**Section 742.APPENDIX C Tier 2 Illustrations and Tables**

**Section 742.TABLE E Default Physical and Chemical Parameterse**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CAS No. | Chemical | Solubility in Water (S) (mg/L) | Diffusivity in Air (Di) (cm2/s) | Diffusivity in Water (Dw) (cm2/s) | Dimensionless Henry's Law Constant (H') (25°C) | Dimensionless Henry's Law Constant (H') (13°C)  For the indoor inhalation exposure route | Organic Carbon Partition Coefficient (Koc) (L/kg) | | First Order Degradation Constant (λ)(d-1) | | Vapor Pressure (mm/Hg) |
| Neutral Organics |  |  |  |  |  |  |  | |  | |  |
| 83-32-9 | Acenaphthene | 3.60E+00 | 4.76E-02 | 7.69E-06 | 6.60E-03 | -------b | 6.30E+03 | | 3.40E-03 | | 2.50E-03 |
| 67-64-1 | Acetone | 1.00E+06 | 1.24E-01 | 1.14E-05 | 1.60E-03 | 9.73E-04 | 7.80E-01 | | 4.95E-02 | | 2.30E+02 |
| 15972-60-8 | Alachlor | 2.40E+02 | 2.13E-02 | 5.28E-06 | 3.40E-06 | -------b | 3.20E+03 | | No Data | | 2.20E-05 |
| 116-06-3 | Aldicarb | 6.03E+03 | 3.18E-02 | 7.24E-06 | 5.90E-08 | -------b | 1.29E+01 | | 1.09E-03 | | 3.47E-05 |
| 309-00-2 | Aldrin | 1.70E-02 | 1.96E-02 | 4.86E-06 | 7.00E-03 | -------b | 2.50E+05 | | 5.90E-04 | | 6.00E-06 |
| 120-12-7 | Anthracene | 4.30E-02 | 3.85E-02 | 7.74E-06 | 2.70E-03 | -------b | 2.50E+04 | | 7.50E-04 | | 2.70E-06 |
| 1912-24-9 | Atrazine | 7.00E+01 | 2.59E-02 | 6.67E-06 | 9.68E-08 | -------b | 3.63E+02 | | No Data | | 2.70E-07 |
| 71-43-2 | Benzene | 1.80E+03 | 8.80E-02 | 1.02E-05 | 2.30E-01 | 1.34E-01 | 5.00E+01 | | 9.00E-04 | | 9.50E+01 |
| 56-55-3 | Benzo(a)anthracene | 9.40E-03 | 5.10E-02 | 9.00E-06 | 1.39E-04 | -------b | 4.00E+05 | | 5.10E-04 | | 1.10E-07 |
| 205-99-2 | Benzo(b)fluoranthene | 1.50E-03 | 2.23E-02 | 5.56E-06 | 4.55E-03 | -------b | 1.05E+06 | | 5.70E-04 | | 5.00E-07 |
| 207-08-9 | Benzo(k)fluoranthene | 8.00E-04 | 2.23E-02 | 5.56E-06 | 3.40E-05 | -------b | 1.00E+06 | | 1.60E-04 | | 2.00E-09 |
| 65-85-0 | Benzoic Acid | 3.40E+03 | 7.02E-02 | 7.97E-06 | 1.56E-06 | -------b | 1.21E+00d | | No Data | | 7.00E-04 |
| 50-32-8 | Benzo(a)pyrene | 1.60E-03 | 4.30E-02 | 9.49E-06 | 4.50E-05 | -------b | 7.90E+05 | | 6.50E-04 | | 5.50E-09 |
| 111-44-4 | Bis(2-chloroethyl) ether | 1.72E+04 | 4.13E-02 | 7.53E-06 | 7.40E-04 | 2.94E-04 | | 1.26E+01 | | 1.90E-03 | 1.55E+00 |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 3.40E-01 | 3.51E-02 | 3.66E-06 | 4.10E-06 | -------b | | 1.00E+05 | | 1.80E-03 | 6.80E-08 |
