SUPPLEMENTAL MATERIAL

ENTHALPY OF SOLVATION CORRELATIONS FOR GASEOUS SOLUTES DISSOLVED IN LINEAR ALKANES (C_5 thru C_{16}) BASED ON THE ABRAHAM MODEL

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TABLE S1. Experimental Enthalpies of Solvation (kJ/mole) of Gaseous Solutes in Linear Alkane Solvents

Solute	E	S	A	B	L	Exp	Ref
Pentane							
Pentane	0.000	0.000	0.000	0.000	2.162	-26.74	10
Methyl methacrylate	0.245	0.510	0.000	0.440	2.880	-32.17	42
Pentyl acetate	0.067	0.600	0.000	0.450	3.844	-43.96	2
Butyl acetate	0.071	0.600	0.000	0.450	3.353	-40.09	3
Butyl propanoate	0.058	0.560	0.000	0.470	3.833	-44.17	3
Propyl acetate	0.092	0.600	0.000	0.450	2.819	-34.04	4
Propyl propanoate	0.070	0.560	0.000	0.450	3.338	-38.58	4
Propyl butanoate	0.050	0.560	0.000	0.450	3.783	-41.90	4
Ethyl butanoate	0.068	0.580	0.000	0.450	3.271	-38.29	5
Ethyl pentanoate	0.049	0.580	0.000	0.450	3.769	-43.46	5
Ethyl hexanoate	0.043	0.580	0.000	0.450	4.251	-48.71	5
Xenon	0.000	0.000	0.000	0.000	0.378	-10.95	8
1,1,2,2-Tetrachloroethane	0.595	0.760	0.160	0.120	3.803	-40.64	7
Propanenitrile	0.162	0.900	0.020	0.360	2.082	-26.10	43
Acetophenone	0.818	1.010	0.000	0.480	4.501	-44.93	9
Methyl acrylate	0.254	0.660	0.000	0.420	2.360	-29.79	6
1,1,1-Trichloroethane	0.369	0.410	0.000	0.090	2.733	-30.86	104
Hexane							
Methane	0.000	0.000	0.000	0.000	-0.323	-2.25	11
Ethane	0.000	0.000	0.000	0.000	0.492	-8.33	11
Propane	0.000	0.000	0.000	0.000	1.050	-14.10	11
Butane	0.000	0.000	0.000	0.000	1.615	-20.50	11
Pentane	0.000	0.000	0.000	0.000	2.162	-26.74	11
Hexane	0.000	0.000	0.000	0.000	2.668	-31.54	11
Heptane	0.000	0.000	0.000	0.000	3.173	-36.56	11
Octane	0.000	0.000	0.000	0.000	3.677	-41.50	11
Decane	0.000	0.000	0.000	0.000	4.686	-50.84	12
Undecane	0.000	0.000	0.000	0.000	5.191	-56.22	13
Dodecane	0.000	0.000	0.000	0.000	5.696	-61.60	27
Hexadecane	0.000	0.000	0.000	0.000	7.714	-81.34	29
2-Methylpropane	0.000	0.000	0.000	0.000	1.409	-18.87	11
2,2-Dimethylpropane	0.000	0.000	0.000	0.000	1.820	-21.55	11
2,2-Dimethylbutane	0.000	0.000	0.000	0.000	2.352	-27.80	14
2,4-Dimethylpentane	0.000	0.000	0.000	0.000	2.809	-32.67	16
2,2,4-Trimethylpentane	0.000	0.000	0.000	0.000	3.106	-35.24	15
Cyclopentane	0.263	0.100	0.000	0.000	2.477	-28.28	27
Cyclohexane	0.305	0.100	0.000	0.000	2.964	-32.43	11
Adamantane	0.760	0.570	0.000	0.040	4.934	-48.40	39
Ethene	0.107	0.100	0.000	0.070	0.289	-7.46	36

