

**AZEOTROPIC
DATA—II**

ADVANCES IN CHEMISTRY SERIES 35

AZEOTROPIC DATA-II

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Compiled by LEE H. HORSLEY
The Dow Chemical Co.
Midland, Mich.

With the cooperation of WILLIAM S. TAMPLIN
Union Carbide Chemicals Co.
South Charleston, W. Va.



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INTRODUCTION

This volume is a supplement to "Azeotropic Data" published as *ADVANCES IN CHEMISTRY SERIES* No. 6, American Chemical Society (1952).

It includes revised data on systems in the original table plus new data on azeotropes, nonazeotropes, and vapor-liquid equilibria collected since 1952. No attempt has been made to evaluate the data. Where appreciable differences occur in data from different sources, more than one set of data is recorded. Where minor differences occur, only one set of data is recorded, but all references are cited.

A brief description is included for calculating azeotropic data for immiscible systems from vapor pressure data.

In general data have been obtained from the original literature. Where the original literature was not available, data have been taken from *Chemical Abstracts*. In a few instances, data have been taken from collections of azeotropic data in handbooks, review articles, and so forth.

Acknowledgment is made to Commercial Solvents Corp., The Dow Chemical Co., Eastman Chemical Products Inc., Farbenwerke Hoechst, Imperial Chemical Industries Limited, Minnesota Mining and Manufacturing Co., and Union Carbide Chemicals Co. for supplying unpublished data for inclusion in the tables.

The tables are arranged in the same manner as the previous volume. This is based on empirical formula as in *Chemical Abstracts* except that all inorganic compounds are listed first, alphabetically by empirical formula.

For a given binary system the lower order component according to empirical formula is chosen as the A-component and under each A-component the B-components are also arranged according to empirical formula. For ternary and quaternary systems the same arrangement is used, using the lowest order formula as A-component, the next lowest order as B-component, and so on.

With a few exceptions for common chemical names, nomenclature in the tables follows the *Chemical Abstracts* nomenclature system.

Abbreviations

max. b.p.	Maximum boiling point azeotrope (negative azeotrope)
min. b.p.	Minimum boiling point azeotrope (positive azeotrope)
atm.	Pressure in standard atmospheres
mm.	Pressure in millimeters of Hg
p.s.i.a.	Pressure in pounds per square inch absolute
p.s.i.g.	Pressure in pounds per square inch gage
v-l.	Vapor-liquid equilibrium data are given in the original reference
v.p.	Vapor pressure
vol. %	Azeotropic concentration is given in volume per cent. Unless so indicated, all concentration data are in weight %
~	Approximate
>, <	Greater than, less than

Corrections for Azeotropic Data—I

The following errors appeared in "Azeotropic Data," ADVANCES IN CHEMISTRY SERIES No. 6.

<i>Page</i>	<i>System</i>	
4	65	Replace A-component, thionyl chloride, with sulfuryl chloride.
6	131	Azeotropic composition is 7.9 wt. %. This is an error in the original reference.
7	176	Formula should be $C_3H_7NO_3$.
8	240	Replace 57% with 43% for azeotropic composition.
9	281	This system should follow system 277.
10	306	Replace "cyclohexane" with "cyclohexene."
13	482	Replace 6.32 by -6.32 for b.p. of methylamine.
19	834-835	A-component formula is $CHBr_3$.
23	1059-1060	Between systems 1059 and 1060 insert: A = CH_2I_2 Diiodomethane b. $181^\circ C$.
28	1389	Replace 59.05 with 49.05 for azeotropic b.p.
33	1696	A-component formula is C_2HBrCl_2 .
83	4708-4709	Replace 43.6 with 38 for A-component b.p.
114	6546	Replace 11 with 154.5 for azeotropic b.p.
123		Between system 7090 and 7091, omit: A = C_4H_9I 1-Iodo-2-methyl propane.
149	8651	Replace reference 244 with 243.
154	8920	Replace $C_7H_{16}O_4$, 2-[2-(2-methoxyethoxy)ethoxy]-ethanol, with $C_6H_{14}O_3$, 2-(2-ethoxyethoxy)ethanol, and insert after system 8909.
251	14519	% B-component should be 93.4%.
257	14658	% A-component should be 8.5%.
267		Formula Cl_2O_2S . Replace thionyl chloride with sulfuryl chloride.
284		Under $C_6H_6O_2$, pyrocatechol, replace system 3510 with 3570.
296		Formula C_8H_{18} . Replace 3-ethylheptane with 3-methylheptane.

Calculation of Azeotropic Data for Immiscible Systems

There are many binary heterogeneous azeotropes which are not listed in the literature because the azeotropic data can readily be calculated from the vapor pressure data of the components.

For a mixture of two completely immiscible liquids the total vapor pressure is equal to the sum of the vapor pressures of the two components at a given temperature. Therefore, from a plot of the vapor pressures of the two components, it is possible to determine the temperature at which the sum of the vapor pressures is equal to 760 mm. This temperature is the azeotropic boiling point of the system at 760 mm. The boiling point at any other pressure can be obtained in a similar manner.

Further, the azeotropic composition can be calculated from the expression

$$\text{Mole \% A} = \frac{V_A \times 100}{V_A + V_B}$$

V_A = vapor pressure of component A

V_B = vapor pressure of component B

Table I. Binary Systems

No.	B-Component		Azeotropic Data				
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.	
A =	A	Argon	-186				
	1 O ₂	Oxygen	-183	Nonazeotrope		v-1 71	
		1-15 atm.	...	...	...	v-1 232
		90°-96° K.	...	...	...	v-1 340
	2 C ₅ F ₁₂	Perfluoropentane, 25°C.	...	Nonazeotrope		v-1 237	
A =	AsCl₃	Arsenic Chloride	130				
	3 GeCl ₄	Germanium chloride	86.5	Nonazeotrope		v-1 298	
A =	BeF₂	Beryllium Fluoride					
	4 FNa	Sodium fluoride, 509°-1061° C.	...			v-1 299	
A =	B₂H₆	Diborane					
	5 C ₄ H ₁₀ O	Ethyl ether, 25-100 p.s.i.g.	...	Nonazeotrope		v-1 206	
A =	BrF₃	Bromine Trifluoride	135				
	6 BrF ₅	Bromine pentafluoride	...	Nonazeotrope		v-1 200	
	7 Br ₂	Bromine, 1760 mm.	...	75	84.4	v-1 101	
		" 3800 mm.	...	100	81.5	v-1 101	
	8 FH	Hydrogen fluoride	19.4	Azeotropic		91	
9 F ₆ U	Uranium hexafluoride	56	Nonazeotrope		91		
A =	BrF₅	Bromine Pentafluoride					
	10 FH	Hydrogen fluoride	19.4	20	56	4,91	
		" 4 atm.	...	...	79	91
	11 F ₆ U	Uranium hexafluoride	56	Min. b.p.	82	91	
		" 3 atm.	...	Nonazeotrope		v-1 203	
		" 70°	...	Nonazeotrope		v-1 203	
		" 90°	...	Nonazeotrope		v-1 203	
	" 100 p.s.i.a.	...	...	62.5	91	
A =	Br₂	Bromine	58.9				
	12 FH	Hydrogen fluoride	19.4	Azeotropic		91	
	13 F ₆ U	Uranium hexafluoride	56	Azeotropic		91	
	14 CCl ₄	Carbon tetrachloride, 736 mm.	76	57.7	89.1	v-1 311	
	15 C ₂ Cl ₃ F ₃	1,1,2-Trichloro-1,2, 2-trifluoroethane	47.6	41	40.8	v-1 312	
	16 C ₂ Cl ₄ F ₂	1,1,1,2-Tetrachloro- 2,2-difluoroethane	91.6	57.8	89.5	v-1 312	
	17 C ₂ HCl ₃ F ₂	1,2,2-Trichloro-1,1- difluoroethane, 736 mm.	71.1	54.1	73.5	v-1 313	
	18 C ₂ H ₂ Cl ₂ F ₂	1,1-Dichloro-2,2- difluoroethane, 735 mm.	59	49.6	62	v-1 313	
	19 C ₃ Cl ₃ F ₅	1,2,2-Trichloro-1,1, 3,3,3-pentafluoro- propane	72.5	49.1	60.5	v-1 312	
	20 C ₇ H ₅ F ₃	α, α, α-Trifluorotoluene	103.9	58.1	97	v-1 312	
	A =	Br₃P	Phosphorus Tribromide	175.3			
		21 C _n H _{2n+2}	Paraffin hydrocarbons	...	Min. b.p.		234

		B-Ccponent	Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	CO ₂	Carbon Dioxide	-78.5			
22	H ₂ S	Hydrogen sulfide, 20-80 atm.	-59.6	Nonazeotrope	v-1	16, 17
23	N ₂ O	Nitrous oxide	-90.7	Min. b.p.	v-1	293
24	C ₂ H ₂	Acetylene	-84	Nonazeotrope	v-1	293
		" Crit. press.	...	Nonazeotrope	v-1	293
25	C ₂ H ₄	Ethylene, <4 atm.	...	Nonazeotrope	v-1	293
		" 12 atm.	...	...	28.9	v-1 293
		" Crit. press.	...	...	51	v-1 293
26	C ₂ H ₆	Ethane	-88.6	...	59.5	v-1 293
		" Crit. press.	...	...	77.5	v-1 293
A =	ClF ₃	Chlorine Trifluoride				
27	ClH	Hydrogen chloride	-85	Reacts		4
28	FH	Hydrogen fluoride	19.4	Azeotropic		91
		" 1183 mm.	...	20	93	v-1 90
		" 90 p.s.i.g.	...	...	94.5	91
		" 125 p.s.i.g.	...	...	94	91
		" 143 p.s.i.g.	...	...	93.8	91
		" 148 p.s.i.g.	...	...	93.7	91
29	F ₆ U	Uranium hexafluoride	56	Nonazeotrope	v-1	89, 91
A =	ClH	Hydrogen Chloride	-85			
30	Cl ₂	Chlorine, 350 mm.	-44	Nonazeotrope		4
31	H ₂ O	Water, 100 p.s.i.g.	169	177	85.2	334
		" 520 p.s.i.g.	244	250	93.5	334
		" 860 p.s.i.g.	275	280	97.2	334
		" 1360 p.s.i.g.	306	310	99.4	334
		" 1815 p.s.i.g.	328	330	99.9	334
32	CH ₄ O	Methanol	64.7	Max. b.p.		76
A =	Cl ₂	Chlorine	-34.6			
33	FH	Hydrogen fluoride, 350 mm.	3.0	-47	92	4
		"	19.4	-35	...	4
A =	Cl ₂ SO ₂	Sulfuryl Chloride	69.1			
34	CCl ₄	Carbon tetrachloride	76.75	Nonazeotrope	v-1	338
35	C ₂ Cl ₆	Hexachloroethane	184.8	Nonazeotrope	v-1	338
36	C ₂ H ₂ Cl ₄	1,1,2,2-Tetra- chloroethane	146.2	Nonazeotrope	v-1	338
37	C ₂ H ₄ Cl ₂	1,2-Dichloroethane	83.45	Nonazeotrope	v-1	338
A =	Cl ₃ HSi	Trichlorosilane				
38	C ₆ H ₆	Benzene, 30°-40° C.	...	Nonazeotrope, v.p. curve		302
A =	Cl ₃ P	Phosphorus Trichloride	76			
39	C ₆ H ₁₂	Cyclohexane	80.75	Nonazeotrope		236
40	C ₆ H ₁₄	Hexane	68.8	68.7	8 vol. %	234
41	C ₇ H ₁₆	2,2-Dimethylpentane	79.1	Min. b.p.		234, 236
42	C ₇ H ₁₆	2,3-Dimethylpentane	89.8	74.5	98.8 vol. %	234
43	C ₇ H ₁₆	2,4-Dimethylpentane	80.5	74.2	73	234
44	C ₇ H ₁₆	2,2,3-Trimethylbutane	80.9	74.5	77	234
A =	Cl ₄ Si	Silicon Tetrachloride	57.6			
45	CH ₃ SiCl ₃	Methyl trichloro- silane, 20°-66°	...	Nonazeotrope, v.p. curve		179
46	CH ₂ SiCl ₂	Methyl dichloro- silane, 20°-66°	...	Nonazeotrope, v.p. curve		179
A =	Cl ₄ Sn	Tin Chloride	114.1			
47	CCl ₄	Carbon tetrachloride	76.8	Nonazeotrope	v-1	34
48	C ₈ H ₁₈	n-Octane	125.7	Nonazeotrope	v-1	34

No.	B-Component			Azeotropic Data		
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	Cl₄Ti	Titanium Tetrachloride	146.2			
49	C ₂ Cl ₄ O	Trichloroacetyl chloride	118	Nonazeotrope	v-1	300
50	C ₂ H ₂ Cl ₂ O	Chloroacetyl chloride	105	Nonazeotrope	v-1	300
51	C ₂ H ₂ Cl ₄	1,1,2,2-Tetrachloroethane, 740 mm.	136.6	135.4	91.7	v-1 32
A =	DH	Deuterium Hydride	-			
52	D ₂	Deuterium, 18°-28° K.	-249.7	Nonazeotrope	v-1	238
53	H ₂	Hydrogen, 18°-28° K.	-252.7	Nonazeotrope	v-1	238
A =	D₂	Deuterium	-249.7			
54	H ₂	Hydrogen, 18°-28° K.	-252.7	Nonazeotrope	v-1	238
A =	FH	Hydrogen Fluoride	19.4			
55	F ₅ Sb	Antimony pentafluoride	142.7	Nonazeotrope	v-1	301
56	F ₆ U	Uranium hexafluoride				
		" 85 p.s.i.g.	...	...	22	91
		" 110 p.s.i.g.	...	...	18	91
		" 132 p.s.i.g.	...	...	15	91
		" 145 p.s.i.g.	...	...	14	91
57	CCl ₂ F ₂	Dichlorodifluoromethane, 150 p.s.i.g.	48	39	7.5	334
58	CHClF ₂	Chlorodifluoromethane				
		" 70 p.s.i.g.	7	<7	3	334
		" 150 p.s.i.g.	29	24	2.7	334
		" 230 p.s.i.g.	45	36	2.8	334
59	C ₂ HF ₃ O ₂	Trifluoroacetic acid		Nonazeotrope	v-1	222
A =	F₆S	Sulfur Hexafluoride	-			
60	C ₅ F ₁₂	Perfluoropentane, 25°C.	-	Nonazeotrope	v-1	237
A =	F₆W	Tungsten Hexafluoride	25/1019; 45/1982 mm.			
61	C ₅ F ₁₀	Perfluorocyclopentane				
		"	25/833	25/1035	85.4	v-1 288
		"	45/1642	45/2010	83.4	v-1 288
62	C ₅ F ₁₂	Perfluoropentane, 1140 mm.	40.86	28.11	93.2	v-1 13
A =	HNO₃	Nitric Acid	86			
63	H ₂ O	Water, 50 mm.	37	57.8	13.7	v-1 19
		" 100 mm.	51.6	72.4	13.8	v-1 19
		" 200 mm.	66.5	86.4	14.0	v-1 19
		" 400 mm.	83.0	103.2	14.2	v-1 19
		" 760 mm.	100	120.7	14.4	v-1 19
64	CHCl ₃	Chloroform	See also 61	H ₂ O-N ₂ O ₅ below 47.5	15	258
A =	H₂O	Water	100			
65	H ₂ O ₂	Hydrogen peroxide	...			v-1 104
66	H ₂ SO ₄	Hydrogen sulfate	...	330	1.7	334
		" 200 mm.	...	...	1.6	334
67	H ₄ N ₂	Hydrazine,				
		" 124.8 mm.	66.8	74.2	33.2	v-1 30
		" 281.8 mm.	86.5	93.3	32.3	v-1 30
		" 411.2 mm.	96.8	103.6	31.0	v-1 30
		" 560.4 mm.	105.2	111.3	31.4	v-1 30
		" 700.6 mm.	111.7	117.6	32.6	v-1 30
		" 760 mm.	113.8	120	32.3	v-1 30
68	N ₂ O ₅	Nitrogen pentoxide	...	Max. b.p.	40	v-1 199
		"	...	Min. b.p.	14.3	199
		"	...	Max. b.p.	12.5	199
69	CS ₂	Carbon disulfide	46.5	43.6	2	334
70	CHCl ₃	Chloroform	61	56.1	2.8	56
71	CH ₂ O ₂	Formic acid, 40-760 mm.	...	...	...	v-1 42
		"	100.75	107.65	25.5	v-1 56, 217, 360

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H₂O	Water (continued)	100			
72	CH ₃ NO ₂	Nitromethane	101.2	83.59	23.6	54, 55
73	CH ₄ O	Methanol	64.7	Nonazeotrope		v-1 68
74	C ₂ Cl ₃ F ₃	1,1,2-Trichlorotrifluoroethane	47.5	44.5	1.0	334
75	C ₂ Cl ₄	Tetrachloroethylene	121	88.5	17.2	334
		"	121	87.7	15.8	170
76	C ₂ HF ₃ O ₂	Trifluoroacetic acid	...	105	21	222
77	C ₂ H ₃ Cl ₂ NO ₂	Methyl N,N-dichlorocarbamate	...	93	50 vol. %	39
78	C ₂ H ₃ Cl ₃	1,1,2-Trichloroethane	113.8	86.0	16.4	334
79	C ₂ H ₃ N	Acetonitrile, 10 mm.	-15	<16	2.6	336
		" 50 mm.	13	<12	5.8	336
		" 760 mm.	80.1	76.5	16.3	336
80	C ₂ H ₄ Cl ₂	1,2-Dichloroethane	83.5	71.6	8.2	334
		"	...	75.5	8.2	55
		" 150 mm.	...	33.5	4.9	55
		" 75 mm.	...	19.0	4.9	55
81	C ₂ H ₄ O ₂	Acetic acid	118.1	Nonazeotrope		v-1 56
82	C ₂ H ₅ BrO	2-Bromoethanol, 150 mm.	100	58	55.7	76
83	C ₂ H ₅ ClO	2-Chloroethanol, 50 mm.	60	37.1	60.2	334
		" 100 mm.	75	51.1	59.3	334
84	C ₂ H ₅ NO ₂	Nitroethane	114.07	87.22	28.5	54, 55
85	C ₂ H ₆ O	Ethyl alcohol, 150°-350° C.	...	...	...	v-1 14
		" 250-2500 mm.	...	...	...	v-1 251
86	C ₂ H ₆ O ₂	Ethylene glycol, 76-760 mm.	...	Nonazeotrope		v-1 60
87	C ₂ H ₇ NO	2-Aminoethanol	170.5	Nonazeotrope		334
		" 100 mm.	112	Nonazeotrope		334
88	C ₂ H ₈ N ₂	1,1-Dimethylhydrazine, 102 mm.	...	Max. b.p.	82.5	37
		"	...	Nonazeotrope		37
89	C ₂ H ₈ N ₂	1,2-Ethylenediamine	116	...	18.0	v-1 76
		" >3400 mm.	...	Nonazeotrope		76
		"	116.9	119	18.4	334
90	C ₃ HF ₅ O ₂	Pentafluoropropionic acid	...	109	10	222
91	C ₃ H ₃ N	Acrylonitrile	77.2	70.6	14.3	334
92	C ₃ H ₃ NS	Thiazole, 695.5 mm.	...	90	34.8	v-1 219
		" 750 mm.	111.5	92.1	35.3	v-1 219
93	C ₃ H ₄ O	Acrolein	52.8	52.4	2.6	334
94	C ₃ H ₄ O	2-Propyn-1-ol	115	97	54.5	95
95	C ₃ H ₄ O ₂	Acrylic acid	141.2	Nonazeotrope		334
96	C ₃ H ₄ O ₃	Ethylene carbonate	...	Nonazeotrope		334
97	C ₃ H ₅ Cl	3-Chloropropene	44.9	43.0	2.2	334
98	C ₃ H ₅ Cl	Methylvinyl chloride	...	33	0.9	334
99	C ₃ H ₅ NO	Hydracrylonitrile	229.7	Nonazeotrope		334
100	C ₃ H ₆ Cl ₂ O	2,3-Dichloro-1-propanol	183.8	99.4	87	334
101	C ₃ H ₆ O	Acetone	56.1	Nonazeotrope		v-1 254
		" 50 p.s.i.a.	...	Nonazeotrope		v-1 254
		" 100 p.s.i.a.	...	125.4	5.2	v-1 254
		" 200 p.s.i.a.	...	157.6	7.2	v-1 254
		" 250 p.s.i.a.	...	168.4	9.4	v-1 254
		" 500 p.s.i.a.	...	206.0	14.3	v-1 254
102	C ₃ H ₆ O	Allyl alcohol, 752 mm.	96.90	...	...	v-1 130
103	C ₃ H ₆ O	Propionaldehyde	47.9	47.5	2	334
		"	...	47.5	2.5	84
104	C ₃ H ₆ O	Propylene oxide	35	Nonazeotrope		v-1 60
105	C ₃ H ₆ O ₂	1,3-Dioxolane	75.6	71.9	7	334
106	C ₃ H ₆ O ₂	Ethyl formate	54.2	52.6	5	334

TABLE I BINARY SYSTEMS

No.	Formula	B-Component Name	Azeotropic Data			
			B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
107	C ₃ H ₆ O ₂	2-Methoxyacetaldehyde, 770 mm.	92	88.5	12.8	77
108	C ₃ H ₆ O ₂	Methyl acetate, <10 p.s.i.a.	...	Nonazeotrope		131
		"	56.3	56.1	5	334
		" 265 mm.	30	30	1.5	334
109	C ₃ H ₇ Cl	1-Chloropropane	46.6	44	2.2	334
110	C ₃ H ₇ Cl	2-Chloropropane	36.5	35.0	1	334
111	C ₃ H ₇ NO	Dimethylformamide, 500 mm.	138	Nonazeotrope		334
		" 200-760 mm.	...	Nonazeotrope		v-1 319
112	C ₃ H ₇ NO ₂	1-Nitropropane	131.18	91.63	36.5	54, 55
113	C ₃ H ₇ NO ₂	2-Nitropropane	120.25	88.55	29.4	54, 55
114	C ₃ H ₈ O	Propyl alcohol, 47 mm.	...	...	31.8	117
		" 200 mm.	...	56.68	29.6	v-1 228, 306
		" 400 mm.	...	71.92	29.0	v-1 306
		" 600 mm.	...	81.68	28.5	v-1 306
		"	...	87.65	28.3	v-1 306
		"	In 1.5M CaCl ₂ Solution			v-1 72
115	C ₃ H ₈ O	Isopropyl alcohol, 95 mm.	...	36	13	v-1 347
		" 190 mm.	...	49.33	12.8	v-1 347
		" 380 mm.	...	63.90	12.6	v-1 347
		" 760 mm.	82.5	80.10	12.0	v-1 347
		" 3087 mm.	...	120.45	11.7	v-1 347
		" 150°-300° C.	...	...	...	v-1 14
		"	...	Evaporation data		196
		"	Effect of dissolved salt			v-1 265
116	C ₃ H ₈ O ₂	2-Methoxyethanol, 100 mm.	...	51.5	80.5	v-1 152
		" 752 mm.	...	99.2	81	v-1 152
		" 150 mm.	79.2	Nonazeotrope		334
		" 760 mm.	124.6	99.9	84.7	334
		" 100 p.s.i.g.	212	169	73.3	334
117	C ₃ H ₈ O ₂	1,2-Propanediol	188	Nonazeotrope		v-1 60
118	C ₃ H ₈ O ₂	1,3-Propanediol	214.8	Nonazeotrope		v-1 334
119	C ₃ H ₉ N	Propylamine	47.8	Nonazeotrope		334
120	C ₃ H ₉ N	Trimethylamine, 0°-100° C.	3.2	75.5	10	v-1 148
		"	...	...	...	v-1 148
121	C ₃ H ₇ NO	1-Amino-2-propanol	159.9	Nonazeotrope		334
122	C ₄ HF ₇ O ₂	Perfluorobutyric acid	122.0	97	71	222
123	C ₄ H ₅ N	3-Butenenitrile	118.9	89.4	34	334
124	C ₄ H ₅ N	Methacrylonitrile	...	76.5	16	269
125	C ₄ H ₆ ClN	2-Chloro-2-methylpropionitrile	116	87	22	269
126	C ₄ H ₆ O	Crotonaldehyde, 111 mm.	84.9	40	19	334
		" 273 mm.	112.3	60	22	334
		" 412 mm.	126.4	70	23	334
		"	102.4	84	24.8	96, 142, 334
127	C ₄ H ₆ O	Methacrylaldehyde	68.0	63.6	7.7	269, 334
128	C ₄ H ₆ O ₂	3-Butenoic acid	...	Nonazeotrope		334
129	C ₄ H ₆ O ₂	trans-Crotonic acid	185	Nonazeotrope		334
130	C ₄ H ₆ O ₂	Crotonic acid	...	99.9	97.8	84
131	C ₄ H ₆ O ₂	Butyrolactone	204.3	Nonazeotrope		334
132	C ₄ H ₆ O ₂	Vinyl acetate	72.7	66	7.3	334
133	C ₄ H ₆ O ₃	Propylene carbonate	242.1	Nonazeotrope		334
134	C ₄ H ₇ ClO	2-Chloroethyl vinyl ether	109.1	84	17	334
135	C ₄ H ₇ N	Butyronitrile	117.6	88.7	32.5	334
136	C ₄ H ₇ NO	2-Hydroxyisobutyronitrile, 30 mm.	...	Nonazeotrope		334
		" 50 mm.	...	Nonazeotrope		334

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
137	C ₄ H ₈ Cl ₂ O	Bis(2-chloroethyl) ether	179.2	98	65.5	334
138	C ₄ H ₈ O	2-Butanone	79.6	73.4	11.0	78
		" 3.5 p.s.i.g.	...	79.3	12.1	78
		" 9.2 p.s.i.g.	...	88.0	12.5	78
		" 30 p.s.i.g.	...	111	15.8	78
		" 60 p.s.i.g.	...	125	18.3	78
		" 14.7 p.s.i.a.	...	73.3	11.6	v-1 254
		" 50 p.s.i.a.	...	112.2	15.9	254
		" 100 p.s.i.a.	...	139.0	19.3	254
		" 250 p.s.i.a.	...	180.7	23.4	254
		" 500 p.s.i.a.	...	216.1	26.4	254
				Evaporation behavior		196
139	C ₄ H ₈ O	Butyraldehyde	74.8	68.0	9.7	334
		"	...	67.8	6.7	84
140	C ₄ H ₈ O	Ethyl vinyl ether	35.5	34.6	1.5	334
141	C ₄ H ₈ O	Isobutyraldehyde	63.5	64.3	6.7	84
142	C ₄ H ₈ O	Methyl propenyl ether	46.3	46.3	0.5	334
143	C ₄ H ₈ OS	2-Methylthiopropionaldehyde, 85 mm.	...	48	64	76
		" 412 mm.	...	82	60	76
		" 753 mm.	...	97.5	68	76
		" 759 mm.	...	97.5	63	76
144	C ₄ H ₈ OS	1,4-Oxathiane	149.2	95.6	48	334
145	C ₄ H ₈ O ₂	p-Dioxane	Effect of dissolved salt		v-1	265
		" 260 mm.	...	60	15.4	60
146	C ₄ H ₈ O ₂	Ethoxyacetaldehyde	105	90	21.8	77
147	C ₄ H ₈ O ₂	2-Hydroxybutyraldehyde, 80 mm.	...	Nonazeotrope		334
148	C ₄ H ₈ O ₂	Isobutyric acid	154.5	98.8	71.8	84
149	C ₄ H ₈ O ₂	3-Methoxypropionaldehyde, 100 mm.	...	45	30	334
150	C ₄ H ₈ O ₂	2-Methyl-1,3-dioxolane	82.5	75	8	76
151	C ₄ H ₈ O ₂	Methyl propionate	79.7	71.0	8.2	84
152	C ₄ H ₈ O ₂	2-Vinyloxyethanol	143	98	65	94
153	C ₄ H ₉ NO	Morpholine	128.3	Nonazeotrope		334
154	C ₄ H ₉ NO ₂	N-(2-Hydroxyethyl) acetamide	...	Nonazeotrope		334
155	C ₄ H ₁₀ O	Butyl alcohol	...	Evaporation behavior		196
		" 250-2500 mm.	...	...	v-1	251
		" 30 mm.	48	28	52.4	335
156	C ₄ H ₁₀ O	sec-Butyl alcohol	99.5	87.0	26.8	v-1 352
		"	...	Evaporation behavior		196
		"	99.5	88.5	32	334
		" 20 mm.	27.3	16.0	32.2	147
157	C ₄ H ₁₀ O	Ethyl ether, 20 p.s.i.g.	62	60	2.0	334
158	C ₄ H ₁₀ O	Isobutyl alcohol, 745 mm.	...	...	...	v-1 335
159	C ₄ H ₁₀ O ₂	1,2-Dimethoxyethane, 100 mm.	35	...	6	9
		"	85.2	...	10.4	9
		"	85	77.4	10.1	76
160	C ₄ H ₁₀ O ₂	2-Ethoxyethanol, <100 mm.	...	Nonazeotrope		18
		" 200 mm.	...	66.4	70	v-1 18
		" 400 mm.	...	82.4	79	v-1 18
		"	134	98.2	87	v-1 18
		" 200 mm.	96.5	66.4	85	334
		" 400 mm.	115.6	82.4	76	334
		"	135.6	99.4	71.2	334
161	C ₄ H ₁₀ O ₃	Diethylene glycol, 10 mm.	...	Nonazeotrope		v-1 60
		"	...	Nonazeotrope		v-1 60
162	C ₄ H ₁₁ N	Butylamine, 575 mm.	69	69	1.3	334
		" 20 p.s.i.g.	106	-	6.5	334

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
163	C ₄ H ₁₁ N	Diethylamine	55.5	Effect of NaOH on v-1 Nonazeotrope	v-1	150 149, 334
164	C ₄ H ₁₁ NO	2-Dimethylamino- ethanol, 27 p.s.i.g.	174	-	90.2	334
		" 744 mm.	133.9	99	92.6	334
		" 540 mm.	123.4	91	95.2	334
		" 250 mm.	100.7	71	98.2	334
165	C ₄ H ₁₁ NO ₂	2,2'-Iminodiethanol	...	Nonazeotrope		334
166	C ₅ H ₄ O ₂	2-Furaldehyde, 1-18 atm.	161.7	-	-	v-1 216
167	C ₅ H ₅ N	Pyridine	115.3	93.6	41.3	147
		" 120 mm.	...	-	46.2	117
		" 758 mm.	...	-	40.5	117
		" >760 mm.	...	30	40.7	v-1 146
		" >760 mm.	...	50	-	v-1 146
		" >760 mm.	...	80	40.7	146, 360
				Effect of dissolved salt		v-1 265
168	C ₅ H ₆ N ₂	2-Methylpyrazine, 737 mm.	133	97	55	351
		"	130	92.6	36 vol. %	279
169	C ₅ H ₆ O	2-Methylfuran, 740 mm.	62.7	57.3	3.4	v-1 310
170	C ₅ H ₇ N	3-Methyl-3-butene- nitrile	137.0	93.0	43.2	334
171	C ₅ H ₈ O	Allyl vinyl ether	67.4	60	5.4	334
172	C ₅ H ₈ O	Cyclopentanone 740 mm.	130.8	94.6	42.4	v-1 334
		"	130	92.6	36 vol. %	279
173	C ₅ H ₈ O	1-Methoxy-1,3-buta- diene	90.7	76.2	12.7	334
174	C ₅ H ₈ O	3-Penten-2-one	123.5	92	28.6	334
175	C ₅ H ₈ O	3-Methyl-3-butene- 2-one	97.9	81.5	18.4	334
176	C ₅ H ₈ O	4-Pentalenal	106	84.3	21	334
177	C ₅ H ₈ O ₂	Allyl acetate	104.1	83	16.7	334
178	C ₅ H ₈ O ₂	Ethyl acrylate 195 mm.	99.5	81.1	15	283
		"	61	48	12	334
179	C ₅ H ₈ O ₂	Isopropenyl acetate, 200 mm.	60.2	48	11	334
		"	97.4	79.3	13.4	334
180	C ₅ H ₈ O ₂	Methyl methacrylate	100.8	83	14	283
181	C ₅ H ₈ O ₂	2,4-Pentanedione	140.6	94.4	41	334
182	C ₅ H ₈ O ₂	Δ-Valerolactone	...	Nonazeotrope		334
183	C ₅ H ₈ O ₂	Vinyl propionate	95.0	79	13	334
184	C ₅ H ₁₀ Cl ₂ O ₂	Bis(2-chloroethoxy) methane	218.1	99.4	86.8	334
185	C ₅ H ₁₀ N ₂	3-Dimethylamino- propionitrile	174.5	99.6	84	334
186	C ₅ H ₁₀ O	<i>cis</i> -1-Butenyl methyl ether	72.0	64	6.1	334
187	C ₅ H ₁₀ O	<i>trans</i> -1-Butenyl methyl ether	76.7	67	7.2	334
188	C ₅ H ₁₀ O	Isopropenyl ethyl ether	61.9	58	2	334
189	C ₅ H ₁₀ O	Isopropyl vinyl ether	55.7	51.8	2.7	334
190	C ₅ H ₁₀ O	Propyl vinyl ether	65.1	59	5	334
191	C ₅ H ₁₀ O	Tetrahydropyran	88	71	8.5	82
192	C ₅ H ₁₀ O	Valeraldehyde	103.3	83	19	334
193	C ₅ H ₁₀ O	Valeraldehydes (isomers)	98.6	80	17	334
194	C ₅ H ₁₀ O ₂	Ethyl propionate, 350 mm.	76.0	61	13.3	334
195	C ₅ H ₁₀ O ₂	3-Methoxybutyral- dehyde, 100 mm.	...	50	37	334
		" 200 mm.	...	64	37	334
		"	131	>92	35	334

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
196	C ₅ H ₁₀ O ₂	Propyl acetate, 200-700 mm.	...			v-1 307
197	C ₅ H ₁₀ O ₂	Valeric acid	185.5	99.8	89	334
198	C ₅ H ₁₀ O ₂	Valeric acid (isomers)	183.2	99.6	85	334
199	C ₅ H ₁₀ O ₂	1-Vinyloxy-2-propanol	...	~100	75	94
200	C ₅ H ₁₀ O ₂	3-Vinyloxy-1-propanol	...	~100	75	94
201	C ₅ H ₁₀ O ₃	3-Ethoxypropionic acid	219.2			Nonazeotrope 334
202	C ₅ H ₁₀ O ₃	3-Methoxybutyric acid	...			Nonazeotrope 334
203	C ₅ H ₁₀ O ₃	Methoxymethyl propio- nate	...	95	56	334
204	C ₅ H ₁₁ NO	4-Methylmorpholine	115.6	94.2	24	334
205	C ₅ H ₁₂	Pentane	36.1	34.6	1.4	334
206	C ₅ H ₁₂ N ₂	1-Methylpiperazine	138.0			Nonazeotrope 334
207	C ₅ H ₁₂ O ₂	1,2-Dimethoxypropane	92	80	11	334
208	C ₅ H ₁₂ O ₂	1-Ethoxy-2-propanol	132.2	97.3	50.1	334
209	C ₅ H ₁₂ O ₂	3-Methoxy-1-butanol	161.1	98.5	80	334
210	C ₅ H ₁₂ O ₂	1,5-Pentanediol	242.5			Nonazeotrope 334
211	C ₅ H ₁₂ O ₂	2-Propoxyethanol	151.5	98.8	70	334
212	C ₅ H ₁₃ N	N-Methylbutylamine	91.1	82.7	15	334
213	C ₅ H ₁₃ NO	1-Ethylamino-2- propanol	159.4			Nonazeotrope 334
214	C ₅ H ₁₄ N ₂	N,N-Dimethyl-1,3- propanediamine	134.9			Nonazeotrope 334
215	C ₆ H ₇ N	Aniline, 742 mm.	...	98.6	80.8	v-1 143
		" 6 atm.	...	155	76.6	v-1 143
		" 11 atm.	...	182	76.2	v-1 143
		" 16.4 atm.	...	200	77.4	v-1 143
216	C ₆ H ₇ N	3-Picoline	144.1	97	60	v-1 365
217	C ₆ H ₇ N	4-Picoline	144.3	97.35	62.8	v-1 365
		"	...	97.4	63.5	334
218	C ₆ H ₈ N ₂	2,5-Dimethylpyrazine	154	98.5	65	351
219	C ₆ H ₈ O	2,5-Dimethylfuran	93.3	77.0	11.7	334
220	C ₆ H ₈ O	2,4-Hexadienal	171	98.0	70	334
221	C ₆ H ₈ O ₂	1,3-Butadienyl acetate	138.5	93	35.6	334
222	C ₆ H ₈ O ₂	Vinyl crotonate	133.9	92	31	334
223	C ₆ H ₉ N ₃	3,3'-Iminodipropio- nitrile	...			Nonazeotrope 334
224	C ₆ H ₁₀	2-Ethyl-1,3-butadiene	66.9	60.2	5.3	334
225	C ₆ H ₁₀ O	Cyclohexanone, < 760 mm.	...	90	...	v-1 121
		"	155.6	96.3	55	v-1 121
		"	155.4	95	61.6	334
226	C ₆ H ₁₀ O	2-Ethylcrotonalde- hyde	135.3	92.7	38	334
227	C ₆ H ₁₀ O	2-Hexenal	149	95.1	48.6	334
228	C ₆ H ₁₀ O	5-Penten-2-one	128.9	92.1	35.3	334
229	C ₆ H ₁₀ O	2-Methyl-2-pentenal	138.2	93.5	40	334
230	C ₆ H ₁₀ O ₂	Ethyl crotonate	137.8	93.5	38	334
231	C ₆ H ₁₀ O ₂	Vinyl butyrate	116.7	87.2	20.4	334
232	C ₆ H ₁₀ O ₂	Vinyl isobutyrate	105.4	83.5	17	334
233	C ₆ H ₁₀ O ₄	Ethylene glycol diacetate	190.8	99.7	84.6	334
234	C ₆ H ₁₁ N	Diallylamine	110.5	87.2	24	334
235	C ₆ H ₁₁ NO	6-Caprolactam, 50-760 mm.	...	...	...	v-1 333
236	C ₆ H ₁₁ NO ₃	2-Methyl-2-nitropropyl vinyl ether, 10 mm.	77-78	...	8.6	341
237	C ₆ H ₁₂	Cyclohexane	80.8	69.5	8.4	147
238	C ₆ H ₁₂	4-Methyl-2-pentene	56.7	53.5	3.5	334
239	C ₆ H ₁₂ Cl ₂ O	Bis(chloroisopropyl) ether	187.0	98.5	62.6	334
240	C ₆ H ₁₂ Cl ₂ O ₂	1,2-Bis(2-chloro- ethoxy)ethane	240.9	99.7	94.0	334
241	C ₆ H ₁₂ O	Butyl vinyl ether	94.2	77.5	11.6	334

No.	Formula	B-Component		Azeotropic Data		
		Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
242	C ₆ H ₁₂ O	Cyclohexanol, 42 mm.	...	35	86	374
		" 57 mm.	...	40	84.8	374
		" 95 mm.	...	50	82.5	374
		" 158 mm.	...	60	80.2	374
		" 252 mm.	...	70	77.8	374
		" 385 mm.	...	80	75.2	374
		" 570 mm.	...	90	72.6	374
		" 684 mm.	...	95	70.7	374
		"	160.65	97.8	69.5	374
		" <760 mm.	160.65	90	74	v-1 122
243	C ₆ H ₁₂ O	2-Ethylbutyraldehyde	116.7	87.5	23.7	334
244	C ₆ H ₁₂ O	Isobutyl vinyl ether	83.4	70.5	7.8	334
245	C ₆ H ₁₂ O	Hexaldehyde	128.3	91.0	31.3	334
246	C ₆ H ₁₂ O	2-Methylpentanal	118.3	88.5	23	334
247	C ₆ H ₁₂ OS	2-Ethylthioethyl vinyl ether	169.7	97.8	61	334
248	C ₆ H ₁₂ O ₂	2-Ethylbutyric acid	194.2	99.7	87	334
249	C ₆ H ₁₂ O ₂	Hexanoic acid	205.7	99.8	92.1	334
250	C ₆ H ₁₂ O ₂	4-Hydroxy-4-methyl-2-pentanone	...	Nonazeotrope		v-1 125
		" 100 mm.	...	Nonazeotrope		v-1 125
		" 200 mm.	123.5	66.4	97	v-1 125
		" 400 mm.	143	82.6	90	v-1 125
		" 760 mm.	161	99.5	85	v-1 125
		"	169.2	99.6	87	335
251	C ₆ H ₁₂ O ₂	2-Ethyl-2-methyl-1,3-dioxolane	117.6	88.5	20	334
252	C ₆ H ₁₂ O ₂	2-Methylpentanoic acid	196.4	99.4	87.9	334
253	C ₆ H ₁₂ O ₂	4-Vinyloxy-1-butanol	-	Min. b.p.		94
254	C ₆ H ₁₂ O ₂	Tetrahydropyran-2-methanol	187.2	Nonazeotrope		334
255	C ₆ H ₁₂ O ₃	2-Ethoxyethyl acetate	156.2	97.5	55.6	334
256	C ₆ H ₁₂ O ₃	Methyl 3-ethoxypropionate, 50 mm.	...	37	50	334
257	C ₆ H ₁₂ O ₃	2-(2-Vinyloxyethoxy) ethanol	...	~100	97-8	94
		"	207.6	Nonazeotrope		334
258	C ₆ H ₁₃ Cl	1-Chlorohexane	134.5	91.8	29.7	334
259	C ₆ H ₁₃ N	Cyclohexylamine,				
		" 40 mm.	51.4	31.7	69.0	38
		" 70 mm.	...	41.9	66.0	38
		" 100 mm.	72	49.0	64.1	38
		" 200 mm.	90.9	63.6	60.7	38
		" 300 mm.	102.5	72.7	59.1	38
		" 500 mm.	118.9	85.3	57.0	38
		" 760 mm.	134.5	96.4	55.8	38
260	C ₆ H ₁₃ N	Hexamethyleneimine	138	95.5	49.5	81
261	C ₆ H ₁₃ NO	2,6-Dimethyl-morpholine	146.6	99.6	70	334
262	C ₆ H ₁₃ NO	4-Ethylmorpholine	138.3	96.7	46.2	334
263	C ₆ H ₁₃ NO ₂	4-Morpholineethanol	225.5	Nonazeotrope		334
264	C ₆ H ₁₄	Hexane	68.7	61.6	5.6	334
265	C ₆ H ₁₄ N ₂	2,5-Dimethylpiperazine	164	Nonazeotrope		334
266	C ₆ H ₁₄ N ₂ O	4-(2-Aminoethyl) morpholine	204.7	Nonazeotrope		334
267	C ₆ H ₁₄ N ₂ O	1-Piperazineethanol	246.3	Nonazeotrope		334
268	C ₆ H ₁₄ O	Butyl ethyl ether	92.2	76.6	11.9	334
269	C ₆ H ₁₄ O	2-Ethyl-1-butanol	147.0	96.7	58	335
270	C ₆ H ₁₄ O	Hexyl alcohol	157.1	97.8	67.2	335
271	C ₆ H ₁₄ O	Isopropyl ether,				
		" 131 mm.	22.47	20.0	2.6	334
		" 297 mm.	41.82	38.0	3.4	334
		" 481 mm.	54.75	50.0	4.0	334
		" 1520 mm.	92	88	7.6	334

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
272	C ₆ H ₁₄ O	2-Methyl-1-pentanol	148	97.2	60	334
273	C ₆ H ₁₄ O	4-Methyl-2-pentanol	131.8	94.3	43.3	334
274	C ₆ H ₁₄ O ₂	1,1-Diethoxyethane	102.1	82.6	14.3	334
275	C ₆ H ₁₄ O ₂	1,1-Dimethoxybutane	114	87.3	20.3	334
276	C ₆ H ₁₄ O ₂	1,3-Dimethoxybutane	120.3	89.6	30	334
277	C ₆ H ₁₄ O ₂	1,1-Dimethoxy-2-methylpropane	104.7	83.9	14.3	334
278	C ₆ H ₁₄ O ₂	2-Methyl-1,5-pentanediol	242.4	Nonazeotrope		334
279	C ₆ H ₁₄ O ₂	3-Methyl-1,5-pentanediol	248.4	Nonazeotrope		334
280	C ₆ H ₁₄ O ₃	Bis(2-methoxyethyl) ether, 100 mm.	103	-	89.5	9
		" 760 mm.	162	-	80.2	9
		" 800 mm.	164	-	80	9
		" 760 mm.	164	99.55	78	v-1 76
281	C ₆ H ₁₄ O ₃	2-(2-Ethoxyethoxy) ethanol	202.8	Nonazeotrope		334
282	C ₆ H ₁₅ N	Diisopropylamine	84.1	74.1	9	334
283	C ₆ H ₁₅ N	1,3-Dimethylbutylamine	108.5	89.5	28.6	334
284	C ₆ H ₁₅ N	Dipropylamine	109	86.7	-	41
285	C ₆ H ₁₅ N	N-Ethylbutylamine	111.2	87.5	43.6	334
286	C ₆ H ₁₅ N	Hexylamine	132.7	95.5	49	334
287	C ₆ H ₁₅ N	Triethylamine	89.4	Compound formation		v-1 315
288	C ₆ H ₁₅ NO	2-Butylaminoethanol	199.3	Nonazeotrope		334
289	C ₆ H ₁₅ NO	2-Diethylaminoethanol	162.1	98.9	74.4	334
290	C ₆ H ₁₅ NO	1-Isopropylamino-2-propanol	164.5	99.8	86	334
291	C ₆ H ₁₅ N ₃	4-(2-Aminoethyl) piperazine	222.0	Nonazeotrope		334
292	C ₆ H ₁₆ N ₂	<u>N,N</u> -Diethylethylenediamine	144.9	99.8	79.5	334
293	C ₆ H ₁₆ N ₂	<u>N,N,N',N'</u> -Tetramethylethylenediamine	119-22	95.6	30	287
294	C ₇ H ₈	Toluene	110.7	Evaporation behavior		196
		"	110.6	85	20.2	334
295	C ₇ H ₈ O ₂	Guaiacol	205.0	99.5	87.5	96
296	C ₇ H ₉ ClO	2-Chloroallylidene diacetate	212.1	99.7	85	334
297	C ₇ H ₉ N	2,6-Lutidine	142	96.02	51.8	v-1 365
298	C ₇ H ₉ N	Tetrahydrobenzoxitrile	195.1	98.8	78.3	334
299	C ₇ H ₁₀ O	1,2,3,6-Tetrahydrobenzaldehyde	164.2	96.9	60	334
300	C ₇ H ₁₀ O ₄	Allylidene diacetate	-	98.7	71	334
301	C ₇ H ₁₂	2,4-Dimethyl-1,3-pentadiene, 750.6 mm.	93.3	76.8	13	334
302	C ₇ H ₁₂ O	3-Hepten-2-one	162.9	96	55.7	334
303	C ₇ H ₁₂ O ₂	Butyl acrylate	147	94.5	40	76
		"	...	94.3	38	334
		" 100 mm.	...	47.8	41	334
304	C ₇ H ₁₂ O ₂	2-Ethoxy-3,4-dihydro-1,2-pyran	142.9	93.6	34.9	334
305	C ₇ H ₁₂ O ₄	Pimelic acid, 100 mm.	272	Nonazeotrope		334
306	C ₇ H ₁₄ O	Butyl isopropenyl ether	114.8	86.3	18.8	334
307	C ₇ H ₁₄ O	3-Heptanone	147.6	94.6	42.2	334
308	C ₇ H ₁₄ O	4-Heptanone	143.7	94.3	40.5	334
309	C ₇ H ₁₄ O	5-Methyl-2-hexanone	144	94.7	44	334
		"	...	93.0	75	84
310	C ₇ H ₁₄ O ₂	Amyl acetate (isomers)	146	94	36.2	334

