

SUPPLEMENTAL MATERIAL FOR

CORRELATION OF HUMAN AND ANIMAL AIR-TO-BLOOD PARTITION

COEFFICIENTS WITH A SINGLE LINEAR FREE ENERGY RELATIONSHIP MODEL

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TABLE S1. Solute Descriptors and Experimental Gas-to-Blood Partition Coefficients, log

$K_{\text{blood}}$ , for Different Animal Species Measured at 37 °C

Solute	E	S	A	B	L	V	Log K
<b>Human</b>							
1,1,1,2-Tetrachloroethane	0.542	0.630	0.100	0.080	3.641	0.8800	1.480
1,1,1-Trichloroethane	0.369	0.410	0.000	0.090	2.733	0.7576	0.500
1,1,2,2-Tetrachloroethane	0.595	0.760	0.160	0.120	3.803	0.8800	2.110
1,1,2-Trichloroethane	0.499	0.680	0.130	0.130	3.290	0.7576	1.580
1,1-Dichloroethane	0.322	0.490	0.100	0.100	2.316	0.6352	0.700
1,2,4-Trimethylbenzene	0.677	0.560	0.000	0.190	4.441	1.1391	1.770
1,2-Dichloroethane	0.416	0.640	0.100	0.110	2.573	0.6352	1.300
1,2-Dichloropropane	0.371	0.680	0.000	0.150	2.866	0.7761	1.010
1-Bromo-2-chloroethane	0.572	0.700	0.100	0.090	2.982	0.6878	1.470
1-Butanol	0.224	0.420	0.370	0.480	2.601	0.7309	2.970
1-Chloropropane	0.216	0.400	0.000	0.100	2.202	0.6537	0.460
1-Nitropropane	0.240	0.950	0.000	0.310	2.894	0.7055	2.270
1-Pentanol	0.219	0.420	0.370	0.480	3.106	0.8718	2.730
1-Propanol	0.236	0.420	0.370	0.480	2.031	0.5900	2.990
2,2,4-Trimethylpentane	0.000	0.000	0.000	0.000	3.106	1.2358	0.200
2-Chloropropane	0.177	0.350	0.000	0.120	1.970	0.6537	0.140
2-Heptanone	0.123	0.680	0.000	0.510	3.760	1.1106	2.300
2-Methyl-1,3-butadiene	0.313	0.230	0.000	0.100	2.101	0.7271	-0.120
2-Methyl-1-propanol	0.217	0.390	0.370	0.480	2.413	0.7309	2.890
2-Nitropropane	0.216	0.920	0.000	0.330	2.550	0.7055	2.190
2-Pentanone	0.143	0.680	0.000	0.510	2.755	0.8288	2.180
2-Propanol	0.212	0.360	0.330	0.560	1.764	0.5900	2.920
3-Methyl-1-butanol	0.192	0.390	0.370	0.480	3.011	0.8718	2.580
4-Chlorobenzotrifluoride	0.530	0.580	0.000	0.010	3.730	1.0328	1.220
4-Methyl-2-pentanone	0.111	0.650	0.000	0.510	3.089	0.9697	2.010
Propanone	0.179	0.700	0.040	0.490	1.696	0.5470	2.350
Benzene	0.610	0.520	0.000	0.140	2.786	0.7164	0.870
Tetrachloromethane	0.458	0.380	0.000	0.000	2.823	0.7391	0.570
Bromochloromethane	0.541	0.800	0.100	0.060	2.445	0.5469	0.790
Bromodichloromethane	0.593	0.690	0.100	0.040	2.891	0.6693	1.420
Butyl acetate	0.071	0.600	0.000	0.450	3.353	1.0284	1.920
2-Butanone	0.168	0.700	0.000	0.510	2.287	0.6879	2.190
Halothane	0.102	0.380	0.150	0.050	2.177	0.4709	0.400
1-Chloro-2,2,2-trifluoroethane	0.010	0.400	0.150	0.000	1.168	0.5659	0.180
Enflurane	-0.230	0.400	0.120	0.130	1.750	0.8009	0.250
Isoflurane	-0.240	0.500	0.100	0.100	1.576	0.8009	0.150
Chlorobenzene	0.718	0.650	0.000	0.070	3.657	0.8388	1.480
Chlorodibromomethane	0.775	0.710	0.070	0.080	3.304	0.7219	1.710
Chloroethane	0.227	0.400	0.000	0.100	1.678	0.5128	0.360
