

**Table A-5. Vapor Intrusion Screening Value Calculation Parameters**

Regulated Substance	CAS No.	MW (g/mol)	$K_{oc}$ (L/kg)	$S$ (mg/L)	$T_B$ (°C)	$T_C$ (K)	$\Delta H_{v,b}$ (cal/mol)	$H$ (atm·m <sup>3</sup> /mol)	$H'$ (@ $T_{gw}$ )	RfC <sub>i</sub> (mg/m <sup>3</sup> )	IUR (µg/m <sup>3</sup> ) <sup>-1</sup>
ACETALDEHYDE	75-07-0	44	4.1	1,000,000	20	466	6,157	6.7 x 10 <sup>-5</sup>	2.0 x 10 <sup>-3</sup>	9.0 x 10 <sup>-3</sup>	2.2 x 10 <sup>-6</sup>
ACETONE	67-64-1	58	0.31	1,000,000	56	508	6,955	3.5 x 10 <sup>-5</sup>	9.7 x 10 <sup>-4</sup>	3.1 x 10 <sup>+1</sup>	
ACETONITRILE	75-05-8	41	0.5	1,000,000	82	546	7,110	3.5 x 10 <sup>-5</sup>	9.3 x 10 <sup>-4</sup>	6.0 x 10 <sup>-2</sup>	
ACROLEIN	107-02-8	56	0.56	208,000	53	506	6,731	1.2 x 10 <sup>-4</sup>	3.4 x 10 <sup>-3</sup>	2.0 x 10 <sup>-5</sup>	
ACRYLAMIDE [M]	79-06-1	71	25	2,151,000	193	818	12,363	1.7 x 10 <sup>-9</sup>	3.3 x 10 <sup>-8</sup>	6.0 x 10 <sup>-3</sup>	1.0 x 10 <sup>-4</sup>
ACRYLIC ACID	79-10-7	72	29	1,000,000	141	617	11,000	3.7 x 10 <sup>-7</sup>	7.5 x 10 <sup>-6</sup>	1.0 x 10 <sup>-3</sup>	
ACRYLONITRILE	107-13-1	53	11	73,500	77	519	7,786	1.4 x 10 <sup>-4</sup>	3.6 x 10 <sup>-3</sup>	2.0 x 10 <sup>-3</sup>	6.8 x 10 <sup>-5</sup>
ALLYL ALCOHOL	107-18-6	58	3.2	1,000,000	97	545	9,550	5.0 x 10 <sup>-6</sup>	1.1 x 10 <sup>-4</sup>	1.0 x 10 <sup>-4</sup>	
AMMONIA	7664-41-7	17	3.1	310,000	-33	406	5,572	1.6 x 10 <sup>-5</sup>	5.1 x 10 <sup>-4</sup>	5.0 x 10 <sup>-1</sup>	
ANILINE	62-53-3	93	190	33,800	184	699	10,000	2.0 x 10 <sup>-6</sup>	4.4 x 10 <sup>-5</sup>	1.0 x 10 <sup>-3</sup>	1.6 x 10 <sup>-6</sup>
BENZENE	71-43-2	78	58	1,781	81	562	7,342	5.6 x 10 <sup>-3</sup>	1.5 x 10 <sup>-1</sup>	3.0 x 10 <sup>-2</sup>	7.8 x 10 <sup>-6</sup>
BENZYL CHLORIDE	100-44-7	127	190	493	179	685	8,773	4.1 x 10 <sup>-4</sup>	9.6 x 10 <sup>-3</sup>	1.0 x 10 <sup>-3</sup>	4.9 x 10 <sup>-5</sup>
BETA PROPIOLACTONE	57-57-8	72	4	370,000	162	686	10,285	1.3 x 10 <sup>-5</sup>	2.8 x 10 <sup>+2</sup>		4.0 x 10 <sup>-3</sup>
BIPHENYL, 1,1-	92-52-4	154	1700	7	255	789	10,890	3.1 x 10 <sup>-4</sup>	6.0 x 10 <sup>-3</sup>	4.0 x 10 <sup>-4</sup>	
BIS(2-CHLOROETHYL)ETHER	111-44-4	143	76	10,200	179	660	10,803	1.7 x 10 <sup>-5</sup>	3.4 x 10 <sup>-4</sup>		3.3 x 10 <sup>-4</sup>