Benzene	0.610	0.520	0.000	0.140	2.786	-30.70	40
Toluene	0.601	0.520	0.000	0.140	3.325	-34.11	28
Naphthalene	1.340	0.920	0.000	0.200	5.161	-51.20	18
Bromobenzene	0.882	0.730	0.000	0.090	4.041	-41.44	35
Chlorobenzene	0.718	0.650	0.000	0.070	3.657	-38.02	40
1,2-Dichlorobenzene	0.872	0.780	0.000	0.040	4.518	-44.35	40
1,2,4-Trichlorobenzene	0.980	0.810	0.000	0.000	5.248	-51.94	34
Nitrobenzene	0.871	1.110	0.000	0.280	4.557	-40.44	40
Methanol	0.278	0.440	0.430	0.470	0.970	-15.10	32
Ethanol	0.246	0.420	0.370	0.480	1.485	-19.30	32
1-Propanol	0.236	0.420	0.370	0.480	2.031	-22.06	33
1-Butanol	0.224	0.420	0.370	0.480	2.601	-28.57	33
1-Hexanol	0.210	0.420	0.370	0.480	3.610	-34.44	19
2-Ethyl-1-butanol	0.231	0.390	0.370	0.480	3.523	-34.43	19
2-Methyl-1-pentanol	0.211	0.390	0.370	0.480	3.530	-33.51	19
1-Nonanol	0.193	0.420	0.370	0.480	5.124	-57.67	37
1-Undecanol	0.181	0.420	0.370	0.480	6.130	-63.33	37
1,1,1,3,3,3-hexafluoro-2-propanol	-0.240	0.550	0.770	0.100	1.392	-20.03	38
Benzaldehyde	0.820	1.000	0.000	0.390	4.008	-40.89	41
Aniline	0.955	0.960	0.260	0.410	3.934	-46.80	40
Pyridine	0.631	0.840	0.000	0.520	3.022	-32.08	17
2-Methylpyridine	0.598	0.750	0.000	0.580	3.422	-36.75	17
3-Methylpyridine	0.631	0.810	0.000	0.540	3.631	-37.91	25
4-Methylpyridiine	0.630	0.820	0.000	0.540	3.640	-37.88	26
2,4-Dimethylpyridine	0.634	0.760	0.000	0.630	4.006	-41.53	17
2,6-Dimethylpyridine	0.607	0.700	0.000	0.630	3.760	-40.16	17
2-Chloropyridine	0.738	1.030	0.000	0.370	3.875	-39.70	17
3-Chloropyridine	0.732	0.830	0.000	0.400	3.783	-42.00	17
3-Cyanopyridine	0.750	1.260	0.000	0.620	4.164	-40.40	17
4-Cyanopyridine	0.750	1.210	0.000	0.590	4.033	-39.00	17
Methyl methacrylate	0.245	0.510	0.000	0.440	2.880	-33.24	42
Propionitrile	0.162	0.900	0.020	0.360	2.082	-24.09	30
Butyronitrile	0.188	0.900	0.000	0.360	2.548	-31.68	43
Acetone	0.179	0.700	0.040	0.490	1.696	-21.84	30
2-Butanone	0.166	0.700	0.000	0.510	2.287	-27.44	30
2-Pentanone	0.143	0.680	0.000	0.510	2.755	-32.50	20
3-Pentanone	0.154	0.660	0.000	0.510	2.811	-33.08	21
Dipropyl ether	0.008	0.250	0.000	0.450	2.954	-35.07	30
Butyl methyl ether	0.045	0.250	0.000	0.440	2.658	-31.29	22
Methyl *tert*-butyl ether	0.024	0.210	0.000	0.590	2.380	-29.18	44
Ethyl *tert*-butyl ether	-0.020	0.160	0.000	0.600	2.720	-32.50	46
Methyl *tert*-amyl ether	0.050	0.210	0.000	0.600	2.916	-34.79	48
Furan	0.369	0.510	0.000	0.130	1.913	-23.83	49
Tetrahydrofuran	0.289	0.520	0.000	0.480	2.636	-28.81	47
2-Methyltetrahydrofuran	0.241	0.480	0.000	0.530	2.820	-31.64	45
Tetrahydropyran	0.275	0.470	0.000	0.550	3.057	-32.55	49
1,4-Dioxane	0.329	0.750	0.000	0.640	2.892	-31.15	30

Dimethoxymethane	0.099	0.460	0.000	0.520	1.894	-23.85	50
1,2-Dimethoxyethane	0.116	0.670	0.000	0.680	2.654	-31.36	30
2,5,8-Trioxanonane	0.113	0.760	0.000	1.170	3.920	-40.30	30
2,5,8,11,14-Pentaoxapentadecane	-0.020	1.110	0.000	1.790	6.498	-67.61	51
Paraldehyde	0.136	0.680	0.000	0.680	3.169	-34.66	30
Anisole	0.710	0.750	0.000	0.290	3.890	-40.75	30
Acetal	-0.020	0.560	0.000	0.620	3.066	-37.51	30
Quinoline	1.268	0.970	0.000	0.540	5.457	-50.19	30
Methyl acetate	0.142	0.640	0.000	0.450	1.911	-21.40	24
Ethyl acetate	0.106	0.620	0.000	0.450	2.314	-28.28	24
Propyl acetate	0.092	0.600	0.000	0.450	2.819	-33.45	24
Butyl acetate	0.071	0.600	0.000	0.450	3.353	-38.40	24
Pentyl acetate	0.067	0.600	0.000	0.450	3.844	-42.50	24
Ethyl propionate	0.087	0.580	0.000	0.450	2.807	-32.52	24
Ethyl butanoate	0.068	0.580	0.000	0.450	3.271	-36.71	24
Ethyl hexanoate	0.043	0.580	0.000	0.450	4.251	-47.24	24
Propyl propionate	0.070	0.560	0.000	0.450	3.338	-37.65	52
Helium	0.000	0.000	0.000	0.000	-1.741	8.03	11
Neon	0.000	0.000	0.000	0.000	-1.575	5.44	11
Argon	0.000	0.000	0.000	0.000	-0.688	-2.72	11
Krypton	0.000	0.000	0.000	0.000	-0.211	-4.73	11
Xenon	0.000	0.000	0.000	0.000	0.378	-10.71	11
Radon	0.000	0.000	0.000	0.000	0.877	-12.68	11
Hydrogen	0.000	0.000	0.000	0.000	-1.200	5.10	11
Nitrogen	0.000	0.000	0.000	0.000	-0.978	0.79	11
Oxygen	0.000	0.000	0.000	0.000	-0.723	-0.96	11
Nitric Oxide	0.370	0.020	0.000	0.090	-0.590	-2.23	31
Tetrafluoromethane	-0.580	-0.260	0.000	0.000	-0.817	-1.46	11
Sulfur Hexafluoride	-0.600	-0.200	0.000	0.000	-0.120	-8.28	11
Triethylamine	0.101	0.150	0.000	0.790	3.040	-34.58	53
Penylamine	0.211	0.350	0.160	0.610	3.139	-35.01	54
Hexylamine	0.197	0.350	0.160	0.610	3.655	-40.61	55
Heptylamine	0.197	0.350	0.160	0.610	4.153	-45.61	56
Octylamine	0.187	0.350	0.160	0.610	4.520	-50.68	57
Decylamine	0.182	0.350	0.160	0.610	5.606	-60.18	58
Nitromethane	0.313	0.950	0.060	0.310	1.892	-22.59	59
Nitroethane	0.270	0.950	0.020	0.330	2.414	-27.61	28
1-Nitropropane	0.242	0.950	0.000	0.310	2.894	-32.66	28
2-Nitropropane	0.216	0.920	0.000	0.330	2.550	-31.23	60
Diethyl sulfide	0.373	0.380	0.000	0.320	3.104	-33.64	61
1,2-Dichloroethane	0.416	0.640	0.100	0.110	2.573	-29.23	62
Chloroform	0.425	0.490	0.150	0.020	2.480	-29.90	63
Ethyl iodide	0.640	0.400	0.000	0.150	2.573	-28.64	28
1-Chlorobutane	0.210	0.400	0.000	0.100	2.722	-34.21	28
2-Chloro-2-methylpropane	0.142	0.300	0.000	0.030	2.273	-27.07	28
Carbon tetrachloride	0.458	0.380	0.000	0.000	2.823	-32.40	28
1-Chloronaphthalene	1.417	1.000	0.000	0.140	5.856	-61.74	64

