Supplementary Material (ESI) for New Journal of Chemistry

Partition of compounds from water and from air into the wet and dry monohalobenzenes

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Supplementary Tables

Table S1. Partition data for fluorobenzene

Solute	w/d	logK	logKw	logP	ref	E	S	A	B	V	L
Helium	Dry	-1.52	-2.02	0.50	23	0.000	0.00	0.00	0.00	0.0680	-1.741
Neon	Dry	-1.40	-1.96	0.56	23	0.000	0.00	0.00	0.00	0.0850	-1.575
Argon	Dry	-0.53	-1.47	0.94	23	0.000	0.00	0.00	0.00	0.1900	-0.688
Krypton	Dry	-0.06	-1.21	1.15	23	0.000	0.00	0.00	0.00	0.2460	-0.211
Xenon	Dry	0.53	-0.97	1.50	23	0.000	0.00	0.00	0.00	0.3290	0.378
Oxygen	Dry	-0.41	-1.51	1.10	27	0.000	0.00	0.00	0.00	0.1830	-0.723
Octane	Dry	3.78	-2.11	5.89	28	0.000	0.00	0.00	0.00	1.2358	3.677
Dioxane	Dry	3.78	3.70	0.08	28	0.329	0.75	0.00	0.64	0.6810	2.892
Butanone	Dry	3.40	2.72	0.68	28	0.166	0.70	0.00	0.51	0.6879	2.287
Nitromethane	Dry	3.28	2.95	0.33	28	0.313	0.95	0.06	0.31	0.4237	1.892
Ethanol	Dry	2.38	3.67	-1.29	28	0.246	0.42	0.37	0.48	0.4491	1.485
Toluene	Dry	3.83	0.65	3.18	28	0.601	0.52	0.00	0.14	0.8573	3.325
Fluorobenzene	Dry	3.40	0.59	2.81	a	0.477	0.57	0.00	0.10	0.7341	2.788
Anthracene	Dry	8.31	3.03	5.28	b	2.290	1.34	0.00	0.28	1.4544	7.568
Pyrene	Dry	9.44	3.50	5.94	b	2.808	1.71	0.00	0.28	1.5846	8.833
Benzil	Dry	9.12	4.87	4.25	b	1.445	1.59	0.00	0.62	1.6374	7.611
1-Chloroanthraquinone	Dry	10.72	6.03	4.69	b	1.900	1.79	0.00	0.57	1.6512	9.171
9-Fluorenone	Dry	8.58	4.20	4.38	b	1.600	1.49	0.00	0.35	1.3722	7.474
4-Hydroxyacetanilide	Dry	8.90	10.90	-2.00	b	1.060	1.63	1.04	0.86	1.1724	6.430
Salicylamide	Dry	7.78	7.68	0.10	b	1.160	1.58	0.61	0.51	1.0315	5.818

4-Methylpyridine thiocyanate	Wet	9.11	9.97	-0.86	22	1.270	1.73	0.69	0.88	1.2430	6.906
a Activity coefficient = 1											
b Solubilities from this work											
		logS	logSw	logP							
Anthracene	Dry	-1.15	-6.43	5.28							
Pyrene	Dry	-0.21	-6.15	5.94							
Benzil	Dry	0.23	-4.02	4.25							
1-Chloroanthraquinone	Dry	-0.85	-5.54	4.69							
9-Fluorenone	Dry	0.40	-3.98	4.38							
4-Hydroxyacetanilide	Dry	-3.03	-1.03	-2.00							
Salicylamide	Dry	-1.65	-1.75	0.10							

Table S2. Partition data for chlorobenzene

Solute	w/d	logK	logKw	logP	ref	E	S	A	B	V	L
Helium	Dry	-1.78	-2.02	0.24	23	0.000	0.00	0.00	0.00	0.0680	-1.741
Neon	Dry	-1.63	-1.96	0.33	23	0.000	0.00	0.00	0.00	0.0850	-1.575
Argon	Dry	-0.69	-1.47	0.78	23	0.000	0.00	0.00	0.00	0.1900	-0.688
Krypton	Dry	-0.18	-1.21	1.03	23	0.000	0.00	0.00	0.00	0.2460	-0.211
Xenon	Dry	0.47	-0.97	1.44	35	0.000	0.00	0.00	0.00	0.3290	0.378
Radon	Dry	1.10	-0.65	1.75	36	0.000	0.00	0.00	0.00	0.3840	0.877
Hydrogen	Dry	-1.21	-1.72	0.58	37	0.000	0.00	0.00	0.00	0.1086	-1.200
Deuterium	Dry	-1.21	-1.73	0.52	38	0.000	0.00	0.00	0.00	0.1100	-1.200
Oxygen	Dry	-0.73	-1.51	0.78	38	0.000	0.00	0.00	0.00	0.1830	-0.723
Nitrogen	Dry	-0.99	-1.80	0.81	38	0.000	0.00	0.00	0.00	0.2222	-0.978
Nitrous oxide	Dry	0.50	-0.23	0.73	39	0.068	0.35	0.00	0.10	0.2810	0.164
Ammonia	Dry	1.00	3.19	-2.19	40	0.139	0.39	0.16	0.56	0.2084	0.319
Carbon monoxide	Dry	-0.78	-1.62	0.84	37, 41	0.000	0.00	0.00	0.04	0.2220	-0.836
Carbon dioxide	Dry	0.37	-0.08	0.45	38	0.000	0.28	0.05	0.10	0.2809	0.058
Iodine	Dry	4.26	1.86	2.40	42	1.398	0.67	0.28	0.00	0.6250	3.681
Hydrogen sulfide	Dry	1.10	0.49	0.61	40	0.310	0.32	0.10	0.08	0.2721	0.706
Methane	Dry	-0.33	-1.45	1.12	38	0.000	0.00	0.00	0.00	0.2495	-0.323

