.051		244.	376.2	38.0	211.	0.256	0.238	
182 C3H3F5	1,1,1,2,2-pentafluoropropane	134.047		255.7	380.1	31.4	273.	0.271	0.308	
183 C3H3N	acrylonitrile	53.064	189.5	350.5	536.	45.6	210.	0.21	0.35	3.5
184 C3H3NO	isoxazole	69.063		368.	552.					2.8
185 C3H4	propadiene	40.065	136.9	238.7	393.	54.7	162.	0.271	0.313	0.2
186 C3H4	methyl acetylene	40.065	170.5	249.9	402.4	56.3	164.	0.275	0.215	0.7
187 C3H40	acrolein	56.064	186.	326.	506.	51.6			0.33	2.9
188 C3H402	acrylic acid	72.064	285.	414.	615.	56.7	210.	0.23	0.56	
189 C3H402	vinyl formate	72.064	215.5	319.6	475.	57.7	210.	0.31	0.55	
190 C3H5C1	allyl chloride	76.526	138.7	318.3	514.	47.6	234.	0.26	0.13	2.0
191 C3H5C13	1,2,3-trichloropropane	147.432	258.5	429.	651.	39.5	348.	0.25	0.31	1.6
192 C3H5N	propionitrile	55.080	180.3	370.3	564.4	41.8	229.	0.205	0.313	3.7
193 C3H6	cyclopropane	42.081	145.7	240.3	397.8	54.9	163.	0.274	0.130	0.0
194 C3H6	propylene	42.081	87.9	225.5	364.9	46.0	181.	0.274	0.144	0.4
195 C3H6C12	1,2-dichloropropane	112.987	172.7	369.5	577.	44.5	226.	0.21	0.24	1.9
196 C3H60	acetone	58.080	178.2	329.2	508.1	47.0	209.	0.232	0.304	2.9
197 C3H6O	allyl alcohol	58.080	144.	370.2	543.0					
198 C3H60	propionaldehyde	58.080	193.	321.	515.3	63.3			0.313	2.7
199 C3H60	1,2-propylene oxide	58.080	161.	308.	482.2	49.2	186.	0.229	0.269	2.0
200 C3H60	vinyl methyl ether	58.080	151.5	278.	436.	47.6	205.	0.27	0.34	

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CP VAP D	DELHF	DELGF
177 178 179	C2H7N0 C2H8N2 C3C1F50 C3F60	monoethanolamine ethylenediamine chloropentafluoroacetone perfluoroacetone	9.311E+0 3.830E+1	3.009E-1 2.407E-1	-1.818E-4 -4.338E-5	4.656E-8 -3.948E-8	-2.017E+5	
	C3F8	perfluoropropane						
	C3H3F3 C3H3F5	trifluoropropene 1,1,1,2,2-pentafluoropropane						
	C3H3N	acrylonitrile	1.069E+1	2.208E-1	-1.565E-4	4.601E-8	1.851E+5	1.954E+5
	C3H3N0	isoxazole	-,				100012	
185	C3H4	propadiene	9.906E+0	1.977E-1	-1.182E-4	2.782E-8	1.923E+5	2.025E+5
186	C 3H 4	methyl acetylene	1.471E+1	1.864E-1	-1.174E-4	3.224E-8	1.856E+5	1.946E+5
	C3H40	acrolein	1.197E+1	2.106E-1	-1.071E-4	1.906E-8	-7.092E+4	-6.519E+4
188	C3H4O2	acrylic acid	1.742E+0	3.191E-1	-2.352E-4	6.975E-8	-3.365E+5	-2.863E+5
189	C3H402	vinyl formate	2.781E+1	1.839E-1	-3.560E-5	-2.335E-7		_•
190	C3H5C1	allyl chloride	2.529E+0	3.047E-1	-2.278E-4	7.293E-8	-6.280E+2	4.363E+4
191	C3H5C13	1,2,3-trichloropropane	2,688E+1	3.622E-1	-2.787E-4	8.788E-8	-1.859E+5	-9.785E+4
	C3H5N	propionitrile	1.540E+1	2.245E-1	-1.100E-4	1.954E-8	5.066E+4	9.621E+4
	C3H6	cyclopropane	-3.524E+1	3.813E-1	-2.881E-4	9.035E-8	5.334E+4	1.045E+5
194	C3H6	propylene	3.710E+0	2.345E-1	-1.160E-4	2.205E-8	2.043E+4	6.276E+4
195	C3H6C12	1,2-dichloropropane	1.045E+1	3.655E-1	-2.604E-4	7.741E-8	-1.660E+5	-8.315E+4
196	C3H60	acetone	6.301E+0	2.606E-1	-1.253E-4	2.038E-8	-2.177E+5	-1.532E+5
	C3H60	allyl alcohol	-1.105E+0	3.146E-1	-2.032E-4	5.321E-8	-1.321E+5	-7.130E+4
	C3H60	propional dehyde	1.172E+1	2.614E-1	-1.300E-4	2.126E-8	-1.922E+5	-1.305E+5
	C3H60	1,2-propylene oxide	-8.457E+0	3.257E-1	-1.989E-4	4.823E-8	-9.282E+4	-2.580E+4
200	C3H60	vinyl methyl ether	1.563E+1	2.341E-1	-9.697E-5	1.062E -8		

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
	C2H7N0 C2H8N2	monoethanolamine	1	-10.8842	3.03743	-7.21939	-2.99322	379	TC	1.016	
178	C3C1F50 C3F60	ethylenediamine chloropentafluoroacetone perfluoroacetone	1	-8.82254	2.27867	-3,52636	-6.97579	285	TC	0.896	293
	C3F8	perfluoropropane	3	9.3122	1901.54	-31.97		194	237	1.350	293
	C3H3F3	trifluoropropene									
183	C3H3F5 C3H3N	1,1,1,2,2-pentafluoropropane acrylonitrile	3	9.3051	2782.21	-51.15		255	385	0.806	
	C3H3N0 C3H4	isoxazole propadiene	3	6.5361	1054.72	-77.08		174	257	1.078 0.658	
186	C 3H4	methyl acetylene	1	-7.43860	2.62026	-5.76535	7.55261	178	TC	0.706	223
	C3H40	acrolein	3	9.2855	2606.53	-45.15		235	360	0.839	
	C3H4O2	acrylic acid	3	9.9415	3319.18	-80.15		315	450	1.051	293
	C3H4O2	vinyl formate	3	10.0329	2569.68	-63.15		240	350	0.963	293
1 90	C3H5C1	allyl chloride	1	-6.76334	2.50730	-7.64033	11.6666	286	TC	0.937	293
	C3H5C13	1,2,3-trichloropropane	3	9.5044	3417.27	-69.15		315	470	1.389	293
	C3H5N	propionitrile	1	-7.27719	0.46035	-0.45714	-10.1636	309	TC	0.782	293
	C3H6	cycl opropane	1	-7.98411	4.38160	-5.72309	3.40444	183	TC	0.563	288
	C3H6	propylene	1	-6.64231	1.21857	-1.81005	-2.48212	140	TC	0.612	223
1 95	C3H6C12	1,2-dichloropropane	1	-6.82259	0.54655	-1.59982	-5.05429	318	TC	1.15	293
196	C 3H 60	acetone	1	-7.45514	1.20200	-2.43926	-3.35590	259	TC	0.790	293
	C 3H 60	allyl alcohol	3	10,2864	2928.20	-85.15		286	400	0.855	288
	C3H60	propionaldehyde	1	-7.18479	1.00298	-1.49247	-5.13288	235	TC	0.797	293
	C3H60	1,2-propylene oxide	1	-6.97569	0.63650	-1.49187	-6.37743	249	TC	0.829	293
200	C3H60	vinyl methyl ether	3	7.8400	1980.22	-25.15		190	315	0.750	293

No	Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mol	Zc	Omega	Dipm debye
	C3H602	propionic acid	74.080	252.5	414.5	612.	54.	222.	0.183	0.520	1.5
	C3H602	ethyl formate	74.080	193.8	327.5	508.5	47.4	229.	0.257	0.285	2.0
	C3H602	methyl acetate	74.080	175.	330.4	506.8	46.9	228.	0.254	0.326	1.7
	C3H7C1	propyl chloride	78.542	150.4	320.4	503.	45.8	254.	0.278	0.235	2.0
205	C3H7C1	isopropyl chloride	78.542	156.0	308.9	485.0	47.2	230.	0.269	0.232	2.1
206	С3Н8	propane	44.094	85.5	231.1	369.8	42.5	203.	0.281	0.153	0.0
207	C3H80	1-propanol	60.096	146.9	370.3	536.8	51.7	219.	0.253	0.623	1.7
208	C3H80	isopropyl alcohol	60.096	184.7	355.4	508.3	47.6	220.	0.248	0.665	1.7
209	C3H80	methyl ethyl ether	60,096	134.	280.6	437.8	44.0	221.	0.267	0.244	1.2
210	C3H802	methylal	76.096	168.	315.	480.6	39.5	213.	0.211	0.286	1.0
211	СЗН802	1,2-propanediol	76.096	213.	460.5	625.	60.7	237.	0.28		3.6
212	C3H802	1,3-propanediol	76.096	246.4	487.6	724.	89.5		_		3.7
213	C3H8U3	glycerol	92.095	291.	563.	726.	66.8	255.	0.28		3.0
214	C3H8S	methyl ethyl sulfide	76,157	167.2	339.8	533.	42.6			0.216	
215	C3H9B03	trimethyl borate	103.912		342.	501.7	35.9			0.415	0.8
216	C3H9N	n-propyl amine	59,112	190.	321.7	497.0	48.1	233.	0.271	0.303	1.3
217	C3H 9N	isopropyl amine	59.112	177.9	305.6	471.8	45.4	221.	0.255	0.291	
	C3H9N	trimethyl amine	59,112	156.	276.0	433.3	40.9	254.	0.288	0.205	0.6
	C4F8	perfluorocyclobutane	200.028		267.2	388.5	27.8	324.	0.279	0.356	
220	C4F10	perfluorobutane	238.024	145.	271.2	386.4	23.2	378.	0.274	0.374	
221	C4H4	vinylacetylene	52.076	227.6	278.1	455.	49.6	202.	0.26	0.092	
	C4H40	furan	68.075	187.5	304.5	490.2	55.0	218.	0.295	0.209	0.7
	C4H4S	thiophene	84.136	234.9	357.2	579.4	56.9	219.	0.258	0.196	0.5
											3.4
				20087			0,.0		-,		1.8
224	C4H5N C4H5N	allyl cyanide pyrrole	67.091 67.091	186.7	392. 403.0	585. 639.8	39.5	265.	0.22	0.39	

No Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
201 C3H602 202 C3H602 203 C3H602	propionic acid ethyl formate methyl acetate	5.669E+0 2.467E+1 1.655E+1	3.689E-1 2.316E-1 2.245E-1	-2.865E-4 -2.120E-5 -4.342E-5	9.877E-8 -5.359E-8 2.914E-8	-4.554E+5 -3.715E+5 -4.097E+5	-3.696E+5
204 C3H7C1 205 C3H7C1	propyl chloride isopropyl chloride	-3.345E+0 1.842E+0	3.626E-1 3.488E-1	-2.508E-4 -2.244E-4	7.448E-8 5.862E-8	-1.302E+5 -1.465E+5	-5.070E+4 -6.255E+4
206 C3H8 207 C3H80 208 C3H80 209 C3H80 210 C3H802	propane 1-propanol isopropyl alcohol methyl ethyl ether methylal	-4.224E+D 2.470E+O 3.243E+1 1.867E+1	3.063E-1 3.325E-1 1.885E-1 2.685E-1	-1.586E-4 -1.855E-4 6.406E-5 -1.025E-4	3.215E-8 4.296E-8 -9.261E-8 8.951E-9	-1.039E+5 -2.566E+5 -2.726E+5 -2.166E+5	-2.349E+4 -1.619E+5 -1.735E+5 -1.177E+5
211 C3H802 212 C3H802 213 C3H803 214 C3H8S 215 C3H9R03	1,2-propanediol 1,3-propanediol glycerol methyl ethyl sulfide trimethyl borate	6.322E-1 8.269E+0 8.424E+0 1.953E+1	4.212E-1 3.676E-1 4.442E-1 2.891E-1	-2.981E-4 -2.162E-4 -3.159E-4 -1.209E-4	8.951E-8 5.053E-8 9.378E-8 1.287E-8	-4.242E+5 -4.091E+5 -5.853E+5 -5.966E+4	1.140E+4
216 C3H9N 217 C3H9N 218 C3H9N 219 C4F8 220 C4F10	n-propyl amine isopropyl amine trimethyl amine perfluorocyclobutane perfluorobutane	6.691E+0 -7.486E+0 -8.206E+0	3.498E-1 4.175E-1 3.972E-1	-1.822E-4 -2.826E-4 -2.219E-4	3.586E -8 8.348E -8 4.622E -8	-7.243E+4 -8.382E+4 -2.386E+4	3.982E+4 9.898E+4
221 C4H4 222 C4H40 223 C4H4S 224 C4H5N 225 C4H5N	vinylacetylene furan thiophene allyl cyanide pyrrole	6.757E+0 -3.553E+1 -3.061E+1 2.170E+1	2.841E-1 4.321E-1 4.480E-1 2.572E-1	-2.265E-4 -3.455E-4 -3.772E-4 -1.192E-4	7.461E-8 1.074E-7 1.253E-7 1.229E-8	3.048E+5 -3.470E+4 1.158E+5 1.084E+5	3.062E+5 8.790E+2 1.269E+5

No Fo	ormula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
201 C3		propionic acid	1	-8.69958	1.49460	-4.50355	1.06898	345	TC	0.993	
202 C3 203 C3		ethyl formate	1	-7.16968	1.13188	-3.37309	-3.53058	277	TC	0.927	
204 C3		methyl acetate propyl chloride	1	-8.05406 -7.55764	2.56375 2.60153	-5.12994 -5.06041	0.16125	275 248	TC TC	0.934	
205 C3		isopropyl chloride	3	9.4182	2490.48	-43.15	3.31163	225	340	0.891 0.862	
206 C3	3H8	propane	1	-6.72219	1.33236	-2.13868	-1.38551	145	TC	0.582	231
207 C3		1-propanol	1	-8.05594	4.25183E-2	-7.51296	6.89004	260	TC	0.804	2 93
208 C3		isopropyl alcohol	1	-8.16927	-9.43213E-2	-8.10040	7.85000	250	TC	0.786	2 93
209 C3		methyl ethyl ether	1	-7.64466	2.88475	-6.32922	0.33736	224	TC	0.700	
210 C3	3H802	methylal	3	9,2035	2415.92	-52.58		270	315	0.888	291
211 C3		1,2-propanediol	3	13,9122	6091.95	-22.46		357	483	1.036	293
212 C3		1,3-propanediol	1	-10.20156	2.93938	-6.69889	5.49989	332	TC	1.053	293
213 C3		glycerol	3	10.6190	4487.04	-140.2		440	600	1.261	293
214 C3		methyl ethyl sulfide	3	9.3563	2722.95	-48.37		250	360	0.837	
215 C3	3H9B03	trimethyl borate								0.915	293
216 C3	3H 9N	n-propyl amine	1	-7.23587	1.22853	-3.75004	-4.33990	235	TC	0.717	293
217 Ç3		isopropyl amine	1	-7.40866	1.79229	-4.75675	-1.70138	235	TC	0.688	293
218 C3		trimethyl amine	1	-6.88066	1.15962	-2.18332	-2.94707	200	TC	0.633	2 93
219 C4		perfluorocyclobutane	3	9.0726	1985.95	-48.01		241	274	1.654	
220 C4	4F10	perfluorobutane	3	9.5788	2280.18	-32.82		233	272	1.517	293
221 C4	4н4 -	vinylacetylene	3	9.3898	2203.57	-43.15		200	305	0.710	273
222 C4	4H40	furan	3	9.4410	2442.70	-45.41		238	363	0.938	293
223 C4		thiophene	1	-7.05208	1.69640	-3.17778	-1.57742	312	TC	1.071	289
224 C4		allyl cyanide	3	9.3817	3128.75	-58.15		400	430	0.835	
225 C4	4H 5N	pyrrole	3	10.1764	3457.47	-62.73		330	440	0.967	294

No Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
226 C4H6	1-butyne	54.092	147.4	281.2	463.7	47.1	220.	0.27	0.050	0.8
227 C4H6	2-butyne	54.092	240.9	300.1	488.7	50.8	221.	0.277	0.124	0.8
228 C4H6	1,2-butadiene	54.092	137.0	284.0	443.7	44.9	219.	0.267	0,255	0.4
229 C4H6	1,3-butadiene	54.092	164.2	268.7	425.	43.3	221.	0.270	0.195	0.0
230 C4H602	vinyl acetate	86,091	173.	346.	525.	43.5	265.	0.26	0.34	1.7
231 C4H603	acetic anhydride	102.089	199.	413.2	569.	46.8			0.908	3.0
232 C4H6O4	dimethyl oxalate	118,090	327.	436.5	628.	39.8			0.556	- • •
233 C4H6O4	succinic acid	118,090	456.	508.						2.2
234 C4H7N	butyronitrile	69,107	161.0	391.1	582.2	37.9			0.373	3.8
235 C4H602	methyl acrylate	86,091	196.7	353.5	536.	43.	265.	0.25	0.35	
236 C4H8	l-butene	56,108	87.8	266.9	419.6	40.2	240.	0.277	0.191	0.3
237 C4H8	2-butene,cis	56,108	134.3	276.9	435.6	42.0	234.	0.271	0.202	0.3
238 C4H8	2-butene,trans	56,108	167.6	274.0	428.6	39.9	238.	0.266	0.205	0.0
239 C4H8	cyclobutane	56,108	182.4	285.7	460.0	49.9	210.	0.274	0.181	
240 C4H8	isobutylene	56.108	132.8	266.2	417.9	40.0	239.	0.275	0.194	0.5
241 C4H80	n-butyraldehyde	72,107	176.8	348.0	545.4	53.8			0.352	2.6
242 C4H80	isobutyraldehyde	72,107	208.2	337.	513.	41.5	274.	0.27	0.35	• -
243 C4H80	methyl ethyl ketone	72.107	186.5	352.7	536.8	42.1	267.	0.252	0.320	3.3
244 C4H80	tetrahydrofuran	72,107	164.7	338.	540.1	51.9	224.	0.259	0.217	1.7
245 C4H80	vinyl ethyl ether	72.107	157.9	308.7	475.	40.7			0.268	1.3
246 C4H802	n-butyric acid	88,107	267.9	437.2	628.	52.7	290.	0.292	0.683	1.5
247 C4H802	isohutyric acid	88.107	227.2	427.9	609.	40.5	292.	0.234	0.623	1.3
248 C4H802	1,4-dioxane	88.107	285.	374.6	587.	52.1	238.	0.254	0.281	0.4
249 C4H802	ethyl acetate	88,107	189.6	350.3	523.2	38.3	286.	0.252	0.362	1.9
250 C4H802	methyl propionate	88.107	185.7	352.8	530.6	40.0	282.	0.256	0.350	1.7

