

Solubility and Koc

Compound	Solubility (mg/L)	Koc
1,4-dioxane	miscible	1
4-hydroxy-4-methyl-2-pentanone	miscible	1
acetone	miscible	
tetrahydrofuran	miscible	1
N,N'-dimethylformamide		1
N,N'-dimethylacetamide		2
2-methyl-2-butanol	140000	6
2-butanol	125000	6
ethyl ether	84300	8
cyclohexanol	56700	10
3-methylbutanoic acid	42000	12
benzyl alcohol	40000	12
aniline	34000	13
2-hexanone (butylmethylketone)	35000	14
2-hydroxy-triethylamine		15
2-methylphenol (o-cresol)	31000	15
2-methyl-2-propanol		16
4-methylphenol	24000	17
pentanoic acid	24000	17
cyclohexanone	23000	18
4-methyl-2-pentanone	19000	20
2,4-dimethyl phenol	17000	21
4-methyl-2-pentanol	17000	21
methylene chloride	13200	25
isophorone	12000	26
phenol	82000	27
2-chlorophenol	11087	27
hexanoic acid	11000	28
chloroform	7840	34
1,2-dichloroethane	8450	36
1,2-trans-dichloroethane	6300	39
chloromethane	5700	42
5-methyl-2-hexanone	5400	43
chloromethane	5380	43
1,1-dichloroethane	5100	45
1,1,2-trichloroethane	4420	49
1,2-dichloropropane	3570	51
benzoic acid	2900	64
octanoic acid	2500	70
heptanoic acid	2410	71
1,1,2,2-tetrachloroethane	3230	88
benzene	1780	97
diethyl phthalate	1000	123

2-nonanol	1000	131
bromodichloromethane	900	131
3-methylbenzoic acid	850	152
trichloroethene	110	152
1,1,1-trichloroethane	700	155
di-n-butyl phthalate	400	217
1,1-dichloroethene	400	217
carbon tetrachloride	800	232
2-butanone (methylethylketone)	353	235
4-methylbenzoic acid	340	240
toluene	500	242
tetrachloroethylene	200	303
chlorobenzene	448	318
1,2-dichlorobenzene	148	343
o-xylene	170	363
1,2,2-trifluoro-1,1,2-trichloroethane		372
styrene	162	380
1,3-dichlorobenzene	118	463
fluorotrichloromethane	110	476
4,6-dinitro-2-methylphenol		477
p-xylene	156	552
m-xylene	146	588
1,4-dichlorobenzene	79	594
ethyl benzene	150	622
pentachlorophenol	14	900
N-nitrosodiphenylamine	35.1	982
3,5-dimethylphenol		1038
BHC-delta	31.5	1052
2,6-dimethylphenol		1060
1,2,4-trichlorobenzene	30	1080
naphthalene	31.7	1300
4-ethylphenol		1986
dibenzofuran	10	2140
hexachloroethane	8	2450
acenaphthene	7.4	2580
tri-N-propylamine		2610
BHC-alpha	8.5	2627
BHC-beta	2.7	3619
hexachlorobenzene	0.035	3910
hexachlorobutadiene	3.2	4330
di-n-octyl phthalate	3	4510
butyl benzyl phthalate	2.9	4606
fluorene	1.98	5835
2-methylnaphthalene	25.4	8500
bis(2-ethylhexyl)phthalate	0.6	12200

toxaphene	0.4	15700
heptachlor epoxide	0.35	17087
endosulfan II	0.28	19623
fluoranthene	0.275	19800
1,2-diphenylhydrazene (as azobenzene)	0.252	20947
endosulfan sulfate	0.22	22788
phenanthrene	1.29	23000
dieldrin	0.188	25120
anthracene	0.073	26000
BHC-gamma	0.15	28900
decanoic acid		39610
chlorodane	0.056	53200
pyrene	0.135	63400
PCB-1254	0.042	63914
heptachlor	0.03	78400
endrin	0.024	90000
benzo(a)anthracene	0.014	125719
aldrin	0.013	132000
4,4'-DDE	0.01	155000
4,4'-DDT	0.0017	238000
4,4'-DDD	0.0017	238000
benzo(a)pyrene	0.0038	282185
PCB-1260	0.0027	349462
chrysene	0.022	420108
benzo(b)fluoranthene		1148497
benzo(k)fluoranthene		2020971

Data compiled by Serrano, Sergio E. 1997. Hydrology for Engineers, Geologists, and Environmental Professionals, HydroScience, Inc. Lexington, KY