Ethane	Dry	0.59	-1.34	1.93	38, 43	0.000	0.00	0.00	0.00	0.3904	0.492
Propane	Dry	1.18	-1.44	2.62	38, 43	0.000	0.00	0.00	0.00	0.5313	1.050
Butane	Dry	1.70	-1.50	3.20	43	0.000	0.00	0.00	0.00	0.6722	1.615
Isobutane	Dry	1.65	-1.70	3.35	40	0.000	0.00	0.00	0.00	0.6722	1.409
Pentane	Dry	2.43	-1.70	4.13	44	0.000	0.00	0.00	0.00	0.8131	2.162
Hexane	Dry	2.95	-1.82	4.77	44	0.000	0.00	0.00	0.00	0.9540	2.668
Heptane	Dry	3.47	-1.96	5.43	44	0.000	0.00	0.00	0.00	1.0949	3.173
Octane	Dry	3.99	-2.11	6.10	44	0.000	0.00	0.00	0.00	1.2358	3.677
Nonane	Dry	4.52	-2.15	6.67	44	0.000	0.00	0.00	0.00	1.3767	4.182
2-Methylpentane	Dry	2.78	-1.84	4.62	44	0.000	0.00	0.00	0.00	0.9540	2.503
2,4-Dimethylpentane	Dry	3.11	-2.08	5.19	44	0.000	0.00	0.00	0.00	1.0949	2.809
2,5-Dimethylhexane	Dry	3.64	-2.02	5.66	44	0.000	0.00	0.00	0.00	1.2358	3.308
2,3,4-Trimethylpentane	Dry	3.69	-1.88	5.57	44	0.000	0.00	0.00	0.00	1.2358	3.481
Cyclohexane	Dry	3.23	-0.90	4.13	44	0.305	0.10	0.00	0.00	0.8454	2.964
Ethylcyclohexane	Dry	4.06	-1.58	5.64	44	0.263	0.10	0.00	0.00	1.1272	3.877
Ethene	Dry	0.45	-0.94	1.39	38	0.107	0.10	0.00	0.07	0.3474	0.289
Pent-1-ene	Dry	2.21	-1.23	3.44	45	0.093	0.08	0.00	0.07	0.7701	2.047
Tetrafluoromethane	Dry	-0.95	-2.29	1.34	38	-0.580	-0.26	0.00	0.00	0.3203	-0.817
Chloromethane	Dry	1.62	0.40	1.22	46	0.249	0.43	0.00	0.08	0.3719	1.163
Dichloromethane	Dry	2.59	0.96	1.63	47	0.387	0.57	0.10	0.05	0.4943	2.019
Chloroethane	Dry	2.17	0.46	1.71	43	0.227	0.40	0.00	0.10	0.5128	1.678
t-Butyl chloride	Dry	2.61	-0.80	3.41	41	0.142	0.30	0.00	0.03	0.7946	2.273
1-Chlorobutane	Dry	3.19	0.12	3.07	49	0.210	0.40	0.00	0.10	0.7946	2.722
Bromoethane	Dry	2.57	0.54	2.03	43	0.366	0.40	0.00	0.12	0.5654	2.120
t-Butyl bromide	Dry	2.88	-0.62	3.50	41	0.305	0.29	0.00	0.07	0.8472	2.609
Iodoethane	Dry	3.06	0.54	2.52	43	0.640	0.40	0.00	0.14	0.6486	2.573
Dimethyl ether	Dry	1.60	1.40	0.20	46	0.000	0.27	0.00	0.41	0.4491	1.285
Dioxane	Dry	3.72	3.70	0.02	28	0.329	0.75	0.00	0.64	0.6810	2.892
Propanone	Dry	2.66	2.83	-0.17	45	0.179	0.70	0.04	0.49	0.5470	1.696
Butanone	Dry	3.29	2.72	0.57	28	0.166	0.70	0.00	0.51	0.6879	2.287
Ethyl acetate	Dry	3.25	2.16	1.09	45	0.106	0.62	0.00	0.45	0.7466	2.314
Triethylamine	Dry	3.35	2.36	0.99	50	0.101	0.15	0.00	0.79	1.0538	3.040
Acetonitrile	Dry	2.74	2.85	-0.11	52	0.237	0.90	0.07	0.32	0.4042	1.739
Proprionitrile	Dry	3.26	2.82	0.44	43	0.162	0.90	0.02	0.36	0.5450	2.082
Nitromethane	Dry	3.06	2.95	0.11	49	0.313	0.95	0.06	0.31	0.4237	1.892

Methanol	Dry	1.67	3.74	-2.07	45	0.278	0.44	0.43	0.47	0.3082	0.970
Ethanol	Dry	2.29	3.67	-1.38	49	0.246	0.42	0.37	0.48	0.4491	1.485
Propan-1-ol	Dry	2.81	3.56	-0.75	51	0.236	0.42	0.37	0.48	0.5900	2.031
Butan-1-ol	Dry	3.39	3.46	-0.07	51	0.224	0.42	0.37	0.48	0.7309	2.601
Butan-2-ol	Dry	3.12	3.39	-0.27	51	0.217	0.36	0.33	0.56	0.7309	2.338
Pentan-1-ol	Dry	4.02	3.35	0.67	51	0.219	0.42	0.37	0.48	0.8718	3.106
2-Methylpropan-1-ol	Dry	3.12	3.30	-0.18	51	0.217	0.39	0.37	0.48	0.7309	2.413
3-Methylbutan-1-ol	Dry	3.76	3.24	0.52	51	0.192	0.39	0.37	0.48	0.8718	3.011
2-Chloroethanol	Dry	3.39	4.60	-1.21	51	0.419	0.77	0.39	0.50	0.5715	2.435
1,3-Dichloropropan-2-ol	Dry	4.41	4.84	-0.43	51	0.546	0.69	0.42	0.60	0.8348	3.364
Sulfur hexafluoride	Dry	-0.26	-2.23	1.97	38	-0.600	-0.20	0.00	0.00	0.4643	-0.120
Tetramethyltin	Dry	2.96	-1.53	4.49	53	0.324	0.11	0.00	0.10	1.0431	2.651
Tetraethyltin	Dry	5.30	-1.62	6.92	53	0.464	0.18	0.00	0.13	1.6067	4.923
Benzene	Dry	3.24	0.63	2.61	42	0.610	0.52	0.00	0.14	0.7164	2.786
Toluene	Dry	3.82	0.65	3.17	28	0.601	0.52	0.00	0.14	0.8573	3.325
Ethylbenzene	Dry	4.28	0.58	3.70	54	0.613	0.51	0.00	0.15	0.9982	3.778
Chlorobenzene	Dry	4.18	0.82	3.36	a	0.718	0.65	0.00	0.07	0.8388	3.657
trans-Stilbene	Dry	8.42	2.78	5.64	55	1.450	1.04	0.00	0.34	1.5630	7.525
Biphenyl	Dry	6.79	1.95	4.84	56	1.360	0.99	0.00	0.26	1.3242	6.014
Anthracene	Dry	8.45	3.03	5.42	57	2.290	1.34	0.00	0.28	1.4544	7.568
Naphthalene	Dry	5.77	1.73	4.04	56	1.340	0.92	0.00	0.20	1.0854	5.161
Benzil	Dry	9.12	4.87	4.28	58	1.445	1.59	0.00	0.62	1.6374	7.611
2-Naphthol	Dry	7.58	5.95	1.63	59	1.520	1.08	0.61	0.40	1.1441	6.200
Diuron	Dry	9.93	7.97	1.96	60	1.280	1.60	0.57	0.70	1.5992	8.060
2-Hydroxybenzoic acid	Dry	6.13	5.39	0.74	61	0.900	0.85	0.73	0.37	0.9904	4.732
Ibuprofen	Dry	8.71	5.70	3.01	62	0.730	0.70	0.56	0.79	1.7771	7.184
Diclofenac	Dry	12.95	9.27	3.68	61	1.810	1.85	0.55	0.77	2.0250	11.025
Niflumic acid	Dry	11.39	9.41	1.98	63	1.540	1.71	0.75	0.79	1.7922	9.277
Ammonia	Wet	0.94	3.19	-2.25	22	0.139	0.39	0.16	0.56	0.2084	0.319
Diethyl ether	Wet	2.96	1.20	1.76	67	0.041	0.25	0.00	0.45	0.7309	2.015
Tetrahydrofuran	Wet	2.97	2.56	0.41	67	0.289	0.52	0.00	0.48	0.6223	2.636
Propanone	Wet	2.84	2.83	0.01	22	0.179	0.70	0.04	0.49	0.5470	1.696
Butanone	Wet	3.32	2.72	0.60	22	0.166	0.70	0.00	0.51	0.6879	2.287
Pentan-2-one	Wet	3.87	2.58	1.29	22	0.143	0.68	0.00	0.51	0.8288	2.755
Hexan-2-one	Wet	4.28	2.41	1.87	22	0.136	0.68	0.00	0.51	0.9697	3.286

