

OCTANOL-WATER PARTITION COEFFICIENTS

The octanol-water partition coefficient, P , is a widely used parameter for correlating biological effects of organic substances. It is a property of the two-phase system in which water and 1-octanol are in equilibrium at a fixed temperature and the substance is distributed between the water-rich and octanol-rich phases. P is defined as the ratio of the equilibrium concentration of the substance in the octanol-rich phase to that in the water-rich phase, in the limit of zero concentration. In general, P tends to be large for compounds with extended non-polar structures (such as long chain or multi-ring hydrocarbons) and small for compounds with highly polar groups. Thus P (or, in its more common form of expression, $\log P$) provides a measure of the lipophilic vs. hydrophilic nature of a compound, which is an important consideration in assessing the potential toxicity. A discussion of methods of measurement and accuracy considerations for $\log P$ may be found in Reference 1.

This table gives selected values of $\log P$ for about 450 organic compounds, including many of environmental importance. All values refer to a nominal temperature of 25°C. The source of each value is indicated in the last column. These references contain data on many more compounds than are included here.

Mol. form.	Name	$\log P$	Ref.
CCl_2F_2	Dichlorodifluoromethane	2.16	2
CCl_3F	Trichlorofluoromethane	2.53	2
CCl_4	Tetrachloromethane	2.64	2
CHBr_3	Tribromomethane	2.38	2
CHCl_3	Trichloromethane	1.97	2
CH_2BrCl	Bromochloromethane	1.41	2
CH_2Br_2	Dibromomethane	2.3	2
CH_2Cl_2	Dichloromethane	1.25	2
CH_2F_2	Difluoromethane	0.20	1
CH_2I_2	Diiodomethane	2.5	2
CH_2O	Formaldehyde	0.35	1
CH_2O_2	Formic acid	-0.54	1
CH_3Br	Bromomethane	1.19	2
CH_3Cl	Chloromethane	0.91	2
CH_3F	Fluoromethane	0.51	1
CH_3I	Iodomethane	1.5	2
CH_3NO	Formamide	-1.51	1
CH_3NO_2	Nitromethane	-0.33	1
CH_4O	Methanol	-0.74	1
CH_5N	Methylamine	-0.57	1
$\text{C}_2\text{Cl}_3\text{F}_3$	1,1,2-Trichlorotrifluoroethane	3.16	2
C_2Cl_4	Tetrachloroethylene	2.88	2
C_2Cl_6	Hexachloroethane	4.00	4
C_2HCl_3	Trichloroethylene	2.53	2
C_2HCl_5	Pentachloroethane	2.89	2
$\text{C}_2\text{H}_2\text{Cl}_2$	1,1-Dichloroethylene	2.13	2
$\text{C}_2\text{H}_2\text{Cl}_2$	cis-1,2-Dichloroethylene	1.86	2
$\text{C}_2\text{H}_2\text{Cl}_2$	trans-1,2-Dichloroethylene	1.93	2
$\text{C}_2\text{H}_2\text{Cl}_4$	1,1,2,2-Tetrachloroethane	2.39	2
$\text{C}_2\text{H}_3\text{Cl}$	Chloroethylene	1.38	2
$\text{C}_2\text{H}_3\text{Cl}_3$	1,1,1-Trichloroethane	2.49	2
$\text{C}_2\text{H}_3\text{Cl}_3$	1,1,2-Trichloroethane	2.38	2
$\text{C}_2\text{H}_3\text{N}$	Acetonitrile	-0.34	1
$\text{C}_2\text{H}_4\text{Cl}_2$	1,1-Dichloroethane	1.79	2
$\text{C}_2\text{H}_4\text{Cl}_2$	1,2-Dichloroethane	1.48	2
$\text{C}_2\text{H}_4\text{O}$	Acetaldehyde	0.45	1
$\text{C}_2\text{H}_4\text{O}$	Ethylene oxide	-0.30	1

Compounds are listed by molecular formula following the Hill convention. To locate a compound by name or CAS Registry Number when the molecular formula is not known, use the table "Physical Constants of Organic Compounds" in Section 3 and its indexes to determine the molecular formula.

References

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Mol. form.	Name	$\log P$	Ref.
