Chemical	Chemical Formula	Liquid Density	Vapor Density	Vapor Pressure	Boiling Point	Solubility	Henry's Constant	Koc	Reactivity	Reference
		g/cm^3 (water = 1 g/cm^3)	compared with air (air = 1)	mm HG (volatile >= 1 mm HG)	Degrees C	mg/L	atm-m^3/mole	L/kg		
tetrachloroethene (PCE)	C_2Cl_4	1.62 @ 20 C	5.7	18.47@25 C	121.1	200	0.0184	155	abiotic biogeochemical transformation	USEPA 1994, USEPA 1996
trichloroethene (TCE)	CCl3H	1.46	4.5 (MSDS)	58 @ 20 C	87.2	1100	0.0103	166	abiotic biogeochemical transformation	USEPA 1996
1,1-dichloroethene (1,1-DCE)	CH_2Cl_2	1.213	3.25 (NTP)	500 @ 20 C	32	2250	0.0261	58.9	abiotic biogeochemical transformation	USEPA 1996
cis-1,2-dichloroethene (cis-1,2-DCE)		1.2837	3.34 or 3.54	200 @ 25 C	60.2	3500	0.00408	35.5	abiotic biogeochemical transformation	USEPA 1996
trans-1,2-dichloroethene (trans-1,2-DCE)		1.257 @25 C	3.34	5.2 psi @ 20 C	48.5	6300	0.00938	52.5	abiotic biogeochemical transformation	USEPA 1996
vinyl chloride (VC)	C_2H_3Cl	0.911	2.2	2300-2280	-13.4	2760	0.027	18.6	abiotic biogeochemical transformation	USEPA 1996
1,2-dichlroethane (1,2-DCA)	C2H4Cl2	1.253 g/cm^3	3.42 (air = 1)	61 mm Hg (20 C)	83.5	8600	0.00091 atm-m^3/mol	17.4		USEPA 1996
1,4-dioxane	C4H8O2	1.033	3.03	29 @ 20 C	101.1	Miscible	0.0000048	1.23		USEPA
carbon tetrachloride (CT)	CCl_4	1.5867	91.3	5.32 @ 20 C	76.72	810	1.197	174		www.nj.gov/dep/srp/guidance/rs/chemproperties.pdf
chloroform (CF)	$CHCl_3$	1.489	4.1	160 @ 20 C	61.15	8,090	0.00367	39.8		www.nj.gov/dep/srp/guidance/rs/chemproperties.pdf
methylene chloride (MC)	CH_2Cl_2	1.326	2.93	435 @ 25 C	39.6	13,000	0.00219	11.7		www.nj.gov/dep/srp/guidance/rs/chemproperties.pdf
chloromethane (CM)	CH_3Cl	2.22	1.8	4300 @ 25 C	-24.2	5,040	0.0088	6		www.nj.gov/dep/srp/guidance/rs/chemproperties.pdf
1,1,2,2-tetrachloroethane (PCA)	C2H2Cl4	1.59	5.8	5.74 @ 25 C	146	2,830	0.000345	93.3		www.nj.gov/dep/srp/guidance/rs/chemproperties.pdf

LEGEND FOR COLORS (FATE AND TRANSPORT MECHANISMS)

Chemical, due to high density, likely to sink beneath water table within the secondary porosity of fractured rock.
Chemical, due to relatively high solubility, likely to have significant matrix/back diffusion if in bedrock with high primary porosity
Chemical, due to high sorbtion characteristic, likely to be retarted in transport and could act as long term reservoir in both primary and secondary porosity
Chemical likely degraded through abiotic mechanisms if encountered in bedrock of certain types (such as pyrite, or high iron content bedrock)
Chemical that because of its boiling point may be amenable to electrical resistivity heating (ERH) or conductivity heating removal technologies
Chemical because of its volatility or tendency to partition from groundwater to vapor, may be present in vapor phase within unsaturated zone
Chemical because of its vapor density, and if present in high concentrations, may sink in unsaturated zone and contaminate groundwater
Not determined

References:

www.nj.gov/dep/srp/guidance/rs/chemproperties.pdf (for vapor density, vapor Pressure, Henry's Constants, dimensionless, Koc)
Handbook of Chemistry and Physics and https://pubchem.ncbi.nlm.nih.gov/compound (for liquid density, boiling point, solubility)

Note that this table presents the implications of chemical properties for fate and transport, but is not a sole source of chemical information for modeling or other purposes