| 75-27-4 | Bromodichloromethane | 6.70E+03 | 5.61E-02 | 1.06E-05 | 6.60E-02 | 3.71E-02 | | 5.00E+01 | | No Data | 5.00E+01 |
| 75-25-2 | Bromoform | 3.10E+03 | 1.49E-02 | 1.03E-05 | 2.19E-02 | 1.06E-02 | | 9.12E+01 | | 1.90E-03 | 5.51E+00 |
| 71-36-3 | Butanol | 7.40E+04 | 8.00E-02 | 9.30E-06 | 3.61E-04 | 1.55E-04 | | 6.00E+00 | | 1.28E-02 | 7.00E+00 |
| 78-93-3 | 2-Butanone (MEK) | 2.20E+05 | 8.08E-02 | 9.8E-06 | 2.30E-03 | 1.32E-03 | | 2.00E+00 | | 4.95E-02 | 9.50E+01 |
| 85-68-7 | Butyl Benzyl Phthalate | 2.70E+00 | 1.99E-02 | 4.89E-06 | 5.30E-05 | -------b | | 6.30E+04 | | 3.85E-03 | 8.30E-06 |
| 86-74-8 | Carbazole | 1.20E+00 | 4.17E-02 | 7.45E-06 | 3.60E-06 | -------b | | 4.00E+03 | | No Data | 7.00E-04 |
| 1563-66-2 | Carbofuran | 3.20E+02 | 2.37E-02 | 5.95E-06 | 1.27E-07 | -------b | | 1.91E+02 | | No Data | 4.85E-06 |
| 75-15-0 | Carbon Disulfide | 1.20E+03 | 1.04E-01 | 1.00E-05 | 1.23E+00 | 8.06E-01 | | 6.30E+01 | | No Data | 3.60E+02 |
| 56-23-5 | Carbon Tetrachloride | 7.90E+02 | 7.80E-02 | 8.80E-06 | 1.23E+00 | 7.48E-01 | | 2.00E+02 | | 1.90E-03 | 1.20E+02 |
| 57-74-9 | Chlordane | 5.60E-02 | 1.79E-02 | 4.37E-06 | 2.00E-03 | -------b | | 2.50E+05 | | 2.50E-04 | 9.80E-06 |
| 106-47-8 | p-Chloroaniline | 5.30E+03 | 6.99E-02 | 1.01E-05 | 4.76E-05 | -------b | | 6.31E+01 | | No Data | 1.23E-02 |
| 108-90-7 | Chlorobenzene | 4.70E+02 | 7.30E-02 | 8.70E-06 | 1.50E-01 | 7.93E-02 | | 2.00E+02 | | 2.30E-03 | 1.20E+01 |
| 124-48-1 | Chlorodibromomethane | 2.60E+03 | 3.66E-02 | 1.05E-05 | 3.20E-02 | 2.07E-02 | | 6.92E+01 | | 3.85E-03 | 4.90E+00 |
| 67-66-3 | Chloroform | 7.90E+03 | 1.04E-01 | 1.00E-05 | 1.50E-01 | 9.18E-02 | | 5.00E+01 | | 3.90E-04 | 2.00E+02 |
| 95-57-8 | 2-Chlorophenol | 2.20E+04 | 6.61E-02 | 9.46E-06 | 1.60E-02 | 7.28E-03 | | 5.93E+01d | | No Data | 2.34E+00 |
| 218-01-9 | Chrysene | 6.30E-03 | 2.44E-02 | 6.21E-06 | 3.90E-03 | -------b | | 4.00E+05 | | 3.50E-04 | 6.20E-09 |
| 94-75-7 | 2,4-D | 6.77E+02 | 5.88E-02 | 6.49E-06 | 4.18E-07 | -------b | | 5.75E+02 | | 3.85E-03 | 6.00E-07 |
| 72-54-8 | 4,4'-DDD | 9.00E-02 | 2.27E-02 | 5.79E-06 | 1.60E-04 | -------b | | 7.90E+05 | | 6.20E-05 | 6.70E-07 |
| 72-55-9 | 4,4'-DDE | 1.20E-01 | 2.38E-02 | 5.87E-06 | 8.60E-04 | -------b | | 4.00E+05 | | 6.20E-05 | 6.00E-06 |
| 50-29-3 | 4,4'-DDT | 2.50E-02 | 1.99E-02 | 4.95E-06 | 3.30E-04 | -------b | | 2.00E+06 | | 6.20E-05 | 1.60E-07 |
