Appendix C

Physical-Chemical Property Values

Table C-1. Molecular Weights and Densities for IWAIR Constituents

CAS	Chemical Name	Molecular Weight (g/mole)	Density (g/cm3)
50000	Formaldehyde	30	0.82
50328	Benzo(a)pyrene	252	1.35
55185	N-Nitrosodiethylamine	102	0.94
56235	Carbon tetrachloride	154	1.59
56495	3-Methylcholanthrene	268	1.28
57976	7,12-Dimethylbenz[a]anthracene	256	1.02
62533	Aniline	93	1.02
67561	Methanol	32	0.79
67641	Acetone	58	0.79
67663	Chloroform	119	1.48
67721	Hexachloroethane	237	2.09
68122	N,N-Dimethyl formamide	73	0.94
71432	Benzene	78	0.88
71556	1,1,1-Trichloroethane	133	1.34
74839	Methyl bromide	95	1.68
74873	Methyl chloride	50	0.91
75014	Vinyl chloride	63	0.91
75058	Acetonitrile	41	0.79
75070	Acetaldehyde	44	0.78
75092	Methylene chloride	85	1.33
75150	Carbon disulfide	76	1.26
75218	Ethylene oxide	44	0.89
75252	Tribromomethane	253	2.90
75274	Bromodichloromethane	164	1.98
75354	1,1-Dichloroethylene	97	1.21
75569	Propylene oxide	58	0.86
75694	Trichlorofluoromethane	137	1.49
75718	Dichlorodifluoromethane	121	1.49
76131	1,1,2-Trichloro-1,2,2-trifluoroethane	187	1.56
77474	Hexachlorocyclopentadiene	273	1.70
78591	Isophorone	138	0.93
78875	1,2-Dichloropropane	113	1.16
78933	Methyl ethyl ketone	72	0.81
79005	1,1,2-Trichloroethane	133	1.44
79016	Trichloroethylene	131	1.46
79061	Acrylamide	71	1.12
79107	Acrylic acid	72	1.05
79345	1,1,2,2-Tetrachloroethane	168	1.60
79469	2-Nitropropane	89	0.98
80626	Methyl methacrylate	100	0.94

Table C-1. Molecular Weights and Densities for IWAIR Constituents

CAS	Chemical Name	Molecular Weight (g/mole)	Density (g/cm3)
85449	Phthalic anhydride	148	1.53
87683	Hexachloro-1,3-butadiene	261	1.56
91203	Naphthalene	128	1.03
92875	Benzidine	184	1.25
95501	o-Dichlorobenzene	147	1.31
95534	o-Toluidine	107	1.00
95578	2-Chlorophenol	129	1.26
95658	3,4-Dimethylphenol	122	0.98
96128	1,2-Dibromo-3-chloropropane	236	2.09
98011	Furfural	96	1.16
98828	Cumene	120	0.86
98953	Nitrobenzene	123	1.20
100414	Ethylbenzene	106	0.87
100425	Styrene	104	0.91
106467	p-Dichlorobenzene	147	1.25
106887	1,2-Epoxybutane	72	0.84
106898	Epichlorohydrin	93	1.18
106934	Ethylene dibromide	188	2.18
106990	1,3-Butadiene	54	0.61
107028	Acrolein	56	0.84
107051	Allyl chloride	77	0.94
107062	1,2-Dichloroethane	99	1.24
107131	Acrylonitrile	53	0.81
107211	Ethylene glycol	62	1.11
108054	Vinyl acetate	86	0.93
108101	Methyl isobutyl ketone	100	0.80
108883	Toluene	92	0.87
108907	Chlorobenzene	113	1.11
108930	Cyclohexanol	100	0.96
108952	Phenol	94	1.05
109864	2-Methoxyethanol	76	0.96
110496	2-Methoxyethanol acetate	118	1.01
110543	n-Hexane	86	0.65
110805	2-Ethoxyethanol	90	0.93
110861	Pyridine	79	0.98
111159	2-Ethoxyethanol acetate	132	0.98
118741	Hexachlorobenzene	285	2.04
120821	1,2,4-Trichlorobenzene	181	1.46
121142	2,4-Dinitrotoluene	182	1.32
121448	Triethylamine	101	0.73

Table C-1. Molecular Weights and Densities for IWAIR Constituents

CAS	Chemical Name	Molecular Weight (g/mole)	Density (g/cm3)
122667	1,2-Diphenylhydrazine	184	1.16
123911	1,4-Dioxane	88	1.03
124481	Chlorodibromomethane	208	2.45
126998	Chloroprene	89	0.96
127184	Tetrachloroethylene	166	1.62
630206	1,1,1,2-Tetrachloroethane	168	1.54
924163	N-Nitrosodi-n-butylamine	158	0.90
930552	N-Nitrosopyrrolidine	100	1.09
1319773	Cresols (total)	108	1.06
1330207	Xylenes	106	0.87
1634044	Methyl tert-butyl ether	88	0.74
1746016	2,3,7,8-TCDD	322	1.83
7439976	Mercury	201	13.53
7439977	Divalent Mercury	201	5.60
10061015	cis-1,3-Dichloropropylene	111	1.22
10061026	trans-1,3-Dichloropropylene	111	1.22