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
311	C ₇ H ₁₄ O ₃	Ethyl 3-ethoxypropionate	170.1	97	63	334
		" 100 mm.	107.8	50.5	71	334
312	C ₇ H ₁₄ O ₃	3-Methoxybutyl acetate	171.3	96.5	65.4	334
313	C ₇ H ₁₄ O ₄	2-(2-Methoxyethoxy) ethyl acetate	208.9	Nonazeotrope		334
314	C ₇ H ₁₆	Heptane	98.4	79.2	12.9	334
315	C ₇ H ₁₆ O	5-Methyl-2-hexanol	...	96.5	59.1	84
316	C ₇ H ₁₆ O ₂	1-Butoxy-2-r thoxyethane	149.9	95.6	42	334
317	C ₇ H ₁₆ O ₂	1-Butoxy-2-propanol	170.1	98.6	72	334
318	C ₇ H ₁₆ O ₂	2-Ethyl-1,5-pentane-diol	253.3	Nonazeotrope		334
319	C ₇ H ₁₆ O ₃	1-(2-Ethoxyethoxy)-2-propanol	198.1	Nonazeotrope		334
320	C ₇ H ₁₆ O ₃	2-Ethoxyethyl 2-methoxyethyl ether	-	99.5	82	334
321	C ₇ H ₁₆ O ₃	2-(2-Propoxyethoxy) ethanol	215.8	Nonazeotrope		334
322	C ₇ H ₁₇ NO	1-Diethylamino-2-propanol	159.5	97.2	55	334
323	C ₇ H ₁₈ N ₂	3-Diethylamino-propylamine	169.4	99.8	93	334
324	C ₈ H ₈	Styrene	145.1	93.9	40.9	334
325	C ₈ H ₈ Cl ₂ O ₂	2-(2,4-Dichlorophenoxy)ethanol	...	~100	~99.6	334
326	C ₈ H ₈ O	Acetophenone	201.6	99.1	81.5	334
327	C ₈ H ₈	(Epoxyethyl)benzene	194.2	99.2	77.6	334
328	C ₈ H ₁₀	Ethylbenzene	136.2	92	33.0	334
		"	...	91	30.6	84
329	C ₈ H ₁₀	m-Xylene	139.1	94.5	40	334
330	C ₈ H ₁₀ O	α-Methylbenzyl alcohol	203.4	99.7	89	335
331	C ₈ H ₁₁ N	N-Ethylaniline	204.8	99.2	83.9	334
332	C ₈ H ₁₁ N	α-Methylbenzylamine	188.6	99.4	83.8	334
333	C ₈ H ₁₁ N	2-Methyl-5-ethylpyridine	178.3	98.4	72	334
334	C ₈ H ₁₁ N	ar-Methyl-1,2,3,6-tetrahydrobenzocnitrile	205.4	99.1	82.6	334
335	C ₈ H ₁₂ O	2-Methyl-1,2,3,6-tetrahydrobenzaldehyde	176.4	97.7	92.2	334
336	C ₈ H ₁₂ O ₂	3,4-Dihydro-2,5-dimethyl-2H-pyran-2-carboxaldehyde	170.9	97.4	56	334
337	C ₈ H ₁₂ O ₄	Diethyl fumarate	218.1	99.5	87.5	334
338	C ₈ H ₁₄	Diisobutylene	102.3	82	12	334
339	C ₈ H ₁₄ O	Bicyclo[2.2.1]heptane-2-methanol	203.9	99.7	91	334
340	C ₈ H ₁₄ O	Diisobutylene oxide	...	94	37	334
341	C ₈ H ₁₄ O	2-Ethyl-2-hexenal	176	97.6	60.9	334
342	C ₈ H ₁₄ O	2-Octenal	...	99.2	76.2	334
343	C ₈ H ₁₄ O ₂	1,1-Diallyloxyethane	150.9	95.3	41	334
344	C ₈ H ₁₄ O ₂	2-Ethyl-3-hexenoic acid	231.8	99.9	97.4	334
345	C ₈ H ₁₄ O ₂	Vinyl 2-methylvalerate	148.8	95	38	334
346	C ₈ H ₁₄ O ₃	Bis(2-vinyloxyethyl) ether	198.7	99.4	82	334
347	C ₈ H ₁₄ O ₃	Butyl acetoacetate	213.9	99.4	84.1	334
348	C ₈ H ₁₄ O ₄	Diethyl succinate	216.2	99.9	91	334
349	C ₈ H ₁₅ N	2-(Aminomethyl)bicyclo[2.2.1]heptane	185.9	99	82	334
350	C ₈ H ₁₆ O	2-Ethylhexaldehyde	163.6	96.4	51.6	334

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
351	C ₈ H ₁₆ O	2,4,4-Trimethyl-1,2-epoxypentane	140.9	93.4	33	334
352	C ₈ H ₁₆ O	2,4,4-Trimethyl-2,3-epoxypentane	127.3	91	25	334
353	C ₈ H ₁₆ OS	2-Butylthioethyl vinyl ether	210.5	99.3	80	334
354	C ₈ H ₁₆ O ₂	2-Butoxyethyl vinyl ether	...	97.0	52.8	334
355	C ₈ H ₁₆ O ₂	2,3-Epoxy-2-ethyl-hexanol	...	100	99.5	334
356	C ₈ H ₁₆ O ₂	2-Ethylbutyl acetate	162.3	97.0	52.4	334
357	C ₈ H ₁₆ O ₂	2-Ethylhexanoic acid	227.6	99.9	96.4	334
		"	...	99.5	97.6	84
358	C ₈ H ₁₆ O ₂	Hexyl acetate	171.0	97.4	61	334
359	C ₈ H ₁₆ O ₂	Iso-octanoic acid (isomers)	220	99.9	96	334
360	C ₈ H ₁₆ O ₂	4-Methyl-2-pentyl acetate	146.1	94.8	36.7	334
361	C ₈ H ₁₆ O ₃	2-Butoxyethyl acetate	192.2	98.8	71.9	334
362	C ₈ H ₁₆ O ₃	2,5-Diethoxytetrahydrofuran	173.0	98	60	334
363	C ₈ H ₁₆ O ₃	2-Ethoxyethyl 2-vinyloxyethyl ether	194.0	99.3	82.3	334
364	C ₈ H ₁₆ O ₄	2-(2-Ethoxyethoxy)ethyl acetate	217.4	Nonazeotrope		334
365	C ₈ H ₁₇ Cl	1-Chloro-2-ethyl-hexane	173	97.3	55	334
366	C ₈ H ₁₇ N	N-Ethylcyclohexyl-amine	164.9	97.1	58	334
367	C ₈ H ₁₇ N	5-Ethyl-2-methyl-piperidine	163.4	97.1	57.0	334
368	C ₈ H ₁₇ N	ar-Methylcyclohexylmethylamine	...	99.0	79	334
369	C ₈ H ₁₇ NO	4-Ethyl-2,6-dimethyl-morpholine	158.1	97.5	49	334
370	C ₈ H ₁₈	Octane	125.7	89.6	25.5	334
371	C ₈ H ₁₈ O	2-Ethyl-1-hexanol	184.8	99.1	80	335
372	C ₈ H ₁₈ O	Iso-octyl alcohol (isomers)	186.5	99.8	82	334
373	C ₈ H ₁₈ O ₂	2-Ethyl-1,3-hexanediol	243.1	Nonazeotrope		334
374	C ₈ H ₁₈ O ₂	1-Butoxy-2-ethoxyethane	164.2	96.8	50	334
375	C ₈ H ₁₈ O ₂	1,1-Diethoxybutane	146.3	94.2	34.5	334
376	C ₈ H ₁₈ O ₂	5-Ethoxy-3-methyl-pentanol	211.7	99.9	97	334
377	C ₈ H ₁₈ O ₂	2-Ethyl-3-methyl-1,5-pentanediol	265.5	Nonazeotrope		334
378	C ₈ H ₁₈ O ₂	2-Hexyloxyethanol	208.1	99.7	91	334
379	C ₈ H ₁₈ O ₂	2-(2-Methylpentyl-oxy)ethanol	197.1	99.6	86	334
380	C ₈ H ₁₈ O ₃	2-(2-Butoxyethoxy)ethanol	230.6	Nonazeotrope		334
381	C ₈ H ₁₈ O ₃	Bis(2-ethoxyethyl) ether	188.4	99.4	69	334
382	C ₈ H ₁₈ O ₄	1,2-Bis(2-methoxyethoxy)ethane	...	Nonazeotrope		9
383	C ₈ H ₁₉ N	Dibutylamine	159.6	97	50.5	334
384	C ₈ H ₁₉ N	2-Ethylhexylamine	169.1	98.2	64	334
385	C ₈ H ₁₉ NO	2-Diisopropylamino-ethanol	190.9	99.2	85	334
386	C ₈ H ₁₉ NO ₂	2,2'-Butyliminodi-ethanol	...	Nonazeotrope		334
387	C ₈ H ₁₉ NO ₂	1,1'-Ethyliminodi-2-propanol	238.9	Nonazeotrope		334
388	C ₉ H ₈ O ₂	Vinyl benzoate	...	99.3	82.6	334

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
389	C ₉ H ₁₀ O ₂	1,2-Epoxy-3-phenoxypropane	244.4	99.8	96.1	334
390	C ₉ H ₁₁ N	5-Ethyl-2-vinylpyridine	...	99.4	85	334
391	C ₉ H ₁₂	Cumene	152.4	95	43.8	334
392	C ₉ H ₁₂ O ₂	Bicyclo[2.2.1]hept-5-ene-2-ol acetate	188.6	98.6	70	334
393	C ₉ H ₁₃ NO	5-Ethyl-2-pyridine-ethanol	...	Nonazeotrope		334
394	C ₉ H ₁₄ O	Isophorone	215.2	99.5	83.9	334
		" 25 p.s.i.g.	251	130	86.5	334
395	C ₉ H ₁₅ O	1-Methyl-2,5-endomethylene-cyclohexane-1-methanol	211.1	99.7	90.6	334
396	C ₉ H ₁₅ N	Triallylamine	151.1	95	38	334
397	C ₉ H ₁₆ O	5-Ethyl-3-hepten-2-one	193.5	98.7	73.4	334
398	C ₉ H ₁₆ O ₄	Dimethyl pimelate	248.9	99.9	96.8	334
399	C ₉ H ₁₈ O	2,6-Dimethyl-4-heptanone	169.4	97.0	51.9	334
400	C ₉ H ₁₈ O ₂	2-Heptyl acetate	176.4	97.8	58.9	334
401	C ₉ H ₁₈ O ₂	3-Heptyl acetate	173.8	97.5	57.6	334
402	C ₉ H ₁₈ O ₃	3-(2-Ethylbutoxy)propionic acid	...	100	> 99	334
403	C ₉ H ₂₀	Nonane	150.7	94.8	82	332
		"	150.8	95	39.8	334
404	C ₉ H ₂₀ O	2,6-Dimethyl-4-heptanol	178.1	98.5	70.4	335
405	C ₉ H ₂₀ O ₂	2-Ethyl-2-butyl-1,3-propanediol	...	Nonazeotrope		334
406	C ₉ H ₂₀ O ₃	1-(2-Butoxyethoxy)-2-propanol	230.3	99.9	95	334
407	C ₉ H ₂₀ O ₃	2-Methoxymethyl-2,4-dimethyl-1,5-pentanediol	...	Nonazeotrope		334
408	C ₉ H ₂₀ O ₃	1,1,3-Triethoxypropane	...	99	70	334
409	C ₉ H ₂₁ N	N-Methyldibutylamine	163.1	96.5	48.0	334
410	C ₉ H ₂₁ N	Tripropylamine	156	94.3	-	41
411	C ₉ H ₂₁ NO ₂	1,1'-Isopropylimino-di-2-propanol	248.6	Nonazeotrope		334
412	C ₉ H ₂₁ NO ₄	2-(2-[2-(3-Aminopropoxy)ethoxy]ethoxy)ethanol	...	Nonazeotrope		334
413	C ₁₀ H ₁₀ O ₄	Dimethyl phthalate	282.9	100	98.9	334
414	C ₁₀ H ₁₂ O ₃	2-Phenoxyethyl acetate	260.6	99.9	97.4	334
415	C ₁₀ H ₁₄	Dicyclopentadiene	172	98	67.7	334
416	C ₁₀ H ₁₄ N ₂	Nicotine, 110 mm.	...	Nonazeotrope		v-1 106
		" 478 mm.	...	...	99.70	v-1 106
		" 572 mm.	...	...	99.02	v-1 106
		" 624 mm.	...	...	98.50	v-1 106
		" 760 mm.	...	99.85	97.48	v-1 106
417	C ₁₀ H ₁₄ O ₂	Ethyl bicyclo[2.2.1]hept-5-ene-2-carboxylate	198	99.2	80	334
418	C ₁₀ H ₁₄ O ₃	2-(2-Phenoxyethoxy)ethanol	297.9	Nonazeotrope		334
419	C ₁₀ H ₁₅ N	N-Butylaniline	240.4	99.8	94.4	334
420	C ₁₀ H ₁₅ N	N-Ethyl- α -methylbenzylamine	201.2	99.2	80	334
421	C ₁₀ H ₁₅ N	N,N, α -Trimethylbenzylamine	195.8	98.6	74.8	334

No.	Formula	B-Component	Azeotropic Data			
		Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
422	C ₁₀ H ₁₅ NO	2-(α -Methylbenzyl- amino)ethanol	...	Nonazeotrope		334
423	C ₁₀ H ₁₆ O	Dicyclopentenol	...	100	96.6	334
424	C ₁₀ H ₁₆ O	Trimethyltetrahydro- benzaldehyde	204.5	99.0	77.0	334
425	C ₁₀ H ₁₆ O ₄	Diisopropyl maleate	228.7	99.9	93	334
426	C ₁₀ H ₁₈ O ₂	Vinyl 2-ethylhexanoate	185.2	98.6	68	334
427	C ₁₀ H ₁₈ O ₂	Vinyl octanoate (isomers)	...	99.1	74	334
428	C ₁₀ H ₂₀ O	2-Ethylhexyl vinyl ether	177.7	97.8	59.1	334
429	C ₁₀ H ₂₀ O ₂	2-Ethylbutyl butyrate	199.6	98.6	74.9	334
430	C ₁₀ H ₂₀ O ₂	2-Ethylhexyl acetate	198.4	99.0	73.5	334
431	C ₁₀ H ₂₀ O ₂	4-Methyl-2-pentyl butyrate	182.6	98.2	60.8	334
432	C ₁₀ H ₂₀ O ₃	2-Butoxyethyl 2- vinylloxyethyl ether	226.7	99.8	90	334
433	C ₁₀ H ₂₁ Cl	Chlorodecane (isomers)	210.6	99.7	84	334
434	C ₁₀ H ₂₁ N	N-Butylcyclohexyl- amine	209.5	99.5	81	334
435	C ₁₀ H ₂₂ O	Decyl alcohol (isomers)	217.3	100	94.8	335
436	C ₁₀ H ₂₂ O	2-Ethylctanol	220.5	99.9	94.0	334
437	C ₁₀ H ₂₂ O	2-Propylheptanol	217.9	99.8	92	334
438	C ₁₀ H ₂₂ O ₂	1,2-Dibutoxyethane	203.6	99.1	76.8	334
439	C ₁₀ H ₂₂ O ₂	1,1-Diisobutoxyethane	160.5	97.4	52.5	334
440	C ₁₀ H ₂₂ O ₃	2-(2-Hexyloxyethoxy) ethanol	259.1	100	98.1	334
441	C ₁₀ H ₂₂ O ₄	1,2-Bis(2-ethoxy- ethoxy)ethane	246.9	Nonazeotrope		334
442	C ₁₀ H ₂₂ O ₅	Bis[2-(2-methoxy- ethoxy)ethyl] ether	...	Nonazeotrope		9, 334
443	C ₁₀ H ₂₃ N	Decylamine (isomers)	203.7	99.5	82	334
444	C ₁₀ H ₂₃ N	Diamylamine (isomers)	190	99.3	76	334
445	C ₁₀ H ₂₃ N	N,N-Dimethyl-2-ethyl- hexylamine	176.1	98.2	58	334
446	C ₁₀ H ₂₃ NO	2-Dibutylaminoethanol	228.7	99.9	91.0	334
447	C ₁₁ H ₁₄ O ₃	Butyl salicylate	268.2	99.9	95.8	334
448	C ₁₁ H ₁₄ O ₃	Ethyl 6-formylbicyclo [2.2.1]hept-5-en-2- carboxylate	...	100	97	334
449	C ₁₁ H ₁₆ O ₃	Allyl 6-methyl-3,4- epoxycyclohexane- carboxylate	251.4	100	98.1	334
450	C ₁₁ H ₁₆ O ₂	Isopropyl 6-methyl- 3-cyclohexene- carboxylate	215.2	99.7	84	334
451	C ₁₁ H ₂₀ O	5-Ethyl-3-nonen- 2-one	226.4	99.6	92	334
452	C ₁₁ H ₂₀ O ₄	Diethyl pimelate	268.1	100	98.3	334
453	C ₁₁ H ₂₀ O	5-Ethyl-2-nonanone	222.9	99.6	87.1	334
454	C ₁₁ H ₂₂ O ₂	2,6-Dimethyl-4-heptyl acetate	192.2	98.7	67.6	334
455	C ₁₁ H ₂₂ O ₃	4-Methoxy-2,6- dipropyl-1,3- dioxane	223.6	99.6	88.1	334
456	C ₁₁ H ₂₄	Undecane	194.5	98.85	96	332
457	C ₁₁ H ₂₄ O	5-Ethyl-2-nanol	225.4	99.7	89.1	334
458	C ₁₁ H ₂₄ O ₂	2,2-Dibutoxypropane	...	98.9	69.6	334
459	C ₁₁ H ₂₄ O ₂	2,6-Dimethyl-4- heptyloxyethanol	225.5	99.9	91	334
460	C ₁₁ H ₂₄ O ₄	1,1,3,3-Tetraethoxy- propane	220.1	99.8	87.4	334

TABLE I BINARY SYSTEMS

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		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H ₂ O	Water (continued)	100			
461	C ₁₁ H ₂₅ NO	1-Dibutylamino-2-propanol	229.1	99.8	88.4	334
462	C ₁₂ H ₁₄ O ₄	Diethyl phthalate	294.3	99.9	98.4	334
463	C ₁₂ H ₁₈ O	Triisobutylene oxide	...	99.3	72	334
464	C ₁₂ H ₁₉ N	N-Butyl- α -methylbenzylamine	239.3	99.8	92	334
465	C ₁₂ H ₂₀ O ₂	sec-Butyl-6-methyl-3-cyclohexene-carboxylate	...	100	92	334
466	C ₁₂ H ₂₀ O ₄	Dibutyl fumarate	285.2	99.9	98.5	334
467	C ₁₂ H ₂₀ O ₄	Dibutyl maleate	280.6	99.9	98.4	334
468	C ₁₂ H ₂₂ O ₂	2-Ethylhexyl crotonate	241.2	99.9	93.4	334
469	C ₁₂ H ₂₂ O ₂	Vinyl decanoate (isomers)	...	99.9	88	334
470	C ₁₂ H ₂₂ O ₄	Diethyl 2-ethyl-3-methylglutarate	255.8	100	97.1	334
471	C ₁₂ H ₂₃ N	Dicyclohexylamine	255.8	Nonazeotrope		38
472	C ₁₂ H ₂₄ O	2,6,8-Trimethyl-4-nonanone	218.2	99	84	334
473	C ₁₂ H ₂₄ O ₂	2-Ethylbutyl 2-ethylbutyrate	222.6	99.6	85.6	334
474	C ₁₂ H ₂₄ O ₂	2-Ethylbutyl hexanoate	236.2	99.7	91.2	334
475	C ₁₂ H ₂₄ O ₂	Hexyl 2-ethylbutyrate	230.3	99.7	88.8	334
476	C ₁₂ H ₂₄ O ₂	Hexyl hexanoate	245.2	99.8	93.3	334
477	C ₁₂ H ₂₆	Dodecane	214.5	99.45	98	332
478	C ₁₂ H ₂₆ O	2-Butyl-1-octanol	253.4	99.9	97.5	334
479	C ₁₂ H ₂₆ O	2,6,8-Trimethyl-4-nonanol	225.5	99.6	89.7	335
480	C ₁₂ H ₂₆ O ₂	1,1-Diethoxy-2-ethylhexane	207.8	99.3	78.6	334
481	C ₁₂ H ₂₆ O ₂	1,1-Diisopentoxyethane	213.6	99.3	78.8	334
482	C ₁₂ H ₂₆ O ₂	3-Ethoxy-4-ethyl-octanol	249.2	100	98	334
483	C ₁₂ H ₂₆ O ₃	Bis(2-butoxyethyl) ether	254.6	99.8	94.7	334
484	C ₁₂ H ₂₆ O ₃	1,1,3-Triethoxyhexane	...	99.6	85	334
485	C ₁₂ H ₂₇ N	Dihexylamine	239.8	99.8	92.8	334
486	C ₁₂ H ₂₇ N	Tributylamine	213.9	99.8	82	334
487	C ₁₂ H ₂₇ O ₄ P	Tributyl phosphate	...	100	99.4	334
488	C ₁₃ H ₂₄ O ₂	Decyl acrylate (isomers)	...	99.9	94.9	334
489	C ₁₄ H ₂₂ O	2-(Ethylhexyl)phenol	297.0	100	> 99	334
490	C ₁₄ H ₂₃ N	N-(Ethylhexyl)aniline	...	100	99.3	334
491	C ₁₄ H ₂₄	1,3,6,8-Tetramethyl-1,6-cyclodecadiene	220.5	99.5	82.3	334
492	C ₁₄ H ₂₆ O ₄	Dibutyl adipate	...	100	> 99	334
493	C ₁₄ H ₂₈ O	Trimethylnonyl vinyl ether	223.4	99.6	84.3	334
494	C ₁₄ H ₂₈ O ₂	2-Ethylbutyl 2-ethylhexanoate	261.5	99.9	95.8	334
495	C ₁₄ H ₂₈ O ₂	2-Ethylhexyl 2-ethylbutyrate	252.8	99.9	94.8	334
496	C ₁₄ H ₂₈ O ₂	2-Ethylhexyl hexanoate	267.2	99.9	96.4	334
497	C ₁₄ H ₂₈ O ₂	Hexyl 2-ethylhexanoate	254.3	99.9	94.6	334
498	C ₁₄ H ₂₉ N	N-(2-Ethylhexyl)cyclohexylamine	...	100	99.7	334
499	C ₁₄ H ₃₀ O	7-Ethyl-2-methyl-4-undecanol	264.3	99.9	96.3	334
500	C ₁₄ H ₃₀ O ₂	2-(2,6,8-Trimethyl-4-nonyloxy)ethanol	...	100	99.0	334
501	C ₁₅ H ₂₈ O ₄	Dibutyl pimelate	...	100	> 99.5	334
502	C ₁₅ H ₃₂ O	2,8-Dimethyl-6-isobutyl-4-nonanol	265.4	99.9	97.2	334

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	H₂O	Water (continued)	100			
503	C ₁₆ H ₁₈ O	Bis(α -methylbenzyl ether)	286.7	100	98.7	334
504	C ₁₆ H ₂₈ O ₄	Bis(4-methyl-2-pentyl) maleate	...	100	99	334
505	C ₁₆ H ₃₀ O ₂	Tridecyl acrylate	...	100	98.8	334
506	C ₁₆ H ₃₁ N	Bis(methylcyclohexyl-methyl)amine	...	100	99.45	334
507	C ₁₆ H ₃₂ O ₂	2-Ethylhexyl 2-ethylhexanoate	280.4	99.9	97.9	334
508	C ₁₆ H ₃₄ O	Bis(2-ethylhexyl) ether	269.8	99.8	96.4	334
509	C ₁₆ H ₃₅ N	Bis(2-ethylhexyl) amine	280.7	100	97.6	334
510	C ₁₇ H ₃₆ O	3,9-Diethyl-6-tridecanol	309	100	> 99	334
511	C ₁₈ H ₂₄ N ₂	Bis(α -methylbenzyl) ethylenediamine	...	100	> 99.9	334
512	C ₁₈ H ₃₈ O ₂	1,1-Bis(2-ethylhexyloxy) ethane	...	99.0	99.9	334
513	C ₁₈ H ₃₉ NO	2-[Bis(2-ethylhexyl) amino]ethanol	...	100	> 99.5	334
514	C ₂₀ H ₃₆ O ₄	Bis(2-ethylhexyl) fumarate	...	100	> 99.9	334
515	C ₂₀ H ₃₆ O ₄	Bis(2-ethylhexyl) maleate	...	100	> 99.9	334
516	C ₂₀ H ₄₀ O ₃	2-Ethylhexyl 3-(2-ethylhexyloxy) butyrate	...	100	> 99.5	334
517	C ₂₀ H ₄₂ O	Decyl ether (isomers)	...	100	99.6	334
518	C ₂₀ H ₄₂ O	Eicosanol (isomers)	...	100	99.8	334
519	C ₂₀ H ₄₃ N	Didecylamine (isomers)	...	100	99.6	334
520	C ₂₁ H ₃₈ O ₃	Allyl 9,10-epoxystearate	...	Nonazeotrope		334
521	C ₂₄ H ₅₂ O ₄ Si	Tetra(2-ethylbutoxy) silane	...	100	99.9	334
522	C ₃₁ H ₅₈ O ₆	Tri(2-ethylhexyl) 1,2,4-butane-tricarboxylate	...	100	99.8	334
A =	H₂S	Hydrogen Sulfide	-59.6			
523	C ₂ H ₆	Ethane, 200 p.s.i.g.	...	-21.6	7.9	v-1 159
		" 300 p.s.i.g.	...	-6.5	11.6	v-1 159
		" 400 p.s.i.g.	...	5	14.5	v-1 159
		" 500 p.s.i.g.	...	15	17.1	v-1 159
		" 600 p.s.i.g.	...	23.5	19.6	v-1 159
524	C ₃ H ₈	Propane, 200 p.s.i.g.	...	7.8	75.2	v-1 161
		" 400 p.s.i.g.	...	37.1	82	v-1 161
		" 600 p.s.i.g.	...	56	83.7	v-1 161
		" 800 p.s.i.g.	...	72	87.2	v-1 161
		" 1000 p.s.i.g.	...	84.2	89.9	v-1 161
		" 1200 p.s.i.g.	...	95	92.7	v-1 161
A =	H₃N	Ammonia	-33.4			
525	C ₂ H ₇ N	Ethylamine, 0°-30° C.	...	Nonazeotrope		334
526	C ₃ H ₇	Propadiene	-32	-45	44.3	127
527	C ₃ H ₅ F	2-Fluoropropene	-24	-40.5	34	127
528	C ₄ H ₁₀	Butane, 300 p.s.i.g.	...	43	56.8	v-1 160
		" 500 p.s.i.g.	...	66	59.0	v-1 160
		" 700 p.s.i.g.	...	81	60.9	v-1 160
		" 900 p.s.i.g.	...	94	62.1	v-1 160
		" 1100 p.s.i.g.	...	104	63.4	v-1 160
529	C ₈ H ₁₈	Iso-octane,				
		200-1600 p.s.i.g.	...	...	...	v-1 162
		> 1400 p.s.i.g.	...	Min. b.p. 98-100%		v-1 162

TABLE I BINARY SYSTEMS

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	He	Helium	-268.9			
530	CH ₄	Methane, 5-170 atm.	...	Nonazeotrope	v-1	165
A =	O ₂ S	Sulfur Dioxide	-10			
531	C ₂ H ₆ O	Methyl ether	-23.6	0	65	102
A =	S	Sulfur	444.6			
532	Se	Selenium	688	Compound formation	v-1	6
A =	CCl ₂ F ₂	Dichlorodifluoromethane	-29.8			
533	CHClF ₂	Chlorodifluoro- methane	-40.8	-41.4	25	86
		" 4.93 atm.	0.04	0.00	2.1	261
		" 2059 mm.	...	Nonazeotrope		346
534	CH ₃ Cl	Chloromethane, 5380 mm.	33.5	25.0	78	282
535	C ₂ H ₄ F ₂	1,1-Difluoroethane	...	-30.5	77.55	260
		"	...	0.00	73.80	260
		"	...	24.90	71.22	260
		"	...	40.08	69.31	260
		" 60 p.s.i.a.	...	4.44	76.2	281
		" 112 p.s.i.a.	...	25	74	281
536	C ₂ H ₆ O	Methyl ether, 2340 mm.	6	0	90	282
537	C ₃ F ₆	Hexafluoropropene, 2059 mm.	-6.1	-7.1	46.3	v-1 346
538	C ₃ HF ₇	Heptafluoropropane, 2328 mm.	17	0.00	86.5	261
539	C ₄ F ₈	Perfluorocyclobutane, 2059 mm.	21	Nonazeotrope		346
A =	CCl ₃ F	Trichlorofluoro- methane	24.9			
540	C ₂ H ₄ O	Acetaldehyde	20.2	15.6	55	102
541	C ₂ H ₄ O ₂	Methyl formate	32	20	82	102
A =	CCl ₄	Carbon Tetrachloride	76.74			
542	CH ₄ O	Methanol	64.7			v-1 245
543	C ₂ HCl ₃	Trichloroethylene	86.2	Ideal system		v-1 184
544	C ₂ H ₃ N	Acetonitrile, 371.2 mm.	...	45	84.5	v-1 22
545	C ₂ H ₄ Cl ₂	1,2-Dichloroethane	83.45	75.5	80	197
546	C ₂ H ₄ O ₂	Acetic acid, < 50 mm.	...	Nonazeotrope		132
		" 90 mm.	...	18.7	99.28	132
		" 340 mm.	...	51.5	99.42	132
		" 530 mm.	...	64.6	99	132
		" 760 mm.	118.1	76	98.46	132
		" 1080 mm.	...	90	97.7	132
		" 1400 mm.	...	...	97.0	132
547	C ₂ H ₆ O	Ethyl alcohol	78.3	65	84	v-1 136
548	C ₃ H ₆ O	Acetone, 513.2 mm.	...	45	9	v-1 23
		" 300 mm.	31.29	31.22	9.03	v-1 10
		" 450 mm.	41.56	41.47	11.80	v-1 10
		" 600 mm.	49.36	49.26	12.48	v-1 10
		" 760 mm.	56.08	55.98	12.6	v-1 10
549	C ₃ H ₆ O	Allyl alcohol	97.1	72.3	88.5	334
550	C ₃ H ₈ O	Propyl alcohol	97.2	72.8	88.5	334
551	C ₄ H ₈ O	2-Butanone, 342 mm.	...	50.0	84.3	v-1 108
		"	79.6	73.7	81.6	v-1 108, 184
552	C ₄ H ₈ O ₂	Ethyl acetate	76.7	74.8	57	334
553	C ₄ H ₁₀ O	n-Butyl alcohol	117.75	76.55	97.6	v-1 136
554	C ₅ H ₄ O ₂	2-Furaldehyde	162	Nonazeotrope		v-1 349
555	C ₆ H ₆	Benzene	80.1	Min. b.p.	98	v-1 245
		" 40° C.	...	Nonazeotrope		v-1 107
		" 760 mm.	80.1	Nonazeotrope		v-1 107
		" >1800 mm.	...	Min. b.p.	...	107
556	C ₇ H ₈	Toluene	110.7	Nonazeotrope		v-1 245, 309

		B-Component	Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	CS₂	Carbon Disulfide	46.2			
557	CH ₃ I	Iodomethane	42.55	41.2	18.6	v-1 116
558	C ₂ H ₄ Cl ₂	1,1-Dichloroethane	57.2	46	94	334
559	C ₃ H ₇ Cl	1-Chloropropane	46.6	45.2	55	334
560	C ₄ H ₈ O ₂	Ethyl acetate	76.7	46.1	97	334
561	C ₄ H ₁₀ O	Ethyl ether	34.6	34.4	1	334
A =	CHClF₂	Chlorodifluoro-	-40.8 (-17.1°/2059 mm.)			
		methane				
562	C ₂ ClF ₅	Chloropentafluoro-	-38.5	-45.6	48.7	15
		ethane				
563	C ₂ H ₂ Cl ₂ F ₂	1,2-Dichloro-1,2-				
		difluoroethane,				
		755 mm.	29.8	-41.4	87.6	96
564	C ₃ F ₆	Hexafluoropropene,				
		2059 mm.	-6.1	-17.3	69.7	346
565	C ₃ F ₈	Perfluoropropane,				
		6,064 atm.	12.5	0	46	261
566	C ₃ H ₈	Propane, 86.2 p.s.i.a.	...	0	68	280
		6,002 atm.	8.6	0	68.3	261
567	C ₄ F ₈	Perfluorocyclobutane,				
		2059 mm.	21.0	Nonazeotrope		346
A =	CHCl₂F	Dichlorofluoro-	7.63/723 mm.			
		methane				
568	C ₂ Cl ₂ F ₄	1,2-Dichloro-1,1,2,2-				
		tetrafluoroethane,				
		723 mm.	2.22	0.00	25	261
A =	CHCl₃	Chloroform	61.2			
569	CH ₂ O ₂	Formic acid	100.75	...	...	v-1 56
570	CH ₄ O	Methanol	64.7	...	...	v-1 31
		" 400 mm.	...	36.3	88.9	v-1 233
		" 500 mm.	...	41.6	88.4	v-1 233
		" 600 mm.	...	46.2	87.9	v-1 233
571	C ₂ Cl ₄	Tetrachloroethylene	121.1	Nonazeotrope		v-1 64
572	C ₂ H ₃ N	Acetonitrile	81.6	Nonazeotrope		334
573	C ₂ H ₄ O ₂	Acetic acid	118.1	Nonazeotrope		v-1 56
574	C ₂ H ₆ O	Ethyl alcohol,				
		20 p.s.i.g.	101.7	82	89	335
575	C ₃ H ₆ O	Acetone, 101 mm.	...	15	74.3	286
		" 129 mm.	...	20	75.0	286
		" 202 mm.	...	30	76.1	286
		" 250 mm.	...	35	76.3	286
		" 308 mm.	...	40	76.7	286
		" 455 mm.	...	50	77.1	286
		" 546 mm.	...	55	77.3	286
576	C ₃ H ₆ O ₂	Methyl acetate	57.1	64.74	64.35	v-1 31, 195
577	C ₃ H ₆ O ₂	Ethyl formate	54.1	62.7	87	195, 252
578	C ₃ H ₇ Br	2-Bromopropane	59.35	62.2	65	195, 252
579	C ₄ H ₈ O	2-Butanone	79.6	Nonazeotrope		v-1 183, 184
	C ₄ H ₈ O	2-Butanone	79.6	79.9	17	334
580	C ₄ H ₈ O ₂	Isopropyl formate	68.8	70	13	195
581	C ₄ H ₁₀ O	Ethyl ether	34.5	Nonazeotrope		v-1 177
582	C ₆ H ₁₂ O	4-Methyl-2-pentanone	115.9	Nonazeotrope		v-1 157
583	C ₆ H ₁₂ O ₂	Butyl acetate	126.2	Nonazeotrope		v-1 63
584	C ₉ H ₁₀ O ₂	Ethyl benzoate	213.3	Nonazeotrope		334
A =	CH₂ClBr	Bromochloromethane	69			
585	CH ₂ Cl ₂	Dichloromethane	40.7	Nonazeotrope		96
A =	CH₂Cl₂	Dichloromethane	40.0			
586	C ₆ H ₁₄	2,2-Dimethylbutane,				
		742 mm.	49.74	35.6	53 vol. %	235

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	CH₂O₂	Formic Acid	100.75			
587	C ₂ H ₄ O ₂	Acetic acid	178.1	Nonazeotrope		v-1 56
588	C ₃ H ₇ NO	N,N-Dimethylformamide	153.0	153.2	1.2	295
	"	"	...	158.8	...	210
	"	100 mm.	90	98.5	...	v-1 210
	"	200 mm.	107.9	117.0	...	v-1 210
	"	760 mm.	153	158.8	...	v-1 210
589	C ₅ H ₅ N	Pyridine	115.5	107.43	61.4	v-1 360
A =	CH₃Cl₃Si	Trichloromethylsilane	...			
590	C ₃ H ₉ SiCl	Chlorotrimethylsilane	...	V.p. curves, non-azeotrope		179
A =	CH₃NO₂	Nitromethane	101.2			
591	CH ₄ O	Methanol	64.51	64.33	12.2	55
592	C ₂ H ₅ N	Acetonitrile, 60° C.	...	Nonazeotrope		v-1 22
593	C ₂ H ₆ O	Ethyl alcohol	78.32	76.05	29.0	55
594	C ₃ H ₆ O	Acetone, 45° C.	...	Nonazeotrope		v-1 22
595	C ₃ H ₈ O	Isopropyl alcohol	82.40	79.33	27.6	55
596	C ₃ H ₈ O	Propyl alcohol	97.25	Nonazeotrope		v-1 135
	"	"	97.15	89.09	48.4	55
597	C ₄ H ₁₀ O	Butyl alcohol	117.73	97.99	71.4	55
598	C ₄ H ₁₀ O	sec-Butyl alcohol	99.53	91.14	45.8	55
599	C ₄ H ₁₀ O	tert-Butyl alcohol	82.41	80.04	21.2	55
600	C ₄ H ₁₀ O	Isobutyl alcohol	107.89	94.46	57.6	55
601	C ₆ H ₆	Benzene	80.1	...	12.7	v-1 343
602	C ₆ H ₁₂	Cyclohexane	80.75	69.5	26.5	v-1 343
A =	CH₄	Methane	...			
603	C ₂ H ₆	Ethane	...	Nonazeotrope		v-1 268
604	C ₃ H ₈	Propane	...	Nonazeotrope		v-1 268
A =	CH₄Cl₂Si	Dichloromethylsilane	...			
605	C ₃ H ₉ ClSi	Chlorotrimethylsilane, 30°-40°	...	V.p. curve, non-azeotrope		302
A =	CH₄O	Methanol	64.7			
606	C ₂ Cl ₃ F ₃	1,1,2-Trichlorotrifluoroethane	47.5	39.9	6	335
607	C ₂ H ₂ Cl ₂	cis-1,2-Dichloroethylene	60.3	51.5	15.1	v-1 5
608	C ₂ H ₂ Cl ₂	trans-1,2-Dichloroethylene	48.3	41.9	9.02	v-1 5
609	C ₂ H ₄ Cl ₂	1,2-Dichloroethane	83.5	59.5	35	335
610	C ₂ H ₄ O	Acetaldehyde	20.2	Nonazeotrope		v-1 171
611	C ₂ H ₄ O ₂	Acetic acid	118.1	Nonazeotrope		v-1 205, 285
612	C ₂ H ₆ O	Ethyl alcohol	78.3	Nonazeotrope		v-1 7, 68
613	C ₂ H ₆ O	Methyl ether	-23.65	...	...	v-1 130
614	C ₃ H ₅ N	Acrylonitrile, 175 mm.	37	29	47	335
615	C ₃ H ₆ O	Acetone, 752 mm.	...	55.07	14.8	v-1 7, 130
	"	"	56.1	Nonazeotrope		192
	"	4.56 atm.	108	102	32	335
	"	7.82 atm.	132	124	46	335
	"	11.6 atm.	150	140	56	335
616	C ₃ H ₆ O ₂	Methyl acetate	57.1	53.9	17.7	v-1 31, 58
	"	4.4 atm.	107	99	29	335
	"	7.8 atm.	132	120	34.6	335
	"	11.2 atm.	149	135	40.4	335
617	C ₃ H ₇ NO ₂	1-Nitropropane	131.18	Nonazeotrope		55
618	C ₃ H ₇ NO ₂	2-Nitropropane	120.25	Nonazeotrope		55

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	CH_4O	Methanol (continued)	64.7			
619	$\text{C}_3\text{H}_8\text{O}_2$	2-Methoxyethanol				
		752 mm.	...	Nonazeotrope	v-1	335
		800 mm.	...	Nonazeotrope	v-1	335
620	$\text{C}_3\text{H}_9\text{BO}_3$	Trimethyl borate	68.0	54.0	27	115, 335
		60 p.s.i.g.	...	100	33	335
		30 p.s.i.g.	...	84	29	335
		200 mm.	...	25	22	335
621	$\text{C}_4\text{H}_6\text{O}_2$	Vinyl acetate	72.7	58.8	36.6	335
		"	72.6	59.05	36.6	96
622	$\text{C}_4\text{H}_8\text{O}$	2-Butanone	79.6	64.5	70	v-1 135
623	$\text{C}_4\text{H}_8\text{O}$	Butyraldehyde	74.8	Nonazeotrope		37
624	$\text{C}_4\text{H}_8\text{O}$	Tetrahydrofuran,				
		740 mm.	65	59.1	31.1	v-1 115
625	$\text{C}_4\text{H}_8\text{O}_2$	Ethyl acetate, 40°-60°		% alcohol in-		v-1 228
		"		creases with		
		"	76.7	62.1	48.6	335
626	$\text{C}_4\text{H}_8\text{O}_2$	Methyl propionate	79.7	62.0	50	84
627	$\text{C}_4\text{H}_{10}\text{O}$	Butyl alcohol, crit. region	117.75	Nonazeotrope	v-1	75, 135
628	$\text{C}_4\text{H}_{11}\text{N}$	Diethylamine, 740 mm.	54.7	66.2	40	335
629	C_5H_8	Isoprene	34.3	29.57	5.2	324
630	C_5H_8	3-Methyl-1,2-butadiene	40.8	34.7	8.5	324
631	C_5H_8	cis-1,3-Pentadiene	44.0	38.1	16 vol. %	291
632	C_5H_8	trans-1,3-Pentadiene	42.0	36.5	15 vol. %	291
		"	...	36.5	12.9	v-1 249
633	$\text{C}_5\text{H}_8\text{O}$	1,3-Butadienyl methyl ether	90.7	62	57.5	335
634	C_5H_{10}	3-Methyl-1-butene	21.2	17.9	4.28	v-1 249
635	C_5H_{10}	2-Methyl-1-butene	32	27.4	8.1	v-1 249
636	C_5H_{10}	2-Methyl-2-butene	37.7	33.1	11.2	v-1 249
637	C_5H_{10}	1-Pentene	29.92	26.4	13 vol. %	291
		"	30.1	26.3	8.92	v-1 249
		"	37.1	31.8	7 vol. %	291
638	C_5H_{10}	cis-2-Pentene	37.1	31.8	7 vol. %	291
639	$\text{C}_5\text{H}_{10}\text{O}$	2-Pentanone	102.2	Nonazeotrope	v-1	135
640	$\text{C}_5\text{H}_{10}\text{O}_2$	Isopropyl acetate	88.7	64.0	70.2	335
641	C_5H_{12}	2-Methylbutane	27.6	24.62	4	324
		"	...	24.2	6.98	v-1 249
642	C_5H_{12}	Pentane	36.15	30.85	7	324
643	$\text{C}_5\text{H}_{12}\text{O}$	Amyl alcohol	137.8	Nonazeotrope	v-1	135
644	$\text{C}_5\text{H}_{12}\text{O}_2$	2,2-Dimethoxypropane	80	61-62	45	201
645	C_6H_6	Benzene	80.1	58	38	v-1 182, 275
		" 64.7 p.s.i.a.	108	102	49	v-1 275
		" 112.7 p.s.i.a.	128	123	54	v-1 275
		" 159.7 p.s.i.a.	141	138	58	v-1 275
		" 209.7 p.s.i.a.	152	148	62	v-1 275
		" 259.7 p.s.i.a.	161	159	65	v-1 275
646	$\text{C}_6\text{H}_8\text{O}$	2,5-Dimethylfuran	93.3	61.5	51	335
647	C_6H_{10}	1,3-Hexadiene	72.9	<58	~40	80
648	C_6H_{10}	2,4-Hexadiene	82	~58	~40	80
649	C_6H_{10}	3-Methyl-1,3-pentadiene	77	~58	~40	80
650	C_6H_{12}	Cyclohexane, <760 mm.	...	27.5	34	317
		" <760 mm.	...	30	32.6	317
		" <760 mm.	...	38	31.6	317
		" <760 mm.	...	42	26.8	317
651	C_6H_{12}	cis-3-Hexene	66.4	49.6	26 vol. %	291
652	$\text{C}_6\text{H}_{12}\text{O}$	Butyl vinyl ether	94.2	62	52	335
653	$\text{C}_6\text{H}_{12}\text{O}$	4-Methyl-2-pentanone	116.2	Nonazeotrope	v-1	135
654	C_6H_{14}	2,2-Dimethylbutane	49.74	39.6	17 vol. %	291
655	C_6H_{14}	2-Methylpentane	60.27	45.6	21 vol. %	291
656	C_6H_{14}	3-Methylpentane	63.28	47.1	20 vol. %	291

