

Table 12-1
Fate and Transport Parameters
Hookston Station Remedial Investigation
Pleasant Hill, California

Chemical Parameters				
Compound	Henry's Constant (atm-m ³ /mol)	Solubility mg/L 20° C	Specific Gravity 20° C/4° C	Molecular Weight
Tetrachloroethene	0.023	150	1.625	166
Trichloroethene	0.0089	1100 (25° C)	1.46	131.5
cis-1,2-Dichloroethene	0.0075	3500	1.248	96.95
trans-1,2-Dichloroethene	0.0067	6300	1.257	96.94
1,1-Dichloroethene	0.15	400	1.218	96.95
Vinyl chloride	0.7	1100 (25° C)	0.9121	62.5
1,1-Dichloroethane	0.0056	5500	1.174	98.96
1,2-Dichloroethane	0.0012	8690	1.25	99
1,1,2-Trichloroethane	0.0012	4500	1.4436	130
Benzene	0.0055	1780	0.8786	78.11
Toluene	0.0066	515	0.866	92
1,2-Dichloropropane	0.15	2700	1.16	112.99
MTBE	65.4	51,000	0.731	88.15

Parameters compiled from:

Predicting the Fate and Transport of Organic Compounds in Groundwater (Part 1),

Roger L. Olsen and Andy Davis, HMC May/June 1990.

Handbook of Chemical Property Estimation Methods, Warren J. Lyman, William F. Reehl,

David H. Rosenblatt, American Chemical Society, Washington DC, 1990.

Handbook of Environmental Data on Organic Chemicals (2nd Ed), Karel Verschueren,

Van Nostrand Reinhold Company, New York, 1983.

Ground Water Issue, "Dense Nonaqueous Phase Liquids," USEPA, EPA/540/4-91-002, March 1991.

Preliminary Remediation Goals, USEPA Region IX, August 1996.