$\text{C}_2\text{H}_4\text{O}_2$	Acetic acid	-0.17	1
$\text{C}_2\text{H}_5\text{Br}$	Bromoethane	1.6	2
$\text{C}_2\text{H}_5\text{Cl}$	Chloroethane	1.43	2
$\text{C}_2\text{H}_5\text{I}$	Iodoethane	2	2
$\text{C}_2\text{H}_5\text{NO}$	Acetamide	-1.26	1
$\text{C}_2\text{H}_5\text{NO}_2$	Nitroethane	0.18	1
$\text{C}_2\text{H}_6\text{O}$	Ethanol	-0.30	1
$\text{C}_2\text{H}_6\text{O}$	Dimethyl ether	0.10	1
$\text{C}_2\text{H}_6\text{OS}$	Dimethyl sulfoxide	-1.35	1
$\text{C}_2\text{H}_6\text{O}_2\text{S}$	Dimethyl sulfone	-1.41	1
$\text{C}_2\text{H}_7\text{N}$	Ethylamine	-0.13	1
$\text{C}_2\text{H}_7\text{N}$	Dimethylamine	-0.38	1
$\text{C}_3\text{H}_3\text{N}$	2-Propenenitrile	0.25	1
$\text{C}_3\text{H}_4\text{Cl}_2$	cis-1,3-Dichloropropene	2.03	2
$\text{C}_3\text{H}_4\text{O}$	Propargyl alcohol	-0.38	1
$\text{C}_3\text{H}_4\text{O}$	Acrolein	-0.01	1
$\text{C}_3\text{H}_5\text{Br}$	3-Bromopropene	1.79	1
$\text{C}_3\text{H}_5\text{ClO}$	Epichlorohydrin	0.30	2
$\text{C}_3\text{H}_5\text{Cl}_3$	1,2,3-Trichloropropane	2.63	2
$\text{C}_3\text{H}_5\text{N}$	Propanenitrile	0.16	1
$\text{C}_3\text{H}_5\text{NO}$	Acrylamide	-0.78	1
$\text{C}_3\text{H}_6\text{Cl}_2$	1,2-Dichloropropane	2.0	2
$\text{C}_3\text{H}_6\text{O}$	Allyl alcohol	0.17	1
$\text{C}_3\text{H}_6\text{O}$	Propanal	0.59	1
$\text{C}_3\text{H}_6\text{O}$	Acetone	-0.24	1
$\text{C}_3\text{H}_6\text{O}$	Methyloxirane	0.03	1
$\text{C}_3\text{H}_6\text{O}_2$	Propanoic acid	0.33	1
$\text{C}_3\text{H}_6\text{O}_2$	Methyl acetate	0.18	1
$\text{C}_3\text{H}_7\text{Br}$	1-Bromopropane	2.1	2
$\text{C}_3\text{H}_7\text{Br}$	2-Bromopropane	1.9	2
$\text{C}_3\text{H}_7\text{Cl}$	1-Chloropropane	2.04	1
$\text{C}_3\text{H}_7\text{Cl}$	2-Chloropropane	1.90	1
$\text{C}_3\text{H}_7\text{I}$	1-Iodopropane	2.5	2
$\text{C}_3\text{H}_7\text{N}$	Allylamine	0.03	1
$\text{C}_3\text{H}_7\text{NO}$	N,N-Dimethylformamide	-1.01	1
$\text{C}_3\text{H}_7\text{NO}$	N-Methylacetamide	-1.05	1
$\text{C}_3\text{H}_7\text{NO}_2$	1-Nitropropane	0.87	1

Mol. form.	Name	$\log P$	Ref.	Mol. form.	Name	$\log P$	Ref.
