
 Miscible
 Immiscible

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 Polarity Chart

Relative Polarity	Formula	Group	Solvents
Non-polar ↓ Polar	R-H	Alkanes	Petroleum ethers, hexanes, ligroin
	Ar-H	Aromatics	Toluene
	R-O-R	Ethers	Diethyl ether
	R-X	Alkyl halides	Trichloromethane, 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	Dimethylformamide
	R-COOH	Carboxylic Acid	Ethanoic Acid
	H-O-H	Water	

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