		B-Component	Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	CH ₄ O	Methanol (continued)	64.7			
657	C ₆ H ₁₄	Hexane	68.95	49.5	26.4	175
		"	68.95	50.57	28	324
658	C ₆ H ₁₄ O	Butyl ethyl ether	92.2	62.6	56	335
659	C ₆ H ₁₄ O ₂	1,1-Dimethoxybutane	114	Nonazeotrope		334
660	C ₆ H ₁₄ O ₂	2,2-Dimethoxybutane	106-7	64.5	81.5	201
661	C ₇ H ₈	Toluene	110.7	63.6	70.8	v-1 202
662	C ₇ H ₁₄	trans-1,3-Dimethyl-cyclopentane	90.77	57.3	45 vol. %	291
663	C ₇ H ₁₆	Heptane	98.4	58.8	46.1	174
		" 406 mm.	...	43.83	-	366
664	C ₇ H ₁₆	2-Methylhexane	90.05	57.1	44 vol. %	291
665	C ₇ H ₁₆	3-Methylhexane	91.85	57.6	44 vol. %	291
666	C ₇ H ₁₆	2,2,3-Trimethylbutane	80.88	54.1	38 vol. %	291
667	C ₈ H ₁₀	p-Xylene	138.35	64.0	5	84
668	C ₈ H ₁₄ O	γ-Ethyl-2-hexenal	176	Nonazeotrope		334
669	C ₈ H ₁₈	Octane	125.75	62.75	67.5	174
		" 406 mm.	...	47.65	-	366
670	C ₉ H ₁₈ O	2,6-Dimethyl-4-heptanone	169.4	Nonazeotrope		334
671	C ₉ H ₂₀	Nonane, 406 mm.	...	48.93	-	366
		"	150.7	64.1	83.4	174
672	C ₁₀ H ₂₂	Decane, 406 mm.	...	Nonazeotrope		366
		"	171.8	Nonazeotrope		v-1 249
673	C ₁₁ H ₂₄	Undecane, 406 mm.	...	Nonazeotrope		366
A =	CH ₄ S	Methanethiol	6.00			
674	C ₄ H ₈	2-Methylpropene, 95 p.s.i.a.	...	53	19.5	145
675	C ₄ H ₁₀	2-Methylpropane	-11.70	-13.00	4.9	21
A =	CH ₅ N	Methylamine	-6			
676	C ₄ H ₆	Butadiene	...	...	58	20
		" 5 atm.	...	...	74	20
		" 20 atm.	...	...	96	20
677	C ₄ H ₈	1-Butene	...	...	50	20
		" 5 atm.	...	...	64	20
		" 20 atm.	...	...	74	20
A =	C ₂ ClF	Chloropentafluoroethane	-38.5			
678	C ₂ H ₄ F ₂	1,1-Difluoroethane	-24.7	-41.3	83.8	198
A =	C ₂ Cl ₂ F ₄	1,2-Dichlorotetrafluoroethane	...			
679	C ₄ H ₁₀	Butane	-0.5	-2.2	59	102
A =	C ₂ Cl ₃ F ₃	1,1,2-Trichlorotrifluoroethane	47.5			
680	C ₂ Cl ₄ F ₂	1,1,2,2-Tetrachlorodifluoroethane	92.4	Nonazeotrope		96, 334
681	C ₂ H ₆ O	Ethyl alcohol	78.3	43.8	96.2	335
A =	C ₂ Cl ₄	Tetrachloroethylene	121.1			
682	C ₂ H ₃ Cl ₃	1,1,2-Trichloroethane	113.65	112.9	26	197
683	C ₃ H ₆ O	Acetone	56.1	Nonazeotrope		v-1 64
684	C ₃ H ₈ O	Isopropyl alcohol	82.3	81.7	19	334
685	C ₄ H ₁₀ O	Butyl alcohol	117.7	110	68	334
A =	C ₂ HCl ₃	Trichloroethylene	86.2			
686	C ₂ H ₄ Cl ₂	1,2-Dichloroethane	83.45	82.2	39	197
687	C ₂ H ₄ O ₂	Acetic acid	117.9	Nonazeotrope		334
688	C ₃ H ₆ Cl ₂	1,2-Dichloropropane	96.3	Nonazeotrope		334
689	C ₄ H ₈ O	2-Butanone	79.6	Nonazeotrope		184
690	C ₄ H ₈ O ₂	Ethyl acetate, 700-760 mm.	...	Nonazeotrope		v-1 274

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_2H_2	Acetylene	-84			
691	C_2H_4	Ethylene	-103.7	...	18	293
		" Crit. press.	...	...	19	293
		" -35°, 0°, 40° F.	...	...	...	v-1 137
692	C_2H_6	Ethane	-88.3	...	39	293
		" Crit. press.	...	...	44	293
		" -35°, 0°, 40° F.	...	...	...	v-1 137
693	C_3H_4	Propyne	-50° to 35° C.	...	...	v-1 28
				Nonazeotrope		
A =	$C_2H_2Cl_2$	<i>cis</i> -1,2-Dichloro- ethylene	60.3			
694	C_2H_5O	Ethyl alcohol	78.3	Calculated		v-1 5
695	C_3H_6O	Acetone	56.4	61.9	73	v-1 5
696	$C_3H_6O_2$	Ethyl formate	54.0	Nonazeotrope		v-1 5
697	$C_3H_6O_2$	Methyl acetate	57.2	61.7	73	v-1 5
698	$C_3H_8O_2$	Methylal	42.6	Nonazeotrope		v-1 103
699	C_4H_8O	2-Butanone	79.6	Nonazeotrope		v-1 5
700	C_4H_8O	Tetrahydrofuran	66.1	69.8	44.5	v-1 103
701	$C_6H_{14}O$	Isopropyl ether	68.0	Nonazeotrope		v-1 103
A =	$C_2H_2Cl_2$	<i>trans</i> -1,2-Dichloro- ethylene	48.35			
702	C_2H_5O	Ethyl alcohol	78.3	Calculated		v-1 5
703	C_3H_6O	Acetone	56.4	Nonazeotrope		v-1 5
704	$C_3H_6O_2$	Ethyl formate	54.0	Nonazeotrope		v-1 5
705	$C_3H_6O_2$	Methyl acetate	57.2	Nonazeotrope		v-1 5
706	$C_3H_8O_2$	Methylal	42.6	48.6	79.3	v-1 103
707	C_4H_8O	2-Butanone	79.6	Nonazeotrope		v-1 5
708	C_4H_8O	Tetrahydrofuran	66.1	Nonazeotrope		v-1 103
709	$C_6H_{14}O$	Isopropyl ether	68.0	Nonazeotrope		v-1 103
A =	C_2H_3Cl	Vinyl Chloride	13.4			
710	$C_2H_4Cl_2$	1,2-Dichloroethane	83.5	Nonazeotrope		334
711	C_3H_6O	Acetone	56.1	Nonazeotrope		334
A =	$C_2H_3Cl_3$	1,1,1-Trichloroethane	74.1			
712	$C_2H_3Cl_3$	1,1,2-Trichloroethane	113.9	Nonazeotrope		96
713	$C_2H_4Cl_2$	1,1-Dichloroethane	57.4	Nonazeotrope		96
A =	$C_2H_3F_3O$	2,2,2-Trifluoroethanol	...			
714	C_2H_5O	Ethyl alcohol	78.3	81.75	57.65	226
A =	C_2H_3N	Acetonitrile	81.55			
715	$C_2H_4Cl_2$	1,2-Dichloroethane	83.15	~79.1	49	v-1 267
716	C_3H_3N	Acrylonitrile	77.1	Nonazeotrope		334
717	C_3H_6O	Acetone, 45° C.	...	Nonazeotrope		v-1 25
718	C_3H_7NO	N, N-Dimethylform- amide	153	Nonazeotrope		334
		" 100-500 mm.	...	Nonazeotrope		334
719	C_5H_{12}	Pentane, 24 p.s.i.g.	65	58	13	334
720	C_6H_6	Benzene, 278 mm.	...	45	30.7	v-1 22
721	C_6H_7N	2-Picoline	134	Nonazeotrope		v-1 247
722	C_7H_{16}	Heptane	98.4	69.55	...	368
723	C_8H_{18}	Octane	125.75	76.7	...	368
724	C_9H_{20}	Nonane	150.7	79.82	...	368
725	$C_{10}H_{22}$	Decane	173.3	81.45	...	368
726	$C_{11}H_{24}$	Undecane	195.4	Nonazeotrope		368
A =	C_2H_4	Ethylene	-103.7			
727	C_2H_6	Ethane, -35°, 0°, 40° F.	-88.3	...	...	v-1 137
		" 0°, -40°, -100° F.	...	Nonazeotrope		v-1 129
A =	$C_2H_4Br_2$	1,2-Dibromoethane	131.5			
728	C_8H_{10}	<i>m</i> -Xylene	139	Nonazeotrope		113
729	C_8H_{10}	<i>p</i> -Xylene	138.4	131.0	94	113

TABLE I BINARY SYSTEMS

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_2H_4Cl_2$	1,2-Dichloroethane	83.65			
730	$C_3H_6Cl_2$	1,2-Dichloropropane	96.3	Nonazeotrope		334
731	C_3H_8O	Isopropyl alcohol	82.3	72.7	60.8	334
732	$C_4H_8Cl_2O$	Bis(2-chloroethyl)ether	179.2	Nonazeotrope		334
733	C_6H_6	Benzene	80.1	80.1	15 vol. %	235
734	C_6H_{12}	Cyclohexane	80.75	74.7	38 vol. %	235
735	C_7H_{16}	2,4-Dimethylpentane	80.8	73.7	35 vol. %	235
A =	C_2H_4O	Acetaldehyde	20.2			
736	C_2H_5Cl	Chloroethane	12.3	11	9.5	96
737	C_3H_6O	Propylene oxide, 35 p.s.i.g.	73	Nonazeotrope		334
738	$C_4H_6O_2$	Vinyl acetate	72.5	Nonazeotrope		96
739	C_4H_8O	Ethyl vinyl ether	35.5	Nonazeotrope		334
740	C_4H_{10}	Butane	-0.5	-7	16	334
741	$C_4H_{10}O$	Ethyl ether	34.5	18.9	76.5	243
742	$C_6H_{14}O$	Isopropyl ether	68.3	Nonazeotrope		334
A =	C_2H_4O	Ethylene Oxide	10.5			
743	C_4H_{10}	Butane	-0.5	-6.5	22	334
A =	$C_2H_4O_2$	Acetic Acid	118.1			
744	C_2H_6O	Ethyl alcohol	78.3	Nonazeotrope		v-1 205, 285
745	$C_3H_6O_2$	Propionic acid	140.7	Ideal system		v-1 48
746	C_3H_8O	Propyl alcohol	97.25	Nonazeotrope		v-1 205, 285
747	$C_4H_6O_3$	Acetic anhydride	139.9	Nonazeotrope		334
748	$C_4H_6O_2$	p-Dioxane	...	119.4	79.5	180
749	$C_4H_8O_2$	Ethyl acetate	76.7	Nonazeotrope		334
750	C_4H_9NO	N,N-Dimethyl- acetamide	165	170.8	21.1	295
751	$C_4H_{10}O$	Butyl alcohol	117.1	120.3	43	v-1 205, 285
752	C_5H_5N	Pyridine	115.5	138.1	51.1	373
		" Crit. press.	345	348	20.2	323
753	$C_5H_{10}O_2$	Isopropyl acetate	88.7	Nonazeotrope		334
754	C_5H_{12}	Pentane	36.15	Nonazeotrope		187
755	C_6H_7N	2-Picoline	134	144.12	40.4	369
756	C_6H_{14}	Hexane	68.7	Nonazeotrope		334
		"	68.60	68.25	6.0	187, 189
757	$C_6H_{14}O$	Isopropyl ether	68.3	Nonazeotrope		334
758	C_7H_9	2,6-Lutidine	143.41	147.28	24	v-1 358
		"	144	148.1	22.9	364
		"	...	162.3	19.5	370
759	C_7H_{16}	Heptane	98.25	91.72 ^a	33	187, 189, 355, 373
760	C_8H_{10}	o-Xylene	143.6	116.6	78	372
761	C_8H_{18}	Octane	125.75	105.7	53.7	v-1 189, 355, 359
762	C_9H_{12}	Cumene	152.8	116	84	76
763	C_9H_{20}	Nonane	150.2	112.8	69	187, 189, 355
		"	150.2	113.25	69.6	324
764	$C_{10}H_{16}$	Camphene, 100 mm.	...	60.6	90	v-1 294
765	$C_{10}H_{22}$	Decane	173.3	116.75	79.5	187, 189, 355
		"	173.3	117.2	79	324
		"	...	116.10	87	v-1 358
766	$C_{11}H_{24}$	Undecane	194.5	117.72	95	187, 189, 355
		"	194.5	117.17	78	324
767	$C_{12}H_{20}O_2$	Isobornyl acetate	225.8	Ideal system		v-1 294
768	$C_{12}H_{26}$	Dodecane	216	Nonazeotrope		187
A =	C_2H_5Cl	Chloroethane	12.4			
769	C_4H_{10}	n-Butane	-0.5	...	15.6	255
		" 738.6 mm.	-0.5	-1.4	20.2	v-1 263

		B-Component		Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.	
A =	C_2H_5ClO	2-Chloroethanol	128.7				
770	C_4H_7ClO	2-Chloroethyl vinyl ether, 120 mm.	...	55.62	14	341	
771	$C_4H_8Cl_2O$	Bis(2-chloroethyl)ether, 50 mm.	96	Nonazeotrope		334	
		"	179.2	Nonazeotrope		334	
772	$C_4H_8O_2$	p-Dioxane	101.3	Nonazeotrope		334	
A =	C_2H_5NO	Acetamide	222				
773	$C_{11}H_{10}$	2-Methylnaphthalene	241.1	...	55	98	
A =	$C_2H_5NO_2$	Nitroethane	114.07				
774	C_2H_5O	Ethyl alcohol	78.32	78.03	12.6	55	
775	C_3H_8O	Isopropyl alcohol	82.40	81.82	10.6	55	
776	C_3H_8O	Propyl alcohol	97.15	94.49	31.8	55	
777	$C_4H_{10}O$	Butyl alcohol	117.75	107.94	58.6	55	
778	$C_4H_{10}O$	sec-Butyl alcohol	99.53	97.16	27.6	55	
779	$C_4H_{10}O$	tert-Butyl alcohol	82.41	82.22	4.5	55	
780	$C_4H_{10}O$	Isobutyl alcohol	107.89	102.68	40.8	55	
A =	C_2H_6	Ethane					
781	C_7F_{16}	Perfluoroheptane, crit. region		Nonazeotrope		v-1	155
A =	C_2H_6O	Ethyl Alcohol	78.3				
782	C_3H_6O	Acetone	56.4	Nonazeotrope		v-1	7, 134
783	$C_3H_7NO_2$	1-Nitropropane	131.18	Nonazeotrope		55	
784	$C_3H_7NO_2$	2-Nitropropane	120.25	78.28	93.6	55	
785	C_3H_8O	Isopropyl alcohol	82.3	Nonazeotrope		v-1	116
786	C_4H_8O	2-Butanone	79.6	74.0	39	v-1	134
		"	79.6	74.8	34		334
787	C_4H_8O	Butyraldehyde	75.7	70.7	60.6		335
788	C_4H_8O	Ethyl vinyl ether	35.5	Nonazeotrope			334
789	$C_4H_8O_2$	p-Dioxane, 200 mm.	...	46.4	68	v-1	124
		" 400 mm.	...	62.4	82		124
		" 600 mm.	...	72.19	88		124
		" 760 mm.	...	78.25	>98		124
790	$C_4H_8O_2$	Ethyl acetate, 40°-60° C.		% Alc. increases with press.		v-1	228
		" 77.4 mm.	...	...	15.95		117
		" 760 mm.	...	...	30.97		117
		"	77.05	72.18	25.8		228
791	$C_4H_{10}O$	Butyl alcohol	117.75	Nonazeotrope		v-1	134
792	$C_4H_{10}O$	sec-Butyl alcohol	99.4	Nonazeotrope		v-1	134
793	$C_4H_{10}O_2$	2-Ethoxyethanol	134	Nonazeotrope		v-1	335
794	$C_4H_{11}N$	Butylamine	77.8	82.2	49		335
795	$C_4H_{11}N$	Diethylamine	55.5	Nonazeotrope			334
796	$C_5H_8O_2$	Ethyl acrylate, 100 mm.	44.9	32	54.4		335
797	C_5H_{10}	2-Methyl-1-butene	31.10	30.1	22 vol. %		291
798	$C_5H_{10}O$	Isopropyl vinyl ether, 737 mm.	54.8	52.6	...		334
799	$C_5H_{10}O$	2-Pentanone	102.35	78	93.3	v-1	134
800	$C_5H_{10}O$	Propyl vinyl ether	65.1	60	18.4		334
801	$C_5H_{12}O$	Amyl alcohol	137.8	Nonazeotrope		v-1	134
802	$C_5H_{12}O$	Butyl methyl ether	70.3	65.5	20		334
803	$C_5H_{12}O_2$	2,2-Dimethoxypropane	80	Min. b.p.			201
804	C_6H_6	Benzene, 310 mm.	...	45	26.2	v-1	22
		" 180 mm.	...	32.5	23.2	v-1	240
		" 400 mm.	...	51.2	28.1	v-1	240
		" 168.4 mm.	...	29.97	21.33	v-1	328
		" 233.5 mm.	...	38.37	23.72		328
		" 336.4 mm.	...	47.15	26.32		328
		" 584 mm.	...	61.06	30.35		328
		" 209 mm.	...	35.0	24.3		256
		" 760 mm.	80.1	67.9	31.7	v-1	191, 344

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C ₂ H ₆ O	Ethyl Alcohol (continued)	78.3			
804	C ₆ H ₆	Benzene (continued)				
		" 5570 mm.	...	132.9	56	256
		" 11,720 mm.	...	166.9	69.5	256
		" 19,160 mm.	...	191.1	81	256
805	C ₆ H ₇ N	Aniline	184.35	...	...	v-1 138
806	C ₆ H ₁₀	1,3-Hexadiene	72.9	Min. b.p.	...	80
807	C ₆ H ₁₀	2,4-Hexadiene	82	Min. b.p.	...	80
808	C ₆ H ₁₀	3-Methylcyclopentene	64.9	57.2	20 vol. %	291
809	C ₆ H ₁₀	3-Methyl-1,3-pentadiene	77	Min. b.p.	...	80
810	C ₆ H ₁₂	Cyclohexane, 296 mm.	...	41.2	25.5	316
		" 420 mm.	...	49.3	27.3	316
		" 643 mm.	...	60.8	29.8	316
		" 760 mm.	...	64.8	31.3	316
		" 760 mm.	80.8	64.9	40	147
811	C ₆ H ₁₂	2-Ethyl-1-butene	64.95	57.0	23 vol. %	291
812	C ₆ H ₁₂	1-Hexene	63.49	56.1	22 vol. %	291
813	C ₆ H ₁₂	cis-2-Hexene	68.8	59.5	22 vol. %	291
814	C ₆ H ₁₂	cis-3-Hexene	66.4	49.6	26 vol. %	291
815	C ₆ H ₁₂	Methylcyclopentane	72.0	60.05	22.7 v-1	304
816	C ₆ H ₁₂	cis-3-Methyl-2-pentene	70.52	60.4	24 vol. %	291
817	C ₆ H ₁₂	trans-3-Methyl-2-pentene	67.6	58.8	20 vol. %	291
818	C ₆ H ₁₂	trans-4-Methyl-2-pentene	58.4	52.6	15 vol. %	291
819	C ₆ H ₁₂ O	Butyl vinyl ether	94.2	73	48	335
820	C ₆ H ₁₂ O	Isobutyl vinyl ether	83.4	69.2	33	335
821	C ₆ H ₁₂ O ₃	Paraldehyde	124.5	Nonazeotrope		334
822	C ₆ H ₁₄	Hexane	68.95	58	20.8 v-1	304
		" 1545 mm.	...	...	26.3 vol. %	251
823	C ₆ H ₁₄	2-Methylpentane	60.27	53.1	12 vol. %	291
824	C ₆ H ₁₄ O	Ethyl butyl ether	92.2	73.8	49.3	335
825	C ₆ H ₁₄ O	Isopropyl ether	68.3	64	17.1	335
826	C ₆ H ₁₄ O ₂	1,2-Diethoxyethane	121.1	Nonazeotrope		334
827	C ₆ H ₁₅ N	Triethylamine	89.7	76.9	51	335
828	C ₇ H ₈	Toluene	110.7	76.5	66.7 v-1	138, 191
		" 327 mm.	...	...	76.2	117
		" 800 mm.	...	...	81.6	117
829	C ₇ H ₁₂	1,3-Heptadiene	...	Min. b.p.	...	80
830	C ₇ H ₁₂	2,4-Heptadiene	...	Min. b.p.	...	80
831	C ₇ H ₁₄	1,1-Dimethylcyclopentane	87.85	68.0	37 vol. %	291
832	C ₇ H ₁₄	cis-1,2-Dimethylcyclopentane	99.53	72.1	46 vol. %	291
833	C ₇ H ₁₄	trans-1,2-Dimethylcyclopentane	91.87	69.6	39 vol. %	291
834	C ₇ H ₁₄	cis-1,3-Dimethylcyclopentane	91.73	69.5	38 vol. %	291
835	C ₇ H ₁₄	trans-1,3-Dimethylcyclopentane	90.77	69.1	37 vol. %	291
836	C ₇ H ₁₄	2,3-Dimethyl-1-pentene	84.2	67.1	35 vol. %	291
837	C ₇ H ₁₄	Ethylcyclopentane	103.47	73.1	48 vol. %	291
838	C ₇ H ₁₄	1,1,2,2-Tetramethylcyclopropane	75.9	62.6	30 vol. %	291
839	C ₇ H ₁₆	2,2-Dimethylpentane	79.20	63.9	25 vol. %	291
840	C ₇ H ₁₆	2,3-Dimethylpentane	89.78	68.6	34 vol. %	291
841	C ₇ H ₁₆	2,4-Dimethylpentane	80.50	64.6	29 vol. %	291
842	C ₇ H ₁₆	3,3-Dimethylpentane	86.07	67.1	38 vol. %	291
843	C ₇ H ₁₆	3-Ethylpentane	93.47	70	38 vol. %	291
844	C ₇ H ₁₆	Heptane	98.4	72	48 v-1	138, 239, 335
		" 180 mm.	...	37.5	43 v-1	158

		B-Component		Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.	
A =	C ₂ H ₆ O	Ethyl Alcohol	78.3				
		(continued)					
844	C ₇ H ₁₆	Heptane (continued)					
		" 400 mm.	...	54.5	43	v-1	158
		" 750 mm.	...	71.0	45	v-1	158
845	C ₇ H ₁₆	2-Methylhexane	90.05	68.7	36 vol. %		291
846	C ₇ H ₁₆	3-Methylhexane	91.85	69.3	36 vol. %		291
847	C ₈ H ₁₆	1,1-Dimethylcyclohexane	119.54	76.2	65 vol. %		291
848	C ₈ H ₁₆	cis-1,4-Dimethylcyclohexane	124.32	76.9	70 vol. %		291
849	C ₈ H ₁₆	trans-1,3-Dimethylcyclohexane	124.45	76.9	70 vol. %		291
850	C ₈ H ₁₆	trans-1,4-Dimethylcyclohexane	119.35	76.2	64 vol. %		291
851	C ₈ H ₁₆	1-Ethyl-1-methylcyclopentane	121.52	76.5	66 vol. %		291
852	C ₈ H ₁₆	1,cis-2,trans-3-Trimethylcyclopentane	117.5	75.9	62 vol. %		291
853	C ₈ H ₁₆	1,trans-2,cis-4-Trimethylcyclopentane	109.29	74.3	52 vol. %		291
854	C ₈ H ₁₆	2,4,4-Trimethyl-2-pentene	104.91	73.9	50 vol. %		291
855	C ₈ H ₁₈	2,2-Dimethylhexane	106.84	73.6	46 vol. %		291
856	C ₈ H ₁₈	2,3-Dimethylhexane	115.61	75.5	57 vol. %		291
857	C ₈ H ₁₈	3,4-Dimethylhexane	117.73	75.8	60 vol. %		291
858	C ₈ H ₁₈	2-Methylheptane	117.65	75.8	59 vol. %		291
859	C ₈ H ₁₈	3-Methylheptane	118.93	76.0	61 vol. %		291
860	C ₈ H ₁₈	4-Methylheptane	117.71	75.8	61 vol. %		291
861	C ₈ H ₁₈	2,2,3-Trimethylpentane	109.84	74.3	53 vol. %		291
862	C ₈ H ₁₈	2,2,4-Trimethylpentane	99.24	71.8	40 vol. %		291
863	C ₈ H ₁₈	2,3,3-Trimethylpentane	114.76	75.3	56 vol. %		291
864	C ₈ H ₁₈	2,3,4-Trimethylpentane	113.47	75.1	57 vol. %		291
865	C ₈ H ₁₈ O	Butyl ether	142.1	Nonazeotrope			334
866	C ₈ H ₁₈ O ₂	2-Ethyl-1,3-hexanediol	243.1	Nonazeotrope			334
A =	C ₂ H ₆ OS	Dimethylsulfoxide	...				
867	C ₆ H ₆	Benzene, 25°-70°	...	V.p. curve			164
A =	C ₂ H ₆ O ₂	Ethylene Glycol	197.4				
868	C ₃ H ₄ O ₃	Ethylene carbonate,					
		" 10 mm.	...	88	13.9		262
		" 25 mm.	...	107	7.5		262
		" 50 mm.	...	122	2.6		262
		" 72 mm.	...	163	0		262
869	C ₄ H ₈ Cl ₂ O	Bis(2-chloroethyl) ether, 50 mm.	96	92.7	...		335
		"	178.6	164	17.8		60
870	C ₄ H ₈ O ₂	2-Vinyloxyethanol	143	...	13		94
871	C ₄ H ₈ O ₃	Ethylene glycol monoacetate	...	Nonazeotrope			147
		" 150 mm.	...	Nonazeotrope			147
872	C ₅ H ₁₂ O ₃	2-(2-Methoxyethoxy) ethanol	194	...	30	284,	335
		" 50 mm.	115	114	4		335
		" 200 mm.	151	149	12		335
873	C ₆ H ₇ N	Aniline, 37.1 mm.	...	95	8.75	v-1	59
		" 104.7 mm.	...	120	12.7	v-1	59
		" 257.9 mm.	...	145	16.8	v-1	59

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_2H_6O_2$	Ethylene Glycol (continued)	197.4			
874	$C_6H_{14}O$	Hexyl alcohol	157.1	Nonazeotrope		334
875	$C_6H_{14}O_3$	2-(2-Ethoxyethoxy) ethanol	202.8	192	45.5	284, 335
		" 100 mm.	137.3	134	33	335
		" 36 mm.	...	108.5	26.6	243
876	C_7H_8	Toluene	110.6	110.1	2.3	335
877	C_7H_8O	Benzyl alcohol	205.2	193.1	56	60
878	C_7H_8O	o-Cresol	191	189.52	26	188
879	C_7H_9N	<u>N</u> -Methylaniline, 31.8 mm.	...	95	22.9	v-1 59
		" 95.3 mm.	...	120	26.6	v-1 59
		" 244 mm.	...	145	30.0	v-1 59
880	C_8H_{10}	o-Xylene	144.4	135.7	6.9	335
881	$C_8H_{11}N$	<u>N,N</u> -Dimethylaniline, 39.3 mm.	...	95	17.6	v-1 59
		" 115 mm.	...	120	21.8	v-1 59
		" 293 mm.	...	145	26.5	v-1 59
882	$C_8H_{11}N$	s-Collidine	171.3	170.5	9.7	188
883	$C_8H_{18}O$	Butyl ether	142.1	139.5	6.4	334, 335
884	$C_8H_{18}O_3$	2-(2-Butoxyethoxy) ethanol	230.6	Min. b.p.		284
885	$C_8H_{19}NO$	2-Diisopropylamino- ethanol, 10 mm.	79	74	10	335
		" 50 mm.	111	104	15	335
		" 100 mm.	127	121	18	335
886	$C_9H_{14}O$	Phorone	197.8	184.5	42	59
887	$C_{10}H_8$	Naphthalene	217.9	183.6	46	147
888	$C_{10}H_{20}OS$	2-Hexylthioethyl vinyl ether	...	Min. b.p.		329
889	$C_{10}H_{22}O_4$	Tripropylene glycol methyl ether	243	192	82	v-1 76
		"	...	138.5	77.2	76
		"	...	111.5	75.1	76
890	$C_{12}H_{10}O$	Phenyl ether, 50 mm.	161.0	120.4	62.3	335
		"	259.3	192.3	64.5	59
891	$C_{12}H_{26}O$	Hexyl ether, 50 mm.	137.0	112.8	35.6	335
892	$C_{14}H_{10}$	Anthracene	340	197	98.3	305
893	$C_{16}H_{34}O$	2-Ethylhexyl ether, 10 mm.	135	87	...	335
A =	C_2H_6S	Methyl Sulfide	37.32			
894	C_5H_{10}	Cyclopentane	49.35	37.09	87.5	70
895	C_5H_{10}	2-Methyl-2-butene	38.60	34.83	53.6	70
896	C_5H_{10}	2-Methyl-1-butene	31.25	30.64	17.0	70
897	C_5H_{12}	2-Methylbutane	27.90	26.62	25.0	70
898	C_5H_{12}	Pentane	36.15	31.80	46.6	70
899	C_6H_{14}	2,2-Dimethylbutane	49.70	36.50	79.8	70
A =	$C_2H_6S_2$	Methyl Disulfide	109.44			
900	C_5H_6S	2-Methylthiophene	111.92	Nonazeotrope		70
901	$C_5H_{12}S$	Ethyl isopropyl sulfide	107.22	106.37	...	70
902	C_7H_8	Toluene	110.85	108.93	...	70
903	C_7H_{14}	Methylcyclohexane	101.05	98.92	28.6	70
904	C_7H_{16}	Heptane	98.40	96.44	26.3	70
905	C_8H_{16}	<u>trans</u> -1,3-Dimethyl- cyclohexane	120.30	107.22	73.3	70
906	C_8H_{18}	2,3-Dimethylhexane	109.15	102.84	48.2	70
907	C_8H_{18}	2-Methylheptane	117.70	106.22	69.5	70
A =	C_2H_7N	Dimethylamine	7.4			
908	$C_4H_{11}NO$	2-(Dimethylamino) ethanol	134.6	Nonazeotrope		334

		B-Component		Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.	
A =	C_2H_7N	Ethylamine	16.6				
909	$C_4H_{11}N$	Diethylamine	55.5	Nonazeotrope		334	
910	$C_4H_{11}NO_2$	2,2'-Iminodiethanol	...	Nonazeotrope		334	
A =	C_2H_7NO	2-Aminoethanol	171.0				
911	C_3H_6O	Acetone	56.1	Nonazeotrope		334	
912	$C_4H_{11}NO_2$	2,2'-Iminodiethanol, 10 mm.	150	Nonazeotrope		334	
A =	$C_2H_6N_2$	Ethylenediamine	116.9				
913	$C_4H_8O_2$	p-Dioxane	101.3	Nonazeotrope		334	
914	$C_4H_{10}O$	Butyl alcohol	117.7	124.7	35.7	335	
915	$C_4H_{10}O$	Isobutyl alcohol	107.9	120.5	50	335	
916	C_6H_6	Benzene	80.1	Nonazeotrope		334	
917	C_7H_8	Toluene	110.7	104	30.8	76	
		"	...	103	30	334	
A =	$C_3HF_5O_2$	Pentafluoropropionic Acid	...				
918	C_6F_{14}	Perfluorohexane, 25° C.	...	Nonazeotrope		v-1 237	
A =	$C_3H_2ClF_3O_2$	3-Chloro-2,2,3- trifluoropropionic Acid	...				
919	C_3H_7NO	<u>N,N</u> -Dimethylform- amide, 20 mm.	...	115-120	...	93	
A =	$C_3H_2F_4O_2$	2,2,3,3-Tetrafluoro- propionic Acid	...				
920	C_3H_7NO	<u>N,N</u> -Dimethylform- amide, 20 mm.	...	40	67	93	
A =	$C_3H_3ClF_3NO$	3-Chloro-2,2,3- trifluoropropionamide	...				
921	C_3H_7NO	<u>N,N</u> -Dimethylform- amide, 20 mm.	...	101-106	...	93	
A =	$C_3H_3F_4NO$	2,2,3,3-Tetrafluoro- propionamide	...				
922	C_3H_7NO	<u>N,N</u> -Dimethylform- amide, 20 mm.	...	91-4	66	93	
		"	153	187	...	93	
A =	C_3H_3N	Acrylonitrile	77.2				
923	C_3H_5N	Propionitrile	97.4	Nonazeotrope		334	
A =	C_3H_4	Propadiene	-32				
924	C_3H_4	Propyne	-23.2	Nonazeotrope		334	
925	C_3H_6	Propene	-47.7	Nonazeotrope		334	
926	C_3H_8	Propane	-42.1	-42	11.6 vol. %	334	
927	C_4H_6	1,3-Butadiene	-4.5	Nonazeotrope		334	
A =	C_3H_4	Propyne	-23.2				
928	C_3H_6	Propene	-47.7	Nonazeotrope		334	
929	C_3H_8	Propane	-42.1	-42	11.7 vol. %	334	
930	C_4H_6	1,3-Butadiene	-4.5	Nonazeotrope		334	
A =	$C_3H_4Cl_4$	Tetrachloropropane	...				
931	$C_5H_8Cl_4$	Tetrachloropentane, 12-150 mm.	...	Nonazeotrope		v-1 250	
A =	C_3H_4O	2-Propyn-1-ol	115				
932	C_6H_6	Benzene	80.1	78	9	95	
A =	$C_3H_4O_2$	Acrylic Acid	141.2				
933	$C_5H_8O_2$	Ethyl acrylate	99.3	Nonazeotrope		334	

TABLE I BINARY SYSTEMS

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		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_3H_5Cl	3-Chloropropene	45.15			
	934 C_3H_7Cl	2-Chloropropene	34.9	Nonazeotrope	v-1	83
A =	C_3H_5ClO	2-Chloro-2-propen-1-ol	...			
	935 C_5H_7ClO	2-Chloroallyl vinyl ether	...	...	10	341
A =	C_3H_5ClO	Epichlorohydrin	116.45			
	936 $C_3H_5Cl_3$	1,2,3-Trichloropropene	156.85	Nonazeotrope	v-1	337
A =	C_3H_6	Propene	-48			
	937 C_3H_8	Propane, 10°--190° F.	...	Nonazeotrope	v-1	128
A =	$C_3H_6Cl_2$	1,2-Dichloropropene	96.3			
	938 C_3H_6O	Propylene oxide, 20 p.s.i.g.	60	Nonazeotrope		334
	939 $C_3H_8O_2$	1,2-Propanediol	187.3	Nonazeotrope		334
A =	C_3H_6O	Acetone	56.5			
	940 C_3H_8O	Isopropyl alcohol	82.3	Nonazeotrope	v-1	45, 46
	941 $C_4H_4O_2$	Diketene	...	Nonazeotrope		334
	942 $C_4H_6O_2$	Vinyl acetate	72.7	Nonazeotrope		334
	943 C_4H_7Cl	1-Chloro-2-methylpropene	68	55.6	81	241
	944 C_4H_8O	2-Butanone, 15-500 p.s.i.a.	...	Nonazeotrope	v-1	254, 334
	945 $C_5H_8O_2$	Isopropenyl acetate	96.5	Nonazeotrope		147
	946 C_5H_{10}	1-Pentene	29.97	28.9	19 vol. %	291
	947 $C_5H_{10}O_2$	Isopropyl acetate	88.7	Nonazeotrope		334
	948 C_5H_{12}	Pentane	36.15	32.5	20	131
		" <100 mm.	...	Nonazeotrope		131
	949 C_6H_6	Benzene, 45° C.	...	Nonazeotrope	v-1	23
		"	80.1	Nonazeotrope	v-1	36
	950 C_6H_{12}	Cyclohexane	80.75	53.0	67.5	v-1 186
		"	80.75	...	67	256
	951 C_6H_{12}	Methylcyclopentane	72.0	...	57	256
	952 C_6H_{12}	1,1,2-Trimethylcyclopropane	52.6	42.3	32 vol. %	291
	953 $C_6H_{12}O$	4-Methyl-2-pentanone	115.9	Nonazeotrope	v-1	157
	954 $C_6H_{12}O_2$	Butyl acetate	126.2	Nonazeotrope	v-1	63
	955 C_6H_{14}	2,3-Dimethylbutane	58.0	...	46.5	256
	956 C_6H_{14}	Hexane	68.95	49.8	59	256, 334
	957 C_7H_{16}	Heptane	98.4	...	89.5	256
A =	C_3H_6O	Allyl Alcohol	96.6			
	958 C_3H_8O	Isopropyl alcohol	82.3	Nonazeotrope	v-1	172
	959 C_5H_8O	Allyl vinyl ether	...	...	10	341
		"	67.4	66.6	5	334
	960 $C_5H_8O_2$	Allyl acetate	...	95.1	63	1
	961 C_6H_{12}	Cyclohexane	80.8	74.0	58	147
	962 C_6H_{14}	Hexane	68.8	...	12.5	176
	963 $C_6H_{14}O$	Isopropyl ether	68.3	Nonazeotrope		334
A =	C_3H_6O	Propionaldehyde	48.7			
	964 C_3H_6O	Propylene oxide, 30 p.s.i.g.	69	Nonazeotrope		334
	965 C_5H_6O	2-Methylfuran	63.7	Nonazeotrope		270
A =	C_3H_6O	Propylene Oxide	35			
	966 $C_4H_{10}O$	Ethyl ether	34.5	32.6	49.6	243
A =	$C_3H_6O_2$	1,3-Dioxolane	75.6			
	967 C_7H_8	Toluene	110.6	Nonazeotrope		334
	968 C_7H_{16}	Heptane	98.4	72.3	81	334

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_3H_6O_2$	1,3-Dioxolane	75.6			
		(continued)				
969	$C_8H_{18}O$	Butyl ether	142.1	Nonazeotrope		334
970	C_9H_{20}	Nonane	150.8	Nonazeotrope		334
A =	$C_3H_6O_2$	Ethyl Formate	54.1			
971	C_3H_7Br	2-Bromopropane	59.35	53.0	59.4	195, 252
A =	$C_3H_6O_2$	Methyl Acetate	56.95			
972	C_3H_7Br	2-Bromopropane	59.35	55.6	14.5	195
973	C_5H_6O	2-Methylfuran	...	Nonazeotrope		270
974	C_5H_8	Cyclopentene	44.4	41.7	27.7	126
975	C_5H_{10}	Cyclopentane	49.3	43.2	37.9	126
976	C_5H_{10}	1-Pentene	30.1	30.0	3.3	126
977	C_5H_{12}	Pentane	36.08	34.05	22	126
978	C_6H_6	Benzene	80.1	56.7	99.7	126
979	C_6H_8	1,3-Cyclohexadiene	80.25	56.7	98.0	126
980	C_6H_{10}	Cyclohexene	83.1	56.5	90.2	126
981	C_6H_{12}	Cyclohexane	80.6	54.9	83.0	126
982	C_6H_{12}	2,3-Dimethyl-1-butene	55.62	48.95	42.8	126
983	C_6H_{12}	2,3-Dimethyl-2-butene	73.38	55.1	71.8	126
984	C_6H_{12}	3,3-Dimethyl-1-butene	41.4	39.9	8.8	126
985	C_6H_{12}	2-Ethyl-1-butene	64.8	52.8	60.1	126
986	C_6H_{12}	1-Hexene	63.58	52.5	63.6	126
987	C_6H_{12}	cis-2-Hexene	68.55	53.7	69.8	126
988	C_6H_{12}	3-Methyl-2-pentene	70.64	54.45	73.7	126
989	C_6H_{12}	4-Methyl-1-pentene	54.0	48.3	36.7	126
990	C_6H_{12}	trans-4-Methyl- 2-pentene	58.45	50.0	51.3	126
991	C_6H_{12}	Methylcyclopentane	71.8	53.0	68.0	126
992	C_6H_{14}	2,2-Dimethylbutane	49.65	43.7	38.2	126
993	C_6H_{14}	2,3-Dimethylbutane	58.05	48.0	48.25	126
994	C_6H_{14}	Hexane	68.85	51.75	60.7	126
995	C_6H_{14}	2-Methylpentane	60.2	49.25	51.6	126
996	C_6H_{14}	3-Methylpentane	63.25	50.05	57.4	126
997	C_7H_{16}	2,4-Dimethylpentane	80.7	54.7	72.4	126
998	C_7H_{16}	Heptane	98.45	56.65	96.45	126
999	C_7H_{16}	2-Methylhexane	90.0	56.0	88.6	126
1000	C_7H_{16}	3-Methylhexane	91.85	56.3	84.9	126
1001	C_7H_{16}	2,2,3-Trimethylbutane	80.9	55.1	74.2	126
A =	$C_3H_6O_2$	Propionic Acid	140.7			
1002	$C_4H_6O_3$	Acetic anhydride	138	Nonazeotrope		v-1 250
1003	C_5H_9N	Pyridine	115.5	148.6	67.2	370
1004	$C_5H_{11}NO$	<u>N,N</u> -Dimethylpropion- amide	175.5	179.3	23.6	295
1005	C_6H_{14}	Hexane	68.85	Nonazeotrope		189
1006	C_7H_{16}	Heptane	98.15	97.82	2.0	189
1007	C_8H_{18}	Octane	125.12	120.89	24	189
		"	125.12	...	24.2	v-1 154
		" Satd. with Na propionate	...	...	6	v-1 154
1008	C_9H_{20}	Nonane	150.67	134.27	54	189
1009	$C_{10}H_{22}$	Decane	174.06	139.76	80.5	189
1010	$C_{11}H_{24}$	Undecane	193.85	Nonazeotrope		189
A =	$C_3H_6O_3$	Methyl Glycolate	151.2			
1011	C_8H_{10}	Ethylbenzene	136.15	Min. b.p. ...		52
1012	C_8H_{10}	<u>m</u> -Xylene	139	Min. b.p. ...		52
A =	$C_3H_6O_3$	<u>s</u>-Trioxane	114.5			
1013	C_6H_{12}	Cyclohexane	80.75	Min. b.p. ...		52
A =	C_3H_7ClO	Propylene Chlorohydrin	73/100			
1014	$C_6H_{12}Cl_2O$	Bis(chloroisopropyl) ether, 100 mm.	121.9	Nonazeotrope		334

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_3H_7NO	N,N-Dimethylformamide	153			
1015	C_6H_6	Benzene	80.1	Nonazeotrope		52
A =	C_3H_7NO	Propionamide	222.1			
1016	$C_{10}H_{22}$	Decane, 50 mm.	...	88	3	26
		" 100 mm.	...	106	5	26
		" 200 mm.	...	126	7.5	26
		" 760 mm.	173.3	168	11.8	26
1017	$C_{11}H_{24}$	Undecane, 50 mm.	...	105	15	26
		" 100 mm.	...	123	16	26
		" 200 mm.	...	142	17.3	26
		" 760 mm.	194.5	183	21	26
1018	$C_{12}H_{26}$	Dodecane, 50 mm.	...	115	26	26
		" 100 mm.	...	132	26	26
		" 200 mm.	...	152	26	26
		" 760 mm.	216	193	31.6	26
A =	$C_3H_7NO_2$	1-Nitropropane	131.18			
1019	C_3H_8O	Isopropyl alcohol	82.40	Nonazeotrope		55
1020	C_3H_8O	Propyl alcohol	97.15	96.95	8.8	55
1021	$C_4H_{10}O$	Butyl alcohol	117.73	115.30	32.2	55
1022	$C_4H_{10}O$	sec-Butyl alcohol	99.53	99.40	4.1	55
1023	$C_4H_{10}O$	tert-Butyl alcohol	82.41	Nonazeotrope		55
1024	$C_4H_{10}O$	Isobutyl alcohol	107.89	105.28	15.2	55
A =	$C_3H_7NO_2$	2-Nitropropane	120.25			
1025	C_3H_8O	Isopropyl alcohol	82.40	82.24	4.2	55
1026	C_3H_8O	Propyl alcohol	97.15	95.97	24.9	55
1027	$C_4H_{10}O$	Butyl alcohol	117.73	111.61	52.4	55
1028	$C_4H_{10}O$	sec-Butyl alcohol	99.53	98.70	18.0	55
1029	$C_4H_{10}O$	tert-Butyl alcohol	82.41	Nonazeotrope		55
1030	$C_4H_{10}O$	Isobutyl alcohol	107.89	105.28	33.1	55
A =	C_3H_8O	Isopropyl Alcohol	82.3			
1031	$C_4H_8O_2$	Vinyl acetate	72.7	70.8	22.4	335
1032	$C_4H_8O_2$	p-Dioxane	...	...	...	v-1 47
1033	$C_4H_8O_2$	Ethyl acetate	77.05	75.9	25	v-1 228
		" 40°-60° C.	...	...	...	v-1 228
1034	$C_4H_8O_2$	Methyl propionate	79.6	77	28	335
1035	C_4H_9Cl	1-Chloro-2-methyl- propane	68.9	63.8	19	335
1036	$C_4H_{10}N$	Ethyl ether	34.6	Nonazeotrope		334
1037	$C_4H_{11}N$	Butylamine	77.8	84.7	60	335
1038	$C_5H_{10}O$	Isopropyl vinyl ether	...	...	16.5	341
1039	$C_5H_{10}O$	2-Pentanone	102.35	Nonazeotrope		v-1 11
1040	C_6H_6	Benzene, 155 mm.	...	31.8	20.6	316
		" 243 mm.	...	41.8	23.6	316
		" 509 mm.	...	60.4	29.9	316
		" 607 mm.	...	65.3	31.4	316
		" 760 mm.	...	71.74	33.7	316
		" 196 mm.	...	37.2	22.4	256
		" 512 mm.	...	60.3	30	256
		" 4920 mm.	...	134.7	62	256
		" 10,180 mm.	...	166.3	79	256
		" 15,380 mm.	...	186.1	91	256
1041	C_6H_{10}	1,3-Hexadiene	72.9	Min. b.p.		80
1042	C_6H_{10}	2,4-Hexadiene	82	Min. b.p.		80
1043	C_6H_{10}	3-Methyl-1,3-pentadiene	77	Min. b.p.		80
1044	$C_6H_{10}O$	Mesityl oxide	128.3	Nonazeotrope		334
1045	C_6H_{12}	Cyclohexane, 129 mm.	...	26.3	18.3	316
		" 270 mm.	...	42.5	23.3	316
		" 434 mm.	...	54.1	27.1	316
		" 549 mm.	...	60.2	29.2	316
		" 760 mm.	...	69.4	32	316
1046	$C_6H_{12}O$	4-Methyl-2-pentanone	115.9	Nonazeotrope		11
1047	$C_6H_{15}N$	Diisopropylamine	84.1	79.7	40	335