Heptan-2-one	Wet	4.74	2.23	2.51	22	0.123	0.68	0.00	0.51	1.1106	3.760
3,3-Dimethylbutan-2-one	Wet	4.01	2.28	1.73	22	0.106	0.62	0.00	0.51	0.9697	2.928
Acetylacetone	Wet	4.30	3.54	0.76	22	0.412	0.78	0.00	0.63	0.8445	3.326
Nonane-4,6-dione	Wet	6.03	3.15	2.88	22	0.410	0.64	0.11	0.64	1.4081	5.218
Thenoyl trifluoroacetone	Wet	6.16	4.51	1.65	22	0.517	0.74	0.06	0.86	1.2892	5.082
Methyl acetate	Wet	2.80	2.30	0.50	22	0.142	0.64	0.00	0.45	0.6057	1.911
Ethyl acetate	Wet	3.28	2.16	1.12	22	0.106	0.62	0.00	0.45	0.7466	2.314
Propyl acetate	Wet	3.73	2.05	1.68	22	0.092	0.60	0.00	0.45	0.8875	2.819
Butyl acetate	Wet	4.28	1.94	2.34	22	0.071	0.60	0.00	0.45	1.0284	3.353
Pentyl acetate	Wet	4.80	1.84	2.96	22	0.067	0.60	0.00	0.45	1.1693	3.844
Methyl propanoate	Wet	3.34	2.15	1.19	22	0.128	0.60	0.00	0.45	0.7466	2.431
Methyl pentanoate	Wet	4.27	1.88	2.39	22	0.108	0.60	0.00	0.45	1.0284	3.392
Methylamine	Wet	1.58	3.34	-1.76	22	0.250	0.35	0.16	0.58	0.3493	1.300
Ethylamine	Wet	2.75	3.30	-0.55	22	0.236	0.35	0.16	0.61	0.4902	1.677
Propylamine	Wet	2.63	3.22	-0.59	22	0.225	0.35	0.16	0.61	0.6311	2.141
Butylamine	Wet	3.06	3.11	-0.05	22	0.224	0.35	0.16	0.61	0.7720	2.618
Dimethylamine	Wet	2.02	3.15	-1.13	22	0.189	0.30	0.08	0.66	0.4902	1.600
Trimethylamine	Wet	2.05	2.35	-0.30	22	0.140	0.20	0.00	0.67	0.6311	1.620
Triethylamine	Wet	3.42	2.36	1.06	22	0.101	0.15	0.00	0.79	1.0538	3.040
Propanoic acid	Wet	3.20	4.73	-1.53	22	0.233	0.65	0.61	0.44	0.6057	2.276
Methacrylic acid	Wet	3.94	4.46	-0.52	22	0.354	0.60	0.62	0.41	0.7036	2.870
Methanol	Wet	1.78	3.74	-1.96	22	0.278	0.44	0.43	0.47	0.3082	0.970
Ethanol	Wet	1.97	3.67	-1.70	22	0.246	0.42	0.37	0.48	0.4491	1.485
Propan-1-ol	Wet	2.82	3.56	-0.74	22	0.236	0.42	0.37	0.48	0.5900	2.031
Butan-1-ol	Wet	3.16	3.46	-0.30	22	0.224	0.42	0.37	0.48	0.7309	2.601
Pentan-1-ol	Wet	3.92	3.35	0.57	22	0.219	0.42	0.37	0.48	0.8718	3.106
Hexan-1-ol	Wet	4.42	3.23	1.19	22	0.210	0.42	0.37	0.48	1.0127	3.610
Heptan-1-ol	Wet	4.95	3.09	1.86	22	0.211	0.42	0.37	0.48	1.1536	4.115
Ethoxyethanol	Wet	3.61	4.91	-1.30	22	0.237	0.55	0.29	0.82	0.7896	2.719
Isopropoxyethanol	Wet	3.97	4.79	-0.82	22	0.196	0.48	0.21	0.91	0.9305	3.214
Butoxyethanol	Wet	4.52	4.52	0.00	22	0.201	0.53	0.26	0.83	1.0714	3.656
Trioctylphosphineoxide	Wet	16.16	11.35	4.81	22	-0.075	0.11	0.00	2.62	3.7535	15.280
Dioctyl phosphate	Wet	11.32	6.76	4.56	22	0.135	0.45	0.85	1.16	2.8024	9.972
Dibutylphosphorodithiotic acid	Wet	9.12	5.89	3.23	22	1.010	0.91	0.02	1.14	1.8848	8.055
Benzoic acid	Wet	5.37	5.10	0.27	22	0.730	0.90	0.59	0.40	0.9317	4.657

2-Hydroxybenzoic acud	Wet	5.79	5.39	0.40	22	0.900	0.85	0.73	0.37	0.9904	4.732
2-Isopropyl-5-methylphenol	Wet	7.01	4.26	2.75	22	0.822	0.84	0.44	0.43	1.3387	5.801
Methyl salicylate	Wet	5.83	2.97	2.86	22	0.850	0.82	0.01	0.48	1.1313	4.961
Ethyl salicylate	Wet	6.38	2.80	3.58	22	0.802	0.86	0.01	0.46	1.2722	5.246
Propyl salicylate	Wet	6.93	2.68	4.25	22	0.793	0.90	0.02	0.43	1.4131	5.955
Butyl salicylate	Wet	7.49	2.57	4.92	22	0.784	0.85	0.15	0.35	1.5540	6.541
BisphenolA	Wet	11.47	10.55	0.92	22	1.607	1.56	0.99	0.91	1.8643	9.603
Triphenylphosphineoxide	Wet	15.27	12.49	2.78	22	1.870	1.97	0.00	1.52	2.1953	13.055
18-Crown-6	Wet	10.36	11.43	-1.07	1	0.410	1.47	0.00	2.10	2.0430	8.228
16-Crown -5	Wet	8.92	9.18	-0.26	2	0.410	1.17	0.00	1.76	1.8434	7.276
Benzo-15-crown-5	Wet	11.89	10.55	1.34	6	1.055	1.94	0.00	1.59	2.0285	9.403
Benzo-18-crown-6	Wet	14.27	13.11	1.16	5	1.045	2.47	0.00	1.90	2.3690	11.076
AC-B18C6	Wet	14.83	13.05	1.78	5	0.684	2.65	0.00	1.85	2.4776	11.100
Dibenzo-18-crown-6	Wet	16.74	13.38	3.36	3	1.690	2.73	0.00	1.78	2.6950	13.384
Dibenzo-24-crown-8	Wet	20.82	17.32	3.50	4	1.680	3.40	0.00	2.34	3.3760	16.414
4-Acetyl-1-phenyl-3-methyl-5-pyrazolone	Wet	9.73	7.25	2.48	22	1.540	1.35	0.00	1.10	1.6412	8.215
4-Propionyl-1-phenyl-3-methyl-5-pyrazolone	Wet	10.24	7.14	3.10	22	1.540	1.35	0.00	1.10	1.7821	8.723
4-Butanoyl-1-phenyl-3-methyl-5-pyrazolone	Wet	10.68	6.97	3.71	22	1.540	1.31	0.00	1.11	1.9230	9.191
4-Hexanoyl-1-phenyl-3-methyl-5-pyrazolone	Wet	11.72	6.79	4.93	22	1.540	1.33	0.00	1.11	2.2048	10.223
4-Octanoyl-1-phenyl-3-methyl-5-pyrazolone	Wet	12.75	6.49	6.26	22	1.540	1.30	0.00	1.11	2.4866	11.226
4-Decanoyl-1-phenyl-3-methyl-5-pyrazolone	Wet	13.73	6.20	7.53	22	1.540	1.31	0.00	1.11	2.7684	12.304
4-Benzoyl-1-phenyl-3-methyl-5-pyrazolone	Wet	12.12	8.48	3.64	22	2.150	1.30	0.00	1.39	2.1081	10.727
Dibutylphosphate	Wet	7.34	7.89	-0.55	22	0.162	0.54	0.90	1.11	1.6752	6.012
Tributylphosphate	Wet	8.97	4.93	4.04	22	-0.100	0.71	0.00	1.26	2.2388	7.539
Tributylphosphine oxide	Wet	9.41	8.13	1.28	22	-0.009	1.15	0.00	1.64	2.0627	7.505
Germanium tetrachloride	Wet	2.82	2.30	0.52	22	0.463	-0.25	0.55	0.48	0.8858	2.784
Germanium tetrabromide	Wet	5.16	4.70	0.46	22	1.306	-0.05	0.85	0.57	1.0962	4.902
Germanium tetraiodide	Wet	8.07	7.62	0.45	22	2.230	0.57	0.32	1.22	1.4290	7.707
Mercury	Wet	2.06	0.46	1.60	64	0.850	0.43	0.00	0.04	0.3400	1.721
Methylmercury(II) chloride	Wet	5.71	4.72	0.99	65	0.980	1.48	0.13	0.29	0.6463	4.037
Phenylmercury(II) chloride	Wet	8.62	6.36	2.26	65	1.650	1.82	0.17	0.43	1.1132	6.841
Aniline	Wet	5.20	4.30	0.90	22	0.955	0.96	0.26	0.41	0.8162	3.934
p-Toluidine	Wet	5.52	4.09	1.46	22	0.923	0.95	0.23	0.45	0.9571	4.452
2-Nitroaniline	Wet	7.29	5.41	1.88	22	1.180	1.37	0.30	0.36	0.9904	5.627
4-Nitroaniline	Wet	8.75	7.18	1.57	22	1.220	1.92	0.46	0.35	0.9904	6.042