C_3H_8O	1-Propanol	0.25	1	$C_5H_{10}O$	2-Methyltetrahydrofuran	1.85	2
C_3H_8O	2-Propanol	0.05	1	$C_5H_{10}O_2$	Pentanoic acid	1.39	1
C_3H_8S	1-Propanethiol	1.81	1	$C_5H_{10}O_2$	Propyl acetate	1.24	1
C_3H_9N	Propylamine	0.48	1	$C_5H_{10}O_2$	Ethyl propanoate	1.21	1
C_3H_9N	Isopropylamine	0.26	1	$C_5H_{10}O_3$	Diethyl carbonate	1.21	1
C_3H_9N	Ethylmethylamine	0.15	1	$C_5H_{11}Br$	1-Bromopentane	3.37	1
C_3H_9N	Trimethylamine	0.16	1	$C_5H_{11}F$	1-Fluoropentane	2.33	1
C_4H_8O	Furan	1.34	1	$C_5H_{11}N$	Piperidine	0.84	1
C_4H_8S	Thiophene	1.81	1	$C_5H_{11}NO_2$	1-Nitropentane	2.01	1
C_4H_5N	Pyrrole	0.75	1	C_5H_{12}	Pentane	3.45	1
C_4H_6	1,3-Butadiene	1.99	1	C_5H_{12}	Neopentane	3.11	1
C_4H_6	2-Butyne	1.46	1	$C_5H_{12}O$	1-Pentanol	1.51	1
C_4H_6O	2,5-Dihydrofuran	0.46	1	$C_5H_{12}O$	2-Pentanol	1.25	1
$C_4H_6O_2$	Methacrylic acid	0.93	1	$C_5H_{12}O$	3-Pentanol	1.21	1
$C_4H_6O_2$	Vinyl acetate	0.73	1	$C_5H_{12}O$	3-Methyl-1-butanol	1.28	1
$C_4H_6O_2$	Methyl acrylate	0.80	1	$C_5H_{12}O$	2-Methyl-2-butanol	0.89	1
C_4H_7N	Butanenitrile	0.60	1	$C_5H_{12}O$	3-Methyl-2-butanol	1.28	1
C_4H_8	cis-2-Butene	2.33	1	$C_5H_{12}O$	2,2-Dimethyl-1-propanol	1.31	1
C_4H_8	trans-2-Butene	2.31	1	$C_5H_{12}O$	Methyl tert-butyl ether	0.94	1
C_4H_8	Isobutene	2.35	1	$C_5H_{13}N$	Pentylamine	1.49	1
$C_4H_8Cl_2O$	Bis(2-chloroethyl) ether	1.12	2	C_6Cl_6	Hexachlorobenzene	5.47	5
C_4H_8O	Ethyl vinyl ether	1.04	1	C_6HCl_5	Pentachlorobenzene	5.03	5
C_4H_8O	Butanal	0.88	1	C_6HCl_5O	Pentachlorophenol	5.07	4
C_4H_8O	2-Butanone	0.29	1	$C_6H_2Cl_4$	1,2,3,4-Tetrachlorobenzene	4.55	5
C_4H_8O	Tetrahydrofuran	0.46	1	$C_6H_2Cl_4$	1,2,3,5-Tetrachlorobenzene	4.65	5
$C_4H_8O_2$	Butanoic acid	0.79	1	$C_6H_2Cl_4$	1,2,4,5-Tetrachlorobenzene	4.51	5
$C_4H_8O_2$	Propyl formate	0.83	1	$C_6H_3Cl_3$	1,2,3-Trichlorobenzene	4.04	5
$C_4H_8O_2$	Ethyl acetate	0.73	1	$C_6H_3Cl_3$	1,2,4-Trichlorobenzene	3.98	5
C_4H_9Br	1-Bromobutane	2.75	1	$C_6H_3Cl_3$	1,3,5-Trichlorobenzene	4.02	5
C_4H_9Cl	1-Chlorobutane	2.64	2	$C_6H_4Cl_2$	<i>o</i> -Dichlorobenzene	3.38	5
C_4H_9F	1-Fluorobutane	2.58	1	$C_6H_4Cl_2$	<i>m</i> -Dichlorobenzene	3.48	5
C_4H_9I	1-Iodobutane	3	2	$C_6H_4Cl_2$	<i>p</i> -Dichlorobenzene	3.38	5
C_4H_9N	Pyrrolidine	0.46	1	$C_6H_4Cl_2O$	2,4-Dichlorophenol	3.23	4