Trichloromethane	0.425	0.490	0.150	0.020	2.480	0.6167	0.980

cis-1,2-Dichloroethene	0.436	0.610	0.110	0.050	2.439	0.5922	0.980
Cyclohexane	0.305	0.100	0.000	0.000	2.964	0.8454	0.190
Cyclopropane	0.408	0.230	0.000	0.000	1.314	0.4227	-0.290
Decane	0.000	0.000	0.000	0.000	4.686	1.5176	1.320
Dichloromethane	0.387	0.570	0.100	0.050	2.019	0.4943	0.950
Diethyl ether	0.041	0.250	0.000	0.450	2.015	0.7309	1.090
Ethane	0.000	0.000	0.000	0.000	0.492	0.3904	-1.070
Ethanol	0.246	0.420	0.370	0.480	1.485	0.4491	3.170
Ethene	0.107	0.100	0.000	0.070	0.289	0.3474	-0.750
Ethyl acetate	0.106	0.620	0.000	0.450	2.314	0.7466	1.910
Ethylbenzene	0.613	0.510	0.000	0.150	3.778	0.9982	1.450
Ethylene oxide	0.250	0.740	0.070	0.320	1.371	0.3405	1.790
Heptane	0.000	0.000	0.000	0.000	3.173	1.0949	0.420
Hexachloroethane	0.680	0.680	0.000	0.000	4.718	1.1248	1.720
Hexane	0.000	0.000	0.000	0.000	2.668	0.9540	0.070
Isobutyl acetate	0.052	0.570	0.000	0.470	3.161	1.0284	1.650
Isopentyl acetate	0.051	0.570	0.000	0.470	3.740	1.1693	1.770
Isopropyl acetate	0.055	0.570	0.000	0.470	2.546	0.8875	1.540
2-Bromopropane	0.332	0.350	0.000	0.140	2.390	0.7063	0.410
JP-10 <sup>a</sup>	0.590	0.450	0.000	0.060	4.840	1.1918	1.720
Methoxyflurane	0.109	0.670	0.070	0.140	2.864	0.8700	1.160
Methanol	0.278	0.440	0.430	0.470	0.970	0.3082	3.290
Methyl acetate	0.142	0.640	0.000	0.450	1.911	0.6057	1.950
Methyl tert-butyl ether	0.024	0.210	0.000	0.590	2.380	0.8718	1.250
Chloromethane	0.249	0.430	0.000	0.080	1.163	0.3719	0.230
Methylcyclohexane	0.244	0.060	0.000	0.000	3.319	0.8454	0.610
1,3-Dimethylbenzene	0.623	0.520	0.000	0.160	3.839	0.9982	1.510
Nonane	0.000	0.000	0.000	0.000	4.182	1.3767	1.700
Octane	0.000	0.000	0.000	0.000	3.677	1.2358	0.610
1,2-Dimethylbenzene	0.663	0.560	0.000	0.160	3.939	0.9982	1.530
Pentyl acetate	0.067	0.600	0.000	0.450	3.844	1.1693	1.970
Propene	0.103	0.080	0.000	0.070	0.946	0.4883	-0.360
Propyl acetate	0.092	0.600	0.000	0.450	2.819	0.8875	1.870
1-Bromopropane	0.366	0.400	0.000	0.120	2.620	0.7063	0.850
1,4-Dimethylbenzene	0.613	0.520	0.000	0.160	3.839	0.9982	1.600
Styrene	0.849	0.650	0.000	0.160	3.856	0.9552	1.730
Sulfur hexafluoride	-0.600	-0.200	0.000	0.000	-0.120	0.4643	-2.220
2-Methyl-2-propanol	0.180	0.300	0.310	0.600	1.963	0.7309	2.660
tert-Amyl methyl ether	0.050	0.210	0.000	0.600	2.916	1.0127	1.250
Tetrachloroethene	0.639	0.440	0.000	0.000	3.584	0.8370	1.090
Toluene	0.601	0.520	0.000	0.140	3.325	0.8573	1.120
trans-1,2-Dichloroethene	0.425	0.410	0.090	0.050	2.278	0.5922	0.770
Tribromomethane	0.974	0.680	0.150	0.060	3.784	0.7745	2.020
Trichloroethene	0.524	0.370	0.080	0.030	2.997	0.7146	0.940
Vinyl bromide	0.564	0.500	0.000	0.070	1.846	0.5224	0.360
Vinyl chloride	0.258	0.380	0.000	0.050	1.404	0.4698	0.060