Benzidine	Wet	11.91	10.43	1.48	22	1.882	2.45	0.40	0.80	1.5238	9.230
Di(4-aminophenyl)methane	Wet	13.65	11.92	1.73	22	1.760	3.10	0.47	0.75	1.6647	10.220
Phenol	Wet	5.10	4.85	0.25	22	0.805	0.89	0.60	0.30	0.7751	3.766
o-Cresol	Wet	5.38	4.31	1.07	22	0.840	0.86	0.52	0.30	0.9160	4.218
p-Cresol	Wet	5.30	4.50	0.80	22	0.820	0.87	0.57	0.31	0.9160	4.312
2,3-Dimethylphenol	Wet	5.88	4.45	1.43	22	0.850	0.82	0.51	0.37	1.0569	4.495
2,4-Dimethylphenol	Wet	5.66	4.41	1.25	22	0.843	0.79	0.52	0.40	1.0569	4.770
2,5-Dimethylphenol	Wet	5.77	4.34	1.43	22	0.840	0.83	0.50	0.38	1.0569	4.774
2,6-Dimethylphenol	Wet	5.60	3.86	1.74	22	0.840	0.79	0.39	0.38	1.0569	4.680
3,4-Dimethylphenol	Wet	5.99	4.77	1.22	22	0.830	0.90	0.55	0.38	1.0569	4.980
3,5-Dimethylphenol	Wet	5.86	4.60	1.26	22	0.830	0.86	0.55	0.37	1.0569	4.856
2-Ethylphenol	Wet	5.83	4.42	1.41	22	0.831	0.84	0.52	0.37	1.0569	4.612
4-Ethylphenol	Wet	5.80	4.50	1.30	22	0.800	0.90	0.55	0.36	1.0569	4.737
2-Fluorophenol	Wet	4.46	3.88	0.58	22	0.660	0.69	0.61	0.26	0.7928	3.453
2-Chlorophenol	Wet	4.79	3.34	1.45	22	0.853	0.88	0.32	0.31	0.8975	4.178
3-Chlorophenol	Wet	5.85	4.85	1.00	22	0.909	1.06	0.69	0.15	0.8975	4.773
4-Chlorophenol	Wet	6.20	5.16	1.04	22	0.915	1.08	0.67	0.20	0.8975	4.775
2,4-Dichlorophenol	Wet	5.59	3.65	1.94	22	0.960	0.82	0.54	0.17	1.0199	4.896
2-Bromophenol	Wet	5.30	3.71	1.59	22	1.037	0.90	0.35	0.31	0.9501	4.802
4-Bromophenol	Wet	6.26	5.23	1.03	22	1.080	1.17	0.67	0.20	0.9501	5.135
2,4-Dibromophenol	Wet	6.29	4.17	2.12	22	1.310	0.91	0.46	0.27	1.1251	5.743
2-Iodophenol	Wet	6.44	4.55	1.89	22	1.360	1.00	0.40	0.35	1.0333	4.964
4-Iodophenol	Wet	7.14	5.58	1.56	22	1.380	1.22	0.68	0.20	1.0333	5.492
2-Methoxyphenol	Wet	5.29	4.09	1.19	22	0.837	0.91	0.22	0.52	0.9747	4.449
Vanillin	Wet	7.24	6.42	0.82	22	1.028	1.28	0.33	0.68	1.1313	5.730
3-Hydroxy-4-methoxybenzaldehyde	Wet	7.33	6.63	0.70	22	1.040	1.37	0.27	0.72	1.1313	5.752
o-Vanillin	Wet	7.05	5.05	2.00	22	1.040	1.26	0.07	0.61	1.1313	5.608
1-Naphthol	Wet	7.61	5.87	1.74	22	1.520	1.10	0.66	0.34	1.1441	6.284
2-Naphthol	Wet	7.62	5.95	1.67	22	1.520	1.08	0.61	0.40	1.1441	6.200
1-Nitroso-2-naphthol	Wet	8.17	5.36	2.81	22	1.434	1.41	0.06	0.58	1.2596	6.706
2-Nitroso-1-naphthol	Wet	8.10	6.44	1.66	22	1.434	1.26	0.44	0.58	1.2596	6.691
BisphenolA	Wet	11.47	10.55	0.92	22	1.607	1.56	0.99	0.91	1.8643	9.603
2-Furaldehyde	Wet	4.62	3.83	0.79	22	0.690	1.13	0.00	0.45	0.6929	3.318
5-Methylfurfural	Wet	5.24	4.03	1.21	22	0.744	1.11	0.00	0.52	0.8339	3.933
2-Hydroxybenzaldehyde	Wet	5.63	3.48	2.15	22	0.962	1.05	0.12	0.33	0.9317	4.570