C_4H_9NO	Butanamide	-0.21	1	C_6H_5Br	Bromobenzene	2.99	2
C_4H_9NO	N,N-Dimethylacetamide	-0.77	1	C_6H_5Cl	Chlorobenzene	2.84	1
$C_4H_9NO_2$	1-Nitrobutane	1.47	1	C_6H_5F	Fluorobenzene	2.27	2
C_4H_{10}	Isobutane	2.8	2	C_6H_5I	Iodobenzene	3.28	2
$C_4H_{10}O$	1-Butanol	0.84	1	$C_6H_5NO_2$	Nitrobenzene	1.85	1
$C_4H_{10}O$	2-Butanol	0.65	1	C_6H_6	Benzene	2.13	1
$C_4H_{10}O$	2-Methyl-1-propanol	0.76	1	C_6H_6O	Phenol	1.48	4
$C_4H_{10}O$	2-Methyl-2-propanol	0.35	1	C_6H_6S	Benzenethiol	2.52	1
$C_4H_{10}O$	Diethyl ether	0.89	1	C_6H_7N	Aniline	0.90	1
$C_4H_{10}S$	1-Butanethiol	2.28	1	C_6H_7N	2-Methylpyridine	1.11	1
$C_4H_{10}S$	Diethyl sulfide	1.95	1	C_6H_7N	3-Methylpyridine	1.20	1
$C_4H_{11}N$	Butylamine	0.86	1	C_6H_7N	4-Methylpyridine	1.22	1
$C_4H_{11}N$	tert-Butylamine	0.40	1	C_6H_8	1,4-Cyclohexadiene	2.3	2
$C_4H_{11}N$	Diethylamine	0.58	1	C_6H_8O	5-Hexyn-2-one	0.58	1
C_5H_5N	Pyridine	0.65	1	C_6H_8O	2-Cyclohexen-1-one	0.61	1
C_5H_6O	2-Methylfuran	1.85	1	C_6H_8O	2-Ethylfuran	2.40	1
C_5H_7N	1-Methylpyrrole	1.21	1	C_6H_{10}	1,5-Hexadiene	2.8	2
C_5H_8	1,4-Pentadiene	2.48	1	C_6H_{10}	1-Hexyne	2.73	2
C_5H_8	1-Pentyne	1.98	1	C_6H_{10}	Cyclohexene	2.86	1
$C_5H_8O_2$	Methyl methacrylate	1.38	1	$C_6H_{10}O$	5-Hexen-2-one	1.02	1
$C_5H_8O_2$	Ethyl acrylate	1.32	1	$C_6H_{10}O$	Cyclohexanone	0.81	1
C_5H_9N	Pantanenitrile	0.94	1	$C_6H_{10}O_2$	Ethyl methacrylate	1.94	1
C_5H_{10}	1-Pentene	2.2	2	$C_6H_{11}Br$	Bromocyclohexane	3.20	1
C_5H_{10}	Cyclopentane	3.00	1	$C_6H_{11}N$	Hexanenitrile	1.66	1
$C_5H_{10}O$	2-Pentanone	0.84	1	C_6H_{12}	1-Hexene	3.40	1
$C_5H_{10}O$	3-Pentanone	0.82	1	C_6H_{12}	4-Methyl-1-pentene	2.5	2
$C_5H_{10}O$	3-Methyl-2-butanone	0.56	1	C_6H_{12}	Cyclohexane	3.44	1
$C_5H_{10}O$	Tetrahydropyran	0.82	1	C_6H_{12}	Methylcyclopentane	3.37	2

Mol. form.	Name	log P	Ref.	Mol. form.	Name	log P	Ref.
C ₆ H ₁₂ O	Cyclohexanol	1.23	1	C ₈ H ₆ O	Benzofuran	2.67	1
C ₆ H ₁₂ O	Hexanal	1.78	1	C ₈ H ₆ S	Benzo[b]thiophene	3.12	1
C ₆ H ₁₂ O	2-Hexanone	1.38	1	C ₈ H ₇ N	Benzeneacetonitrile	1.56	1
C ₆ H ₁₂ O	4-Methyl-2-pentanone	1.31	1	C ₈ H ₇ N	Indole	2.14	1
C ₆ H ₁₂ O ₂	Hexanoic acid	1.92	1	C ₈ H ₈	Styrene	3.05	1
C ₆ H ₁₂ O ₂	Butyl acetate	1.82	1	C ₈ H ₈ O	Acetophenone	1.63	1