Propylbenzene	0.604	0.500	0.000	0.150	4.230	1.1391	1.670
Sevoflurane	-0.465	0.232	0.080	0.147	1.688	0.8548	-0.200

1,2,3-Trichloropropane	0.547	0.650	0.200	0.330	3.566	0.8985	2.010
1,2,3-Trimethylbenzene	0.728	0.610	0.000	0.190	4.565	1.1391	1.820
1,2-Dichlorobenzene	0.872	0.780	0.000	0.040	4.518	0.9612	2.630
1,3,5-Trimethylbenzene	0.649	0.520	0.000	0.190	4.344	1.1391	1.640
1,3-Butadiene	0.320	0.230	0.000	0.100	1.543	0.5862	0.090
1,3-Dichlorobenzene	0.847	0.730	0.000	0.020	4.410	0.9612	2.300
1-Chlorobutane	0.210	0.400	0.000	0.100	2.722	0.7946	0.630
1-Chloropentane	0.208	0.380	0.000	0.090	3.223	0.9355	0.870
1-Fluoropropane	0.034	0.350	0.000	0.130	1.103	0.5490	0.020
1-Methoxy-2-propanol	0.218	0.540	0.310	0.820	2.655	0.7896	4.090
2,2-Dimethylbutane	0.000	0.000	0.000	0.000	2.352	0.9540	-0.590
2,3-Dimethylbutane	0.000	0.000	0.000	0.000	2.495	0.9540	0.780
2-Butoxyethanol	0.201	0.500	0.300	0.830	3.806	1.0741	3.900
2-Ethoxyethanol	0.237	0.520	0.310	0.810	2.792	2.7920	4.340
2-Fluoropropane	0.004	0.320	0.000	0.100	1.070	0.5490	0.060
2-Hexanone	0.136	0.680	0.000	0.510	3.286	0.9697	2.100
2-Isopropoxyethanol	0.196	0.470	0.300	0.910	3.170	0.9305	4.160
2-Methoxyethanol	0.269	0.500	0.300	0.840	2.490	0.6487	4.520
2-Methylcyclohexanone	0.372	0.830	0.000	0.560	4.055	1.0020	2.870
2-Methylpentane	0.000	0.000	0.000	0.000	2.503	0.9540	-0.390
3-Methylhexane	0.000	0.000	0.000	0.000	3.044	1.0949	0.110
3-Methylpentane	0.000	0.000	0.000	0.000	2.581	0.9540	-0.370
3-Pentanone	0.154	0.660	0.000	0.510	2.811	0.8288	2.210
Acetylene	0.190	0.600	0.060	0.040	0.140	0.3044	-0.060
Allylbenzene	0.717	0.600	0.000	0.220	4.136	1.0960	1.710
Argon	0.000	0.000	0.000	0.000	-0.688	0.1900	-1.520
Carbon disulfide	0.876	0.260	0.000	0.030	2.370	0.4905	0.300
Carbon monoxide	0.000	0.000	0.000	0.040	-0.836	0.2220	-1.670
1-Chloro-2,2-difluoroethene	-0.340	0.290	0.150	0.000	0.723	0.5482	0.060
1,2-Dichlorotetrafluoroethane	-0.190	0.050	0.000	0.000	1.427	0.7060	-0.820
1,1,2,2,3,3,4,4-Octafluorobutane	-0.790	0.080	0.150	0.150	1.456	0.8138	-0.360
1,1,2,2,3-Pentafluoropropane	-0.450	0.170	0.000	0.030	0.680	0.6198	-0.480
1,1,2,2-Tetrafluoroethane	-0.390	0.240	0.100	0.120	0.394	0.4612	-0.120
1,1,2,4,4-Pentafluorobutane	-0.492	0.480	0.230	0.140	1.200	0.7607	0.870
1,1-Difluoroethane	-0.250	0.470	0.040	0.070	0.570	0.4258	0.420
Teflurane	-0.070	0.210	0.200	0.020	1.370	0.6360	-0.220
1,1,1,2,2,3,3,4,4-Nonafluorobutane	-0.890	-0.430	0.040	0.100	0.700	0.8315	-1.520
1,1,1,2-Tetrafluoroethane	-0.390	0.240	0.100	0.120	0.394	0.4612	-0.250
1,1,1,2,3,4,4,4-Octafluorobuane	-0.790	0.200	0.130	0.050	1.096	0.8138	-0.590
Fluroxene	0.183	0.300	0.000	0.270	1.600	0.7410	0.150
Tetrafluoromethane	-0.580	-0.260	0.000	0.000	-0.817	0.3203	-1.100
Halopropane	-0.070	0.280	0.200	0.000	2.030	0.7771	0.750