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
	C4H6	1-butyne	1.255E+1	2.744E-1	-1.545E-4	3.450E-8	1.653E+5	2.022E+5
	C4H6	2-butyne	1.593F.+1	2.381E-1	-1.070E-4	1.753E-8	1.464E+5	1.856E+5
	C4H6	1,2-butadiene	1.120E+1	2.724E-1	-1.468E-4	3.089E-8	1.623E+5	1.986E+5
	C 4H 6	1,3-butadiene	-1.687E+0	3.419E-1	-2.340E-4	6.335E-8	1.102E+5	1.508E+5
230	C4H602	vinyl acetate	1.516E+1	2.795E-1	-8.805E-5	-1.660E-8	-3.160E+5	
	C4H603 C4H604	acetic anhydride dimethyl oxalate	-2.313E+1	5.087E-1	-3.580E-4	9.835E-8	-5.761E+5	-4.770E+5
	C4H604	succinic acid	1.507E+1	4.689E-1	-3.143E-4	7.938E-8		
234	C4H7N	butyronitrile	1.521E+1	3.206E-1	-1.638E-4	2.982E-8	3.410E+4	1.087E+5
235	C4H602	methyl acrylate	1.516E+1	2.796E-1	-8.805E-5	-1.660E-8		•••••
236	C4H8	l-butene	-2.994E+0	3.532E-1	-1.990E-4	4.463E-8	-1.260E+2	7.134E+4
237	C4H8	2-butene.cis	4.396E-1	2.953E-1	-1.018E-4	-0.616E-9	-6.990E+3	6.590E+4
238	C4H8	2-butene,trans	1,832F.+1	2.564E-1	-7.013E-5	-8.989E-9	-1.118E+4	6.301E+4
239	C4H8	cyclobutane	-5.025E+1	5.024E-1	-3.558E-4	1.047E-7	2.667E+4	1.101E+5
240	C4H8	isobutylene	1.605E+1	2.804E-1	-1.091E-4	9.098E-9	-1.691E+4	5.811E+4
241	C4H80	n-butyraldehyde	1.408E+1	3.457E-1	-1.723E-4	2.887E-8	-2.052E+5	-1.148E+5
_	C4H80	i sobuty ral dehyde	2.446E+1	3.356E-1	-2.057E-4	6.368E-8	-2.159E+5	-1.214E+5
243	C4H80	methyl ethyl ketone	1.094E+1	3.559E-1	-1.900E-4	3.920E-8	-2.385E+5	-1.462E+5
244	C4H80	tetrahydrofuran	1.910E+1	5.162E-1	-4.132E-4	1.454E-7	-1.843E+5	
245	C4H80	vinyl ethyl ether	1.728E+1	3.236E-1	-1.471E-4	2.150E-8	-1.403E+5	
246	C4H802	n-butyric acid	1.174E+1	4.137E-1	-2.430E-4	5.531E-8	-4.762E+5	
	C4H802	isobutyric acid	9.814E+0	4.668E-1	-3.720E-4	1.350E-7	-4.842E+5	
	C4H802	1,4-dioxane	-5.357E+1	5.987E-1	-4.085E-4	1.062E-7	-3.153E+5	-1.809E+5
	C4H802	ethyl acetate	7.235E+0	4.072E-1	-2.092E-4	2.855E-8	-4.432E+5	-3.276E+5
	C4H802	methyl propionate	1.820E+1	3.140E-1	-9.353E-5	-1.828E-8		2,27,02.0

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
226	C4H6	l-butyne	1	-6.29693	2.12358	-6.42124	4.11543	194	TC	0.650	289
227	C4H6	2-butyne	3	9.6669	2536.78	-37.34		240	320	0.691	
228	C4H6	1,2-butadiene	3	9.4837	2397.26	-30.88		245	305	0.652	
229	C4H6	1,3-butadiene	1	-7.12563	1.73913	-2.70805	-1.68376	197	TC	0,621	
230	C4H602	<b>v</b> inyl acetate	1	-7.80478	1.80668	-4.48160	1.70357	2 95	TC	0.932	
232	C 4H603 C 4H604	acetic anhydride dimethyl oxalate	1	-18.1529	18.3036	-20.0953	16.6970	336	TC	1.087 1.15	293 288
	C4H604	succinic acid									
	C4H7N	butyronitrile	2	49.985	6476.68	-5.599	3770.	320	TC	0.792	
235	C4H602	methyl acrylate	3	9.4886	2788.43	-59.15		260	390	0.956	293
	C4H8	1-butene	1	-6.88204	1.27051	-2.26284	-2.61632	170	TC	0.595	293
	C4H8	2-butene,cis	1	-6.88706	1.15941	-2.19304	-3.12758	203	TC	0.621	293
	C4H8	2-butene,trans	2	43.517	4174.56	-5.041	1995.	240	400	0.604	293
	C4H8	cyclobutane	1	-7.40011	2.37997	-3.12269	-0.34310	213	TC	0.694	293
240	C4H8	isobutylene	1	-6.95542	1.35673	-2.45222	-1.46110	170	TC	0.594	293
241	C4H80	n-butyral dehyde	1	-7.01403	0.12265	-0.00073	-8.50911	304	TC	0.802	293
242	C4H80	isobutyraldehyde	1	-7.53679	1.08548	-1.52929	-8.48589	286	TC	0.789	293
243	C 4H 80	methyl ethyl ketone	1	-7.71476	1.71061	-3.68770	-0.75169	255	TC	0.805	
244	C4H80	tetrahydrofuran	3	9.4867	2768.38	-46.90		270	370	0.889	293
245	C4H80	vinyl ethyl ether	1	-7.33727	1.50878	-3.30376	-1.10728	256	TC	0.793	293
246	C4H802	n-butyric acid	1	-10.0392	3.15679	-7.72604	5.27630	364	TC	0.958	2 93
247	C4H802	isobutyric acid	2	76.037	9222.72	-8, 986	3863.	320	TC	0.968	
248	C4H802	1.4-dioxane	3	9.5125	2966.88	-62.15		275	410	1.033	
249	C4H802	ethyl acetate	1	-7.68521	1.36511	-4.08980	-1.75342	289	TC	0.901	
250	C4H802	methyl propionate	ī	-8.23756	2.71406	-5.35097	-2.34114	294	ŤČ	0.915	

o Formula	Name	MolWt	Tfp K	ТЬ Ķ	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
51 C4H802	n-propyl formate	88.107	180.3	354.1	538.0	40.6	285.	0.259	0.314	1.9
52 C4H8S	tetrahydrothiophene	88.172	177.0	394.2	632.					1.9
53 C4H9C1	l-chlorobutane	92.569	150.1	351.6	542.	36.8	312.	0.255	0.218	2.0
54 C4H9C1	2-chlorobutane	92.569	141.8	341.4	520.6	39.5	305.	0.28	0.30	2.1
55 C4H9C1	tert-butyl chloride	92.569	247.8	324.	507.	39.5	295.	0.28	0.19	2.1
56 C4H9N	pyrrolidine	71.123		359.6	568.6	56.1	249.	0.295	0.274	1.6
57 C4H9N0	morpholine	87.122	268.4	401.4	618.	54.7	253.	0.27	0.37	1.5
58 C4H10	n-butane	58.124	134.8	272.7	425.2	38.0	255.	0.274	0.199	0.0
59 C4H10	isobutane	58.124	113.6	261.4	408.2	36.5	263.	0.283	0.183	0.1
60 C4H100	n-butanol	74.123	183.9	390.9	563.1	44.2	275.	0.259	0.593	1.8
61 C4H100	2-butanol	74.123	158.5	372.7	536.1	41.8	269.	0.252	0.577	1.7
62 C4H100	isobutanol	74.123	165.2	381.0	547.8	43.0	273.	0.257	0.592	1.7
63 C4H100	tert-butanol	74.123	298.8	355.5	506.2	39.7	275.	0.259	0.612	1.7
64 C4H100	diethyl ether	74.123	156.9	307.6	466.7	36.4	280.	0.262	0.281	1.3
65 C4H100	methyl propyl ether	74.123		311.7	476.3	38.0			0.271	1.2
66 C4H100	methyl isopropyl ether	74.123		303.9	464.5	37.6			0.266	
67 C4H1002	1,2-dimethoxyethane	90.123	202.	358.	536.	38.7	271.	0.235	0.358	0.0
68 C4H1003	diethylene glycol	106.122	265.	519.	681.	47.				
69 C4H10S	diethyl sulfide	90.184	169.2	365.3	557.	39.6	318.	0.272	0.292	1.6
70 C4H10S2	diethyl disulfide	122.244	171.7	427.1	642.					2.0
71 C4H11N	n-butyl amine	73.139	224.1	349.5	531.9	42.0			0.329	1.3
72 C4H11N	isobutyl amine	73.139	188.0	336.2	514.3	41.0			0.368	1.2
73 C4H11N	diethyl amine	73.139	223.4	328.6	496.5	37.1	301.	0.271	0.291	1.1
74 C5F12	perfluoropentane	288.031		302.4	420.6	20.5	473.	0.276	0.432	0.0
75 C5H2F602	hexafluoroacetylacetone	208.059		327.3	485.1	27.7			0.278	

No F	ormula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DE LHF	DELGF
251 C	4H802	n-propyl formate						
252 C	4H8S	tetrahydrothiophene						
253 C	4H9C1	1-chlorobutane	-2.613E+0	4.497E-1	-2.937E-4	8.081E-8	-1.474E+5	-3.881E+4
254 C	4H9C1	2-chl orobutane	-3.433E+0	4.559E-1	-2.981E-4	8.256E-8	-1.616E+5	-5.351E+4
255 C	4H9C1	tert-butyl chloride	-3.931E+0	4.652E-1	-2.886E-4	7.871E-8	-1.834E+5	-6.414E+4
256 C	4H9N	pyrrolidine	-5.153E+1	5.338E-1	-3.240E-4	7.528E-8	-3.600E+3	1.148E+5
257 C	4H9N0	morpholine	-4.280E+1	5.388E-1	-2.666E-4	4.199E-8		
258 C	4H10	n-butane	9.487E+0	3.313E-1	-1.108E-4	-2.822E-9	-1.262E+5	-1.610E+4
259 C	4410	isobutane	-1.390E+0	3.847E-1	-1.846E-4	2.895E-8	-1.346E+5	-2.090E+4
260 C	4H100	n-butanol	3.266E+0	4.180E-1	-2.242E-4	4.685E-8	-2.749E+5	-1.509E+5
261 C	4н 1 00	2-butanol	5.753E+0	4.245E-1	-2.328E-4	4.773E-8	-2.928E+5	-1.677E+5
262 C	4H100	isobutanol	-7.708E+0	4.689E-1	-2.884E-4	7.231E-8	-2.834E+5	-1.674E+5
263 C	4H100	tert-butanol	-4.861E+1	7.172E-1	-7.084E-4	2.920E-7	-3.128E+5	-1.778E+5
264 C	4H100	diethyl ether	2.142E+1	3.359E-1	-1.035E-4	-9.357E-9	-2.524E+5	-1.224E+5
265 C	4H100	methyl propyl ether	2.131E+1	3.390E-1	-1.127E-4	-2.855E-9	-2.379E+5	-1.100E+5
	4H100	methyl isopropyl ether	1.353E+1	3.697E-1	-1.481E-4	1.205E-8	-2.522E+5	-1.210E+5
267 C	4H1002	1,2-dimethoxyethane	3.223E+1	3.567E-1	-1.336E -4	8.399E~9		
268 C	4H1003	diethylene glycol	7.306E+1	3.461E-1	-1.468E-4	1.846E-8	-5.715E+5	
	:4H10S	diethyl sulfide	1.359E+1	3.959E-1	-1.780E-4	2.649E-8	-8.353E+4	1.780E+4
270 C	4H10S2	diethyl disulfide	2.690E+1	4.601E-1	-2.710E-4	5.970E-8	-7.469E+4	2.227E+4
271 C	4H11N	n-butyl amine	5.079E+0	4.476E-1	-2.407E-4	7.599E-8	-9.211E+4	4.924E+4
272 C	4H11N	isobutyl amine	9.491E+0	4.430E-1	-2.110E-4	2.333E-8		
	4H11N	diethyľ amine	2.039E+0	4.430E-1	-2.183E-4	3.653E-8	-7.243E+4	7.214E+4
274 C		perfluoropentane						
275 C	5H2F602	hexafluoroacetylacetone						

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Ттах	LDEN	TDEN
251	C4H802	n-propyl formate	1	-7.48563	1.71260	-5.16404	1.64290	299	TC	0.911	289
252	C4H8S	tetrahydrothiophene	3	9.3870	3160.1	-57.2		308	473	1.000	293
	C4H9C1	1-chlorobutane	1	-6.79852	0.78511	-2.31047	-5.83223	256	TC	0.886	293
254	C4H9C1	2-chlorobutane	3	9.3705	2753,43	<b>-47.15</b>		250	375	0.873	293
255	C4H9C1	tert-butyl chloride	3	9.1919	2567.15	-44.15		235	360	0.842	293
256	C4H9N	pyrrolidine	1	-7.73658	2.33495	-4.20213	-3.71251	316	TC	0.852	295
257	C4H9N0	morpholine	3	9.6162	3171.35	-71.15		300	440	1.000	293
258	C4H10	n-butane	1	-6.88709	1.15157	-1.99873	-3.13003	170	TC	0.579	293
259	C4H10	isobutane	1	-6.95579	1.50090	-2.52717	-1.49776	165	TC	0.557	293
260	C4H100	n-butanol	1	-8.00756	0.53783	-9.34240	6.68692	275	TC	0.810	293
261	C4H100	2-butanol	1	-7.80578	0.32456	-9.41265	2.64643	265	TC	0.807	293
262	C4H100	isobutanol	3	10.2510	2874,73	-100.3		293	388	0.802	293
263	C4H100	tert-butanol	3	10.2346	2658,29	-95.50		293	376	0.787	293
264	C4H100 -	diethyl ether	1	-7.29916	1.24828	-2.91931	-3.36740	250	TC	0.713	293
265	C4H100	methyl propyl ether	1	-7.59830	2.01601	-3.70390	-1.64710	258	TC	0.738	293
266	C4H100	methyl isopropyl ether	1	-7.06696	0.86497	-2.16269	-4.72211	252	TC	0.724	288
267	C4H1002	1.2-dimethoxyethane	3	9.4039	2869.79	-53.15		262	393	0.867	293
268	C4H1003	diethylene glycol	3	10.4124	4122.52	-122.5		402	560	1,116	293
269	C4H10S	diethyl sulfide	3	9.3329	2896.27	-54.49		260	390	0.837	293
270	C4H10S2	diethyl disulfide	3	9.4405	3421,57	-64.19		312	455	0.998	293
271	C4H11N	n-butyl amine	1	-7.91668	2.36401	-5.01170	-2.54215	255	TC	0.739	293
272	C4H11N	isobutyl amine	1	-8.41366	3.12108	-5.70064	-1.83920	248	TC	0.722	295
	C4H11N	diethyl amine	ī	-7.26796	1.15810	-3.91125	-1.17981	240	ŤČ	0.707	
274	C5F12	perfluoropentane	3	9.5390	2470.33	-43.20		282	338		
	C5H2F602	hexafluoroacetylacetone	-								

No Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
276 C5H402	furfural	96.085	234.5	434.9	670.	58.9			0.383	3.6
277 C5H5N	pyridine	79.102	231.5	388.4	620.0	56.3	254.	0.277	0.243	2.3
278 C5H6N2	2-methyl pyrazine	94.117		410.	634.3	50.1	283.	0.268	0.315	
279 C5H60	2-methyl furan	82.102		338.	527.	47.2	247.	0.266	0.270	0.7
280 C5H8	cyclopentene	68,119	138.1	317.4	506.0			••	00=.0	0.9
281 C5H8	1,2-pentadiene	68,119	135.9	318.0	503.	40.7	276.	0.269	0.173	
282 C5H8	1,3-pentadiene,trans	68.119	185.7	315.1	496.	39.9	275.	0.266	0.175	0.7
283 C5H8	1,4-pentadiene	68.119	124.9	299.1	478.	37.9	276.	0.263	0.104	0.4
284 C5H8	1-pentyne	68.119	167.5	313.3	493.5	40.5	278.	0.275	0.164	0.9
285 C5H8	2-methyl-1,3-butadiene	68.119	127.2	307.2	484.	38.5	276.	0.264	0.164	0.3
286 С5Н8	3-methyl-1,2-butadiene	68,119	159.5	314.0	496.	41.1	267.	0.266	0.160	
287 C5H8O	cyclopentanone	84.118	222.5	403.9	634.6	51.1	268.	0.260	0.35	3.0
288 C5H80	dihydropyran	84.118		359.	561.7	45.6	268.	0.262	0.247	1.4
289 C5H802	ethyl acrylate	100.118	201.	373.	552.	37.4	320.	0.261	0.400	• •
290 C5H10	cyclopentane	70.135	179.3	322.4	511.7	45.1	260.	0.275	0.196	0.0
291 C5H10	1-pentene	70.135	107.9	303.1	464.8	35.3	300.	0.31	0.233	0.4
292 C5H10	2-pentene,cis	70.135	121.7	310.1	476.	36.5			0.251	
293 C5H10	2-pentene, trans	70.135	132.9	309.5	475.	36.6			0.259	
294 C5H10	2-methyl-1-butene	70.135	135.6	304.3	465.	34.5			0.236	0.5
295 C5H10	2-methy1-2-butene	70.135	139.3	311.7	470.	34.5			0.244	
296 C5H10	3-methyl-1-butene	70,135	104.7	293.3	450.	35.1			0.209	
297 C5H100	valeraldehyde	86,134	182.	376.	554.	35.4	333.	0.26	0.40	2.6
298 C5H100	methyl n-propyl ketone	86.134	196.	375.4	561.1	36.9	301.	0.238	0.346	2.5
299 C5H100	methyl isopropyl ketone	86.134	181.	367.5	553.4	38.5	310.	0.259	0.331	2.8
300 C5H100	diethyl ketone	86.134	234.2	375.1	561.0	37.3	336.	0.269	0.344	2.7

Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DE LHF	DELGF
76 C5H402	furfural						
77 C5H5N	pyridine	3.979E+1	4.928E-1	-3.558E-4	1.004E-7	1.403E+5	1.903E+5
78 C5H6N2	2-methyl pyrazine						
79 C5H60 30 C5H8	2-methyl furan	-4.151E+1	4.631E-1	-2.579E-4	5.434E-8	2 2055 . 4	1 1000 . 5
ou Cono	cycl opentene	-4. 1315 11	4.031E-1	-2.3/9E-4	3. 434E -0	3.295E+4	1.109E+5
31 C5H8	1,2-pentadiene	8.826E+0	3.880E-1	-2.280E-4	5.246E-8	1.457E+5	2.106E+5
32 C5H8	1,3-pentadiene,trans	3.069E+1	2.811E-1	-6.711E-5	-2.352E-8	7.787E+4	1.468E+5
33 C5H8	1,4-pentadiene	6.996E+0	3.952E-1	-2.374E-4	5.598E-8	1.055E+5	1.704E+5
34 C5H8	1-pentyne	1.807E+1	3.511E-1	-1.913E-4	4.098E-8	1.444E+5	2.104E+5
5 C5H8	2-methyl-1,3-butadiene	-3.412E+0	4.585E-1	-3.337E-4	1.000E-7	7.578E+4	1.460E+5
36 C5H8	3-methyl-1.2-butadiene	1.469E+1	3.598E-1	-1.976E-4	4.262E-8	1.298E+5	1.987E+5
37 C5H80	cyclopentanone	-4.064E+1	5.255E-1	-3.124E-4	7.130E-8	-1.928E+5	
38 C5H8O	dihydropyran						
39 C5H8O2	ethyl acrylate	1.681E+1	3.690E-1	-1.382E-4	-5.732E-9		
0 C5H10	cyclopentane	-5.362E+1	5.426E-1	-3.031E-4	6.485E-8	-7.729E+4	3.860E+4
01 C5H10	1-pentene	-1.340E-1	4.329E-1	-2.31 7E -4	4.681E-8	-2.093E+4	7.917E+4
2 C5H10	2-pentene,cis	-1.429E+1	4.601E-1	-2.541E-4	5.455E-8	-2.809E+4	7.189E+4
3 C5H10	2-pentene trans	1.947E+0	4.182E-1	-2.178E-4	4.405E-8	-3.178E+4	6.996E+4
4 C5H10	2-methyl-1-butene	1.057E+1	3.997E-1	-1.946E-4	3.314E-8	-3.634E+4	6.565E+4
5 C5H10	2-methyl-2-butene	1.180E+1	3.509E-1	-1.117E-4	-5.807E-9	-4.258E+4	5.970E+4
6 C5H10	3-methyl-1-butene	2.174E+1	3.890E-1	-2.007E -4	4.011E-8	-2.897E+4	7.482E+4
97 C5H100	valeraldehyde	1.424E+1	4.329E-1	-2.107E-4	3.162E-8	-2 . 280E +5	-1.084E+5
98 C5H100	methyl n-propyl ketone	1.147E+0	4.802E-1	-2.818E-4	6.661E-8	-2.588E+5	-1.372E+5
9 C5H100	methyl isopropyl ketone	-2.914E+0	4.991E-1		6.665E-8		
00 C5H100	diethyl ketone	3.001E+1	3.939E-1	-1.907E-4	3.398E-8	-2.588E+5	-1.354E+5

No Formul	a Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Ттах	LDEN	TDEN
276 C5H402	furfural	3	8,5214	2760.09	-110.4		328	434	1.159	293
277 C5H5N	pyridine	1	-7.07689	1.21511	-2.76681	-2.87472	340	TC	0.983	293
278 C5H6N2	2-methyl pyrazine								1.044	273
279 C5H60	2-methyl furan	_		0.000 07	22.72				0.913	
280 C5H8	cyclopentene	3	9.3154	2583.07	-39.70		244	378	0.772	293
281 C5H8	1,2-pentadiene	3	9.3095	2544.34	-44.30		250	340	0.693	293
282 C5H8	1,3-pentadiene,trans	3	9.2980	2541.69	-41.43		250	340	0.676	
283 C5H8	1,4-pentadiene	3	9.1190	2344.02	-41.69		240	320	0.661	293
284 C5H8	1-pentyne	3	9.4227	2515.62	-45.97		230	335	0.690	293
285 C5H8	2-methyl-1,3-butadiene	1	-6.59262	1.28930	-3.89168	1.70215	257	TC	0.681	293
286 C5H8	3-methyl-1,2-butadiene	1	-6.71441	1.53531	-4.64262	2.99854	274	TC	0.686	293
287 C5H80	cyclopentanone	ī	-7.19551	1.16379	-2.52546	-3.28861	273	TC	0.950	
288 C5H80	dihydropyran									
289 C5H802	ethyl acrylate	3	9.4688	2974.94	-58.15		274	409	0.921	293
290 C5H10	cyclopentane	1	-6.51809	0.38442	-1.11706	-4.50275	289	TC	0.745	293
291 C5H10	1-pentene	1	-7.04875	1.17813	-2.45105	-2.21727	190	TC	0.640	293
292 C5H10	2-pentene,cis	ī	-6.80160	0.54458	-1.55279	-5.68029	275	TC	0.656	
293 C5H10	2-pentene, trans	ī	-6.99461	1.00724	-2,42146	-2.51692	274	TC	0.649	293
294 C5H10	2-methyl-1-butene	1	-6.82990	0.72660	-2.15363	-3.62225	274	TC	0.650	293
295 C5H10	2-methy1-2-butene	1	-7.71438	1.95946	-3.15710	-2.22515	276	TC	0.662	293
296 C5H10	3-methyl-1-butene	1	-7.18870	1.42502	-2.27292	-2.04323	273	TC	0.627	293
297 C5H100	valeraldehyde	3	9.5421	3030.20	-58.15		277	412	0.810	
298 C5H100	methyl n-propyl ketone	3	9.3829	2934.87	-62.25		275	410	0.806	
299 C5H100	methyl isopropyl ketone	3	7.5577	1993.12	-103.2		271	406	0.803	293
300 C5H100	diethyl ketone	1	-7.70542	1.44422	-3.60173	-2.88141	330	TC	0.814	293

o Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
O1 C5H100	2-methyl tetrahydrofuran	86.134		351.	537.	37.6	267.	0.225	0.264	
02 C5H100 03 C5H1002	tetrahydropyran n-valeric acid	86.134 102.134	239.0	361. 459.5	572.2 651.	47.7	263.	0.263	0.218	1.6
04 C5H1002	isovaleric acid	102.134	237.0	449.7	634.					1.0
05 C5H1002	isobutyl formate	102.134	178.	371.4	554.	37.3	352.	0.285	0.396	1.9
06 C5H1002	n-propyl acetate	102.134	178.	374.7	549.4	33.3	345.	0.252	0.391	1.8
07 C5H1002	ethyl propionate	102.134	199.3	372.2	546.0	33.6	345.	0.256	0.391	1.8
08 C5H1002	methyl butyrate	102.134	188.4	375.9	554.4	34.8	340.	0.257	0.380	1.7
09 C5H1002	methyl isobutyrate	102.134	185.4	365.5	540.8	34.3	339.	0.259	0.362	2.0
10 C5H11N	piperidine	85.150	262.7	379.6	594.0	47.6	289.	0.280	0.251	1.2
11 C5H12	n-pentane	72.151	143.4	309.2	469.7	33.7	304.	0.263	0.251	0.0
12 C5H12	2-methyl butane	72.151	113.3	301.0	460.4	33.9	306.	0.271	0.227	0.1
13 C5H12	2,2-dimethlypropane	72.151	256.6	282.6	433.8	32.0	303.	0.269	0.197	0.0
l4 C5H12O	1-pentanol	88.150	195.0	411.1	588.2	39.1	326.	0.26	0.579	1.7
5 C5H120	2-methyl-1-butanol	88.150	203.	401.9	571.0	33.4				
16 C5H12O	3-methyl-1-butanol	88.150	156.	405.2	579.4					1.8
17 C5H12O	2-methyl-2-butanol	88.150	264.4	375.5	545.0	39.5				1.9
18 C5H12O	2,2-dimethyl-1-propanol	88.150	327.	386.3	549.0					
19 C5H12O	ethyl propyl ether	88.150	146.4	336.4	500.2	33.7	339.	0.275	0.333	1.2
20 C5H12O	butyl methyl ether	88.150	157.7	343.3	512.8	33.7	329.	0.260	0.316	1.3
21 C5H12O	tert-butyl methyl ether	88.150		328.3	496.4	33.7			0.269	1.2
22 C68rF5	bromopentafluorobenzene	246,960		410.0	601.	30.4			0.355	
23 C6C1F5	chloropentafluorobenzene	202,509		391.1	570.8	32.4	376.	0.256	0.400	
24 C6C12F4	dichlorotetrafluorobenzene	218.964		430.9	626.	53.2			0.622	
25 C6C13F3	1,3,5-trichlorotrifluorobenzene	235.419		471.5	684.9	32.7	448.	0.257	0.426	

No Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DE LGF
301 C5H100 302 C5H100	2-methyl tetrahydrofuran tetrahydropyran						
303 C5H1002 304 C5H1002	n-valeric acid isovaleric acid	1.339E+1	5.033E-1	-2.931E-4	6.619E-8	-4.907E+5	-3.574E+5
305 C5H1002	isobutyl formate	1.985E+1	4.034E -1	-1.436E-4	-7.402E-9		
306 C5H1002	n-propyl acetate	1.542E+1	4.501E-1	-1.686E -4	-1.439E-8	-4.660E+5	
307 C5H1002 308 C5H1002 309 C5H1002	ethyl propionate methyl butyrate methyl isobutyrate	1.985E+1	4.034E-1	-1.437E-4	-7.394E-9	-4.702E+5	-3.237E+5
310 C5H11N	piperidine	-5.307E+1	6.289E -1	-3.358E-4	6.427E-8	-4.903E+4	
311 C5H12	n-pentane	-3.626E+0	4.873E-1	-2.580E-4	5.305E-8	-1.465E+5	-8.370E+3
312 C5H12 313 C5H12	2-methyl butane 2,2-dimethlypropane	-9.525E+0 -1.659E+1	5.066E-1 5.552E-1	-2.729E-4 -3.306E-4	5.723E-8 7.633E-8	-1.546E+5 -1.661E+5	-1.482E+4 -1.524E+4
314 C5H120 315 C5H120	1-pentanol 2-methyl-1-butanol	3.869E+0 -9.483E+0	5.045E-1 5.677E-1	-2.639E-4 -3.481E-4	5.120E-8 8.637E-8	-2.989E+5 -3.027E+5	-1.461E+5 -1.657E+5
316 C5H12O	3-methyl-1-butanol	-9.542E+0	5.681E-1	-3.485E-4	8.650E-8	-3.023E+5	
317 C5H120 318 C5H120 319 C5H120 320 C5H120	2-methyl-2-butanol 2,2-dimethyl-1-propanol ethyl propyl ether butyl methyl ether	-1.209E+1 1.215E+1	6.096E-1 5.397E-1	-4.204E-4 -3.160E-4	1.228E-7 7.122E-8	-3.299E+5 -2.931E+5	-1.654E+5 -1.255E+5
321 C5H12O 322 C6RrF5 323 C6C1F5 324 C6C12F4 325 C6C13F3	tert-hutyl methyl ether bromopentafluorobenzene chloropentafluorobenzene dichlorotetrafluorobenzene 1,3,5-trichlorotrifluorobenzene	2.534E+0	5.136E -1	-2.596E-4	4.303E-8	-2.931E+5	-1.255E+5

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDE N
_	C5H100	2-methyl tetrahydrofuran								0.855	
	C5H100	tetrahydropyran	_							0.886	
	C5H1002	n-valeric acid	3	11.0104	4092,15	-86.55		350	495	0.939	
	C5H1002	isovaleric acid	3	2.4671	588.09	-261.9		359	378	0.925	
305	C5H1002	isobutyl formate	1	-8.01454	2.05091	-4.38201	-2.85582	270	TC	0.885	293
306	C5H1002	n-propyl acetate	1	-7.85524	1.43936	-4.30187	-3.04832	312	TC	0.887	293
307	C5H1002	ethyl propionate	1	-8.55094	3.10067	-6.99241	3.45112	307	TC	0.895	289
308	C5H1002	methyl butyrate	1	-7.77600	1.32028	-3.93963	-3.53112	275	TC	0.898	293
309	C5H1002	methyl isobutyrate	1	-7.65814	1.29248	-3.85632	-3.49858	270	TC	0.891	293
310	C5H11N	piperidine	1	-7.56707	2.15002	-3.89030	-3.70363	316	TC	0.862	293
311	C5H12	n-pentane	1	-7.28936	1.53679	-3,08367	-1.02456	195	TC	0.626	293
	C5H12	2-methyl butane	1	-7.12727	1.38996	-2.54302	-2.45657	220	TC	0.620	
	C5H12	2,2-dimethlypropane	ī	-6.89153	1.25019	-2.28233	-4.74891	260	ŤČ	0.591	
	C5H120	1-pentanol	1	-8.97725	2.99791	-12.9596	8.84205	290	TC	0.815	
	C5H120	2-methyl-1-butanol	1	-9.26305	3.86947	-15.3562	12.1464	308	TC	0.819	
316	C5H120	3-methy]-1-butanol	3	10.0925	3026,43	-104.1		298	426	0.810	293
	C5H120	2-methyl-2-butanol	ĭ	-8.66602	3.46689	-14.1750	10.9679	298	TC	0.809	
	C5H120	2,2-dimethyl-1-propanol	3	11.5134	3694.96	-65.00	10000	328	406	0.783	
	C5H120	ethyl propyl ether	ĭ	-8.05820	2.35916	-4.51822	0.92352	275	TC	0.733	
	C5H120	butyl methyl ether	ī	-7.75110	1.87213	-3.80629	-1.81410	285	TC	0.744	
321	C5H100	tert-butyl methyl ether	1	-7.82516	2.95493	-6.94079	12.17416	287	TC		
322	C6BrF5	bromopentafluorobenzene							•		
323	C6C1F5	chloropentafluorobenzene	1	-8.02172	1.54665	-3.78361	-2.99849	309	TC		
324	C6C12F4	dichlorotetrafluorobenzene									
325	C6C13F3	1,3,5-trichlorotrifluorobenzene	1	-8.20940	1.68886	-4.17824	-1.54115	364	TC		
324		dichlorotetrafluorobenzene	1		_						

No Fo	nmula	Name	MolWt	Tfp	ТЬ	Tc	Рс	Уc	Zc	Omega	Dipm
		nune		к	ĸ.	K	bar	cm <sup>3</sup> /mol			debye
326 C6F	F 6	perfluorobenzene	186.056		353.4	516.7	33.0	335.	0.255	0.396	
327 C61		perfluorocyclohexane	300.047		326.0	457.2	24.3	459.	0.270	0.432	0.0
328 C6		perfluoro-n-hexane	338.044	186.0	329.8	448.8	18.7	606.	0.303	0.514	
329 C61		perfluoro-2-methylpentane	338.044		330.8	453.	18.2	550.	0.266	0.464	
330 C6	F14	perfluoro-3-methylpentane	338.044		331.5	450.	16.9			0.476	
331 C6F		perfluoro-2,3-dimethylbutane	338.044		332.9	463.	18.7	525.	0.256	0.394	
332 C6I		pentafluorobenzene	168.064		358.9	531.0	35.3	324.	0.260	0.373	
333 C6		pentafluorophenol	184.063		418.8	609.	40.0	348.	0.275	0.502	
334 C6		1,2,3,4-tetrafluorobenzene	150.074		367.5	550.8	37.9	313.	0.259	0.344	
335 C61	H2F 4	1,2,3,5-tetrafluorobenzene	150.074		357.6	535.3	37.5			0.346	
336 C6		1,2,4,5-tetrafluorobenzene	150.074		363.4	543.4	38.0			0.355	
337 Ç6I		o-dichlorobenzene	147.004	256.1	452.0	729.	41.0	360.	0.244	0.272	2.3
338 C6		1,4-difluorobenzene	114.094		362.0	556.	44.0			0.299	
339 C6		bromobenzene	157.010	242.3	429.2	670.0	45.2	324.	0.263	0.251	1.5
340 C6	H5C1	chlorobenzene	112.559	227.6	404.9	632.4	45.2	308.	0.265	0.249	1.6
341 C6		fluorobenzene	96.104	234.0	357.9	560.1	45.5	269.	0.263	0.244	1.4
342 C6		i odobenzene	204.011	241.8	461.6	721.0	45.2	351.	0.265	0.249	1.4
343 C6		benzene	78.114	278.7	353.2	562.2	48.9	259.	0.271	0.212	0.0
344 C6		phenol	94.113	314.0	455.0	694.2	61.3	229.	0.240	0.438	1.6
345 C6I	H/N	aniline	93.129	267.0	457.6	699.	53.1	274.	0.250	0.384	1.6
346 C6		2-methylpyridine	93.129	207.	402.6	621.	46.0			0.299	1.9
347 C6		3-methylpyridine	93.129	_	417.3	645.					2.4
348 C6I		4-methylpyridine	93.129	276.9	418.5	646.0	44.6	311.	0.260	0.301	
349 C6		1,5-hexadiene	82.146	132.0	332.6	507.0	34.4			0.160	
350 C6	H10	cyclohexene	82.146	169.7	356.1	560.5	43.4			0.210	0.6

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
327 328 329	C6F6 C6F12 C6F14 C6F14 C6F14	perfluorobenzene perfluorocyclohexane perfluoro-n-hexane perfluoro-2-methylpentane perfluoro-3-methylpentane	3.628E+1	5.267E-1	-4.547E-4	1.456E-7	-9.573E+5	-8.800E+5
332 333 334	C6F14 C6HF5 C6HF50 C6H2F4 C6H2F4	perfluoro-2,3-dimethylbutane pentafluorobenzene pentafluorophenol 1,2,3,4-tetrafluorobenzene 1,2,3,5-tetrafluorobenzene						
337 338 339	C6H2F4 C6H4C12 C6H4F2 C6H5Br C6H5C1	1,2,4,5-tetrafluorohenzene o-dichlorobenzene 1,4-difluorobenzene bromobenzene chlorobenzene	-1.430E+1 -2.596E+1 -2.881E+1 -3.389E+1	5.506E-1 5.722E-1 5.351E-1 5.631E-1	-4.513E-4 -4.677E-4 -4.080E-4 -4.522E-4	1.429E-7 1.475E-7 1.212E-7 1.426E-7	3.000E+4 -3.074E+5 1.051E+5 5.187E+4	8.273E+4 -2.530E+5 1.386E+5 9.923E+4
342 343 344	C6H5F C6H5I C6H6 C6H6O C6H7N	fluorobenzene iodobenzene benzene phenol aniline	-3.873E+1 -2.927E+1 -3.392E+1 -3.584E+1 -4.052E+1	5.669E-1 5.564E-1 4.739E-1 5.983E-1 6.385E-1	-4.434E-4 -4.509E-4 -3.017E-4 -4.827E-4 -5.133E-4	1.355E-7 1.443E-7 7.130E-8 1.527E-7 1.633E-7	-1.166E+5 1.627E+5 8.298E+4 -9.642E+4 8.692E+4	-6.908E+4 1.879E+5 1.297E+5 -3.290E+4 1.668E+5
347 348 349	C6H7N C6H7N C6H7N C6H1O C6H1O	2-methylpyridine 3-methylpyridine 4-methylpyridine 1,5-hexadiene cyclohexene	-3.626E+1 -3.709E+1 -1.743E+1 -6.865E+1	5.584E-1 5.600E-1 4.882E-1 7.252E-1	-3.704E-4 -3.719E-4 -2.798E-4	9.663E-8 9.685E-8 5.451E-8	9.902E+4 1.062E+5 1.023E+5 8.374E+4 -5.360E+3	1.772E+5 1.844E+5 1.069E+5

No Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Ттах	LDEN	TDE
326 C6F6	perfluorobenzene	1	-7.97271	1.43798	-3.62195	-4.79241	278	TC		
327 C6F12	perfluorocyclohexane	3	7.2885	1374.07	-136.8		280	400		
328 C6F14	perfluoro-n-hexane	ī	-9.16184	2.97539	-7.17322	5.50684	270	TC		
329 C6F14	perfluoro-2-methylpentane	3	9.6896	2760.0	-45.70		259	346	1.733	293
330 C6F14	perfluoro-3-methylpentane	3	9.2670	2565.44	-54.23		255	3 33		
331 C6F14	perfluoro-2,3-dimethylbutane	3	9.9846	2933.85	-38.70		262	333		
332 C6HF5	pentafluorobenzene	1	<b>-7.7973</b> 0	1.35271	-3.50409	-3.76856	322	TC		
333 C6HF50	pentafluorophenol	1	-8.69734	2.03071	-5.32619	-3.28915	379	TC		
334 C6H2F4	1,2,3,4-tetrafluorobenzene	1	-7.71223	1.48262	-3.55699	-2.83189	301	TC		
335 C6H2F4	1,2,3,5-tetrafluorobenzene	1	-7.71193	1.46356	-3.49452	-3.04916	288	TC		
336 C6H2F4	1,2,4,5-tetrafluorobenzene	1	-7.79740	1.57406	-3.82060	-2.45398	294	TC		
337 C6H4C12	o-dichlorobenzene	1	-8.23991	6.34949	-13.24326	17,25417	403	TC	1.306	293
338 C6H4F2	1,4-difluorobenzene									
339 C6H5Br	bromobenzene	1	-7.54985	2.09359	-3.57864	-1.82558	329	TC	1.495	
340 C6H5C1	chlorobenzene	1	-7.58700	2.26551	-4.09418	0.17038	335	TC	1.106	293
341 C6H5F	fluorobenzene	2	48.521	5819.21	-5.489	2910.	300	TC	1.024	
342 C6H5I	iodobenzene	2	51.071	7589.50	-5.646	4845.	380	TC	1.855	
343 C6H6	benzene	1	-6.98273	1.33213	-2.62863	-3.33399	288	TC	0.885	
344 C6H60	phenol	1	-8.75550	2.92651	-6.31601	-1.36889	380	TC	1.059	
345 C6H7N	aniline	1	-7.65517	0.85386	-2.51602	-5.96795	376	TC	1.022	293
346 C6H7N	2-methylpyridine	3	9.5725	3259.83	-61.58		352	442	0.950	
347 C6H7N	3-methylpyridine	3	9.6136	3411.91	-61.95		347	458	0.961	
348 C6H7N	4-methyl pyridine	1	-7.13732	0.93444	-2.93708	-2.65045	348	TC	0.955	
349 C6H1O	1,5-hexadiene	1	-7.72848	2.21648	-2.23190	-8.51382	273	TC	0.692	
350 C6H10	cyclohexene	3	9.2041	2813.53	-49.98		300	360	0.816	289

No.	Formula	Name	MolWt 	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
351	C6H100	cyclohexanone	98.145	242.0	428.8	629.	39.				3.1
	C6H11N	capronitrile	97,161	194.	436.8	622.	32.5			0.524	3.5
353	C6H12	cyclohexane	84.162	279.6	353.8	553.5	40.7	308.	0.273	0.212	0.3
354	C6H12	methylcyclopentane	84,162	130.7	345.0	532.7	37.8	319.	0.272	0.231	0.0
355	C6H12	1-hexene	84.163	133.3	336.6	504.0	31.7	350.	0.26	0.285	0.4
356	C6H12	2-hexene,cis	84.162	132.0	342.0	518.	32.8	351.	0.27	0.256	
	C6H12	2-hexene,trans	84.162	140.	341.0	516.	32.7	351.	0.27	0.242	
	C6H12	3-hexene,cis	84.162	135.3	339.6	517.	32.8	350.	0.27	0.225	0.3
	C6H12	3-hexene,trans	84.162	159.7	340.3	519.9	32.5	350.	0.26	0.227	0.0
360	C6H12	2-methy1-2-pentene	84.162	138.1	340.5	518.	32.8	351.	0.27	0.229	
361	C6H12	3-methy1-2-pentene,cis	84.162	138.3	340.9	518.	32.8	351.	0.27	0.269	
362	C6H12	3-methy1-2-pentene.trans	84.162	134.7	343.6	521.	32.9	350.	0.27	0.207	
	C6H12	4-methyl-2-pentene,cis	84.162	139.	329.6	490.	30.4	360.	0.27	0.29	
	C6H12	4-methyl-2-pentene,trans	84.162	132.	331.7	493.	30.4	360.	0.27	0.29	
365	C6H12	2,3-dimethy1-1-butene	84.162	115.9	328.8	501.	32.4	343.	0.27	0.221	
366	C6H12	2,3-dimethy1-2-butene	84.162	198.9	346.4	524.	33.6	351.	0.27	0.239	
	C6H12	3,3-dimethyl-1-butene	84.162	158.	314.4	490.	32.5	340.	0.27	0.121	
	C6H12O	cyclohexanol	100.160	298.	434.3	625.	37.5			0.528	1.7
	C6H12O	ethyl propyl ketone	100,160		396.6	582.8	33.2			0.378	
370	C6H12O	methyl butyl ketone	100.160	216.	400.7	587.0	33.2			0.392	
	C6H12O	methyl isobutyl ketone	100,160	189.	389.6	571.	32.7			0.385	2.8
	C6H12O2	n-butyl acetate	116,160	199.7	399.3	579.	31.4	400.	0.26	0.417	1.8
	C6H12O2	isobutyl acetate	116.160	174.3	389.7	564.	30.2	414.	0.267	0.455	1.9
	C6H12O2	ethyl butyrate	116.160	180.	394.7	569.	29.6	421.	0.263	0.461	1.8
375	C6H12O2	ethyl isobutyrate	116,160	185.	383,2	555.	29.7	421.	0.271	0.431	2.1

No	Formula	Name	CPVAP A	CPVAP R	CPVAP C	CPVAP D	DELHF	DELGF
351	C6H100	cyclohexanone	-3.781E+1	5.539E-1	-1.953E-4	-1.534E-8	-2.303E+5	-9.081E+4
	C6H11N	capronitrile						
	C6H12	cyclohexane	-5.454E+1	6.113E-1	-2.523E-4	1.321E-8	-1.232E+5	3.178E+4
	C6H12	methylcyclopentane	-5.011E+1	6.381E-1	-3.642E-4	8.014E-8	-1.068E+5	3.580E+4
355	C6H12	1-hexene	-1.746E+0	5.309E-1	-2.903E-4	6.054E-8	-4.170E+4	8. 750E+4
356	C6H12	2-hexene,cis	-9.810E+0	5.309E-1	-2.717E-4	4.827E-8	-5.238E+4	7.628E+4
357	C6H12	2-hexene,trans	-3.292E+1	6.929E-1	-5.619E-4	2.005E-7	-5.393E+4	7.649E+4
358	C6H12	3-hexene,cis	-2.173E+1	5.811E-1	-3.362E-4	7.457E-8	-4.765E+4	8.307E+4
359	C6H12	3-hexene,trans	-4.338E+0	5.510E-1	-3.282E-4	8.047E-8	-5.447E+4	7.767E+4
360	C6H12	2-methyl-2-pentene	-1.475E+1	5.669E-1	-3.341E-4	7.963E-8	-6,653E+4	7.126E+4
361	C6H12	3-methyl-2-pentene,cis	-1.475E+1	5.669E-1	-3.341E-4	7.963E-8	-6.222E+4	7.327E+4
362	C6H12	3-methyl-2-pentene,trans	-1.475E+1	5.669E-1	-3.341E-4	7.963E-8	-6.314E+4	7.134E+4
363	C6H12	4-methyl-2-pentene,cis	-1.675E+0	5.376E-1	-3.044E-4	6.753E-8	-5.748E+4	8.219E+4
364	C6H12	4-methyl-2-pentene,trans	1.263E+1	5.154E-1	-3.007E-4	7.327E-8	-6.150E+4	7.967E+4
365	C6H12	2,3-dimethyl-1-butene	7.025E+0	5.585E-1	-3.696E-4	1.063E-7	-6.636E+4	7.909E+4
366	C6H12	2,3-dimethy1-2-butene	2.294E+0	4.827E-1	-2.199E-4	3.042E-8	-6.984E+4	7.591E+4
367	C6H12	3,3-dimethyl-1-butene	-1.256E+1	5.485E-1	-2.915E-4	5.208E-8	-6.155E+4	9.822E+4
368	C6H12O	cyclohexanol	-5.553E+1	7.214E-1	-4.086E-4	8.235E-8	-2.948E+5	-1.180E+5
369	C6H12O	ethyl propyl ketone						
370	C6H12O	methyl butyl ketone						
371	C6H12O	methyl isobutyl ketone	3.894E+0	5.656E-1	-3.318E-4	8.231E-8	-2.840E+5	
372	C6H1202	n-butyl acetate	1.362E+1	5.489E-1	-2.278E-4	0.791E-9	-4.868E+5	
373	C6H12O2	isobutyl acetate	7.310E+0	5.740E-1	-2.576E-4	1.101E-8	-4.955E+5	
374	C6H1202	ethyl butyrate	2.151E+1	4.928E-1	-1.938E-4	3.559E-9	-	
375	C6H12O2	ethyl isobutyrate						

No	Formula	Name	Eq.	VP A	VP 8	VP C	VP D	Tmin	Tmax	LDEN	TDEN
352	C6H100 C6H11N	cyclohexanone capronitrile	3	9.7814	3677.63	-60.40		363	438	0.951 0.809	288
354	C6H12 C6H12 C6H12	cyclohexane methylcyclopentane l-hexene	1 1	-6.96009 -7.15937 -7.76467	1.31328 1.48017 2.29843	-2.75683 -2.92482 -4.44302	-2.45491 -1.98377 0.89947	293 288 289	TC TC TC	0.779 0.754 0.673	289
357 358 359	C6H12 C6H12 C6H12 C6H12 C6H12	2-hexene,cis 2-hexene,trans 3-hexene,cis 3-hexene,trans 2-methyl-2-pentene	3 2 3 3 3	9.5855 53.818 9.2182 9.3086 9.3221	2897.97 5734.51 2680.52 2718.68 2725.89	-39.30 -6.348 -48.40 -47.77 -47.64	3548.	245 280 245 245 245	370 TC 365 365 370	0.687 0.678 0.680 0.677 0.691	293 293 293
362 363 364	C6H12 C6H12 C6H12 C6H12 C6H12	3-methyl-2-pentene,cis 3-methyl-2-pentene,trans 4-methyl-2-pentene,cis 4-methyl-2-pentene,trans 2,3-dimethyl-1-butene	3 3 3 3	9.2922 9.3282 9.1325 9.2223 9.1810	2731.79 2750.50 2580.52 2631.57 2612.69	-46.47 -48.33 -46.56 -46.00 -43.78		248 250 238 240 235	364 366 352 354 360	0.694 0.698 0.669 0.669 0.678	293 293 293
367 368 369	C6H12 C6H12 C6H120 C6H120 C6H120	2,3-dimethyl-2-butene 3,3-dimethyl-1-butene cyclohexanol ethyl propyl ketone methyl butyl ketone	1 1 1 3	-7.15852 -6.54633 -8.77758 9.5000	1.36868 1.50412 3.11622 3144.85	-4.12890 -4.54855 -12.3555 -65.19	1.53046 2.96466 7.50610	302 264 367 347	TC TC TC 408	0.708 0.653 0.942 0.813 0.816	293 303 295
372 373 374	C6H120 C6H1202 C6H1202 C6H1202 C6H1202	methyl isobutyl ketone n-butyl acetate isobutyl acetate ethyl butyrate ethyl isobutyrate	1 1 1 1	-8.54349 -8.36658 -8.12456 -8.00073 -8.08582	2.92801 2.40985 1.66934 1.34045 1.61436	-5.27311 -6.42511 -4.20511 -3.99843 -4.14816	-2.54507 4.85939 -3.72813 -3.74347 -3.80720	295 333 290 290 280	TC TC TC TC TC	0.801 0.898 0.875 0.879 0.869	273 293 293

No Formula	Name	Mo1\t	Tfp K	Tb K	Tc K	Pc bar	Ус cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
376 C6H1202	n-propyl propionate	116,160		395.8	571.	30.2				1.8
377 C6H12O2	n-amyl formate	116.160	199.7	403.6	576.	34.6			0.538	
378 C6H12O2	isoamyl formate	116.160		396.7	578.					
379 C6H14	n-hexane	86.178		341.9	507.5	30.1	370.	0.264	0.299	0.0
380 C6H14	2-methyl pentane	86.178	119.5	333.4	497.5	30.1	367.	0.267	0.278	
381 C6H14	3-methyl pentane	86.178	155.	336.4	504.5	31.2	367.	0.273	0.272	
382 C6H14	2,2-dimethyl butane	86.178	173.3	322.8	488.8	30.8	359.	0.272	0.232	
383 C6H14	2,3-dimethyl butane	86.178	144.6	331.1	500.0	31.3	358.	0.269	0.247	
384 C6H140	1-hexanol	102.177	229.2	430.2	611.	40.5	381.	0.300	0.560	1.8
385 C6H140	2-hexanol	102.177		411.	586.2	_				
386 C6H140	ethyl butyl ether	102.177	170.	365.4	531.	30.4	390.	0.27	0.40	1.2
387 C6H140	methyl amyl ether	102.177		372.	546.5	30.4	392.	0.262	0.347	1
388 C6H140	dipropyl ether	102.177	151.	363.2	530.6	30.3	032.	0.202	0.369	1.2
389 C6H140	diisopropyl ether	102.177	187.7	341.7	500.3	28.8	386.	0.262	0.331	1.2
390 C6H15N	dipropylamine	101.193	233.6	382.5	555.8	29.9	000.	0,202	0.471	1.0
	, ,,				-	_				1.0
391 C6H15N	diisopropylamine	101.193	212.2	357.1	523.1	30.2			0.360	1.0
392 C6H15N	triethylamine	101.193	158.4	362.5	535.	30.3	389.	0.265	0.320	0.9
393 C7F8	perfluorotoluene	236.061		377.7	534.5	27.1	428.	0.260	0.475	
394 C7F14	perfluoromethylcyclohexane	350.055		349.5	486.8	23.3			0.491	
395 C7F16	perfluoro-n-heptane	388.051	195.	355.6	474.8	16.2	664.	0.273	0.556	
396 C7H3F5	2,3,4,5,6-pentafluorotoluene	182.091		390.7	566.5	31.3	384.	0.255	0.415	
397 C7H5N	henzonitrile	103.124	260.	464.3	699.4	42.2			0.362	3.5
398 C7H60	benzal dehyde	106,124	216.	452.2	694.8	45.4			0.316	2.8
399 C7H602	benzoic acid	122,124	395.6	523.	752.	45.6	341.	0.25	0.62	1.7
400 C7H8	toluene	92.141	178.	383.8	591.8	41.0	316.	0.263	0.263	0.4

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
377	C6H12O2 C6H12O2 C6H12O2	n-propyl propionate n-amyl formate isoamyl formate						
	C6H14	n-hexane	-4.413E+0	5.820E-1	-3.119E-4	6.494E-8	-1.673E+5	-1.670E+2
380	C6H14	2-methyl pentane	-1.057E+1	6.184E-1	-3.573E -4	8. 085E -8	-1.744E+5	-5.020E+3
381	C6H14	3-methyl pentane	-2.386E+0	5.690E-1	-2.870E -4	5.033E-8	-1.717E+5	-2.140E+3
382	C6H14	2,2-dimethyl butane	-1.663E+1	6.293E-1	-3.481E-4	6.850E-8	-1.857E+5	-9.630E+3
	C6H14	2,3-dimethyl butane	-1.461E+1	6.150E-1	-3.376E -4	6.820E-8	-1.779E+5	-4.100E+3
	C6H14O	1-hexanol	4.811E+0	5.891E-1	-3.010E-4	5.426E-8	-3.178E+5	-1.357E+5
385	C6H140	2-hexanol						
386	C6H140	ethyl butyl ether	2.363E+1	5.367E-1	-2.528E-4	4.157E-8		
387	C6H14O	methyl amyl ether						
	C6H14O	dipropyl ether	1.862E+1	5.335E-1	-2.285E-4	2.442E-8	-2.931E+5	-1.056E+5
	C6H14O	diisopropyl ether	7.505E+0	5.849E-1	-3.027E-4	5.845E-8	-3.190E+5	-1.220E+5
390	C6H15N	dipropylamine	6.460E+0	6.293E-1	-3.390E-4	7.072E -8		
391	C <i>6</i> H15N	diisopropyl amine						
	C6H15N	triethylamine	-1.843E+1	7.155E-1	-4.392E-4	1.092E-7	-9.965E+4	1.104E+5
	C7F8	perfluorotoluene						
	C7F14	perfluoromethylcyclohexane					-2.898E+6	
395	C7F16	perfluoro-n-heptane					-3.387E+6	-3.089E+6
396	C7H3F5	2,3,4,5,6-pentafluorotoluene						
397	C7H5N	benzonitrile	-2.605E+1	5.732E-1	-4.430E-4	1.349E-7	2.190E+5	2.610E+5
	C7H60	benzal dehyde	-1.214E+1	4.961E-1		5.167E-8	-3.680E+4	2.240E+4
	C7H602	benzoic acid	-5.129E+1	6.293E-1	-4.237E-4	1.062E-7	-2.904E+5	-2.106E+5
400	C7H8	toluene	-2.435E+1	5.125E-1	-2.765E-4	4.911E-8	5.003E+4	1.221E+5