3-Nitrophenol	Wet	7.54	7.06	0.48	22	1.050	1.57	0.79	0.23	0.9493	5.692
Salicylic acid	Wet	5.69	5.39	0.30	22	0.900	0.85	0.73	0.37	0.9904	4.732
Benzoylacetone	Wet	6.82	3.69	3.13	22	0.766	0.99	0.01	0.58	1.3114	5.647
4-Methylpyridine thiocyanate	Wet	9.04	9.97	-0.93	22	1.270	1.73	0.69	0.88	1.2430	6.906
8-Hydroxyquinoline	Wet	6.83	4.44	2.39	22	1.450	1.02	0.06	0.56	1.1030	5.812
Brompheniramine	Wet	12.38	8.50	3.88	22	1.600	1.53	0.00	1.36	2.2624	10.543
Zimeldine	Wet	12.56	8.72	3.84	22	1.730	1.61	0.00	1.34	2.2194	10.662
N-Phenylbenzohydroxamic acid	Wet	10.01	8.31	1.70	22	1.710	1.28	0.32	1.08	1.6393	8.383
N-Phenyl-2-methylbenzohydroxamic acid	Wet	10.51	8.44	2.07	66	1.710	1.28	0.41	1.06	1.7802	8.960
N-m-Tolylbenzohydroxamic aid	Wet	11.03	8.16	2.87	66	1.710	1.30	0.31	1.07	1.7802	8.790
N-o-Tolyl-2-methylbenzohydroxamic acid	Wet	10.15	8.22	1.93	66	1.710	1.20	0.40	1.09	1.9211	9.411
N-p-Tolyl-2-methylbenzohydroxamic acid	Wet	10.84	8.40	2.44	66	1.710	1.29	0.42	1.06	1.9211	9.470
N-p-Tolyl-4-ethoxybenzohydroxamic acid	Wet	12.36	9.11	3.25	66	1.780	1.40	0.32	1.26	2.1207	10.410
N-o-Tolyl-4-chlorobenzohydroxamic acid	Wet	10.40	7.90	2.50	66	1.840	1.17	0.34	1.07	1.9026	9.450
N-p-Tolyl-phenoxyacetohydroxamic acid	Wet	11.77	9.36	2.41	66	1.750	1.40	0.39	1.23	1.9798	9.800
N-m-Chlorophenyl-4-methoxybenzohydroxamic acid	Wet	11.62	9.38	2.24	22	1.880	1.56	0.32	1.19	1.9613	10.090
N-p-Chlorophenyl-4-bromobenzohydroxamic acid	Wet	11.95	8.47	3.48	22	2.110	1.53	0.32	0.99	1.9367	10.300
N-m-Chlorophenylbenzohydroxamic acid	Wet	10.20	7.98	2.22	22	1.840	1.19	0.32	1.07	1.7617	9.050
N-Phenyl-2-nitrobenzohydroxamic acid	Wet	11.74	10.62	1.12	22	1.970	1.88	0.34	1.23	1.8135	9.980
N-Phenyl-3,5-dinitrobenzohydroxamic acid	Wet	13.58	11.46	2.12	22	2.240	2.23	0.32	1.23	1.9877	11.230
a Activity coefficient = 1											
Crotonic acid (not used)	Wet	5.07	4.63	0.44	22	0.355	0.54	0.60	0.49	0.7036	2.726
		logS	LogSw								
trans-Stilbene	Dry	-0.16	-5.80								
Biphenyl	Dry	0.51	-4.33								
Anthracene	Dry	-1.01	-6.43								
Naphthalene	Dry	0.46	-3.58								
Benzil	Dry	0.26	-4.02								
2-Naphthol	Dry	-0.65	-2.28								
Diuron	Dry	-1.78	-3.74								
2-Hydroxybenzoic acid	Dry	-1.18	-1.92								
Ibuprofen	Dry	-0.71	-3.76								
Diclofenac	Dry	-1.45	-5.13								
Niflumic acid	Dry	-2.02	-4.00								

Table S3. Partition data for bromobenzene

Solute	w/d	logK	logKw	logP	ref	E	S	A	B	V	L
Helium	Dry	-1.91	-2.02	0.12	23	0.000	0.00	0.00	0.00	0.0680	-1.741
Neon	Dry	-1.74	-1.96	0.22	23	0.000	0.00	0.00	0.00	0.0850	-1.575
Argon	Dry	-0.80	-1.47	0.67	23	0.000	0.00	0.00	0.00	0.1900	-0.688
Krypton	Dry	-0.28	-1.21	0.94	23	0.000	0.00	0.00	0.00	0.2460	-0.211
Xenon	Dry	0.40	-0.97	1.37	23	0.000	0.00	0.00	0.00	0.3290	0.378
Radon	Dry	0.95	-0.65	1.59	36	0.000	0.00	0.00	0.00	0.3840	0.877
Hydrogen	Dry	-1.30	-1.72	0.42	38	0.000	0.00	0.00	0.00	0.1086	-1.200
Deuterium	Dry	-1.29	-1.73	0.44	38	0.000	0.00	0.00	0.00	0.1100	-1.200
Oxygen	Dry	-0.85	-1.51	0.66	38	0.000	0.00	0.00	0.00	0.1830	-0.723
Nitrogen	Dry	-1.13	-1.80	0.67	38	0.000	0.00	0.00	0.00	0.2222	-0.978
Carbon monoxide	Dry	-0.87	-1.62	0.75	68	0.000	0.00	0.00	0.04	0.2220	-0.836
Carbon dioxide	Dry	0.26	-0.08	0.34	38	0.000	0.28	0.05	0.10	0.2809	0.058
Methane	Dry	-0.42	-1.45	1.04	38	0.000	0.00	0.00	0.00	0.2495	-0.323
Ethane	Dry	0.45	-1.34	1.79	38	0.000	0.00	0.00	0.00	0.3904	0.492
Propane	Dry	1.05	-1.44	2.48	37	0.000	0.00	0.00	0.00	0.5313	1.050
Octane	Dry	3.74	-2.11	5.85	28, 37	0.000	0.00	0.00	0.00	1.2358	3.677
Ethene	Dry	0.38	-0.94	1.32	38	0.107	0.10	0.00	0.07	0.3474	0.289
Tetrafluoromethane	Dry	-1.15	-2.29	1.14	38	-0.580	-0.26	0.00	0.00	0.3203	-0.817
Chloromethane	Dry	1.59	0.40	1.19	46	0.249	0.43	0.00	0.08	0.3719	1.163
t-Butyl chloride	Dry	2.52	-0.80	3.32	41	0.142	0.30	0.00	0.03	0.7946	2.273
t-Butyl bromide	Dry	2.85	-0.62	3.47	41	0.305	0.29	0.00	0.07	0.8472	2.609
Iodoethane	Dry	3.09	0.54	2.55	69	0.640	0.40	0.00	0.14	0.6486	2.573
Dimethyl ether	Dry	1.54	1.40	0.14	46	0.000	0.27	0.00	0.41	0.4491	1.285
Dioxane	Dry	3.83	3.70	0.13	28	0.329	0.75	0.00	0.64	0.6810	2.892
Butanone	Dry	3.22	2.72	0.50	28	0.166	0.70	0.00	0.51	0.6879	2.287
Triethylamine	Dry	3.28	2.36	0.92	50	0.101	0.15	0.00	0.79	1.0538	3.040
Nitromethane	Dry	3.04	2.95	0.09	28	0.313	0.95	0.06	0.31	0.4237	1.892
Ethanol	Dry	2.24	3.67	-1.43	28	0.246	0.42	0.37	0.48	0.4491	1.485
Propan-1-ol	Dry	2.68	3.56	-0.88	51	0.236	0.42	0.37	0.48	0.5900	2.031
Butan-1-ol	Dry	3.33	3.46	-0.13	51	0.224	0.42	0.37	0.48	0.7309	2.601

