15. SOLVENTS FOR ULTRAVIOLET SPECTROPHOTOMETRY

Solvent	Cutoff wavelength (nm)	Dielectric constant (20°C)	
Acetic acid	260	6.15	
Acetone	330	20.7	(25°C)
Acetonitrile	190	37.5	
Benzene	280	2.284	
2-Butanol	260	15.8	(25°C)
n-Butyl acetate	254		
Carbon disulphide	380	2.641	
Carbon tetrachloride	265	2.238	
1-Chlorobutane	220	7.39	(25°C)
Chloroform[a]	245	4.806	
Cyclohexane	210	2.023	
1,2-Dichloroethane	226	10.19	(25°C)
1,2-Dimethoxyethane	240		
N,*N*-Dimethylacetamide	268	59	(83°C)
N,*N*-Dimethylformamide	270	36.7	
Dimethyl sulphoxide	265	4.7	
1,4-Dioxane	215	2.209	(25°C)
Diethyl ether	218	4.335	
Ethanol	210	24.30	(25°C)
2-Ethoxyethanol	210		
Ethyl acetate	255	6.02	(25°C)
Glycerol	207	42.5	(25°C)
n-Hexadecane	200	2.06	(25°C)
n-Hexane	210	1.890	
Methanol	210	32.63	(25°C)
2-Methoxyethanol	210	16.9	
Methyl cyclohexane	210	2.02	(25°C)
Methyl ethyl ketone	330	18.5	
Methyl isobutyl ketone	335		
2-Methyl-1-propanol	230	1	
N-Methyl-2-pyrrolidone	285	32.0	
Pentane	210	1.844	
n-Pentyl acetate	212		
1-Propanol	210	20.1	(25°C)
2-Propanol	210	18.3	(25°C)
Pyridine	330	12.3	(25°C)
Tetracholoroethylene[b]	290		
Tetrahydrofuran	220	7.6	
Toluene	286	2.379	(25°C)
1,1,2-Tricholro-1,2,2-trifluroethane	231		
2,2,4-Trimethylpentane	215	1.936	(25°C)
o-Xylene	290	2.568	
m-Xylene	290	2.374	
p-Xylene	290	2.270	
Water		78.54	(25°C)

[a] Stabilized with ethanol to avoid phosgene formation.
[b] Stabilized with thymol (isopropyl meta-cresol).
Reprinted from T. J. Bruno and P. D. N. Svoronos, *CRC Handbook of Basic Tables for Chemical Analysis*, CRC Press, Boca Raton, FL, 1989, p. 212.