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
377	C6H12O2 C6H12O2 C6H12O2	n-propyl propionate n-amyl formate isoamyl formate	1	-8.00913	1.33297	-3.97513	-3.83674	290	TC	0.881 0.902 0.882	293 273 293
	C6H14 C6H14	n-hexane isohexane	1 1	-7.46765 -7.31728	1.44211 1.33940	-3.28222 -3.06807	-2.50941 -1.99255	220 240	TC TC	0.659 0.653	
	C6H14 C6H14	3-methyl pentane 2,2-dimethyl butane	1	-7.27084 -7.24296	1.26113 1.66876	-2.81741 -3.23718	-2.17642 -0.53171	235 225	TC TC	0.664 0.649	
383	C6H14 C6H140	2,3-dimethyl butane 1-hexanol	1 3	-7.27870 11.4792	1.56349	-3.05387 -76.49	-1.57752	235 308	TC 430	0.662 0.819	293
	C6H140	2-hexanol	3	10.0989	3158.53	-99.98		295	418	0.816	
	C6H140 C6H140	ethyl butyl ether methyl amyl ether	1	-8.30292	2.02889	-3.26245	-6.32274	311	TC	0.749 0.75	293 298
389	C6H140 C6H140	dipropyl ether diisopropyl ether	1 1	-8.22229 -7.62613	2.22110 1.29308	-3.90291 -2.90101	-3.77431 -6.14467	288 297	TC TC	0.736 0.724	293
	C6H15N	dipropylamine	1	-8.56471	2.93461	-5.56089	0.56571	275	TC	0.738	
392	C6H15N C6H15N C7F8	diisopropylamine triethylamine perfluorotoluene	1	-7.84319 -11.3617	1.80097 10.0092	-4.66547 -13.4750	-0.29364 -9.36035	257 323	TC TC	0.722 0.728	
	C7F14 C7F16	perfluoromethylcyclohexane perfluoro-n-heptane	1	-10.5469 -9.13392	6.38028 2.75328	-10.6940 -8.33813	11.6006 6.82085	306 271	TC TC	1.789 1.733	
397	C7H3F5 C7H5N	2,3,4,5,6-pentafluorotoluene benzonitrile	1 2	-8.05688 53.154	1.46673 7912.31	-3.82439 -5.881	-2.78727 4898.	313 340	TC TC	1.010	
399	C7H60 C7H602 C7H8	benzaldehyde benzoic acid toluene	1 3 1	-7.16527 10.5432 -7.28607	0.52710 4190.70 1.38091	-1.51484 -125.2 -2.83433	-7.92908 -2.79168	300 405 309	TC 560 TC	1.045 1.075 0.867	

lo Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
01 C7H80	methyl phenyl ether	108.140	235.7	426.8	645.6	42.5			0.347	1.2
02 C7H80	benzyl alcohol	108.140	257.8	478.6	720.2	44.0				1.7
03 C7H80	o-cresol	108.140	304.1	464.2	697.6	50.1			0.433	1.6
04 C7H80	m-cresol	108.140	285.4	475.4	705.8	45.6	309.	0.240	0.454	1.8
05 C7H80	p-cresol	108.140	307.9	475.1	704.6	51.5			0.505	1.6
06 C7H9N	2,3-dimethylpyridine	107.156		434.4	655.4					2.2
07 C7H9N	2.4-dimethylpyridine	107.156		431.6	647.					2.3
08 C7H9N	2,5-dimethylpyridine	107.156		430.2	644.2					2.2
09 C7H9N	2,6-dimethylpyridine	107.156	267.	417.2	623.8					1.7
10 C7H9N	3,4-dimethylpyridine	107.156		452.3	683.8					1.9
11 C7H9N	3,5-dimethylpyridine	107.156		445.1	667.2					2.6
12 C7H9N	N-methylaniline	107.156	216.	469.4	701.	52.0			0.475	1.7
3 C7H9N	o-toluidine	107.156	258.4	473.5	694.	37.5			0.473	1.6
4 C7H9N	m-toluidine	107.156	242.8	476.6	709.	41.5			0.430	1.5
5 C7H9N	p-toluidine	107.156	316.9	473.7	667.	23.8			0.443	1.6
16 C7H14	cycloheptane	98.189	265.	391.6	604.2	38.1	353.	0.268	0.237	
17 C7H14	1,1-dimethylcyclopentane	98.189	203.4	361.0	547.	34.4	360.	0.27	0.273	
18 C7H14	1,2-dimethylcyclopentane-cis	98.189	219.3	372.7	564.8	34.4	368.	0.27	0.269	
19 C7H14	1,2-dimethylcyclopentane-trans	98.189	155.6	365.0	553.2	34.4	362.	0.27	0.269	
0 C7H14	ethylcyclopentane	98.189	134.7	376.6	569.5	34.0	375.	0.269	0.271	
1 C7H14	methylcyclohexane	98.189	146.6	374.1	572.2	34.7	368.	0.268	0.236	0.0
22 C7H14	1-heptene	98.189	154.3	366.8	537.3	28.3	440.	0.28	0.358	0.3
3 C7H14	2,3,3-trimethyl-1-butene	98.189	163.3	351.0	533.	28.9	400.	0.26	0.192	0.0
24 C7H14O	methyl amyl ketone	114.188	100.0	424.2	611.5	34.4		3.20	0.483	
25 C7H14O2	n-propyl butyrate	130.187	176.0	416.2	590.	27.1			3, 400	1.8

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
401	C7H80	methyl phenyl ether						
402	C 7H80	benzyl alcohol	-7.398E+0	5.481E-1	-3.357E-4	7.771E-8	-9.408E+4	
	C7H80	o-cresol	-3.228E+1	7.005E-1	-5 • 92 4E -4	2.124E-7	-1.287E+5	-3.300E+4
	C7H80	m-cresol	-4.501E+1	7.264E-1	-6.029E-4	2.077E-7	-1.324E+5	-4.057E+4
405	С7Н80	p-cresol	-4.063E+1	7.055E-1	-5.757E-4	1.967E-7	-1.255E+5	-3.090E+4
	C 7H 9N	2,3-dimethylpyridine					6.829E+4	
	C7H9N	2,4-dimethylpyridine						
	C7H9N	2,5-dimethylpyridine					6.644E+4	
	C 7H 9N	2,6-dimethylpyridine						
410	C7H9N	3,4-dimethylpyridine					7.005E+4	
411	C 7H 9N	3,5-dimethylpyridine					7.281E+4	
412	C7H9N	N-methylaniline					8.541E+4	1.993E+5
413	C7H9N	o-toluidine						
414	C7H9N	m-toluidine	-1.599E+1	5.681E-1	-3.033E-4	4.643E-8		
415	C7H9N	p-toluidine						
416	C7H14	cycloheptane	-7.619E+1	7.867E-1	-4.204E-4	7.561E-8	-1.194E+5	6.305E+4
417	C7H14	1,1-dimethylcyclopentane	-5.789E+1	7.670E-1	-4.501E-4	1.010E-7	-1.384E+5	3.906E+4
418	C7H14	1,2-dimethylcyclopentane-cis	-5.564E+1	7.616E-1	-4.484E-4	1.014E-7	-1.296E+5	4.576E+4
419	C7H14	1,2-dimethylcyclopentane-trans	-5.452E+1	7.591E-1	-4.480E-4	1.017E-7	-1.368E+5	3.839E+4
420	C7H14	ethylcyclopentane	-5.531E+1	7.511E-1	-4.396E-4	1.004E-7	-1.272E+5	4.459E+4
421	C7H14	methylcyclohexane	-6.192E+1	7.842E-1	-4.438E-4	9.366E-8	-1.549E+5	2.730E+4
422	C7H14	1-heptene	-3.303E+0	6.297E-1	-3.512E-4	7.607E-8	-6.234E+4	9.588E+4
423	C7H14	2,3,3-trimethyl-1-butene					-8.654E+4	
	C7H140	methyl amyl ketone						
425	C7H1402	n-propyl butyrate						

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
401	C7H80	methyl phenyl ether	1	-7.87545	1.83291	-4.06977	-2.18906	357	тс	0.996	293
402	C7H80	benzyl alcohol	1	-7.09506	1.18389	-9.14255	5.56311	303	TC	1.041	298
403	C7H80	o-cresol	1	-8.82061	3.14917	-6.63041	-0.84857	393	TC	1.028	313
404	C7H80	m-cresol	1	-8.58506	2.82624	-8.57418	8.74822	423	TC	1.034	293
405	C7H80	p-cresol	1	-9.23951	3.29880	-7.17725	-0.48000	401	TC	1.019	313
406	C7H9N	2,3-dimethylpyridine	3	10.5290	4219.74	-33.04		420	440	0.942	298
407	C7H9N	2,4-dimethylpyridine	3	10.2785	3991.27	-42.79		418	438	0.949	273
408	C7H9N	2,5-dimethylpyridine	3	9.6844	3545.14	-63.59		350	435	0.938	273
409	C7H9N	2,6-dimethylpyridine	3	9.6286	3385.20	-65.19		350	420	0.923	298
410	C7H9N	3,4-dimethylpyridine	3	10.3315	4237.04	-41.65		400	460	0.954	298
411	C7H9N	3,5-dimethylpyridine	3	10.2648	4106.95	-44.45		400	460	0.939	298
412	C7H9N	N-methylaniline	3	9.6864	3756.28	-80.71		320	480	0.989	293
413	C7H9N	o-toluidine	1	-8.68458	2.72553	-5.94620	-1.09185	392	TC	0.998	293
	C 7H 9N	m-toluidine	1	-8.43741	2.58101	-6.00776	-1.52856	395	TC	0.989	293
415	C7H9N	p-toluidine	3	10.0766	4041.04	-72.15		350	500	0.964	323
416	C7H14	cycloheptane	3	9.1616	3066.05	-56.80		330	435	0.810	293
417	C7H14	1,1-dimethylcyclopentane	1	-7.56029	1.82906	-2.90303	-3.11433	289	TC	0.759	289
418	C7H14	1,2-dimethylcyclopentane-cis	1	-7.67242	2,20160	-3.86394	-1.16796	299	TC	0.777	289
419	C7H14	1,2-dimethyl cyclopentane-trans	1	-7.19675	1.03696	-1.93618	-5.30531	299	TC	0.756	289
420	C7H14	ethylcyclopentane	1	-7.68089	2.28014	-4.40365	0.54338	302	TC	0.771	289
421	C7H14	methylcyclohexane	1	-7.01915	1.09615	-2.37009	-3.37562	299	TC	0.774	289
422	C7H14	1-heptene	1	-8.26875	3.02688	-6.18709	4.33049	295	TC	0.697	293
423	C7H14	2,3,3-trimethyl-1-butene	3	9.0334	2719.47	-49.56		253	375	0.705	293
	C7H140	methyl amyl ketone		0.00000	. 4051.	4 .0202	2 70150	200		0.820	
425	C7H1402	n-propyl butyrate	1	-8.28062	1.40511	-4.19323	-3.70158	300	TC	0.879	288

No ——	Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
426	C7H1402	n-propyl isobutyrate	130.187		408.6	581.	28.3				
427	C7H1402	isoamyl acetate	130.187	194.7	415.7	599.					1.8
	C7H1402	isobutyl propionate	130.187	201.8	410.0	583.	27.7				
429	C7H16	n-heptane	100.205	182.6	371.6	540.3	27.4	432.	0.263	0.349	0.0
430	C7H16	2-methylhexane	100,205	154.9	363.2	530.4	27.3	421.	0.261	0.329	0.0
31	C7H16	3-methylhexane	100.205	100.0	365.0	535.3	28.1	404.	0.255	0.323	0.0
132	C7H16	2,2-dimethylpentane	100,205	149.4	352.4	520.5	27.7	416.	0.266	0.287	0.0
133	C7H16	2,3-dimethylpentane	100.205		362.9	537.4	29.1	393.	0.256	0.296	0.0
134	C7H16	2,4-dimethylpentane	100.205	154.	353.6	519.8	27.4	418.	0.264	0.302	0.0
135	C7H16	3,3-dimethylpentane	100.205	138.7	359.2	536.4	29.5	414.	0.273	0.267	0.0
136	C7H16	3-ethylpentane	100.205	154.6	366.6	540.6	28.9	416.	0.267	0.310	0.0
137	C7H16	2,2,3-trimethylbutane	100.205	248.3	354.0	531.2	29.5	398.	0.266	0.250	0.0
38	C 7H 160	1-heptanol	116.204	239.2	449.8	633.	30.4	435.	0.251	0.560	1.7
39	C8H403	phthalic anhydride	148.118	404.	560.	810.	47.6	368.	0.26		5.3
40	C8H8	styrene	104.152	242.5	418.3	647.	39.9	-	-	0.257	0.1
441	C8H80	methyl phenyl ketone	120.151	292.8	474.9	714.0	40.6	376.	0.257	0.42	3.0
442	C8H802	methyl benzoate	136.151	260.8	472.2	692.	36.4	396.	0.25	0.43	1.9
143	C8H803	methyl salicylate	152.149	264.6	496.1	709.			-	-	2.4
144	C8H10	o-xylene	106.168	248.0	417.6	630.3	37.3	369.	0.262	0.310	0.5
145	C8H10	m-xylene	106.168	225.3	412.3	617.1	35.4	376.	0.259	0.325	0.3
146	C8H10	p-xylene	106.168	286.4	411.5	616.2	35.1	379.	0.260	0.320	0.1
447	C8H10	ethyl benzene	106.168	178.2	409.3	617.2	36.0	374.	0.262	0.302	0.4
448	C8H100	o-ethylphenol	122.167	269.8	477.7	703.0	-	-			
449	C8H100	m-et hy lphenol	122.167	269.	491.6	718.8					
450	C8H100	p-ethylphenol	122.167	318.	491.1	716.4					

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
				-			<del></del>	
	C7H14N2	n-propyl isobutyrate						
	C7H1402 C7H1402	isoamyl acetate						
	C7H14NZ	isobutyl propionate n-heptane	-5.146E+0	6.762E-1	-3.651E-4	7.658E-8	-1.879E+5	8.000E+3
	C7H16	2-methylhexane	-3.939E+1	8.642E-1	-6.289E-4	1.836E-7	-1.951E+5	3.220E+3
431	C7H16	3-methylhexane	-7.046E+0	6.837E-1	-3.734E-4	7.834E-8	-1.924E+5	4.600E+3
	C7H16	2,2-dimethylpentane	-5.010E+1	8.956E-1	-6.360E-4	1.736E-7	-2.063E+5	8.400E+2
	C7H16	2,3-dimethylpentane	-7.046E+0	6.837E-1	-3.734E-4	7.834E-8	-1.994E+5	6.700E+2
	C7H16 C7H16	2,4-dimethylpentane 3,3-dimethylpentane	-7.046E+0 -7.046E+0	6.837E-1 6.837E-1	-3.734E-4 -3.734E-4	7.834E-8 7.834E-8	-2.021E+5 -2.017E+5	3.100E+3 2.640E+3
733	C/IIIO	3,3-atmetry (pentalie	-/ • O40L +0	0.6571-1	-3.7346-4	7.034E-0	-2.01/6+3	2.0402+3
	C7H16	3-ethylpentane	-7.046E+0	6.837E-1	-3.734E-4	7.834E-8	-1.898E+5	1.100E+4
_	C7H16	2,2,3-trimethy1butane	-2.294E+1	7.519E-1	-4.421E-4	1.005E-7	-2.049E+5	4.270E+3
	C7H160	1-heptanol	4.907E+1	6.778E-1	-3.447E-4	6.046E-8	-3.320E+5	-1.210E+5
	C8H403 C8H8	phthalic anhydride styrene	-4.455E+0 -2.825E+1	6.540E-1 6.159E-1	-4.283E-4 -4.023E-4	1.009E-7 9.935E-8	-3.718E+5 1.475E+5	2.139E+5
770	CONO	scyl ene	-2.02 JE *1	0.1550-1	-4.0235-4	9. 33 JE -0	1.4/3673	2.139673
441	C8H80	methyl phenyl ketone	-2.958E+1	6.410E-1	-4.071E-4	9.722E-8	-8.692E+4	1.840E+3
	C8H802	methyl benzoate	-2.121E+1	5.501E-1	-1.799E-4	4.425E-8	-2.541E+5	
	C8H803	methyl salicylate	1 5055.1			7 5000 0		
	C8H10 C8H10	o-xylene m-xylene	-1.585E+1 -2.917E+1	5.962E-1 6.297E-1	-3.443E-4 -3.747E-4	7.528E-8 8.478E-8	1.900E+4 1.725E+4	1.222E+5 1.189E+5
443	CONTO	iir xy i eile	-2.91/6+1	0.29/6-1	-3./4/6-4	0.4/0E-0	1./23674	1.109573
446	C8H10	p-xylene	-2.509E+1	6.042E-1	-3.374E-4	6.820E-8	1.796E+4	1.212E+5
	C8H10	ethyl benzene	-4.310E+1	7.072E-1	-4.811E-4	1.301E-7	2.981E+4	1.307E+5
	C8H100	o-ethylphenol					-1.458E+5	
	C8H100 C8H100	m-ethylphenol p-ethylphenol					-1.466E+5 -1.447E+5	
730	CONTOU	h-ecily (busho)					-1.44/6+3	

No Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
426 C7H14O2	n-propyl isobutyrate	1	-8.52052	2.10660	-4.44053	-3.90420	300	TC	0.884	273
427 C7H1402	isoamyl acetate	3	10.5011	3699.29	-57.54		311	369	0.876	288
428 C7H1402	isohutyl propionate	1	-8.32761	1.56574	-3.97739	-4.71845	300	TC	0.888	273
429 C7H16	n-heptane	1	-7.67468	1.37068	-3.53620	-3.20243	240	TC	0.684	2 93
430 C7H16	2-methylhexane	1	-7.62477	1.47806	-3.53616	-2.70794	230		0.679	
431 C7H16	3-methylhexane	1	-7.58592	1.47394	-3.52511	-2.35419	235	TC	0.687	293
432 C7H16	2,2-dimethylpentane	1	-7.45564	1.56232	-3.44620	-1.80802	225	TC	0.674	293
433 C7H16	2,3-dimethylpentane	1	-7.46078	1.47778	-3.37079	-1.88997	230	TC	0.695	293
434 C7H16	2,4-dimethylpentane	1	-7.46358	1.43203	-3.42422	-2.20238	225	TC	0.673	293
435 C7H16	3,3-dimethylpentane	1	-7.49199	1.83146	-3.57292	-0.89448	225	TC	0.693	293
436 C7H16	3-ethylpentane	1	-7.58305	1.58587	-3.56732	-2.42625	265	TC	0.698	293
437 C7H16	2,2,3-trimethylbutane	1	-7.22017	1.44914	-3.11808	-1.10598	250	TC	0.690	293
438 C7H160	1-heptanol	3	8.6866	2626.42	-146.6		333	449	0.822	293
439 C8H403	phthalic anhydride	3	9.3782	4467.01	-83.15		409	615		
440 C8H8	styrene	1	-7.15981	1.78861	-5.10359	1.63749	303	TC	0.906	293
441 C8H80	methyl phenyl ketone	1	-7.63896	1.20432	-3.60753	-1.55754	298	TC	1.032	288
442 C8H802	methyl benzoate	3	9.6070	3751.83	-81.15		350	516	1.086	293
443 C8H803	methyl salicylate	3	9.6897	3943.86	-86.19		350	4 95	1.182	298
444 C8H10	o-xyl ene	1	-7.53357	1.40968	-3.10985	-2.85992	337	TC	0.880	293
445 C8H10	m-xylene	1	-7.59222	1.39441	-3.22746	-2.40376	332	TC	0.864	293
446 C8H10	p-xylene	1	-7.63495	1.50724	-3.19678	-2.78710	331	TC	0.861	293
447 C8H10	ethyl benzene	1	-7.48645	1.45488	-3.37538	-2.23048	330	TC	0.867	293
448 C8H100	o-ethylphenol	3	11.3408	4928.36	-45.75		350	500	1.037	273
449 C8H100	m-ethylphenol	3	10.5753	4272.77	-86.08		370		1.025	273
450 C8H100	p-ethyl phenol	3	12.4703	5579.62	-44.15		370	500		