Butan-2-ol	Dry	3.04	3.39	-0.35	51	0.217	0.36	0.33	0.56	0.7309	2.338
Pentan-1-ol	Dry	3.97	3.35	0.62	51	0.219	0.42	0.37	0.48	0.8718	3.106
Hexan-1-ol	Dry	4.38	3.23	1.15	51	0.210	0.42	0.37	0.48	1.0127	3.610
2-Methylpropan-1-ol	Dry	3.10	3.30	-0.20	51	0.217	0.39	0.37	0.48	0.7309	2.413
3-Methylbutan-1-ol	Dry	3.86	3.24	0.62	51	0.192	0.39	0.37	0.48	0.8718	3.011
Cyclohexanol	Dry	4.74	4.01	0.73	51	0.460	0.54	0.32	0.57	0.9040	3.758
2-Chloroethanol	Dry	3.52	4.60	-1.08	51	0.419	0.77	0.39	0.50	0.5715	2.435
Sulfur hexafluoride	Dry	-0.49	-2.23	1.74	38	-0.600	-0.20	0.00	0.00	0.4643	-0.120
Hydrogen sulfide	Dry	0.95	0.49	0.55	46	0.310	0.32	0.10	0.08	0.2721	0.706
Tetramethyltin	Dry	2.63	-1.53	4.16	53	0.324	0.11	0.00	0.10	1.0431	2.651
Toluene	Dry	3.79	0.65	3.14	28	0.601	0.52	0.00	0.14	0.8573	3.325
Iodine	Dry	4.47	1.86	2.61	42	1.398	0.67	0.28	0.00	0.6250	3.681
Bromobenzene	Dry	4.62	1.07	3.55	a	0.882	0.73	0.00	0.09	0.8914	4.041
4-Nitrobenzyl chloride	Dry	4.14	0.65	3.49	70	0.601	0.52	0.00	0.14	0.8573	3.325
2-Naphthol	Dry	7.65	5.95	1.70	59	1.520	1.08	0.61	0.40	1.1441	6.200
Anthracene	Dry	8.51	3.03	5.48	71	2.290	1.34	0.00	0.28	1.4544	7.568
Pyrene	Dry	9.65	3.50	6.15	71	2.808	1.71	0.00	0.28	1.5846	8.833
Diethyl ether	Wet	2.81	1.20	1.51	67	0.041	0.25	0.00	0.45	0.7309	2.015
Tetrahydrofuran	Wet	2.90	2.56	0.34	67	0.289	0.52	0.00	0.48	0.6223	2.636
Acetylacetone	Wet	4.33	3.54	0.79	22	0.412	0.78	0.00	0.63	0.8445	3.326
Methyl acetate	Wet	2.70	2.30	0.40	22	0.142	0.64	0.00	0.45	0.6057	1.911
Ethyl acetate	Wet	3.24	2.16	1.08	22	0.106	0.62	0.00	0.45	0.7466	2.314
Propyl acetate	Wet	3.57	2.05	1.52	22	0.092	0.60	0.00	0.45	0.8875	2.819
Butyl acetate	Wet	4.16	1.94	2.22	22	0.071	0.60	0.00	0.45	1.0284	3.353
Pentyl acetate	Wet	4.70	1.84	2.86	22	0.067	0.60	0.00	0.45	1.1693	3.844
Ethylamine	Wet	2.00	3.30	-1.30	22	0.236	0.35	0.16	0.61	0.4902	1.677
Propylamine	Wet	2.62	3.22	-0.60	22	0.225	0.35	0.16	0.61	0.6311	2.141
Butylamine	Wet	3.04	3.11	-0.07	22	0.224	0.35	0.16	0.61	0.7720	2.618
Methanol	Wet	1.69	3.74	-2.05	22	0.278	0.44	0.43	0.47	0.3082	0.970
Ethanol	Wet	1.97	3.67	-1.70	22	0.246	0.42	0.37	0.48	0.4491	1.485
Propan-1-ol	Wet	2.76	3.56	-0.80	22	0.236	0.42	0.37	0.48	0.5900	2.031
Butan-1-ol	Wet	2.99	3.46	-0.47	22	0.224	0.42	0.37	0.48	0.7309	2.601
Pentan-1-ol	Wet	3.78	3.35	0.43	22	0.219	0.42	0.37	0.48	0.8718	3.106
Hexan-1-ol	Wet	4.37	3.23	1.14	22	0.210	0.42	0.37	0.48	1.0127	3.610
Heptan-1-ol	Wet	4.88	3.09	1.79	22	0.211	0.42	0.37	0.48	1.1536	4.115

Ethoxyethanol	Wet	3.61	4.91	-1.30	22	0.237	0.55	0.29	0.82	0.7896	2.719
Butoxyethanol	Wet	4.45	4.52	-0.07	22	0.201	0.53	0.26	0.83	1.0714	3.656
Isopropoxyethanol	Wet	3.97	4.79	-0.82	22	0.196	0.48	0.21	0.91	0.9305	3.214
Benzoylacetone	Wet	7.05	3.69	3.36	22	0.766	0.99	0.01	0.58	1.3114	5.647
Aniline	Wet	5.16	4.30	0.86	22	0.955	0.96	0.26	0.41	0.8162	3.934
p-Toluidine	Wet	5.59	4.09	1.50	22	0.923	0.95	0.23	0.45	0.9571	4.452
2-Nitroaniline	Wet	7.27	5.41	1.86	22	1.180	1.37	0.30	0.36	0.9904	5.627
4-Nitroaniline	Wet	8.69	7.18	1.51	22	1.220	1.92	0.46	0.35	0.9904	6.042
Phenol	Wet	4.99	4.85	0.14	22	0.805	0.89	0.60	0.30	0.7751	3.766
o-Cresol	Wet	5.33	4.31	1.02	22	0.840	0.86	0.52	0.30	0.9160	4.218
p-Cresol	Wet	5.22	4.50	0.72	22	0.820	0.87	0.57	0.31	0.9160	4.312
2,4-Dimethylphenol	Wet	5.57	4.41	1.16	22	0.843	0.79	0.52	0.40	1.0569	4.770
2,5-Dimethylphenol	Wet	5.67	4.34	1.33	22	0.840	0.83	0.50	0.38	1.0569	4.774
3,4-Dimethylphenol	Wet	5.89	4.77	1.12	22	0.830	0.90	0.55	0.38	1.0569	4.980
3,5-Dimethylphenol	Wet	5.77	4.60	1.17	22	0.830	0.86	0.55	0.37	1.0569	4.856
4-Ethylphenol	Wet	5.74	4.50	1.24	22	0.800	0.90	0.55	0.36	1.0569	4.737
2-Isopropyl-5-methylphenol	Wet	6.93	4.26	2.67	22	0.822	0.84	0.44	0.43	1.3387	5.801
2-Fluorophenol	Wet	4.33	3.88	0.45	22	0.660	0.69	0.61	0.26	0.7928	3.453
2-Chlorophenol	Wet	4.69	3.34	1.35	22	0.853	0.88	0.32	0.31	0.8975	4.178
3-Chlorophenol	Wet	5.78	4.85	0.93	22	0.909	1.06	0.69	0.15	0.8975	4.773
4-Chlorophenol	Wet	6.12	5.16	0.96	22	0.915	1.08	0.67	0.20	0.8975	4.775
2,4-Dichlorophenol	Wet	5.55	3.65	1.90	22	0.960	0.82	0.54	0.17	1.0199	4.896
2-Bromophenol	Wet	5.37	3.71	1.66	22	1.037	0.90	0.35	0.31	0.9501	4.802
4-Bromophenol	Wet	6.23	5.23	1.00	22	1.080	1.17	0.67	0.20	0.9501	5.135
2,4-Dibromophenol	Wet	6.26	4.17	2.09	22	1.310	0.91	0.46	0.27	1.1251	5.743
2-Iodophenol	Wet	6.42	4.55	1.87	22	1.360	1.00	0.40	0.35	1.0333	4.964
4-Iodophenol	Wet	7.13	5.58	1.55	22	1.380	1.22	0.68	0.20	1.0333	5.492
2-Methoxyphenol	Wet	5.48	4.09	1.39	22	0.837	0.91	0.22	0.52	0.9747	4.449
3-Nitrophenol	Wet	7.46	7.06	0.40	22	1.050	1.57	0.79	0.23	0.9493	5.692
2,4-Dinitrophenol	Wet	7.25	5.58	1.67	22	1.200	1.49	0.09	0.56	1.1235	5.981
2,4-Dinitro-6-aminophenol	Wet	9.30	8.35	0.95	22	1.750	1.85	0.21	0.80	1.2233	7.466
2,4-Dinitroresorcinol	Wet	8.02	6.97	1.05	22	1.330	1.33	0.62	0.51	1.1822	6.400
Salicylic acid	Wet	5.69	5.39	0.30	22	0.900	0.85	0.73	0.37	0.9904	4.732
Methyl salicylate	Wet	5.77	2.97	2.80	22	0.850	0.82	0.01	0.48	1.1313	4.961
Ethyl salicylate	Wet	6.27	2.80	3.47	22	0.802	0.86	0.01	0.46	1.2722	5.246

