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CRYOSCOPIC AND EBULLIOSCOPIC SOLVENT DATA

Table 1. Boiling point elevation and freezing point depression constants for some solvents.

Solvent	T_f [°C]	K_f [K/(mol/L)]	T_b [°C]	K_b [K/(mol/L)]
Acetic acid, CH ₃ COOH	16.6	3.9	118	3.1
Benzene, C ₆ H ₆	5.5	5.0	80.1	2.5
Carbon disulphide, CS ₂	-111	3.8	46	2.3
Carbon tetrachloride, CCl ₄	-23	30	76.5	5.0
Chloroform, CHCl ₃	-63.4	4.7	62	3.6
Cyclohexane, C ₆ H ₁₂	6.6	20.2	80.7	3.8
Decane, C ₁₀ H ₂₂	-30		174	8.1
Dimethyl ether, C ₂ H ₆ O	-138		-23	1.7
Diethyl ether, C ₄ H ₁₀ O	-116	1.8	34.5	2.0
Ethanol, C ₂ H ₆ O	-117	2.0	78.4	1.2
Methanol, CH ₄ O	-98		64	0.83
Naphthalene, C ₁₀ H ₈	79	6.9	218	5.8
Nitrobenzene, C ₆ H ₅ NO ₂	5.7	8.1	211	5.2
n-Octane, C ₈ H ₁₈	-58		125.7	4.0
Phenol, C ₆ H ₅ OH	41	7.3	182	3.6
Toluene, C ₆ H ₅ CH ₃	-95		111	3.3
Water, H ₂ O	0.0	1.86	100.0	0.52

The definition of K_f and K_b can be found in [Solution properties](#), as well as many other properties for some special solutions: salt-water, sugar-water, alcohol-water, hydrogen peroxide-water, ammonia-water and carbon dioxide-water.

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