Acetophenone	0.818	1.010	0.000	0.480	4.501	-44.77	23
Ethyl benzoate	0.689	0.850	0.000	0.460	5.075	-54.11	65
Methyl benzoate	0.733	0.850	0.000	0.460	4.704	-49.08	65
Heptane							
Methane	0.000	0.000	0.000	0.000	-0.323	-3.81	1
Ethane	0.000	0.000	0.000	0.000	0.492	-11.17	1
Pentane	0.000	0.000	0.000	0.000	2.162	-26.53	1
Hexane	0.000	0.000	0.000	0.000	2.668	-31.55	1
Heptane	0.000	0.000	0.000	0.000	3.173	-36.57	1
Octane	0.000	0.000	0.000	0.000	3.677	-41.51	1
Nonane	0.000	0.000	0.000	0.000	4.182	-46.40	1
Decane	0.000	0.000	0.000	0.000	4.686	-51.38	1
Dodecane	0.000	0.000	0.000	0.000	5.696	-61.17	1
Hexadecane	0.000	0.000	0.000	0.000	7.714	-80.92	1
3-Ethylpentane	0.000	0.000	0.000	0.000	3.091	-35.19	1
2-Methylpentane	0.000	0.000	0.000	0.000	2.503	-30.05	1
3-Methylpentane	0.000	0.000	0.000	0.000	2.581	-30.43	1
2,2-Dimethylbutane	0.000	0.000	0.000	0.000	2.352	-27.85	1
2,3-Dimethylbutane	0.000	0.000	0.000	0.000	2.495	-29.30	1
2,4-Dimethylpentane	0.000	0.000	0.000	0.000	2.809	-32.92	1
2,2,4-Trimethylpentane	0.000	0.000	0.000	0.000	3.106	-35.06	1
Cyclohexane	0.305	0.100	0.000	0.000	2.964	-32.29	1
Cycloheptane	0.350	0.100	0.000	0.000	3.704	-37.81	1
Cyclooctane	0.413	0.100	0.000	0.000	4.329	-42.66	1
Cyclodecane	0.474	0.100	0.000	0.000	5.340	-52.10	1
Methylcyclopentane	0.225	0.100	0.000	0.000	2.816	-31.39	1
Methylcyclohexane	0.244	0.100	0.000	0.000	3.323	-35.37	1
cis-1,2-Dimethylcyclohexane	0.281	0.240	0.000	0.000	3.847	-39.76	1
trans-1,2-Dimethylcyclohexane	0.227	0.200	0.000	0.000	3.722	-38.69	1
cis Decalin	0.550	0.250	0.000	0.000	5.156	-50.82	1
trans Decalin	0.467	0.230	0.000	0.000	4.984	-49.95	1
Bicyclohexyl	0.531	0.330	0.000	0.070	5.922	-57.84	1
Tetralin	0.891	0.650	0.000	0.170	5.203	-52.80	1
1-Hexene	0.078	0.080	0.000	0.070	2.572	-30.38	1
1-Octyne	0.155	0.220	0.090	0.100	3.521	-40.04	1
2-Octyne	0.225	0.300	0.000	0.100	3.850	-42.63	1
Propanal	0.196	0.650	0.000	0.450	1.815	-20.19	1
Butanal	0.187	0.650	0.000	0.450	2.270	-25.19	1
Pentanal	0.163	0.650	0.000	0.450	2.770	-31.15	1
Hexanal	0.146	0.650	0.000	0.450	3.370	-36.45	1
Heptanal	0.140	0.650	0.000	0.450	3.860	-41.59	1
Octanal	0.160	0.650	0.000	0.450	4.380	-45.76	1
Nonanal	0.150	0.650	0.000	0.450	4.856	-50.84	1
Isobutyraldehyde	0.144	0.620	0.000	0.450	2.120	-26.30	1
Acetone	0.179	0.700	0.040	0.490	1.696	-21.59	1
2-Butanone	0.166	0.700	0.000	0.510	2.287	-26.53	1