C ₆ H ₁₃ Br	1-Bromohexane	3.80	1	C ₈ H ₈ O	2-Methylbenzaldehyde	2.26	1
C ₆ H ₁₃ N	Cyclohexylamine	1.49	1	C ₈ H ₈ O	Benzeneacetaldehyde	1.78	1
C ₆ H ₁₄	Hexane	4.00	1	C ₈ H ₈ O	2,3-Dihydrobenzofuran	2.14	1
C ₆ H ₁₄	3-Methylpentane	3.60	2	C ₈ H ₈ O	Phenoxirane	1.61	1
C ₆ H ₁₄	2,2-Dimethylbutane	3.82	1	C ₈ H ₈ O ₂	<i>o</i> -Toluic acid	2.32	4
C ₆ H ₁₄	2,3-Dimethylbutane	3.85	2	C ₈ H ₈ O ₂	<i>m</i> -Toluic acid	2.37	1
C ₆ H ₁₄ O	1-Hexanol	2.03	1	C ₈ H ₈ O ₂	<i>p</i> -Toluic acid	2.34	1
C ₆ H ₁₄ O	2-Hexanol	1.76	1	C ₈ H ₈ O ₂	Benzeneacetic acid	1.41	1
C ₆ H ₁₄ O	3-Hexanol	1.65	1	C ₈ H ₈ O ₂	Phenyl acetate	1.49	1
C ₆ H ₁₄ O	3,3-Dimethyl-2-butanol	1.48	1	C ₈ H ₈ O ₂	Methyl benzoate	2.20	1
C ₆ H ₁₄ O	Dipropyl ether	2.03	1	C ₈ H ₁₀	Ethylbenzene	3.15	1
C ₆ H ₁₄ O	Diisopropyl ether	1.52	1	C ₈ H ₁₀	<i>o</i> -Xylene	3.12	1
C ₆ H ₁₅ N	Hexylamine	2.06	1	C ₈ H ₁₀	<i>m</i> -Xylene	3.20	1
C ₆ H ₁₅ N	Dipropylamine	1.67	1	C ₈ H ₁₀	<i>p</i> -Xylene	3.15	1
C ₆ H ₁₅ N	Triethylamine	1.45	1	C ₈ H ₁₀ O	<i>o</i> -Ethylphenol	2.47	1
C ₇ H ₅ BrO ₂	2-Bromobenzoic acid	2.20	4	C ₈ H ₁₀ O	<i>m</i> -Ethylphenol	2.50	1
C ₇ H ₅ BrO ₂	3-Bromobenzoic acid	2.87	4	C ₈ H ₁₀ O	<i>p</i> -Ethylphenol	2.50	1
C ₇ H ₅ BrO ₂	4-Bromobenzoic acid	2.86	4	C ₈ H ₁₀ O	2,4-Xylenol	2.35	1
C ₇ H ₅ N	Benzonitrile	1.56	1	C ₈ H ₁₀ O	2,5-Xylenol	2.34	1
C ₇ H ₆ O	Benzaldehyde	1.48	1	C ₈ H ₁₀ O	2,6-Xylenol	2.36	1
C ₇ H ₆ O ₂	Benzoic acid	1.88	4	C ₈ H ₁₀ O	3,4-Xylenol	3.23	1
C ₇ H ₆ O ₂	Phenyl formate	1.26	1	C ₈ H ₁₀ O	3,5-Xylenol	2.35	1
C ₇ H ₆ O ₃	Salicylic acid	2.20	4	C ₈ H ₁₀ O	Benzeneethanol	1.36	1
C ₇ H ₇ Br	(Bromomethyl)benzene	2.92	1	C ₈ H ₁₀ O	α -Methylbenzyl alcohol	1.42	1
C ₇ H ₇ Cl	<i>o</i> -Chlorotoluene	3.42	1	C ₈ H ₁₀ O	3-Methylbenzenemethanol	1.60	1
C ₇ H ₇ Cl	<i>m</i> -Chlorotoluene	3.28	1	C ₈ H ₁₀ O	4-Methylbenzenemethanol	1.58	1
C ₇ H ₇ Cl	<i>p</i> -Chlorotoluene	3.33	1	C ₈ H ₁₀ O	Phenetole	2.51	1
C ₇ H ₇ Cl	(Chloromethyl)benzene	2.30	1	C ₈ H ₁₀ O	Benzyl methyl ether	1.35	1
C ₇ H ₇ NO ₂	<i>p</i> -Nitrotoluene	2.42	1	C ₈ H ₁₀ O	2-Methylanisole	2.74	1
C ₇ H ₈	Toluene	2.73	1	C ₈ H ₁₀ O	3-Methylanisole	2.66	1
C ₇ H ₈	1,3,5-Cycloheptatriene	2.63	2	C ₈ H ₁₀ O	4-Methylanisole	2.81	1