BIS(2-CHLORO-ISOPROPYL)ETHER	108-60-1	171	62	1,700	189	690	9,695	7.4 x 10 <sup>-5</sup>	1.6 x 10 <sup>-3</sup>		1.0 x 10 <sup>-5</sup>
BIS(CHLOROMETHYL)ETHER	542-88-1	115	16	22,000	105	569	7,981	4.4 x 10 <sup>-3</sup>	1.1 x 10 <sup>-1</sup>		6.2 x 10 <sup>-2</sup>
BROMOBENZENE	108-86-1	157	268	446	156	670	1,060	2.5 x 10 <sup>-3</sup>	9.5 x 10 <sup>-2</sup>	6.0 x 10 <sup>-2</sup>	
BROMOCHLOROMETHANE	74-97-5	129	27	16,700	68	512	7,168	1.5 x 10 <sup>-3</sup>	3.9 x 10 <sup>-2</sup>	4.0 x 10 <sup>-2</sup>	
BROMODICHLOROMETHANE	75-27-4	164	93	4,500	87	586	7,800	2.1 x 10 <sup>-3</sup>	5.5 x 10 <sup>-2</sup>		3.7 x 10 <sup>-5</sup>
BROMOMETHANE	74-83-9	95	170	17,500	4	467	5,714	7.3 x 10 <sup>-3</sup>	2.2 x 10 <sup>-1</sup>	5.0 x 10 <sup>-3</sup>	
BUTADIENE, 1,3-	106-99-0	54	120	735	-5	425	5,370	7.4 x 10 <sup>-2</sup>	2.3 x 10 <sup>+0</sup>	2.0 x 10 <sup>-3</sup>	3.0 x 10 <sup>-5</sup>
CARBON DISULFIDE	75-15-0	76	300	2,100	46	552	6,391	1.4 x 10 <sup>-2</sup>	4.2 x 10 <sup>-1</sup>	7.0 x 10 <sup>-1</sup>	
CARBON TETRACHLORIDE	56-23-5	154	160	795	77	557	7,127	2.8 x 10 <sup>-2</sup>	7.5 x 10 <sup>-1</sup>	1.0 x 10 <sup>-1</sup>	6.0 x 10 <sup>-6</sup>
CHLORO-1,1-DIFLUOROETHANE, 1- CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	75-68-3 107-05-1	101 77	22 48	1,400 3,300	-9 45	410 514	53,298 6,936	5.9 x 10 <sup>-2</sup> 1.1 x 10 <sup>-2</sup>	1.8 x 10 <sup>-1</sup> 3.1 x 10 <sup>-1</sup>	5.0 x 10 <sup>+1</sup> 1.0 x 10 <sup>-3</sup>	6.0 x 10 <sup>-6</sup>
CHLOROBENZENE	108-90-7	113	200	490	132	632	8,410	3.1 x 10 <sup>-3</sup>	7.6 x 10 <sup>-2</sup>	5.0 x 10 <sup>-2</sup>	
CHLORODIFLUOROMETHANE	75-45-6	86	59	2,899	-41	369	4,836	4.1 x 10 <sup>-2</sup>	1.3 x 10 <sup>+0</sup>	5.0 x 10 <sup>+1</sup>	
CHLOROETHANE	75-00-3	65	42	5,700	12	460	5,879	1.1 x 10 <sup>-2</sup>	3.3 x 10 <sup>-1</sup>	1.0 x 10 <sup>+1</sup>	
CHLOROFORM	67-66-3	119	56	8,000	61	536	6,988	3.7 x 10 <sup>-3</sup>	1.0 x 10 <sup>-1</sup>	3.0 x 10 <sup>-1</sup>	2.3 x 10 <sup>-5</sup>
CHLORONITROBENZENE, P-	100-00-5	158	480	225	242	751	12,200	4.9 x 10 <sup>-6</sup>	8.7 x 10 <sup>-5</sup>	2.0 x 10 <sup>-3</sup>	