		B-Component	Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C ₃ H ₈ O	Isopropyl Alcohol (continued)	82.3			
1048	C ₆ H ₁₅ N	Hexylamine	132.7	Nonazeotrope		334
1049	C ₇ H ₈	Toluene	110.7	...	52	327
		"	110.6	80.6	69	335
1050	C ₈ H ₁₄	Diisobutylene	102.3	77.8	54.5	335
1051	C ₈ H ₁₆	<u>trans</u> -1,2-Dimethyl- cyclohexane	123.42	81.4	79 vol. %	291
1052	C ₈ H ₁₆	<u>cis</u> -1-Ethyl-2-methyl- cyclopentane	128.05	82.2	83 vol. %	291
1053	C ₈ H ₁₆	<u>trans</u> -1-Ethyl-2- methylcyclopentane	121.2	81.6	76 vol. %	291
1054	C ₈ H ₁₆	<u>trans</u> -1-Ethyl-3- methylcyclopentane	120.8	81.4	75 vol. %	291
1055	C ₈ H ₁₆	1,1,2-Trimethyl- cyclopentane	113.73	80.4	66 vol. %	291
1056	C ₈ H ₁₆	1,1,3-Trimethyl- cyclopentane	104.89	78.5	53 vol. %	291
1057	C ₈ H ₁₆	1, <u>cis</u> -2, <u>trans</u> -3- Trimethylcyclo- pentane	117.5	81.1	71 vol. %	291
1058	C ₈ H ₁₆	1, <u>cis</u> -2, <u>trans</u> -4- Trimethylcyclo- pentane	116.73	80.9	71 vol. %	291
1059	C ₈ H ₁₈	2,2,4-Trimethyl- pentane	99.3	77.3	48.5 v-1	29
A =	C ₃ H ₈ O	Propyl Alcohol	97.25			
1060	C ₃ H ₈ S	1-Propanethiol, 766 mm.	67.8	66.4	8.65	181
1061	C ₄ H ₈ O ₂	Ethyl acetate, 40°-60° C.	77.05	Nonazeotrope		v-1 228
1062	C ₅ H ₁₀ O	3-Pentanone	101.8	94.9	57	334
1063	C ₅ H ₁₀ O ₂	Propyl acetate	101.6	94.7	49	v-1 264
		" 200 mm.	...	59.96	31.4	v-1 306
		" 400 mm.	...	77.06	39.2	v-1 306
		" 600 mm.	...	88.04	44.8	v-1 306
		" 760 mm.	...	94.7	48.9	v-1 306
1064	C ₆ H ₅ Cl	Chlorobenzene	132	96.5	80	334
1065	C ₆ H ₆	Benzene, 239 mm.	...	45	10.5	v-1 24
		" 44.7-309.7 p.s.i.g.	...	Effect of press.		v-1 277
		" 123 mm.	...	28.0	8.0	316, 344
		" 289 mm.	...	49.8	11.6	316, 344
		" 423 mm.	...	59.9	13.6	316, 344
		" 610 mm.	...	70.1	15.7	316, 344
		" 760 mm.	...	77.10	17.1	316, 344
		" 342 mm.	...	53.7	12.3	256
		" 573 mm.	...	68.6	15.3	256
		" 2420 mm.	...	117.6	27.5	256
		" 5020 mm.	...	147.5	37	256
		" 10,050 mm.	...	183.8	50.5	256
		" 18,200 mm.	...	218.3	66.1	256
1066	C ₆ H ₁₂	Cyclohexane, 161 mm.	...	33.8	9.9	316
		" 250 mm.	...	44.3	11.8	316
		" 429 mm.	...	58.0	15.0	316
		" 560 mm.	...	65.4	16.5	316
		" 760 mm.	...	74.69	18.5	316
		" 4-15 atm.	...	Effect of press.		278
1067	C ₆ H ₁₂ O	2-Methylpentanal	118.3	95	86	334
1068	C ₆ H ₁₆ O _{Si}	(Trimethylsiloxy) propane, 735 mm.	100.3	87.5	...	193
1069	C ₇ H ₈	Toluene	110.7	...	50.5	327
		"	110.6	92.6	49	334
		"	110.7	92.6	51.5	v-1 202
1070	C ₈ H ₈	Styrene, 50 mm.	...	38.5	84	v-1 211
		"	...	% PrOH increases with press.		211

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_3H_8O	Propyl Alcohol (continued)	97.25			
1071	C_8H_{10}	Ethylbenzene, 50 mm.	...	% PrOH increases with press.		211
1072	C_8H_{10}	p-Xylene	138.4	...	92	327
A =	C_3H_8OS	2-(Methylthio)ethanol		...		
1073	$C_5H_{10}OS$	2-Methylthioethyl vinyl ether, 22 mm.	...	75	20	329
A =	$C_3H_8O_2$	2-Methoxyethanol	124.5			
1074	C_6H_6	Benzene	80.1	Nonazeotrope		v-1 331
1075	C_6H_{12}	Cyclohexane	80.7	Nonazeotrope		334
		"	...	77.5	15	v-1 331
1076	C_7H_{14}	trans-2-Heptene	98.0	92.9	19 vol. %	291
1077	$C_7H_{16}O_2$	1-tert-Butoxy-2- methoxyethane	...	119	45	76
1078	C_8H_8	Styrene, 57 mm.	67.9	54.8	62 vol. %	291
		" 62 mm.	...	56.8	50.1	v-1 152
1079	C_8H_{10}	Ethylbenzene, 62 mm.	...	51.9	34.3	v-1 152
1080	C_8H_{10}	p-Xylene	138.35	119.3	54 vol. %	291
1081	C_8H_{12}	4-Vinylcyclohexene, 57 mm.	...	44.4	30 vol. %	291
1082	C_8H_{16}	cis-1,3-Dimethyl- cyclohexane	120.9	105.6	36 vol. %	291
1083	C_8H_{16}	trans-1-Ethyl-2- methylcyclopentane	121.2	106.3	32 vol. %	291
1084	C_8H_{16}	trans-1-Ethyl-3- methylcyclopentane	120.8	106.0	35 vol. %	291
1085	C_8H_{16}	1,1,3-Trimethyl- cyclopentane	104.89	96.7	20 vol. %	291
1086	C_8H_{16}	1,cis-2,cis-3-Tri- methylcyclopentane	123.0	107.4	35 vol. %	291
1087	C_8H_{16}	1,trans-2,cis-3-Tri- methylcyclopentane	110.2	100.2	20 vol. %	291
1088	C_8H_{16}	2,4,4-Trimethyl- 1-pentene	101.44	95.5	20 vol. %	291
1089	C_8H_{18}	2,4-Dimethylhexane	109.43	99.3	26 vol. %	291
1090	C_8H_{18}	2,2,3-Trimethylpentane	109.84	99.7	25 vol. %	291
1091	C_9H_{18}	1,1,3-Trimethyl- cyclohexane	136.6	113.1	41 vol. %	291
1092	C_9H_{20}	2,2,3,4-Tetramethyl- pentane	133.02	111.4	39 vol. %	291
1093	C_9H_{20}	2,3,4-Trimethylhexane	139.0	113.5	39 vol. %	291
1094	C_9H_{20}	2,3,5-Trimethylhexane	131.34	110.6	40 vol. %	291
A =	$C_3H_8O_2$	1,2-Propanediol	187.8			
1095	$C_6H_{10}O_2$	3-Vinyloxypropanol	...	Min. b.p.		94
1096	C_6H_6	Benzene	80.1	Nonazeotrope		334
1097	$C_6H_{14}O_3$	Dipropylene glycol, 10 mm.	...	Nonazeotrope		v-1 60
1098	C_7H_8	Toluene	110.6	110.5	1.5	335
1099	C_8H_6O	Coumarone	173	Azeo. distillation		120
1100	C_8H_{10}	o-Xylene	144.4	135.8	10	335
1101	$C_8H_{18}O$	Butyl ether	142.1	136	...	334, 335
1102	$C_{10}H_8$	Naphthalene	218.1	Azeo. distillation		120
1103	$C_{10}H_{22}O_4$	Tripropylene glycol methyl ether, 50 mm.	...	Nonazeotrope		76
1104	$C_{12}H_{26}$	Dodecane	216	175	67	60
1105	$C_{14}H_{30}$	Tetradecane	252.5	179	76	60
1106	$C_{16}H_{34}O$	Bis(2-ethylhexyl) ether, 10 mm.	135	84	...	335
A =	$C_3H_8O_2$	1,3-Propanediol	214			
1107	$C_5H_{10}O_2$	3-Vinyloxy-1- propanol	...	...	10-15	94

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_3H_8S	Ethyl Methyl Sulfide	66.61			
1108	C_6H_{12}	Cyclohexane	80.35	Nonazeotrope		70
1109	C_6H_{12}	1-Hexene	63.50	62.71	29.4	70
1110	C_6H_{12}	Methylcyclopentane	71.85	65.59	64.1	70
1111	C_6H_{14}	2,3-Dimethylbutane	58.10	57.41	18.7	70
1112	C_6H_{14}	Hexane	68.75	63.94	56.6	70
1113	C_7H_{16}	2,2-Dimethylpentane	79.20	66.37	88.2	70
A =	$C_3H_5BO_3$	Trimethyl Borate	68.7			
1114	C_4H_8O	Tetrahydrofuran	65	Nonazeotrope	v-1	115
A =	C_3H_9N	Isopropylamine	32.4			
1115	C_6H_{14}	Hexane	68.7	Nonazeotrope		334
A =	C_3H_7NO	1-Amino-2-propanol	159.9			
1116	C_6H_5Cl	Chlorobenzene	131	128.30	13	259
1117	$C_6H_5NO_2$	1,1'-Iminodi-2-propanol, 100 mm.	185	Nonazeotrope		334
1118	C_7H_8	Toluene	110.7	110	5	259
1119	C_7H_{16}	Heptane	98.4	96.6	6	334
A =	$C_3H_{10}N_2$	1,2-Propanediamine	120.9			
1120	$C_4H_{10}O$	Butyl alcohol	117.7	126.5	49	335
1121	$C_4H_{10}O$	Isobutyl alcohol	107.9	123	65	335
1122	C_7H_8	Toluene	110.6	105	32	334
A =	$C_4Cl_3F_7$	2,2,3-Trichloroheptafluorobutane	97.4			
1123	$C_5Cl_2F_6$	1,2-Dichlorohexafluorocyclopentene	90.6	Nonazeotrope	v-1	354
1124	C_7H_{16}	Heptane	98.53	92.3	76	v-1 354
1125	$C_8F_{16}O$	Perfluorocyclic oxide	102.6	96.35	67	v-1 354
A =	$C_4HF_7O_2$	Perfluorobutyric Acid	122.0			
1126	C_8H_{10}	Ethylbenzene	136.15	115.4	80	52
1127	C_8H_{10}	<i>m</i> -Xylene	139	117.5	83	52
1128	C_8H_{10}	<i>p</i> -Xylene	138.4	117.6	82	52
A =	$C_4H_2O_3$	Maleic Anhydride	...			
1129	C_8H_{10}	<i>m</i> -Xylene, 150 mm.	...	Nonazeotrope		334
1130	$C_{16}H_{22}O_4$	Dibutyl phthalate, 50 mm.	238	Nonazeotrope		334
A =	C_4H_4	Vinylacetylene	...			
1131	C_4H_5Cl	2-Chloro-1,3-butadiene, 740 mm.	...	Nonazeotrope	v-1	151
A =	$C_4H_4O_2$	Diketene	...			
1132	C_7H_8	Toluene, 60 mm.	...	41	10	84
A =	C_4H_4S	Thiophene	83.97			
1133	$C_4H_{10}S$	2-Butanethiol	85.15	82.27	...	70
1134	$C_4H_{10}S$	Isopropyl methyl sulfide	84.76	83.42	...	70
1135	C_6H_6	Benzene	80.10	Nonazeotrope		70
1136	C_6H_{12}	Cyclohexane	80.85	77.90	41.2	70
1137	C_6H_{12}	Methylcyclopentane	71.85	71.47	14.0	70
1138	C_6H_{14}	Hexane	68.75	68.46	11.2	70
1139	C_7H_{14}	<i>trans</i> -1,3-Dimethylcyclopentane	90.80	82.00	67.7	70
1140	C_7H_{16}	2,3-Dimethylpentane	89.90	80.90	64	70
1141	C_7H_{16}	2,4-Dimethylpentane	80.55	76.58	42.7	70
1142	C_7H_{16}	Heptane	98.40	83.09	83.2	70

TABLE I BINARY SYSTEMS

		B-Component	Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_4H_5Cl	2-Chloro-1,3-butadiene	...			
1143	$C_4H_6Cl_2$	1,3-Dichloro-2-butene, 100 mm.	...	Nonazeotrope		v-1 151
		" 340 mm.	...	Nonazeotrope		v-1 151
1144	C_4H_6O	3-Butene-2-one, 100 mm.	...	Nonazeotrope		v-1 151
		" 340 mm.	...	Nonazeotrope		v-1 151
A =	$C_4H_6O_2$	2,3-Butanedione	90.7			
1145	C_4H_8O	2-Butanone	79.6	Nonazeotrope		334
A =	$C_4H_6O_2$	Vinyl Acetate	72.7			
1146	$C_4H_{10}O$	Butyl alcohol	117.7	Nonazeotrope		334
1147	C_6H_{12}	Cyclohexane	80.7	67.4	61.3	334
1148	C_7H_{16}	Heptane	98.4	72	83.5	334
1149	$C_8H_{18}O$	Butyl ether	142.1	Nonazeotrope		334
A =	$C_4H_6O_3$	Acetic Anhydride	139.9			
1150	$C_5H_8O_2$	Isopropenyl acetate	97.4	Nonazeotrope		334
1151	$C_5H_{10}O_2$	Isopropyl acetate	88.7	Nonazeotrope		334
1152	$C_6H_{14}O$	Isopropyl ether	68.3	Nonazeotrope		334
A =	C_4H_7ClO	2-Chloroethyl Vinyl Ether	109.1			
1153	$C_5H_{12}O$	Isoamyl alcohol	131.8	109	99	335
		" 50 mm.	67	39	99	335
A =	$C_4H_8Cl_2O$	Bis(2-chloroethyl Ether)	178.65			
1154	$C_4H_{10}O_3$	Diethylene glycol	245.5	174.6	92	60
1155	$C_7H_{16}O$	3-Heptanol	156.4	141.2	28	334
1156	$C_8H_{18}O$	2-Ethyl-1-hexanol, 50 mm.	109	96	90	335
A =	C_4H_8O	2-Butanone	79.6			
1157	$C_4H_8O_2$	Isopropyl formate	68.8	Nonazeotrope		310
1158	C_4H_9Cl	1-Chloro-2-methylpropane	68.8	Nonazeotrope		310
1159	$C_4H_{10}O$	sec-Butyl alcohol	99.5	Nonazeotrope		v-1 8
		" 374 mm.	...	Nonazeotrope		v-1 8
1160	C_5H_6O	2-Methylfuran	...	Nonazeotrope		v-1 310
1161	C_6H_6	Benzene	80.1	78.1	47	v-1 74
		" 14.7 p.s.i.a.	...	78.2	45	v-1 321
		" 66.7 p.s.i.a.	...	133.0	67.6	v-1 321
		" 118.0 p.s.i.a.	...	160.7	90.0	v-1 321
		" 125.0 p.s.i.a.	...	Nonazeotrope		v-1 321
1162	C_6H_6O	Phenol, 200-760 mm.	...	Nonazeotrope		v-1 33
1163	C_6H_8O	2,5-Dimethylfuran	93.3	Nonazeotrope		334
1164	C_6H_{12}	Cyclohexane, 14.7 p.s.i.a.	...	71.0	52.5	321
		" 66.7 p.s.i.a.	...	128.7	61.0	321
		" 118.0 p.s.i.a.	...	156.4	64.0	321
		" 125.0 p.s.i.a.	...	182.5	69.0	321
		"	80.85	71.6	45.5	186
		"	80.85	71.5	44	73
		"	80.85	...	42	256
1165	C_6H_{14}	2,3-Dimethylbutane	58	...	15.1	256
1166	C_6H_{14}	Hexane	68.95	...	29.6	256
1167	C_7H_{14}	Methylcyclohexane	101.15	...	80	256
1168	C_7H_{16}	Heptane	98.4	...	73	256
1169	C_8H_{18}	2,5-Dimethylhexane	109.4	...	95	256
A =	C_4H_8O	Butyraldehyde	74.8			
1170	C_4H_8O	Isobutyraldehyde	69.5	Nonazeotrope		96
1171	$C_4H_8O_2$	Butyric acid	163.3	Nonazeotrope		334

		B-Component		Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.	
A =	C_4H_8O	Butyraldehyde (continued)	74.8				
1172	$C_4H_{10}O$	Isobutyl alcohol	107.9	Nonazeotrope		334	
1173	$C_4H_{10}O_2$	1,1-Dimethoxyethane	64.5	Nonazeotrope		334	
1174	$C_6H_{10}O$	Mesityl oxide	128.3	Nonazeotrope		334	
1175	C_6H_{14}	Hexane	68.7	60	26	334	
1176	$C_6H_{14}O_2$	1,1-Dimethoxybutane	114	Nonazeotrope		334	
A =	$C_4H_8O_2$	Butyric Acid	162.45				
1177	C_5H_5N	Pyridine	115.5	163.2	92	370	
1178	$C_6H_{13}NO$	<u>N,N</u> -Dimethylbutyr- amide, 100 mm.	124.5	130	32.6	295	
1179	$C_{11}H_{24}$	Undecane	194.5	162.4	84.5	370	
A =	$C_4H_8O_2$	p-Dioxane	101.3				
1180	$C_4H_{10}O$	Butyl alcohol	117.75	Nonazeotrope		v-1	215
1181	$C_4H_{10}O$	Isobutyl alcohol	108	101.3	...	208	
1182	C_6H_6	Benzene, 200-760 mm.	...	Nonazeotrope		v-1	124
1183	$C_6H_{14}O$	Isopropyl ether	68.3	Nonazeotrope		334	
1184	C_7H_8	Toluene, 200-760 mm.	...	Nonazeotrope		v-1	124
A =	$C_4H_8O_2$	Ethyl Acetate	77.05				
1185	$C_4H_{10}O$	Isobutyl alcohol, 100-760 mm.	...	...	...	v-1	316
1186	$C_4H_{10}O_2$	2-Ethoxyethanol	135.1	Nonazeotrope		v-1	220
1187	$C_5H_4O_2$	2-Furaldehyde	161.45	Nonazeotrope		350	
1188	C_6H_6	Benzene	80.1	Nonazeotrope		v-1	43, 44
1189	C_6H_{12}	Cyclohexane	80.75	71.6	56	v-1	43, 44
		" 233 mm.	...	38.7	50.1	316	
		" 301 mm.	...	45.1	51	316	
		" 415 mm.	...	53.6	52.3	316	
		" 581 mm.	...	63.0	54.1	316	
		" 756 mm.	...	71.1	55.3	316	
1190	$C_6H_{12}O_2$	Butyl acetate	126.1	Nonazeotrope		334	
1191	$C_6H_{14}O_2$	2-Butoxyethanol	171.1	Nonazeotrope		334	
A =	$C_4H_8O_2$	Isobutyric Acid	154.7				
1192	$C_5H_8O_3$	Methyl acetoacetate	171.7	Nonazeotrope		334	
1193	C_8H_{10}	Ethylbenzene	136.15	133.0	8.8	84	
		" 30 mm.	...	48.0	0.8	84	
1194	C_8H_{10}	Mixed xylenes	...	133.0	10.0	84	
		" 56 mm.	...	62	1.0	84	
A =	$C_4H_8O_2$	Propyl Formate	80.9				
1195	C_6H_{14}	Hexane	68.95	63.6	29.5	324	
A =	C_4H_8S	Tetrahydrothiophene	120.79				
1196	$C_6H_{14}S$	Isopropyl sulfide	119.25	118.40	...	70	
1197	C_7H_8	Toluene	110.85	Nonazeotrope		70	
1198	C_8H_{16}	<u>trans</u> -1,3-Dimethyl- cyclohexane	120.30	115.90	43.1	70	
1199	C_8H_{16}	Ethylcyclohexane	131.85	120.46	80.7	70	
1200	C_8H_{18}	2,5-Dimethylhexane	109.15	107.95	16.8	70	
1201	C_8H_{18}	2-Methylheptane	117.70	113.96	38.2	70	
1202	C_8H_{18}	Octane	125.70	117.79	60.3	70	
A =	C_4H_9Cl	1-Chlorobutane	77.9				
1203	$C_4H_{10}O$	Butyl alcohol	117.75	Nonazeotrope		v-1	335
A =	$C_4H_7Cl_3Sn$	Butyltin Trichloride	113/17				
1204	$C_8H_{18}Cl_2Sn$	Dibutyltin dichloride, 17 mm.	157	Nonazeotrope		334	
1205	$C_{12}H_{27}ClSn$	Tributyltin chloride, 17 mm.	166	Nonazeotrope		334	

TABLE I BINARY SYSTEMS

No.	Formula	B-Component		Azeotropic Data		
		Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_4H_9NO	Morpholine	128.3			
1206	$C_8H_{18}O$	Butyl ether	142.1	126.7	73	334
1207	$C_9H_{18}O$	2,6-Dimethyl-4-heptanone	169.4	128	98	334
A =	$C_4H_9NO_3$	2-Methyl-2-nitro-1-Propanol	...			
1208	$C_6H_{11}NO_3$	2-Methyl-2-nitropropyl vinyl ether, 10 mm.	...	71-81	8.6	341
A =	$C_4H_{10}O$	Butyl Alcohol	117.75			
1209	$C_4H_{10}O$	sec-Butyl alcohol	99.5	Nonazeotrope		334
1210	$C_4H_{10}O$	Isobutyl alcohol, to crit. region	107	Nonazeotrope		v-1 75, 334
		" 750 mm.	...	Nonazeotrope		v-1 335
1211	$C_4H_{10}O$	Ethyl ether, to crit. region	34.5	Nonazeotrope		v-1 75
1212	$C_4H_{10}S$	1-Butanethiol, 770 mm.	98	97.8	14.84	181
1213	$C_4H_{11}N$	Butylamine	77.1	Nonazeotrope		334
1214	C_5H_5N	Pyridine	115.5	118.6	69	v-1 141
1215	$C_5H_8O_2$	Methyl methacrylate	99.8	Nonazeotrope		147
1216	C_6H_6	Benzene, 45°	...	Nonazeotrope		v-1 24
		"	80.1	Nonazeotrope		v-1 344, 362
1217	C_6H_{12}	Cyclohexane	80.8	79.8	9.5	147, 335
1218	$C_6H_{12}O$	Butyl vinyl ether	94.2	93.3	7.8	335
1219	$C_6H_{12}O$	Hexaldehyde	128.3	116.8	77.1	335
1220	$C_6H_{12}O_2$	Butyl acetate, 50 mm.	...	...	27.3	117
		"	126.2	117.6	67.2	117, 335
1221	C_6H_{14}	Hexane	68.95	68.2	3.2	174, 335
1222	$C_6H_{14}O_2$	2-Butoxyethanol	171.1	Nonazeotrope		v-1 335
1223	C_7H_8	Toluene	110.7	105.5	27.5	v-1 377
		" 200 mm.	...	66.8	17.7	v-1 124
		" 400 mm.	...	85.45	22.9	v-1 124
		" 600 mm.	...	97.7	26.5	v-1 124
		" 760 mm.	...	105.3	29.7	v-1 124
1224	$C_7H_{12}O_2$	Butyl acrylate, 100 mm.	69.77	69	75	334
		" 20 mm.	...	39	87.7	76
		" 150 mm.	...	77	92.2	76
		"	147	117	98.2	76
1225	C_7H_{16}	Heptane	98.4	93.85	18	174, 175
		"	98.4	~94	~16	v-1 141
1226	$C_7H_{18}SiO$	(Trimethylsiloxy) butane	...	Azeotropic		193
1227	C_8H_{10}	Ethylbenzene, 50 mm.	...	...	36.3	v-1 92
		" 100 mm.	...	63.65	42.1	v-1 92
		" 300 mm.	...	...	51.0	v-1 92
		" 500 mm.	...	...	59.7	v-1 92
		" 760 mm.	136.15	115.85	65.1	v-1 92
1228	C_8H_{18}	Octane	125.75	108.45	43.2	174, 175
1229	$C_8H_{18}O$	Butyl ether	142.1	117.6	82.5	335
1230	$C_8H_{19}N$	Dibutylamine	159.6	Nonazeotrope		334
1231	C_9H_{20}	Nonane	150.7	115.9	71.5	174, 175
A =	$C_4H_{10}O$	sec-Butyl Alcohol	99.5			
1232	$C_6H_{12}O_2$	Butyl acetate	126.1	Nonazeotrope		334
1233	$C_6H_{12}O_2$	sec-Butyl acetate	112.2	Nonazeotrope		334
1234	C_7H_{14}	Methylcyclohexane	101.5	89.7	38.2	v-1 352
1235	C_7H_{16}	Heptane	98.4	88.1	36.7	v-1 352
1236	C_8H_{14}	Diisobutylene	102.3	91	35	37
1237	C_8H_{18}	Iso-octane	99.3	88.0	33.8	v-1 352

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_4H_{10}O$	Isobutyl Alcohol	107			
1238	C_6H_6	Benzene	80.1	78.36	12	111
		" 111 mm.	...	28.4	2.7	316
		" 240 mm.	...	45.0	4.2	316
		" 525 mm.	...	67.4	6.4	316
		" 760 mm.	80.1	79.3	7.4	316
		" 206 mm.	...	43.0	4.2	256
		" 394 mm.	...	59.5	6.0	256
		" 759 mm.	80.1	79.4	7.9	256
		" 5420 mm.	...	159.9	21.0	256
		" 12,930 mm.	...	207.5	33	256
A =	$C_4H_{10}O$	Ethyl Ether	34.5			
1239	$C_8H_{18}O$	Butyl ether, 600 mm.	142.4	Ideal system	v-1	257
A =	$C_4H_{10}O_2$	1,2-Dimethoxyethane	85.2			
1240	$C_6H_{14}O$	Isopropyl ether	68.3	Nonazeotrope		334
A =	$C_4H_{10}O_2$	1,4-Butanediol	230			
1241	$C_6H_{12}O_2$	4-Vinyloxybutanol	...	Min. b.p.	...	94
A =	$C_4H_8O_2$	2-Ethoxyethanol	134.0			
1242	$C_5H_8O_2$	Methyl methacrylate	99.8	Nonazeotrope		147
1243	$C_5H_{10}O_2$	Propyl acetate	101.6	Nonazeotrope	v-1	220
1244	$C_6H_{12}O_2$	Butyl acetate	126.2	125.7	13	v-1 221
1245	$C_6H_{14}N_2$	2,5-Dimethylpiperazine	164	Nonazeotrope		334
1246	$C_6H_{14}O_3$	2-(2-Ethoxyethoxy) ethanol	202.8	Nonazeotrope		334
1247	C_8H_8	Styrene, 50 mm.	...	59.8	42.5	v-1 110
1248	C_8H_{10}	Ethylbenzene, 50 mm.	...	53.9	27.6	v-1 110
		" 57 mm.	60.62	50.0	42 vol. %	291
		" 735 mm.	134.9	126.2	43.3	v-1 167
			136.15	128	45	v-1 227
1249	C_8H_{10}	m-Xylene, 735 mm.	137.9	127.7	48.9	v-1 167
1250	C_8H_{10}	o-Xylene, 735 mm.	143.1	129.6	57.2	v-1 167
1251	C_8H_{10}	p-Xylene, 735 mm.	137.4	127.3	47.9	v-1 167
1252	C_8H_{16}	trans-1,2-Dimethyl-cyclohexane	123.42	115.6	27 vol. %	291
1253	C_8H_{16}	Ethylcyclohexane	131.78	120.2	33 vol. %	291
1254	C_8H_{16}	cis-2-Octene	125.6	117.9	28 vol. %	291
1255	C_8H_{18}	2,5-Dimethylhexane	109.10	105.1	16 vol. %	291
1256	C_8H_{18}	3,3-Dimethylhexane	111.97	107.1	17 vol. %	291
1257	C_8H_{18}	3-Ethyl-3-methyl-pentane	118.26	111.7	23 vol. %	291
1258	C_8H_{18}	Octane	125.75	122.5	33.6	v-1 227
1259	C_9H_{12}	o-Ethyltoluene	165.15	135.0	91 vol. %	291
1260	C_9H_{12}	Mesitylene, 735 mm.	163.4	133.7	85.7	v-1 167
1261	C_9H_{18}	Butylcyclopentane	156.56	130.2	61 vol. %	291
1262	C_9H_{18}	Isobutylcyclopentane	147.6	127.4	49 vol. %	291
1263	C_9H_{18}	Isopropylcyclohexane	154.5	129.6	56 vol. %	291
1264	C_9H_{18}	1-Nonene	146.87	128.1	48 vol. %	291
1265	C_9H_{18}	Propylcyclohexane	156.72	130.2	59 vol. %	291
1266	C_9H_{20}	3,3-Diethylpentane	146.17	126.4	45 vol. %	291
1267	C_9H_{20}	n-Nonane	150.8	128.0	50 vol. %	291
1268	C_9H_{20}	2,2,3,3-Tetramethyl-pentane	140.27	124.1	40 vol. %	291
1269	C_9H_{20}	2,2,4,4-Tetramethyl-pentane	122.28	114.3	26 vol. %	291
1270	C_9H_{20}	2,3,3,4-Tetramethyl-pentane	141.55	124.6	41 vol. %	291
1271	C_9H_{20}	2,2,3-Trimethylhexane	133.60	120.8	34 vol. %	291
1272	C_9H_{20}	2,2,4-Trimethylhexane	126.54	116.8	26 vol. %	291
1273	C_9H_{20}	2,3,3-Trimethylhexane	137.68	122.8	41 vol. %	291
1274	C_9H_{20}	2,3,5-Trimethylhexane	131.34	119.5	32 vol. %	291
1275	C_9H_{20}	2,4,4-Trimethylhexane	130.65	119.1	34 vol. %	291
1276	C_9H_{20}	3,3,4-Trimethylhexane	140.46	124.0	40 vol. %	291

TABLE I BINARY SYSTEMS

No.	Formula	B-Component Name	Azeotropic Data			
			B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_4H_{10}O_2$	2-Ethoxyethanol (continued)	134.0			
1277	$C_{10}H_{20}$	<i>tert</i> -Butylcyclohexane	171.5	133.3	73 vol. %	291
A =	$C_4H_{10}O_3$	Diethylene Glycol	245.5			
1278	$C_5H_{12}O_3$	2-(2-Methoxyethoxy) ethanol	193.6	Nonazeotrope		334
1279	C_6H_6	Benzene	80.1	Nonazeotrope		334
1280	$C_6H_{12}O_3$	2-(2-Vinyloxyethoxy) ethanol	...	Min. b.p.		94
1281	$C_6H_4O_3$	2-(2-Ethoxyethoxy) ethanol	202.8	Nonazeotrope		334
1282	$C_6H_{14}O_4$	Triethylene glycol, 3 mm.	...	Nonazeotrope	v-1	60
1283	C_8H_7N	Indole	253	Azeo. distillation		120
1284	C_8H_{10}	Ethylbenzene	136.15	Azeo. distillation		120
1285	C_8H_{10}	<i>p</i> -Xylene	138.2	Azeo. distillation		120
1286	$C_8H_{18}O_3$	2-(2-Butoxyethoxy) ethanol, 10 mm.	109	Nonazeotrope		334
1287	$C_8H_{18}O_4$	2-[2-(2-Ethoxyethoxy) ethoxy]ethanol, 2 mm.	98	87	43	335
		" 3 mm.	...	135	83.4	60
1288	$C_{10}H_8$	Naphthalene	218.1	Azeo. distillation		120
1289	$C_{11}H_{14}OS$	2-(Benzylmercapto) ethyl vinyl ether	...	Min. b.p.		329
1290	$C_{12}H_9N$	Carbazole, >10 mm.	294	Nonazeotrope		100
1291	$C_{12}H_{10}$	Biphenyl	355.9	Azeo. distillation		120
1292	$C_{12}H_{10}O$	Phenyl ether, 4 mm.	100	...	23	335
1293	$C_{12}H_{24}OS$	2-(2-Ethylhexylthio) ethyl vinyl ether	...	Min. b.p.		329
1294	$C_{12}H_{26}O$	Hexyl ether, 50 mm.	137	129.9	15.5	335
1295	$C_{13}H_{10}$	Fluorene, 10-760 mm.	294	Min. b.p.	...	100
1296	$C_{14}H_{10}$	Phenanthrene, 20 mm.	...	146	93	100
		" 100 mm.	...	180	96.2	100
		" 200 mm.	...	203	98.5	100
		" 300 mm.	...	217	99.5	100
		" 400 mm.	...	226	99.9	100
1297	$C_{14}H_{14}O$	Benzyl ether, 5 mm.	...	...	40	335
1298	$C_{16}H_{34}O$	Bis(2-ethylhexyl)ether, 10 mm.	135	114	...	335
A =	$C_4H_{10}S$	2-Butanethiol	85.15			
1299	$C_4H_{10}S$	Isopropyl methyl sulfide	84.76	Nonazeotrope		70
A =	$C_4H_{10}S$	Ethyl Sulfide	92.07			
1300	C_6H_6	Benzene	80.10	Nonazeotrope		70
1301	C_6H_{12}	Cyclohexane	80.85	Nonazeotrope		70
1302	C_7H_{14}	<i>trans</i> -1,3-Dimethyl- cyclopentane	90.80	88.89	41.0	70
1303	C_7H_{14}	1,1-Dimethylcyclo- pentane	87.90	86.98	26.1	70
1304	C_7H_{14}	Methylcyclohexane	101.05	92.10	94.5	70
1305	C_7H_{16}	3-Methylhexane	91.60	89.19	48.3	70
1306	C_7H_{16}	2,3-Dimethylpentane	89.90	87.93	38.6	70
1307	C_7H_{16}	2,4-Dimethylpentane	80.55	80.53	2.26	70
1308	C_8H_{18}	2,2,4-Trimethylpentane	99.30	91.44	77.0	70
A =	$C_4H_{10}S$	Isopropyl Methyl Sulfide	84.76			
1309	C_6H_{12}	Cyclohexane	80.85	79.76	30	70
1310	C_6H_{12}	Methylcyclopentane	71.85	Nonazeotrope		70
1311	C_7H_{14}	<i>trans</i> -1,3-Dimethyl- cyclopentane	90.80	84.38	80.4	70
1312	C_7H_{14}	1,1-Dimethylcyclo- pentane	87.90	83.62	64.9	70
1313	C_7H_{16}	3-Methylhexane	91.60	84.38	82.4	70

		B-Component		Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.	
A =	$C_4H_{10}S$	Isopropyl Methyl Sulfide (continued)	84.76				
	1314 C_7H_{16}	2,3-Dimethylpentane	89.90	83.83	72.8	70	
	1315 C_7H_{16}	2,4-Dimethylpentane	80.55	79.39	29.7	70	
	1316 C_7H_{16}	2,2-Dimethylpentane	79.20	78.40	23.3	70	
A =	$C_4H_{10}S$	Methyl Propyl Sulfide	95.47				
	1317 C_7H_{14}	Ethylcyclopentane	103.45	95.41	90.7	70	
	1318 C_7H_{14}	Methylcyclohexane	101.05	95.06	78.0	70	
	1319 C_7H_{14}	<i>trans</i> -1,3-Dimethyl- cyclopentane	90.80	90.11	24.3	70	
	1320 C_7H_{14}	1,1-Dimethylcyclo- pentane	87.90	87.66	9.7	70	
	1321 C_7H_{16}	3-Methylhexane	91.60	90.53	32.95	70	
	1322 C_7H_{16}	2,3-Dimethylpentane	89.90	89.10	22.75	70	
	1323 C_8H_{18}	2,2-Dimethylhexane	106.85	95.42	94.4	70	
	1324 C_8H_{18}	2,2,4-Trimethylpentane	99.30	94.00	62.2	70	
A =	$C_4H_{10}S_2$	Ethyl Disulfide	154.11				
	1325 C_9H_{20}	Nonane	150.65	148.62	41.2	70	
	1326 $C_{10}H_{22}$	3-Ethyl-3-methyl- heptane	163.00	153.02	80.2	70	
A =	$C_4H_{11}N$	Diethylamine	55.5				
	1327 $C_6H_{14}O$	Isopropyl ether	68.3	Nonazeotrope		334	
	1328 $C_6H_{15}NO$	2-(Diethylamino) ethanol	162.1	Nonazeotrope		334	
A =	$C_4H_{11}NO_2$	2,2'-Iminodiethanol	126/2 mm.				
	1329 $C_6H_{15}NO_3$	2,2',2''-Nitrilotri- ethanol, 2 mm.	195	Nonazeotrope		334	
A =	$C_5Cl_2F_6$	1,2-Dichlorohexa- fluorocyclopentene	90.6				
	1330 $C_8F_{16}O$	Perfluorocyclic oxide	102.6	90.4	80	v-1	354
A =	C_5F_{10}	Perfluorocyclopentane	...				
	1331 C_5F_{12}	Perfluoropentane, 9,6°-25° C.	...	Nonazeotrope		v-1	237
	1332 C_6F_{14}	Perfluorohexane, 15°-25° C.	...	Nonazeotrope		v-1	237
A =	$C_5H_4F_8O$	2,2,3,3,4,4,5,5- Octafluoro-1-pentanol	...				
	1333 $C_5H_{12}O$	Active amyl alcohol	128.5	Nonazeotrope		330	
	1334 $C_5H_{12}O$	Isoamyl alcohol	132.0	Nonazeotrope		330	
A =	$C_5H_4O_2$	2-Furaldehyde	161.45				
	1335 $C_5H_6O_2$	Furfuryl alcohol, 25 mm.	...	Nonazeotrope		v-1	348
	1336 C_6H_6	Benzene	80.1	Nonazeotrope		v-1	52, 331
	1337 C_6H_{12}	Cyclohexane	80.75	Nonazeotrope		v-1	52, 331
	1338 C_7H_{14}	Methylcyclohexane	101.05	100.8	4.1	v-1	114
	1339 C_7H_{16}	Heptane	98.40	98.3	5.3	v-1	114
A =	C_5H_5N	Pyridine	115.5				
	1340 $C_5H_{11}N$	Piperidine	106	105.8	3.4	147	
	1341 $C_5H_{12}O$	3-Pentanol	115.6	117.4	45	334	
	1342 C_7H_8	Toluene	110.8	110.1	22.2	v-1	141, 371
	1343 C_7H_{16}	Heptane	98.40	95.60	25.3	355, 373	
		"	98.40	95	13.3	v-1	141
	1344 C_8H_{10}	Ethylbenzene	136.15	Nonazeotrope		363	
	1345 C_8H_{10}	<i>o</i> -Xylene	143.6	Nonazeotrope		372	

TABLE I BINARY SYSTEMS

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No.	Formula	B-Component Name	Azeotropic Data			
			B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C₅H₅N	Pyridine (continued)	115.5			
1346	C ₈ H ₁₈	Octane	125.75	109.5	56.1	355
1347	C ₉ H ₂₀	Nonane	150.7	115.1	89.9	355
1348	C ₁₀ H ₈ N ₂	2,2'-Dipyridyl	274	Nonazeotrope		147
1349	C ₁₀ H ₂₂	Decane	173.3	Nonazeotrope		355
A =	C₅H₆S	2-Methylthiophene	111.92			
1350	C ₇ H ₁₆	Heptane	98.40	97.77	2.2	70
1351	C ₈ H ₁₈	2-Methylheptane	117.70	109.97	67.8	70
1352	C ₈ H ₁₈	2,5-Dimethylhexane	109.15	106.12	39.6	70
1353	C ₈ H ₁₈	2,2-Dimethylhexane	106.85	104.62	33.2	70
A =	C₅H₆S	3-Methylthiophene	114.96			
1354	C ₇ H ₁₄	Ethylcyclopentane	103.45	102.82	3.9	70
1355	C ₇ H ₁₆	Heptane	98.40	Nonazeotrope		70
1356	C ₈ H ₁₆	<i>trans</i> -1,3-Dimethyl- cyclohexane	120.3	113.17	66	70
1357	C ₈ H ₁₆	1,1,2-Trimethylcyclo- pentane	113.75	110.47	43.2	70
1358	C ₈ H ₁₈	Octane	125.70	114.15	82	70
1359	C ₈ H ₁₈	2-Methylheptane	117.70	111.86	58.8	70
1360	C ₈ H ₁₈	2,5-Dimethylhexane	109.15	107.12	31.7	70
A =	C₅H₈	Isoprene	34.3			
1361	C ₅ H ₁₀	3-Methyl-1-butene	21.2	Nonazeotrope		248
1362	C ₅ H ₁₀	2-Methyl-1-butene	32	Nonazeotrope		248
1363	C ₅ H ₁₀	2-Methyl-2-butene	37.7	Nonazeotrope		248
1364	C ₅ H ₁₂	2-Methylbutane	27.6	Nonazeotrope		248
1365	C ₅ H ₁₂	Pentane, 758 mm.	36	33.6	72.5	v-1 248
A =	C₅H₈Cl₄	Tetrachloropentane	...			
1366	C ₇ H ₁₂ Cl ₄	Tetrachloroheptane, 12-150 mm.	...	Nonazeotrope		v-1 250
A =	C₅H₈O	Cyclopentanone	129.5			
1367	C ₅ H ₁₂ O	Active amyl alcohol	128.5	Nonazeotrope		330
1368	C ₅ H ₁₂ O	Isoamyl alcohol	131.85	127.8	60	v-1 87, 88
		"	131.85	129.4	...	314
		"	131.85	Nonazeotrope		2
1369	C ₅ H ₁₂ O	2-Methyl-1-butanol	128.9	127	...	87, 88
		"	128.9	124.6	...	314
A =	C₅H₈O₂	Ethyl Acrylate	99.3			
1370	C ₆ H ₁₄ O	Isopropyl ether	68.3	Nonazeotrope		334
A =	C₅H₈O₂	Methyl Methacrylate	61.8/200 mm.			
1371	C ₈ H ₁₄ O ₂	Butyl methacrylate, 200 mm.	117.7	Nonazeotrope		147
1372	C ₈ H ₁₄ O ₃	2-Ethoxyethyl methacrylate, 200 mm.	134.3	Nonazeotrope		147
A =	C₅H₈O₂	2,4-Pentanedione	140.2			
1373	C ₅ H ₈ O ₂	Isopropenyl acetate	96.5	Nonazeotrope		147
A =	C₅H₁₀	Cyclopentane	49.4			
1374	C ₆ H ₆	Benzene	80.1	Nonazeotrope		v-1 230
1375	C ₆ H ₁₄	2,2-Dimethylbutane	49.7	49.1	82.3	214
A =	C₅H₁₀	3-Methyl-1-butene	22.5			
1376	C ₅ H ₁₂	2-Methylbutane	27.6	Nonazeotrope		248
A =	C₅H₁₀	2-Methyl-2-butene	37.7			
1377	C ₅ H ₁₂	Pentane	36.15	Nonazeotrope		248

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C₅H₁₀O	3-Methyl-2-butanone	95.4			
1378	C ₆ H ₁₂	Cyclohexane	80.75	...	14.8	256
1379	C ₇ H ₁₆	Heptane	98.4	...	48	256
A =	C₅H₁₀O	2-Pentanone	102.35			
1380	C ₆ H ₁₂	Cyclohexane	80.75	...	5.0	256
A =	C₅H₁₀O	3-Pentanone	102			
1381	C ₇ H ₁₄	Methylcyclohexane	101.15	...	40	256
1382	C ₇ H ₁₆	Heptane	98.4	...	35	256
1383	C ₈ H ₁₆	1,3-Dimethylcyclohexane	120.7	...	83	256
1384	C ₈ H ₁₈	2,5-Dimethylhexane	109.4	...	60	256
A =	C₅H₁₀O₂	Isopropyl Acetate	88.7			
1385	C ₆ H ₈ O	2,5-Dimethylfuran	93.3	Nonazeotrope		334
A =	C₅H₁₀O₂	Valeric Acid	186.35			
1386	C ₇ H ₁₅ NO	N,N-Dimethylvaleramide, 100 mm.	141	145.8	30.8	295
A =	C₅H₁₂	Pentane	36.15			
1387	C ₆ H ₆	Benzene	80.2	Nonazeotrope		v-1 52, 229
1388	C ₆ H ₁₂	Cyclohexane	80.75	Nonazeotrope		v-1 231
1389	C ₆ H ₁₂	Methylcyclopentane	72.0	Nonazeotrope		v-1 52, 231
1390	C ₇ F ₁₆	Perfluoroheptane, crit. region	82.5	Azeotrope		v-1 155
1391	C ₇ H ₁₄	Methylcyclohexane	101.15	Nonazeotrope		v-1 52, 231
A =	C₅H₁₂O	Amyl Alcohol	137.8			
1392	C ₆ H ₆	Benzene	80.2	Nonazeotrope		v-1 344
1393	C ₆ H ₁₀ O	Methylcyclopentanone	138	Min. b.p.	87, 88,	314
1394	C ₆ H ₄ N ₂	2,5-Dimethylpiperazine	164	Nonazeotrope		334
1395	C ₈ H ₁₈	C ₈ paraffins	120-130	Min. b.p.		314
1396	C ₈ H ₁₈	Octane	125.75	121.8	...	314
1397	C ₁₁ H ₂₄ O ₂	Diamyloxymethane	...	Nonazeotrope		334
A =	C₅H₁₂O	Active Amyl Alcohol	128.5			
1398	C ₅ H ₁₂ O	Isoamyl alcohol	131	Nonazeotrope		v-1 246
1399	C ₆ H ₅ Cl	Chlorobenzene	132	124.4	43	330
1400	C ₆ H ₅ FO	o-Fluorophenol	...	Nonazeotrope		330
1401	C ₆ H ₇ N	̄-Picoline	129	132.8	49	330
1402	C ₆ H ₁₀ O	Mesityl oxide	129.5	Nonazeotrope		330
1403	C ₇ H ₇ F	o-Fluorotoluene	114	112.0	16	330
1404	C ₇ H ₈	Toluene	111	109.9	12	330
1405	C ₇ H ₉ N	2,6-Lutidine	144	Nonazeotrope		330
1406	C ₇ H ₁₄ O	2,4-Dimethyl-3-pentanone	125	124.1	21	330
1407	C ₇ H ₁₅ N	1,2-Dimethylpiperidine	128	130.3	...	330
1408	C ₇ H ₁₅ N	2,6-Dimethylpiperidine	128	130.7	54	330
1409	C ₈ H ₁₀	Ethylbenzene	136	125.0	53	330
1410	C ₈ H ₁₈	n-Octane	126.0	117.0	34	330
1411	C ₉ H ₂₀	̄,2,5-Trimethylhexane	124	115.5	29	330
A =	C₅H₁₂O	Isoamyl Alcohol	131			
1412	C ₅ H ₁₂ S	3-Methyl-1-butanethiol	116	115.6	22.89	181
1413	C ₆ H ₅ Cl	Chlorobenzene	132	123.9	38	330
1414	C ₆ H ₅ FO	o-Fluorophenol	...	Nonazeotrope		330
1415	C ₆ H ₇ N	̄-Picoline	129	132.8	61	330
1416	C ₆ H ₁₀ O	Mesityl oxide	129.5	Nonazeotrope		330
1417	C ₇ H _n	C ₇ hydrocarbons	95-120	Min. b.p.		314
1418	C ₇ H ₇ F	o-Fluorotoluene	114	112.1	14	330
1419	C ₇ H ₈	Toluene	111	109.7	10	330, 371