C ₇ H ₈ O	<i>o</i> -Cresol	1.98	1	C ₈ H ₁₁ N	<i>p</i> -Ethylaniline	1.96	1
C ₇ H ₈ O	<i>m</i> -Cresol	1.98	1	C ₈ H ₁₁ N	<i>N,N</i> -Dimethylaniline	2.31	1
C ₇ H ₈ O	<i>p</i> -Cresol	1.97	1	C ₈ H ₁₁ N	Benzeneethanamine	1.41	1
C ₇ H ₈ O	Benzyl alcohol	1.05	1	C ₈ H ₁₄ O ₂	Butyl methacrylate	2.88	1
C ₇ H ₈ O	Anisole	2.11	1	C ₈ H ₁₅ N	Octanenitrile	2.75	1
C ₇ H ₉ N	Benzylamine	1.09	1	C ₈ H ₁₆	1-Octene	4.57	1
C ₇ H ₉ N	<i>o</i> -Methylaniline	1.32	1	C ₈ H ₁₆	Cyclooctane	4.45	2
C ₇ H ₉ N	<i>m</i> -Methylaniline	1.40	1	C ₈ H ₁₆ O	2-Octanone	2.37	1
C ₇ H ₉ N	<i>p</i> -Methylaniline	1.39	1	C ₈ H ₁₆ O ₂	Octanoic acid	3.05	1
C ₇ H ₉ N	<i>N</i> -Methylaniline	1.66	1	C ₈ H ₁₇ Br	1-Bromoocetane	4.89	1
C ₇ H ₁₄	1-Heptene	3.99	1	C ₈ H ₁₈	Octane	5.15	1
C ₇ H ₁₄	Methylcyclohexane	3.88	1	C ₈ H ₁₈ O	1-Octanol	3.07	1
C ₇ H ₁₄ O	2-Heptanone	1.98	1	C ₈ H ₁₈ O	2-Octanol	2.90	1
C ₇ H ₁₄ O	5-Methyl-2-hexanone	1.88	1	C ₈ H ₁₈ O	4-Octanol	2.68	1
C ₇ H ₁₅ Br	1-Bromoheptane	4.36	1	C ₈ H ₁₈ O	Dibutyl ether	3.21	1
C ₇ H ₁₅ Cl	1-Chloroheptane	4.15	1	C ₉ H ₇ N	Quinoline	2.03	1
C ₇ H ₁₅ I	1-Iodoheptane	4.70	1	C ₉ H ₇ N	Isoquinoline	2.08	1
C ₇ H ₁₆	Heptane	4.50	1	C ₉ H ₈	Indene	2.92	1
C ₇ H ₁₆ O	1-Heptanol	2.62	1	C ₉ H ₈ O ₂	<i>trans</i> -Cinnamic acid	2.13	1
C ₇ H ₁₆ O	2-Heptanol	2.31	1	C ₉ H ₉ N	Benzenepropanenitrile	1.72	1
C ₇ H ₁₆ O	3-Heptanol	2.24	1	C ₉ H ₁₀	Indan	3.33	1
C ₇ H ₁₆ O	4-Heptanol	2.22	1	C ₉ H ₁₀ O	1-Phenyl-1-propanone	2.19	1
C ₇ H ₁₇ N	Heptylamine	2.57	1	C ₉ H ₁₀ O	1-Phenyl-2-propanone	1.44	1
C ₈ H ₆	Phenylacetylene	2.40	1	C ₉ H ₁₀ O	4-Methylacetophenone	2.19	1

Mol. form.	Name	$\log P$	Ref.	Mol. form.	Name	$\log P$	Ref.
C ₉ H ₁₀ O ₂	2-Phenylpropanoic acid	1.80	1	C ₁₂ H ₆ Cl ₄	2,3,4,5-Tetrachlorobiphenyl	5.72	3
C ₉ H ₁₀ O ₂	Benzyl acetate	1.96	1	C ₁₂ H ₆ Cl ₄	2,2',4',5-Tetrachlorobiphenyl	5.73	7
C ₉ H ₁₀ O ₂	4-Methylphenyl acetate	2.11	1	C ₁₂ H ₇ Cl ₃	2,4,5-Trichlorobiphenyl	5.60	3
C ₉ H ₁₀ O ₂	Ethyl benzoate	2.64	1	C ₁₂ H ₇ Cl ₃	2,4,6-Trichlorobiphenyl	5.47	3
C ₉ H ₁₂	Propylbenzene	3.69	1	C ₁₂ H ₈ Cl ₂	2,5-Dichlorobiphenyl	5.10	3
C ₉ H ₁₂	Isopropylbenzene	3.66	1	C ₁₂ H ₈ Cl ₂	2,6-Dichlorobiphenyl	5.00	3
C ₉ H ₁₂	<i>o</i> -Ethyltoluene	3.53	1	C ₁₂ H ₈ O	Dibenzofuran	4.12	1
C ₉ H ₁₂	<i>p</i> -Ethyltoluene	3.63	2	C ₁₂ H ₉ Cl	2-Chlorobiphenyl	4.52	1