No	Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
	C8H100	ethyl phenyl ether	122.167	243.	443.0	647.	34.2			0.418	1.2
	C8H100	2,3-xylenol	122.167	348.	490.1	722.8					
	C8H100 C8H100	2,4-xylenol 2,5-xylenol	122.167 122.167	298. 348.	484.1	707.6					2.0
	C8H100	2,6-xylenol	122.167	322.	484.3 474.2	706.9 701.0					1.5
456	C8H100	3,4-xylenol	122.167	338.	500.2	729.8					1.7
457	C8H100	3,5-xylenol	122.167	337.	494.9	715.6					1.8
	C8H11N	N,N-dimethylaniline	121,183	275.6	467.3	687.	36.3			0.411	1.6
	C8H11N	N-ethylaniline	121.183	207.4	476.2	698.					1.7
460	C8H1404	diethylsuccinate	174.196	251.9	490.9	663.					2.3
461	C8H16	1,1-dimethylcyclohexane	112,216	239.7	392.7	591.	29.6	416.	0.25	0.238	
	C8H16	1,2-dimethylcyclohexane-cis	112.216	223.1	402.9	606.	29.6			0.236	
	C8H16	1,2-dimethylcyclohexane-trans	112.216	185.0	396.6	596.				0.242	
	C8H16	1,3-dimethylcyclohexane-cis	112.216	197.6	393.3	591.	29.6			0.224	
465	C8H16	1,3-dimethylcyclohexane-trans	112.216	183.0	397.6	598.	29.7			0.189	
4 66	C8H16	1,4-dimethylcyclohexane-cis	112.216	185.7	397.5	598.	29.7			0.234	
	C8H16	1,4-dimethylcyclohexane-trans	112.216		392.5	587.7	29.7			0.242	
	C8H16	ethylcyclohexane	112.216	161.8	404.9	609.	30.	450.	0.27	0.243	0.0
	C8H16	1,1,2-trimethylcyclopentane	112.216		386.9	579.5	29.4			0.252	
470	C8H16	1,1,3-trimethylcyclopentane	112,216		378.0	569.5	28.3			0.211	
471	C8H16	1,2,4-trimethylcyclopentane-c,c,t	112,216		391.	579.	29.			0.277	
472	C8H16	1,2,4-trimethylcyclopentane-c.t.c	112.216		382.4	571.	28.			0.246	
473	C8H16	1-methyl-1-ethylcyclopentane	112.216		394.7	592.	30.			0.250	
474	C8H16	n-propylcyclopentane	112.216	155.8	404.1	603.	30.	425.	0.25	0.335	
475	C8H16	isopropylcyclopentane	112.216	160.5	399.6	601.	30.			0.240	

	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	
	61 C8H100	ethyl phenyl ether						
	2 C8H100	2,3-xylenol					-1.573E+5	
-	3 C8H100	2,4-xylenol					-1.628E+5	
	4 C8H100	2,5-xylenol					-1.615E+5	
45	55 C8H100	2,6-xylenol					-1.619E+5	
4.5	6 C8H100	3,4-xylenol					-1.565E+5	
	7 C8H100	3,5-xylenol					-1.615E+5	
	8 C8H11N	N,N-dimethylaniline					8.415E+4	
	69 C8H11N	N-ethylaniline						
46	60 C8H14O4	diethylsuccinate						
46	1 C8H16	1,1-dimethylcyclohexane	-7.211E+1	8.997E-1	-5.020E-4	1.030E-7	-1.811E+5	
46	2 C8H16	1,2-dimethylcyclohexane-cis	-6.837E+1	8.972E-1	-5.137E-4	1.099E-7	-1.723E+5	
46	3 C8H16	1,2-dimethylcyclohexane-trans	-6.848E+1	9.123E-1	-5.355E-4	1.181E-7	-1.801E+5	
	4 C8H16	1,3-dimethylcyclohexane-cis	-6.516E+1	8.838E-1	-4.932E-4	1.020E-7	-1.849E+5	
46	5 C8H16	1,3-dimethylcyclohexane-trans	-6.415E+1	8.826E-1	-5.016E-4	1.068E-7	-1.767E+5	
46	6 C8H16	1,4-dimethylcyclohexane-cis	-6.415E+1	8.826E-1	-5.016E-4	1.068E-7	-1.768E+5	
46	7 C8H16	1,4-dimethylcyclohexane-trans	-7.036E+1	9.131E-1	-5.309E-4	1.155E-7	-1.847E+5	
46	8 C8H16	ethylcyclohexane	-6.389E+1	8,893E-1	-5.108E-4	1.103E-7	-1.719E+5	
46	9 C8H16	1,1,2-trimethylcyclopentane						
47	n C8H16	1,1,3-trimethylcyclopentane						
47	1 C8H16	1,2,4-trimethylcyclopentane-c.c.t						
47	2 C8H16	1,2,4-trimethylcyclopentane-c,t,c						
47	3 C8H16	1-methyl-1-ethylcyclopentane						
	4 C8H16	n-propylcyclopentane	-5.597E+1	8.449E-1	-4.924E-4	1.117E-7	-1.482E+5	
47	5 C8H16	isopropylcyclopentane	<del>-</del>		'			

No Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
451 C8H100	ethyl phenyl ether	1	-8.50867	2.56997	-5.78999	0.10899	371	TC	0.979	277
452 C8H100	2,3-xyl eno1	3	9.6222	3724.58	-102.4		420	500		
453 C8H100	2,4-xylenol	3	9.6254	3655.26	-103.8		410	500		
454 C8H100	2,5-xyl enol	3	9.6166	3667.32	-102.4		410	490		
455 C8H100	2,6-xylenol	3	9.6607	3749.35	-85.55		400	480		
456 C8H100	3,4-xylenol	3	9.6802	3733.53	-113.9		430	520		
457 C8H100	3,5-xylenol	3	9.7990	3775.91	-109.0		410	500		
458 C8H11N	N,N-dimethylaniline	3	10.3445	4276.08	-52.80		345	480	0.956	293
459 C8H11N	N-ethylaniline	3	10.4715	4382.63	-58.88		321	481	0.963	293
460 C8H14O4	diethylsuccinate								1.041	293
461 C8H16	1,1-dimethylcyclohexane	1	-6.92810	1.01872	-3.04857	-1.70684	314	TC	0.785	289
462 C8H16	1,2-dimethylcyclohexane-cis	1	-7.01944	1.31860	-3.96577	0.08142	322	TC	0.796	293
463 C8H16	1,2-dimethylcyclohexane-trans	2	46.903	6162.66	-5.245	4785.	320	TC	0.776	293
464 C8H16	1,3-dimethylcyclohexane-cis	3	9.1268	3081.95	-55.08		284	420	0.766	293
465 C8H16	1,3-dimethylcyclohexane-trans	2	49.477	6271.67	-5.615	4718.	320	TC	0.785	293
466 C8H16	1,4-dimethylcyclohexane-cis	2	46.951	6219.26	-5.233	4718.	320	TC	0.783	293
467 C8H16	1,4-dimethylcyclohexane-trans	2	46.289	6071.72	-5.163	4650.	320	TC	0.763	293
468 C8H16	ethyl cycl ohexane	3	9.1923	3183.25	-58.15		293	433	0.788	293
469 C8H16	1,1,2-trimethylcyclopentane	1	-7.01985	1.06194	-3.15886	-1.64858	309	TC		
470 C8H16	1,1,3-trimethylcyclopentane	1	-6.97215	1.62353	-4.90587	2.76293	302	TC		
471 C8H16	1,2,4-trimethylcyclopentane-c,c,t	3	9.1341	3073.95	-54.20		283	418		
472 C8H16	1,2,4-trimethylcyclopentane-c,t,c	3	9.1554	3009.70	-53.23		282	417		
473 C8H16	1-methyl-1-ethylcyclopentane	1	-7.09092	1.31715	-3.96332	0.30332	316	TC		
474 C8H16	n-propylcyclopentane	1	-7.82031	2.88785	-6.85367	6.03561	325	TC	0.781	289
475 C8H16	isopropylcyclopentane	1	-7.10096	1.54495	-4.66594	2.34067	320	TC	0.776	293

No Formula	Name 	MolWt	Tfp K	Tb 	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
476 C8H16	cyclonctane	112,216		422.	647.2	35.6	410.	0.271	0.236	
477 C8H16 478 C8H16	1-octene 2-octene-trans	112,216 112,216	171.4 185.4	394.4 398.1	566.7	26.2	464.	0.26	0.386	0.3
479 C8H1602	isoamyl propionate	144,214	100.4	433.4	580. 611.	27.7			0.350	
480 C8H1602	isobutyl butyrate	144.214		430.1	603.	24.5				
481 C8H1602	isobutyl isobutyrate	144.214		421.8	594.	24.6				
482 C8H16O2 483 C8H18	n-propyl isovalerate n-octane	144.214 114.232	216 4	429.1	609.	24.0	400	0.050	0 200	
484 C8H18	2-methy1heptane	114.232	216.4 164.	398.8 390.8	568.8 559.6	24.9 24.8	492. 488.	0.259 0.261	0.398 0.378	0.0
485 C8H18	3-methylheptane	114.232	152.7	392.1	563.7	25.5	464.	0.252	0.370	
486 C8H18	4-methy1heptane	114,232	152.2	390.9	561.7	25.4	476.	0.259	0.371	
487 C8H18	2,2-dimethylhexane	114.232	152.	380.0	549.9	25.3	478.	0.264	0.338	
488 C8H18	2,3-dimethylhexane	114.232		388.8	563.5	26.3	468.	0.263	0.346	
489 C8H18 490 C8H18	2,4-dimethylhexane	114.232	101 0	382.6	553.5	25.6	472.	0.262	0.343	
490 CON10	2,5-dimethy1hexane	114.232	181.9	382.3	550.1	24.9	482.	0.262	0.356	
491 C8H18	3,3-dimethylhexane	114.232	147.	385.1	562.0	26.5	443.	0.251	0.320	
492 C8H18	3,4-dimethylhexane	114.232		390.9	568.9	26.9	466.	0.265	0.338	
493 C8H18	3-ethylhexane	114,232	160.0	391.7	565.5	26.1	455.	0.252	0.361	
494 C8H18 495 C8H18	2,2,3-trimethylpentane 2,2,4-trimethylpentane	114.232 114.232	160.9 165.8	383.0 372.4	563.5 544.0	27.3 25.7	436. 468.	0.254 0.266	0.297 0.303	
493 (0110	2,2,4-crimethy pentane	114,232	103.6	3/2.4	344.0	25.7	400.	0.200	0.303	
496 C8H18	2,3,3-trimethylpentane	114.232	172.5	387.9	573.6	28.2	455.	0.269	0.290	
497 C8H18	2,3,4-trimethylpentane	114.232	163.9	386.6	566.4	27.3	461.	0.267	0.315	
498 C8H18	2-methyl-3-ethylpentane	114.232	158.2	388.8	567.1	27.0	443.	0.254	0.330	
499 C8H18 500 C8H18	3-methyl-3-ethylpentane 2,2,3,3-tetramethylbutane	114.232 114.232	182.3 374.	391.4 379.6	576.6 567.8	28.1 28.7	455. 461.	0.267 0.280	0.303 0.251	

No	Formula	Name	CPVAP A	CPVAP R	CPVAP C	CPVAP D	DELHF	DELGF
476	C8H16	cyclooctane						
477	C8H16	1-octene	-4.099E+0	7.239E-1	-4.036E-4	8.675E-8	-8.298E+4	1.043E+5
478	C8H16	2-octene-trans	-1.282E+1	7.532E-1	-4.442E-4	1.050E-7	-9.458E+4	9.274E+4
479	C8H1602	isoamyl propionate						
480	C8H1602	isobutyl butyrate						
481	C8H1602	isobutyl isobutyrate						
482	C8H1602	n-propyl isovalerate						
483	C8H18	n-octane	-6.096E+0	7.712E-1	-4.195E-4	8.855E-8	-2.086E+5	1.640E+4
484	C8H18	2-methylheptane	-8. 970E+1	1.242E+0	-1.176E-3	4.618E-7	-2.156E+5	1.277E+4
485	C8H18	3-methylheptane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.128E+5	1.373E+4
486	C8H18	4-methylheptane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.122E+5	1.675E+4
487	C8H18	2.2-dimethylhexane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.249E+5	1.072E+4
488	C8H18	2,3-dimethylhexane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.141E+5	1.771E+4
489	C8H18	2,4-dimethy1hexane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.196E+5	1.172E+4
490	C8H18	2,5-dimethylhexane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.228E+5	1.047E+4
491	C8H18	3,3-dimethylhexane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.203E+5	1.327E+4
492	C8H18	3,4-dimethylhexane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.131E+5	1.733E+4
493	C8H18	3-ethy1hexane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.110E+5	1.694E+4
494	C8H18	2,2,3-trimethylpentane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.203E+5	1.712E+4
495	C8H18	2,2,4-trimethylpentane	-7.461E+0	7.779E-1	-4.287E-4	9.173E-8	-2.243E+5	1.369E+4
496	C8H18	2,3,3-trimethylpentane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.166E+5	1.892E+4
	C8H18	2,3,4-trimethylpentane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.176E+5	1.892E+4
	C8H18	2-methyl-3-ethylpentane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.113E+5	2.127E+4
499	C8H18	3-methyl-3-ethylpentane	-9.215E+0	7.859E-1	-4.400E-4	9.697E-8	-2.151E+5	1.993E+4
500	C8H18	2,2,3,3-tetramethy1butane	•	•				

No Formul	Name Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN T	T DE N
476 C8H16	cyclooctane	3	9.1799	3310.62	-63.18		367	470	0.834	293
477 C8H16	1-octene	2	57.867	6883.34	-6.765	5235.	320	TC	0.715	
478 C8H16	2-octene-trans	3	9.2352	3134.97	-58.00	3233.	289	425	0.720	
479 C8H160		Ŭ	341001	3201.37	30.00		203	720	0.870	
480 C8H160		1	-8.32597	1.42350	-4.25376	-3.09772	310	TC	0.863	
481 C3H160	de disobutyl isobutyrate	1	-8.18677	1.32200	-3.94343	-3.68833	310	TC	0.875	273
482 C8H160									0.863	293
483 C8H18	n-octane	1	-7.91211	1.38007	-3.80435	-4.50132	260	TC	0.703	
484 C8H18	2-methy1heptane	1	-7.80701	1.38191	-3.78286	-3.50395	250	TC	0.702	
485 C8H18	3-methylheptane	1	-7.82876	1.50656	-3.86146	-3.52377	255	TC	0.706	
486 C8H18	4-methylheptane	1	-7.78757	1.40709	-3.76234	-3.50643	250	TC	0.705	2 93
487 C8H18	2,2-dimethylhexane	1	-7.69898	1.56083	-3.75189	-3.01869	245	TC	0.695	
488 C8H18	2,3-dimethylhexane	ī	-7.75180	1.58578	-3.80794	-2.58547	250	ŤĊ	0.712	
489 C8H18	2,4-dimethy1hexane	1	-7.65152	1.41393	-3,62789	-3.06548	245	TC	0.700	293
490 C8H18	2,5-dimethy1hexane	1	-7.76508	1.51236	-3.78809	-3.07843	245	TC	0.693	
491 C8H18	3,3-dimethy1hexane	1	-7.59847	1.50336	-3.49912	-2.38236	245	TC	0.710	293
492 C8H18	3,4-dimethylhexane	1	-7.72976	1.61174	-3.75756	-2.62874	250	TC	0.719	
493 C8H18	3-ethylhexane	1	-7.75246	1.42908	-3.68445	-3.46671	250	TC	0.718	
494 C8H18	2,2,3-trimethylpentane	1	-7.48839	1.52208	-3.44481	-2.12538	245	TC	0.716	293
495 C8H18	2,2,4-trimethylpentane	1	-7.38890	1.25294	-3.16606	-2.22001	265	TC	0.692	
496 C8H18	2,3,3-trimethylpentane	1	-7.41747	1.42778	-3.19166	-1.81367	245	TC	0.726	293
497 C8H18	2,3,4-trimethylpentane	1	-7.62000	1.60334	-3.57834	-2.04401	245	TC	0.719	
498 C8H18	2-methyl-3-ethylpentane	1	-7.65393	1.54032	-3.64686	-2.52380	250	TC	0.719	
499 C8H18	3-methyl-3-ethylpentane	1	-7.56484	1.58810	-3.40610	-1.71546	250	TC	0.727	293
500 C8H18	2,2,3,3-tetramethylbutane	3	11.4937	3856.39	-42.42	· -	270	343	-	

No Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
501 C8H180	1-octanol	130.231	257.7	468.3	652.5	28.6	490.	0.258	0.587	2.0
502 C8H180	2-octanol	130.231	241.2	452.	637.					1.6
503 C8H180	4-methyl-3-heptanol	130.231		443.	623.5					
504 C8H180	5-methyl-3-heptanol	130.231		445.	621.2					
505 C8H180	2-ethyl-1-hexanol	130.231	203.2	457.8	640.2					1.8
506 C8H180	dibutyl ether	130,231	175.	413,4	580.	25.3			0.502	1.2
507 C8H180	di-tert-butyl ether	130.231		382.2	550.	24.2				
508 C8H19N	dibutyl amine	129.247	211.	432.8	607.5	26.4			0.580	1.1
509 C8H19N	diisobutyl amine	129.247	203.	412.8	584.4	27.2			0.548	
510 C9H7N	quinoline	129.162	258.	510.8	782.					
511 C9H7N	isoquinoline	129.162	300.	516.4	803.					
512 C9H10	indane	118,179		451.1	684.9	39.5			0.308	
513 C9H10	alpha-methylstyrene	118,179		438.5	654.	34.				
514 C9H1002	ethyl benzoate	150.178	238.3	485.9	668.7	23.2			0.48	
515 C9H12	n-propylbenzene	120.195	173.7	432.4	638.2	32.0	440.	0.265	0.344	
516 C9H12	isopropylbenzene	120.195	177.1	425.6	631.1	32.1			0.326	
517 C9H12	1-methy1-2-ethy1benzene	120.195	192.3	438.3	651.	30.4	460.	0.26	0.294	
518 C9H12	1-methyl-3-ethylbenzene	120.195	177.6	434.5	637.	28.4	490.	0.26	0.360	
519 C9H12	1-methyl-4-ethylbenzene	120.195	210.8	435.2	640.	29.4	470.	0.26	0.322	
520 C9H12	1,2,3-trimethylbenzene	120.195	247.7	449.3	664.5	34.5			0.366	
521 C9H12	1,2,4-trimethylbenzene	120.195	227.	442.5	649.2	32.3			0.376	
522 C9H12	1,3,5-trimethylbenzene	120.195	228.4	437.9	637.3	31.3			0.399	0.1
523 C9H13N	N.N-dimethyl-o-toluidine	135.210	212.	467.3	668.	31.2			0.484	0.9
524 C9H18	n-propylcyclohexane	126.243	178.7	429.9	639.0	28.0			0.258	
525 C9H18	isopropylcyclohexane	126.243	183.4	427.7	640.0	28.3			0.237	0.0