2-Heptanone	0.123	0.680	0.000	0.510	3.760	-41.09	1
4-Heptanone	0.110	0.660	0.000	0.510	3.705	-41.51	1
2-Nonanone	0.119	0.680	0.000	0.510	4.735	-50.12	1
5-Nonanone	0.103	0.660	0.000	0.510	4.698	-50.08	1
2,2,4,4-Tetramethyl-3-pentanone	0.099	0.560	0.000	0.520	4.370	-42.13	1
Cyclohexanone	0.403	0.860	0.000	0.560	3.792	-37.78	1
Butyl acetate	0.071	0.600	0.000	0.450	3.353	-38.72	1
Butyl propionate	0.058	0.560	0.000	0.470	3.833	-44.94	1
Butyl butanoate	0.044	0.560	0.000	0.450	4.275	-47.61	1
Methyl methacrylate	0.245	0.510	0.000	0.440	2.880	-33.11	1
Diethyl ether	0.041	0.250	0.000	0.450	2.015	-24.31	1
Dibutyl ether	0.000	0.250	0.000	0.450	3.924	-44.22	1
Dipentyl ether	0.000	0.250	0.000	0.450	4.875	-52.54	1
Diisopropyl Ether	-0.060	0.160	0.000	0.580	2.530	-30.96	1
n-Butyl methyl ether	0.045	0.250	0.000	0.440	2.658	-30.79	1
Methyl heptyl ether	0.048	0.250	0.000	0.450	4.088	-46.11	1
Methyl *tert*-butyl ether	0.024	0.210	0.000	0.590	2.380	-24.81	1
Ethyl *tert*-butyl ether	-0.020	0.160	0.000	0.600	2.720	-32.28	1
Methyl *tert*-amyl ether	0.050	0.210	0.000	0.600	2.916	-34.61	1
Tetrahydrofuran	0.289	0.520	0.000	0.480	2.636	-29.32	1
2-Methyltetrahydrofuran	0.241	0.480	0.000	0.530	2.820	-31.59	1
1-Fluorooctane	-0.020	0.350	0.000	0.100	3.850	-47.86	1
Tetrachloromethane	0.458	0.380	0.000	0.000	2.823	-31.21	1
1,2-Dichloroethane	0.416	0.640	0.100	0.110	2.573	-27.98	1
1-Chlorooctane	0.191	0.400	0.000	0.090	4.708	-50.88	1
Diiodomethane	0.714	0.690	0.110	0.070	2.886	-37.74	1
Methanol	0.278	0.440	0.430	0.470	0.970	-14.90	1
Ethanol	0.246	0.420	0.370	0.480	1.485	-18.60	1
Butan-1-ol	0.224	0.420	0.370	0.480	2.601	-27.87	1
Pentan-1-ol	0.219	0.420	0.370	0.480	3.106	-34.14	1
1-Octanol	0.199	0.420	0.370	0.480	4.619	-47.57	1
1-Nonanol	0.193	0.420	0.370	0.480	5.124	-53.66	1
1-Undecanol	0.181	0.420	0.370	0.480	6.130	-61.83	1
3-Methyl-1-butanol	0.192	0.390	0.370	0.480	3.011	-35.63	1
2-Pentanol	0.195	0.360	0.330	0.560	2.840	-35.90	1
3-Methyl-2-butanol	0.194	0.330	0.330	0.560	2.793	-31.93	1
2-Methyl-2-butanol	0.194	0.300	0.310	0.600	2.630	-26.44	1
Cyclohexanol	0.460	0.540	0.320	0.570	3.758	-37.50	1
2-Methoxyethanol	0.269	0.500	0.300	0.840	2.490	-34.22	1
Triethylamine	0.101	0.150	0.000	0.790	3.040	-34.45	1
Propylamine	0.225	0.350	0.160	0.610	2.141	-25.14	1
Isopropylamine	0.181	0.320	0.160	0.610	1.908	-22.87	1
Butylamine	0.224	0.350	0.160	0.610	2.618	-29.97	1
sec-Butylamine	0.170	0.320	0.160	0.630	2.410	-27.89	1
iso-Butylamine	0.121	0.290	0.160	0.710	2.493	-28.11	1
tert-Butylamine	0.121	0.290	0.160	0.710	2.493	-24.98	1
Pentylamine	0.211	0.350	0.160	0.610	3.139	-34.12	1

Hexylamine	0.197	0.350	0.160	0.610	3.655	-39.47	1
Heptylamine	0.197	0.350	0.160	0.610	4.153	-44.97	1
Octylamine	0.187	0.350	0.160	0.610	4.520	-49.41	1
Nonylamine	0.187	0.350	0.160	0.610	5.100	-54.09	1
Decylamine	0.182	0.350	0.160	0.610	5.606	-58.69	1
3-Methylphenol	0.822	0.880	0.570	0.340	4.310	-39.92	1
Benzene	0.610	0.520	0.000	0.140	2.786	-30.54	1
Toluene	0.601	0.520	0.000	0.140	3.325	-35.94	1
Mesitylene	0.649	0.520	0.000	0.190	4.344	-46.23	1
Naphthalene	1.340	0.920	0.000	0.200	5.161	-51.82	1
Trifluorotoluene	0.225	0.480	0.000	0.100	2.894	-33.35	1
Nitrobenzene	0.871	1.110	0.000	0.280	4.557	-44.73	1
Anisole	0.710	0.750	0.000	0.290	3.890	-41.21	1
Aniline	0.955	0.960	0.260	0.410	3.934	-40.75	1
Acetonitrile	0.237	0.900	0.070	0.320	1.739	-17.56	1
Helium	0.000	0.000	0.000	0.000	-1.741	7.72	1
Neon	0.000	0.000	0.000	0.000	-1.575	5.56	1
Argon	0.000	0.000	0.000	0.000	-0.688	-1.22	1
Krypton	0.000	0.000	0.000	0.000	-0.211	-5.51	1
Xenon	0.000	0.000	0.000	0.000	0.378	-10.08	1
Hydrogen	0.000	0.000	0.000	0.000	-1.200	3.78	1
Carbon dioxide	0.000	0.280	0.050	0.100	0.058	-9.66	1
Tetrafluoromethane	-0.580	-0.260	0.000	0.000	-0.817	-1.59	1
Sulfur Hexafluoride	-0.600	-0.200	0.000	0.000	-0.120	-8.28	1
Difluorodichloromethane	0.037	0.130	0.000	0.000	1.124	-18.91	1
Hexafluorobenzene	0.088	0.560	0.000	0.010	2.345	-31.62	1
Chlorotrifluoromethane	-0.247	-0.046	0.000	0.000	0.209	-12.84	1
Nitromethane	0.313	0.950	0.060	0.310	1.892	-24.40	1
1-Methylnaphthalene	1.337	0.940	0.000	0.220	5.802	-54.06	1
1-Butanethiol	0.382	0.350	0.000	0.240	3.243	-33.81	1
1,2,4-Trimethylbenzene	0.677	0.560	0.000	0.190	4.441	-46.76	1
2,5,8,11,14-Pentaoxopentadecane	-0.020	1.110	0.000	1.790	6.498	-68.10	1
2,5,8,11-Tetraoxododecane	0.000	0.980	0.000	1.440	5.157	-54.15	1
2,5,8-Trioxanonane	0.113	0.760	0.000	1.170	3.920	-39.94	1
Diethoxymethane	0.010	0.490	0.000	0.540	2.789	-33.41	1
1,2-Dimethoxyethane	0.116	0.670	0.000	0.680	2.654	-31.76	1
Dimethoxymethane	0.099	0.460	0.000	0.520	1.894	-26.06	1
1-Propanol	0.236	0.420	0.370	0.480	2.031	-22.10	1
2-Butanol	0.217	0.360	0.330	0.560	2.338	-26.70	1
2-Methyl-1-propanol	0.217	0.390	0.370	0.480	2.413	-26.60	1
2-Methyl-2-propanol	0.180	0.300	0.310	0.600	1.963	-22.60	1
1-Hexanol	0.210	0.420	0.370	0.480	3.610	-38.32	1
Sulfur dioxide	0.370	0.660	0.280	0.100	0.778	-15.90	1
Pentyl acetate	0.067	0.600	0.000	0.450	3.844	-44.52	1
Cyclopentanol	0.427	0.540	0.320	0.560	3.241	-37.21	1
Ethyl benzoate	0.689	0.850	0.000	0.460	5.075	-53.08	1
Ethyl butanoate	0.068	0.580	0.000	0.450	3.271	-38.07	1