C ₉ H ₁₂	1,2,3-Trimethylbenzene	3.60	1	C ₁₂ H ₉ Cl	3-Chlorobiphenyl	4.58	1
C ₉ H ₁₂	1,2,4-Trimethylbenzene	3.63	1	C ₁₂ H ₉ Cl	4-Chlorobiphenyl	4.61	1
C ₉ H ₁₂	1,3,5-Trimethylbenzene	3.42	1	C ₁₂ H ₉ N	Carbazole	3.72	1
C ₉ H ₁₂ O	2-Propylphenol	2.93	1	C ₁₂ H ₁₀	Acenaphthene	3.96	4
C ₉ H ₁₂ O	4-Propylphenol	3.20	1	C ₁₂ H ₁₀	Biphenyl	3.76	6
C ₉ H ₁₂ O	2,3,6-Trimethylphenol	2.67	1	C ₁₂ H ₁₀ N ₂	Azobenzene	3.82	1
C ₉ H ₁₂ O	2,4,6-Trimethylphenol	2.46	1	C ₁₂ H ₁₀ O	Diphenyl ether	4.21	1
C ₉ H ₁₂ O	Benzenepropanol	1.88	1	C ₁₂ H ₁₀ S	Diphenyl sulfide	4.45	1
C ₉ H ₁₃ N	<i>N,N</i> -Dimethylbenzylamine	1.98	1	C ₁₂ H ₁₁ N	Diphenylamine	3.44	4
C ₉ H ₁₃ N	Amphetamine	1.76	1	C ₁₂ H ₁₂	1-Ethynaphthalene	4.40	1
C ₉ H ₁₈	1-Nonene	5.15	1	C ₁₂ H ₁₂	1,2-Dimethylnaphthalene	4.31	1
C ₉ H ₁₈ O	2-Nonanone	3.16	1	C ₁₂ H ₁₂	1,4-Dimethylnaphthalene	4.37	1
C ₉ H ₁₈ O	5-Methyl-2-octanone	2.92	1	C ₁₂ H ₁₄ O	4-Phenylcyclohexanone	2.45	1
C ₉ H ₂₀	Nonane	5.65	1	C ₁₂ H ₁₈	Hexylbenzene	5.52	1
C ₉ H ₂₀ O	1-Nonanol	4.02	1	C ₁₂ H ₁₈	Hexamethylbenzene	4.69	4
C ₉ H ₂₁ N	Tripropylamine	2.79	1	C ₁₂ H ₂₂ O	Cyclododecanone	4.10	1
C ₁₀ H ₇ Cl	1-Chloronaphthalene	3.90	1	C ₁₂ H ₂₄ O ₂	Dodecanoic acid	4.6	1
C ₁₀ H ₇ Cl	2-Chloronaphthalene	3.98	1	C ₁₂ H ₂₆ O	1-Dodecanol	5.13	1
C ₁₀ H ₈	Naphthalene	3.34	4	C ₁₃ H ₈ O	9H-Fluoren-9-one	3.58	1
C ₁₀ H ₈	Azulene	3.22	1	C ₁₃ H ₉ N	Acridine	3.40	1
C ₁₀ H ₈ O	1-Naphthol	2.84	1	C ₁₃ H ₁₀	9H-Fluorene	4.20	4
C ₁₀ H ₈ O	2-Naphthol	2.70	1	C ₁₃ H ₁₀ O	Benzophenone	3.18	1
C ₁₀ H ₁₂ O ₂	Isopropyl benzoate	3.18	1	C ₁₃ H ₁₀ O ₂	Phenyl benzoate	3.59	1
C ₁₀ H ₁₄	Butylbenzene	4.26	1	C ₁₃ H ₁₁ NO	<i>N</i> -Phenylbenzamide	2.62	1
C ₁₀ H ₁₄	<i>tert</i> -Butylbenzene	4.11	1	C ₁₃ H ₁₂	Diphenylmethane	4.14	1
C ₁₀ H ₁₄	Isobutylbenzene	4.01	2	C ₁₃ H ₁₂	4-Methylbiphenyl	4.63	1
C ₁₀ H ₁₄	<i>p</i> -Cymene	4.10	1	C ₁₃ H ₁₂ O	Diphenylmethanol	2.67	1
C ₁₀ H ₁₄	1,2,4,5-Tetramethylbenzene	4.10	2	C ₁₃ H ₁₂ O	Benzyl phenyl ether	3.79	1
C ₁₀ H ₁₄	1,2,3,4-Tetramethylbenzene	4.00	1	C ₁₄ H ₁₀	Anthracene	4.56	4
C ₁₀ H ₁₄	1,2,3,5-Tetramethylbenzene	4.10	1	C ₁₄ H ₁₀	Phenanthrene	4.52	4
C ₁₀ H ₁₄ O	4-Butylphenol	3.65	1	C ₁₄ H ₁₂	<i>trans</i> -Stilbene	4.81	1