| 75-99-0 | Dalapon | 9.00E+05 | 6.08E-02 | 9.45E-06 | 2.64E-06 | NA | | 4.80E+00 | | 5.78E-03 | 1.90E-01 |
| 53-70-3 | Dibenzo(a,h)anthracene | 2.50E-03 | 2.11E-02 | 5.24E-06 | 6.10E-07 | -------b | | 2.50E+06 | | 3.70E-04 | 1.00E-10 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1.20E+03 | 2.68E-02 | 7.02E-06 | 6.20E-03c | NA | | 7.90E+01 | | 1.93E-03 | 5.80E-01 |
| 106-93-4 | 1,2-Dibromoethane | 4.00E+03 | 4.37E-02 | 8.44E-06 | 3.00E-02 | 1.54E-02 | | 5.00E+01 | | 5.78E-03 | 1.30E+01 |
| 84-74-2 | Di-n-butyl Phthalate | 1.10E+01 | 4.38E-02 | 7.86E-06 | 7.40E-05 | -------a | | 4.00E+04 | | 3.01E-02 | 7.30E-05 |
| 1918-00-9 | Dicamba | 4.50E+03 | 2.37E-02 | 5.95E-06 | 2.18E-09 | -------a | | 2.95E+00 | | No Data | 3.38E-05 |
| 95-50-1 | 1,2-Dichlorobenzene | 1.56E+02 | 6.90E-02 | 7.90E-06 | 7.79E-02 | 3.56E-02 | | 5.75E+02 | | 1.90E-03 | 1.36E+00 |
| 106-46-7 | 1,4-Dichlorobenzene | 7.90E+01 | 6.90E-02 | 7.90E-06 | 9.80E-02 | 4.69E-02 | | 7.90E+02 | | 1.90E-03 | 1.00E+00 |
| 91-94-1 | 3,3-Dichlorobenzidine | 3.10E+00 | 2.59E-02 | 6.74E-06 | 1.60E-07 | -------a | | 2.82E+03 | | 1.90E-03 | 3.71E-08 |
| 75-71-8 | Dichlorodifluoromethane | 2.80E+02 | 7.60E-02 | 1.08E-05 | 1.41E+01 | 8.14E+00 | | 6.17E+01 | | 1.92E-03 | 4.85E+03 |
| 75-34-3 | 1,1-Dichloroethane | 5.10E+03 | 7.42E-02 | 1.05E-05 | 2.30E-01 | 1.42E-01 | | 3.20E+01 | | 1.90E-03 | 2.30E+02 |
| 107-06-2 | 1,2-Dichloroethane | 8.50E+03 | 1.04E-02 | 9.90E-06 | 4.00E-02 | 2.29E-02 | | 2.00E+01 | | 1.90E-03 | 7.90E+01 |
| 75-35-4 | 1,1-Dichloroethylene | 2.30E+03 | 9.00E-02 | 1.04E-05 | 1.10E+00 | 7.10E-01 | | 5.00E+01 | | 5.30E-03 | 6.00E+02 |
| 156-59-2 | *cis*-1,2-Dichloroethylene | 3.50E+03 | 8.86E-02 | 1.13E-05 | 1.70E-01 | 1.00E-01 | | 4.00E+01 | | 2.40E-04 | 2.00E+02 |
| 156-60-5 | *trans*-1,2-Dichloroethylene | 6.30E+03 | 7.03E-02 | 1.19E-05 | 3.90E-01 | 2.43E-01 | | 5.00E+01 | | 2.40E-04 | 3.30E+02 |
| 120-83-2 | 2,4-Dichlorophenol | 4.50E+03 | 4.89E-02 | 8.77E-06 | 1.30E-04 | -------a | | 7.32E+02d | | 2.70E-04 | 6.70E-02 |
| 78-87-5 | 1,2-Dichloropropane | 2.80E+03 | 7.82E-02 | 8.73E-06 | 1.10E-01 | 6.52E-02 | | 5.00E+01 | | 2.70E-04 | 5.20E+01 |
| 542-75-6 | 1,3-Dichloropropylene (*cis* + *trans*) | 2.80E+03 | 6.26E-02 | 1.00E-05 | 7.40E-01 | 3.98E-01 | | 2.00E+01 | | 6.10E-02 | 3.40E+01 |
| 60-57-1 | Dieldrin | 2.00E-01 | 1.92E-02 | 4.74E-06 | 6.2E-04 | -------a | | 2.50E+04 | | 3.20E-04 | 5.9E-06 |
| 84-66-2 | Diethyl Phthalate | 1.10E+03 | 2.49E-02 | 6.35E-06 | 1.80E-05 | -------a | | 3.20E+02 | | 6.19E-03 | 1.60E-03 |
