

Common Organic Solvents: Table of Properties ^{1,2,3,4}

Solvent	Formula	MW	BP (°C)	MP (°C)	Density (g/ml)	Solubility in water (g/100 g)
acetic acid	C2H4O2	60,05	118	16,6	1,049	Miscible
acetone	C3H6O	58,08	56,2	-94,3	0,786	Miscible
acetonitrile	C2H3N	41,05	81,6	-46	0,786	Miscible
benzene	C6H6	78,11	80,1	5,5	0,879	0,18
1-butanol	C4H10O	74,12	117,6	-89,5	0,81	6,3
2-butanol	C4H10O	74,12	98	-115	0,808	15
2-butanone	C4H8O	72,11	79,6	-86,3	0,805	25,6
t-butyl alcohol	C4H10O	74,12	82,2	25,5	0,786	Miscible
carbon tetrachloride	CCl4	153,82	76,7	-22,4	1,594	0,08
chlorobenzene	C6H5Cl	112,56	131,7	-45,6	1,1066	0,05
chloroform	CHCl3	119,38	61,7	-63,7	1,498	0,795
cyclohexane	C6H12	84,16	80,7	6,6	0,779	<0.1
1,2-dichloroethane	C2H4Cl2	98,96	83,5	-35,3	1,245	0,861
diethyl ether	C4H10O	74,12	34,6	-116,3	0,713	7,5
diethylene glycol	C4H10O3	106,12	245	-10	1,118	10
diglyme	C6H14O3	134,17	162	-68	0,943	Miscible
glyme (DME)	C4H10O2	90,12	85	-58	0,868	Miscible
dimethylether	C2H6O	46,07	-22	-138,5	NA	NA
DMF	C3H7NO	73,09	153	-61	0,944	Miscible
DMSO	C2H6OS	78,13	189	18,4	1,092	25,3
dioxane	C4H8O2	88,11	101,1	11,8	1,033	Miscible
ethanol	C2H6O	46,07	78,5	-114,1	0,789	Miscible
ethyl acetate	C4H8O2	88,11	77	-83,6	0,895	8,7
ethylene glycol	C2H6O2	62,07	195	-13	1,115	Miscible
glycerin	C3H8O3	92,09	290	17,8	1,261	Miscible
heptane	C7H16	100,2	98	-90,6	0,684	0,01
HMPA	C6H18N3OP	179,2	232,5	7,2	1,03	Miscible
HMPT	C6H18N3P	163,2	150	-44	0,898	Miscible
hexane	C6H14	86,18	69	-95	0,659	0,014
methanol	CH4O	32,04	64,6	-98	0,791	Miscible
methyl t-butyl ether	C5H12O	88,15	55,2	-109	0,741	5,1
methylene chloride	CH2Cl2	84,93	39,8	-96,7	1,326	1,32
nitromethane	CH3NO2	61,04	101,2	-29	1,382	9,5
pentane	C5H12	72,15	36,1	-129,7	0,626	0,04
Pet.ether	--	--	30-60	-40	0,656	--
1-propanol	C3H8O	88,15	97	-126	0,803	Miscible
2-propanol	C3H8O	88,15	82,4	-88,5	0,785	Miscible
pyridine	C5H5N	79,1	115,2	-41,6	0,982	Miscible
tetrahydrofuran (THF)	C4H8O	72,11	66	-108,4	0,886	30
toluene	C7H8	92,14	110,6	-93	0,867	0,05
triethyl amine	C6H15N	101,19	88,9	-114,7	0,728	0,02
water	H2O	18,02	100	0	0,998	--
o-xylene	C8H10	106,17	144	-25,2	0,897	Insoluble
m-xylene	C8H10	106,17	139,1	-47,8	0,868	Insoluble
p-xylene	C8H10	106,17	138,4	13,3	0,861	Insoluble

Notes:

1. This table was originally from: Prof. Murov's Orgsolstab, which was edited and reposted by Erowid
2. You can find more detailed information (Health & Safety, Physical, Regulatory, Environmental) on various organic solvents from NCMS
3. The values in the table above were obtained from ChemFinder Web Server, the CRC, or Vogel's Practical Organic Chemistry (5th ed.).
4. T = 20 °C unless specified otherwise.