

- Binary mixtures
- 1) Acetone - Chloroform
 - 2) Acetone - Ethanol
 - 3) Acetone - Water
 - 4) Benzene - Toluene
 - 5) Carbon tetrachloride - Benzene
 - 6) Ethanol - Water
 - 7) Ethyl acetate - Ethanol
 - 8) Methanol - Water
 - 9) n-Heptane - Toluene
 - 10) Water - Ethylene glycol

1) Acetone - Chloroform

Total pressure: 101.3 kPa

Mole fraction of acetone	
Liquid	Vapor
0.0000	0.0000
0.0817	0.0500
0.1390	0.1000
0.2338	0.2000
0.3162	0.3000
0.3535	0.3500
0.3888	0.4000
0.4582	0.5000
0.5299	0.6000
0.6106	0.7000
0.7078	0.8000
0.8302	0.9000
0.9075	0.9500
1.0000	1.0000

2) Acetone - Ethanol

Mole fraction of acetone	
Liquid	Vapor
0.000	0.000
0.033	0.111
0.078	0.216
0.149	0.345
0.195	0.410
0.316	0.534
0.414	0.614
0.532	0.697
0.691	0.796
0.852	0.896
1.000	1.000

3) Acetone - Water

Total pressure: 101.3 kPa

Mole fraction of acetone	
Liquid	Vapor
0.0000	0.0000
0.0100	0.3350
0.0230	0.4620
0.0410	0.5850
0.0500	0.6381
0.1000	0.7301
0.1200	0.7560
0.1500	0.7716
0.2000	0.7916
0.3000	0.8124
0.4000	0.8269
0.5000	0.8387
0.6000	0.8532
0.7000	0.8712
0.8000	0.8950
0.9000	0.9335
0.9500	0.9627
1.0000	1.0000

4) Benzene - Toluene

Mole fraction of benzene

Liquid	Vapor
0.0000	0.0000
0.0200	0.0455
0.0600	0.1320
0.1000	0.2090
0.1400	0.2800
0.1800	0.3440
0.2200	0.4040
0.2600	0.4585
0.3000	0.5075
0.3400	0.5555
0.4200	0.6400
0.4600	0.6790
0.5000	0.7140
0.5400	0.7470
0.5800	0.7765
0.6200	0.8054
0.6600	0.8305
0.7000	0.8545
0.7400	0.8785
0.7800	0.9005
0.8200	0.9215
0.8600	0.9405
0.9400	0.9765
1.0000	1.0000

5) Carbon tetrachloride - Benzene

Mole fraction of carbon tetrachloride	
Liquid	Vapor
0.000	0.000
0.136	0.158
0.216	0.241
0.257	0.288
0.294	0.321
0.363	0.391
0.406	0.435
0.527	0.548
0.620	0.638
0.722	0.733
1.000	1.000

6) Ethanol - Water

Total pressure: 101.3 kPa

Mole fraction of ethanol	
Liquid	Vapor
0.0000	0.0000
0.019	0.170
0.0721	0.3891
0.0966	0.4375
0.1238	0.4704
0.1661	0.5089
0.2337	0.548
0.2608	0.558
0.3273	0.583
0.3965	0.6122
0.5079	0.6564
0.5198	0.6599
0.5732	0.6841
0.6763	0.7385
0.7472	0.7815
0.8954	0.8954
0.93	0.92
0.97	0.96
1.0000	1.0000

7) Ethyl acetate - Ethanol

Total pressure: 101.3 kPa

Mole fraction of ethyl acetate	
Liquid	Vapor
0.000	0.000
0.050	0.102
0.100	0.187
0.200	0.305
0.300	0.389
0.400	0.457
0.500	0.516
0.540	0.540
0.600	0.576
0.700	0.644
0.800	0.726
0.900	0.837
0.950	0.914
1.000	1.000

8) Methanol - Water

Mole fraction of methanol	
Liquid	Vapor
0.000	0.000
0.020	0.134
0.040	0.230
0.060	0.304
0.080	0.365
0.100	0.418
0.150	0.517
0.200	0.579
0.300	0.665
0.400	0.729
0.500	0.779
0.600	0.825
0.700	0.870
0.800	0.915
0.900	0.958
0.950	0.979
1.000	1.000

9) n-Heptane - Toluene

Mole fraction of n-heptane

Liquid	Vapor
0.000	0.000
0.025	0.048
0.062	0.107
0.129	0.205
0.185	0.275
0.235	0.333
0.250	0.349
0.286	0.396
0.354	0.454
0.412	0.504
0.455	0.540
0.568	0.637
0.692	0.742
0.950	0.948
1.000	1.000

10) Water - Ethylene glycol

Total pressure: 30.4 kPa

Mole fraction of water

Liquid	Vapor
0.00	0.000
0.03	0.530
0.07	0.700
0.10	0.780
0.15	0.870
0.27	0.940
0.46	0.980
0.60	0.990
0.69	0.997
0.77	0.998
1.00	1.000