TABLE I BINARY SYSTEMS

No.	Formula	B-Component	Azeotropic Data			
		Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C ₅ H ₁₂ O	Isoamyl Alcohol	131			
		(continued)				
1420	C ₇ H ₅ N	2,6-Lutidine, 70 mm.	...	Max. b.p.		330
		"	144	Nonazeotrope		330
1421	C ₇ H ₁₄ O	2,4-Dimethyl-3-pentanone	125	124.5	8	330
1422	C ₇ H ₁₅ N	1,2-Dimethyl-piperidine	128	132.5	81	330
1423	C ₇ H ₁₅ N	2,6-Dimethyl-piperidine	128	132.6	76	330
1424	C ₈ H ₁₀	Ethylbenzene	136	125.7	49	330
1425	C ₈ H ₁₈	n-Octane	126	117.0	30	330
1426	C ₉ H ₂₀	2,2,5-Trimethylhexane	124	116.0	26	330
A =	C ₅ H ₁₂ O	2-Methyl-1-Butanol	128.9			
1427	C ₇ H _n	C ₇ hydrocarbons	95-120	Min. b.p.		314
1428	C ₇ H ₈	Toluene	110.7	Min. b.p.		314
A =	C ₅ H ₁₂ O	2-Methyl-2-butanol	101.7			
1429	C ₆ H ₆	Benzene	80.2	80.0	15	52
		" 715 mm.	...	...	4.95 v-1	272
1430	C ₇ H ₈	Toluene	110.7	100.5	56	52
		" 715 mm.	...	...	32.5 v-1	272
A =	C ₅ H ₁₂ O ₃	2-(2-Methoxyethoxy) ethanol	192.95			
1431	C ₈ H ₆ Cl ₂	<u>ar</u> -Dichlorostyrene,				
		" 15 mm.	...	86-90	...	49
		" 29 mm.	...	100-101	...	49
1432	C ₉ H ₁₂	<u>p</u> -Ethyltoluene	161.99	161.4	9 vol. %	291
1433	C ₉ H ₁₂	<u>m</u> -Ethyltoluene	161.31	160.9	13 vol. %	291
1434	C ₉ H ₁₂	<u>o</u> -Ethyltoluene	165.15	164.3	16 vol. %	291
1435	C ₉ H ₁₂	1,2,3-Trimethylbenzene	176.08	173.4	26 vol. %	291
1436	C ₉ H ₁₂	1,2,4-Trimethylbenzene	169.35	167.9	21 vol. %	291
1437	C ₉ H ₁₂	Mesitylene	164.72	163.8	12 vol. %	291
1438	C ₁₀ H ₁₄	Butylbenzene	183.27	177.9	32 vol. %	291
1439	C ₁₀ H ₁₄	<u>sec</u> -Butylbenzene	173.30	170.7	16 vol. %	291
1440	C ₁₀ H ₁₄	<u>tert</u> -Butylbenzene	169.11	167.6	13 vol. %	291
1441	C ₁₀ H ₁₄	Isobutylbenzene	172.76	170.3	24 vol. %	291
1442	C ₁₀ H ₁₄	<u>m</u> -Diethylbenzene	181.13	176.3	29 vol. %	291
1443	C ₁₀ H ₁₄	<u>p</u> -Diethylbenzene	183.78	177.9	31 vol. %	291
1444	C ₁₀ H ₁₄	5-Ethyl- <u>m</u> -xylene	183.75	177.9	30 vol. %	291
1445	C ₁₀ H ₁₄	<u>p</u> -Cymene	177.10	173.3	22 vol. %	291
1446	C ₁₀ H ₁₄	1,2,3,5-Tetramethylbenzene	197.93	185.9	48 vol. %	291
1447	C ₁₁ H ₁₀	2-Methylnaphthalene	241.1	Nonazeotrope		98
1448	C ₁₁ H ₁₆	<u>tert</u> -Amylbenzene	198.1	182.8	40 vol. %	291
1449	C ₁₁ H ₂₂	<u>tert</u> -Amylcyclohexane	198.1	180.6	40 vol. %	291
1450	C ₁₁ H ₂₄	<u>n</u> -Undecane	195.88	178.7	40 vol. %	291
1451	C ₁₂ H ₂₆	<u>n</u> -Dodecane, 217 mm.	169.79	144.2	52 vol. %	291
1452	C ₁₂ H ₂₆	2,2,4,4,6-Pentamethylheptane	185.6	173.6	30 vol. %	291
1453	C ₁₂ H ₂₆	2,2,4,6,6-Pentamethylheptane	177.9	168.9	23 vol. %	291
1454	C ₁₃ H ₂₆	1-Tridecene	232.78	191.6	70 vol. %	291
A =	C ₆ F ₁₂ O	Perfluorocyclic Ether	...			
1455	C ₆ F ₁₄	Perfluorohexane, 25°	...	Nonazeotrope	v-1	237
A =	C ₆ F ₁₄	Perfluorohexane	...			
1456	C ₆ H ₁₄	Hexane, 325 mm.	...	25	83.4 v-1	79
		" 479 mm.	...	35	83.7 v-1	79
		" 689 mm.	...	45	80.0 v-1	79

		B-Component		Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.	
A =	C_6F_{14}	Perfluorohexane	...				
	1457 $C_{12}F_{27}N$	(continued) Tris(perfluorobutyl) amine, 25°	...	...	Nonazeotrope	v-1	237
A =	$C_6H_3Cl_3$	1,2,4-Trichlorobenzene	...				
	1458 $C_9H_6N_2O_2$	2,4-Tolylene diisocyanate, 40 mm.	...	...	Nonazeotrope	v-1	119
A =	$C_6H_4Cl_2$	o-Dichlorobenzene	67.0/15				
	1459 $C_9H_6O_2N_2$	2,4-Tolylene diisocyanate, 15 mm.	128.7	...	Nonazeotrope		147
	1460 $C_{15}H_{10}O_2N_2$	Di-p-isocyanatodi- phenylmethane, 5 mm.	192.0	...	Nonazeotrope		147
A =	C_6H_5Br	Bromobenzene	156.1				
	1461 $C_6H_{12}O$	Cyclohexanol, 250 mm.	127.0	113.6	85.5	v-1	318
		" 500 mm.	144.4	136.8	81.5	v-1	318
		" 730 mm.	158.6	150.6	74.8	v-1	318
A =	C_6H_5Cl	Chlorobenzene	131.8				
	1462 C_6H_{14}	n-Hexane	68.95	...	Nonazeotrope		52
	1463 $C_9H_6N_2O_2$	2,4-Tolylene diiso- cyanate, 40 mm.	...	...	Nonazeotrope	v-1	119
A =	C_6H_5F	Fluorobenzene	84.9				
	1464 C_6H_6	Benzene	80.1	...	Ideal system	v-1	12
A =	$C_6H_5NO_2$	Nitrobenzene	210.85				
	1465 C_6H_{12}	Cyclohexane	80.75	...	Nonazeotrope		52
A =	C_6H_6	Benzene	80.1				
	1466 C_6H_{12}	Cyclohexane	80.75	77.6	51.2	v-1	44, 191, 343
		"	80.75	77.4	52.5		74, 111
		" 128 mm.	...	28.4	47.6		316
		" 155 mm.	...	33.1	48.0		316
		" 287 mm.	...	48.3	49.3		316
		" 307 mm.	...	50.4	49.4		316
		" 495 mm.	...	63.7	50.8		316
		" 602 mm.	...	69.8	51.3		316
		" 760 mm.	...	77.56	51.9		316
		" 14.7 p.s.i.a.	...	77.4	50.2	v-1	321
		" 66.7 p.s.i.a.	...	137.1	61.5	v-1	321
		" 118.0 p.s.i.a.	...	165.8	67.0	v-1	321
		" 186.8 p.s.i.a.	...	193.0	71.5	v-1	321
		" 66.7 p.s.i.a.	...	...	59.7	v-1	276
		" 116.5 p.s.i.a.	...	...	64.9	v-1	276
		" 165.9 p.s.i.a.	...	...	67.6	v-1	276
		" 217.0 p.s.i.a.	...	...	71	v-1	276
		" 268.7 p.s.i.a.	...	...	74	v-1	276
	1467 C_6H_{12}	Methylcyclopentane	71.85	71.7	16	v-1	230
	1468 $C_6H_{12}O$	4-Methyl-2-pentanone, 450-760 mm.	...	...	Nonazeotrope	v-1	66
	1469 C_6H_{14}	Hexane	68.95	...	Nonazeotrope	v-1	229
		" 4-18 atm.	...	...	Nonazeotrope	v-1	276
	1470 C_7F_{14}	Perfluoromethylcyclo- hexane	73-78	59	...		51
	1471 C_7F_{16}	Perfluoroheptane	83	61	...		51
	1472 C_7H_{14}	Methylcyclohexane	101.05	...	Nonazeotrope	v-1	230
	1473 C_7H_{16}	2,3-Dimethylpentane	89.79	79.4	78.8	v-1	190
	1474 C_7H_{16}	2,4-Dimethylpentane	81	> 75	48.4		51
	1475 C_7H_{16}	Heptane, 180-450 mm.	...	...	Nonazeotrope	v-1	240
		"	98.4	...	Nonazeotrope	v-1	229

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_6H_6	Benzene (continued)	80.1			
1476	$C_8F_{18}O$	Perfluorobutyl ether	100	68	...	51
1477	C_8H_{18}	Octane	125.75	Nonazeotrope		52
1478	C_8H_{18}	2,2,4-Trimethyl- pentane, 35°-75° C.	...	Nonazeotrope		v-1 345
1479	$C_8H_{18}O_3$	2-(2-Butoxyethoxy) ethanol	230.6	Nonazeotrope		334
A =	C_6H_6O	Phenol	181.42			
1480	$C_6H_{10}O$	Cyclohexanone, 50 mm.	73	...	71.5	76
		"	155.6	Azeotropic		57
		" 50 mm.	...	Max. b.p.	75.8	334
1481	$C_6H_{10}O_4$	Ethylene diacetate	189.86	195.53	39.2	253
1482	$C_6H_{12}O$	Cyclohexanol, 60 mm.	...	111	70	76
		" 70 mm.	...	111	73	57
		" 90 mm.	...	120	70	v-1 57
		" 200 mm.	...	140	71	76
		"	160.65	180	87	76
1483	$C_8H_8O_2$	Phenyl acetate	195.14	195.89	8.9	253
1484	$C_8H_{18}O$	2-Ethyl-1-hexanol, 25 mm.	...	95.6	95	34, 335
1485	C_9H_{10}	α -Methylstyrene	...	162	7	303
1486	C_9H_{12}	Cumene	152.8	149	2	76
1487	C_9H_{12}	Propylbenzene	158.9	158.5	14	324
1488	$C_9H_{14}SiO$	(Trimethylsiloxy) benzene	181.9	175.5	...	193
A =	$C_6H_6O_2$	Pyrocatechol	245.9			
1489	$C_{12}H_{18}$	1,3,5-Triethylbenzene	215.5	214.7	8.9	324
A =	C_6H_7N	Aniline	184.35			
1490	$C_6H_{12}O$	Cyclohexanol	...	Nonazeotrope		v-1 242
1491	$C_6H_{13}N$	Cyclohexylamine	134	Nonazeotrope		147, 242
1492	C_6H_{14}	Hexane, 556-731 mm.	...	Nonazeotrope		v-1 356
1493	C_7H_8	Toluene	110.7	...	...	v-1 138
1494	C_7H_9N	<u>N</u> -Methylaniline, 95°-145°	...	Nonazeotrope		v-1 59
1495	C_7H_{16}	Heptane	98.4	...	...	v-1 138
1496	$C_8H_{11}N$	<u>N,N</u> -Dimethylaniline, 36.7 mm.	...	95	74.5	v-1 59
		" 101.4 mm.	...	120	76.1	v-1 59
		" 243.1 mm.	...	145	77.5	v-1 59
1497	C_8H_{18}	Iso-octane, 86-741 mm.	...	Nonazeotrope		v-1 356
1498	$C_{10}H_{14}$	<u>p</u> -Cymene, 50 mm.	...	...	21.3	v-1 92
		" 100 mm.	...	106.3	23	v-1 92
		" 300 mm.	...	...	...	v-1 92
		" 500 mm.	...	...	...	v-1 92
		" 760 mm.	...	172.80	31.3	v-1 92
A =	C_6H_7N	2-Picoline	128.8			
1499	$C_6H_{12}O_3$	Paraldehyde	124.5	Nonazeotrope		334
1500	C_8H_{18}	Octane	125.75	121.12	42	369
1501	C_9H_{20}	Nonane	150.7	129.2	84.1	369
A =	C_6H_7N	3-Picoline	144			
1502	C_7H_9N	2,6-Lutidine	144.06	143.5	27.3	v-1 27
A =	C_6H_8ClN	Aniline Hydro- chloride	...			
1503	$C_{12}H_{11}N$	Diphenylamine, 100 mm.	...	...	45.8	153
		" 250 mm.	...	...	48	153
		" 350 mm.	265	215	50	153
		" 740 mm.	...	233	65	153
		" 2500 mm.	...	270	...	153

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_6H_8N_2$	2-Amino-3-methyl-pyridine	221			
1504	$C_{11}H_{10}$	1-Methylnaphthalene,				
		20 mm.	...	115	68.2	98, 99
		" 50 mm.	...	136	75.2	98, 99
		" 150 mm.	...	166	89.7	98, 99
		" 290 mm.	...	187	96.4	98, 99
		" 400 mm.	...	198	98.7	98, 99
		" 760 mm.	244.8	Nonazeotrope		98, 99
1505	$C_{11}H_{10}$	2-Methylnaphthalene,				
		16 mm.	...	109	57.5	98, 99
		" 50 mm.	...	137	69.5	98, 99
		" 150 mm.	...	165	76.8	98, 99
		" 400 mm.	...	196	92	98, 99
		" 550 mm.	...	209	96	98, 99
		" 760 mm.	241.1	Nonazeotrope		98, 99
A =	$C_6H_{10}O$	Cyclohexanone	155.6			
1506	$C_6H_{12}O$	Cyclohexanol, 100 mm.	...	Nonazeotrope		v-1 57
A =	$C_6H_{10}O$	Mesityl Oxide	128.3			
1507	$C_6H_{12}O$	4-Methyl-2-pentanone	116.2	Nonazeotrope		334
1508	$C_6H_{12}O_2$	4-Hydroxy-4-methyl-2-pentanone	169.2	Nonazeotrope		334
1509	$C_7H_{12}O$	3-Hepten-2-one	162.9	Nonazeotrope		334
1510	$C_9H_{16}O_2$	4-Methyl-2-pentyl acetate	146.1	Nonazeotrope		334
1511	$C_9H_{18}O$	2,6-Dimethyl-4-heptanone	169.4	Nonazeotrope		334
A =	C_6H_{12}	Cyclohexane	80.85			
1512	$C_6H_{12}O$	Cyclohexanol	161.1	Nonazeotrope		334
1513	$C_6H_{12}O$	4-Methyl-2-pentanone,				
		450-760 mm.	...	Nonazeotrope		v-1 66
1514	$C_6H_{13}N$	Cyclohexylamine	...	Nonazeotrope		v-1 242
1515	C_6H_{14}	Hexane	68.95	Nonazeotrope		v-1 231
1516	C_7H_8	Toluene	110.7	Nonazeotrope		v-1 230
1517	C_7H_{16}	2,4-Dimethylpentane	80.5	80.2	48.6	214
1518	C_7H_{16}	Heptane	98.4	...	...	v-1 52,
						231
1519	C_7H_{16}	2,2,3-Trimethylbutane	80.8	80.0	46.6	214
A =	C_6H_{12}	Methylcyclopentane	71.72			
1520	C_6H_{14}	Hexane, 200-760 mm.	68.95	Nonazeotrope		v-1 85,
						231
1521	C_7H_8	Toluene	110.7	Nonazeotrope		v-1 230
A =	$C_6H_{12}O$	Cyclohexanol	161			
1522	$C_7H_{12}O_2$	Cyclohexyl formate,				
		50 mm.	...	79.4	50	147
1523	$C_8H_{14}O$	Cyclohexyl vinyl ether,				
		45 mm.	...	71-80	21	341
A =	$C_6H_{12}O$	4-Methyl-2-pentanone	116.2			
1524	$C_8H_{16}O_2$	4-Methyl-2-pentyl acetate	146.1	Nonazeotrope		334
1525	$C_9H_{18}O$	2,6-Dimethyl-4-heptanone	169.4	Nonazeotrope		334
A =	$C_6H_{12}O_2$	Butyl Acetate	126.1			
1526	$C_6H_{12}O_2$	sec-Butyl acetate	112.2	Nonazeotrope		334
1527	$C_6H_{14}O_2$	2-Butoxyethanol	171.1	Nonazeotrope		334
1528	$C_8H_{18}O$	Butyl ether	142.1	125.9	95	334

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_6H_{12}O_2$	Hexanoic Acid	205.15			
1529	$C_8H_{16}O_2$	Octanoic acid, 20-100 mm.	...	Nonazeotrope	v-1	289
1530	$C_8H_{17}NO$	<u>N,N</u> -Dimethylhexan- amide, 100 mm.	...	Max. b.p.		
A =	$C_6H_{12}O_2$	4-Hydroxy-4-methyl 2-Pentanone	166			
1531	C_9H_{12}	<u>x</u> -Ethyltoluene, 20 mm.	...	<80	25	353
A =	$C_6H_{12}SO_2$	2,4-Dimethylsulfolane	...			
1532	$C_{15}H_{18}$	Amyl naphthalene, 20 mm.	...	151	75	225
1533	$C_{16}H_{34}$	Hexadecane, 20 mm.	...	142	75	225
A =	$C_6H_{12}O_3$	2-Ethoxyethyl Acetate	156.2			
1534	C_7H_8	Toluene	110.6	Nonazeotrope		334
A =	$C_6H_{12}O_3$	Paraldehyde	124			
1535	C_8H_{10}	<u>m</u> -Xylene	139	Nonazeotrope		113
1536	C_8H_{10}	<u>p</u> -Xylene	138.4	Nonazeotrope		113
A =	C_6H_{14}	Hexane	68.95			
1537	C_7F_{16}	Perfluoroheptane, crit. region	...	Azeotropic	v-1	155
1538	C_7H_8	Toluene	110.7	Nonazeotrope		52
		" 150-760 mm.	...	Nonazeotrope	v-1	229
1539	C_7H_{14}	Methylcyclohexane	101.15	Nonazeotrope	v-1	52, 231
A =	$C_6H_{14}O$	2-Ethyl-1-butanol	147.0			
1540	$C_8H_{16}O$	2-Ethylhexaldehyde	163.6	Nonazeotrope		334
1541	$C_8H_{17}Cl$	3-(Chloromethyl) heptane, 50 mm.	89	77	61	335
		" 100 mm.	106.9	92	68	335
A =	$C_6H_{14}O$	Hexyl Alcohol	157.1			
1542	$C_8H_{16}O_2$	2-Ethylbutyl acetate	162.3	154.4	72.5	335
A =	$C_6H_{14}O$	Isopropyl Ether	68.3			
1543	$C_6H_{14}O_2$	1,2-Diethoxyethane	121.1	Nonazeotrope		334
A =	$C_6H_{14}O$	4-Methyl-2-pentanol	131.8			
1544	$C_8H_{16}O_2$	4-Methyl-2-pentyl acetate	146.1	Nonazeotrope		334
A =	$C_6H_{14}OS$	2-Butylthioethanol	...			
1545	$C_8H_{16}OS$	2-Butylthioethyl vinyl ether	...	Min. b.p.		329
A =	$C_6H_{14}O_2$	2-Butoxyethanol	171.2			
1546	C_9H_{12}	Cumene	152.4	151.7	10.3	168
1547	C_9H_{16}	<u>cis</u> -Hexahydroindan	167.7	159.9	38 vol. %	291
1548	$C_{10}H_{14}$	Butylbenzene	183.4	169.6	73.4	168
1549	$C_{10}H_{14}$	<u>sec</u> -Butylbenzene	173.3	166.0	47.9	168
1550	$C_{10}H_{14}$	<u>tert</u> -Butylbenzene	169.1	164.4	39.1	168
1551	$C_{10}H_{14}$	<u>p</u> -Cymene	177.2	167.4	56.6	168
1552	$C_{10}H_{20}$	<u>n</u> -Butylcyclohexane	180.95	165.6	56 vol. %	291
1553	$C_{10}H_{20}$	<u>sec</u> -Butylcyclohexane	179.3	165.1	53 vol. %	291
1554	$C_{10}H_{20}$	Isobutylcyclohexane	171.3	161.5	40 vol. %	291
1555	$C_{10}H_{20}$	<u>cis</u> -1-Methyl-4- isopropylcyclo- hexane	172.7	162.0	45 vol. %	291
1556	$C_{10}H_{20}$	<u>trans</u> -1-methyl-4- isopropylcyclo- hexane	170.5	160.9	41 vol. %	291

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_6H_{14}O_2$	2-Butoxyethanol (continued)	171.2			
1557	$C_{10}H_{22}$	3,3,5-Trimethyl- heptane	155.5	151.6	23 vol. %	291
A =	$C_6H_{14}O_2$	Hexylene Glycol	...			
1558	C_8H_{10}	Ethylbenzene, 400 mm.	...	Nonazeotrope	v-1	271
1559	C_8H_{16}	Ethylcyclohexane, 400 mm.	...	Nonazeotrope	v-1	271
A =	$C_6H_{14}O_3$	Dipropylene Glycol	...			
1560	$C_{10}H_8$	Naphthalene	218.1	142.9	12.4	v-1 204
1561	$C_{11}H_{10}$	2-Methylnaphthalene	241.1	Nonazeotrope		98
A =	$C_6H_{14}O_3$	2-(2-Ethoxyethoxy) ethanol	202.8			
1562	$C_8H_{18}O_3$	Bis(2-ethoxyethyl) ether	188.4	Nonazeotrope		334
		" 10 mm.	72	Nonazeotrope		334
1563	$C_{11}H_{10}$	2-Methylnaphthalene	241.1	Nonazeotrope		98
A =	$C_6H_{14}O_3$	Triethylene Glycol	288.7			
1564	$C_{12}H_9N$	Carbazole	294	Nonazeotrope		100
		" Low press.	...	Min. b.p.		100
1565	$C_{12}H_{10}O$	Phenyl ether, 4 mm.	102	Nonazeotrope		334
1566	$C_{13}H_{10}$	Fluorene	294	Nonazeotrope		100
		" High press.	...	Min. b.p.		100
1567	$C_{14}H_{10}$	Phenanthrene, Low press.	340	Min. b.p.		100
1568	$C_{14}H_{14}O$	Glycol decreases with Benzyl ether, 5 mm.	145.5	... 28		335
A =	$C_6H_5NO_2$	1,1'-Iminodi-2-propanol	133/10			
1569	$C_9H_{21}NO_3$	1,1',1''-Nitrilotri-2- propanol, 10 mm.	177	Nonazeotrope		334
A =	C_7F_{16}	Perfluoroheptane	82.5			
1570	C_7H_{16}	Heptane, crit. region	...	Azeotropic	v-1	155
1571	$C_8F_{16}O$	Perfluorocyclic oxide	102.6	Nonazeotrope	v-1	354
1572	C_8H_{18}	Octane, crit. region	...	Azeotropic	v-1	155
1573	C_9H_{20}	Nonane, crit. region	...	Nonazeotrope	v-1	155
A =	$C_7H_5O_2$	Benzoic Acid	189/100 mm.			
1574	$C_{12}H_{10}O$	Phenyl ether, 100 mm.	181	176.5	27	76
A =	C_7H_8	Toluene	110.7			
1575	C_7H_8O	p-Cresol	201.7	Nonazeotrope	v-1	213
1576	C_7H_{14}	Methylcyclohexane	101.1	Nonazeotrope	v-1	114, 309
		" 60°-100° C.	...	Evaporation data		297
1577	C_7H_{16}	Heptane	98	Evaporation data	v-1	114
1578	$C_8H_{11}N$	2-Methyl-5-ethyl- pyridine	178.3	Nonazeotrope		334
1579	C_8H_{18}	Iso-octane	...	Nonazeotrope	v-1	266
1580	C_8H_{18}	2,2,4-Trimethylpentane	99.3	Nonazeotrope	v-1	52
1581	$C_{10}H_{22}O$	Decyl alcohol (isomers)	217.3	Nonazeotrope		334
1582	$C_{12}H_{26}O$	2,6,8-Trimethyl- 4-nonanol	225.5	Nonazeotrope		334
A =	C_7H_8O	Benzyl Alcohol	205.2			
1583	$C_9H_{10}O$	Benzyl vinyl ether, 25 mm.	...	103	-	341
A =	C_7H_8O	m-Cresol	202.2			
1584	$C_9H_{10}O_2$	Ethyl benzoate	212.4	...	26.6	112

No.	Formula	B-Component		Azeotropic Data		
		Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C ₇ H ₈ O	<u>o</u> -Cresol	191			
1585	C ₈ H ₁₁ N	<u>s</u> -Collidine	171.30	197.20	63.0	188
A =	C ₇ H ₈ O	<u>x</u> -Cresol	202			
1586	C ₇ H ₉ N	Pyridine bases	163	204.9	78	367
1587	C ₇ H ₉ N	Pyridine bases	157	204.4	80	367
1588	C ₇ H ₉ N	Pyridine bases	142-5	202.5	90	367
A =	C ₇ H ₈ O	<u>m,p</u> -Cresols	202			
1589	C ₁₀ H ₈	Naphthalene	218.1	202	71.8	212
1590	C ₁₁ H ₁₀	2-Methylnaphthalene	241.15	Nonazeotrope		98
A =	C ₇ H ₈ O	<u>p</u> -Cresol	201.7			
1591	C ₉ H ₁₀ O ₂	Ethyl benzoate	212.4	...	24.5	112
A =	C ₇ H ₉ N	<u>N</u> -Methylaniline	196.25			
1592	C ₈ H ₁₁ N	<u>N,N</u> -Dimethyl-aniline, 95°-145°	...	Nonazeotrope		v-1 59
A =	C ₇ H ₉ N	2,6-Lutidine	143.41			
1593	C ₁₀ H ₂₂	Decane	174.0	Nonazeotrope		v-1 358
A =	C ₇ H ₉ N	<u>o</u> -Toluidine	200.7			
1594	C ₁₁ H ₁₇ N	Diethyl- <u>o</u> -toluidine, 20 mm.	...	95.8	48	173
A =	C ₇ H ₁₄	Methylcyclohexane	100.93			
1595	C ₇ H ₁₆	Heptane	98	Nonazeotrope		v-1 114, 309
1596	C ₈ F ₁₆ O	Perfluorocyclic oxide	102.5	85	40 vol. %	207
A =	C ₇ H ₁₄ O ₂	Heptanoic Acid	222.0			
1597	C ₉ H ₁₉ NO	<u>N,N</u> -Dimethylheptan- amide	...	Max. b.p.		295
A =	C ₇ H ₁₆	Heptane	98			
1598	C ₈ F ₁₈ O	Perfluorobutyl ether	100	Min. b.p.		50
1599	C ₈ H ₁₀	Ethylbenzene	136.15	Nonazeotrope		52
		" 100-760 mm.	...	Nonazeotrope		v-1 229
1600	C ₈ H ₁₈	2,2,4-Trimethylpentane	99.3	Nonazeotrope		52
A =	C ₇ H ₁₆ O ₃	Dipropylene Glycol Methyl Ether	...			
1601	C ₁₁ H ₁₀	2-Methylnaphthalene	241.15	Nonazeotrope		98
A =	C ₈ F ₁₆ O	Perfluorocyclic Oxide	102.5			
1602	C ₈ H ₁₆	Ethylcyclohexane	131.78	96.3	80 vol. %	207
1603	C ₈ H ₁₈	2,2,4-Trimethylpentane	99.24	87.5	60 vol. %	207
1604	C ₉ H ₂₀	2,3,4-Trimethylhexane	131.34	98.4	80 vol. %	207
A =	C ₈ H ₅ Cl ₃	<u>ar</u> -Trichlorostyrene	...			
1605	C ₉ H ₂₀ O ₃	2-(2-Isoamyloxyethoxy) ethanol, 6.7 mm.	...	101	...	49
A =	C ₈ H ₈	Styrene	145			
1606	C ₈ H ₁₀	Ethylbenzene, 10-100 mm.	...	Nonazeotrope		v-1 40, 110
		" 30°-120° C.	...	Nonazeotrope		v-1 156
1607	C ₈ H ₁₀	Xylene, 20 mm.	50	Nonazeotrope		334
A =	C ₈ H ₈ O ₃	Methyl Salicylate	222.3			
1608	C ₁₁ H ₁₀	2-Methylnaphthalene	241.15	Nonazeotrope		98

No.	B-Component		Azeotropic Data			
	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C_8H_{10}	Ethylbenzene	136.15			
1609	C_8H_{16}	Ethylcyclohexane, 400 mm.	...	Nonazeotrope	v-1	271
1610	C_8H_{16}	1-Octene	121.6	Nonazeotrope	v-1	342
1611	C_8H_{18}	Octane	125.75	Nonazeotrope		52
1612	C_9H_{12}	Cumene	152.4	Nonazeotrope		334
1613	C_9H_{20}	Nonane	150.7	Nonazeotrope		363
1614	C_9H_{20}	2,2,5-Trimethylhexane	120.1	Nonazeotrope	v-1	342
A =	C_8H_{10}	m-Xylene	139			
1615	$C_8H_{18}O$	2-Ethyl-1-hexanol	184.8	Nonazeotrope		334
1616	$C_9H_{18}O$	2-Ethylheptanal	...	139.0	96.1	52
A =	C_8H_{10}	o-Xylene	143.6			
1617	C_9H_{20}	Nonane	150.7	144.25	81	372
A =	C_8H_{10}	p-Xylene	138.4			
1618	C_8H_{18}	Octane	125.75	Nonazeotrope		52
A =	$C_8H_4O_3$	Bis(2-vinyl-oxyethyl) Ether	196.5/10 mm.			
1619	$C_8H_{18}O_3$	Bis(2-ethoxyethyl) ether, 10 mm.	187.8	Nonazeotrope	v-1	69
A =	$C_8H_{16}O_2$	1,3-Dimethylbutyl Acetate	146.1			
1620	$C_9H_{18}O$	2,6-Dimethyl-4- heptanone	169.4	Nonazeotrope		334
A =	$C_8H_{16}O_2$	2-Ethylhexanoic Acid	...			
1621	$C_{11}H_{10}$	2-Methylnaphthalene	241.15	...	<50	98
A =	$C_8H_{16}O_2$	Octanoic Acid	238.5			
1622	$C_{10}H_{21}NO$	N,N-Dimethyloctan- amide, 100 mm.	187	190	26.0	295
A =	$C_8H_{16}O_3$	2-(2-Ethoxyethoxy) Ethyl Acetate	...			
1623	$C_{11}H_{10}$	2-Methylnaphthalene	241.15	Nonazeotrope		98
A =	$C_8H_{17}Cl$	3-(Chloromethyl) heptane	106.9/100 mm.			
1624	$C_8H_{18}O$	2-Ethyl-1-hexanol, 100 mm.	124.8	106	98	335
A =	$C_8H_8Cl_2Sn$	Dibutyltin Dichloride	157/17			
1625	$C_{12}H_{27}ClSn$	Tributyltin chloride, 17 mm.	166	Nonazeotrope		334
A =	$C_8H_{18}O$	Butyl Ether	142.1			
1626	$C_8H_{18}O$	2-Ethyl-1-hexanol	184.8	Nonazeotrope		334
A =	$C_8H_{18}O$	2-Ethyl-1-hexanol	184.8			
1627	C_9H_{20}	Nonane	150.8	Nonazeotrope		334
1628	$C_{10}H_{20}O_2$	2-Ethylhexyl acetate	198.4	Nonazeotrope		334
1629	$C_{11}H_{25}N$	(2-Ethylhexyl) propylamine, 50 mm.	147	Nonazeotrope		334
A =	$C_8H_{18}O$	Octyl Alcohol	195.15			
1630	$C_{10}H_{20}O$	Octyl vinyl ether, 5 mm.	64	64	17	341
A =	$C_8H_{18}OS$	2-Hexylthioethanol	...			
1631	$C_{10}H_{20}OS$	2-Hexylthioethyl vinyl ether	...	Min. b.p.		329

TABLE I BINARY SYSTEMS

No.	Formula	B-Component		Azeotropic Data		
		Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_8H_{18}O_2$	2-Ethyl-1,3-hexanediol	243.1			
1632	$C_{16}H_{34}O$	Bis(2-ethylhexyl)ether, 10 mm.	135	123	40	335
		"	269.8	241	-	335
A =	$C_8H_{18}O_3$	2-(2-Butoxyethoxy) ethanol	231.2			
1633	$C_{10}H_8$	Naphthalene, 100 mm.	144.35	Nonazeotrope		v-1 144
1634	$C_{11}H_{10}$	1-Methylnaphthalene, 20 mm.	...	...	46.8	98
		" 100 mm.	...	...	64.3	98
		" 200 mm.	...	...	74	98
1635	$C_{11}H_{10}$	2-Methylnaphthalene, 20 mm.	...	...	38	98
		" 100 mm.	...	...	53.5	98
		"	241.15	...	82	98
1636	$C_{12}H_{26}$	Dodecane, 100 mm.	146.2	142.6	34	v-1 144
1637	$C_{15}H_{30}$	1-Pentadecene, 217 mm.	183.7	185.16	87 vol. %	291
A =	$C_9F_{21}N$	Tris(perfluoropropyl) amine	130			
1638	C_9H_{12}	Cumene	152	116	...	51
A =	$C_9H_6N_2O_2$	2,4-Tolylene Diisocyanate	...			
1639	$C_9H_6N_2O_2$	2,6-Tolylene diisocyanate, 5-60 mm.	...	Nonazeotrope		v-1 53
A =	C_9H_7N	Isoquinoline				
1640	$C_{11}H_{10}$	2-Methylnaphthalene	241.15	...	<50	98
A =	C_9H_7N	Quinoline	237.3			
1641	$C_{11}H_{10}$	2-Methylnaphthalene	241.15	...	>50	98
A =	$C_9H_{10}O_3$	Ethyl Salicylate	233.7			
1642	$C_{12}H_{10}O$	Phenyl ether, 5 mm.	...	Nonazeotrope		v-1 118
		" 50 mm.	...	Nonazeotrope		v-1 118
		" 180 mm.	...	Nonazeotrope		v-1 118
A =	C_9H_{12}	Cumene	...			
1643	$C_{12}F_{27}N$	Tris(perfluorobutyl) amine	177	138	...	51
A =	C_9H_{12}	Mesitylene	164.7			
1644	C_9H_{12}	1,2,4-Trimethylbenzene	169.2	Nonazeotrope		96
A =	$C_9H_{12}OS$	2-Benzylthioethanol	...			
1645	$C_{11}H_{14}OS$	2-Benzylthioethyl vinyl ether	...	Min. b.p.		329
A =	$C_9H_{14}O$	Isophorone	...			
1646	$C_{11}H_{10}$	2-Methylnaphthalene	241.15	Nonazeotrope		98
A =	C_9H_{18}	Propylcyclohexane	156.72			
1647	$C_{12}F_{27}N$	Perfluorotributylamine	178.4	145.4	55 vol. %	207
A =	C_9H_{20}	Nonane	151			
1648	$C_{12}F_{27}N$	Perfluorotributylamine	177	Min. b.p.		50

		B-Component	Azeotropic Data			
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	C ₉ H ₂₀ O	2,6-Dimethyl-4-heptanol	104/52			
1649	C ₁₂ H ₂₄	2,6,8-Trimethylnonene, 8 mm.	...	56	18	334
		" 52 mm.	...	95	32	334
A =	C ₉ H ₂₀ O ₄	Tripropylene Glycol	...			
1650	C ₁₂ H ₉ N	Carbazole	294	Nonazeotrope		100
		" Low press.	...	Min. b.p.		100
1651	C ₁₃ H ₁₀	Fluorene, high press.	...	Min. b.p.		100
		" Low press.	...	Nonazeotrope		100
1652	C ₁₄ H ₁₀	Phenanthrene	-	Min. b.p.		100
		"		% glycol decreases with decreasing pressure		100
A =	C ₁₀ H ₈	Naphthalene	218.1			
1653	C ₁₂ H ₂₆	Dodecane, 100 mm.	...	140.2	59.2	v-1 144, 204
A =	C ₁₀ H ₁₈	Decahydronaphthalene	...			
1654	C ₁₀ H ₂₂	Decane, 10 mm.	...	Nonazeotrope		v-1 309
		" 20 mm.	...	Nonazeotrope		v-1 309
		" 50 mm.	...	Nonazeotrope		v-1 309
A =	C ₁₀ H ₁₈ O	Menthone	209.5			
1655	C ₁₀ H ₂₀ O	Menthol, 5 mm.	...	Nonazeotrope		v-1 118
		" 50 mm.	...	Nonazeotrope		v-1 118
		" 180 mm.	...	Nonazeotrope		v-1 118
A =	C ₁₀ H ₂₂	3,3,5-Trimethylheptane	155.68			
1656	C ₁₂ F ₂₇ N	Perfluorotributylamine	178.4	147.3	55 vol. %	207
A =	C ₁₀ H ₂₂ O	Decyl Alcohol	232.9			
1657	C ₁₂ H ₂₆ O	Dodecyl alcohol, 20, 50, 100, 300 mm.	...	Ideal system		v-1 290
A =	C ₁₀ H ₂₂ OS	2-(2-Ethylhexylthio)ethanol	...			
1658	C ₁₂ H ₂₄ OS	2-(2-Ethylhexylthio)ethyl vinyl ether	...	Min. b.p.		329
A =	C ₁₀ H ₂₂ O ₄	Tripropylene Glycol Methyl Ether	...			
1659	C ₁₁ H ₁₀	2-Methylnaphthalene	241.15	...	<50	98
A =	C ₁₁ H ₁₀	1-Methylnaphthalene	244.8			
1660	C ₁₁ H ₂₄ O	5-Ethyl-2-nonanol, 19 mm.	...	121	41.4	98, 99
		" 50 mm.	...	143	25.2	98, 99
		" 150 mm.	...	173	5.25	98, 99
		" 200 mm.	...	179.5	2	98, 99
		" 400 mm.	...	Nonazeotrope		98, 99
A =	C ₁₁ H ₁₀	2-Methylnaphthalene	241.1			
1661	C ₁₁ H ₂₄ O	5-Ethyl-2-nonanol, 20 mm.	...	120	49.8	98, 99
		" 50 mm.	...	140.5	36.0	98, 99
		" 90 mm.	...	157	24.5	98, 99
		" 200 mm.	...	181.5	9.0	98, 99
		" 300 mm.	...	193.5	3.5	98, 99
		" 400 mm.	...	Nonazeotrope		98, 99

TABLE I BINARY SYSTEMS

		B-Component		Azeotropic Data		
No.	Formula	Name	B.P., °C.	B.P., °C.	Wt.%A	Ref.
A =	$C_{12}H_9N$	Carbazole	355			
1662	$C_{14}H_{30}O$	Tetradecanol	...	Nonazeotrope		100
		" Low press.	...	Min. b.p.		100
1663	$C_{17}H_{36}O$	Heptadecanol	...	Nonazeotrope		100
		" Low press.	...	Min. b.p.		100
A =	$C_{12}H_{10}$	Biphenyl	255.9			
1664	$C_{24}H_{38}O_4$	Diocetyl phthalate, 10 mm.	248	Nonazeotrope		334
A =	$C_{12}H_{24}$	2,6,8-Trimethylnonene	...			
1665	$C_{12}H_{26}O$	2,6,8-Trimethyl- 4-nonanol, 50 mm.	137	Nonazeotrope		334
		" 10 mm.	103	Nonazeotrope		334
A =	$C_{12}H_{26}$	Dodecane	216			
1666	$C_{16}H_{34}$	Hexadecane, 10-760 mm.	...	Nonazeotrope	v-1	163
A =	$C_{13}H_{10}$	Fluorene	294			
1667	$C_{14}H_{30}O$	Tetradecanol, " Low press.	...	Nonazeotrope		100
		" High press.	...	Min. b.p.		100
1668	$C_{17}H_{36}O$	Heptadecanol, " Low press.	...	Nonazeotrope		100
		" High press.	...	Min. b.p.		100
A =	$C_{14}H_{10}$	Phenanthrene	340			
1669	$C_{14}H_{30}O$	Tetradecanol	...	% Phenanthrene in- creases with pres- sure; min. b.p.		100
1670	$C_{17}H_{36}O$	Heptadecanol	...	% Phenanthrene in- creases with pres- sure; min. b.p.		100
A =	$C_{16}H_{32}O_2$	Palmitic Acid	...			
1671	$C_{18}H_{36}O_2$	Stearic acid, 5 mm.	...	...	...	v-1 139
A =	$C_{18}H_{34}O_2$	Oleic Acid	...			
1672	$C_{18}H_{34}O_3$	Ricinoic acid, 5 mm.	...	...	...	v-1 139
1673	$C_{18}H_{36}O_2$	Stearic acid, 5 mm.	...	...	...	v-1 139
1674	$C_{20}H_{30}O_2$	Abietic acid, 1-10 mm.	...	Nonazeotrope	v-1	166

Table II. Ternary Systems

No.	A-Component			B-Component			C-Component			Azeotropic Data				
	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	$\frac{A}{B}$	$\frac{C}{B}$	Ref.		
1675	A	Argon	-185.7	N ₂	Nitrogen	-195.8	O ₂	Oxygen	...	...	Nonazeotrope	v-1	97,194
1676 ^a	CO	Carbon monoxide	-192	H ₂	Hydrogen	-252.7	N ₂	Nitrogen	...	...	Nonazeotrope	v-1	2
1677	ClF ₃	Chlorine trifluoride	...	FH	Hydrogen fluoride	19.4	F ₂ U	Uranium hexafluoride	...	...	Nonazeotrope	v-1	91,292
1678	ClH	Hydrogen chloride	-85	C ₅ H ₅ N	Pyridine	115.5	C ₁₀ H ₈	Naphthalene	218.1	189.6	...	...	322
1679	HF	Hydrogen fluoride	19.5	H ₂ O	Water	100	C ₄ HF ₇ O ₂	Perfluorobutyric acid	...	108	12	28	60	222
1680	HNO ₃	Nitric acid	...	H ₂ O	Water	100	CHCl ₃	Chloroform	61	...	92	3	5	258
1681	H ₂ O	Water	100	SO ₂	Sulfur dioxide	-10	C ₃ H ₄ O	Acetaldehyde	20.2	...	...	v-1	273
1682	H ₂ O	Water	100	CHCl ₃	Chloroform	61	CH ₃ O ₂	Formic acid	100.75	52.6	4	Nonazeotrope	v-1	56
1683	H ₂ O	Water	100	CHCl ₃	Chloroform	61	CH ₃ O	Methanol	64.7	...	81	15	335	
1684	H ₂ O	Water	100	CHCl ₃	Chloroform	61	C ₂ H ₃ N	Acetonitrile	81.6	...	Nonazeotrope	v-1	334	
1685	H ₂ O	Water	100	CHCl ₃	Chloroform	61	C ₂ H ₄ O ₂	Acetic acid	118.1	78.0	3.9	91.2	4.9	335
1686 ^b	H ₂ O	Water	100	CHCl ₃	Chloroform	61	C ₂ H ₆ O	Ethyl alcohol	78.3	...	Nonazeotrope	v-1	334	
1687	H ₂ O	Water	100	CHCl ₃	Chloroform	61	C ₄ H ₈ O	2-Butanone	79.6	...	Nonazeotrope	v-1	360	
1688	H ₂ O	Water	100	CH ₂ O ₂	Formic acid	100.75	C ₂ H ₄ O ₂	Acetic acid	118.1	...	Nonazeotrope	v-1	176	
1689	H ₂ O	Water	100	CH ₂ O ₂	Formic acid	100.75	C ₅ H ₅ N	Pyridine	115.5	...	11.7	36.8	51.5	360
1690	H ₂ O	Water	100	CH ₃ NO ₂	Nitromethane	101	C ₃ H ₆ O	Isopropyl alcohol	82.3	...	0.6	3.0	96.4	335
1691	H ₂ O	Water	100	CH ₄ O	Methanol	64.3	C ₂ Cl ₃ F ₃	1,1,2-Tri-chloro-tri-fluoroethane	47.5	39.4	0.6	3.0	96.4	335
1692	H ₂ O	Water	100	CH ₄ O	Methanol	64.7	C ₂ H ₆ O	Ethyl alcohol	78.3	...	Nonazeotrope	v-1	68	
1693	H ₂ O	Water	100	CH ₄ O	Methanol	64.7	C ₃ H ₆ O	Propionaldehyde	47.9	...	Nonazeotrope	v-1	334	
1694	H ₂ O	Water	100	CH ₄ O	Methanol	64.7	C ₃ H ₆ O ₂	Methyl acetate	57.1	...	Nonazeotrope	v-1	58	
1695	H ₂ O	Water	100	CH ₄ O	Methanol	64.7	C ₃ H ₈ O	Isopropyl alcohol	82.3	...	Nonazeotrope	v-1	334	

^a20 atm. to critical point.

^b20 p.s.i.g.