C ₁₀ H ₂₀ O	2-Decanone	3.77	1	C ₁₄ H ₁₂	1-Methylfluorene	4.97	1
C ₁₀ H ₂₀ O ₂	Decanoic acid	4.09	1	C ₁₄ H ₁₂ O	2-Phenylacetophenone	3.18	1
C ₁₀ H ₂₂	Decane	6.25	1	C ₁₄ H ₁₂ O ₂	Benzyl benzoate	3.97	1
C ₁₀ H ₂₂ O	1-Decanol	4.57	1	C ₁₄ H ₁₄	1,2-Diphenylethane	4.70	1
C ₁₁ H ₉ N	4-Phenylpyridine	2.59	1	C ₁₄ H ₁₄	4,4'-Dimethylbiphenyl	5.09	1
C ₁₁ H ₁₀	1-Methylnaphthalene	3.87	1	C ₁₄ H ₂₂	Octylbenzene	6.30	1
C ₁₁ H ₁₀	2-Methylnaphthalene	4.00	1	C ₁₄ H ₂₈ O ₂	Tetradecanoic acid	6.1	1
C ₁₁ H ₁₆	Pentylbenzene	4.90	1	C ₁₅ H ₁₂	2-Methylnanthracene	5.15	2
C ₁₁ H ₁₆	Pentamethylbenzene	4.56	1	C ₁₅ H ₁₂	9-Methylnanthracene	5.07	1
C ₁₁ H ₂₂ O	2-Undecanone	4.09	1	C ₁₅ H ₁₂	1-Methylphenanthrene	5.14	2
C ₁₁ H ₂₂ O ₂	Methyl decanoate	4.41	1	C ₁₆ H ₁₀	Fluoranthene	5.07	4
C ₁₂ Cl ₁₀	Decachlorobiphenyl	8.26	3	C ₁₆ H ₁₀	Pyrene	5.08	4
C ₁₂ HCl ₉	2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	8.16	3	C ₁₆ H ₁₄	9,10-Dimethylnanthracene	5.69	1
C ₁₂ H ₂ Cl ₈	2,2',3,3',5,5',6,6'-Octachlorobiphenyl	7.10	3	C ₁₆ H ₃₂ O ₂	Hexadecanoic acid	7.17	1
C ₁₂ H ₃ Cl ₇	2,2',3,3',4,4',6-Heptachlorobiphenyl	6.70	3	C ₁₇ H ₁₂	11H-Benzo[a]fluorene	5.40	1
C ₁₂ H ₄ Cl ₆	2,2',3,3',4,4'-Hexachlorobiphenyl	7.00	3	C ₁₇ H ₁₂	11H-Benzo[b]fluorene	5.75	1
C ₁₂ H ₆ Cl ₆	2,2',4,4',6,6'-Hexachlorobiphenyl	7.00	3	C ₁₈ H ₁₂	Benz[a]anthracene	5.91	1
C ₁₂ H ₆ Cl ₆	2,2',3,3',6,6'-Hexachlorobiphenyl	6.70	3	C ₁₈ H ₁₂	Chrysene	5.73	4
C ₁₂ H ₅ Cl ₅	2,3,4,5,6-Pentachlorobiphenyl	6.30	3	C ₁₈ H ₁₂	Naphthacene	5.76	1
C ₁₂ H ₅ Cl ₅	2,2',4,5,5'-Pentachlorobiphenyl	6.40	3	C ₁₈ H ₁₂	Triphenylene	5.49	4
				C ₁₈ H ₁₅ N	Triphenylamine	5.74	1
				C ₁₈ H ₃₀ O ₂	Linolenic acid	6.46	1

Octanol-Water Partition Coefficients

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Mol. form.	Name	$\log P$	Ref.	Mol. form.	Name	$\log P$	Ref.
$C_{18}H_{32}O_2$	Linoleic acid	7.05	1	$C_{20}H_{40}O_2$	Arachidic acid	9.29	1
$C_{18}H_{34}O_2$	Oleic acid	7.64	1	$C_{21}H_{16}$	1,2-Dihydro-3-methylbenz[j]aceanthrylene	6.75	1
$C_{18}H_{36}O_2$	Stearic acid	8.23	1	$C_{22}H_{12}$	Benzo[ghi]perylene	6.90	1
$C_{19}H_{16}O$	Triphenylmethanol	3.68	1	$C_{24}H_{12}$	Coronene	6.05	4
$C_{20}H_{12}$	Perylene	6.25	1				
$C_{20}H_{12}$	Benzo[a]pyrene	6.20	4				
$C_{20}H_{32}O_2$	Arachidonic acid	6.98	1				