CHLOROPRENE	126-99-8	89	50	1,736	59	525	8,075	5.6 x 10 <sup>-2</sup>	1.5 x 10 <sup>+0</sup>	2.0 x 10 <sup>-2</sup>	3.0 x 10 <sup>-4</sup>
CHLOROPROPANE, 2-	75-29-6	79	260	3,100	47	485	6,286	1.8 x 10 <sup>-2</sup>	5.0 x 10 <sup>-1</sup>	1.0 x 10 <sup>-1</sup>	
CRESOL(S)	1319-77-3	108	25	20,000	139	701	10,886	1.2 x 10 <sup>-6</sup>	2.6 x 10 <sup>-5</sup>	6.0 x 10 <sup>-1</sup>	

Regulated Substance	CAS No.	MW (g/mol)	$K_{oc}$ (L/kg)	$S$ (mg/L)	$T_B$ (°C)	$T_C$ (K)	$\Delta H_{v,b}$ (cal/mol)	$H$ (atm·m <sup>3</sup> /mol)	$H'$ (@ $T_{gw}$ )	RfC <sub>i</sub> (mg/m <sup>3</sup> )	IUR (µg/m <sup>3</sup> ) <sup>-1</sup>
CUMENE (ISOPROPYL BENZENE)	98-82-8	120	2800	50	152	631	10,335	$1.2 \times 10^{-2}$	$2.4 \times 10^{-1}$	$4.0 \times 10^{-1}$	
CYCLOHEXANE	110-82-7	84	479	55	81	553	7,154	$1.5 \times 10^{-1}$	$4.0 \times 10^{+0}$	$6.0 \times 10^{+0}$	
CYCLOHEXANONE	108-94-1	98	66	36,500	157	653	9,500	$9.0 \times 10^{-6}$	$2.0 \times 10^{-4}$	$7.0 \times 10^{-1}$	
DIBROMO-3-CHLOROPROPANE, 1,2-[M]	96-12-8	236	140	1,000	196	704	9,960	$1.5 \times 10^{-4}$	$3.1 \times 10^{-3}$	$2.0 \times 10^{-4}$	$6.0 \times 10^{-3}$
DIBROMOETHANE, 1,2-(ETHYLENE DIBROMIDE)	106-93-4	188	54	4,150	131	583	8,310	$6.5 \times 10^{-4}$	$1.6 \times 10^{-2}$	$9.0 \times 10^{-3}$	$6.0 \times 10^{-4}$
DIBROMOMETHANE	74-95-3	174	110	11,400	96	583	7,868	$8.2 \times 10^{-4}$	$2.1 \times 10^{-2}$	$4.0 \times 10^{-3}$	
DICHLORO-2-BUTENE, 1,4-	764-41-0	125	180	850	156	647	8,875	$6.6 \times 10^{-4}$	$1.5 \times 10^{-2}$		$4.2 \times 10^{-3}$
DICHLORO-2-BUTENE, TRANS-1,4-	110-57-6	125	215	850	155	646	9,125	$6.6 \times 10^{-4}$	$1.5 \times 10^{-2}$		$4.2 \times 10^{-3}$
DICHLOROBENZENE, 1,2-	95-50-1	147	350	147	180	705	9,700	$1.9 \times 10^{-3}$	$4.3 \times 10^{-2}$	$2.0 \times 10^{-1}$	
DICHLOROBENZENE, P-	106-46-7	147	510	83	174	685	9,271	$2.4 \times 10^{-3}$	$5.5 \times 10^{-2}$	$8.0 \times 10^{-1}$	$1.1 \times 10^{-5}$
DICHLORODIFLUOROMETHANE (FREON 12)	75-71-8	121	360	280	-30	385	9,421	$3.4 \times 10^{-1}$	$9.1 \times 10^{+0}$	$1.0 \times 10^{-1}$	
DICHLOROETHANE, 1,1-	75-34-3	99	52	5,000	57	523	6,895	$5.6 \times 10^{-3}$	$1.6 \times 10^{-1}$	$5.0 \times 10^{-1}$	$1.6 \times 10^{-6}$