Desflurane	-0.540	0.270	0.070	0.170	0.740	0.6962	-0.370
Cyclohexanone	0.403	0.860	0.000	0.560	3.792	0.8611	3.330
Difluorodichloromethane	0.037	0.130	0.000	0.000	1.124	0.5297	-0.820
Dimethyl ether	0.000	0.270	0.000	0.410	1.285	0.4491	1.160
Divinyl ether	0.259	0.390	0.000	0.130	1.760	0.6449	0.410
Ethyl formate	0.146	0.660	0.000	0.380	1.845	0.6057	1.650

Ethyl tert-butyl ether	-0.020	0.160	0.000	0.600	2.720	1.0127	1.070
Ethyl tert-pentyl ether	0.030	0.230	0.000	0.370	3.200	1.1536	1.250
Fluoroethane	0.052	0.350	0.000	0.100	0.576	0.4081	0.090
Fluorotrichloromethane	0.207	0.240	0.000	0.070	1.950	0.6344	-0.060
Helium	0.000	0.000	0.000	0.000	-1.741	0.0680	-2.000
Hydrogen	0.000	0.000	0.000	0.000	-1.200	0.1086	-1.770
Iodoethane	0.640	0.400	0.000	0.150	2.573	0.6486	0.830
Isophorone	0.511	1.120	0.000	0.530	4.740	1.2407	3.370
Isopropylbenzene	0.602	0.490	0.000	0.160	4.084	1.1391	1.570
Krypton	0.000	0.000	0.000	0.000	-0.211	0.2460	-1.220
Methane	0.000	0.000	0.000	0.000	-0.323	0.2495	-1.420
3-Methyl-2-pentanone	0.110	0.650	0.000	0.510	3.163	0.9697	2.230
Methylcyclopentane	0.225	0.100	0.000	0.000	2.907	0.8454	-0.070
Neon	0.000	0.000	0.000	0.000	-1.575	0.0850	-2.010
Nitrogen	0.000	0.000	0.000	0.100	-0.978	0.2222	-1.830
Nitrous oxide	0.068	0.350	0.000	0.000	0.164	0.2810	-0.340
Oxygen	0.000	0.000	0.000	0.000	-0.723	0.1830	-1.580
Pentane	0.000	0.000	0.000	0.000	2.162	0.8131	-0.290
Xenon	0.000	0.000	0.000	0.000	0.378	0.3290	-0.850
$\beta$ -Chloroprene (2-chloro-1,3-butadiene)	0.453	0.360	0.000	0.150	2.513	0.7086	0.653
Propylene oxide	0.243	0.740	0.070	0.350	1.775	0.4814	1.812
Rat							
1,1,1,2-Tetrachloroethane	0.542	0.630	0.100	0.080	3.641	0.8800	1.620
1,1,1-Trichloroethane	0.369	0.410	0.000	0.090	2.733	0.7576	0.760
1,1,2,2-Tetrachloroethane	0.595	0.760	0.160	0.120	3.803	0.8800	2.150
1,1,2-Trichloroethane	0.499	0.680	0.130	0.130	3.290	0.7576	1.760
1,1-Dichloroethane	0.322	0.490	0.100	0.100	2.316	0.6352	1.050
1,2,4-Trimethylbenzene	0.677	0.560	0.000	0.190	4.441	1.1391	1.930
1,2-Dichloroethane	0.416	0.640	0.100	0.110	2.573	0.6352	1.480
1,2-Dichloropropane	0.371	0.680	0.000	0.150	2.866	0.7761	1.270
1-Bromo-2-chloroethane	0.572	0.700	0.100	0.090	2.982	0.6878	1.720
1-Butanol	0.224	0.420	0.370	0.480	2.601	0.7309	3.190
1-Chloropropane	0.216	0.400	0.000	0.100	2.202	0.6537	0.720
1-Nitropropane	0.240	0.950	0.000	0.310	2.894	0.7055	2.350
1-Pentanol	0.219	0.420	0.370	0.480	3.106	0.8718	2.920
1-Propanol	0.236	0.420	0.370	0.480	2.031	0.5900	3.130
2,2,4-Trimethylpentane	0.000	0.000	0.000	0.000	3.106	1.2358	0.250
2-Chloropropane	0.177	0.350	0.000	0.120	1.970	0.6537	0.490
2-Heptanone	0.123	0.680	0.000	0.510	3.760	1.1106	2.350
2-Methyl-1,3-butadiene	0.313	0.230	0.000	0.100	2.101	0.7271	0.320
