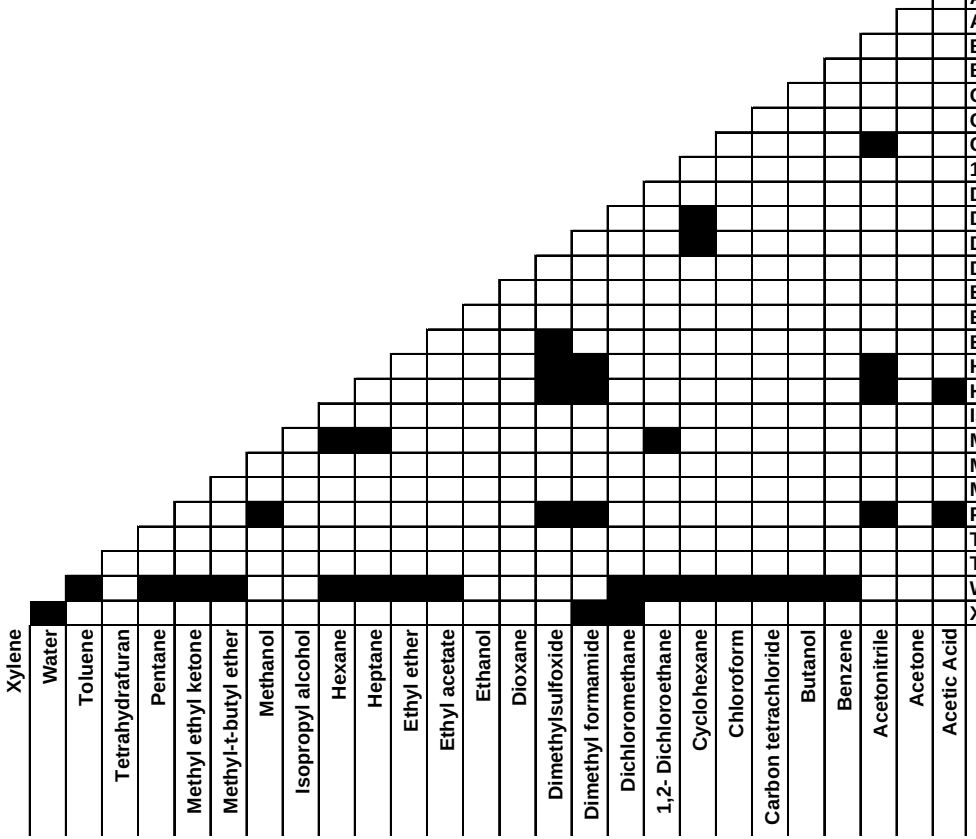

Miscibile
Immiscible

	Polarity Index[1]	Viscosity (cP)	UV (nm) Cutoff[2]	Solubility in Water (%)
Acetic Acid	6.2	1.26	230	100
Acetone	5.1	0.32	330	100
Acetonitrile	5.8	0.37	190	100
Benzene	2.7	0.65	280	0.18
Butanol	4.0	0.73	254	0.43
Carbon tetrachloride	1.6	0.97	263	0.08
Chloroform	4.1	0.57	245	0.815
Cyclohexane	0.2	1.00	200	0.01
1,2- Dichloroethane	3.5	0.79	225	0.81
Dichloromethane	3.1	0.44	235	1.6
Dimethyl formamide	6.4	0.92	268	100
Dimethylsulfoxide	7.2	2.00	268	100
Dioxane	4.8	1.54	215	100
Ethanol	5.2	1.20	210	100
Ethyl acetate	4.4	0.45	260	8.7
Ethyl ether	2.8	0.32	220	6.89
Heptane	0.0	0.39	200	0.0003
Hexane	0.0	0.33	200	0.001
Isopropyl alcohol	3.9	2.30	210	100
Methanol	5.1	0.60	205	100
Methyl-t-butyl ether	2.5	0.27	210	4.8
Methyl ethyl ketone	4.7	0.45	329	24
Pentane	0.0	0.23	200	0.0004
Tetrahydrafuran	4.0	0.55	215	100
Toluene	2.4	0.59	285	0.051
Water	9.0	1.00	200	100
Xylene	2.5	0.61	290	0.018

[1] The polarity index is a measure of the relative polarity of a solvent and is useful for identifying suitable mobile phase solvents. The polarity index increases with polarity. For reverse phase chromatography eluent strength decreases as its polarity increases

[2] UV cutoff, the wavelength at which the solvent absorbance in a 1 cm path length cell is equal to 1 AU (absorbance unit) using water in the reference cell.

Solvent Miscibility and Viscosity Chart adapted from Paul Sadek The HPLC Solvent Guide Wiley-Interscience, 2002.

Mobile phases, stationary phase, analyte and samples must be compatible

Solvent Polarity Chart

Relative Polarity	Formula	Group	Solvents
Non-polar	R-H	Alkanes	Petroleum ethers, hexanes, ligroin
	Ar-H	Aromatics	Toluene
	R-O-R	Ethers	Diethyl ether
	R-X	Alkyl halides	Tricholoromethane, chloroform
	R-COOR	Esters	Ethyl acetate
	R-CO-R	Aldehydes and ketones	Acetone, MEK
	R-NH2	Amines	Pyridine, triethylamine
	R-OH	Alcohols	MeOH, EtOH, IPA, Butanol
	R-COHN2	Amides	Dimethyformamide
	R-COOH	Carboxylic Acid	Ethanoic Acid
Polar	H-O-H	Water	