DICHLOROETHANE, 1,2-	107-06-2	99	38	8,412	83	561	7,643	$1.2 \times 10^{-3}$	$3.1 \times 10^{-2}$	$7.0 \times 10^{-3}$	$2.6 \times 10^{-5}$
DICHLOROETHYLENE, 1,1-	75-35-4	97	65	2,500	32	576	6,247	$2.6 \times 10^{-2}$	$7.6 \times 10^{-1}$	$2.0 \times 10^{-1}$	
DICHLOROMETHANE (METHYLENE CHLORIDE) [M]	75-09-2	85	16	20,000	40	510	6,706	$3.3 \times 10^{-3}$	$9.2 \times 10^{-2}$	$6.0 \times 10^{-1}$	$1.0 \times 10^{-8}$
DICHLOROPROPANE, 1,2-	78-87-5	113	47	2,700	96	572	7,590	$2.8 \times 10^{-3}$	$7.3 \times 10^{-2}$	$4.0 \times 10^{-3}$	$3.7 \times 10^{-3}$
DICHLOROPROPENE, 1,3-	542-75-6	111	27	2,700	108	587	7,900	$3.6 \times 10^{-3}$	$9.0 \times 10^{-2}$	$2.0 \times 10^{-2}$	$4.0 \times 10^{-6}$
DICYCLOPENTADIENE	77-73-6	132	810	40	167	665	2,197	$6.3 \times 10^{-2}$	$2.2 \times 10^{+0}$	$3.0 \times 10^{-4}$	
DIOXANE, 1,4-	123-91-1	88	7.8	1,000,000	101	587	8,690	$4.8 \times 10^{-6}$	$1.2 \times 10^{-4}$	$3.0 \times 10^{-2}$	$5.0 \times 10^{-6}$
DIPHENYLHYDRAZINE, 1,2-	122-66-7	184	660	221	309	939	14,200	$4.8 \times 10^{-7}$	$7.8 \times 10^{-6}$		$2.2 \times 10^{-4}$
EPICHLOROHYDRIN	106-89-8	93	35	65,800	116	600	10	$3.0 \times 10^{-5}$	$1.2 \times 10^{-3}$	$1.0 \times 10^{-3}$	$1.2 \times 10^{-6}$
ETHOXYETHANOL, 2- (EGEE)	110-80-5	90	12	1,000,000	136	572	9,368	$4.7 \times 10^{-7}$	$1.0 \times 10^{-5}$	$2.0 \times 10^{-1}$	
ETHYL ACETATE	141-78-6	88	59	80,800	77	523	7,634	$1.3 \times 10^{-4}$	$3.5 \times 10^{-3}$	$7.0 \times 10^{-2}$	
ETHYL ACRYLATE	140-88-5	100	110	15,000	100	552	8,270	$3.4 \times 10^{-4}$	$8.4 \times 10^{-3}$	$8.0 \times 10^{-3}$	
ETHYL BENZENE	100-41-4	106	220	161	136	617	8,501	$7.9 \times 10^{-3}$	$1.9 \times 10^{-1}$	$1.0 \times 10^{+0}$	$2.5 \times 10^{-6}$
ETHYL METHACRYLATE	97-63-2	114	22	4,636	117	571	10,957	$5.7 \times 10^{-4}$	$1.2 \times 10^{-2}$	$3.0 \times 10^{-1}$	
ETHYLENE GLYCOL	107-21-1	62	4.4	1,000,000	198	718	12,550	$6.0 \times 10^{-8}$	$1.1 \times 10^{-6}$	$4.0 \times 10^{-1}$	
FLUOROTRICHLOROMETHANE (FREON 11)	75-69-4	137	130	1,090	24	471	5,999	$9.7 \times 10^{-2}$	$2.9 \times 10^{+0}$	$7.0 \times 10^{-1}$	
FORMALDEHYDE	50-00-0	30	3.6	55,000	-21	408	5,500	$3.4 \times 10^{-7}$	$1.1 \times 10^{-5}$	$9.8 \times 10^{-3}$	$1.3 \times 10^{-5}$
