

Properties of Solvents



Solvent	Boiling Point (°C)	Refractive Index (20°C)	Density (g/cm ³)	Flash Point (°C)	Viscosity (cP, 20°C)	Elutropic Value (Silica)	UV Cutoff (nm)(**)
Acetone	56	1.359	0.791	-17	0.32	0.43	330
Acetonitrile	82	1.344	0.786	5	0.37	0.50	190
1-Butanol	117.7	1.399	0.81	35	2.948	-	215
2-Butanone	80	1.379	0.805	-3	0.43	0.39	330
Butyl acetate	124-126	1.394	0.882	22	0.732	-	254
tert-Butyl methyl ether	53-56	1.3692	0.740	-10	-	0.29	-
Carbon disulfide	46	1.627	1.266	-33	0.37	-	380
Chlorobenzene	132	1.524	1.107	23	0.80	-	287
1-Chlorobutane	77-78	1.4024	0.886	-6	0.35	-	225
Chloroform	60.5-61.5	1.446	1.492	none	0.57	0.31	245
Cyclohexane	80.7-81	1.426	0.779	-18	1.02	0.03	200
Cyclopentane	50	1.404	0.751	-37	0.47	-	200
1,2-Dichloroethane	83	1.4438	1.256	15	0.79	-	225
Dichloromethane	39.8-40	1.424	1.325	none	0.44	0.32	235
N,N-Dimethylacetamide	164.5-166	1.438	0.937	70	-	-	268
N,N-Dimethylformamide	153	1.431	0.944	57	0.92	-	268
1,4-Dioxane	100-102	1.422	1.034	12	1.54	-	215
Ether	34.6	1.353	0.708	-40	0.23	0.29	215
Ethyl acetate	76.5-77.5	1.372	0.902	-3	0.45	0.45	260
Ethyl alcohol	78	1.361	0.785	8	1.20	-	210
Ethylene glycol dimethyl ether	85	1.3791	0.867	0	-	-	220
Heptane	98	1.387	0.684	-1	-	0.00	200
Hexane	69	1.375	0.659	-23	0.33	0.00	200
Hexanes	68-69	1.379	0.67	-22	-	0.00	200
2-Methoxyethanol	124-125	1.402	0.965	46	1.72	-	220
2-Methoxyethyl acetate	145	1.402	1.009	43	-	-	254
Methyl alcohol	64.6	1.329	0.791	11	0.60	0.73	205
Methyl sulfoxide	189	1.479	1.101	95	2.24	-	268
Nitromethane	100.8-101	1.382	1.127	35	0.67	-	380
Pentane	35-36	1.358	0.626	-49	0.23	0.00	200
1-Propanol	97	1.384	0.804	15	2.256	-	210
2-Propanol	82.4	1.377	0.785	22	2.30	0.63	210
Pyridine	115	1.509	0.978	20	0.94	0.55	305
Tetrahydrofuran	67	1.407	0.886	-17	0.55	0.35	215
Toluene	111	1.496	0.867	4	0.59	0.22	285
1,1,2-Trichlorotrifluoroethane	47-48	1.3578	1.575	none	0.69	0.02	230
2,2,4-Trimethylpentane	98-99	1.391	0.692	-7	0.50	0.01	215
Water	100	-	0.998	none	1.00	>0.73	185

* At 20°C ± 5°C relative to water at 4°C.

** Wavelength at which absorbance is 1AU for a good LC-grade solvent