2-Methyl-1-propanol	0.217	0.390	0.370	0.480	2.413	0.7309	2.940
2-Nitropropane	0.216	0.920	0.000	0.330	2.550	0.7055	2.260
2-Pentanone	0.143	0.680	0.000	0.510	2.755	0.8288	2.100
2-Propanol	0.212	0.360	0.330	0.560	1.764	0.5900	3.110
3-Methyl-1-butanol	0.192	0.390	0.370	0.480	3.011	0.8718	2.920
4-Chlorobenzotrifluoride	0.530	0.580	0.000	0.010	3.730	1.0328	1.640
4-Methyl-2-pentanone	0.111	0.650	0.000	0.510	3.089	0.9697	1.900
Propanone	0.179	0.700	0.040	0.490	1.696	0.5470	2.370

Benzene	0.610	0.520	0.000	0.140	2.786	0.7164	1.220
Tetrachloromethane	0.458	0.380	0.000	0.000	2.823	0.7391	0.660
Bromochloromethane	0.541	0.800	0.100	0.060	2.445	0.5469	1.620
Bromodichloromethane	0.593	0.690	0.100	0.040	2.891	0.6693	1.560
Butyl acetate	0.071	0.600	0.000	0.450	3.353	1.0284	1.950
2-Butanone	0.168	0.700	0.000	0.510	2.287	0.6879	2.280
Halothane	0.102	0.380	0.150	0.050	2.177	0.4709	0.730
1-Chloro-2,2,2-trifluoroethane	0.010	0.400	0.150	0.000	1.168	0.5659	0.100
Enflurane	-0.230	0.400	0.120	0.130	1.750	0.8009	0.450
Isoflurane	-0.240	0.500	0.100	0.100	1.576	0.8009	0.250
Chlorobenzene	0.718	0.650	0.000	0.070	3.657	0.8388	1.770
Chlorodibromomethane	0.775	0.710	0.070	0.080	3.304	0.7219	2.040
Chloroethane	0.227	0.400	0.000	0.100	1.678	0.5128	0.610
Trichloromethane	0.425	0.490	0.150	0.020	2.480	0.6167	1.320
cis-1,2-Dichloroethene	0.436	0.610	0.110	0.050	2.439	0.5922	1.330
Cyclohexane	0.305	0.100	0.000	0.000	2.964	0.8454	0.140
Cyclopropane	0.408	0.230	0.000	0.000	1.314	0.4227	-0.120
Decane	0.000	0.000	0.000	0.000	4.686	1.5176	1.020
Dichloromethane	0.387	0.570	0.100	0.050	2.019	0.4943	1.290
Diethyl ether	0.041	0.250	0.000	0.450	2.015	0.7309	1.120
Ethane	0.000	0.000	0.000	0.000	0.492	0.3904	-0.970
Ethanol	0.246	0.420	0.370	0.480	1.485	0.4491	3.370
Ethene	0.107	0.100	0.000	0.070	0.289	0.3474	-0.310
Ethyl acetate	0.106	0.620	0.000	0.450	2.314	0.7466	1.890
Ethylbenzene	0.613	0.510	0.000	0.150	3.778	0.9982	1.480
Ethylene oxide	0.250	0.740	0.070	0.320	1.371	0.3405	1.810
Heptane	0.000	0.000	0.000	0.000	3.173	1.0949	0.580
Hexachloroethane	0.680	0.680	0.000	0.000	4.718	1.1248	1.800
Hexane	0.000	0.000	0.000	0.000	2.668	0.9540	0.350
Isobutyl acetate	0.052	0.570	0.000	0.470	3.161	1.0284	1.720
Isopentyl acetate	0.051	0.570	0.000	0.470	3.740	1.1693	1.810
Isopropyl acetate	0.055	0.570	0.000	0.470	2.546	0.8875	1.550
2-Bromopropane	0.332	0.350	0.000	0.140	2.390	0.7063	0.860
JP-10 <sup>a</sup>	0.590	0.450	0.000	0.060	4.840	1.1918	1.790
Methoxyflurane	0.109	0.670	0.070	0.140	2.864	0.8700	1.400
Methanol	0.278	0.440	0.430	0.470	0.970	0.3082	3.520
Methyl acetate	0.142	0.640	0.000	0.450	1.911	0.6057	2.000
Methyl tert-butyl ether	0.024	0.210	0.000	0.590	2.380	0.8718	1.110
Chloromethane	0.249	0.430	0.000	0.080	1.163	0.3719	0.390