FORMIC ACID	64-18-6	46	0.54	1,000,000	101	588	5,240	$1.7 \times 10^{-7}$	$5.0 \times 10^{-6}$	$3.0 \times 10^{-4}$	
FURFURAL	98-01-1	96	6.3	91,000	162	670	9,826	$3.8 \times 10^{-6}$	$8.3 \times 10^{-5}$	$5.0 \times 10^{-2}$	
HEXACHLOROETHANE	67-72-1	237	2200	50	187	695	9,510	$3.9 \times 10^{-3}$	$8.6 \times 10^{-2}$	$3.0 \times 10^{-2}$	$1.0 \times 10^{-5}$
HEXANE	110-54-3	86	3600	10	69	508	6,895	$1.8 \times 10^{+0}$	$4.9 \times 10^{+1}$	$7.0 \times 10^{-1}$	

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HYDRAZINE/HYDRAZINE SULFATE	302-01-2	32	0.0053	1,000,000	114	653	10,700	6.1 x 10 <sup>-7</sup>	1.3 x 10 <sup>-5</sup>	3.0 x 10 <sup>-5</sup>	4.9 x 10 <sup>-3</sup>
METHACRYLONITRILE	126-98-7	67	21	25,700	90	554	7,600	2.5 x 10 <sup>-4</sup>	6.4 x 10 <sup>-3</sup>	3.0 x 10 <sup>-2</sup>	
METHANOL	67-56-1	32	2.8	1,000,000	65	513	8,426	4.6 x 10 <sup>-6</sup>	1.1 x 10 <sup>-4</sup>	2.0 x 10 <sup>+1</sup>	
METHOXYETHANOL, 2-	109-86-4	76	1	1,000,000	124	598	8,966	3.3 x 10 <sup>-7</sup>	7.8 x 10 <sup>-6</sup>	2.0 x 10 <sup>-2</sup>	
METHYL ACRYLATE	96-33-3	86	55	52,000	70	536	7,749	2.0 x 10 <sup>-4</sup>	5.2 x 10 <sup>-3</sup>	2.0 x 10 <sup>-2</sup>	
METHYL CHLORIDE	74-87-3	50	6	6,180	-24	416	5,115	8.8 x 10 <sup>-3</sup>	2.8 x 10 <sup>-1</sup>	9.0 x 10 <sup>-2</sup>	1.8 x 10 <sup>-6</sup>
METHYL ETHYL KETONE	78-93-3	72	32	275,000	80	537	7,481	5.7 x 10 <sup>-5</sup>	1.5 x 10 <sup>-3</sup>	5.0 x 10 <sup>+0</sup>	
METHYL HYDRAZINE	60-34-4	46	1	1,000,000	88	585	8,890	3.0 x 10 <sup>-6</sup>	7.4 x 10 <sup>-5</sup>	2.0 x 10 <sup>-5</sup>	1.0 x 10 <sup>-3</sup>
METHYL ISOBUTYL KETONE	108-10-1	100	17	19,550	117	571	8,243	1.4 x 10 <sup>-4</sup>	3.4 x 10 <sup>-3</sup>	3.0 x 10 <sup>+0</sup>	
METHYL ISOCYANATE	624-83-9	57	10	100,000	40	491	6,394	9.3 x 10 <sup>-4</sup>	2.7 x 10 <sup>-2</sup>	1.0 x 10 <sup>-3</sup>	
METHYL METHACRYLATE	80-62-6	100	10	15,600	100	567	8,975	3.2 x 10 <sup>-4</sup>	7.6 x 10 <sup>-3</sup>	7.0 x 10 <sup>-1</sup>	
METHYL N-BUTYL KETONE (2- HEXANONE)	591-78-6	100	54	17,500	128	601	8,610	9.3 x 10 <sup>-5</sup>	2.2 x 10 <sup>-3</sup>	3.0 x 10 <sup>-2</sup>	
METHYL STYRENE (MIXED ISOMERS)	25013-15-4	118	2200	89	163	655	12,027	2.6 x 10 <sup>-3</sup>	4.8 x 10 <sup>-2</sup>	4.0 x 10 <sup>-2</sup>	