| 105-67-9 | 2,4-Dimethylphenol | 7.90E+03 | 6.43E-02 | 8.69E-06 | 8.20E-05 | -------a | | 2.00E+02 | | 4.95E-02 | 9.80E-02 |
| 75-71-8 | 1,3-Dinitrobenzene | 8.60E+02 | 4.55E-02 | 8.46E-06 | 2.30E-07 | -------a | | 3.20E+01 | | 1.92E-03 | 9.00E-04 |
| 51-28-5 | 2,4-Dinitrophenol | 2.79E+03 | 2.73E-02 | 9.06E-06 | 1.82E-05 | -------a | | 3.24E+01 | | 1.32E-03 | 5.10E-03 |
| 121-14-2 | 2,4-Dinitrotoluene | 2.70E+02 | 2.03E-01 | 7.06E-06 | 3.80E-06 | -------a | | 8.90E+01 | | 1.92E-03 | 1.47E-04 |
| 606-20-2 | 2,6-Dinitrotoluene | 1.82E+02 | 3.70E-02 | 7.76E-06 | 3.06E-05 | -------a | | 4.90E+01 | | 1.92E-03 | 5.67E-04 |
| 88-85-7 | Dinoseb | 5.20E+01 | 2.45E-02 | 6.25E-06 | 1.87E-05 | -------a | | 9.17E+01d | | 2.82E-03 | 7.50E-05 |
| 117-84-0 | Di-n-octyl Phthalate | 2.00E-02 | 1.73E-02 | 4.17E-06 | 2.74E-03 | -------a | | 1.30E+05 | | 1.90E-03 | 2.60E-06 |
| 123-91-1 | p-Dioxane | 1.00E+06 | 2.29E-01 | 1.02E-05 | 1.97E-04 | 1.07E-04 | | 7.20E-01 | | 1.92E-03 | 3.81E+01 |
| 115-29-7 | Endosulfan | 5.10E-01 | 1.85E-02 | 4.55E-06 | 4.51E-04 | -------a | | 5.00E+03 | | 7.63E-02 | 1.00E-05 |
| 145-73-3 | Endothall | 2.10E+04 | 2.91E-02 | 8.07E-06 | 1.58E-14 | -------a | | 7.59E+01 | | No Data | 1.57E-10 |
| 72-20-8 | Endrin | 2.50E-01 | 1.92E-02 | 4.74E-6 | 3.08E-04 | -------a | | 3.20E+04 | | 3.20E-04 | 3.00E-06 |
| 100-41-4 | Ethylbenzene | 1.70E+02 | 7.50E-02 | 7.80E-06 | 3.24E-01 | 1.64E-01 | | 3.20E+02 | | 3.00E-03 | 9.60E+00 |
| 206-44-0 | Fluoranthene | 2.06E-01 | 2.51E-02 | 6.35E-06 | 6.60E-04 | -------a | | 7.40E+04 | | 1.90E-04 | 1.23E-08 |
| 86-73-7 | Fluorene | 2.00E+00 | 4.40E-02 | 7.88E-06 | 2.62E-03 | -------a | | 1.30E+04 | | 6.91E-04 | 6.30E-04 |
| 76-44-8 | Heptachlor | 1.80E-01 | 2.23E-02 | 5.69E-06 | 6.07E-02 | 1.73E-02 | | 3.00E+03 | | 1.30E-01 | 4.00E-04 |
| 1024-57-3 | Heptachlor epoxide | 2.00E-01 | 2.19E-02 | 5.57E-06 | 3.90E-04 | -------a | | 2.00E+05 | | 6.30E-04 | 1.90E-05 |
| 118-74-1 | Hexachlorobenzene | 6.20E-03 | 5.42E-02 | 5.91E-06 | 5.33E-02 | 1.35E-02 | | 2.00E+04 | | 1.70E-04 | 1.80E-05 |
| 319-84-6 | Alpha-HCH (alpha-BHC) | 2.00E+00 | 2.04E-02 | 5.04E-06 | 4.51E-04 | -------a | | 5.00E+03 | | 2.50E-03 | 4.50E-05 |
| 58-89-9 | Gamma-HCH (Lindane) | 7.30E+00 | 2.75E-02 | 7.34E-06 | 5.74E-04 | -------a | | 3.00E+03 | | 2.90E-03 | 4.10E-04 |
| 2691-41-0 | High Melting Explosive, Octogen (HMX) | 5.00E+00 | 2.69E-02 | 7.15E-06 | 8.67E-10 | 3.55E-08 | | 1.40E+00 | | No Data | 3.30E-14 |