No.	A-Component			B-Component			C-Component			Azeotropic Data		
	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	B.P., °C.	Composition, Wt. % A B C	Ref.
1696	H ₂ O	Water	100	CH ₄ O	Methanol	64.7	C ₄ H ₆ O ₂	Methyl acrylate	80.9		Nonazeotrope	334
1697	H ₂ O	Water	100	CH ₄ O	Methanol	64.7	C ₄ H ₆ O ₂	Methyl propionate	79.85		Nonazeotrope	84
1698	H ₂ O	Water	100	CH ₄ O	Methanol	64.7	C ₄ H ₁₀	2-Methylpropane	-11.7		Nonazeotrope	334
1699	H ₂ O	Water	100	C ₂ Cl ₃ F ₃	1,1,2-Trichlorotrifluoroethane	47.5	C ₂ H ₆ O	Ethyl alcohol	78.3	42.6	0.6 3.9 95.5	335
1700	H ₂ O	Water	100	C ₂ HCl ₃	Trichloroethylene	86.2	C ₃ H ₆ O	Allyl alcohol	97.1	71.4	7.5 80 12.5	334
1701	H ₂ O	Water	100	C ₂ HCl ₃	Trichloroethylene	86.2	C ₃ H ₈ O	Propyl alcohol	97.3	...	7.1 84.8 8.1	176
1702	H ₂ O	Water	.00	C ₂ HCl ₃	Trichloroethylene	86.2	C ₃ H ₈ O	Isopropyl alcohol	82.3	69.4	7 73 20	335
1703	H ₂ O	Water	100	C ₂ H ₃ N	Acetonitrile	81.6	C ₂ H ₆ O	Ethyl alcohol	78.3	72.9	1 44 55	335
1704	H ₂ O	Water	100	C ₂ H ₃ N	Acetonitrile	81.6	C ₄ H ₁₁ N	Diethylamine	55.5		Nonazeotrope	334
1705	H ₂ O	Water	100	C ₂ H ₃ N	Acetonitrile	81.6	C ₆ H ₁₄ O	Isopropyl ether	68.3	59	5 13 82	334
1706	H ₂ O	Water	100	C ₂ H ₃ N	Acetonitrile	81.6	C ₆ H ₁₃ N	Triethylamine	89.7	68.6	6 31 63	334
1707	H ₂ O	Water	100	C ₂ H ₄ Cl ₂	1,2-Dichloroethane	83.5	C ₂ H ₆ O	Ethyl alcohol	78.3	67.8	7.2 77.1 15.7	335
1708	H ₂ O	Water	100	C ₂ H ₄ Cl ₂	1,2-Dichloroethane	83.5	C ₃ H ₈ O	Isopropyl alcohol	82.3	69.7	7.7 73.3 19.0	335
1709	H ₂ O	Water	100	C ₂ H ₄ O	Acetaldehyde	20.2	C ₂ H ₆ O	Ethyl alcohol	78.3	...	... v-1	133
1710	H ₂ O	Water	100	C ₂ H ₄ O	Acetaldehyde	20.2	C ₆ H ₁₂ O ₃	Paraldehyde	124		Nonazeotrope	334
1711	H ₂ O	Water	100	C ₂ H ₅ ClO	2-Chloroethanol	128.7	C ₆ H ₆	Benzene	80.1		Nonazeotrope	334
1712	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₃ H ₃ N	Acrylonitrile	77.2	69.5	8.7 20.3 71.0	335
1713	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₃ H ₆ O	Acetone	56.1	<30	6.6 9.0 84.4	335
1714	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₃ H ₇ O ₂	Ethyl formate	54.2		Nonazeotrope	334
1715	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₄ H ₆ O	Crotonaldehyde	102.4	78.0	4.8 87.9 7.3	335

TABLE II TERNARY SYSTEMS

A-Component			B-Component			C-Component			Azeotropic Data			Ref.		
No.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	A	B		C	
1716	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₄ H ₈ O	2-Butanone	79.6	73.2	11	14	75	335
1717	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₄ H ₈ O	Butyraldehyde	75.7	67.2	9	11	80	335
1718	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₄ H ₆ O	Ethyl vinyl ether	35.5				Nonazeotrope	334
1719	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₄ H ₁₁ N	Butylamine	77.8	81.8	7.5	42.5	50.0	335
1720	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₅ H ₈ O ₂	Ethyl acrylate	99.3	77.1	10.1	48.3	41.6	335
1721	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₅ H ₁₀ O	1-Butenyl methyl ether	165 mm.	44	8.6	36.3	55.1	335
1722	H ₂ C	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₅ H ₁₀ O	Propyl vinyl ether	65.1	57	5.1	21.2	73.7	335
1723	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₅ H ₁₀ O ₂	Isopropyl acetate	88.7	74.8	9.8	19.4	70.8	335
1724	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₅ H ₁₂ O	Butyl methyl ether	70.3	62	6.3	8.6	85.1	335
1725	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₅ H ₁₂ O	Isosamyl alcohol	132				Nonazeotrope	v-1
1726	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₂	Cyclohexane	80.75	62.60	4.8	19.7	75.5	361
1727	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₂ O	Isobutyl vinyl ether	80.7	62.1	7	17	76	335
1728	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₄	Hexane	83.4	60	8	22	70	335
1729	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₄ O	Butyl ethyl ether	68.22	56.4	3	18.7	78.3	326
1730	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₄ O	Ethyl isobutyl ether	68.7	56.0	3	12	85	335
1731	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₄ O	Isopropyl ether	92.2	71.6	9.3	4.2	86.5	335
1732	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₄ O	Isopropyl propyl ether	79	66	6.5	15.8	77.7	334
1733	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₇ H ₈	Toluene	68.3	61.0	4.0	6.5	89.5	335
1734	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₇ H ₁₄	Methylcyclohexane	100 p.s.i.g.	128.5	9.1	14.2	76.7	335
1735	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₇ H ₁₆	Heptane	50 p.s.i.g.	105.8	7.1	11.9	81	335
1736	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₈ H ₈	Styrene	...	66	7.0	14.7	78.3	334

A-Component			B-Component			C-Component			Azeotropic Data			
No.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Composition, Wt. %	Ref.	
										A	B	C
1737	H ₂ O	Water	100	C ₃ H ₆ O	Ethyl alcohol	78.3	C ₈ H ₁₈ O	Butyl ether	142.1	Nonazeotrope		
1738	H ₂ O	Water	100	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₈ O ₂	2-Ethyl-1,3-hexanediol	243.1	Nonazeotrope		
1739	H ₂ O	Water	100	C ₂ H ₇ N	Dimethylamine	7.4	C ₄ H ₁₁ NO	2-(Dimethylamino)ethanol	134.6	Nonazeotrope		
1740	H ₂ O	Water	100	C ₂ H ₈ N ₂	Ethylene-diamine	116.9	C ₆ H ₆	Benzene	80.1	Nonazeotrope		
1741	H ₂ O	Water	100	C ₃ H ₃ N	Acrylonitrile	77.2	C ₃ H ₅ N	Propionitrile	97.4	Nonazeotrope		
1742	H ₂ O	Water	100	C ₃ H ₄ O	2-Propyn-1-ol	115	C ₃ H ₈ O ₂	3,3-Dimethoxypropyne	111	88.95	...	...
1743	H ₂ O	Water	100	C ₃ H ₄ O	2-Propyn-1-ol	115	C ₆ H ₆	Benzene	80.1	68.1	8.3	3.7
1744	H ₂ O	Water	100	C ₃ H ₄ O ₂	Acrylic acid	141.2	C ₅ H ₈ O ₂	Ethyl acrylate	99.3	69	9	4
1745	H ₂ O	Water	100	C ₃ H ₆ Cl ₂	1,2-Dichloropropane	96.3	C ₃ H ₇ ClO	Propylene chlorohydrin	127.4	Nonazeotrope		
1746	H ₂ O	Water	100	C ₃ H ₆ O	Acetone	56.1	C ₃ H ₈ O	Isopropyl alcohol	82.3	Nonazeotrope v-1		
1747	H ₂ O	Water	100	C ₃ H ₆ O	Acetone	56.1	C ₄ H ₆ O ₂	Vinyl acetate	72.7	Nonazeotrope		
1748	H ₂ O	Water	100	C ₃ H ₆ O	Acetone	56.1	C ₄ H ₈ O	2-Butanone	79.6	Nonazeotrope		
1749	H ₂ O	Water	100	C ₃ H ₆ O	Acetone	56.1	C ₄ H ₆ O	Butyraldehyde	74.8	Nonazeotrope		
1750	H ₂ O	Water	100	C ₃ H ₆ O	Acetone	56.1	C ₃ H ₁₀ O ₂	Isopropyl acetate	88.6	Nonazeotrope		
1751 ^c	H ₂ O	Water	100	C ₃ H ₆ O	Acetone	56.1	C ₆ H ₁₄ O	Isopropyl ether	68.3	75	3	49
1752	H ₂ O	Water	100	C ₃ H ₆ O	Acetone	56.1	C _n H _{2n+2}	Paraffin hydrochloride	...	61-71	1.4	42.1
1753	H ₂ O	Water	100	C ₃ H ₆ O	Allyl alcohol	96.6	C ₆ H ₁₄	Hexane	68.8	...	8.5	5.1
1754	H ₂ O	Water	100	C ₃ H ₆ O	Allyl alcohol	96.6	C ₇ H ₈	Toluene	110.6	80.6	15.2	31.4
1755	H ₂ O	Water	100	C ₃ H ₆ O	Allyl alcohol	96.6	C ₉ H ₁₆ O ₂	2,2-Bis(allyloxy)propane	...	88	28	55
												17

TABLE II TERNARY SYSTEMS

No.	A-Component			B-Component			C-Component			Azeotropic Data					
	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Composition, Wt. %	Ref.				
										A	B	C			
1756	H ₂ O	Water	100	C ₃ H ₆ O ₂	Propionic acid	140.7	C ₄ H ₈ O ₂	Methyl propionate	79.85	Nonazeotrope			84		
1757	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₄ H ₈ O	2-Butanone	79.6	73.4	11	1	88	335	
1758	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₄ H ₁₁ N	Butylamine	77.8	83	12.5	40.5	47	335	
1759	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₅ H ₁₀ O ₂	Isopropyl acetate	88.7	75.5	11	13	76	335	
1760	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₆ H ₆	Benzene	80.1	65.7	8.2	19.8	72.0	335	
1761	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₆ H ₁₂ O	4-Methyl-2-pentanone	20 p.s.i.g.	90	10	18	72	335	
1762	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₆ H ₁₄ O	Butyl ethyl ether	116.2	73.4	10.4	21.9	67.7	335	
1763	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₆ H ₁₄ O	Isopropyl ether	68.3	61.8	5	4	91	335	
1764	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₆ H ₁₅ N	Diisopropyl-amine	30 p.s.i.g.	95	6	9	85	335	
1765	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₇ H ₈	Toluene	15 p.s.i.g.	81	6	7	87	335	
1766	H ₂ O	Water	100	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₆ H ₁₄	Diisobutyl-ene	84.1	76.3	13.1	38.2	48.7	335	
1767 ^d	H ₂ O	Water	100	C ₃ H ₈ O	Propyl alcohol	97.3	C ₃ H ₈ S	1-Propane-thiol	102.3	72.3	9.3	31.6	59.1	335	
1768	H ₂ O	Water	100	C ₃ H ₈ O	Propyl alcohol	97.3	C ₅ H ₁₀ O	3-Pentanone	67.5	60.8	...	...	...	181
1769	H ₂ O	Water	100	C ₃ H ₈ O	Propyl alcohol	97.3	C ₅ H ₁₀ O ₂	Propyl acetate	101.8	81.2	20	20	60	334	
		"			"			"	101.6	50.23	13.3	4.7	82.0	v-1	
		"			"			"	200 mm.	66.07	15.0	6.5	78.5	v-1	
		"			"			"	400 mm.	76.26	16.0	8.5	75.5	v-1	
		"			"			"	600 mm.	82.45	17.0	10.0	73.0	v-1	
		"			"			"	760 mm.	80.1	68.5	8.6	9.0	82.4	334
1770	H ₂ O	Water	100	C ₃ H ₈ O	Propyl alcohol	97.3	C ₆ H ₆	Benzene	80.7	66.6	8.5	10.0	81.5	334	
1771	H ₂ O	Water	100	C ₃ H ₈ O	Propyl alcohol	97.3	C ₆ H ₁₂	Cyclohexane	80.7	66.6	8.5	10.0	81.5	334	

^d771 mm.

A-Component			B-Component			C-Component			Azeotropic Data					
No.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	A	B	C	Ref.	
1772	H ₂ O	Water	100	C ₃ H ₈ O	Propyl alcohol	97.3	C ₆ H ₁₂ O	2-Hexanone	127.2	87	27	63	10	123
1773	H ₂ O	Water	100	C ₃ H ₈ O	Propyl alcohol	97.3	C ₆ H ₁₂ O	2-Methyl-pentanal	118.3	86	28	58	14	334
1774	H ₂ O	Water	100	C ₃ H ₈ O	Propyl alcohol	97.3	C ₇ H ₁₆ O ₂	Dipropoxy-ethane	146.6	87.6	27.4	51.6	21.0	334
1775	H ₂ O	Water	100	C ₃ H ₈ O ₂	2-Methoxy-ethanol	124.6	C ₆ H ₆	Benzene	80.1	Nonazeotrope			334	
1776	H ₂ O	Water	100	C ₃ H ₈ O ₂	2-Methoxy-ethanol	124.6	C ₆ H ₁₂	Cyclohexane	80.7	Nonazeotrope			334	
1777	H ₂ O	Water	100	C ₃ H ₈ O ₂	2-Methoxy-ethanol	124.6	C ₇ H ₈	Toluene	110.6	Nonazeotrope			334	
1778	H ₂ O	Water	100	C ₃ H ₈ O ₂	1,2-Propane-diol	187.8	C ₇ H ₈	Toluene	110.6	Nonazeotrope			334	
1779	H ₂ O	Water	100	C ₄ H ₈ O	Crotonaldehyde	102.4	C ₆ H ₁₀ O	2-Ethylcrotonaldehyde	135.3	Nonazeotrope			334	
1780	H ₂ O	Water	100	C ₄ H ₈ O	2-Butanone	79.6	C ₆ H ₆	Benzene	80.1	68.2	8.8	26.1	65.1	334
1781	H ₂ O	Water	100	C ₄ H ₈ O	2-Butanone	79.6	C ₆ H ₁₂	Cyclohexane	80.7	63.6	5	35	60	334
1782	H ₂ O	Water	100	C ₄ H ₈ O	2-Butanone	79.6	C ₆ H ₁₄	Hexane	68.7	55	1	22	77	334
1783	H ₂ O	Water	100	C ₄ H ₈ O	Butyraldehyde	74.8	C ₄ H ₁₀ O	Isobutyl alcohol	107.9	Nonazeotrope			334	
1784	H ₂ O	Water	100	C ₄ H ₈ O	Butyraldehyde	74.8	C ₄ H ₁₀ O ₂	1,1-Dimethoxyethane	64.5	Nonazeotrope			334	
1785	H ₂ O	Water	100	C ₄ H ₈ O	Butyraldehyde	74.8	C ₆ H ₁₂ O ₂	Butyl acetate	126.1	Nonazeotrope			334	
1786	H ₂ O	Water	100	C ₄ H ₈ O	Butyraldehyde	74.8	C ₆ H ₁₄	Hexane	68.7	55	4	21	75	334
1787	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.7	C ₄ H ₁₀ O	sec-Butyl alcohol	99.5	Nonazeotrope			334	
1788	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.7	C ₄ H ₁₀ S	1-Butane-thiol	97.5	78.6	...	...	...	181
1789	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.7	C ₄ H ₁₁ N	Butylamine	77.8	Nonazeotrope			334	
1790	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₆ H ₁₂ O	Butyl vinyl ether	94.2	77.4	10	2	88	335
1791	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₆ H ₁₂ O ₂	Butyl acetate	126.1	90.7	29	8	63	335
1792	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₆ H ₁₄	Hexane	68.95	61.5	19.2	2.9	77.9	174

TABLE II TERNARY SYSTEMS

No.	A-Component		B-Component		C-Component			Azeotropic Data				
	Formula	Name	B.P., °C.	Formula	Name	Formula	Name	B.P., °C.	B.P., °C.	Composition Wt. % A B C	Ref.	
1793	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₇ H ₁₂ O ₂	Butyl acrylate	147	50	37.6	12.4
1794	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₇ H ₁₆	Heptane	100 mm.	46	41	26
1795	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₈ H ₁₈	Octane	98.4	78.1	41.4	7.6
1796	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₈ H ₁₈ O	Butyl ether	125.75	86.1	60	14.6
1797	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₈ H ₁₉ N	Dibutyl-amine	142.1	90.6	29.9	34.6
1798	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₉ H ₂₀	Nonane	100 mm.	45	31.2	24.6
1799	H ₂ O	Water	100	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₉ H ₂₀ O ₂	Dibutoxy-methane	159.6		Nonazeotrope	
1800	H ₂ O	Water	100	C ₄ H ₁₀ O	sec-Butyl alcohol	99.4	C ₄ H ₁₀ O	tert-Butyl alcohol	150.7	90	69.9	18.3
1801	H ₂ O	Water	100	C ₄ H ₁₀ O	sec-Butyl alcohol	99.4	C ₆ H ₆	Benzene	80.1,	38.2	7	5
		"	"	"	"	"	"	"	200 mm.			
		"	"	"	"	"	"	"	300 mm.	47.0	7	6
		"	"	"	"	"	"	"	400 mm.	53.8	7	6
		"	"	"	"	"	"	"	500 mm.	59.0	7	6
		"	"	"	"	"	"	"	665 mm.	65.5	8	6
1802	H ₂ O	Water	100	C ₄ H ₁₀ O	sec-Butyl alcohol	99.4	C ₆ H ₁₂ O ₂	sec-Butyl acetate	112.2	85.5	20.2	27.4
1803	H ₂ O	Water	100	C ₄ H ₁₀ O	sec-Butyl alcohol	99.4	C ₇ H ₁₄	Methyl-cyclohexane	101.1	77.1	11.9	21.9
1804	H ₂ O	Water	100	C ₄ H ₁₀ O	sec-Butyl alcohol	99.4	C ₇ H ₁₆	Heptane	98.4	75.8	10.9	22.2
1805	H ₂ O	Water	100	C ₄ H ₁₀ O	sec-Butyl alcohol	99.4	C ₈ H ₁₄	Diisobutylene	77.5	11	19	70
1806	H ₂ O	Water	100	C ₄ H ₁₀ O	sec-Butyl alcohol	99.4	C ₈ H ₁₈	Iso-octane	...	76.3	10.6	21.9
1807	H ₂ O	Water	100	C ₄ H ₁₀ O	sec-Butyl alcohol	99.4	C ₈ H ₁₈ O	Butyl ether	142.1	86.6	24.7	56.1
1808	H ₂ O	Water	100	C ₄ H ₁₀ O	Isobutyl alcohol	107.9	C ₉ H ₂₀ O ₂	Diisobutoxy-methane	163.8		Nonazeotrope	
1809	H ₂ O	Water	100	C ₄ H ₁₀ O ₂	2-Ethoxy-ethanol	135.6	C ₇ H ₈	Toluene	110.7		Nonazeotrope	
1810	H ₂ O	Water	100	C ₄ H ₁₀ O ₂	2-Ethoxy-ethanol	135.6	C ₁₀ H ₂₀ O	2-Ethylhexyl vinyl ether	177.7	97.7	51	11

A-Component			B-Component			C-Component			Azeotropic Data		
No.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Composition Wt. % A B C	Ref.
1811	H ₂ O	Water	100	C ₄ H ₁₁ N	Butylamine	77.8	C ₈ H ₁₉ N	Dibutyl-amine	159.6	Nonazeotrope	334
1812	H ₂ O	Water	100	C ₄ H ₁₁ N	Diethyl-amine	55.5	C ₆ H ₁₄ O	Isopropyl ether	68.3	Nonazeotrope	334
1813	H ₂ O	Water	100	C ₃ H ₅ N	Pyridine	115.5	C ₇ H ₁₆	Heptane	98.4	14 13.5 70.5	332
1814	H ₂ O	Water	100	C ₃ H ₅ N	Pyridine	115.5	C ₈ H ₁₈	Octane	125.75	22.5 25.5 52	332
1815	H ₂ O	Water	100	C ₃ H ₅ N	Pyridine	115.5	C ₉ H ₂₀	Nonane	150.7	30.5 37 32.5	332
1816	H ₂ O	Water	100	C ₃ H ₅ N	Pyridine	115.5	C ₁₀ H ₂₂	Decane	173.3	35.5 45.5 19	332
1817	H ₂ O	Water	100	C ₃ H ₅ N	Pyridine	115.5	C ₁₁ H ₂₄	Undecane	184.5	38.5 51 10.5	332
1818	H ₂ O	Water	100	C ₃ H ₅ N	Pyridine	115.5	C ₁₂ H ₂₆	Dodecane	216	40.5 54.5 5	332
1819	H ₂ O	Water	100	C ₃ H ₈ O ₂	Ethyl acrylate	99.3	C ₆ H ₁₄ O	Isopropyl ether	68.3	Nonazeotrope	334
1820	H ₂ O	Water	100	C ₃ H ₁₀ O	2-Pentanone	102.3	C ₆ H ₆	Benzene	80.1	Nonazeotrope	334
1821	H ₂ O	Water	100	C ₃ H ₁₂ O	Amyl alcohol	138.0	C ₁₁ H ₂₄ O	Diamyloxy-methane	...	Nonazeotrope	334
1822*	H ₂ O	Water	100	C ₃ H ₁₂ O	Isoamyl alcohol	132	C ₃ H ₁₂ S	3-Methyl-1-butane-thiol	120	86.6	181
1823	H ₂ O	Water	100	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₄ O	Hexyl alcohol	157.85	Nonazeotrope	176
1824	H ₂ O	Water	100	C ₈ H ₇ N	2-Picoline	128.8	C ₆ H ₁₂ O ₃	Paraldehyde	124.5	Nonazeotrope	334
1825	H ₂ O	Water	100	C ₆ H ₁₀ O	Cyclohexanone	155.6	C ₆ H ₁₂ O	Cyclohexanol	160.65	Nonazeotrope v-1	122
1826	H ₂ O	Water	100	C ₆ H ₁₂ O ₂	Butyl acetate	126.1	C ₆ H ₁₂ O ₂	sec-Butyl acetate	112.2	Nonazeotrope	334
1827	H ₂ O	Water	100	C ₆ H ₁₂ O ₂	Butyl acetate	126.1	C ₈ H ₁₈ O	Butyl ether	142.1	Nonazeotrope	334
1828	H ₂ O	Water	100	C ₆ H ₁₂ O ₂	sec-Butyl acetate	112.2	C ₈ H ₁₈ O	Butyl ether	142.1	Nonazeotrope	334
1829	H ₂ O	Water	100	C ₆ H ₁₂ O ₃	2-Ethoxyethyl acetate	156.2	C ₇ H ₈	Toluene	110.6	Nonazeotrope	334
1830	H ₂ O	Water	100	C ₆ H ₁₄ O	Isopropyl ether	68.3	C ₆ H ₁₅ N	Triethyl-amine	89.7	Nonazeotrope	334
1831	H ₂ O	Water	100	C ₇ H ₈	Toluene	110.6	C ₁₀ H ₂₀ O	Decyl alcohol (isomers)	217.3	Nonazeotrope	334

TABLE II TERNARY SYSTEMS

A-Component			B-Component			C-Component			Azeotropic Data		
No.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Composition, Wt. %	Ref.
										A B C	
1832	H ₂ O	Water	100	C ₇ H ₈	Toluene	110.6	C ₁₂ H ₂₆ O	2,6,8-Tri-methyl-4-nonanol	225.5	Nonazeotrope	334
1833	CCl ₄	Carbon tetra-chloride	76.75	C ₂ HCl ₃	Trichloro-ethylene	86.2	C ₄ H ₆ O	2-Butanone	79.6	Nonazeotrope	v-1 184
1834	CHCl ₃	Chloroform	61	CH ₂ O ₂	Formic acid	100.75	C ₂ H ₄ O ₂	Acetic acid	118.1	Nonazeotrope	v-1 56
1835	CHCl ₃	Chloroform	61	CH ₃ O	Methanol	64.7	C ₃ H ₆ O	Acetone	56.1	Nonazeotrope	v-1 335
1836	CHCl ₃	Chloroform	61	CH ₄ O	Methanol	64.7	C ₃ H ₆ O ₂	Methyl acetate	57.1	Nonazeotrope	v-1 31,143
1837	CHCl ₃	Chloroform	61	CH ₄ O	Methanol	64.7	C ₄ H ₈ O	2-Butanone	79.6	Nonazeotrope	v-1 334
1838	CHCl ₃	Chloroform	61	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₃ H ₆ O	Acetone	56.1	Nonazeotrope	v-1 224
1839	CHCl ₃	Chloroform	61	C ₃ H ₆ O	Acetone	56.4	C ₄ H ₈ O	2-Butanone	79.6	Nonazeotrope	v-1 62
1840	CHCl ₃	Chloroform	61	C ₃ H ₆ O	Acetone	56.4	C ₆ H ₁₂ O	4-Methyl-2-pentanone	115.9	Nonazeotrope	v-1 157
1841	CHCl ₃	Chloroform	61	C ₃ H ₆ O	Acetone	56.4	C ₆ H ₁₄ O	Isopropyl ether	68.3	Nonazeotrope	334
1842	CHCl ₃	Chloroform	61	C ₃ H ₆ O	Acetone	56.4	C ₇ H ₈	Toluene	110.7	Nonazeotrope	v-1 296
1843	CHCl ₃	Chloroform	61	C ₃ H ₆ O ₂	Ethyl formate	54.1	C ₃ H ₇ Br	2-Bromo-propane	59.4	5.3 15.7	195
1844	CHCl ₃	Chloroform	61	C ₃ H ₆ O ₂	Methyl acetate	57.1	C ₃ H ₇ Br	2-Bromo-propane	59.4	Nonazeotrope	195
1845	CHCl ₃	Chloroform	61	C ₃ H ₇ Br	2-Bromo-propane	59.4	C ₄ H ₈ O ₂	Isopropyl formate	68.8	Nonazeotrope	195
1846	CHCl ₃	Chloroform	61	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₄ H ₈ O	2-Butanone	79.6	Nonazeotrope	334
1847	CH ₂ Cl ₂	Dichloro-methane	40.0	CH ₄ O	Methanol	64.7	C ₈ H ₁₈ O ₃	2-(2-Butoxy-ethoxy) ethanol	230.6	Nonazeotrope	334
1848	CH ₃ NO ₂	Nitrometh-ane	101.2	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	Nonazeotrope	v-1 343
1849 ^f	CH ₄	Methane	-161.5	C ₂ H ₆	Ethane	-88.6	C ₃ H ₈	Propane	-44	Nonazeotrope	v-1 268
1850	CH ₄ O	Methanol	64.7	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₃ H ₆ O	Acetone	56.1	Nonazeotrope	v-1 335
1851	CH ₄ O	Methanol	64.5	C ₃ H ₆ O	Acetone	56.1	C ₃ H ₆ O ₂	Methyl acetate	56.3	5.8 76.8	
1852	CH ₄ O	Methanol	64.5	C ₃ H ₆ O	Acetone	56.1	C ₆ H ₁₄	Hexane	68.95	14.6 30.8 59.6	105
1853	CH ₄ O	Methanol	64.5	C ₃ H ₆ O ₂	Methyl acetate	56.3	C ₆ H ₁₄	Hexane	68.7	14 27 59	335

^f -200° to 50° F.

No.	A-Component			B-Component			C-Component			Azeotropic Data			
	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	A	B	Composition, Wt. %	Ref.
1854	CH ₄ O	Methanol	64.7	C ₃ H ₉ BO ₃	Trimethyl borate	68.7	C ₄ H ₈ O	Tetrahydrofuran	65			Nonazeotrope	v-1 115
1855	CH ₄ O	Methanol	64.7	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75			Nonazeotrope	v-1 223,362
1856 ^a	C ₂ H ₂	Acetylene	-84	C ₂ H ₄	Ethylene	-104	C ₂ H ₆	Ethane	-88			Nonazeotrope	v-1 137
1857	C ₂ H ₃ N	Acetonitrile	81.6	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₁₅ N	Triethylamine	89.7	70.1	34	8	58 335
1858	C ₂ H ₄ Cl ₂	1,2-Dichloroethane	83.45	C ₃ H ₆ O	Acetone	56.4	C ₆ H ₆	Benzene	80.1			Nonazeotrope	v-1 35
1859	C ₃ H ₄ O ₂	Acetic acid	118.1	C ₃ H ₅ N	Pyridine	115.5	C ₇ H ₁₆	Heptane	98.4	96.2	2	6.5	91.5 373
1860	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₃ H ₅ N	Pyridine	115.5	C ₈ H ₁₀	Ethylbenzene	136.15	96.5	3.4	10.6	86.0 355
1861	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₅ H ₅ N	Pyridine	115.5	C ₈ H ₁₀	Pyridine	143.6	132.2	17.7	30.5	51.8 372
1862	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₃ H ₅ N	Pyridine	115.5	C ₆ H ₁₈	Octane	125.75	115.7	10.4	20.1	69.5 355
1863	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₃ H ₅ N	Pyridine	115.5	C ₉ H ₂₀	Nonane	150.7	128.0	20.7	29.4	49.9 372
1864	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₃ H ₅ N	Pyridine	115.5	C ₁₀ H ₂₂	Decane	173.3	134.1	31.4	38.2	30.4 355
1865	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₃ H ₅ N	Pyridine	115.5	C ₁₁ H ₂₄	Undecane	194.5	137.1	37.5	43.5	19.0 370
1866	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₃ H ₅ N	2-Picoline	134	C ₈ H ₁₈	Octane	125.75	121.3	3.6	24.8	71.6 369
1867	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₆ H ₇ N	2-Picoline	134	C ₉ H ₂₀	Nonane	150.7	135.0	12.8	38.4	48.8 369
1868	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₆ H ₇ N	2-Picoline	134	C ₁₀ H ₂₂	Decane	173.3	141.3	19.9	46.8	33.3 369
1869	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₆ H ₇ N	2-Picoline	134	C ₁₁ H ₂₄	Undecane	194.5	143.4	30.5	55.2	14.3 369
1870	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₇ H ₉ N	2,6-Lutidine	144	C ₈ H ₁₈	Octane	125.75			Nonazeotrope	364
1871	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₇ H ₉ N	2,6-Lutidine	144	C ₁₀ H ₂₂	Decane	173.3	147.0	12.6	74.3	13.1 323,364
1872	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₇ H ₉ N	2,6-Lutidine	144	C ₁₁ H ₂₄	Undecane	194.5	162.0	75.0	13.8	11.3 v-1 358
1873	C ₂ H ₄ O ₂	Acetic acid	118.1	C ₈ H ₁₀	Ethylbenzene	136.15	C ₉ H ₂₀	Nonane	150.7			Nonazeotrope	370 363
1874	C ₂ H ₅ NO ₂	Nitroethane	114.2	C ₄ H ₈ O ₂	p-Dioxane	101.3	C ₄ H ₁₀ O	Isobutyl alcohol	108	102.87	31.7	17.7	50.6 208
1875	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Methylcyclopentane	72			Nonazeotrope	304
1876	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	65.05	30.4	10.8	58.8 362
1877	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₄	Hexane	68.95			Nonazeotrope	326
1878	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₆	Benzene	80.1	C ₇ H ₁₄	Methylcyclohexane	100.88			Nonazeotrope	326

^a -35°, 0°, 40° F.

TABLE II TERNARY SYSTEMS

No.	A-Component			B-Component			C-Component			Azeotropic Data					
	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	B.P., °C.	Composition, Wt. % A B C	Ref.			
1879	C ₂ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₆	Benzene	80.1	C ₇ H ₆	Heptane	98.4, 180-760 mm.	32.38	22.4	74.2	3.4	v-1	240, 339
1880	C ₃ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₇ N	Benzene	184.35	C ₇ H ₈	Toluene	110.7	110.7	74.2	3.4	v-1	244	
1881	C ₃ H ₆ O	Ethyl alcohol	78.3	C ₆ H ₇ N	Aniline	184.35	C ₇ H ₁₆	Heptane	98.4	98.4	74.2	3.4	v-1	138	
1882	C ₃ H ₆ O	Ethyl alcohol	78.3	C ₇ H ₈	Toluene	110.7	C ₈ H ₁₀	Heptane	98.4	110.7	74.2	3.4	v-1	138	
1883	C ₃ H ₆ O ₂	Ethylene glycol	196.7	C ₇ H ₈ O	o-Cresol	191	C ₈ H ₁₁ N	s-Collidine	171.30	189.65	33.6	62.4	4.0	v-1	188
1884	C ₃ H ₄	Propadiene	-32	C ₃ H ₄	Propyne	-23.2	C ₃ H ₆	Propene	-47.7	-47.7	Nonazeotrope				334
1885	C ₃ H ₄	Propadiene	-32	C ₃ H ₄	Propyne	-23.2	C ₃ H ₈	Propane	-42.1	-42.1	Nonazeotrope				334
1886	C ₃ H ₄	Propadiene	-32	C ₃ H ₄	Propyne	-23.2	C ₃ H ₆	Butadiene	-4.5	-4.5	Nonazeotrope				334
1887	C ₃ H ₆ O	Acetone	56.1	C ₃ H ₆ O ₂	Methyl acetate	56.3	C ₆ H ₁₄	Hexane	68.7	47	45	7	48		334
1888	C ₃ H ₆ O	Acetone	56.1	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₃ H ₁₀ O ₂	Isopropyl acetate	88.7	88.7	Nonazeotrope				334
1889	C ₃ H ₆ O	Acetone	56.1	C ₆ H ₅ Cl	Chlorobenzene	131.8	C ₆ H ₆	Benzene	80.1	80.1	Nonazeotrope				109
1890	C ₃ H ₆ O	Acetone	56.1	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	80.75	Nonazeotrope				185
1891	C ₃ H ₆ O	Allyl alcohol	97.1	C ₆ H ₁₄ O	Isopropyl ether	68.3	C ₉ H ₁₆ O ₂	2,2-Bis(allyl-oxy)propane	...	...	Nonazeotrope				334
1892	C ₃ H ₆ O ₂	Propionic acid	140.7	C ₃ H ₅ N	Pyridine	115.5	C ₁₁ H ₂₄	Undecane	194.5	147.1	55.5	26.4	18.1		370
1893	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₄ H ₈ O ₂	Ethyl acetate	76.7	C ₆ H ₁₂	Cyclohexane	80.7	68.3	...	...	...		334
1894	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₃ H ₁₀ O ₂	Isopropyl acetate	88.7	C ₆ H ₁₄ O	Isopropyl ether	68.3	68.3	Nonazeotrope				334
1895	C ₃ H ₈ O	Isopropyl alcohol	82.3	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	80.75	Azeotrope				209
1896	C ₃ H ₈ O	Propyl alcohol	97.25	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	73.75	18	28	54		209, 362
1897	C ₃ H ₈ O ₂	2-Methoxyethanol	124.5	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	66.7-216.7 p.s.i.a.	9	39.1	51.9	v-1	320
1898 ^a	C ₃ H ₈ O ₂	2-Methoxyethanol	124.5	C ₈ H ₈	Styrene	144	C ₈ H ₁₀	Ethylbenzene	136.15	136.15	Nonazeotrope				331
1899	C ₄ H ₈ O	2-Butanone	79.6	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	14.7-186.8 p.s.i.a.	...	...	...		61, 74

^a62 mm.

No.	A-Component			B-Component			C-Component			Azeotropic Data				
	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	B.P., °C.	Composition, Wt. % $\frac{A}{B+C}$	Ref.		
1900	C ₄ H ₈ O ₂	Butyric acid	162.45	C ₃ H ₅ N	Pyridine	115.5	C ₁₁ H ₂₄	Undecane	194.5		Nonazeotrope	370		
1901	C ₄ H ₈ O ₂	Ethyl acetate	77.05	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75		Nonazeotrope	43,44		
1902	C ₄ H ₅ Cl ₃ Sn	Butyltin trichloride	113/17	C ₈ H ₁₈ Cl ₂ Sn	Dibutyltin dichloride	157/17	C ₁₂ H ₂₇ Cl ₃ Sn	T-ributyltin chloride	166/17		Nonazeotrope	334		
1903	C ₄ H ₁₀ O	Isobutyl alcohol	107.0	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	76.73	8	42	50	153,362
1904	C ₄ H ₁₀ O	Butyl alcohol	117.7	C ₄ H ₁₁ N	Butylamine	77.8	C ₈ H ₁₉ N	Dibutylamine	159.6		Nonazeotrope	334		
1905	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₅ H ₅ N	Pyridine	115.5	C ₇ H ₈	Toluene	110.7	108.7	11.9	20.7	67.4	140
1906	C ₄ H ₁₀ O	Butyl alcohol	117.75	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	77.42	4	48	48	362
1907	C ₄ H ₁₀ O	Butyl alcohol	117.7	C ₆ H ₁₂ O ₂	Butyl acetate	126.1	C ₈ H ₁₈ O	Butyl ether	142.1		Nonazeotrope	334		
1908	C ₄ H ₁₀ O ₂	2-Ethoxyethanol	135.1	C ₈ H ₈	Styrene	145	C ₈ H ₁₀	Ethylbenzene	136.15, 5 mm. 62 mm.		Nonazeotrope	v-1	110	
1909	C ₄ H ₁₀ O ₂	2-Ethoxyethanol	135.1	C ₈ H ₁₀	Ethylbenzene	136.15	C ₈ H ₁₈	Octane	125.75		Nonazeotrope	v-1	152	
1910	C ₃ H ₄ O ₂	2-Furaldehyde	161.7	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75		Nonazeotrope	v-1	227	
1911	C ₃ H ₄ O ₂	2-Furaldehyde	161.7	C ₇ H ₈	Toluene	110.7	C ₇ H ₁₄	Methylcyclohexane	101.1		Nonazeotrope	v-1	331	
1912	C ₃ H ₄ O ₂	2-Furaldehyde	161.7	C ₇ H ₈	Toluene	110.7	C ₇ H ₁₆	Heptane	98.4		Nonazeotrope	v-1	114	
1913	C ₃ H ₄ O ₂	2-Furaldehyde	161.7	C ₇ H ₁₄	Methylcyclohexane	101.1	C ₇ H ₁₆	Heptane	98.4		Nonazeotrope	v-1	114	
1914	C ₅ H ₅ N	Pyridine	115.5	C ₉ H ₁₂ O	Isamyl alcohol	131	C ₇ H ₈	Toluene	110.7	110.19	8.6	4.1	87.3	371
1915	C ₃ H ₅ N	Pyridine	115.5	C ₈ H ₁₀	Ethylbenzene	136.15	C ₉ H ₂₀	Nonane	150.7		Nonazeotrope	363		
1916	C ₆ H ₆	Benzene	80.1	C ₆ H ₁₂	Cyclohexane	80.75	C ₆ H ₁₂ O	4-Methyl-2-pentanone	115.9		Nonazeotrope	v-1	65	
1917	C ₈ H ₆	Benzene	80.1	C ₇ H ₁₆	2,3-Dimethylpentane	89.8	C ₁₂ F ₂₁ N	Perfluoro-tributylamine	...		Nonazeotrope	v-1	190	

TABLE I BINARY SYSTEMS

No.	A-Component			B-Component			C-Component			Azeotropic Data				
	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	Formula	Name	B.P., °C.	B.P., °C.	$\frac{A}{B}$ Composition, Wt. %	$\frac{C}{C}$	Ref.	
1918 ⁱ	C ₆ H ₆ O	Phenol	182	C ₆ H ₁₀ O	Cyclohexanone	155.6	C ₆ H ₁₂ O	Cyclohexanol	160.65		Nonazeotrope	v-1	57	
1919	C ₆ H ₆ O	Phenol	182	C ₆ H ₁₀ O ₄	Ethylene diacetate	186	C ₈ H ₈ O ₂	Phenyl acetate	195.7	194.45	26.4	34.4	39.2	253
1920	C ₆ H ₇ N	Aniline	184.35	C ₆ H ₁₂ O	Cyclohexanol	160.65	C ₆ H ₁₃ N	Cyclohexylamine	...		Nonazeotrope	v-1	242	
1921 ^j	C ₆ H ₇ N	Aniline	184.35	C ₇ H ₈	Toluene	110.7	C ₇ H ₁₄	Methylcyclohexane	101.1		Evaporation data		297	
1922	C ₆ H ₇ N	Aniline	184.35	C ₇ H ₈	Toluene	110.7	C ₇ H ₁₆	Heptane	98.4		Nonazeotrope	v-1	138	
1923 ^k	C ₆ H ₁₄ O ₂	Hexylene glycol	...	C ₈ H ₁₀	Ethylbenzene	136.15	C ₈ H ₁₆	Ethylcyclohexane	131.8		Nonazeotrope	v-1	271	
1924	C ₇ H ₈ O	<u>x</u> -Cresol	202	C ₇ H ₉ N	Pyridine bases	143	C ₁₀ H ₈	Naphthalene	218.1	202.48	81	9	10	367
1925	C ₇ H ₈ O	<u>x</u> -Cresol	202	C ₇ H ₉ N	Pyridine bases	157	C ₁₀ H ₈	Naphthalene	218.1	202.03	65.5	16.5	18	367
1926	C ₇ H ₈ O	<u>x</u> -Cresol	202	C ₇ H ₉ N	Pyridine bases	163	C ₁₀ H ₈	Naphthalene	218.1	202.39	62	17	21	367

ⁱ 90 mm.
^j 80° to 100° C.
^k 400 mm.

Table III. Quaternary Systems

No.	Formula	Name	B.P., °C.	B.P., °C.	Azeotropic Data				Ref.
					A	B	C	D	
1927	A	H ₂ O	100	Nonazeotrope					334
	B	C ₂ H ₃ N	81.6						
	C	C ₂ H ₆ O	78.3						
	D	C ₆ H ₁₅ N	89.7						
1928	A	H ₂ O	100	70	8.7	11.1	0.1	80.1	84
	B	C ₂ H ₆ O	78.3						
	C	C ₄ H ₆ O	102.2						
	D	C ₄ H ₈ O ₂	77.1						
1929	A	H ₂ O	100	62.19 62.14	7.1	17.4	21.5	54.0	357 322, 361
	B	C ₂ H ₆ O	78.3						
	C	C ₆ H ₆	80.1						
	D	C ₆ H ₁₂	80.75						
1930	A	H ₂ O	100	Nonazeotrope					326
	B	C ₂ H ₆ O	78.3						
	C	C ₆ H ₆	80.1						
	D	C ₆ H ₁₄	68.95						
1931	A	H ₂ O	100	Nonazeotrope					326
	B	C ₂ H ₆ O	78.3						
	C	C ₆ H ₆	80.1						
	D	C ₇ H ₁₄	100.88						
1932	A	H ₂ O	100	64.79	6.8	18.7	62.4	12.1	325
	B	C ₂ H ₆ O	78.3						
	C	C ₆ H ₆	80.1						
	D	C ₇ H ₁₄	100.88						
1933	A	H ₂ O	100	64.69	6.7	17.7	61.4	14.1	325
	B	C ₂ H ₆ O	78.3						
	C	C ₆ H ₆	80.1						
	D	C ₈ H ₁₈	...						

TABLE II TERNARY SYSTEMS

No.	Azeotropic Data				B.P., °C.	B.P., °C.	Min. b.p.	Azeotropic Composition				Ref.
	Formula	Name	B.P., °C.	B.P., °C.				A	B	C	D	
1934	A	H ₂ O	Water	100								178
	B	C ₃ H ₈ O	Isopropyl alcohol	82.3								
	C	C ₇ H ₈	Toluene	110.7								
	D	C _n H _{2n+2}	Paraffins	...								
1935	A	H ₂ O	Water	100								335
	B	C ₄ H ₁₀ O	Butyl alcohol	117.7								
	C	C ₆ H ₁₂ O ₂	Butyl acetate	126.1								
	D	C ₈ H ₁₈ O	Butyl ether	142.1								
1936	A	C ₂ H ₄ O ₂	Acetic acid	118.1								322,363
	B	C ₅ H ₅ N	Pyridine	115.5								
	C	C ₈ H ₁₀	Ethylbenzene	136.15								
	D	C ₉ H ₂₀	Nonane	150.7								
1937	A	C ₂ H ₄ O ₂	Acetic acid	118.1								372
	B	C ₅ H ₅ N	Pyridine	115.5								
	C	C ₈ H ₁₀	o-Xylene	143.6								
	D	C ₉ H ₂₀	Nonane	150.7								
1938	A	C ₂ H ₆ O	Ethyl alcohol	78.3								304
	B	C ₆ H ₆	Benzene	80.1								
	C	C ₆ H ₁₂	Methylcyclopentane	72.0								
	D	C ₆ H ₁₄	Hexane	68.95								
1939	A	C ₂ H ₆ O	Ethyl alcohol	78.3								138
	B	C ₆ H ₇ N	Aniline	184.4								
	C	C ₇ H ₈	Toluene	110.7								
	D	C ₇ H ₁₆	Heptane	98.4								

Formula Index

This index lists all compounds appearing in the azeotropic tables. Included are formula, name, standard boiling point, and numbers of the systems in which the compound appears as a component. The inorganic substances are indexed first.