METHYL TERT-BUTYL ETHER (MTBE)	1634-04-4	88	12	45,000	55	497	6,678	5.9 x 10 <sup>-4</sup>	1.6 x 10 <sup>-2</sup>	3.0 x 10 <sup>+0</sup>	2.6 x 10 <sup>-7</sup>
METHYLNAPHTHALENE, 2-	91-57-6	142	16,000	25	241	761	12,600	5.2 x 10 <sup>-4</sup>	9.1 x 10 <sup>-3</sup>	3.0 x 10 <sup>-3</sup>	
NAPHTHALENE	91-20-3	128	950	30	218	748	10,373	4.4 x 10 <sup>-4</sup>	9.2 x 10 <sup>-3</sup>	3.0 x 10 <sup>-3</sup>	3.4 x 10 <sup>-5</sup>
NITROANILINE, O-	88-74-4	138	27	1,470	284	784	14,500	5.9 x 10 <sup>-8</sup>	8.4 x 10 <sup>-7</sup>	5.0 x 10 <sup>-5</sup>	
NITROBENZENE	98-95-3	123	130	2,000	211	719	10,566	2.4 x 10 <sup>-5</sup>	4.9 x 10 <sup>-4</sup>	9.0 x 10 <sup>-3</sup>	4.0 x 10 <sup>-5</sup>
NITROPROPANE, 2-	79-46-9	89	20	16,700	120	594	8,383	1.2 x 10 <sup>-4</sup>	2.9 x 10 <sup>-3</sup>	2.0 x 10 <sup>-2</sup>	2.7 x 10 <sup>-3</sup>
NITROSODIETHYLAMINE, N- [M]	55-18-5	102	26	93,000	176	655	10,087	3.6 x 10 <sup>-6</sup>	7.6 x 10 <sup>-5</sup>		4.3 x 10 <sup>-2</sup>
NITROSODIMETHYLAMINE, N- [M]	62-75-9	74	8.5	1,000,000	154	645	9,448	1.8 x 10 <sup>-6</sup>	4.1 x 10 <sup>-5</sup>	4.0 x 10 <sup>-5</sup>	1.4 x 10 <sup>-2</sup>
NITROSO-DI-N-BUTYLAMINE, N-	924-16-3	158	450	1,200	235	584	11,653	1.3 x 10 <sup>-5</sup>	1.8 x 10 <sup>-4</sup>		1.6 x 10 <sup>-3</sup>
PCB-1221 (AROCLOR)	11104-28-2	189	1900	1	275	845	12,100	7.4 x 10 <sup>-4</sup>	1.4 x 10 <sup>-2</sup>		1.0 x 10 <sup>-4</sup>
PCB-1232 (AROCLOR)	11141-16-5	189	1500	1	290	845	12,200	7.4 x 10 <sup>-4</sup>	1.3 x 10 <sup>-2</sup>		1.0 x 10 <sup>-4</sup>
PHENOL	108-95-2	94	22	84,300	182	694	10,920	3.3 x 10 <sup>-7</sup>	6.8 x 10 <sup>-6</sup>	2.0 x 10 <sup>-1</sup>	
PHTHALIC ANHYDRIDE	85-44-9	148	79	6,200	295	791	12,700	1.6 x 10 <sup>-8</sup>	2.6 x 10 <sup>-7</sup>	2.0 x 10 <sup>-2</sup>	
PROPANOL, 2- (ISOPROPYL ALCOHOL)	67-63-0	60	25	1,000,000	82	508	9,518	8.1 x 10 <sup>-6</sup>	1.9 x 10 <sup>-4</sup>	2.0 x 10 <sup>-1</sup>	
PROPYLBENZENE, N-	103-65-1	120	720	52	159	630	9,123	1.1 x 10 <sup>-2</sup>	2.4 x 10 <sup>-1</sup>	1.0 x 10 <sup>+0</sup>	
PROPYLENE OXIDE	75-56-9	58	25	405,000	34	482	6,621	7.0 x 10 <sup>-5</sup>	2.0 x 10 <sup>-3</sup>	3.0 x 10 <sup>-2</sup>	3.7 x 10 <sup>-6</sup>