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
501	C8H180	1-octanol	6.171E+0	7.607E-1	-3.797E-4	6.263E-8	-3.601E+5	-1.202E+5
	C8H180 C8H180	2-octanol 4-methyl-3-heptanol	2.588E+1	7.641E-1	-4.224E-4	9.064E-8		·- <del>-</del> ·
504	C8H180	5-methyl-3-heptanol						
505	C8H180	2-ethyl-1-hexanol	-1.499E+1	8.654E-1	-5.280E-4	1.285E-7	-3.655E+5	
	C8H180	dibutyl ether	6.054E+0	7.729E-1	-4.085E-4	8.085E-8	-3.341E+5	-8.859E+4
	C8H18O C8H19N	di-tert-butyl ether dibutyl amine	9.764E+0	8.081E-1	-4.392E-4	9.249E-8		
509	C8H19N	diisobutyl amine	36701210	0.0011. 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3,2132 0		
510	C9H7N	quinoline						
	C9H7N	isoquinoline						
	C9H10	indane						
	C9H10 C9H1002	alpha-methylstyrene ethyl benzoate	-2.433E+1 2.067E+1	6.933F-1	-4.530E-4	1.181E-7		
	C9H12	n-propylbenzene	-3.129E+1	6.887E-1 7.486E-1	-3.608E-4 -4.601E-4	5.062E-8 1.081E-7	7.830E+3	1.373E+5
516	C9H12	isopropy!benzene	-3.936E+1	7.842E-1	-5_087E-4	1.291E-7	3.940E+3	1 2715.5
	C9H12	1-methyl-2-ethylbenzene	-1.645E+1	6.996E-1	-4.120E-4	9.328E-8	1.210E+3	1.371E+5 1.312E+5
	C9H12	1-methyl-3-ethylbenzene	-2.900E+1	7.293E-1	-4.363E-4	9.998E-8	-1.930E+3	1.265E+5
	C9H12	1-methyl-4-ethylbenzene	-2.731E+1	7.176E-1	-4.224E-4	9.542E-8	-2.050E+3	1.268E+5
520	C9H12	1,2,3-trimethylbenzene	-6.942E+0	6.335E-1	-3.326E-4	6.611E-8	-9.590E+3	1.246E+5
	C9H12	1,2,4-trimethy1benzene	-4.668E+0	6.238E-1	-3.263E-4	6.376E-8	-1.394E+4	1.170E+5
	C9H12 C9H13N	1,3,5-trimethylbenzene N,N-dimethyl-o-toluidine	-1.959E+1	6.724E-1	-3.692E-4	7.700E-8	-1.608E+4	1.180E+5
	C9H18	n-propylcyclohexane	-6.252E+1	9.889E-1	-5.795E-4	1.291E-7	-1.934E+5	4.735E+4
525	C9H18	isopropylcyclohexane			-			

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
501	C8H180	1-octanol	1	-9.71763	4.22514	-12.9222	-3.59254	325	TC	0.826	293
	C8H180	2-octanol	3	8,0906	2441.66	-150.7		345	453	0.821	293
	C8H180	4-methyl-3-heptanol									
	C8H180	5-methyl-3-heptanol									
505	C8H180	2-ethyl-1-hexanol	3	8.7412	2773.46	-140.0		348	458	0.833	293
506	C8H180	dibutyl ether	1	-9.04970	2.78734	-5.11686	-3.97104	362	TC	0.768	293
	C8H18O	di-tert-butyl ether	1	-7.47062	1.33672	-4.00322	-1.89122	300	TC		
806	C8H19N	dibutyl amine	1	-9.14853	2.93179	-6.02092	0.93342	315	TC	0.767	293
	C8H19N	diisobutyl amine	1	-8.95962	2.85335	-5.81427	0.65701	300	TC	0.741	298
510	C 9H 7N	quinoline	3	9.0779	3842.40	-86.94		437	515	1.095	293
511	C9H7N	isoquinoline	3	9.2957	3968.37	-88, 94		437	517	1.091	303
512	C9H10	indane			-				-		
513	C9H10	alpha-methylstyrene	3	9.7106	3644.30	-67.15		348	493	0.911	293
	C9H1002	ethyl benzoate	1	-9.32936	2.89807	-6.54758	5.56703	317	TC	1.046	293
515	C9H12	n-propylbenzene	1	-7.92198	1.97403	-4.27504	-1.28568	346	TC	0.862	293
516	C9H12	i sopropyl benzene	1	-7.46042	1.14486	-3.19082	-3.62628	343	TC	0.862	293
517	C9H12	1-methyl-2-ethylbenzene	1	-7.58007	2.20412	-6,68027	6.06587	354	TC	0.881	293
	C9H12	1-methyl-3-ethylbenzene	1	-7.86301	2.47961	-6.98644	6.35609	351	TC	0.865	293
519	C9H12	1-methyl-4-ethylbenzene	1	-7.68892	1.92605	-5.51788	2.76399	351	TC	0.861	293
520	C9H12	1,2,3-trimethylbenzene	1	-8.44191	2.92198	-5.66712	2,28086	363	TC	0.894	293
521	C9H12	1,2,4-trimethylbenzene	1	-8.50002	2,98227	-6,02665	3.51307	358	TC	0.880	289
522	C9H12	1,3,5-trimethylbenzene	1	-8.37150	2.41166	-5.30321	2,67635	355	TC	0.865	293
523	C9H13N	N,N-dimethyl-o-toluidine		-	-					0.929	293
524	C9H18	n-propyl cycl ohexane	1	-7.37782	2.13149	-6.45979	5.82529	349	TC	0.793	293
E2E	C9H18	isopropylcyclohexane	1	-7.24565	2.09643	-6.35158	5.5038	344	TC	0.802	293

No Formula	Name	MolWt	Tfp K	Tb K	Tc K	Pc har	Vc cm <sup>3</sup> /mo1	Zc	Omega ————	Dipm debye
526 C9H18	1,trans-3,5-trimethylcyclohexane	126,243		413.7	602.2					
527 C9H18	1-nonene	126.243	191.8	420.0	592.	23.4	580.	0.28	0.430	
528 C9H18O	dibutyl ketone	142.242	267.3	461.6	640.					2.7
529 C9H2O	n-nonane	128.259	219.7	424.0	594.6	22.9	548.	0.26	0.445	
530 C9H2O	2-methyloctane	128.242	192.8	416.4	587.0	23.1			0.423	
531 C9H2O	2,2-dimethy1heptane	128.242	160.	405.9	576.8	23.5			0.390	
532 C9H2O	2,2,3-trimethylhexane	128.259		406.8	588.	24.9			0.332	
533 C9H2O	2,2,4-trimethylhexane	128.259	153.	399.7	573.7	23.7			0.321	
534 C9H2O	2,2,5-t rimethylhexane	128.259	167.4	397.2	568.	23.3	519.	0.260	0.357	
535 С9Н2О	3,3-diethylpentane	128.259	240.1	419.3	610.	26.7			0.338	0.0
536 C9H2O	2,2,3,3-tetramethylpentane	128.259	263.	413.4	607.7	27.4			0.303	
537 C9H2O	2,2,3,4-tetramethylpentane	128.259	152.	406.1	592.7	26.0			0.313	
538 C9H2O	2,2,4,4-tetramethylpentane	128.259	206.0	395.4	574.7	24.9			0.312	
539 C9H2O	2,3,3,4-tetramethylpentane	128.259	171.1	414.7	607.7	27.2			0.313	
540 C9H2OO	1-nonanol	144.258	268.	486.7	671.		546.			1.7
541 C10F8	perfluoronaphthalene	272.094		482.	673.1					
542 C10F18	perfluorodecalin	462.074		415.	566.	15.2			0.392	
543 C10H8	naphthalene	128.174	353.5	491.1	748.4	40.5	413.	0.269	0.302	0.0
544 C10H12	1,2,3,4-tetrahydronaphthalene	132,206	242.	480.7	719.	35.1			0.303	
545 C10H14	n-buty1benzene	134.222	185.2	456.5	660.5	28.9	497.	0.261	0.393	0.4
546 C10H14	isobutylbenzene	134.222	221.7	445.9	650.	31.4	480.	0.28	0.380	0.3
547 C10H14	sec-butylbenzene	134.222	197.7	446.5	664.	29.4			0.274	0.4
548 C10H14	tert-butylbenzene	134.222	215.3	442.3	660.	29.6			0.265	0.5
549 C10H14	1-methyl-2-isopropylbenzene	134.222		451.5	670.	28.9			0.277	
550 C10H14	1-methyl-3-isopropylbenzene	134.222		448.3	666.	29.3			0.279	

526 C9H18 1,trans-3,5-trimethylcyclohexane 527 C9H18 1-nonene -3.718E-	+0 8.729E-1	-4.509E-4	9.705E-8	-1.036E+5	1 1000 - 5
• • • • • • • • • • • • • • • • • • • •	+0 8.729E-1		9.705E -8	-1 - 036F +5	
					1.128E+5
528 C9H180 dibutyl ketone			1 0015 7	0.0005.5	0.4005.4
529 C9H2O n-nonane -8.374E 530 C9H2O 2-methyloctane -1.011E	11 0 ONET 1	-4.823E-4 -4.936E-4	1.031E-7 1.083E-7	-2.292E+5 -2.292E+5	2.483E+4 2.483E+4
530 C9H2O 2-methyloctane -1.011E-	+1 8.805E-1	-4.9306-4	1.0832-/	-2.29ZE+5	2.483E+4
531 C9H2O 2,2-dimethylheptane -2.089E	+1 9.668E-1	-6.120E-4	1.570E-7	-2.470E+5	1.675E+4
532 C9H20 2,2,3-trimethylhexane -4.563E-	+1 1.055E+0	-7.172E-4	1.987E-7	-2.414E+5	2.453E+4
533 C9H20 2,2,4-trimethylhexane -6.031E-	+1 1.104E+0	-7.712E-4	2.188E-7	-2.434E+5	2.252E+4
534 C9H2O 2,2,5-trimethylhexane -5.411E-	+1 1.095E+0	-7.746E-4	2.255E-7	-2.542E+5	1.344E+4
535 C9H2O 3,3-diethylpentane -6,727E	+1 1.126E+0	-7.988E -4	2.306E-7	-2.321E+5	3.509E+4
536 C9H2O 2,2,3,3-tetramethylpentane -5.458E	+1 1.089E+0	-7.570E-4	2.142E-7	-2.374E+5	3.433E+4
537 C9H2O 2.2.3.4-tetramethylpentane -5.458E		-7.570E-4	2.142E-7	-2.371F+5	3.266E+4
538 C9H2O 2,2,4,4-tetramethylpentane -6,740E		-8.612E-4	2.574E-7	-2.421E+5	3.404E+4
539 C9H2O 2,3,3,4-tetramethylpentane -5.492E		-7.603E-4	2.158E-7	-2.364E+5	3.412E+4
540 C9H200 1-nonanol . 1.280E	+0 8.817E-1	-4.791E-4	9.801E-8	-3.872E+5	-1.183E+5
541 ClOF8 perfluoronaphthalene					
541 C10F8 perfluoronaphthalene 542 C10F18 perfluorodecalin					
543 C10H8 naphthalene -6.880E	+1 8_499E-1	-6.506E-4	1.981E-7	1.511E+5	2.237E+5
544 C10H12 1.2.3.4-tetrahydronaphthalene	11 0,4336-1	-0.300E -4	1.3016-7	2.760E+3	1.671E+5
545 C10H14 n-butylbenzene -2,299E	+1 7,934E-1	-4.396E-4	8. 570E -8	-1.382E+4	1.448E+5
	. • • • • •				-•
546 C10H14 isobutylbenzene				-2.156E+4	
547 C10H14 sec-buty1benzene -6.515E		-7.214E-4	2.152E-7	-1.746E+4	
548 C10H14 tert-butylbenzene -8.600E	+1 1.102E+0	-8.746E-4	2.827E-7	-2.269E+4	
549 C10H14 1-methyl-2-isopropylbenzene			_		
550 C10H14 1-methyl-3-isopropylhenzene -4.876E	+1 9.064E -1	-6.054E-4	1.62 7E -7	-2.931E+4	

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
	C9H18	l,trans-3,5-trimethylcyclohexane	1	-8.30824	2.03357	<b>-</b> 5.42753	0.95331	340	TC	0.722 0.745	293 273
	C9H180 C9H20	dibutyl ketone n-nonane	,	-8.24480	1.57885	-4.38155	-4.04412	343	TC	0.827 0.718	286 293
	C9H20	2-methyloctane	3	9.3089	3246.64	-67.20	-4.04412	323	448	0.713	
	C9H20	2,2-dimethy1heptane	3	9.1710	3120.00	-65.20		313	438	0.711	293
	C9H2O C9H2O	2,2,3-trimethy1hexane 2,2,4-trimethy1hexane	3 3	9.1815 9.1437	3164.17 3084.08	-61.66 -61.94		297 291	436 428	0.729	293
	C9H2O	2,2,5-trimethylhexane	ა 1	-7.80573	1.68023	-61.94 -4.50859	-0.78808	319	428 TC	0.720 0.717	289 289
	C9H20	3,3-diethylpentane	i	<b>-7.98732</b>	2.15446	-4.25035	-0.09787	336	TC	0.752	293
536	C9H2O	2,2,3,3-tetramethy1pentane	1	-7.40615	1.23976	-2.94462	-3.35833	331	TC	0.757	2 93
	C9H2O	2,2,3,4-tetramethylpentane	1	-7.60624	1.62208	-3.71777	-1.50403	325	TC	0.739	293
	C9H2O	2,2,4,4-tetramethylpentane	1	-7.71570	1.89775	-4.08940	-0.75421	316	TC	0.719	293
	C9H20	2,3,3,4-tetramethylpentane	1	-7.65000	1.71897	-3.82026	-0.95911	332	TC	0.755	293
540	C 9H2 00	1-nonanol	3	8.7513	2939.54	-150.1		363	487	0.828	293
	C10F8 C10F18	perfluoronaphthal ene									
	C10F16	perfluorodecalin naphthalene	1	-7.85178	2.17172	-3,70504	-4.81238	399	TC	0.971	363
	C10H12	1,2,3,4-tetrahydronaphthalene	3	9.5883	4009.49	-64.89	-4.01230	365	500	0.973	293
	C10H14	n-butyl benzene	i	-8.39978	2.61916	-5.8D532	2.11591	369	TC	0.860	293
546	C10H14	isobutylbenzene	1	-8.13153	1.58186	-2.37146	-7.46781	360	TC	0.853	293
	C10H14	sec-butylbenzene	1	-7.49482	2.23440	-6.77346	6.31118	360	TC	0.862	293
	C10H14	tert-butyl benzene	1	-7.45802	2.33227	-7.07129	6.72178	357	TC	0.867	293
	C10H14	1-methyl-2-isopropylbenzene	3	9.3607	3564.52	-70.00		330	481	0.876	293
550	C10H14	1-methyl-3-isopropylbenzene	2	61.106	8033.58	-7.076	6293.	330	TC	0.861	293

No For	rmula	Name	MolWt	Tfp K	Tb K	T <sub>C</sub> K	Pc bar	Vc cm <sup>3</sup> /mol	Zc	Omega	Dipm debye
551 C10 552 C10 553 C10	0H14	1-methyl-4-isopropylbenzene 1,4-diethylbenzene	134.222 134.222 134.222	200. 231. 249.	450.3 456.9 471.2	651. 657.9 679.	27.3 28.0			0.373 0.404	0.0 0.1
554 C10 555 C10	0H14	1,2,3,5-tetramethylbenzene 1,2,4,5-tetramethylbenzene thymol	134.212 134.212 150.221	352. 323.	470.0 505.7	675. 698.	29.4			0.435	
556 C10 557 C10 558 C10 559 C10 560 C10	0H18 0H18 0H18	n-butylaniline cis-decalin trans-decalin 1,3-decadiene caprylonitrile	149.236 138.254 138.254 138.254 153.269	259. 230. 242.8 255.3	513.9 468.9 460.5 442. 516.	721. 702.3 687.1 615. 622.0	28.3 32.0 31.4 32.5			0.286 0.270	0.0
561 C10 562 C10 563 C10 564 C10 565 C10	0H20 0H20 0H20	butylcyclohexane isobutylcyclohexane sec-butylcyclohexane tert-butylcyclohexane l-decene	140.260 140.270 140.270 140.270 140.270	198.4 232.0 206.9	454.1 444.5 452.5 444.7 443.7	667. 659. 669. 659.	31.5 31.2 26.7 26.6 22.0	650 <b>.</b>	0.28	0.362 0.319 0.264 0.252 0.491	0.0
566 C10 567 C10 568 C10 569 C10 570 C10	0H22 0H22 0H22	menthol n-decane 3,3,5-trimethylheptane 2,2,3,3-tetramethylhexane 2,2,5,5-tetramethylhexane	156.269 142.286 142.286 142.286 142.286	316. 243.5	489.5 447.3 428.9 433.5 410.6	694. 617.7 609.7 623.2 581.6	21.2 23.2 25.1 21.9	603.	0.249	0.489 0.382 0.364 0.375	0.0
571 C10 572 C11 573 C11 574 C11 575 C11	1H10 1H10 1H1402	1-decanol 1-methylnaphthalene 2-methylnaphthalene butyl benzoate pentamethylbenzene	158.285 142.201 142.201 178.232 148.249	280.1 242.7 307.7 251. 327.5	506.1 517.9 514.3 523. 504.6	687. 772. 761. 723. 719.	22.2 36. 35. 26.	600. 462. 462. 561.	0.230 0.234 0.26 0.25	0.310 0.382 0.58	1.8 0.5 0.4