Formula	Name and System Nos.	Formula	Name and System Nos.
A	Argon B.p., -186 1, 2, 1675	F ₆ S	Sulfur hexafluoride 60
AsCl ₃	Arsenic chloride 3 B.p., 130	F ₆ W	Tungsten hexafluoride 61, 62 B.p., 19.5
B ₂ H ₆	Diborane B.p., -87.5 5	HNO ₃	Nitric acid B.p., 86 63, 64, 1680
BeF ₂	Beryllium fluoride 4	H ₂	Hydrogen B.p., -252.7 53, 54, 1676
BrF ₃	Bromine trifluoride 6-9 B.p., 135	H ₂ O	Water B.p., 100 31, 63, 65-522, 1679- 1832, 1927-1935
BrF ₅	Bromine pentafluoride 6, 10, 11	H ₂ O ₂	Hydrogen peroxide 65 B.p., 151.4
Br ₂	Bromine B.p., 58.9 7, 12-20	H ₂ S	Hydrogen sulfide B.p., -59.6 22, 523, 524
Br ₃ P	Phosphorus tribromide 21 B.p., 175.3	H ₂ SO ₄	Hydrogen sulfate 66
CO	Carbon monoxide 1676 B.p., -192	H ₃ N	Ammonia B.p., -33.4 525-529
CO ₂	Carbon dioxide 22-26 B.p., -78.5	H ₄ N ₂	Hydrazine B.p., 113.8 67
ClF ₃	Chlorine trifluoride 27-29, 1677	He	Helium B.p., -268.9 530
ClH	Hydrogen chloride B.p., -85 27, 30-32, 1678	N ₂	Nitrogen B.p., -195.8 1675, 1676
Cl ₂	Chlorine B.p., -34.6 30, 33	N ₂ O	Nitrous oxide 23 B.p., -90.7
Cl ₂ O ₂ S	Sulfuryl chloride 34-37 B.p., 69.1	N ₂ O ₅	Nitrogen pentoxide 68
Cl ₃ HSi	Trichlorosilane 38	O ₂	Oxygen B.p., -183 1, 1675
Cl ₃ P	Phosphorus trichloride 39-44 B.p., 76	O ₂ S	Sulfur dioxide B.p., -10 531, 1681
Cl ₄ Ge	Germanium chloride 3 B.p., 86.5	S	Sulfur B.p., 444.6 532
Cl ₄ Si	Silicon tetrachloride 45, 46 B.p., 57.6	Se	Selenium B.p., 688 532
Cl ₄ Sn	Tin chloride B.p., 114.1 47, 48	CCl ₂ F ₂	Dichlorodifluoromethane B.p., -29.8 57, 533-539
Cl ₄ Ti	Titanium tetrachloride 49-51 B.p., 146.2	CCl ₃ F	Trichlorofluoromethane B.p., 24.9 540, 541
DH	Deuterium hydride 52, 53	CCl ₄	Carbon tetrachloride B.p., 76.8 14, 34, 47, 542-556, 1833
D ₂	Deuterium B.p., -249.7 52, 54	CS ₂	Carbon disulfide B.p., 46.2 69, 557-561
FH	Hydrogen fluoride B.p., 19.4 8, 10, 12, 28, 33, 55-59, 1677, 1679	CHClF ₂	Chlorodifluoromethane B.p., -40.8 58, 533, 562-567
FNa	Sodium fluoride 4	CHCl ₂ F	Dichlorofluoromethane B.p., 7.63/723 mm. 568
F ₅ Sb	Antimony pentafluoride 55 B.p., 142.7		
F ₆ U	Uranium hexafluoride B.p., 56 9, 11, 13, 29, 56, 1677		

Formula	Name and System Nos.	Formula	Name and System Nos.
CHCl ₃	Chloroform B.p., 61.2 64, 70, 569-584, 1680, 1682-1687, 1834-1846	C ₂ H ₂ Cl ₂	<u>cis</u> -1,2-Dichloroethylene B.p., 60.3 607, 694-701
CH ₂ BrCl	Bromochloromethane 585 B.p., 69	C ₂ H ₂ Cl ₂	<u>trans</u> -1,2-Dichloro- ethylene B.p., 48.3 608, 702-709
CH ₂ Cl ₂	Dichloromethane B.p., 40.7 585, 586, 1847	C ₂ H ₂ Cl ₂ F ₂	1,1-Dichloro-2,2-di- fluoroethane 18 B.p., 59/735 mm.
CH ₂ O ₂	Formic acid B.p., 100.75 71, 569, 587-589, 1682, 1688, 1689, 1834	C ₂ H ₂ Cl ₂ F ₂	1,2-Dichloro-1,2-di- fluoroethane B.p., 30 563
CH ₃ Cl	Chloromethane B.p., -24 534	C ₂ H ₂ Cl ₂ O	Chloroacetyl chloride 50 B.p., 105
CH ₃ Cl ₃ Si	Trichloromethylsilane 45, 590	C ₂ H ₂ Cl ₄	1,1,2,2-Tetrachloroethane 36, 51 B.p., 146.2
CH ₃ I	Iodomethane B.p., 42.55 557	C ₂ H ₃ Cl	Vinyl chloride 710, 711 B.p., 13.4
CH ₃ NO ₂	Nitromethane B.p., 101.2 72, 591-602, 1690, 1848	C ₂ H ₃ Cl ₂ NO ₂	Methyl dichlorocar- bamate 77
CH ₄	Methane B.p., -161.5 530, 603, 604, 1849	C ₂ H ₃ Cl ₃	1,1,1-Trichloroethane 712, 713 B.p., 74.1
CH ₄ Cl ₂ Si	Dichloromethylsilane 46, 605	C ₂ H ₃ Cl ₃	1,1,2-Trichloroethane B.p., 113.65 68, 682, 712
CH ₄ O	Methanol B.p., 64.7 32, 73, 542, 570, 591, 606-673, 1683, 1691- 1698, 1835-1837, 1847, 1849-1855	C ₂ H ₃ F ₃ O	2,2,2-Trifluoroethanol 714
CH ₄ S	Methanethiol B.p., 6.00 674, 675	C ₂ H ₃ N	Acetonitrile B.p., 80.1 79, 544, 572, 592, 715-726, 1684, 1703- 1706, 1857, 1927
CH ₅ N	Methylamine B.p., -6 676, 677	C ₂ H ₄	Ethylene B.p., -103.7 25, 691, 727, 1856
C ₂ ClF ₃	Chloropentafluoroethane 562, 678 B.p., -38.5	C ₂ H ₄ Br ₂	1,2-Dibromoethane 728, 729 B.p., 131.5
C ₂ Cl ₂ F ₄	1,2-Dichlorotetrafluoro- ethane B.p., 2.22/723 mm. 568, 606, 679	C ₂ H ₄ Cl ₂	1,1-Dichloroethane 558, 713 B.p., 57.2
C ₂ Cl ₃ F ₃	1,1,2-Trichlorotrifluoro- ethane B.p., 47.6 15, 74, 680, 681, 1691, 1699	C ₂ H ₄ Cl ₂	1,2-Dichloroethane B.p., 83.16 37, 80, 545, 609, 686, 710, 715, 730- 735, 1707, 1708, 1858
C ₂ Cl ₄	Tetrachloroethylene B.p., 121 75, 571, 682-685	C ₂ H ₄ F ₂	1,1-Difluoroethane 535, 678 B.p., -24.7
C ₂ Cl ₄ F ₂	1,1,1,2-Tetrachlorodi- fluoroethane B.p., 91.6 16	C ₂ H ₄ O	Acetaldehyde B.p., 20.2 540, 610, 736-742, 1681, 1709, 1710
C ₂ Cl ₄ F ₂	1,1,2,2-Tetrachlorodi- fluoroethane B.p., 92.4 680	C ₂ H ₄ O	Ethylene oxide 743 B.p., 10.5
C ₂ Cl ₄ O	Trichloroacetyl chloride 49 B.p., 118	C ₂ H ₄ O ₂	Acetic acid B.p., 118.1 81, 546, 573, 587, 611, 687, 744-768, 1685, 1688, 1834, 1859- 1873, 1936, 1937
C ₂ Cl ₆	Hexachloroethane 35 B.p., 184.8	C ₂ H ₄ O ₂	Methyl formate B.p., 32 541
C ₂ HCl ₃	Trichloroethylene B.p., 86.2 543, 686-690, 1700-1702, 1833	C ₂ H ₅ BrO	2-Bromoethanol B.p., 100/150 mm. 82
C ₂ HCl ₃ F ₂	1,2,2-Trichloro-1,1-di- fluoroethane B.p., 71.1/736 mm. 17	C ₂ H ₅ Cl	Chloroethane B.p., 12.4 736, 769
C ₂ HF ₃ O ₂	Trifluoroacetic acid 59, 76	C ₂ H ₅ ClO	2-Chloroethanol B.p., 128.7 83, 770-772, 1711
C ₂ H ₂	Acetylene B.p., -84 24, 691-693, 1856	C ₂ H ₅ NO	Acetamide B.p., 222 773

Formula	Name and System Nos.	Formula	Name and System Nos.
$C_2H_5NO_2$	Nitroethane F.p., 114.0 84, 774-780, 1874	C_3H_4	Propyne B.p., -23.2 693, 924, 928-930, 1884-1886
C_2H_6	Ethane B.p., -88.6 26, 523, 603, 692, 727, 781, 1849, 1856	$C_3H_4Cl_4$	Tetrachloropropane 931
C_2H_6O	Ethyl alcohol B.p., 78.3 85, 547, 574, 593, 612, 681, 694, 702, 714, 744, 774, 782-866, 1686, 1692, 1699, 1703, 1707, 1709, 1712-1738, 1838, 1850, 1857, 1875-1882, 1927-1933, 1938, 1939	C_3H_4O	Acrolein B.p., 52.8 93
C_2H_6O	Methyl ether B.p., -23.7 531, 536, 612	C_3H_4O	2-Propyn-1-ol B.p., 115 94, 932, 1742, 1743
C_2H_6OS	Dimethylsulfoxide 867	$C_3H_4O_2$	Acrylic acid B.p., 141.2 95, 933, 1744
$C_2H_6O_2$	Ethylene glycol B.p., 197 86, 868-893, 1883	$C_3H_4O_3$	Ethylene carbonate 96, 868
C_2H_6S	Methyl sulfide B.p., 37.32 894-899	C_3H_5Cl	3-Chloropropene 97, 934 B.p., 45.15
$C_2H_6S_2$	Methyl disulfide 900-907 B.p., 109.44	C_3H_5Cl	α -Methylvinyl chloride 98
C_2H_7N	Dimethylamine B.p., 7.4 908, 1739	C_3H_5ClO	2-Chloro-2-propen-1-ol 935
C_2H_7N	Ethylamine B.p., 16.6 525, 909, 910	C_3H_5ClO	Epichlorohydrin 936 B.p., 116.45
C_2H_7NO	2-Aminoethanol B.p., 170.5 87, 911, 912	$C_3H_5Cl_3$	1,2,3-Trichloropropane 936 B.p., 156.85
$C_2H_8N_2$	1,1-Dimethylhydrazine 88	C_3H_5F	2-Fluoropropene 527 B.p., -23
$C_2H_8N_2$	Ethylenediamine B.p., 116 89, 913, 917, 1740	C_3H_5N	Propionitrile B.p., 97.4 923, 1741
$C_3Cl_3F_5$	1,2,2-Trichloropenta- fluoropropane B.p., 72.5 19	C_3H_5NO	Hydracrylonitrile 99 B.p., 229.7
C_3F_6	Hexafluoropropene B.p., -6.1/2059 mm. 537, 564	C_3H_6	Propene B.p., -48 925, 928, 937, 1884
C_3F_8	Perfluoropropane B.p., 12.5/6.064 atm. 565	$C_3H_6Cl_2$	1,2-Dichloropropane B.p., 96.3 688, 730, 938, 939, 1745
$C_3HF_5O_2$	Pentafluoropropionic acid 90, 918	$C_3H_6Cl_2O$	2,3-Dichloro-1-propanol 100 B.p., 183.8
C_3HF_7	Heptafluoropropane B.p., 17/2328 mm. 538	C_3H_6O	Acetone B.p., 56.1 101, 548, 575, 594, 615, 683, 695, 703, 711, 717, 782, 911, 940-957, 1713, 1746- 1752, 1835, 1838- 1842, 1850, 1851, 1852, 1858, 1887-1890
$C_3H_2ClF_3O_2$	3-Chloro-2,2,3-trifluoro- propionic acid 919	C_3H_6O	Allyl alcohol B.p., 96.90 102, 549, 958-963, 1700, 1753-1755, 1891
$C_3H_2F_4O_2$	2,2,3,3-Tetrafluoro- propionic acid 920	C_3H_6O	Propionaldehyde B.p., 47.9 103, 964, 965, 1693
$C_3H_3ClF_3NO$	3-Chloro-2,2,3-trifluoro- propionamide 921	C_3H_6O	Propylene oxide B.p., 38 104, 737, 938, 964, 966
$C_3H_3F_4NO$	2,2,3,3-Tetrafluoro- propionamide 922	$C_3H_6O_2$	1,3-Dioxolane B.p., 75.6 105, 967-970
C_3H_3N	Acrylonitrile B.p., 77.2 91, 614, 716, 923, 1712, 1741	$C_3H_6O_2$	Ethyl formate B.p., 54.0 106, 577, 696, 704, 971, 1714, 1843
C_3H_3NS	Thiazole B.p., 116.8 92	$C_3H_6O_2$	Methoxyacetaldehyde B.p., 92/770 mm. 107
C_3H_4	Propadiene B.p., -32 526, 924-927, 1884- 1886	$C_3H_6O_2$	Methyl acetate B.p., 57.2 108, 576, 616, 697, 705, 972-1001, 1694, 1836, 1844, 1851, 1853, 1887

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₃ H ₆ O ₂	Propionic acid B.p., 140.7 745, 1002-1010, 1756, 1892	C ₃ H ₉ ClSi	Chlorotrimethylsilane 590, 605
C ₃ H ₆ O ₃	Methyl glycolate 1011, 1012 B.p., 151.2	C ₃ H ₉ N	Isopropylamine 1115 B.p., 32.4
C ₃ H ₆ O ₃	s-Trioxane B.p., 114.5 1013	C ₃ H ₉ N	Propylamine B.p., 48.5 119
C ₃ H ₇ Br	2-Bromopropane B.p., 59.35 578, 971, 972, 1843-1845	C ₃ H ₉ N	Trimethylamine 120 B.p., 3.2
C ₃ H ₇ Cl	1-Chloropropane 109, 559 B.p., 46.6	C ₃ H ₉ NO	1-Amino-2-propanol B.p., 159.9 121, 1116-1119
C ₃ H ₇ Cl	2-Chloropropane 110, 934 B.p., 34.9	C ₃ H ₁₀ N ₂	1,2-Propanediamine 1120-1122 B.p., 120.9
C ₃ H ₇ ClO	Propylene chlorohydrin B.p., 73/100 mm. 1014, 1745	C ₄ Cl ₃ F ₇	2,2,3-Trichlorohepta- fluorobutane B.p., 97.4 1123-1125
C ₃ H ₇ NO	<u>N,N</u> -Dimethylformamide B.p., 153.0 111, 588, 718, 919-922, 1015	C ₄ F ₈	Perfluorocyclobutane 539, 567
C ₃ H ₇ NO	Propionamide B.p., 222.1 1016-1018	C ₄ HF ₇ O ₂	Perfluorobutyric acid B.p., 122.0 122, 1126-1128, 1679
C ₃ H ₇ NO ₂	1-Nitropropane B.p., 131.6 112, 617, 783, 1019-1024	C ₄ H ₂ O ₃	Maleic anhydride 1129, 1130
C ₃ H ₇ NO ₂	2-Nitropropane B.p., 120.3 113, 618, 784, 1025-1030	C ₄ H ₄	Vinylacetylene 1131
C ₃ H ₈	Propane B.p., -42.1 524, 566, 604, 926, 929, 937, 1849, 1885	C ₄ H ₄ O ₂	Diketene 941, 1132
C ₃ H ₈ O	Isopropyl alcohol B.p., 82.5 115, 595, 684, 731, 775, 785, 940, 958, 1019, 1025, 1031-1059, 1690, 1695, 1702, 1708, 1746, 1757-1766, 1846, 1888, 1893-1895, 1934	C ₄ H ₄ S	Thiophene B.p., 83.97 1133-1142
C ₃ H ₈ O	Propyl alcohol B.p., 97.25 114, 550, 596, 746, 776, 1020, 1026, 1060-1072, 1701, 1767-1774, 1896	C ₄ H ₅ Cl	2-Chloro-1,3-butadiene 1131, 1143, 1144
C ₃ H ₈ OS	2-(Methylthio)ethanol 1073	C ₄ H ₅ N	3-Butenenitrile 123 B.p., 118.9
C ₃ H ₈ O ₂	2-Methoxyethanol B.p., 124.5 116, 619, 1074-1094, 1775-1777, 1897, 1898	C ₄ H ₅ N	Methacrylonitrile 124
C ₃ H ₈ O ₂	Methylal B.p., 42.6 698, 706	C ₄ H ₆	1,3-Butadiene B.p., -4.5 676, 927, 930, 1886
C ₃ H ₈ O ₂	1,2-Propanediol B.p., 188 117, 939, 1095- 1106, 1778	C ₄ H ₆ ClN	2-Chloro-2-methylpro- pionitrile B.p., 116 125
C ₃ H ₈ O ₂	1,3-Propanediol B.p., 214 118, 1107	C ₄ H ₆ Cl ₂	1,3-Dichloro-2-butene 1143
C ₃ H ₈ S	Ethyl methyl sulfide 1108-1113 B.p., 66.61	C ₄ H ₆ O	Crotonaldehyde B.p., 101.5 126, 1715, 1779, 1928
C ₃ H ₈ S	1-Propanethiol B.p., 67 1060, 1767	C ₄ H ₆ O	Methacrylaldehyde 127 B.p., 68.0
C ₃ H ₉ BO ₃	Trimethyl borate B.p., 68.7 620, 1114, 1854	C ₄ H ₆ O	3-Butene-2-one 1144
		C ₄ H ₆ O ₂	2,3-Butanedione 1145 B.p., 90.7
		C ₄ H ₆ O ₂	3-Butenoic acid 128
		C ₄ H ₆ O ₂	Butyrolactone 131 B.p., 204.3
		C ₄ H ₆ O ₂	Crotonic acid B.p., 185 129, 130
		C ₄ H ₆ O ₂	Methyl acrylate 1696 B.p., 80.9
		C ₄ H ₆ O ₂	Vinyl acetate B.p., 72.7 132, 621, 738, 942, 1031, 1146-1149, 1747
		C ₄ H ₆ O ₃	Acetic anhydride B.p., 138 747, 1002, 1150-1152
		C ₄ H ₆ O ₃	Propylene carbonate 133 B.p., 242.1

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₄ H ₇ Cl	1-Chloro-2-methylpropene 943 B.p., 68	C ₄ H ₈ O ₂	Methyl propionate B.p., 79.7
C ₄ H ₇ ClO	2-Chloroethyl vinyl ether B.p., 109.1		151, 626, 1034, 1697, 1756
C ₄ H ₇ N	Butyronitrile B.p., 117.6	C ₄ H ₈ O ₂	Propyl formate B.p., 80.9
C ₄ H ₇ NO	135		1195
	2-Hydroxyisobutyronitrile	C ₄ H ₈ O ₂	2-Vinyloxyethanol
	136		152, 870 B.p., 143
C ₄ H ₈	1-Butene B.p., -6	C ₄ H ₈ O ₃	Ethylene glycol mono- acetate
	677		871
C ₄ H ₈	2-Methylpropene B.p., -6	C ₄ H ₈ S	Tetrahydrothiophene
	674		1196-1202 B.p., 120.79
C ₄ H ₈ Cl ₂ O	Bis(2-chloroethyl) ether B.p., 178.6	C ₄ H ₉ Cl	1-Chlorobutane B.p., 77.9
	137, 732, 771, 869, 1154-1156		1203
C ₄ H ₈ O	2-Butanone B.p., 79.6	C ₄ H ₉ Cl	1-Chloro-2-methylpropene
	138, 551, 579, 622, 689, 699, 707, 786, 944, 1145, 1157-1169, 1687, 1716, 1748, 1757, 1780- 1782, 1833, 1837, 1839, 1846, 1899		1035, 1158 B.p., 68.9
	Butyraldehyde B.p., 75.7	C ₄ H ₉ Cl ₃ Sn	Butyltin trichloride
	139, 623, 787, 1170- 1176, 1717, 1749, 1783-1786		B.p., 113/17 mm. 1204, 1902
C ₄ H ₈ O	Ethyl vinyl ether	C ₄ H ₉ NO	<u>N,N</u> -Dimethylacetamide
	B.p., 35.5		750 B.p., 165
	140, 739, 788, 1718	C ₄ H ₉ NO	Morpholine B.p., 128.3
C ₄ H ₈ O	Isobutyraldehyde		153, 1206, 1207
	141, 1170 B.p., 63.5	C ₄ H ₉ NO ₂	<u>N</u> -(2-Hydroxyethyl) acetamide
C ₄ H ₈ O	Methyl propenyl ether		154
	142 B.p., 46.3	C ₄ H ₉ NO ₃	2-Methyl-2-nitro-1- propanol
C ₄ H ₈ O	Tetrahydrofuran		1208
	B.p., 66.1	C ₄ H ₁₀	Butane B.p., -0.5
	624, 700, 708, 1114, 1854		528, 679, 740, 743, 769
C ₄ H ₈ OS	2-(Methylthio)propional- dehyde	C ₄ H ₁₀	2-Methylpropane
	143		675, 1698 B.p., -11.70
C ₄ H ₈ OS	1,4-Oxathiane B.p., 149.2	C ₄ H ₁₀ O	Butyl alcohol B.p., 117.75
	144		155, 553, 597, 627, 685, 751, 777, 791, 914, 1021, 1027, 1120, 1146, 1180, 1203, 1209-1231, 1787-1799, 1904-1907, 1935
C ₄ H ₈ O ₂	Butyric acid B.p., 162.45	C ₄ H ₁₀ O	<u>sec</u> -Butyl alcohol
	1171, 1177-1179, 1900		B.p., 99.5
C ₄ H ₈ O ₂	<u>p</u> -Dioxane B.p., 101		156, 598, 778, 792, 1022, 1028, 1159, 1209, 1232-1237, 1787, 1800- 1807
	145, 748, 772, 789, 913, 1032, 1180-1184, 1874	C ₄ H ₁₀ O	<u>tert</u> -Butyl alcohol
C ₄ H ₈ O ₂	Ethoxyacetaldehyde		B.p., 82.41
	146 B.p., 105		599, 779, 1023, 1029, 1800
C ₄ H ₈ O ₂	Ethyl acetate B.p., 77.05	C ₄ H ₁₀ O	Ethyl ether B.p., 34.5
	552, 560, 625, 690, 749, 790, 1033, 1061, 1185- 1191, 1893, 1901, 1928		5, 157, 561, 581, 741, 966, 1036, 1211, 1239
C ₄ H ₈ O ₂	2-Hydroxybutyraldehyde	C ₄ H ₁₀ O	Isobutyl alcohol B.p., 107
	147		158, 600, 780, 915, 1024, 1030, 1121, 1172, 1181, 1185, 1210, 1238, 1783, 1808, 1874, 1903
C ₄ H ₈ O ₂	Isobutyric acid	C ₄ H ₁₀ O ₂	1,4-Butanediol B.p., 230
	B.p., 154.5		1241
	148, 1192-1194	C ₄ H ₁₀ O ₂	1,1-Dimethoxyethane
C ₄ H ₈ O ₂	Isopropyl formate		1173, 1784 B.p., 64.5
	B.p., 68.8	C ₄ H ₁₀ O ₂	1,2-Dimethoxyethane
	580, 1157, 1845		159, 1240 B.p., 85.2
C ₄ H ₈ O ₂	3-Methoxypropionaldehyde		
	149		
C ₄ H ₈ O ₂	2-Methyl-1,3-dioxolane		
	150 B.p., 82.5		

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₄ H ₁₀ O ₂	2-Ethoxyethanol B.p., 134.0 160, 793, 1186, 1242-1277, 1809, 1810, 1908, 1909	C ₅ H ₇ ClO	2-Chloroallyl vinyl ether 935
C ₄ H ₁₀ O ₃	Diethylene glycol B.p., 245.5 161, 1154, 1278-1298	C ₅ H ₇ N	3-Methyl-3-butenenitrile 170 B.p., 137
C ₄ H ₁₀ S	1-Butanethiol B.p., 98/770 mm. 1212, 1788	C ₅ H ₈	Cyclopentene B.p., 44.4 974
C ₄ H ₁₀ S	2-Butanethiol B.p., 85.15 1133, 1299	C ₅ H ₈	Isoprene B.p., 34.3 629, 1361-1365
C ₄ H ₁₀ S	Ethyl sulfide B.p., 92.07 1300-1308	C ₅ H ₈	3-Methyl-1,2-butadiene 630 B.p., 40.8
C ₄ H ₁₀ S	Isopropyl methyl sulfide B.p., 84.76 1134, 1299, 1309-1316	C ₅ H ₈	<u>cis</u> -1,3-Pentadiene 631 B.p., 44
C ₄ H ₁₀ S	Methyl propyl sulfide 1317-1324 B.p., 95.47	C ₅ H ₈	<u>trans</u> -1,3-Pentadiene 632 B.p., 42.0
C ₄ H ₁₀ S ₂	Ethyl disulfide B.p., 154.11 1325, 1326	C ₅ H ₈ Cl ₄	Tetrachloropentane 931, 1366
C ₄ H ₁₁ N	Butylamine B.p., 77.8 162, 794, 1037, 1213, 1719, 1758, 1789, 1811, 1904	C ₅ H ₈ O	Allyl vinyl ether 171, 959 B.p., 67.4
C ₄ H ₁₁ N	Diethylamine B.p., 55.5 163, 628, 795, 909, 1327, 1328, 1704, 1812	C ₅ H ₈ O	Cyclopentanone B.p., 130 172, 1367-1369
C ₄ H ₁₁ NO	2-Dimethylaminoethanol B.p., 134.6 164, 908, 1739	C ₅ H ₈ O	1-Methoxy-1,3-butadiene 173, 633 B.p., 90.7
C ₄ H ₁₁ NO ₂	2,2'-Iminodiethanol 165, 910, 912, 1329	C ₅ H ₈ O	3-Penten-2-one 174 B.p., 123.5
C ₅ Cl ₂ F ₆	1,2-Dichlorohexafluoro- cyclopentene B.p., 90.6 1123, 1330	C ₅ H ₈ O	3-Methyl-3-buten-2-one 175 B.p., 97.9
C ₅ F ₁₀	Perfluorocyclopentane B.p., 25/833 mm. 61, 1331, 1332	C ₅ H ₈ O	4-Pentalen B.p., 106 176
C ₅ F ₁₂	Perfluoropentane B.p., 40.86/1140 mm. 2, 60, 62, 1331	C ₅ H ₈ O ₂	Allyl acetate B.p., 104.1 177, 960
C ₅ H ₄ F ₈ O	2,2,3,3,4,4,5,5-Octafluoro- 1-pentanol 1333, 1334	C ₅ H ₈ O ₂	3,3-Dimethoxypropyne 1742 B.p., 111
C ₅ H ₄ O ₂	2-Furaldehyde B.p., 162 166, 554, 1187, 1335-1339, 1910-1913	C ₅ H ₈ O ₂	Ethyl acrylate B.p., 99.5 178, 796, 933, 1370, 1720, 1744, 1819
C ₅ H ₅ N	Pyridine B.p., 115.5 167, 589, 752, 1003, 1177, 1214, 1340-1349, 1678, 1689, 1813-1818, 1859-1865, 1892, 1900, 1905, 1914, 1915, 1936, 1937	C ₅ H ₈ O ₂	Isopropenyl acetate B.p., 97.4 179, 945, 1150, 1373
C ₅ H ₆ N ₂	2-Methylpyrazine 168 B.p., 133/737 mm.	C ₅ H ₈ O ₂	Methyl methacrylate B.p., 100.8 180, 1215, 1242, 1371, 1372
C ₅ H ₆ O	2-Methylfuran B.p., 63 169, 965, 973, 1160	C ₅ H ₈ O ₂	2,4-Pentanedione (acetyl acetone) B.p., 140.6 181, 1373
C ₅ H ₆ O ₂	Furfuryl alcohol 1335	C ₅ H ₈ O ₂	Δ-Valerolactone 182
C ₅ H ₆ S	2-Methylthiophene B.p., 111.92 900, 1350-1353	C ₅ H ₈ O ₂	Vinyl propionate 183 B.p., 95.0
C ₅ H ₆ S	3-Methylthiophene 1354-1360 B.p., 114.96	C ₅ H ₈ O ₃	Methyl acetoacetate 1192 B.p., 171.7
		C ₅ H ₁₀	Cyclopentane B.p., 49.35 894, 975, 1374, 1375
		C ₅ H ₁₀	2-Methyl-1-butene B.p., 31.10 635, 797, 896, 1362
		C ₅ H ₁₀	3-Methyl-1-butene B.p., 21.2 634, 1361, 1376
		C ₅ H ₁₀	2-Methyl-2-butene B.p., 38.60 636, 895, 1363, 1377
		C ₅ H ₁₀	1-Pentene B.p., 29.92 637, 946, 976
		C ₅ H ₁₀	<u>cis</u> -2-Pentene B.p., 37.1 638
		C ₅ H ₁₀ Cl ₂ O ₂	Bis(2-chloroethoxy) methane B.p., 218.1 184

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₅ H ₁₀ N ₂	3-Dimethylaminopropionitrile B.p., 174.5 185	C ₅ H ₁₂ N ₂	1-Methylpiperazine 206 B.p., 138.0
C ₅ H ₁₀ O	<u>cis</u> -1-Butenyl methyl ether B.p., 72.0 186, 1721	C ₅ H ₁₂ O	Active amyl alcohol B.p., 128.5 1333, 1367, 1398-1411
C ₅ H ₁₀ O	<u>trans</u> -1-Butenyl methyl ether B.p., 76.7 187	C ₅ H ₁₂ O	Amyl alcohol B.p., 137.9 643, 801, 1392-1397, 1821
C ₅ H ₁₀ O	Ethyl isopropenyl ether 188 B.p., 61.9	C ₅ H ₁₂ O	Butyl methyl ether 802, 1724 B.p., 70.3
C ₅ H ₁₀ O	Isopropyl vinyl ether B.p., 55.7 189, 798, 1038	C ₅ H ₁₂ O	Isoamyl alcohol B.p., 131.85 1153, 1334, 1368, 1398, 1412-1426, 1725, 1822, 1914
C ₅ H ₁₀ O	3-Methyl-2-butanone 1378, 1379 B.p., 95.4	C ₅ H ₁₂ O	2-Methyl-1-butanol B.p., 128.9 1369, 1427, 1428
C ₅ H ₁₀ O	2-Pentanone B.p., 102.2 639, 799, 1039, 1380, 1820	C ₅ H ₁₂ O	2-Methyl-2-butanol 1429, 1430 B.p., 101.7
C ₅ H ₁₀ O	3-Pentanone B.p., 102 1062, 1381-1384, 1768	C ₅ H ₁₂ O	3-Pentanol B.p., 115.6 1341
C ₅ H ₁₀ O	Propyl vinyl ether B.p., 65.1 190, 800, 1722	C ₅ H ₁₂ O ₂	1,2-Dimethoxypropane 207 B.p., 92
C ₅ H ₁₀ O	Tetrahydropyran B.p., 88 191	C ₅ H ₁₂ O ₂	2,2-Dimethoxypropane 644, 803 B.p., 80
C ₅ H ₁₀ O	Valeraldehyde B.p., 103.3 192, 193	C ₅ H ₁₂ O ₂	1-Ethoxy-2-propanol 208 B.p., 132.2
C ₅ H ₁₀ OS	2-Methylthioethyl vinyl ether 1073	C ₅ H ₁₂ O ₂	3-Methoxy-1-butanol 209 B.p., 161.1
C ₅ H ₁₀ O ₂	Ethyl propionate 194 B.p., 99.1	C ₅ H ₁₂ O ₂	1,5-Pentanediol 210 B.p., 242.5
C ₅ H ₁₀ O ₂	Isopropyl acetate B.p., 88.7 640, 753, 947, 1151, 1385, 1723, 1750, 1759, 1888, 1894	C ₅ H ₁₂ O ₂	2-Propoxyethanol 211 B.p., 151.5
C ₅ H ₁₀ O ₂	3-Methoxybutyraldehyde 195 B.p., 131	C ₅ H ₁₂ O ₃	2-(2-Methoxyethoxy) ethanol B.p., 194.2 872, 1278, 1431-1454
C ₅ H ₁₀ O ₂	Propyl acetate B.p., 101.6 196, 1063, 1243, 1769	C ₅ H ₁₂ S	Ethyl isopropyl sulfide 901 B.p., 107.22
C ₅ H ₁₀ O ₂	Valeric acid B.p., 187 197, 198, 1386	C ₅ H ₁₂ S	3-Methyl-1-butanethiol 1412, 1822 B.p., 116
C ₅ H ₁₀ O ₂	3-Vinyloxy-1-propanol 200, 1095, 1107	C ₅ H ₁₃ N	<u>N</u> -Methylbutylamine 212 B.p., 91.1
C ₅ H ₁₀ O ₂	1-Vinyloxy-2-propanol 199	C ₅ H ₁₃ NO	1-Ethylamino-2-propanol 213 B.p., 159.4
C ₅ H ₁₀ O ₃	3-Ethoxypropionic acid 201 B.p., 219.2	C ₅ H ₁₄ N ₂	<u>N,N</u> -Dimethyl-1,3-propanediamine B.p., 1349 214
C ₅ H ₁₀ O ₃	3-Methoxybutyric acid 202	C ₆ F ₁₂ O	Perfluorocyclic ether 1455
C ₅ H ₁₀ O ₃	Methoxymethyl propionate 203	C ₆ F ₁₄	Perfluorohexane 918, 1332, 1455, 1456, 1457
C ₅ H ₁₁ N	Piperidine B.p., 106 1340	C ₆ H ₃ Cl ₃	1,2,4-Trichlorobenzene 1458 B.p., 213
C ₅ H ₁₁ NO	<u>N,N</u> -Dimethylpropionamide B.p., 175.5 1004	C ₆ H ₄ Cl ₂	<u>o</u> -Dichlorobenzene 1459, 1460 B.p., 179
C ₅ H ₁₁ NO	4-Methylmorpholine 204 B.p., 115.6	C ₆ H ₅ Br	Bromobenzene B.p., 156.1 1461
C ₅ H ₁₂	2-Methylbutane B.p., 27.90 641, 897, 1364, 1376	C ₆ H ₅ Cl	Chlorobenzene B.p., 131 1064, 1116, 1399, 1413, 1462, 1463, 1889
C ₅ H ₁₂	Pentane B.p., 36.15 205, 642, 719, 754, 898, 948, 977, 1365, 1377, 1387-1391	C ₆ H ₅ F	Fluorobenzene B.p., 84.9 1464
		C ₆ H ₅ FO	<u>o</u> -Fluorophenol 1400, 1414
		C ₆ H ₅ NO ₂	Nitrobenzene 1465 B.p., 210.85

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₆ H ₆	Benzene B.p., 80.1 38, 555, 601, 645, 720, 733, 804, 867, 916, 932, 949, 978, 1015, 1040, 1065, 1074, 1096, 1135, 1161, 1182, 1188, 1216, 1238, 1279, 1300, 1336, 1374, 1387, 1392, 1429, 1464, 1466-1479, 1711, 1740, 1743, 1760, 1770, 1775, 1780, 1801, 1820, 1823, 1848, 1855, 1858, 1875-1879, 1889, 1890, 1895-1897, 1899, 1901, 1903, 1906, 1910, 1916, 1917, 1929-1933, 1938	C ₆ H ₁₀ O	2-Ethylcrotonaldehyde 226, 1779 B.p., 135.3
C ₆ H ₆ O	Phenol B.p., 182 1162, 1480-1488, 1918, 1919	C ₆ H ₁₀ O	2-Hexenal B.p., 149 227
C ₆ H ₆ O ₂	Pyrocatechol B.p., 245.9 1489	C ₆ H ₁₀ O	Mesityl oxide B.p., 129.5 1044, 1174, 1402, 1416, 1507-1511
C ₆ H ₇ N	Aniline B.p., 184.35 215, 805, 873, 1490-1498, 1880, 1881, 1920-1922, 1939	C ₆ H ₁₀ O	2-Methylcyclopentanone 1393 B.p., 138
C ₆ H ₇ N	2-Picoline B.p., 134 721, 755, 1401, 1415, 1499-1501, 1824, 1966-1869	C ₆ H ₁₀ O	2-Methyl-2-pentenal 229 B.p., 138.7
C ₆ H ₇ N	3-Picoline B.p., 144.1 216, 1502	C ₆ H ₁₀ O	5-Penten-2-one 228 B.p., 128.9
C ₆ H ₇ N	4-Picoline B.p., 144.3 217	C ₆ H ₁₀ O ₂	Ethyl crotonate 230 B.p., 137.8
C ₆ H ₈	1,3-Cyclohexadiene 979 B.p., 80.25	C ₆ H ₁₀ O ₂	Vinyl butyrate 231 B.p., 116.7
C ₆ H ₈ ClN	Aniline hydrochloride 1503	C ₆ H ₁₀ O ₂	Vinyl isobutyrate 232 B.p., 105.4
C ₆ H ₈ N ₂	2-Amino-3-methylpyridine 1504, 1505 B.p., 221	C ₆ H ₁₀ O ₄	Ethylene diacetate B.p., 186 233, 1481, 1919
C ₆ H ₈ N ₂	2,5-Dimethylpyrazine B.p., 154/742 mm. 218	C ₆ H ₁₁ N	Diallylamine B.p., 110.5 234
C ₆ H ₈ O	2,5-Dimethylfuran B.p., 93.3 219, 646, 1163, 1385	C ₆ H ₁₁ NO	6-Caprolactam 235
C ₆ H ₈ O	2,4-Hexadienal B.p., 171 220	C ₆ H ₁₁ NO ₃	2-Methyl-2-nitropropyl vinyl ether 236, 1208
C ₆ H ₈ O ₂	1,3-Butadienyl acetate 221 B.p., 138.5	C ₆ H ₁₂	Cyclohexane B.p., 80.6 39, 237, 602, 650, 734, 810, 950, 961, 981, 1013, 1045, 1066, 1075, 1108, 1136, 1147, 1164, 1189, 1217, 1301, 1309, 1337, 1378, 1380, 1388, 1465, 1466, 1512-1519, 1726, 1771, 1776, 1781, 1848, 1855, 1876, 1890, 1893, 1895-1897, 1899, 1901, 1903, 1906, 1910, 1916, 1929
C ₆ H ₈ O ₂	Vinyl crotonate 222 B.p., 133.9	C ₆ H ₁₂	2,3-Dimethyl-1-butene 982 B.p., 55.62
C ₆ H ₉ N ₃	3,3'-Iminodipropionitrile 223	C ₆ H ₁₂	2,3-Dimethyl-2-butene 983 B.p., 73.38
C ₆ H ₁₀	Cyclohexene B.p., 83.1 980	C ₆ H ₁₂	3,3-Dimethyl-1-butene 984 B.p., 41.4
C ₆ H ₁₀	2-Ethyl-1,3-butadiene 224 B.p., 66.9	C ₆ H ₁₂	2-Ethyl-1-butene 811, 985 B.p., 64.95
C ₆ H ₁₀	1,3-Hexadiene B.p., 72.9 647, 806, 1041	C ₆ H ₁₂	1-Hexene B.p., 63.49 812, 986, 1109
C ₆ H ₁₀	2,4-Hexadiene B.p., 82 648, 807, 1042	C ₆ H ₁₂	<u>cis</u> -2-Hexene B.p., 68.8 813, 987
C ₆ H ₁₀	3-Methylcyclopentene 808 B.p., 64.9	C ₆ H ₁₂	<u>cis</u> -3-Hexene B.p., 66.4 651, 814
C ₆ H ₁₀	3-Methyl-1,3-pentadiene B.p., 77 649, 809, 1043	C ₆ H ₁₂	Methylcyclopentane B.p., 71.8 815, 951, 991, 1110, 1137, 1310, 1389, 1467, 1520, 1521, 1875, 1938
C ₆ H ₁₀ O	Cyclohexanone B.p., 155.6 225, 1480, 1506, 1825, 1918	C ₆ H ₁₂	<u>cis</u> -3-Methyl-2-pentene 816, 988 B.p., 70.52
		C ₆ H ₁₂	<u>trans</u> -3-Methyl-2-pentene 817 B.p., 67.6
		C ₆ H ₁₂	4-Methyl-1-pentene 989 B.p., 54.0
		C ₆ H ₁₂	4-Methyl-2-pentene 238, 818 B.p., 56.7

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₆ H ₁₂	<i>trans</i> -4-Methyl-2-pentene 990 B.p., 58.4	C ₆ H ₁₂ O ₃	2-Ethoxyethyl acetate B.p., 156.2 255, 1534, 1829
C ₆ H ₁₂	1,1,2-Trimethylcyclopropane 952 B.p., 52.6	C ₆ H ₁₂ O ₃	Methyl 3-ethoxypropionate 256
C ₆ H ₁₂ Cl ₂ O	Bis(chloroisopropyl)ether 239, 1014 B.p., 187.0	C ₆ H ₁₂ O ₃	Paraldehyde B.p., 124 821, 1499, 1535, 1536, 1710, 1824
C ₆ H ₁₂ Cl ₂ O ₂	1,2-Bis(2-chloroethoxy)ethane 240 B.p., 240.9	C ₆ H ₁₂ O ₃	2-(2-Vinyloxyethoxy)-ethanol 257, 1280
C ₆ H ₁₂ O	Butyl vinyl ether B.p., 94.2 241, 652, 819, 1218, 1790	C ₆ H ₁₃ Cl	1-Chlorohexane 258 B.p., 134.5
C ₆ H ₁₂ O	Cyclohexanol B.p., 160.55 242, 1461, 1482, 1490, 1506, 1512, 1522, 1523, 1825, 1918, 1920	C ₆ H ₁₃ N	Cyclohexylamine B.p., 124.5 259, 1491, 1514, 1920
C ₆ H ₁₂ O	2-Ethylbutyraldehyde 243 B.p., 116.7	C ₆ H ₁₃ N	Hexamethyleneimine 260 B.p., 138
C ₆ H ₁₂ O	2-Hexanone B.p., 127.2 1772	C ₆ H ₁₃ NO	<i>N,N</i> -Dimethylbutyramide B.p., 124.5/100 mm. 1178
C ₆ H ₁₂ O	Hexanal B.p., 128.3 245, 1219	C ₆ H ₁₃ NO	2,6-Dimethylmorpholine 261 B.p., 146.6
C ₆ H ₁₂ O	Isobutyl vinyl ether B.p., 83.4 244, 820, 1727	C ₆ H ₁₃ NO	4-Ethylmorpholine 262 B.p., 138.3
C ₆ H ₁₂ O	2-Methylvaleraldehyde B.p., 118.3 246, 1067, 1773	C ₆ H ₁₃ NO ₂	4-Morpholineethanol 263 B.p., 225.5
C ₆ H ₁₂ O	4-Methyl-2-pentanone B.p., 116.2 582, 653, 953, 1046, 1468, 1513, 1524, 1525, 1761, 1840, 1916	C ₆ H ₁₄	2,2-Dimethylbutane B.p., 49.74 586, 654, 899, 992, 1375
C ₆ H ₁₂ OS	2-Ethylthioethyl vinyl ether 247 B.p., 169.7	C ₆ H ₁₄	2,3-Dimethylbutane B.p., 58.05 955, 993, 1111, 1165
C ₆ H ₁₂ O ₂	Butyl acetate B.p., 126.2 583, 954, 1190, 1220, 1232, 1244, 1526-1528, 1785, 1791, 1826, 1827, 1907, 1935	C ₆ H ₁₄	Hexane B.p., 68.60 40, 264, 657, 756, 822, 956, 962, 994, 1005, 1112, 1115, 1138, 1166, 1175, 1195, 1221, 1456, 1462, 1469, 1492, 1515, 1520, 1537-1539, 1728, 1753, 1782, 1786, 1792, 1852, 1853, 1877, 1887, 1930, 1938
C ₆ H ₁₂ O ₂	<i>sec</i> -Butyl acetate B.p., 112.3 1233, 1526, 1802, 1826, 1828, 1906	C ₆ H ₁₄	2-Methylpentane B.p., 60.27 655, 823, 995
C ₆ H ₁₂ O ₂	2-Ethylbutyric acid 248 B.p., 194.2	C ₆ H ₁₄	3-Methylpentane 565, 996 B.p., 63.28
C ₆ H ₁₂ O ₂	2-Ethyl-2-methyl-1,3-dioxolane 251 B.p., 117.6	C ₆ H ₁₄ N ₂	2,5-Dimethylpiperazine B.p., 164 265, 1245, 1394
C ₆ H ₁₂ O ₂	Hexanoic acid B.p., 205.15 249, 1529, 1530	C ₆ H ₁₄ N ₂ O	4-(2-Aminoethyl)morpholine B.p., 204.7 266
C ₆ H ₁₂ O ₂	4-Hydroxy-4-methyl-2-pentanone (diacetone alcohol) 250, 1508 B.p., 161	C ₆ H ₁₄ N ₂ O	1-Piperazineethanol 267 B.p., 246.3
C ₆ H ₁₂ O ₂	2-Methylpentanoic acid 252 B.p., 196.4	C ₆ H ₁₄ O	Isopropyl propyl ether 1732
C ₆ H ₁₂ O ₂	Tetrahydropyran-2-methanol 254 B.p., 187.2	C ₆ H ₁₄ O	Butyl ethyl ether B.p., 92.2 268, 658, 824, 1729, 1762
C ₆ H ₁₂ O ₂	4-Vinyloxy-1-butanol 253, 1241	C ₆ H ₁₄ O	2-Ethyl-1-butanol B.p., 147.0 269, 1540, 1541
C ₆ H ₁₂ O ₂ S	2,4-Dimethylsulfolane 1532, 1533	C ₆ H ₁₄ O	Ethyl isobutyl ether 1730 B.p., 79

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₆ H ₁₄ O	Hexyl alcohol B.p., 157.85 270, 874, 1542, 1323	C ₆ H ₁₅ NO	2-Diethylaminoethanol 289, 1328 B.p., 162.1
C ₆ H ₁₄ O	Isopropyl ether B.p., 68.0 271, 701, 709, 742, 757, 825, 963, 1152, 1183, 1327, 1370, 1543, 1705, 1731, 1751, 1763, 1812, 1819, 1830, 1841, 1891, 1894	C ₆ H ₁₅ NO	1-Isopropylamino-2-pro- panol B.p., 164.5 290
C ₆ H ₁₄ O	2-Methyl-1-pentanol 272 B.p., 148	C ₆ H ₁₅ NO ₂	1,1'-Iminodi-2-propanol B.p., 185/100 mm. 1117, 1569
C ₆ H ₁₄ O	4-Methyl-2-pentanol 273, 1544 B.p., 131.8	C ₆ H ₁₅ NO ₃	2,2',2''-Nitrilotriethanol 1329
C ₆ H ₁₄ OS	2-Butylthioethanol 1545	C ₆ H ₁₅ N ₃	4-(2-Aminoethyl)pipera- zine B.p., 222.0 291
C ₆ H ₁₄ O ₂	2-Butoxyethanol B.p., 171.2 1191, 1222, 1527, 1546-1557	C ₆ H ₁₆ N ₂	<u>N,N</u> -Diethylethylenedi- amine B.p., 144.9 292
C ₆ H ₁₄ O ₂	1,1-Diethoxyethane 274 B.p., 102.1	C ₆ H ₁₆ N ₂	<u>N,N,N',N'</u> -Tetramethyl- ethylenediamine 293 B.p., 119
C ₆ H ₁₄ O ₂	1,2-Diethoxyethane 826, 1543 B.p., 121.1	C ₆ H ₁₆ OSi	1-(Trimethylsiloxy)propane B.p., 100.3/735 mm. 1068
C ₆ H ₁₄ O ₂	1,1-Dimethoxybutane B.p., 114 275, 659, 1176	C ₇ F ₁₄	Perfluoro(methylcyclo- hexane) B.p., 73-78 1470
C ₆ H ₁₄ O ₂	2,2-Dimethoxybutane 660 B.p., 106-7	C ₇ F ₁₆	Perfluoroheptane B.p., 83 371, 1390, 1471, 1537, 1570-1573
C ₆ H ₁₄ O ₂	1,3-Dimethoxybutane 276 B.p., 120.3	C ₇ H _n	C ₇ Hydrocarbons B.p., 95-120 1417, 1427
C ₆ H ₁₄ O ₂	1,1-Dimethoxy-2-methyl- propane B.p., 104.7 277	C ₇ H ₅ F ₃	<i>a, a, a</i> -Trifluorotoluene 20 B.p., 103.9
C ₆ H ₁₄ O ₂	Hexylene glycol 1558, 1559, 1923	C ₇ H ₆ O ₂	Benzoic acid 1574
C ₆ H ₁₄ O ₂	2-Methyl-1,5-pentanediol 278 B.p., 242.4	C ₇ H ₇ F	<i>o</i> -Fluorotoluene B.p., 114 1403, 1418
C ₆ H ₁₄ O ₂	3-Methyl-1,5-pentanediol 279 B.p., 248.4	C ₇ H ₈	Toluene B.p., 110.7 294, 556, 661, 828, 876, 902, 917, 967, 1049, 1069, 1098, 1118, 1122, 1132, 1184, 1197, 1223, 1342, 1404, 1419, 1428, 1430, 1493, 1516, 1521, 1534, 1538, 1575-1582, 1733, 1754, 1765, 1777, 1778, 1809, 1829, 1831, 1832, 1842, 1880, 1882, 1905, 1911, 1912, 1914, 1920, 1921, 1934, 1939
C ₆ H ₁₄ O ₃	Bis(2-methoxyethyl)ether 280 B.p., 162	C ₇ H ₈ O	Benzyl alcohol B.p., 205.2 877, 1583
C ₆ H ₁₄ O ₃	Dipropylene glycol 1097, 1560, 1561	C ₇ H ₈ O	<i>x</i> -Cresol B.p., 202 1586-1588, 1924-1926
C ₆ H ₁₄ O ₃	2-(2-Ethoxyethoxy)ethanol B.p., 202.8 281, 875, 1246, 1281, 1562, 1563	C ₇ H ₈ O	<i>o</i> -Cresol B.p., 191 878, 1585, 1883
C ₆ H ₁₄ O ₄	Triethylene glycol B.p., 288.7 1282, 1564-1568	C ₇ H ₈ O	<i>m</i> - and <i>p</i> -Cresol B.p., 202 1584, 1589, 1590
C ₆ H ₁₄ S	Isopropyl sulfide 1196 B.p., 119.25	C ₇ H ₈ O	<i>p</i> -Cresol B.p., 201.7 1575, 1591
C ₆ H ₁₅ N	Diisopropylamine B.p., 84.1 282, 1047, 1764	C ₇ H ₈ O ₂	Guaiacol B.p., 205.0 295
C ₆ H ₁₅ N	1,3-Dimethylbutylamine 283 B.p., 108.5	C ₇ H ₉ ClO	2-Chloroallylidene di- acetate B.p., 212.1 296
C ₆ H ₁₅ N	Dipropylamine B.p., 109 284	C ₇ H ₉ N	2,6-Lutidine B.p., 144 297, 758, 1405, 1420, 1502, 1593, 1870-1872
C ₆ H ₁₅ N	<u>N</u> -Ethylbutylamine 285 B.p., 111.2		
C ₆ H ₁₅ N	Hexylamine B.p., 132.7 286, 1048		
C ₆ H ₁₅ N	Triethylamine B.p., 89.4 287, 827, 1706, 1830, 1857, 1927		
C ₆ H ₁₅ NO	2-Butylaminoethanol 288 B.p., 199.3		