STYRENE	100-42-5	104	910	300	145	636	8,737	2.8 x 10 <sup>-3</sup>	6.5 x 10 <sup>-2</sup>	1.0 x 10 <sup>+0</sup>	
TETRACHLOROETHANE, 1,1,1,2-	630-20-6	168	980	1,100	131	624	9,768	2.5 x 10 <sup>-3</sup>	5.6 x 10 <sup>-2</sup>		7.4 x 10 <sup>-6</sup>
TETRACHLOROETHANE, 1,1,2,2-	79-34-5	168	79	2,860	147	661	8,996	3.7 x 10 <sup>-4</sup>	8.6 x 10 <sup>-3</sup>		5.8 x 10 <sup>-5</sup>
TETRACHLOROETHYLENE (PCE)	127-18-4	166	300	162	121	620	8,288	1.8 x 10 <sup>-2</sup>	4.4 x 10 <sup>-1</sup>	4.0 x 10 <sup>-2</sup>	2.6 x 10 <sup>-7</sup>
TETRAHYDROFURAN	109-99-9	72	43	300,000	66	541	7,074	7.1 x 10 <sup>-5</sup>	1.9 x 10 <sup>+2</sup>	2.0 x 10 <sup>+0</sup>	1.9 x 10 <sup>-6</sup>

Regulated Substance	CAS No.	MW (g/mol)	$K_{oc}$ (L/kg)	$S$ (mg/L)	$T_B$ (°C)	$T_C$ (K)	$\Delta H_{v,b}$ (cal/mol)	$H$ (atm·m <sup>3</sup> /mol)	$H'$ (@ $T_{gw}$ )	RfC <sub>i</sub> (mg/m <sup>3</sup> )	IUR (µg/m <sup>3</sup> ) <sup>-1</sup>
TOLUENE	108-88-3	92	130	532	111	592	7,930	6.6 x 10 <sup>-3</sup>	1.7 x 10 <sup>-1</sup>	5.0 x 10 <sup>+0</sup>	
TRIBROMOMETHANE (BROMOFORM)	75-25-2	253	130	3,050	149	696	9,479	5.4 x 10 <sup>-4</sup>	1.2 x 10 <sup>-2</sup>		1.1 x 10 <sup>-6</sup>
TRICHLORO-1,2,2- TRIFLUOROETHANE, 1,1,2-	76-13-1	187	1200	170	48	487	6,463	5.3 x 10 <sup>-1</sup>	1.5 x 10 <sup>+1</sup>	5.0 x 10 <sup>+1</sup>	
TRICHLOROBENZENE, 1,2,4-	120-82-1	181	1500	44	213	725	10,471	1.4 x 10 <sup>-3</sup>	2.9 x 10 <sup>-2</sup>	2.0 x 10 <sup>-3</sup>	
TRICHLOROBENZENE, 1,3,5-	108-70-3	181	3100	6	208	744	10,600	1.9 x 10 <sup>-3</sup>	3.9 x 10 <sup>-2</sup>	2.0 x 10 <sup>-3</sup>	
TRICHLOROETHANE, 1,1,1-	71-55-6	133	100	1,495	74	545	7,136	1.7 x 10 <sup>-2</sup>	4.7 x 10 <sup>-1</sup>	5.0 x 10 <sup>+0</sup>	
TRICHLOROETHANE, 1,1,2-	79-00-5	133	76	4,420	114	602	8,322	8.2 x 10 <sup>-4</sup>	2.0 x 10 <sup>-2</sup>	2.0 x 10 <sup>-4</sup>	1.6 x 10 <sup>-5</sup>
TRICHLOROETHYLENE (TCE) [M]	79-01-6	131	93	1,100	87	544	7,505	9.9 x 10 <sup>-3</sup>	2.6 x 10 <sup>-1</sup>	2.0 x 10 <sup>-3</sup>	4.0 x 10 <sup>-6</sup>
TRICHLOROPROPANE, 1,2,3- [M]	96-18-4	147	280	1,896	157	652	9,171	3.4 x 10 <sup>-4</sup>	7.9 x 10 <sup>-3</sup>	3.0 x 10 <sup>-4</sup>	