Propyl butanoate	0.050	0.560	0.000	0.450	3.783	-43.10	1
Pyridine	0.631	0.840	0.000	0.520	3.022	-31.76	68
3-Methylpyridine	0.631	0.810	0.000	0.540	3.631	-37.77	66
4-Methylpyridiine	0.630	0.820	0.000	0.540	3.640	-37.34	69
Propane	0.000	0.000	0.000	0.000	1.050	-17.13	78
1,2,4-Trichlorobenzene	0.980	0.810	0.000	0.000	5.248	-52.36	34
Octane							
Methane	0.000	0.000	0.000	0.000	-0.323	-4.06	36
Octane	0.000	0.000	0.000	0.000	3.677	-41.51	10
Dodecane	0.000	0.000	0.000	0.000	5.696	-61.62	79
2,2,4-Trimethylpentane	0.000	0.000	0.000	0.000	3.106	-35.09	15
Diethyl ether	0.041	0.250	0.000	0.450	2.015	-25.90	83
Dipropyl ether	0.008	0.250	0.000	0.450	2.954	-34.76	80
Dibutyl ether	0.000	0.250	0.000	0.450	3.924	-44.37	85
n-Butyl methyl ether	0.045	0.250	0.000	0.440	2.658	-31.22	81
Methyl *tert*-butyl ether	0.024	0.210	0.000	0.590	2.380	-28.60	83
Ethyl *tert*-butyl ether	-0.020	0.160	0.000	0.600	2.720	-32.19	46
Tetrahydropyran	0.275	0.470	0.000	0.550	3.057	-33.31	84
1,4-Dioxane	0.329	0.750	0.000	0.640	2.892	-31.02	87
2-Methyltetrahydrofuran	0.241	0.480	0.000	0.530	2.820	-31.43	45
2,5,8-Trioxanonane	0.113	0.760	0.000	1.170	3.920	-40.80	88
Methanol	0.278	0.440	0.430	0.470	0.970	-15.30	32
Ethanol	0.246	0.420	0.370	0.480	1.485	-19.50	32
1-Propanol	0.236	0.420	0.370	0.480	2.031	-25.00	82
1-Butanol	0.224	0.420	0.370	0.480	2.601	-29.90	82
1-Nonanol	0.193	0.420	0.370	0.480	5.124	-55.74	86
1-Undecanol	0.181	0.420	0.370	0.480	6.130	-64.40	86
1-Hexene	0.078	0.080	0.000	0.070	2.572	-30.36	89
Chlorotrifluoromethane	-0.247	-0.046	0.000	0.000	0.209	-9.41	36
Dichlorodifluoromethane	0.037	0.130	0.000	0.000	1.124	-17.07	36
1-Chloronaphthalene	1.417	1.000	0.000	0.140	5.856	-61.57	90
Helium	0.000	0.000	0.000	0.000	-1.741	8.06	36
Neon	0.000	0.000	0.000	0.000	-1.575	6.94	36
Argon	0.000	0.000	0.000	0.000	-0.688	-0.36	36
Krypton	0.000	0.000	0.000	0.000	-0.211	-5.00	36
Xenon	0.000	0.000	0.000	0.000	0.378	-10.16	8
Hydrogen	0.000	0.000	0.000	0.000	-1.200	4.04	36
Tetrafluoromethane	-0.580	-0.260	0.000	0.000	-0.817	-0.09	36
Sulfur hexafluoride	-0.600	-0.200	0.000	0.000	-0.120	-8.34	36
Carbon monoxide	0.000	0.000	0.000	0.040	-0.836	-1.13	94
Carbon dioxide	0.000	0.280	0.050	0.100	0.058	-8.11	94
Butyronitrile	0.188	0.900	0.000	0.360	2.548	-30.26	43
Acetophenone	0.818	1.010	0.000	0.480	4.501	-44.68	9
Ethyl acetate	0.106	0.620	0.000	0.450	2.314	-29.14	65
Ethyl benzoate	0.689	0.850	0.000	0.460	5.075	-52.89	65
Pyridine	0.631	0.840	0.000	0.520	3.022	-31.50	70