| 77-47-4 | Hexachlorocyclo-  pentadiene | 1.80E+00 | 2.79E-02 | 7.21E-06 | 1.11E+00 | 4.22E-01 | | 1.20E+04 | | 1.20E-02 | 5.96E-02 |
| 67-72-1 | Hexachloroethane | 5.00E+01 | 2.50E-03 | 6.80E-06 | 1.59E-01 | 7.26E-02 | | 1.50E+03 | | 1.92E-03 | 2.10E-01 |
| 193-39-5 | Indeno(1,2,3-c,d)pyrene | 2.20E-05 | 2.25E-02 | 5.66E-06 | 6.56E-05 | -------a | | 3.10E+06 | | 4.70E-04 | 1.00E-10 |
| 78-59-1 | Isophorone | 1.20E+04 | 6.23E-02 | 6.76E-06 | 2.72E-04 | 1.12E-04 | | 2.50E+01 | | 1.24E-02 | 4.38E-01 |
| 98-82-8 | Isopropylbenzene (Cumene) | 6.10E+01 | 6.50E-02 | 7.10E-06 | 4.92E+01 | 2.10E+01 | | 1.02E+03 | | 4.33E-02 | 4.50E+00 |
| 93-65-2 | Mecoprop (MCPP) | 8.95E+02 | 2.40E-02 | 6.05E-06 | 7.70E-09 | -------a | | 1.84E+01d | | 3.85E-03 | 2.44E-05 |
| 7439-97-6 | Mercury | 6.00E-02 | 7.14E-02 | 3.01E-05 | 4.51E-01 | 1.59E-01 | | 8.70E+03 | | No Data | 2.00E-03 |
| 72-43-5 | Methoxychlor | 4.50E-02 | 1.84E-02 | 4.46E-06 | 6.56E-04 | -------a | | 5.00E+04 | | 1.90E-03 | 6.00E-07 |
| 74-83-9 | Methyl Bromide | 1.50E+04 | 7.28E-02 | 1.21E-05 | 2.56E-01 | 1.79E-01 | | 1.00E+01 | | 1.82E-02 | 1.62E+03 |
| 1634-04-4 | Methyl tertiary-butyl ether | 5.10E+04 | 8.59E-02 | 1.10E-05 | 2.42E-02 | 1.50E-02 | | 1.00E+01 | | No Data | 2.50E+02 |
| 75-09-2 | Methylene Chloride | 1.30E+04 | 1.01E-01 | 1.17E-05 | 9.02E-02 | 5.70E-02 | | 1.30E+01 | | 1.20E-02 | 4.30E+02 |
| 93-65-2 | 2-Methylnaphthalene | 2.50E+01 | 5.22E-02 | 7.75E-06 | 2.10E-02 | 6.95E-03 | | 1.60E+03 | | No Data | 6.80E-02 |
| 95-48-7 | 2-Methylphenol (o-cresol) | 2.60E+04 | 7.40E-02 | 8.30E-06 | 4.92E-05 | 2.00E-05 | | 4.20E+01 | | 4.95E-02 | 2.99E-01 |
| 91-20-3 | Naphthalene | 3.10E+01 | 5.90E-02 | 7.50E-06 | 1.97E-02 | 8.29E-03 | | 5.00E+02 | | 2.70E-03 | 8.50E-02 |
| 98-95-3 | Nitrobenzene | 2.09E+03 | 7.60E-02 | 8.60E-06 | 9.84E-04 | 3.99E-04 | | 4.00E+01 | | 1.76E-03 | 2.40E-01 |
| 86-30-6 | N-Nitrosodiphenylamine | 3.50E+01 | 2.83E-02 | 7.19E-06 | 2.10E-04 | -------a | | 1.00E+03 | | 1.00E-02 | 6.70E-04 |
| 621-64-7 | N-Nitrosodi-n-propylamine | 9.89E+03 | 5.87E-02 | 8.17E-06 | 9.20E-05 | 5.48E-05 | | 1.45E+01 | | 1.90E-03 | 1.30E-01 |
| 87-86-5 | Pentachlorophenol | 2.00E+03 | 5.60E-02 | 6.10E-06 | 9.84E-07 | -------a | | 2.77E+03d | | 4.50E-04 | 3.20E-05 |
| 108-95-2 | Phenol | 8.30E+04 | 8.20E-02 | 9.10E-06 | 1.64E-05 | 6.67E-06 | | 2.00E+01 | | 9.90E-02 | 2.80E-01 |