TRICHLOROPROPENE, 1,2,3-	96-19-5	145	190	2,700	142	623	8,585	1.8 x 10 <sup>-2</sup>	4.2 x 10 <sup>-1</sup>	3.0 x 10 <sup>-4</sup>	
TRIETHYLAMINE	121-44-8	101	51	55,000	90	536	8,095	1.5 x 10 <sup>-4</sup>	3.7 x 10 <sup>-3</sup>	7.0 x 10 <sup>-3</sup>	
TRIMETHYLBENZENE, 1,3,4- (TRIMETHYLBENZENE, 1,2,4-)	95-63-6	120	2200	56	169	649	9,369	6.2 x 10 <sup>-3</sup>	1.4 x 10 <sup>-1</sup>	6.0 x 10 <sup>-2</sup>	
TRIMETHYLBENZENE, 1,3,5-	108-67-8	120	660	49	165	637	9,321	8.8 x 10 <sup>-3</sup>	1.9 x 10 <sup>-1</sup>	6.0 x 10 <sup>-2</sup>	
VINYL ACETATE	108-05-4	86	2.8	20,000	73	519	7,800	5.1 x 10 <sup>-4</sup>	1.3 x 10 <sup>-2</sup>	2.0 x 10 <sup>-1</sup>	
VINYL BROMIDE (BROMOETHENE)	593-60-2	107	150	4,180	16	464	5,398	1.2 x 10 <sup>-2</sup>	3.8 x 10 <sup>-1</sup>	3.0 x 10 <sup>-3</sup>	3.2 x 10 <sup>-5</sup>
VINYL CHLORIDE [M]	75-01-4	63	10	2,700	-13	432	5,250	2.8 x 10 <sup>-2</sup>	8.8 x 10 <sup>-1</sup>	1.0 x 10 <sup>-1</sup>	9.0 x 10 <sup>-6</sup>
XYLENES (TOTAL)	1330-20-7	106	350	175	140	616	8,523	5.2 x 10 <sup>-3</sup>	1.2 x 10 <sup>-1</sup>	1.0 x 10 <sup>-1</sup>	

#### Notes to Table A-5

Symbol	Definition	Source
MW	molecular weight	VISL Calculator (U.S. EPA, 2014a), or alternate
$K_{oc}$	organic carbon partition coefficient	Chapter 250, Appendix A, Table 5A
$S$	aqueous solubility	Chapter 250, Appendix A, Table 5A
$T_B$	boiling point temperature	Chapter 250, Appendix A, Table 5A
$T_C$	critical temperature	VISL Calculator (U.S. EPA, 2014a), or alternate
$\Delta H_{v,b}$	enthalpy of vaporization at the normal boiling point	VISL Calculator (U.S. EPA, 2014a), or alternate
$H$	Henry's law constant at 25°C	VISL Calculator (U.S. EPA, 2014a), or alternate
$H'$	Dimensionless Henry's law constant	Calculated in the VISL Calculator (U.S. EPA, 2014a)
$T_{gw}$	Groundwater temperature (16°C)	Appendix B, Section 3
RfC <sub>i</sub>	Inhalation reference concentration	Chapter 250, Appendix A, Table 5A
IUR	Inhalation unit risk	Chapter 250, Appendix A, Table 5A
[M]	Mutagenic substance	Section 250.301(b)

Alternate sources include:

- The U.S. National Institutes of Health online Hazardous Substances Data Bank
- DEP's Land Recycling Program online Chemical and Physical Properties Database
- EPA's Johnson & Ettinger model (U.S. EPA, 2004)