3-Methylpyridine	0.631	0.810	0.000	0.540	3.631	-37.61	67
4-Methylpyridiine	0.630	0.820	0.000	0.540	3.640	-37.70	71
Nonane							
Nonane	0.000	0.000	0.000	0.000	4.182	-46.44	10
Cycloheptane	0.350	0.100	0.000	0.000	3.704	-37.71	95
Cyclooctane	0.413	0.100	0.000	0.000	4.329	-42.53	95
Bromobenzene	0.882	0.730	0.000	0.090	4.041	-40.82	35
Helium	0.000	0.000	0.000	0.000	-1.741	9.69	36
Neon	0.000	0.000	0.000	0.000	-1.575	6.29	36
Argon	0.000	0.000	0.000	0.000	-0.688	-1.46	36
Krypton	0.000	0.000	0.000	0.000	-0.211	-4.64	36
Xenon	0.000	0.000	0.000	0.000	0.378	-9.95	8
Ethyl acetate	0.106	0.620	0.000	0.450	2.314	-28.61	105
Methyl nonanoate	0.056	0.600	0.000	0.450	5.321	-58.51	106
Methyl decanoate	0.053	0.600	0.000	0.450	5.806	-63.41	106
Decane							
Methane	0.000	0.000	0.000	0.000	-0.323	-4.31	11
Ethane	0.000	0.000	0.000	0.000	0.492	-7.78	11
Propane	0.000	0.000	0.000	0.000	1.050	-13.72	11
Butane	0.000	0.000	0.000	0.000	1.615	-20.29	11
Hexane	0.000	0.000	0.000	0.000	2.668	-31.49	96
Decane	0.000	0.000	0.000	0.000	4.686	-51.38	10
Dodecane	0.000	0.000	0.000	0.000	5.696	-61.68	79
2-Methylpropane	0.000	0.000	0.000	0.000	1.409	-16.65	11
2-Methylpentane	0.000	0.000	0.000	0.000	2.503	-29.73	12
3-Methylpentane	0.000	0.000	0.000	0.000	2.581	-30.14	12
2,2-Dimethylbutane	0.000	0.000	0.000	0.000	2.352	-27.43	12
2,3-Dimethylbutane	0.000	0.000	0.000	0.000	2.495	-28.83	12
2,2,4-Trimethylpentane	0.000	0.000	0.000	0.000	3.106	-34.94	15
1-Hexene	0.078	0.080	0.000	0.070	2.572	-30.26	89
Diethyl ether	0.041	0.250	0.000	0.450	2.015	-25.63	97
Dipropyl ether	0.008	0.250	0.000	0.450	2.954	-34.66	80
Dibutyl ether	0.000	0.250	0.000	0.450	3.924	-44.26	98
n-Butyl methyl ether	0.045	0.250	0.000	0.440	2.658	-31.05	81
Ethyl *tert*-Butyl ether	-0.020	0.160	0.000	0.600	2.720	-32.22	99
Tetrahydrofuran	0.289	0.520	0.000	0.480	2.636	-28.73	47
2,5,8,11-Tetraoxadodecane	0.000	0.980	0.000	1.440	5.157	-53.14	100
2,5,8,11,14-Pentaoxapentadecane	-0.020	1.110	0.000	1.790	6.498	-56.58	51
Methyl methacrylate	0.245	0.510	0.000	0.440	2.880	-33.18	42
Methanol	0.278	0.440	0.430	0.470	0.970	-15.82	33
1-Nonanol	0.193	0.420	0.370	0.480	5.124	-54.96	37
1-Undecanol	0.181	0.420	0.370	0.480	6.130	-63.87	37
2-Methyl-2-butanol	0.194	0.300	0.310	0.600	2.630	-28.30	101
1-Chloronaphthalene	1.417	1.000	0.000	0.140	5.856	-61.92	91
Helium	0.000	0.000	0.000	0.000	-1.741	6.86	11

Neon	0.000	0.000	0.000	0.000	-1.575	6.53	11
Argon	0.000	0.000	0.000	0.000	-0.688	-1.63	11
Krypton	0.000	0.000	0.000	0.000	-0.211	-4.87	36
Xenon	0.000	0.000	0.000	0.000	0.378	-9.84	8
Nitrogen	0.000	0.000	0.000	0.000	-0.978	-0.29	11
Carbon monoxide	0.000	0.000	0.000	0.040	-0.836	0.38	11
Carbon dioxide	0.000	0.280	0.050	0.100	0.058	-6.92	94
Oxygen	0.000	0.000	0.000	0.000	-0.723	-0.25	11
Sulfur hexafluoride	-0.600	-0.200	0.000	0.000	-0.120	-7.91	11
Acetophenone	0.818	1.010	0.000	0.480	4.501	-44.75	9
Pyridine	0.631	0.840	0.000	0.520	3.022	-31.43	72
3-Methylpyridine	0.631	0.810	0.000	0.540	3.631	-37.43	73
4-Methylpyridiine	0.630	0.820	0.000	0.540	3.640	-37.57	74
Undecane							
Undecane	0.000	0.000	0.000	0.000	5.191	-56.30	10
Xenon	0.000	0.000	0.000	0.000	0.378	-9.64	8
1-Hexanol	0.210	0.420	0.370	0.480	3.610	-37.91	102
Dodecane							
Methane	0.000	0.000	0.000	0.000	-0.323	-3.95	36
Propane	0.000	0.000	0.000	0.000	1.050	-15.28	78
Hexane	0.000	0.000	0.000	0.000	2.668	-31.43	27
Heptane	0.000	0.000	0.000	0.000	3.173	-36.49	27
Octane	0.000	0.000	0.000	0.000	3.677	-41.43	27
Decane	0.000	0.000	0.000	0.000	4.686	-51.36	79
Dodecane	0.000	0.000	0.000	0.000	5.696	-61.70	10
2,4-Dimethylpentane	0.000	0.000	0.000	0.000	2.809	-32.32	16
1-Hexene	0.078	0.080	0.000	0.070	2.572	-30.15	89
Diethyl ether	0.041	0.250	0.000	0.450	2.015	-25.42	97
Dipropyl ether	0.008	0.250	0.000	0.450	2.954	-34.49	80
Dibutyl ether	0.000	0.250	0.000	0.450	3.924	-44.10	98
n-Butyl methyl ether	0.045	0.250	0.000	0.440	2.658	-31.09	81
Ethyl *tert*-Butyl ether	-0.020	0.160	0.000	0.600	2.720	-32.02	99
2-Methyltetrahydrofuran	0.241	0.480	0.000	0.530	2.820	-31.27	45
2,5,8,11-Tetraoxadodecane	0.000	0.980	0.000	1.440	5.157	-53.61	100
Methyl methacrylate	0.245	0.510	0.000	0.440	2.880	-32.80	42
1,4-Difluorobenzene	0.384	0.600	0.000	0.060	2.766	-32.48	103
1-Chloronaphthalene	1.417	1.000	0.000	0.140	5.856	-62.37	92
Helium	0.000	0.000	0.000	0.000	-1.741	7.21	36
Neon	0.000	0.000	0.000	0.000	-1.575	6.97	36
Argon	0.000	0.000	0.000	0.000	-0.688	-0.64	36
Krypton	0.000	0.000	0.000	0.000	-0.211	-4.25	36
Xenon	0.000	0.000	0.000	0.000	0.378	-9.53	8
Carbon dioxide	0.000	0.280	0.050	0.100	0.058	-6.00	78
Butyronitrile	0.188	0.900	0.000	0.360	2.548	-32.86	43
1-Propanol	0.236	0.420	0.370	0.480	2.031	-22.62	102
Pyridine	0.631	0.840	0.000	0.520	3.022	-31.86	75