No I	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
551 (	C10H14	1-methyl-4-isopropylbenzene						
	C10H14	1,4-diethylbenzene	-3.742E+1	8.671E-1	-5.560E-4	1.411E-7	-2.227E+4	1.380E
	C10H14	1,2,3,5-tetramethylbenzene	3.923E+0	7.131E-1	-3.711E-4	6.840E-8	-4.484E+4	1.188E
	C10H14 C10H140	<pre>1,2,4,5-tetramethylbenzene thymol</pre>	1.652E+1	6.519E-1	-2.879E-4	3.257E-8	-4.530E+4	1.195E
556 (	C10H15N	n-butylaniline	-3.407E+1	9.144E-1	-5.560E-4	1.287E-7		
	C10H18	cis-decalin	-1.125E+2	1.118E+0	-6.607E-4	1.437E-7	-1.691E+5	8.587E
558 (	C10H18	trans-decalin	-9.767E+1	1.045E+0	-5.476E-4	8.981E-8	-1.824E+5	7.348E
559 (	C10H18	1,3-decadiene						
560 (	C10H19N	caprylonitrile						
561 (	C10H20	butylcyclohexane	-6.296E+1	1.081E+0	-6.305E-4	1.400E-7	-2.133E+5	5.648E
562 (	C10H20	isobuty1 cyclohexane						
	C10H20	sec-butylcyclohexane						
564 (	C10H20	tert-butylcyclohexane						
5 65 (	C10H20	1-decene	-4.664E+0	9.077E-1	-5.058E-4	1.095E-7	-1.242E+5	1.211E
566 (	C10H20N	menthol						
567 (	C10H22	n-decane	-7.913E+0	9.609E-1	-5.288E-4	1.131E-7	-2.498E+5	3.324E
568 (	C10H22	3,3,5-trimethy1heptane	-7.037E+1	1.232E+0	-8.646E-4	2.455E-7	-2.587E+5	3.358E
569 (	C10H22	2,2,3,3-tetramethylhexane	-5.883E+1	1.231E+0	-8.834E-4	2.585E-7		
570 (	C10H22	2,2,5,5-tetramethy1hexane	-6.234E+1	1.245E+0	-8.956E-4	2.618E-7		
571 (	C10H22O	1-decanol	1.457E+1	8.947E-1	-3.921E-4	3.451E-8	-4.019E+5	-1.043E
572	C11H10	1-methylnaphthalene	-6.482E+1	9.387E-1	-6.942E-4	2.016E-7	1.169E+5	2.178E
	C11H10	2-methyl naphthalene	-5.652E+1	8.997E-1	-6.469E-4	1.840E-7	1.162E+5	2.163E
	C11H14O2	butyl benzoate	-1.737E+1	8.675E-1	-4.610E-4	7.235E-8	5,1321.0	
	C11H16	pentamethy!benzene						

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
551	C10H14	1-methyl-4-isopropylbenzene	2	56.605	7800.97	-6.432	6308.	360	TC	0.857	293
	C10H14	1,4-diethylhenzene	1	-8.11413	1.77697	-4.43960	-1.47477	370	TC	0.862	293
553	C10H14	1,2,3,5-tetramethylbenzene	3	9.6750	3854.53	-72.26		368	513	0.890	293
	C10H14 C10H140	1,2,4,5-tetramethylhenzene thymol	2	57.519	8300.92	-6.478	6600.	360	TC	0.838	354
556	C10H15N	n-butylaniline	3	9,7792	4079.72	-96.15		385	560	0.932	293
557	C10H18	cis-decalin	3	9.2110	3671.61	-69.74		368	495	0.897	293
	C10H18	trans-decalin	3	9.1787	3610.66	-66.49		363	470	0.870	293
	C10H18	1,3-decadiene								0.750	
560	C10H19N	caprylonitrile								0.820	293
561	C10H20	butylcyclohexane	3	9.2914	3542.57	-72.32		332	485	0.799	293
562	C10H20	isobutylcyclohexane	1	-8.05035	2.67134	-5.49473	2.06044	358	TC	0.795	293
563	C10H20	sec-butylcyclohexane	1	-7.49250	2.47712	-7.51526	7.69513	369	TC	0.813	293
	C10H20	tert-butylcyclohexane	1	-7.34348	2.13810	-6.48025	5.89241	357	TC	0.813	293
565	C10H20	1-decene	1	-9.05778	3.06154	-7.07236	4.20695	360	TC	0.741	293
566	C10H200	menthol									
567	C10H22	n-decane	1	-8.56523	1.97756	-5.81971	-0.29982	368	TC	0.730	293
568	C10H22	3,3,5-trimethylheptane	3	9.1646	3305.20	-67.66		313	458		
569	C10H22	2,2,3,3-tetramethylhexane	3	9.1396	3371.05	-64.09		314	463		
570	C10H22	2,2,5,5-tetramethylhexane	3	9.2244	3172.92	-66.15		300	438		
571	C10H220	1-decanol	1	-8,62283	1.39315	-8.24774	-19.21149	400	TC	0.830	293
	C11H10	1-methyl naphthalene	ī	-7.56390	1.19577	-3.38134	-2.86388	415	TC	1.020	
	C11H10	2-methylnaphthalene	ī	-8.43595	2.88433	-5.70017	2.50897	412	ŤČ	0.990	313
	C11H1402		3	9.7161	4158.47	-94.15		390	570	1.006	
	C11H16	pentamethyl benzene	3	9.8147	4222.48	-74.20		398			

No Formula	Na me	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
576 C11H22	n-hexylcyclopentane	154,297	200.2	476.3	660.1	21.3			0.476	
577 C11H22	1-undecene	154.297	224.0	465.8	637.	19.9			0.518	
578 C11H24	n-undecane	156,313	247.6	469.1	638.8	19.7	660.	0.24	0.535	0.0
579 C12H10	diphenyl	154.212	342.4	529.3	789.	38.5	502.	0.295	0.372	. • •
580 C12H100	diphenyl ether	170.211	300.	531.2	766.	31.4			0.44	1.1
581 C12H18	hexamethyl benzene	162.276		536.6	758.					
582 C12H24	n-heptylcyclopentane	168.324	220.	497.3	679.	19.4			0.515	
583 C12H24	1-dodecene	168.324	238.0	486.5	657.	18.5			0.558	
84 C12H26	dodecane	170.340	263.6	489.5	658.2	18.2	713.	0.24	0.575	0.0
585 C12H260	dihexylether	186.339	230.0	499.6	657.	18.2	720.	0.24	0.70	
586 C12H260	dodecanol	186.339	297.1	533.1	679.	19.2	718.	0.24		1.6
587 C12H27N	tributylamine	185.355		486.6	643.	18.2				0.8
588 C13H12	diphenylmethane	168,239	300.	538.2	770.	28.6			0.442	0.4
89 C13H26	n-octyl cycl opentane	182.351	229.	516.9	694.	17.9			0.564	
590 C13H26	1-tridecene	182.351	250.1	505.9	674.	17.0			0.598	
591 C13H28	n-tridecane	184.367	267.8	508.6	676.	17.2	780.	0.240	0.619	
592 C14H10	anthracene	178.234	489.7	613.1	869.3		554.			0.0
593 C14H10	phenanthrene	178.234	373.7	613.	873.		554.			0.0
594 C14H28	n-nonylcyclopentane	196.378	244.	535.3	710.5	16.5			0.610	
595 C14H28	1-tetradecene	196.378	260.3	524.3	689.	15.6			0.644	
596 C14H30	n-tetradecane	198.394	279.0	526.7	693.0	14.4	830.	0.23	0.581	
597 C15H30	n-decylcyclopentane	210,405	251.1	552.5	723.8	15.2			0.654	
598 C15H30	1-pentadecene	210.405	269.4	541.5	704.	14.5			0.682	
599 C15H32	n-pentadecane	212.421	283.	543.8	707.	15.2	880.	0.23	0.706	
600 C16H22O4	dibutyl-o-phthalate	278.350	238.	608.						

No	Formula	Name	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
576	C11H22	n-hexylcyclopentane	-5.832E+1	1.128E+0	-6.536E-4	1.473E-7	-2.096E+5	7.825E+4
	C11H22	1-undecene	-5.585E+0	1.003E+0	-5.602E-4	1.216E-7	-1.449E+5	1.295E+5
	C11H24	n-undecane	-8.395E+0	1.054E+0	-5.799E-4	1.237E-7	-2.705E+5	4.162E+4
	C12H10	diphenyl	-9.707E+1	1.106E+0	-8.855E -4	2.790E-7	1.822E+5	2.803E+5
580	C12H100	diphenyl ether	-6.073E+1	9.282E -1	-5.870E -4	1.359E-7	4.999E+4	
581	C12H18	hexamethy1benzene						
582	C12H24	n-heptylcyclopentane	-5,926E+1	1.223E+0	-7.084E-4	1.596E-7	-2.303E+5	8.667E+4
583	C12H24	1-dodecene	-6.544E+0	1.098E+0	-6.155E-4	1.341E-7	-1.655E+5	1.380E+5
584	C12H26	dodecane	-9.328E+0	1.149E+0	-6.347E -4	1.359E-7	-2.91 1E+5	5.007E+4
585	C12H260	dihexylether	3.354E+1	1.073E+0	-5.535E-4	1.678E-7		
586	C12H260	dodecanol	9.224E+0	1.103E+0	-5.338E-4	7.779E-8	-4.431E+5	-8.713E+4
587	C12H27N	tributylamine	7.993E+0	1.198E+0	-6.703E -4	1.449E-7		,
588	C13H12	diphenylmethane						
589	C13H26	n-octyl cycl opentane	-5.995E+1	1.317E+0	-7.612E-4	1.708E-7	-2.509E+5	9.512E+4
590	C13H26	1-tridecene	-7.118E+0	1.191E+0	-6.674E-4	1.451E-7	-1.861E+5	1.464E+5
591	C13H28	n-tridecane	-1.046E+1	1.245E+0	-6.912E-4	1.490E-7	-3.117E+5	5.849E+4
592	C14H10	anthracene	-5.898E+1	1.006E+0	-6.594E-4	1.606E-7	2.248E+5	
	C14H10	phenanthrene	-5.898E+1	1.006E+0	-6.594E-4	1.606E -7		
5 94	C14H28	n-nonylcyclopentane	-6.081E+1	1.412E+0	-8.156E-4	1.830E-7	-2.715E+5	1.035E+5
595	C14H28	1-tetradecene	-7.967E+0	1.286E+0	-7.210E-4	1.569E-7	-2.067E+5	1.549E+5
596	C14H30	n-tetradecane	-1.098E+1	1.338E+0	-7.423E-4	1.598E-7	-3.323E+5	6.686E+4
	C15H30	n-decyl cycl opentane	-6.192E+1	1.508E+0	-8.717E-4	1.959E -7	-2.922E+5	1.119E+5
	C15H30	1-pentadecene	-9.203E+0	1.382E+0	-7.783E-4	1.703E-7	-2.274E+5	1.632E+5
	C15H32	n-pentadecane	-1.192E+1	1.433E+0	-7.972E-4	1.720E-7	-3.530E+5	7.528E+4
	C16H22O4	dibutyl-o-phthalate	1.880E+0	1.254E+0	-6.121E-4	6.971E-8	0.000	, 5 52 52 7

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
576	C11H22	n-hexylcyclopentane	. 3	9.3938	3702.56	-81.55		351	507	0.797	293
	C11H22	1-undecene	2	71.675	9105.75	-8.489	8596.	350	TC	0.751	293
578	C11H24	n-undecane	2	73.501	93 05.80	-8.729	8813.	350	TC	0.740	293
579	C12H10	diphenyl	1	-7.67400	1.23008	-3.67908	-2.29172	342	TC	0.990	347
580	C12H100	diphenyl ether	1	-8.59849	2.46297	-5.62029	-1.23996	477	TC	1.066	303
581	C12H18	hexamethyl benzene									
582	C12H24	n-heptylcyclopentane	3	9.4387	3850.38	-88,75		368	529	0.810	293
583	C12H24	1 -dodec ene	2	76.348	9846.99	-9.073	9826.	360	TC	0.758	
584	C12H26	dodecane	2	77.628	10012.5	-9.236	10030.	360	TC	0.748	293
	C12H260	dihexylether	3	9.7170	3982.78	-89.15		373	545	0.794	293
586	C12H260	dodecanol	3	8.6436	3242.04	-157.1		407	580	0.835	293
	C12H27N	tributylamine	3	9.6676	3865.58	-86, 15		362	531	0.779	
588	C13H12	diphenylmethane	3	7.8654	2902.44	-167.9		473	563	1.006	293
589	C13H26	n-octylcyclopentane	3	9.4739	3983.01	-95.85		385	549	0.805	293
590	C13H26	l⊸tridecene	2	81.389	10609.4	-9.709	11250.	370	TC	0.766	293
591	C13H28	n-tridecane	3	9,5153	3892.91	-98.93		380	540	0.756	293
	C14H10	anthracene	3	11.0499	6492.44	-26.13		490	655		
	C14H10	phenanthrene	3	10.0985	5477.94	-69.39		450	655		
594	C14H28	n-nonyl cyclopentane	3	9.4887	4096.30	-103.0		400	569	0.808	293
595	C14H28	1-tetradecene	2	85.854	11329.2	-10.27	12800.	380	TC	0.786	273
596	C14H30	n-tetradecane	2	84.552	11322.9	-10.07	12500.	380	TC	0.763	293
	C15H30	n-decyl cyclopentane	3	9.5059	4203.94	-109.7		413	586	0.811	293
	C15H30	1-pentadecene	2	92,300	12205.3	-11.09	14370.	400	TC	0.791	273
599	C15H32	n-pentadecane	2	88.380	11995.6	-10.54	13840.	400	TC	0.769	293
600	C16H2204	dibutyl-o-phthalate	3	10.3337	4852.47	-138.1		469	657	1.047	293

No	Formula	Nале	MolWt	Tfp K	Tb K	Tc K	Pc bar	Vc cm <sup>3</sup> /mo1	Zc	Omega	Dipm debye
601	C16H32	n-decylcyclohexane	224.432	271.	570.8	750.	13.5			0.583	
602	C16H32	1-hexadecene	224.432	277.3	558.	717.	13.3			0.721	
603	C16H34	hexadecane	226.448	291.	560.	722.	14.1			0.742	
604	C17H34	n-dodecylcyclopentane	238.459	268.	584.1	750.	12.9			0.719	
605	C17H360	heptadecanol	256.474	327.	597.	736.	14.1				
606	C17H36	n-heptadecane	240,475	295.	575.2	733.	13.	1000.	0.22	0.77	
607	C18H14	o-terphenyl	230.310	330.	605.	891.0	39.0	753.	0.396	0.431	
	C18H14	m-terphenyl	230.310	360.	638.	924.9	35.1	768.	0.358	0.449	
	C18H14	p-terphenyl	230.310	485.	649.	926.0	33.2	763.	0.329	0.523	0.7
	C18H36	1-octadecene	252.486	290.8	588.0	739.	11.3	,		0.807	
611	C18H36	n-tridecylcyclopentane	252.486	278.	598.6	761.	12.0			0.755	
_	C18H38	octadecane	254.504	301.3	589.5	748.	12.0			0.790	
	C18H380	1-octadecanol	270.501	331.	608.	747.	14.1				1.7
	C19H38	1-cyclopentyltetradecane	266.513	282.	599.	772.	11.2			0.789	
	C19H40	n-nonadecane	268.529	305.	603.1	756.	11.1			0.827	
616	C20H40	1-cyclopentylpentadecane	280,540	290.	625.	780.	10.2			0.833	
	C20H42	n-eicosane	282,556	310.	617.	767.	11.1			0.907	
	C20H420	1-eicosanol	298.555	339.	629.	770.	12.			-200,	

No	Formula	Nа те	CPVAP A	CPVAP B	CPVAP C	CPVAP D	DELHF	DELGF
601	C16H32	n-decyl cycl ohexane	-6.902E+1	1.654E+0	-9.613E-4	2.143E-7		
602	C16H32	1-hexadecene	-9.705E+0	1.475E+0	-8.298E-4	1.810E-7	-2.480E+5	1.716E+5
	C16H34	hexadecane	-1.302E+1	1.529E+0	-8.537E-4	1.850E-7	-3.736E+5	8.374E+4
	C17H34	n-dodecy1cyclopentane	-6.326E+1	1.695E+0	-9.768E-4	2.186E-7	-3.361E+5	1.260E+5
605	C17H360	heptadecanol	-7.792E+0	1.653E+0	-9.345E-4	2.044E-7	-5.463E+5	-4.467E+4
607 608	C17H36 C18H14 C18H14	n-heptadecane o-terphenyl m-terphenyl	-1.397E+1	1.624E+0	-9.081E-4	1.972E-7	-3.942E+5	9.215E+4
	C18H14 C18H36	p-terphenyl 1-octadecene	-1.133E+1	1.664E+0	-9.374E-4	2.049E-7	-2.892E+5	1.884E+5
612	C18H36 C18H38 C18H380	n-tridecylcyclopentane octadecane l-octadecanol	-6.421E+1 -1.447E+1 -8.704E+0	1.790E+0 1.717E+0 1.748E+0	-1.032E-3 -9.592E-4 -9.881E-4	2.309E-7 2.078E-7 2.157E-7	-3.540E+5 -4.148E+5 -5.669E+5	1.371E+5 1.006E+5 -3.622E+4
	C19H38 C19H40	1-cyclopentyltetradecane n-nonadecane	-6.493E+1 -1.549E+1	1.884E+0 1.812E+0	-1.085E-3 -1.015E-3	2.426E-7 2.205E-7	-3.746E+5 -4.354E+5	1.456E+5 1.090E+5
617	C20H40 C20H42 C20H420	l-cyclopentylpentadecane n-eicosane l-eicosanol	-6.609E+1 -2.238E+1 -1.258E+1	1.980E+0 1.939E+0 1.950E+0	-1.140E-3 -1.117E-3 -1.118E-3	2.550E-7 2.528E-7 2.516E-7	-3.953E+5 -4.561E+5 -6.081E+5	1.540E+5 1.174E+5 -1.943E+4

No	Formula	Name	Eq.	VP A	VP B	VP C	VP D	Tmin	Tmax	LDEN	TDEN
601	C16H32	n-decylcyclohexane	3	9.5425	4373.37	-111.8		463	573	0.819	293
	C16H32	1-hexadecene	2	99.280	13117.0	-11.99	16260.	400	TC	0.788	
	C16H34	hexadecane	2	89.060	12411.3	-10.58	15200.	400	TC	0.773	293
604	C17H34	n-dodecylcyclopentane	3	9.5713	4395.87	-124.2		441	619	0.816	293
	C17H360	heptadecanol	3	8.9959	3672.62	-188.1		464	656	0.848	327
606	C17H36	n-heptadecane	3	9.5308	4294.55	-124.0		434	610	0.778	298
	C18H14	o-terphenyl									
	C18H14	m-terphenyl									
609	C18H14	p-terphenyl									
610	C18H36	1-octadecene	3	9.6019	4416.13	-127.3		444	623	0.789	293
611	C18H36	n-tridecylcyclopentane	3	9.6068	4483.13	-131.3		453	634	0.818	293
612	C18H38	octadecane	3	9.5030	4361.79	-129.9		445	625	0.777	301
	C18H380	1-octadecanol	3	9.0696	3757.82	-193.1		474	658	0.812	332
614	C19H38	1-cyclopentyltetradecane	3	9.6430	4439.38	-138.1		465	648	0.820	293
615	C19H40	n-nonadecane	3	9.5331	4450.44	-135.6		456	639	0.789	305
616	C20H40	1-cyclopentylpentadecane	3	9.6890	4692.01	-145.1		476	661	0.821	293
	C20H42	n-eicosane	3	9.8483	4680.46	-141.1		471	652	0.775	313
	C20H420	1-eicosanol	3	9,2031	3912.10	-203.1		492	679		_