| 1918-02-1 | Picloram | 4.30E+02 | 2.26E-02 | 5.64E-06 | 2.19E-12 | -------a | | 2.00E+00 | | No Data | 7.21E-11 |
| 1336-36-3 | Polychlorinated biphenyls (PCBs) | -------a | -------a | -------a | -------a | -------a | | -------a | | -------a | -------a |
| 129-00-0 | Pyrene | 1.40E+00 | 2.77E-02 | 7.24E-06 | 4.51E-04 | -------a | | 6.31E+04 | | 1.80E-04 | 4.60E-06 |
| 121-82-4 | Royal Demolition Explosive, Cyclonite (RDX) | 5.97E+01 | 3.11E-02 | 8.49E-06 | 2.01E-11 | -------a | | 7.20E+00 | | No Data | 4.10E-09 |
| 122-34-9 | Simazine | 6.20E+00 | 2.48E-02 | 6.28E-06 | 3.80E-08 | -------a | | 1.32E+02 | | No Data | 2.21E-08 |
| 100-42-5 | Styrene | 3.10E+02 | 7.10E-02 | 8.00E-06 | 1.11E-01 | 5.48E-03 | | 3.16E+02 | | 3.30E-03 | 6.10E+00 |
| 93-72-1 | 2,4,5-TP (Silvex) | 7.10E+01 | 2.30E-02 | 5.83E-06 | 3.71E-07 | -------a | | 5.50E+03 | | No Data | 9.97E-06 |
| 127-18-4 | Tetrachloroethylene | 2.00E+02 | 7.20E-02 | 8.20E-06 | 7.38E-01 | 4.00E-01 | | 6.31E+02 | | 9.60E-04 | 1.90E+01 |
| 108-88-3 | Toluene | 5.30E+02 | 8.70E-02 | 8.60E-06 | 2.71E-01 | 1.49E-01 | | 1.58E+02 | | 1.10E-02 | 2.80E+01 |
| 8001-35-2 | Toxaphene | 7.40E-01 | 2.16E-02 | 5.51E-06 | 2.46E-04 | -------a | | 5.01E+04 | | No Data | 9.80E-07 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 3.50E+01 | 3.00E-02 | 8.23E-06 | 5.74E-02 | 2.38E-02 | | 1.58E+03 | | 1.90E-03 | 4.30E-01 |
| 71-55-6 | 1,1,1-Trichloroethane | 1.30E+03 | 7.80E-02 | 8.80E-06 | 6.97E-01 | 4.21E-01 | | 1.26E+02 | | 1.30E-03 | 1.20E+02 |
| 79-00-5 | 1,1,2-Trichloroethane | 4.40E+03 | 7.80E-02 | 8.80E-06 | 3.73E-02 | 1.98E-02 | | 5.01E+01 | | 9.50E-04 | 2.30E+01 |
| 79-01-6 | Trichloroethylene | 1.50E+03 | 7.90E-02 | 9.10E-06 | 4.10E-01 | 2.41E-01 | | 1.00E+02 | | 4.20E-04 | 7.30E+01 |
| 75-69-4 | Trichlorofluoromethane | 1.10E+03 | 8.70E-02 | 9.70E-06 | 3.98E+00 | 2.69E+00 | | 1.30E+02 | | 9.63E-04 | 8.00E+02 |
| 95-95-4 | 2,4,5-Trichlorophenol | 1.20E+03 | 2.91E-02 | 7.03E-06 | 1.78E-04 | -------a | | 2.68E+03d | | 3.80E-04 | 2.40E-02 |
| 88-06-2 | 2,4,6-Trichlorophenol | 8.00E+02 | 2.61E-02 | 6.36E-06 | 3.53E-04 | -------a | | 8.78E+02 d | | 3.80E-04 | 2.00E-02 |
| 108-05-4 | Vinyl Acetate | 2.00E+04 | 8.50E-02 | 9.20E-06 | 2.09E-02 | 1.18E-02 | | 4.57E+00 | | No Data | 9.00E+01 |
| 99-35-4 | 1,3,5-Trinitrobenzene | 2.80E+02 | 2.41E-02 | 6.08E-06 | 3.30E-10 | -------a | | 1.60E+01 | | No Data | 6.40E-06 |