3-Methylpyridine	0.631	0.810	0.000	0.540	3.631	-37.52	76
4-Methylpyridiine	0.630	0.820	0.000	0.540	3.640	-37.55	77
Tridecane							
Tridecane	0.000	0.000	0.000	0.000	6.200	-66.50	10
Xenon	0.000	0.000	0.000	0.000	0.378	-9.53	8
Tetradecane							
Tetradecane	0.000	0.000	0.000	0.000	6.705	-71.40	10
Diethyl ether	0.041	0.250	0.000	0.450	2.015	-25.20	83
Dipropyl ether	0.008	0.250	0.000	0.450	2.954	-33.68	83
Methyl tert-butyl ether	0.024	0.210	0.000	0.590	2.380	-26.52	83
1-Hexene	0.078	0.080	0.000	0.070	2.572	-30.06	89
Benzene	0.610	0.520	0.000	0.140	2.786	-30.58	27
Hexafluorobenzene	0.088	0.560	0.000	0.010	2.345	-32.33	103
3-Pentanone	0.154	0.660	0.000	0.510	2.811	-31.69	96
Helium	0.000	0.000	0.000	0.000	-1.741	5.89	36
Neon	0.000	0.000	0.000	0.000	-1.575	5.88	36
Argon	0.000	0.000	0.000	0.000	-0.688	-1.47	36
Krypton	0.000	0.000	0.000	0.000	-0.211	-5.32	36
Xenon	0.000	0.000	0.000	0.000	0.378	-9.36	8
15-Crown-5	0.410	1.200	0.000	1.750	6.770	-75.76	107,108
Pentadecane							
Pentadecane	0.000	0.000	0.000	0.000	7.209	-74.50	10
1-Chloronaphthalene	1.417	1.000	0.000	0.140	5.856	-62.39	93
Xenon	0.000	0.000	0.000	0.000	0.378	-9.34	8
Hexadecane							
Methane	0.000	0.000	0.000	0.000	-0.323	-3.97	1
Ethane	0.000	0.000	0.000	0.000	0.492	-11.51	1
Propane	0.000	0.000	0.000	0.000	1.050	-15.94	1
Butane	0.000	0.000	0.000	0.000	1.615	-20.79	1
Pentane	0.000	0.000	0.000	0.000	2.162	-25.94	1
Hexane	0.000	0.000	0.000	0.000	2.668	-31.04	1
Heptane	0.000	0.000	0.000	0.000	3.173	-36.15	1
Octane	0.000	0.000	0.000	0.000	3.677	-41.13	1
Hexadecane	0.000	0.000	0.000	0.000	7.714	-81.38	1
2-Methylpropane	0.000	0.000	0.000	0.000	1.409	-18.74	1
Cyclopentane	0.263	0.100	0.000	0.000	2.477	-27.66	1
Cyclohexane	0.305	0.100	0.000	0.000	2.964	-31.50	1
Ethene	0.107	0.100	0.000	0.070	0.289	-11.17	1
Propene	0.103	0.080	0.000	0.070	0.946	-13.35	1
Acetone	0.179	0.700	0.040	0.490	1.696	-21.42	1
2-Butanone	0.166	0.700	0.000	0.510	2.287	-26.48	1
2-Pentanone	0.143	0.680	0.000	0.510	2.755	-31.05	1
2-Hexanone	0.136	0.680	0.000	0.510	3.286	-35.77	1
2-Heptanone	0.123	0.680	0.000	0.510	3.760	-40.46	1