Propyl salicylate	Wet	6.88	2.68	4.20	22	0.793	0.90	0.02	0.43	1.4131	5.955
Butyl salicylate	Wet	7.39	2.57	4.82	22	0.784	0.85	0.15	0.35	1.5540	6.541
Vanillin	Wet	7.25	6.42	0.81	22	1.028	1.28	0.33	0.68	1.1313	5.730
3-Hydroxy-4-methoxybenzaldehyde	Wet	7.31	6.63	0.68	22	1.040	1.37	0.27	0.72	1.1313	5.752
o-Vanillin	Wet	7.03	5.05	1.98	22	1.040	1.26	0.07	0.61	1.1313	5.608
Isoeugenol	Wet	6.64	4.64	2.00	22	1.140	0.95	0.31	0.54	1.3544	6.286
1-Naphthol	Wet	7.67	5.87	1.80	22	1.520	1.10	0.66	0.34	1.1441	6.284
2-Naphthol	Wet	7.66	5.95	1.71	22	1.520	1.08	0.61	0.40	1.1441	6.200
1-Nitroso-2-naphthol	Wet	8.22	5.36	2.86	22	1.434	1.41	0.06	0.58	1.2596	6.706
2-Nitroso-1-naphthol	Wet	8.13	6.44	1.69	22	1.434	1.26	0.44	0.58	1.2596	6.691
2-Amino-6-chloro-4-nitrophenol	Wet	7.76	7.44	0.32	22	1.370	1.21	0.57	0.70	1.1715	6.264
Bisphenol A	Wet	11.47	10.55	0.92	22	1.607	1.56	0.99	0.91	1.8643	9.603
2-Furaldehyde	Wet	4.60	3.83	0.77	22	0.690	1.13	0.00	0.45	0.6929	3.318
5-Methylfurfural	Wet	5.23	4.03	1.20	22	0.744	1.11	0.00	0.52	0.8339	3.933
4-Methylpyridine thiocyanate	Wet	9.04	9.97	-0.93	22	1.270	1.73	0.69	0.88	1.2430	6.906
15-Crown-5	Wet	8.95	9.40	-0.45	72	0.410	1.20	0.00	1.75	1.7025	6.779
18-Crown-6	Wet	10.31	11.43	-1.12	1	0.410	1.47	0.00	2.10	2.0430	8.228
16-Crown -5	Wet	9.19	9.18	0.01	2	0.410	1.17	0.00	1.76	1.8434	7.276
Benzo-15-crown-5	Wet	11.91	10.55	1.36	6	1.055	1.94	0.00	1.59	2.0285	9.403
Benzo-18-crown-6	Wet	14.24	13.11	1.13	5	1.045	2.47	0.00	1.90	2.3690	11.076
AC-B18C6	Wet	14.69	13.05	1.64	5	0.684	2.65	0.00	1.85	2.4776	11.100
Dibenzo-18-crown-6	Wet	16.79	13.38	3.41	3	1.690	2.73	0.00	1.78	2.6950	13.384
Dibenzo-24-crown-8	Wet	20.90	17.32	3.58	4	1.680	3.40	0.00	2.34	3.3760	16.414
Mercury	Wet	2.19	0.46	1.73	64	0.850	0.43	0.00	0.04	0.3400	1.721
Methylmercury(II) chloride	Wet	5.81	4.72	1.09	65	0.980	1.48	0.13	0.29	0.6463	4.037
Penylmercury(II) chloride	Wet	8.81	6.36	2.45	65	1.650	1.82	0.17	0.43	1.1132	6.841
a Activity coefficient taken as unity.											
		logS	logSw								
2-Naphthol	Dry	-0.58	-2.28								
Anthracene	Dry	-0.95	-6.43								
Pyrene	Dry	0.00	-6.15								