Methylcyclohexane	0.244	0.060	0.000	0.000	3.319	0.8454	0.790
1,3-Dimethylbenzene	0.623	0.520	0.000	0.160	3.839	0.9982	1.660
Nonane	0.000	0.000	0.000	0.000	4.182	1.3767	0.630
Octane	0.000	0.000	0.000	0.000	3.677	1.2358	0.496
1,2-Dimethylbenzene	0.663	0.560	0.000	0.160	3.939	0.9982	1.300
Pentyl acetate	0.067	0.600	0.000	0.450	3.844	1.1693	1.990
Propene	0.103	0.080	0.000	0.070	0.946	0.4883	-0.060
Propyl acetate	0.092	0.600	0.000	0.450	2.819	0.88750	1.880
1-Bromopropane	0.366	0.400	0.000	0.120	2.620	0.7063	1.090

1,4-Dimethylbenzene	0.613	0.520	0.000	0.160	3.839	0.9982	1.620
Styrene	0.849	0.650	0.000	0.160	3.856	0.9552	1.600
Sulfur hexafluoride	-0.600	-0.200	0.000	0.000	-0.120	0.4643	-2.120
2-Methyl-2-propanol	0.180	0.300	0.310	0.600	1.963	0.7309	2.700
tert-Amyl methyl ether	0.050	0.210	0.000	0.600	2.916	1.0127	1.190
Tetrachloroethene	0.639	0.440	0.000	0.000	3.584	0.8370	1.280
Toluene	0.601	0.520	0.000	0.140	3.325	0.8573	1.160
trans-1,2-Dichloroethene	0.425	0.410	0.090	0.050	2.278	0.5922	0.980
Tribromomethane	0.974	0.680	0.150	0.060	3.784	0.7745	2.270
Trichloroethene	0.524	0.370	0.080	0.030	2.997	0.7146	1.330
Vinyl bromide	0.564	0.500	0.000	0.070	1.846	0.5224	0.610
Vinyl chloride	0.258	0.380	0.000	0.050	1.404	0.4698	0.270
1,1-Dichloro-1-fluoroethane	0.084	0.430	0.010	0.050	1.920	0.6529	0.320
1,1-Dichloroethylene	0.362	0.340	0.000	0.050	2.110	0.5922	0.700
1,2,4-Trifluorobenzene	0.410	0.650	0.000	0.020	2.850	0.7695	0.760
1,2,4-Trimethylcyclohexane	0.360	0.210	0.000	0.0000	4.100	1.2680	0.870
1,2-Dibromoethane	0.747	0.760	0.100	0.1700	3.382	0.7404	2.080
1,2-Difluorobenzene	0.390	0.630	0.000	0.0600	2.843	0.7518	0.960
1,2-Dimethylcyclohexane	0.320	0.230	0.000	0.0000	3.800	1.1272	0.910
1,2-Epoxy-3-butene	0.370	0.470	0.000	0.3600	2.257	0.5793	1.970
1,3,5-Trifluorobenzene	0.390	0.490	0.000	0.0000	2.660	0.7695	0.490
1,4-Difluorobenzene	0.384	0.600	0.000	0.0600	2.766	0.7518	0.870
1-Decene	0.093	0.080	0.000	0.0700	4.533	1.4750	1.210
1-Hexanol	0.210	0.420	0.370	0.4800	3.610	1.0127	3.210
1-Nonene	0.090	0.080	0.000	0.0700	4.073	1.3337	1.180
1-Octene	0.094	0.080	0.000	0.0700	3.568	1.1928	1.070
1,1,1-Trifluoro-2,2-dichloroethane	-0.160	0.400	0.220	0.0000	1.746	0.6883	0.610
2,3,4-Trimethylpentane	0.000	0.000	0.000	0.0000	3.481	1.2358	0.570
2-Methylheptane	0.000	0.000	0.000	0.0000	3.480	1.2358	0.490
2-Methylnonane	0.000	0.000	0.000	0.0000	4.453	1.5176	0.760
2-Methyloctane	0.000	0.000	0.000	0.0000	3.966	1.3767	0.520
Allyl chloride	0.327	0.560	0.000	0.0500	2.109	0.6106	1.240
Bromobenzene	0.882	0.730	0.000	0.0900	4.041	0.8914	1.720
Butane	0.000	0.000	0.000	0.0000	1.615	0.6722	-0.530
Cyanoethylene oxide	0.390	1.000	0.000	0.5200	2.543	0.5823	3.220
Cycloheptane	0.350	0.100	0.000	0.0000	3.704	0.9863	0.720
Cyclopentane	0.263	0.100	0.000	0.000	2.477	0.7045	0.240