4-Heptanone	0.110	0.660	0.000	0.510	3.705	-44.89	1
2-Octanone	0.108	0.680	0.000	0.510	4.257	-44.89	1
2-Nonanone	0.119	0.680	0.000	0.510	4.735	-49.37	1
Cyclohexanone	0.403	0.860	0.000	0.560	3.792	-36.48	1
Diethyl ether	0.041	0.250	0.000	0.450	2.015	-25.19	1
Dipropyl ether	0.008	0.250	0.000	0.450	2.954	-34.15	1
Dibutyl ether	0.000	0.250	0.000	0.450	3.924	-43.42	1
Butyl Methyl Ether	0.045	0.250	0.000	0.440	2.658	-30.53	1
Tetrahydrofuran	0.289	0.520	0.000	0.480	2.636	-28.53	1
2-Methyltetrahydrofuran	0.241	0.480	0.000	0.530	2.820	-30.78	1
Dichloromethane	0.387	0.570	0.100	0.050	2.019	-23.18	1
Chloroform	0.425	0.490	0.150	0.020	2.480	-28.07	1
Carbon tetrachloride	0.458	0.380	0.000	0.000	2.823	-30.92	1
1-Chlorobutane	0.210	0.400	0.000	0.100	2.722	-30.88	1
Tetrachloroethene	0.639	0.440	0.000	0.000	3.584	-38.41	1
Nitromethane	0.313	0.950	0.060	0.310	1.892	-25.36	1
2-Nitropropane	0.216	0.920	0.000	0.330	2.550	-30.15	1
Acetonitrile	0.237	0.900	0.070	0.320	1.739	-19.08	1
Methanol	0.278	0.440	0.430	0.470	0.970	-13.35	1
Ethanol	0.246	0.420	0.370	0.480	1.485	-16.32	1
1-Propanol	0.236	0.420	0.370	0.480	2.031	-21.17	1
2-Propanol	0.212	0.360	0.330	0.560	1.764	-22.38	1
1-Butanol	0.224	0.420	0.370	0.480	2.601	-28.07	1
1-Pentanol	0.219	0.420	0.370	0.480	3.106	-31.34	1
1-Hexanol	0.210	0.420	0.370	0.480	3.610	-39.79	1
Heptan-1-ol	0.211	0.420	0.370	0.480	4.115	-44.43	1
1-Octanol	0.199	0.420	0.370	0.480	4.619	-49.07	1
1-Nonanol	0.193	0.420	0.370	0.480	5.124	-52.81	1
1-Undecanol	0.181	0.420	0.370	0.480	6.130	-61.39	1
tert-Butanol	0.180	0.300	0.310	0.600	1.963	-23.01	1
Cyclohexanol	0.460	0.540	0.320	0.570	3.758	-47.53	1
Ethyl acetate	0.106	0.620	0.000	0.450	2.314	-27.99	1
Butyl acetate	0.071	0.600	0.000	0.450	3.353	-38.49	1
Methyl benzoate	0.733	0.850	0.000	0.460	4.704	-48.37	1
Benzene	0.610	0.520	0.000	0.140	2.786	-30.38	1
Toluene	0.601	0.520	0.000	0.140	3.325	-35.90	1
Ethylbenzene	0.613	0.510	0.000	0.150	3.778	-40.12	1
Propylbenzene	0.604	0.500	0.000	0.150	4.230	-44.14	1
m-Xylene	0.623	0.520	0.000	0.160	3.839	-41.37	1
p-Xylene	0.613	0.520	0.000	0.160	3.839	-41.51	1
Mesitylene	0.649	0.520	0.000	0.190	4.344	-46.56	1
Acetophenone	0.818	1.010	0.000	0.480	4.501	-47.36	1
Anisole	0.710	0.750	0.000	0.290	3.890	-41.24	1
Benzaldehyde	0.820	1.000	0.000	0.390	4.008	-41.17	1
Benzonitrile	0.742	1.110	0.000	0.330	4.039	-41.25	1
Chlorobenzene	0.718	0.650	0.000	0.070	3.657	-38.24	1

Fluorobenzene	0.477	0.570	0.000	0.100	2.788	-31.05	1
1,4-Difluorobenzene	0.384	0.600	0.000	0.060	2.766	-32.19	1
Aniline	0.955	0.960	0.260	0.410	3.934	-41.80	1
Nitrobenzene	0.871	1.110	0.000	0.280	4.557	-45.65	1
N,N-Dimethylaniline	0.957	0.810	0.000	0.410	4.701	-48.36	1
Pyridine	0.631	0.840	0.000	0.520	3.022	-32.64	1
2-Methylpyridine	0.598	0.750	0.000	0.580	3.422	-35.90	1
3-Methylpyridine	0.631	0.810	0.000	0.540	3.631	-37.49	1
4-Methylpyridine	0.630	0.820	0.000	0.540	3.640	-36.78	1
Propylamine	0.225	0.350	0.160	0.610	2.141	-23.97	1
Butylamine	0.224	0.350	0.160	0.610	2.618	-29.41	1
Pentylamine	0.211	0.350	0.160	0.610	3.139	-34.81	1
Hexylamine	0.197	0.350	0.160	0.610	3.655	-39.46	1
Heptylamine	0.197	0.350	0.160	0.610	4.153	-45.27	1
Nonylamine	0.187	0.350	0.160	0.610	5.100	-55.03	1
Decylamine	0.182	0.350	0.160	0.610	5.605	-60.02	1
tert-Butylamine	0.121	0.290	0.160	0.710	2.493	-26.15	1
Diethylamine	0.154	0.300	0.080	0.690	2.395	-24.60	1
Triethylamine	0.101	0.150	0.000	0.790	3.040	-34.14	1
Helium	0.000	0.000	0.000	0.000	-1.741	8.24	1
Neon	0.000	0.000	0.000	0.000	-1.575	6.78	1
Argon	0.000	0.000	0.000	0.000	-0.688	-0.79	1
Krypton	0.000	0.000	0.000	0.000	-0.211	-5.02	1
Xenon	0.000	0.000	0.000	0.000	0.378	-10.08	1
Radon	0.000	0.000	0.000	0.000	0.877	-14.18	1
Hydrogen	0.000	0.000	0.000	0.000	-1.200	4.56	1
Diiodomethane	0.714	0.690	0.110	0.070	2.886	-38.95	1
2,2,2-Trifluoroethanol	0.015	0.600	0.570	0.250	1.224	-20.88	1
1,1,1,3,3,3-Hexafluoropropan-2-ol	-0.240	0.550	0.770	0.100	1.392	-22.09	1
Benzyl alcohol	0.803	0.870	0.330	0.560	4.221	-42.38	1
Thiophene	0.687	0.560	0.000	0.150	2.819	-29.92	1
Benzyl chloride	0.821	0.820	0.000	0.330	4.384	-43.32	1
1-Chloronaphthalene	1.417	1.000	0.000	0.140	5.856	-61.74	1
1-Methylnaphthalene	1.337	0.940	0.000	0.220	5.802	-55.80	1
Diisopropyl ether	-0.060	0.160	0.000	0.580	2.530	-30.67	1
Methyl tert-amyl ether	0.050	0.210	0.000	0.600	2.916	-34.12	1
2,2-Dimethylpropane	0.000	0.000	0.000	0.000	1.820	-21.14	1

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