Table S4. Partition data for iodobenzene

Solute	w/d	logK	logKw	logP	ref	E	S	A	B	Bo	V	L
Helium	Dry	-2.08	-2.02	-0.06	23	0.000	0.00	0.00	0.00	0.00	0.0680	-1.741
Neon	Dry	-1.93	-1.96	0.03	23	0.000	0.00	0.00	0.00	0.00	0.0850	-1.575
Argon	Dry	-0.96	-1.47	0.51	23	0.000	0.00	0.00	0.00	0.00	0.1900	-0.688
Krypton	Dry	-0.43	-1.21	0.78	23	0.000	0.00	0.00	0.00	0.00	0.2460	-0.211
Xenon	Dry	0.29	-0.97	1.26	37	0.000	0.00	0.00	0.00	0.00	0.3290	0.378
Oxygen	Dry	-0.95	-1.51	0.56	37	0.000	0.00	0.00	0.00	0.00	0.1830	-0.723
Methane	Dry	-0.61	-1.45	0.84	37	0.000	0.00	0.00	0.00	0.00	0.2495	-0.323
Ethane	Dry	0.45	-1.34	1.79	37	0.000	0.00	0.00	0.00	0.00	0.3904	0.492
Propane	Dry	1.11	-1.44	2.55	37	0.000	0.00	0.00	0.00	0.00	0.5313	1.050
Octane	Dry	3.49	-2.11	5.60	37	0.000	0.00	0.00	0.00	0.00	1.2358	3.677
Chloromethane	Dry	1.54	0.40	1.04	46	0.249	0.43	0.00	0.08	0.08	0.3719	1.163
Iodoethane	Dry	3.14	0.54	2.60	69	0.640	0.40	0.00	0.14	0.14	0.6486	2.573
Dimethyl ether	Dry	1.49	1.40	0.09	46	0.000	0.27	0.00	0.41	0.41	0.4491	1.285
Dioxane	Dry	3.63	3.70	-0.07	28	0.329	0.75	0.00	0.64	0.64	0.6810	2.892
Butanone	Dry	3.10	2.72	0.38	28	0.166	0.70	0.00	0.51	0.51	0.6879	2.287
Triethylamine	Dry	3.18	2.36	0.82	50	0.101	0.15	0.00	0.79	0.79	1.0538	3.040
Nitromethane	Dry	2.93	2.95	-0.02	28	0.313	0.95	0.06	0.31	0.31	0.4237	1.892
Ethanol	Dry	2.17	3.67	-1.50	28	0.246	0.42	0.37	0.48	0.48	0.4491	1.485
Toluene	Dry	3.70	0.65	3.05	28	0.601	0.52	0.00	0.14	0.14	0.8573	3.325
Iodobenzene	Dry	5.22	1.28	3.94	a	1.188	0.82	0.00	0.12	0.12	0.9746	4.502
Acetylacetone	Wet	4.33	3.54	0.79	22	0.412	0.78	0.00	0.63	0.63	0.8445	3.326
Methanol	Wet	1.59	3.74	-2.15	22	0.278	0.44	0.43	0.47	0.47	0.3082	0.970
Ethanol	Wet	1.75	3.67	-1.92	22	0.246	0.42	0.37	0.48	0.48	0.4491	1.485
Propan-1-ol	Wet	2.60	3.56	-0.96	22	0.236	0.42	0.37	0.48	0.48	0.5900	2.031
Butan-1-ol	Wet	2.97	3.46	-0.49	22	0.224	0.42	0.37	0.48	0.48	0.7309	2.601
Pentan-1-ol	Wet	3.75	3.35	0.40	22	0.219	0.42	0.37	0.48	0.48	0.8718	3.106
Hexan-1-ol	Wet	4.22	3.23	0.99	22	0.210	0.42	0.37	0.48	0.48	1.0127	3.610
Heptan-1-ol	Wet	4.77	3.09	1.68	22	0.211	0.42	0.37	0.48	0.48	1.1536	4.115
Ethylamine	Wet	2.00	3.30	-1.30	22	0.236	0.35	0.16	0.61	0.61	0.4902	1.677
Propylamine	Wet	2.60	3.22	-0.62	22	0.225	0.35	0.16	0.61	0.61	0.6311	2.141

Butylamine	Wet	2.99	3.11	-0.12	22	0.224	0.35	0.16	0.61	0.61	0.7720	2.618
Acetylacetone	Wet	4.33	3.54	0.79	22	0.412	0.78	0.00	0.63	0.63	0.8445	3.326
2-Nitroaniline	Wet	7.19	5.41	1.78	22	1.180	1.37	0.30	0.36	0.36	0.9904	5.627
4-Nitroaniline	Wet	8.53	7.18	1.35	22	1.220	1.92	0.46	0.35	0.35	0.9904	6.042
Phenol	Wet	4.95	4.85	0.10	22	0.805	0.89	0.60	0.30	0.30	0.7751	3.766
o-Cresol	Wet	5.24	4.31	0.93	22	0.840	0.86	0.52	0.30	0.30	0.9160	4.218
m-Cresol	Wet	5.00	4.60	0.40	22	0.822	0.88	0.57	0.34	0.34	0.9160	4.310
p-Cresol	Wet	5.18	4.50	0.68	22	0.820	0.87	0.57	0.31	0.31	0.9160	4.312
3,5-Dimethylphenol	Wet	5.68	4.60	1.08	22	0.830	0.86	0.55	0.37	0.37	1.0569	4.856
2-Fluorophenol	Wet	4.28	3.88	0.40	22	0.660	0.69	0.61	0.26	0.26	0.7928	3.453
2-Chlorophenol	Wet	4.66	3.34	1.32	22	0.853	0.88	0.32	0.31	0.31	0.8975	4.178
3-Chlorophenol	Wet	5.71	4.85	0.86	22	0.909	1.06	0.69	0.15	0.15	0.8975	4.773
4-Chlorophenol	Wet	6.06	5.16	0.90	22	0.915	1.08	0.67	0.20	0.20	0.8975	4.775
2,4-Dichlorophenol	Wet	5.48	3.65	1.83	22	0.960	0.82	0.54	0.17	0.17	1.0199	4.896
2-Bromophenol	Wet	5.35	3.71	1.64	22	1.037	0.90	0.35	0.31	0.31	0.9501	4.802
4-Bromophenol	Wet	6.20	5.23	0.97	22	1.080	1.17	0.67	0.20	0.20	0.9501	5.135
2,4-Dibromophenol	Wet	6.20	4.17	2.03	22	1.310	0.91	0.46	0.27	0.27	1.1251	5.743
2-Iodophenol	Wet	6.39	4.55	1.84	22	1.360	1.00	0.40	0.35	0.35	1.0333	4.964
4-Iodophenol	Wet	7.08	5.58	1.50	22	1.380	1.22	0.68	0.20	0.20	1.0333	5.492
2,4-Dinitro-6-aminophenol	Wet	9.19	8.35	0.84	22	1.750	1.85	0.21	0.80	0.80	1.2233	7.466
Methyl salicylate	Wet	5.66	2.97	2.69	22	0.850	0.82	0.01	0.48	0.48	1.1313	4.961
Ethyl salicylate	Wet	6.20	2.80	3.40	22	0.802	0.86	0.01	0.46	0.46	1.2722	5.246
Propyl salicylate	Wet	6.78	2.68	4.10	22	0.793	0.90	0.02	0.43	0.43	1.4131	5.955
Butyl salicylate	Wet	7.33	2.57	4.76	22	0.784	0.85	0.15	0.35	0.35	1.5540	6.541
1-Naphthol	Wet	7.60	5.87	1.73	22	1.520	1.10	0.66	0.34	0.34	1.1441	6.284
2-Naphthol	Wet	7.46	5.95	1.51	22	1.520	1.08	0.61	0.40	0.40	1.1441	6.200
2-Amino-6-chloro-4-nitrophenol	Wet	7.64	7.44	0.20	22	1.370	1.21	0.57	0.70	0.70	1.1715	6.264
BisphenolA	Wet	11.43	10.55	0.88	22	1.607	1.56	0.99	0.91	0.91	1.8643	9.603
2-Furaldehyde	Wet	4.52	3.83	0.69	22	0.690	1.13	0.00	0.45	0.45	0.6929	3.318
5-Methylfurfural	Wet	5.12	4.03	1.09	22	0.744	1.11	0.00	0.52	0.52	0.8339	3.933
3-Nitrophenol	Wet	7.28	7.06	0.22	22	1.050	1.57	0.79	0.23	0.23	0.9493	5.692
2,4-Dinitrophenol	Wet	7.11	5.58	1.53	22	1.200	1.49	0.09	0.56	0.56	1.1235	5.981
2,4-Dinitroresorcinol	Wet	7.93	6.97	0.96	22	1.330	1.33	0.62	0.51	0.51	1.1822	6.400
Salicylic acid	Wet	5.59	5.39	0.20	22	0.900	0.85	0.73	0.37	0.37	0.9904	4.732

4-Methylpyridine thiocyanate	Wet	9.01	9.97	-0.96	22	1.270	1.73	0.69	0.88	0.88	1.2430	6.906
a Activity coefficient taken as zero.												