Dibromomethane	0.714	0.690	0.110	0.070	2.886	0.600	1.870
Difluoromethane	-0.320	0.490	0.060	0.050	0.040	0.2849	0.200
Fluorobenzene	0.477	0.570	0.000	0.100	2.788	0.7341	1.060
Fluorochloromethane	0.042	0.610	0.070	0.040	0.982	0.3806	0.710
Furan	0.369	0.510	0.000	0.130	1.913	0.5363	0.820
Hexafluorobenzene	0.088	0.560	0.000	0.010	2.345	0.8226	0.390
2,3,4,5,6-Pentafluorotoluene	0.060	0.590	0.000	0.010	3.244	0.9458	0.730
3-Methylstyrene	0.866	0.650	0.000	0.180	4.376	1.0961	2.280
Pentachloroethane	0.648	0.660	0.170	0.060	4.267	1.0024	2.020
Pentafluorobenzene	0.154	0.680	0.000	0.020	2.578	0.8049	0.510
4-Methylstyrene	0.871	0.650	0.000	0.180	4.399	1.0961	2.370

Radon	0.000	0.000	0.000	0.000	0.877	0.3840	-0.390
tert-Butylbenzene	0.619	0.490	0.000	0.180	4.413	1.2800	1.240
tert-Butylcyclohexane	0.300	0.100	0.000	0.100	4.603	1.4090	1.160
tert-Pentanol	0.194	0.300	0.310	0.600	2.630	0.8718	2.590
1,1-Difluoroethene	-0.100	0.000	0.000	0.050	0.240	0.383	-0.740
Undecane	0.000	0.000	0.000	0.000	5.191	1.6590	1.310
Dodecane	0.000	0.000	0.000	0.000	5.696	1.7990	1.390
1,4-Dioxane	0.329	0.750	0.000	0.640	2.892	0.6810	3.267
$\beta$ -chloroprene ( (2-chloro-1,3-butadiene)	0.453	0.360	0.000	0.150	2.513	0.7086	0.881
1-Chloro-1,2,2,2-tetrafluoroethane	-0.300	0.170	0.100	0.070	0.904	0.5860	0.181
2-Methoxyethanol	0.269	0.500	0.300	0.840	2.490	0.6487	4.496
Propylene oxide	0.243	0.740	0.070	0.350	1.775	0.4814	1.778
<b>Dog</b>							
Hydrogen	0.000	0.000	0.000	0.000	-1.200	0.1086	-1.780
Argon	0.000	0.000	0.000	0.000	-0.688	0.1900	-1.592
Methane	0.000	0.000	0.000	0.000	-0.323	0.2495	-1.530
Sulfur hexafluoride	-0.600	-0.200	0.000	0.000	-0.120	0.4643	-2.171
Helium	0.000	0.000	0.000	0.000	-1.741	0.0680	-2.000
Nitrogen	0.000	0.000	0.000	0.000	-0.978	0.2222	-1.801
Nitrous oxide	0.370	0.020	0.000	0.090	-0.590	0.2810	-0.334
2,4-Dimethylpentane	0.000	0.000	0.000	0.000	2.809	1.0949	0.000
Propyl ether	0.008	0.250	0.000	0.450	2.954	1.0127	1.000
2-Butanone	0.168	0.700	0.000	0.510	2.287	0.6879	2.305
Ethanol	0.246	0.420	0.370	0.480	1.485	0.4491	3.280
Diethyl ether	0.041	0.250	0.000	0.450	2.015	0.7309	1.110
Benzene	0.610	0.520	0.000	0.140	2.786	0.7164	0.968
Krypton	0.000	0.000	0.000	0.000	-0.211	0.2460	-1.161
Halothane	0.102	0.380	0.150	0.050	2.177	0.4709	0.506
<b>Pig</b>							
Desflurane	-0.540	0.270	0.070	0.170	0.740	0.6962	-0.456
Sevoflurane	-0.465	0.232	0.080	0.147	1.688	0.8548	-0.347
Isoflurane	-0.236	0.560	0.000	0.080	1.969	0.8009	-0.027
Halothane	0.102	0.380	0.150	0.050	2.177	0.4709	0.405
Enflurane	-0.236	0.540	0.010	0.100	2.009	0.8010	0.117
<b>Mouse</b>							
Trichloroethylene	0.524	0.370	0.080	0.030	2.997	0.7146	1.202
$\beta$ -Chloroprene (2-chloro-1,3-butadiene)	0.453	0.360	0.000	0.150	2.513	0.7086	0.892