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₇ H ₉ N	<u>N</u> -Methylaniline 879, 1494, 1592	C ₇ H ₁₄ O	2,4-Dimethyl-3-pentanone 1406, 1421 B.p., 125
C ₇ H ₉ N	Pyridine bases 1586-1588, 1924-1926	C ₇ H ₁₄ O	3-Heptanone B.p., 147.6 307
C ₇ H ₉ N	Tetrahydrobenzoxonitrile 298 B.p., 195.1	C ₇ H ₁₄ O	4-Dimethyl-3-pentanone 308 B.p., 143.7
C ₇ H ₉ N	<u>o</u> -Toluidine B.p., 200.7 1594	C ₇ H ₁₄ O	5-Methyl-2-hexanone 309 B.p., 144
C ₇ H ₁₀ O	1,2,3,6-Tetrahydrobenzal- dehyde B.p., 164.2 299	C ₇ H ₁₄ O ₂	Amyl acetate B.p., 146 310
C ₇ H ₁₀ O ₄	Allylidene diacetate 300	C ₇ H ₁₄ O ₂	Heptanoic acid 1597 B.p., 222.0
C ₇ H ₁₂	2,4-Dimethyl-1,3-penta- diene B.p., 93.3 301	C ₇ H ₁₄ O ₃	Ethyl 3-ethoxypropionate 311 B.p., 170.1
C ₇ H ₁₂	1,3-Heptadiene 829	C ₇ H ₁₄ O ₃	3-Methoxybutyl acetate 312 B.p., 171.3
C ₇ H ₁₂	2,4-Heptadiene 830	C ₇ H ₁₄ O ₄	2-(2-Methoxyethoxy)ethyl acetate B.p., 208.9 313
C ₇ H ₁₂ Cl ₄	Tetrachloroheptane 1366	C ₇ H ₁₅ N	1,2-Dimethylpiperidine 1407, 1422 B.p., 128
C ₇ H ₁₂ O	3-Hepten-2-one 302, 1509 B.p., 162.9	C ₇ H ₁₅ N	2,6-Dimethylpiperidine B.p., 128 1386, 1408, 1423
C ₇ H ₁₂ O ₂	Butyl acrylate B.p., 147 303, 1224, 1793	C ₇ H ₁₅ NO	<u>N,N</u> -Dimethylvaleramide B.p., 141/100 mm. 1386
C ₇ H ₁₂ O ₂	Cyclohexyl formate 1522	C ₇ H ₁₆	2,2-Dimethylpentane B.p., 79.20 41, 839, 1113, 1316
C ₇ H ₁₂ O ₂	2-Ethoxy-3,4-dihydro-1, 2-pyran B.p., 142.9 304	C ₇ H ₁₆	2,3-Dimethylpentane B.p., 89.78 42, 840, 1140, 1306, 1314, 1322, 1473, 1917
C ₇ H ₁₂ O ₄	Pimelic acid 305	C ₇ H ₁₆	2,4-Dimethylpentane B.p., 80.50 43, 735, 841, 997, 1141, 1307, 1315, 1474, 1517
C ₇ H ₁₄	1,1-Dimethylcyclopentane B.p., 87.85 831, 1303, 1312, 1320	C ₇ H ₁₆	3,3-Dimethylpentane 842 B.p., 86.07
C ₇ H ₁₄	<u>cis</u> -1,2-Dimethylcyclo- pentane B.p., 99.53 832	C ₇ H ₁₆	3-Ethylpentane 843 B.p., 93.47
C ₇ H ₁₄	<u>trans</u> -1,2-Dimethylcyclo- pentane B.p., 91.87 833	C ₇ H ₁₆	Heptane B.p., 98.25 314, 663, 722, 759, 844, 904, 957, 968, 998, 1006, 1119, 1124, 1142, 1148, 1168, 1225, 1235, 1339, 1343, 1350, 1355, 1379, 1382, 1475, 1495, 1518, 1570, 1577, 1595, 1598-1600, 1735, 1794, 1804, 1813, 1859, 1879, 1881, 1882, 1912, 1913, 1922, 1932, 1939
C ₇ H ₁₄	<u>cis</u> -1,3-Dimethylcyclo- pentane B.p., 91.73 834	C ₇ H ₁₆	2-Methylhexane B.p., 90.05 664, 845, 999
C ₇ H ₁₄	<u>trans</u> -1,3-Dimethylcyclo- pentane B.p., 90.77 662, 835, 1139, 1302, 1311, 1319	C ₇ H ₁₆	3-Methylhexane B.p., 91.85 665, 846, 1000, 1305, 1313, 1927
C ₇ H ₁₄	2,3-Dimethyl-1-pentene 836 B.p., 84.2	C ₇ H ₁₆	2,2,3-Trimethylbutane B.p., 80.88 44, 666, 1001, 1519
C ₇ H ₁₄	Ethylcyclopentane B.p., 103.47 837, 1317, 1354	C ₇ H ₁₆ O	3-Heptanol B.p., 156.4 1155
C ₇ H ₁₄	<u>trans</u> -2-Heptene 1076 B.p., 98.0	C ₇ H ₁₆ O	5-Methyl-2-hexanol 315
C ₇ H ₁₄	Methylcyclohexane B.p., 101.05 903, 1167, 1234, 1304, 1318, 1338, 1381, 1391, 1472, 1539, 1576, 1595, 1734, 1803, 1878, 1911, 1913, 1921, 1931		
C ₇ H ₁₄	1,1,2,2-Tetramethylcyclo- propane B.p., 75.9 838		
C ₇ H ₁₄ O	Butyl isopropenyl ether 306 B.p., 114.8		

Formula	Name and System Nos.
C ₇ H ₁₆ O ₂	1-Butoxy-2-methoxyethane 316 B.p., 149.9
C ₇ H ₁₆ O ₂	1- <i>tert</i> -Butoxy-2-methoxyethane 1077
C ₇ H ₁₆ O ₂	1-Butoxy-2-propanol 317 B.p., 170.1
C ₇ H ₁₆ O ₂	2-Ethyl-1,5-pentanediol 318 B.p., 253.3
C ₇ H ₁₆ O ₂	Dipropoxymethane 1774 B.p., 146.6
C ₇ H ₁₆ O ₃	Dipropylene glycol methyl ether 1601
C ₇ H ₁₆ O ₃	1-(2-Ethoxyethoxy)-2-propanol 319 B.p., 198.1
C ₇ H ₁₆ O ₃	2-Ethoxyethyl 2-methoxyethyl ether 320
C ₇ H ₁₆ O ₃	2-(2-Propoxyethoxy)ethanol 321 B.p., 215.8
C ₇ H ₁₇ NO	1-Diethylamino-2-propanol 322 B.p., 159.5
C ₇ H ₁₈ N ₂	3-Diethylaminopropylamine 323 B.p., 169.4
C ₇ H ₁₈ OSi	(Trimethylsiloxy)butane 1226
C ₈ F ₁₆ O	Perfluorocyclic oxide B.p., 102.6 1125, 1330, 1571, 1596, 1602-1604
C ₈ F ₁₈ O	Perfluorobutyl ether 1476, 1598 B.p., 100
C ₈ H ₅ Cl ₃	<i>ar</i> -Trichlorostyrene 1605
C ₈ H ₆ Cl ₂	<i>ar</i> -Dichlorostyrene 1431
C ₈ H ₆ O	Coumarone B.p., 173 1099
C ₈ H ₇ N	Indole B.p., 253 1283
C ₈ H ₈	Styrene B.p., 67.9/57 324, 1070, 1078, 1247, 1606, 1736, 1898, 1908
C ₈ H ₈ Cl ₂ O ₂	2-(2,4-Dichlorophenoxy)ethanol 325
C ₈ H ₈ O	Acetophenone B.p., 201.6 326
C ₈ H ₈ O	(Epoxyethyl)benzene 327 B.p., 194.2
C ₈ H ₈ O ₂	Phenyl acetate B.p., 195.1 1483, 1919
C ₈ H ₈ O ₃	Methyl salicylate 1608 B.p., 222.3
C ₈ H ₁₀	Ethylbenzene B.p., 136.15 328, 1011, 1071, 1079, 1126, 1193, 1227, 1248, 1284, 1344, 1409, 1424, 1558, 1599, 1606, 1609-1614, 1860, 1873, 1898, 1908, 1915, 1923, 1936

Formula	Name and System Nos.
C ₈ H ₁₀	<i>m</i> -Xylene B.p., 139 329, 728, 1012, 1127, 1129, 1194, 1249, 1535, 1607, 1615, 1616
C ₈ H ₁₀	<i>o</i> -Xylene B.p., 143.1/735 mm. 760, 880, 1100, 1250, 1345, 1617, 1861, 1937
C ₈ H ₁₀	<i>p</i> -Xylene B.p., 138.35 667, 729, 1072, 1080, 1128, 1251, 1285, 1536, 1618
C ₈ H ₁₀ O	α -Methylbenzyl alcohol 330 B.p., 203.4
C ₈ H ₁₁ N	<i>N,N</i> -Dimethylaniline B.p., 194.05 881, 1496, 1592
C ₈ H ₁₁ N	<i>N</i> -Ethylaniline 331 B.p., 204.8
C ₈ H ₁₁ N	α -Methylbenzylamine 332 B.p., 188.6
C ₈ H ₁₁ N	2-Methyl-5-ethylpyridine 333, 1578 B.p., 178.3
C ₈ H ₁₁ N	<i>x</i> -Methyl-1,2,3,6-tetrahydrobenzotriole 334 B.p., 205.4
C ₈ H ₁₁ N	<i>s</i> -Collidine B.p., 171.3 882, 1585, 1883
C ₈ H ₁₂	4-Vinylcyclohexene 1081
C ₈ H ₁₂ O	2-Methyl-1,2,3,6-tetrahydrobenzaldehyde 335 B.p., 176.4
C ₈ H ₁₂ O ₂	3,4-Dihydro-2,5-dimethyl-2H-pyran-2-carboxaldehyde 336 B.p., 170.9
C ₈ H ₁₂ O ₄	Diethyl fumarate 337 B.p., 218.1
C ₈ H ₁₄	Diisobutylene B.p., 102.3 338, 1050, 1236, 1766, 1805
C ₈ H ₁₄ O	Bicyclo[2.2.1]-heptane-2-methanol B.p., 203.9 339
C ₈ H ₁₄ O	Cyclohexyl vinyl ether 1523
C ₈ H ₁₄ O	Diisobutylene oxide 340
C ₈ H ₁₄ O	2-Ethyl-2-hexenal 341, 668 B.p., 176
C ₈ H ₁₄ O	2-Octenal 342
C ₈ H ₁₄ O ₂	Butyl methacrylate 1371
C ₈ H ₁₄ O ₂	1,1-Diallyloxyethane 343 B.p., 150.9
C ₈ H ₁₄ O ₂	2-Ethyl-3-hexenoic acid 344 B.p., 231.8
C ₈ H ₁₄ O ₂	Vinyl 2-methylvalerate 345 B.p., 148.8
C ₈ H ₁₄ O ₃	Bis(2-vinylloxyethyl)ether 346, 1619 B.p., 198.7
C ₈ H ₁₄ O ₃	Butyl acetoacetate 347 B.p., 213.9
C ₈ H ₁₄ O ₃	2-Ethoxyethyl methacrylate 1372

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₈ H ₁₄ O ₄	Diethyl succinate 348 B.p., 216.2	C ₈ H ₁₆	2,4,4-Trimethyl-2-pentene 854 B.p., 104.91
C ₈ H ₁₅ N	2-(Aminoethyl)bicyclo [2.2.1]heptane 349 B.p., 185.9	C ₈ H ₁₆ O	2-Ethylhexanal 350, 1540 B.p., 163.6
C ₈ H ₁₆	1,1-Dimethylcyclohexane 847 B.p., 119.54	C ₈ H ₁₆ O	2,4,4-Trimethyl-1,2- epoxypentane B.p., 140.9 351
C ₈ H ₁₆	<u>trans</u> -1,2-Dimethylcyclo- hexane B.p., 123.42 1051, 1252	C ₈ H ₁₆ O	2,4,4-Trimethyl-2,3- epoxypentane B.p., 127.3 352
C ₈ H ₁₆	1,3-Dimethylcyclohexane 1383 B.p., 120.3	C ₈ H ₁₆ OS	2-Butylthioethyl vinyl ether B.p., 210.5 353, 1545
C ₈ H ₁₆	<u>cis</u> -1,3-Dimethylcyclohex- ane B.p., 120.09 1082	C ₈ H ₁₆ O ₂	2-Butoxyethyl vinyl ether 354
C ₈ H ₁₆	<u>trans</u> -1,3-Dimethylcyclo- hexane B.p., 124.45 849, 905, 1198, 1356	C ₈ H ₁₆ O ₂	1,3-Dimethylbutyl acetate 1620 B.p., 146.1
C ₈ H ₁₆	<u>cis</u> -1,4-Dimethylcyclo- hexane B.p., 124.32 848	C ₈ H ₁₆ O ₂	2,3-Epoxy-2-ethylhexanol 355
C ₈ H ₁₆	<u>trans</u> -1,4-Dimethylcyclo- hexane B.p., 119.35 850	C ₈ H ₁₆ O ₂	2-Ethylbutyl acetate 356, 1542 B.p., 162.3
C ₈ H ₁₆	Ethylcyclohexane B.p., 131.85 1199, 1253, 1559, 1602, 1609, 1923	C ₈ H ₁₆ O ₂	2-Ethylhexanoic acid 357, 1621 B.p., 227.6
C ₈ H ₁₆	1-Ethyl-1-methylcyclo- pentane B.p., 121.52 851	C ₈ H ₁₆ O ₂	Hexyl acetate B.p., 171.0 358
C ₈ H ₁₆	<u>cis</u> -1-Ethyl-2-methyl- cyclopentane B.p., 128.05 1052	C ₈ H ₁₆ O ₂	Iso-octanoic acid (iso- mers) B.p., 220 359
C ₈ H ₁₆	<u>trans</u> -1-Ethyl-2-methyl- cyclopentane B.p., 121.2 1053, 1083	C ₈ H ₁₆ O ₂	4-Methyl-2-pentyl acetate B.p., 146.1 360, 1510, 1524, 1544
C ₈ H ₁₆	<u>trans</u> -1-Ethyl-3-methyl- cyclopentane B.p., 120.8 1054, 1084	C ₈ H ₁₆ O ₂	Octanoic acid B.p., 238.5 1529, 1622
C ₈ H ₁₆	1-Octene B.p., 121.6 1610	C ₈ H ₁₆ O ₃	2-Butoxyethyl acetate 361 B.p., 192.2
C ₈ H ₁₆	<u>cis</u> -2-Octene B.p., 125.6 1254	C ₈ H ₁₆ O ₃	2,5-Diethoxytetrahydro- furan B.p., 173.0 362
C ₈ H ₁₆	1,1,2-Trimethylcyclopent- ane B.p., 113.73 1055, 1357	C ₈ H ₁₆ O ₃	2-Ethoxyethyl 2-vinyloxy- ethyl ether B.p., 194.0 363
C ₈ H ₁₆	1,1,3-Trimethylcyclopent- ane B.p., 104.89 1056, 1085	C ₈ H ₁₆ O ₄	2-(2-Ethoxyethoxy)ethyl acetate B.p., 217.4 364, 1623
C ₈ H ₁₆	1, <u>cis</u> -2, <u>cis</u> -3-Trimethyl- cyclopentane B.p., 123.0 1086	C ₈ H ₁₇ Cl	1-Chloro-2-ethylhexane 365 B.p., 173
C ₈ H ₁₆	1, <u>cis</u> -2, <u>trans</u> -3-Trimethyl cyclopentane B.p., 117.5 852, 1057	C ₈ H ₁₇ Cl	3-(Chloromethyl)heptane 1541, 1624
C ₈ H ₁₆	1, <u>trans</u> -2, <u>cis</u> -3-Trimethyl- cyclopentane B.p., 110.2 1087	C ₈ H ₁₇ N	<u>N</u> -Ethylcyclohexylamine 366 B.p., 164.9
C ₈ H ₁₆	1, <u>cis</u> -2, <u>trans</u> -4-Trimethyl- cyclopentane B.p., 116.73 1058	C ₈ H ₁₇ N	5-Ethyl-2-methylpiperi- dine B.p., 163.4 367
C ₈ H ₁₆	1, <u>trans</u> -2, <u>cis</u> -4-Trimethyl- cyclopentane B.p., 109.29 853	C ₈ H ₁₇ N	<u>ar</u> -Methylcyclohexane- methylamine 368
C ₈ H ₁₆	2,4,4-Trimethyl-1-pentene 493, 1088 B.p., 101.44	C ₈ H ₁₇ NO	<u>N,N</u> -Dimethylhexanamide 1530
		C ₈ H ₁₇ NO	4-Ethyl-2,6-dimethylmor- pholine B.p., 158.1 369
		C ₈ H ₁₈	2,2-Dimethylhexane B.p., 106.84 855, 1323, 1353
		C ₈ H ₁₈	2,3-Dimethylhexane 856, 906 B.p., 115.61
		C ₈ H ₁₈	2,4-Dimethylhexane 1089 B.p., 109.43

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₈ H ₁₈	2,5-Dimethylhexane B.p., 109.15 1169, 1200, 1255, 1352, 1360, 1384	C ₈ H ₁₈ O ₂	2-Ethyl-3-methyl-1,5-pentanediol B.p., 265.5 377
C ₈ H ₁₈	3,3-Dimethylhexane 1256 B.p., 111.97	C ₈ H ₁₈ O ₂	2-Hexyloxyethanol 378 B.p., 208.1
C ₈ H ₁₈	3,4-Dimethylhexane 857 B.p., 117.73	C ₈ H ₁₈ O ₂	2-(2-Methylpentoxy)ethanol B.p., 197.1 379
C ₈ H ₁₈	3-Ethyl-3-methylpentane 1257 B.p., 118.26	C ₈ H ₁₈ O ₃	Bis(2-ethoxyethyl) ether B.p., 188.4 381, 1562, 1619
C ₈ H ₁₈	Iso-octane 529, 1237, 1497, 1579, 1806, 1933	C ₈ H ₁₈ O ₃	2-(2-Butoxyethoxy)ethanol B.p., 231.2 380, 884, 1286, 1479, 1633-1637, 1847
C ₈ H ₁₈	2-Methylheptane B.p., 117.65 858, 907, 1201, 1351, 1359	C ₈ H ₁₈ O ₄	1,2-Bis(2-methoxyethoxy)ethane 382
C ₈ H ₁₈	3-Methylheptane 859 B.p., 118.93	C ₈ H ₁₈ O ₄	2-[2-(2-Ethoxyethoxy)ethoxy]ethanol 1287
C ₈ H ₁₈	4-Methylheptane 860 B.p., 117.71	C ₈ H ₁₉ N	Dibutylamine B.p., 159.6 383, 1230, 1797, 1811, 1904
C ₈ H ₁₈	n-Octane B.p., 125.7 48, 370, 669, 723, 761, 1007, 1202, 1228, 1258, 1346, 1358, 1396, 1410, 1425, 1477, 1500, 1572, 1611, 1618, 1795, 1814, 1862, 1866, 1870	C ₈ H ₁₉ N	2-Ethylhexylamine 384 B.p., 169.1
C ₈ H ₁₈	2,2,3-Trimethylpentane 861, 1090 B.p., 109.84	C ₈ H ₁₉ NO	2-Diisopropylaminoethanol 385, 885 B.p., 190.9
C ₈ H ₁₈	2,2,4-Trimethylpentane B.p., 99.24 862, 1059, 1308, 1324, 1478, 1580, 1600, 1603	C ₈ H ₁₉ NO ₂	2,2'-Butyliminodiethanol 386
C ₈ H ₁₈	2,3,3-Trimethylpentane 863 B.p., 114.76	C ₈ H ₁₉ NO ₂	1,1'-Ethyliminodi-2-propanol B.p., 238.9 387
C ₈ H ₁₈	2,3,4-Trimethylpentane 864 B.p., 113.47	C ₉ F ₂₁ N	Tris(perfluoropropyl)amine B.p., 130 1638
C ₈ H ₁₈ Cl ₂ Sn	Dibutyltin dichloride B.p., 157/17 mm. 1204, 1625, 1902	C ₉ H ₆ N ₂ O ₂	2,4-Tolylene diisocyanate 1458, 1459, 1463, 1639
C ₈ H ₁₈ O	Butyl ether B.p., 142.1 865, 883, 969, 1107, 1149, 1206, 1229, 1239, 1528, 1626, 1737, 1796, 1807, 1827, 1828, 1907, 1935	C ₉ H ₆ N ₂ O ₂	2,6-Tolylene diisocyanate 1639
C ₈ H ₁₈ O	2-Ethyl-1-hexanol B.p., 184.8 371, 1156, 1484, 1615, 1624, 1626-1629	C ₉ H ₇ N	Isoquinoline 1640
C ₈ H ₁₈ O	Iso-octyl alcohol (isomers) 372 B.p., 186.5	C ₉ H ₇ N	Quinoline B.p., 237.3 1641
C ₈ H ₁₈ O	Octyl alcohol B.p., 195.15 1630	C ₉ H ₈ O ₂	Vinyl benzoate 388
C ₈ H ₁₈ OS	2-Hexylthioethanol 1631	C ₉ H ₁₀	α-Methylstyrene 1485
C ₈ H ₁₈ O ₂	1-Butoxy-2-ethoxyethane 374 B.p., 164.2	C ₉ H ₁₀ O	Benzyl vinyl ether 1583
C ₈ H ₁₈ O ₂	1,1-Diethoxybutane 375 B.p., 146.3	C ₉ H ₁₀ O ₂	1,2-Epoxy-3-phenoxypropane B.p., 244.4 389
C ₈ H ₁₈ O ₂	5-Ethoxy-3-methylpentanol B.p., 211.7 376	C ₉ H ₁₀ O ₂	Ethyl benzoate B.p., 213.3 584, 1584, 1591
C ₈ H ₁₈ O ₂	2-Ethyl-1,3-hexanediol B.p., 243.1 373, 866, 1632, 1738	C ₉ H ₁₀ O ₃	Ethyl salicylate 1642 B.p., 233.7
		C ₉ H ₁₁ N	5-Ethyl-2-vinylpyridine 390
		C ₉ H ₁₂	Cumene B.p., 152.4 391, 762, 1486, 1546, 1612, 1638, 1643
		C ₉ H ₁₂	<u>m</u> -Ethyltoluene 1433 B.p., 161.31
		C ₉ H ₁₂	<u>o</u> -Ethyltoluene B.p., 165.15 1259, 1434

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₉ H ₁₂	p-Ethyltoluene 1432 B.p., 161.99	C ₉ H ₂₀	3,3-Diethylpentane 1266 B.p., 146.17
C ₉ H ₁₂	<u>x</u> -Ethyltoluene 1531	C ₉ H ₂₀	<u>n</u> -Nonane B.p., 150.2 403, 671, 724, 763, 970, 1008, 1231, 1267, 1325, 1347, 1501, 1573, 1613, 1617, 1627, 1648, 1798, 1815, 1863, 1867, 1873, 1936, 1937
C ₉ H ₁₂	Mesitylene B.p., 164.72 1260, 1437, 1644	C ₉ H ₂₀	2,2,3,3-Tetramethylpen- tane B.p., 140.27 1268
C ₉ H ₁₂	Propylbenzene B.p., 158.9 1487	C ₉ H ₂₀	2,2,3,4-Tetramethylpen- tane B.p., 133.02 1092
C ₉ H ₁₂	1,2,3-Trimethylbenzene 1435 B.p., 176.08	C ₉ H ₂₀	2,2,4,4-Tetramethylpen- tane B.p., 122.28 1269
C ₉ H ₁₂	1,2,4-Trimethylbenzene B.p., 169.35 1436, 1644	C ₉ H ₂₀	2,3,3,4-Tetramethylpen- tane B.p., 141.55 1270
C ₉ H ₁₂ OS	2-Benzylthioethanol 1645	C ₉ H ₂₀	2,2,3-Trimethylhexane 1271 B.p., 133.60
C ₉ H ₁₂ O ₂	Bicyclo[2.2.1]hept-5-ene- 2-ol acetate B.p., 188.6 392	C ₉ H ₂₀	2,2,4-Trimethylhexane 1272 B.p., 126.54
C ₉ H ₁₃ NO	5-Ethyl-2-pyridineethanol 393	C ₉ H ₂₀	2,2,5-Trimethylhexane B.p., 124 1411, 1426, 1614
C ₉ H ₁₄ O	Isophorone B.p., 215.2 394, 1646	C ₉ H ₂₀	2,3,3-Trimethylhexane 1273 B.p., 137.68
C ₉ H ₁₄ O	1-Methyl-2,5-endomethyl- encyclohexane-1-meth- anol B.p., 211.1 395	C ₉ H ₂₀	2,3,4-Trimethylhexane 1093, 1604 B.p., 139.0
C ₉ H ₁₄ O	Phorone B.p., 197.8 886	C ₉ H ₂₀	2,3,5-Trimethylhexane B.p., 131.34 1094, 1274
C ₉ H ₁₄ OSi	(Trimethylsiloxy)benzene 1488 B.p., 181.9	C ₉ H ₂₀	2,4,4-Trimethylhexane 1275 B.p., 130.65
C ₉ H ₁₅ N	Triallylamine B.p., 151.1 396	C ₉ H ₂₀	3,3,4-Trimethylhexane 1276 B.p., 140.46
C ₉ H ₁₆	<u>cis</u> -Hexahydroindan 1547 B.p., 167.7	C ₉ H ₂₀ O	2,6-Dimethyl-4-heptanol 404, 1649 B.p., 178.1
C ₉ H ₁₆ O	5-Ethyl-3-hepten-2-one 397 B.p., 193.5	C ₉ H ₂₀ O ₂	Dibutoxymethane 1799 B.p., 181.8
C ₉ H ₁₆ O ₂	2,2-Bis(allyloxy)propane 1755, 1891	C ₉ H ₂₀ O ₂	Diisobutoxymethane 1808 B.p., 163.8
C ₉ H ₁₆ O ₄	Dimethyl pimelate 398 B.p., 248.9	C ₉ H ₂₀ O ₂	2-Ethyl-2-butyl-1,3- propanediol 405
C ₉ H ₁₈	Butylcyclopentane 1261 B.p., 156.56	C ₉ H ₂₀ O ₃	1-(2-Butoxyethoxy)-2- propanol B.p., 230.3 406
C ₉ H ₁₈	Isobutylcyclopentane 1262 B.p., 147.6	C ₉ H ₂₀ O ₃	2-(2-Isoamyloxyethoxy) ethanol 1605
C ₉ H ₁₈	Isopropylcyclohexane 1263 B.p., 154.5	C ₉ H ₂₀ O ₃	2-Methoxymethyl-2,4- dimethyl-1,5-pentanediol 407
C ₉ H ₁₈	1-Nonene B.p., 146.85 1264	C ₉ H ₂₀ O ₃	1,1,3-Triethoxypropane 408
C ₉ H ₁₈	Propylcyclohexane B.p., 156.72 1265, 1647	C ₉ H ₂₀ O ₄	Tripropylene glycol 1650-1652
C ₉ H ₁₈	1,1,3-Trimethylcyclohex- ane B.p., 136.6 1091	C ₉ H ₂₁ N	<u>N</u> -Methyldibutylamine 409 B.p., 163.1
C ₉ H ₁₈ O	2,6-Dimethyl-4-heptanone B.p., 169.4 399, 670, 1207, 1511, 1525, 1620	C ₉ H ₂₁ N	Tripropylamine B.p., 156. 410
C ₉ H ₁₈ O	2-Ethylheptanal 1616	C ₉ H ₂₁ NO ₂	1,1'-Isopropyliminodi-2- propanol B.p., 248.6 411
C ₉ H ₁₈ O ₂	2-Heptyl acetate 400 B.p., 176.4		
C ₉ H ₁₈ O ₂	3-Heptyl acetate 401 B.p., 173.8		
C ₉ H ₁₈ O ₃	3-(2-Ethylbutoxy)propionic acid 402		
C ₉ H ₁₉ NO	<u>N,N</u> -Dimethylheptanamide 1597		

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₉ H ₂₁ NO ₃	1,1',1''-Nitrilotri-2-propanol 1569	C ₁₀ H ₁₈	Decahydronaphthalene 1654
C ₉ H ₂₁ NO ₄	2-(2-[2-(3-Aminopropoxy)ethoxy]ethoxy)ethanol 412	C ₁₀ H ₁₈ O ₂	Vinyl 2-ethylhexanoate 426 B.p., 185.2
C ₁₀ H ₈	Naphthalene B.p., 218.1 887, 1102, 1288, 1560, 1589, 1633, 1653, 1678, 1924-1926	C ₁₀ H ₁₈ O ₂	Vinyl octanoate (isomers) 427
C ₁₀ H ₈ N ₂	2,2'-Dipyridyl B.p., 274, 1348	C ₁₀ H ₁₈ O	Menthone B.p., 209.5 1655
C ₁₀ H ₁₀ O ₄	Dimethyl phthalate 413 B.p., 282.9	C ₁₀ H ₂₀	<u>n</u> -Butylcyclohexane 1552 B.p., 180.95
C ₁₀ H ₁₂ O ₃	2-Phenoxyethyl acetate 414 B.p., 260.6	C ₁₀ H ₂₀	<u>sec</u> -Butylcyclohexane 1553 B.p., 179.3
C ₁₀ H ₁₄	Butylbenzene B.p., 183.27 1438, 1548	C ₁₀ H ₂₀	<u>tert</u> -Butylcyclohexane 1277 B.p., 171.5
C ₁₀ H ₁₄	<u>sec</u> -Butylbenzene B.p., 173.30 1439, 1549	C ₁₀ H ₂₀	Isobutylcyclohexane 1554 B.p., 171.3
C ₁₀ H ₁₄	<u>tert</u> -Butylbenzene B.p., 169.11 1440, 1550	C ₁₀ H ₂₀	<u>cis</u> -1-Isopropyl-4-methyl- cyclohexane B.p., 172.7 1555
C ₁₀ H ₁₄	<u>p</u> -Cymene B.p., 177.2 1445, 1498, 1551	C ₁₀ H ₂₀	<u>trans</u> -1-Isopropyl-4- methylcyclohexane 1556 B.p., 170.5
C ₁₀ H ₁₄	Dicyclopentadiene 415 B.p., 172	C ₁₀ H ₂₀ O	2-Ethylhexyl vinyl ether 428, 1810 B.p., 177.7
C ₁₀ H ₁₄	<u>m</u> -Diethylbenzene 1442 B.p., 181.13	C ₁₀ H ₂₀ O	Menthol 1655
C ₁₀ H ₁₄	<u>p</u> -Diethylbenzene 1443 B.p., 183.78	C ₁₀ H ₂₀ O	Octyl vinyl ether 1630
C ₁₀ H ₁₄	5-Ethyl- <u>m</u> -xylene 1444 B.p., 183.75	C ₁₀ H ₂₀ OS	2-Hexylthioethyl vinyl ether 888, 1631
C ₁₀ H ₁₄	Isobutylbenzene 1441 B.p., 172.76	C ₁₀ H ₂₀ O ₂	2-Ethylbutyl butyrate 429 B.p., 199.6
C ₁₀ H ₁₄	1,2,3,5-Tetramethylben- zene B.p., 197.93 1446	C ₁₀ H ₂₀ O ₂	2-Ethylhexyl acetate 430, 1628 B.p., 198.4
C ₁₀ H ₁₄ N ₂	Nicotine 416	C ₁₀ H ₂₀ O ₂	4-Methyl-2-pentyl butyr- ate B.p., 182.6 431
C ₁₀ H ₁₄ O ₂	Ethyl bicyclo[2.2.1]hept- 5-en-2-carboxylate 417 B.p., 198	C ₁₀ H ₂₀ O ₃	2-Butoxyethyl 2-vinyloxy- ethyl ether B.p., 226.7 432
C ₁₀ H ₁₄ O ₃	2-(2-Phenoxyethoxy) ethanol B.p., 297.9 418	C ₁₀ H ₂₁ Cl	Chlorodecane (isomers) 433 B.p., 210.6
C ₁₀ H ₁₅ N	<u>N</u> -Butylaniline B.p., 240.4 419	C ₁₀ H ₂₁ N	<u>N</u> -Butylcyclohexylamine 434 B.p., 209.5
C ₁₀ H ₁₅ N	<u>N</u> -Ethyl- α -methylbenzyl- amine B.p., 201.2 420	C ₁₀ H ₂₁ NO	<u>N,N</u> -Dimethyloctanamide B.p., 187/100 mm. 1622
C ₁₀ H ₁₅ N	<u>N,N</u> - α -Trimethylbenzyl- amine B.p., 195.8 421	C ₁₀ H ₂₂	Decane B.p., 173.3 672, 725, 765, 1009, 1016, 1349, 1593, 1654, 1816, 1864, 1868, 1871
C ₁₀ H ₁₅ NO	2-(α -Methylbenzylamino) ethanol 422	C ₁₀ H ₂₂	3-Ethyl-3-methylheptane 1326 B.p., 163
C ₁₀ H ₁₆	Camphene 764	C ₁₀ H ₂₂	3,3,5-Trimethylheptane 1557, 1656 B.p., 155.5
C ₁₀ H ₁₆ O	Dicyclopentenol 423	C ₁₀ H ₂₂	Decyl alcohol B.p., 232.9 1581, 1657, 1831
C ₁₀ H ₁₆ O	Trimethyltetrahydrobenz- aldehyde B.p., 204.5 424	C ₁₀ H ₂₂ O	2-Ethyldecane 436 B.p., 220.5
C ₁₀ H ₁₆ O ₄	Diisopropyl maleate 425 B.p., 228.7	C ₁₀ H ₂₂ O	2-Propylheptanol 437 B.p., 217.9
		C ₁₀ H ₂₂ OS	2-(2-Ethylhexylthio) ethanol 1658
		C ₁₀ H ₂₂ O ₂	1,2-Dibutoxyethane 438 B.p., 203.6

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₁₀ H ₂₂ O ₂	1,2-Diisobutoxyethane 439 B.p., 160.5		1817, 1865, 1869, 1872, 1892, 1900
C ₁₀ H ₂₂ O ₃	2-(2-Hexyloxyethoxy) ethanol B.p., 259.1 440	C ₁₁ H ₂₄ O	5-Ethyl-2-nonanol B.p., 225
C ₁₀ H ₂₂ O ₄	1,2-Bis(2-ethoxyethoxy) ethane B.p., 206.9 441	C ₁₁ H ₂₄ O ₂	457, 1660, 1661 Diaryloxymethane 1397, 1821
C ₁₀ H ₂₂ O ₄	Tripropylene glycol methyl ether B.p., 243 889, 1103, 1659	C ₁₁ H ₂₄ O ₂	2,2-Dibutoxypropane 458
C ₁₀ H ₂₂ O ₅	Bis[2-(2-methoxyethoxy) ethyl]ether 442	C ₁₁ H ₂₄ O ₂	2-Nonyloxyethanol 459 B.p., 225.5
C ₁₀ H ₂₃ N	Decylamine (isomers) 443 B.p., 203.7	C ₁₁ H ₂₄ O ₄	1,1,3,3-Tetraethoxypro- pane B.p., 220.1 460
C ₁₀ H ₂₃ N	Diamylamine (isomers) 444 B.p., 190	C ₁₁ H ₂₅ N	2-Ethyl-N-propylhexyl- amine 1629
C ₁₀ H ₂₃ N	N,N-Dimethyl-2-ethylhex- ylamine B.p., 176.1 445	C ₁₁ H ₂₅ NO	1-Dibutylamino-2-pro- panol B.p., 229.1 461
C ₁₀ H ₂₃ NO	2-Dibutylaminoethanol 446 B.p., 228.7	C ₁₂ F ₂₇ N	Tris(perfluorobutyl)amine B.p., 177
C ₁₁ H ₁₀	1-Methylnaphthalene B.p., 244.8 1504, 1634, 1660		1457, 1643, 1647, 1648, 1656, 1917
C ₁₁ H ₁₀	2-Methylnaphthalene B.p., 241.1 773, 1447, 1505, 1561, 1563, 1590, 1601, 1608, 1621, 1623, 1635, 1640, 1641	C ₁₂ H ₉ N	Carbazole B.p., 294 1290, 1564, 1650, 1662, 1663
C ₁₁ H ₁₄ OS	2-(Benzylmercapto)-ethyl vinyl ether 1289, 1645	C ₁₂ H ₁₀	Biphenyl B.p., 355.9 1291, 1664
C ₁₁ H ₁₄ O ₃	Butyl salicylate 447 B.p., 268.2	C ₁₂ H ₁₀ O	Phenyl ether B.p., 259.3 890, 1292, 1565, 1574, 1642
C ₁₁ H ₁₄ O ₃	Ethyl 6-formylbicyclo- [2.2.1]hept-5-en-2-car- boxylate 448	C ₁₂ H ₁₁ N	Diphenylamine B.p., 265/350 mm. 1503
C ₁₁ H ₁₆	tert-Amylbenzene 1448 B.p., 198.1	C ₁₂ H ₁₄ O ₄	Diethyl phthalate 462 B.p., 294.3
C ₁₁ H ₁₆ O ₃	Allyl 6-methyl-3,4-epoxy- cyclohexanecarboxylate 449 B.p., 251.4	C ₁₂ H ₁₈	1,3,5-Triethylbenzene 1489 B.p., 215.5
C ₁₁ H ₁₇ N	N,N-Diethyl- <i>o</i> -toluidine 1594	C ₁₂ H ₁₈ O	Triisobutylene oxide 463
C ₁₁ H ₁₈ O ₂	Isopropyl 6-methyl-3- cyclohexanecarboxylate 450 B.p., 215.2	C ₁₂ H ₁₉ N	N-Butyl- α -methylbenzyl- amine B.p., 239.3 464
C ₁₁ H ₂₀ O	5-Ethyl-3-nonen-2-one 451 B.p., 226.4	C ₁₂ H ₂₀ O ₂	sec-Butyl 6-methyl-3- cyclohexanecarboxylate 465
C ₁₁ H ₂₀ O ₄	Diethyl pimelate 452 B.p., 268.1	C ₁₂ H ₂₀ O ₂	Isobornyl acetate 767 B.p., 225.8
C ₁₁ H ₂₂	tert-Amylcyclohexane 1449 B.p., 198.1	C ₁₂ H ₂₀ O ₄	Dibutyl fumarate 466 B.p., 285.2
C ₁₁ H ₂₂ O	5-Ethyl-2-nonanone 453 B.p., 222.9	C ₁₂ H ₂₀ O ₄	Dibutyl maleate 467 B.p., 280.6
C ₁₁ H ₂₂ O ₂	2,6-Dimethyl-4-heptyl acetate B.p., 192.2 454	C ₁₂ H ₂₂ O ₂	2-Ethylhexyl crotonate 468 B.p., 241.2
C ₁₁ H ₂₂ O ₃	4-Methoxy-2,6-dipropyl- 1,3-dioxane B.p., 223.6 455	C ₁₂ H ₂₂ O ₂	Vinyl decanoate (isomers) 469
C ₁₁ H ₂₄	Undecane B.p., 195.88 456, 673, 726, 766, 1010, 1017, 1179, 1450,	C ₁₂ H ₂₂ O ₄	Diethyl 2-ethyl-3-methyl- glutarate B.p., 255.8 470
		C ₁₂ H ₂₃ N	Dicyclohexylamine 471 B.p., 255.8
		C ₁₂ H ₂₄	2,6,8-Trimethylnonene 1649, 1665
		C ₁₂ H ₂₄ O	2,6,8-Trimethyl-4-nona- none B.p., 218.2 472

Formula	Name and System Nos.	Formula	Name and System Nos.
C ₁₂ H ₂₄ OS	2-(2-Ethylhexylthio)ethyl vinyl ether 1293, 1658	C ₁₄ H ₂₄	1,3,6,8-Tetramethyl-1,6-cyclodecadiene 491 B.p., 220.5
C ₁₂ H ₂₄ O ₂	2-Ethylbutyl 2-ethylbutyrate 473 B.p., 222.6	C ₁₄ H ₂₆ O ₄	Dibutyl adipate 492
C ₁₂ H ₂₄ O ₂	2-Ethylbutyl hexanoate 474 B.p., 236.2	C ₁₄ H ₂₈ O	Trimethylnonyl vinyl ether 493 B.p., 223.4
C ₁₂ H ₂₄ O ₂	Hexyl 2-ethylbutyrate 475 B.p., 230.3	C ₁₄ H ₂₈ O ₂	2-Ethylbutyl 2-ethylhexanoate 494 B.p., 261.5
C ₁₂ H ₂₄ O ₂	Hexyl hexanoate 476 B.p., 245.2	C ₁₄ H ₂₈ O ₂	2-Ethylhexyl 2-ethylbutyrate 495 B.p., 252.8
C ₁₂ H ₂₆	Dodecane 477, 768, 1018, 1104, 1451, 1636, 1653, 1666, 1818	C ₁₄ H ₂₈ O ₂	2-Ethylhexyl hexanoate 496 B.p., 267.2
C ₁₂ H ₂₆	2,2,4,4,6-Pentamethylheptane 1452 B.p., 185.6	C ₁₄ H ₂₈ O ₂	Hexyl 2-ethylhexanoate 497 B.p., 254.3
C ₁₂ H ₂₆	2,2,4,6,6-Pentamethylheptane 1453 B.p., 177.9	C ₁₄ H ₂₉ N	N-(2-Ethylhexyl)cyclohexylamine 498
C ₁₂ H ₂₆ O	2-Butyl-1-octanol 478 B.p., 253.4	C ₁₄ H ₃₀	Tetradecane 1105 B.p., 252.5
C ₁₂ H ₂₆ O	Dodecyl alcohol 1657	C ₁₄ H ₃₀ O	7-Ethyl-2-methyl-4-undecanol 499 B.p., 264.3
C ₁₂ H ₂₆ O	Hexyl ether 891, 1294	C ₁₄ H ₃₀ O	x-Tetradecyl alcohol 1662, 1667, 1669
C ₁₂ H ₂₆ O	2,6,8-Trimethyl-4-nonanol 479, 1582, 1665, 1832 B.p., 225.5	C ₁₄ H ₃₀ O ₂	2-(2,6,8-Trimethyl-4-nonyloxy)ethanol 500
C ₁₂ H ₂₆ O ₂	1,1-Diethoxy-2-ethylhexane 480 B.p., 207.8	C ₁₅ H ₁₀ O ₂ N ₂	Di-p-isocyanatodiphenylmethane 1460 B.p., 192/5 mm.
C ₁₂ H ₂₆ O ₂	1,1-Diisopentoxyethane 481 B.p., 213.6	C ₁₅ H ₁₈	Amylnaphthalene 1532
C ₁₂ H ₂₆ O ₂	3-Ethoxy-4-ethyloctanol 482 B.p., 249.2	C ₁₅ H ₂₈ O ₄	Dibutyl pimelate 501
C ₁₂ H ₂₆ O ₃	Bis(2-butoxyethyl)ether 483 B.p., 254.6	C ₁₅ H ₃₀	1-Pentadecene 1637 B.p., 183.7/217 mm.
C ₁₂ H ₂₆ O ₃	1,1,3-Triethoxyhexane 484	C ₁₅ H ₃₂ O	2,8-Dimethyl-6-isobutyl-4-nonanol 502 B.p., 265.4
C ₁₂ H ₂₇ ClSn	Tributyltin chloride 1205, 1625, 1902 B.p., 116/17 mm.	C ₁₆ H ₁₈ O	Bis(α-methylbenzyl)ether 503 B.p., 286.7
C ₁₂ H ₂₇ N	Dihexylamine 485 B.p., 239.8	C ₁₆ H ₂₂ O ₄	Dibutyl phthalate 1130 B.p., 238/50 mm.
C ₁₂ H ₂₇ N	Tributylamine 486 B.p., 213.9	C ₁₆ H ₂₈ O ₄	Bis(4-methylbenzyl)ether maleate 504
C ₁₂ H ₂₇ O ₄ P	Tributyl phosphate 487	C ₁₆ H ₃₀ O ₂	Tridecyl acrylate 505
C ₁₃ H ₁₀	Fluorene 1295, 1566, 1651, 1667, 1668 B.p., 294	C ₁₆ H ₃₁ N	1,1'-Bis(x-methylcyclohexyl)dimethylamine 506
C ₁₃ H ₂₄ O ₂	Decyl acrylate (isomers) 488	C ₁₆ H ₃₂ O ₂	2-Ethylhexyl 2-ethylhexanoate 507 B.p., 280.4
C ₁₃ H ₂₆	1-Tridecene 1454 B.p., 232.78	C ₁₆ H ₃₂ O ₂	Palmitic acid 1671
C ₁₄ H ₁₀	Anthracene 892 B.p., 340	C ₁₆ H ₃₄	Hexadecane 1533, 1666
C ₁₄ H ₁₀	Phenanthrene 1296, 1567, 1652, 1669, 1670 B.p., 340	C ₁₆ H ₃₄ O	Bis(2-ethylhexyl) ether 508, 893, 1106, 1298, 1632 B.p., 269.8
C ₁₄ H ₁₄ O	Benzyl ether 1297, 1568	C ₁₆ H ₃₅ N	Bis(2-ethylhexyl)amine 509 B.p., 280.7
C ₁₄ H ₂₂ O	o-(Ethylhexyl)phenol 489 B.p., 297.0		
C ₁₄ H ₂₃ N	N-(Ethylhexyl)aniline 490		

<u>Formula</u>	<u>Name and System Nos.</u>	<u>Formula</u>	<u>Name and System Nos.</u>
C ₁₇ H ₃₆ O	3,9-Diethyl-6-tridecanol 510 B.p., 309	C ₂₀ H ₃₆ O ₄	Bis(2-ethylhexyl)fumarate 514
C ₁₇ H ₃₆ O	\underline{x} -Heptadecyl alcohol 1663, 1668, 1670	C ₂₀ H ₃₆ O ₄	Bis(2-ethylhexyl)maleate 515
C ₁₈ H ₂₄ N ₂	Bis(α -methylbenzyl)ethyl- enediamine 511	C ₂₀ H ₄₀ O ₃	2-Ethylhexyl 3-(2-ethyl- hexyloxy)butyrate 516
C ₁₈ H ₃₄ O ₂	Oleic acid 1672	C ₂₀ H ₄₂ O	Decyl ether (isomers) 517
C ₁₈ H ₃₄ O ₃	Ricinoleic acid 1672	C ₂₀ H ₄₂ O	Eicosanol (isomers) 518
C ₁₈ H ₃₆ O ₂	Stearic acid 1671, 1673	C ₂₀ H ₄₃ N	Didecylamine (isomers) 519
C ₁₈ H ₃₈ O ₂	1,1-Bis(2-ethylhexyloxy) ethane 512	C ₂₁ H ₃₈ O ₃	Allyl 9,10-epoxystearate 520
C ₁₈ H ₃₉ NO	2-[Bis(2-ethylhexyl)amino] ethanol 513	C ₂₄ H ₃₈ O ₄	Diocetyl phthalate 1664
C ₂₀ H ₃₀ O ₂	Abietic acid 1674	C ₂₄ H ₅₂ O ₄ Si	Tetra(2-ethylbutoxy)silane 521
		C ₃₁ H ₅₈ O ₆	Tri(2-ethylhexyl)-1,2,4- butanetricarboxylate 522

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