

SOLVENT POLARITIES AND ELUTION STRENGTHS, UV CUT-OFF'S AND REFRACTIVE INDICES

Polarities according to Rohrschneider (GC) and Elution Strengths according to Snyder (HPLC)

Solvent	GC Polarity	Elution Strength on Al ₂ O ₃	Elution Strength on Silica	Elution Strength on C18	UV cut- off [nm]	Refractive Index
Squalane	-0.8					
Isooctane	-0.4	0.01	0.01		197- 210	1.404
n-Decane	-0.3	0.04			210	1.412
Pentane	0	0.00	0.00		210	
Hexane	0	0.00	0.00		210	1.375
Cyclohexane	0	0.04	0.03		210	1.427
Carbon disulfide	1	0.15			380	
Carbon tetrachloride	1.7	0.18	0.12		265	1.466
Triethylamine	1.8					1.401
Diisopropyl ether	2.2	0.28	0.22		220	1.368
Toluene	2.3	0.29	0.23		285	1.496
p-Xylene	2.4	0.26			290	
Diethyl ether	2.9	0.38	0.29		220	
Tert.-butyl methyl ether	2.9		0.35		210	1.370
Benzene	3	0.32	0.27		280	1.501
n-Octanol	3.2					
Dibenzyl ether	3.3					
Dichloromethane	3.4	0.42	0.32		232	1.424
Dichloroethane	3.7					
Dichloroethene	3.7	0.49	0.38		230	1.445
tert.-Butanol	3.9					
n-Propanol	3.9	0.82		10.1	210	
Methyl isobutyl keton	4.2	0.43			330	
Tetrahydrofuran	4.2	0.45	0.35	3.7	212- 230	1.408
Ethyl acetate	4.3	0.58	0.38-0.45		256	1.370
Isopropanol	4.3	0.82	0.63	8.3	210+	
Methyl acetate	4.4	0.60	0.46		260	1.362
Chloroform	4.4	0.36-0.40	0.26		245	1.443
Butanone	4.5					
Cyclohexanone	4.5					
Nitrobenzene	4.5					
Methyl ethylketon	4.5	0.51	0.39		330	1.379

Benzonitrile	4.6					
2-Picoline	4.8					
Dioxane	4.8	0.56		11.7	220	
Diethylene glycol	5					
Ethanol	5.2	0.88	0.68	3.1	205-210	1.361
Nitroethane	5.3				380	1.392
Pyridine	5.3	0.71	0.55		305-330	1.510
Acetone	5.4	0.56-0.58	0.47-0.53	8.8	330	1.359
Ethylene glycol	5.4	1.11			210	
Benzylalcohol	5.5					
Methoxyethanol	5.7	0.74			220	1.401
Acetonitrile	6.2	0.55-0.65	0.50	3.1	190	1.344
Dimethylformamide	6.4			7.6	268	1.431
N-Methylpyrrolidon	6.5				285	
Dimethylsulfoxide	6.5	0.62	0.41		268	1.478
Hexamethylphosphoric acid triamide (HMPA)	6.6					
Methanol	6.6	0.95	0.73	1.0 (reference)	205	1.329
Nitromethane	6.8					1.380
Formamide	7.3				210	1.450
Water	9	large			180	1.333
Tetrafluoropropanol	9.3					