Ethylbenzene	0.613	0.510	0.000	0.150	3.778	0.9982	1.772
Propylene	0.103	0.080	0.000	0.070	0.946	0.4883	-0.086
1,4-Dioxane	0.329	0.750	0.000	0.640	2.892	0.6810	3.301
Isoprene	0.313	0.230	0.000	0.100	2.101	0.7271	0.310
Benzene	0.610	0.520	0.000	0.140	2.786	0.7164	1.240
1-Chloro-1,2,2,2-tetrafluoroethane	-0.300	0.170	0.100	0.070	0.904	0.5860	0.061
2-Methoxyethanol	0.269	0.500	0.300	0.840	2.490	0.6487	4.543
Dichloromethane	0.387	0.570	0.100	0.050	2.019	0.4943	1.415
Chloroform	0.425	0.490	0.150	0.020	2.480	0.6167	1.328
Vinyl chloride	0.258	0.380	0.000	0.050	1.404	0.4698	0.354



cis-1,2-Dichloroethene	0.436	0.610	0.110	0.050	2.439	0.5922	1.290
Tetrachloroethylene	0.639	0.440	0.000	0.000	3.584	0.8370	1.243
Vinyl bromide	0.564	0.500	0.000	0.070	1.846	0.5224	0.574
Ethanol	0.246	0.420	0.370	0.480	1.485	0.4491	3.095
<b>Rabbit</b>							
Ethane	0.000	0.000	0.000	0.000	0.492	0.3904	-1.174
Cyclopropane	0.408	0.230	0.000	0.000	1.314	0.4227	-0.357
Halothane	0.102	0.390	0.130	0.050	1.953	0.4709	0.301
Acetone	0.179	0.700	0.040	0.490	1.696	0.5470	2.410
Sulfur hexafluoride	-0.600	-0.200	0.000	0.000	-0.120	0.4643	-2.090
Krypton	0.000	0.000	0.000	0.000	-0.211	0.2460	-1.282
Desflurane	-0.470	0.380	0.050	0.040	0.990	0.6962	-0.206
Enflurane	-0.236	0.540	0.010	0.100	2.009	0.8009	0.369
Diethyl ether	0.041	0.250	0.000	0.450	2.015	0.7309	1.072
Argon	0.000	0.000	0.000	0.000	-0.688	0.1900	-1.516
Nitrogen	0.000	0.000	0.000	0.000	-0.978	0.2222	-1.851
Nitrous oxide	0.370	0.020	0.000	0.090	-0.590	0.2810	-0.336
Neon	0.000	0.000	0.000	0.000	-1.575	0.0850	-2.009
Benzene	0.610	0.520	0.000	0.140	2.786	0.7164	1.029
Toluene	0.601	0.520	0.000	0.140	3.325	0.8573	1.230
m-Xylene	0.623	0.520	0.000	0.160	3.839	0.9982	1.572
Isoflurane	-0.236	0.560	0.000	0.080	1.969	0.8009	0.220
<b>Hamster</b>							
$\beta$ -Chloroprene (2-chloro-1,3-butadiene)	0.453	0.360	0.000	0.150	2.513	0.7086	0.968
1-Chloro-1,2,2,2-tetrafluoroethane	-0.300	0.170	0.100	0.070	0.904	0.586	-0.119
Krypton	0.000	0.000	0.000	0.000	-0.211	0.2460	-1.085
Dichloromethane	0.387	0.570	0.100	0.050	2.019	0.4943	1.352
<b>Horse</b>							
Halothane	0.102	0.390	0.130	0.050	1.953	0.4709	0.220
Isoflurane	-0.236	0.560	0.000	0.080	1.969	0.8009	-0.036
Sevoflurane	-0.465	0.232	0.080	0.147	1.688	0.8548	-0.328
<b>Guinea Pig</b>							
Benzene	0.610	0.520	0.000	0.140	2.786	0.7164	0.923
Krypton	0.000	0.000	0.000	0.000	-0.211	0.2460	-1.269
<b>Sheep</b>							
Isoflurane	-0.236	0.560	0.000	0.080	1.969	0.8009	0.149
Enflurane	-0.236	0.540	0.010	0.100	2.009	0.8009	0.238
Halothane	0.102	0.390	0.130	0.050	1.953	0.4709	0.391
Methoxyflurane	0.109	0.670	0.070	0.140	2.864	0.8700	1.164
<b>Cat</b>							
Krypton	0.000	0.000	0.000	0.000	-0.211	0.2460	-1.225

<sup>a</sup> JP-10 is tricycle[5.2:1.0<sup>2,6</sup>]decane.