| 118-96-7 | 2,4,6-Trinitrotoluene (TNT) | 1.24E+02 | 2.94E-02 | 7.90E-06 | 4.87E-09 | -------a | | 3.72E+01 | | 1.92E-03 | 2.02E-06 |
| 57-01-4 | Vinyl Chloride | 8.80E+03 | 1.06E-01 | 1.23E-06 | 1.11E+00 | 8.14E-01 | | 1.58E+01 | | 2.40E-04 | 3.00E+03 |
| 108-38-3 | m-Xylene | 1.60E+02 | 7.00E-02 | 7.80E-06 | 2.99E-01 | 1.52E-01 | | 3.98E+02 | | 1.90E-03 | 8.50E+00 |
| 95-47-6 | o-Xylene | 1.80E+02 | 8.70E-02 | 1.00E-05 | 2.13E-01 | 1.07E-01 | | 3.16E+02 | | 1.90E-03 | 6.60E+00 |
| 106-42-3 | p-Xylene | 1.60E+02 | 7.69E-02 | 8.44E-06 | 3.16E-01 | 1.59E-01 | | 3.16E+02 | | 1.90E-03 | 8.90E+00 |
| 1330-20-7 | Xylenes (total) | 1.10E+02 | 7.35E-02 | 9.23E-06 | 2.71E-01 | NA | | 3.98E+02 | | 1.90E-03 | 8.00E+00 |

Chemical Abstracts Service (CAS) registry number. This number in the format xxx-xx-x, is unique for each chemical and allows efficient searching on computerized data bases.

a Soil remediation objectives are determined pursuant to 40 CFR 761, as incorporated by reference at Section 742.210(b) (the USEPA "PCB Spill Cleanup Policy"), for most sites; persons remediating sites should consult with BOL if calculation of Tier 2 or 3 remediation objectives is desired. PCBs are a mixture of different congeners. The appropriate values to use for the physical/chemical parameters depend on congeners present at the site.

b Dimensionless Henry's Law Constant at 13°C is not calculated because the chemical is not volatile and does not require evaluation under the indoor inhalation exposure route.

c Dimensionless Henry's Law Constant = 20°C

d These chemicals are ionizing and its Koc value will change with pH. The Koc values listed in this table is the effective Koc at pH of 6.8. If the site-specific pH is values other than 6.8, the Koc value listed Appendix C, Table I should be used.

e The values in this table were taken from the following sources (in order of preference): SCDMS online database (http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm); CHEMFATE online database (http://www.srcinc.com/what-we-do/databaseforms.aspx?id=381); PhysProp online database (http://www.srcinc.com/what-we-do/databaseforms.aspx?id-386); Water (http://www.epa.gov/ttn/chief/software/water/) for diffusivity values; and Handbook of Environmental Degradation Rates by P.H. Howard (1991) for first order degradation constant values.

ILLINOIS REGISTER

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

(Source: Amended at 37 Ill. Reg. 7506, effective May 15, 2013)