

1,1,2-Trichloroethane (C₂H₃Cl₃)

What is 1,1,2-Trichloroethane?

1,1,2-Trichloroethane is a colorless liquid with a sweet, pleasant odor. It is used as a chemical intermediate and as a solvent for rubbers, fats, oils, waxes, and resins.

Does 1,1,2-Trichloroethane have any additional names?

1,1,2-TCE, Vinyl Trichloride

What are the known health effects?

Short term health effects of exposure to high levels of 1,1,2-Trichloroethane include irritation of the gastrointestinal tract, red or hemorrhaged lungs, and pale liver. Long term effects of exposure to high levels include the potential to cause damage to the liver and kidneys and cancer.

How does exposure occur?

The general population may be exposed to low levels of 1,1,2-Trichloroethane through inhalation of contaminated ambient air. Results from a nationwide monitoring study of groundwater supplies show that exposure to 1,1,2-Trichloroethane from contaminated drinking water appears to be uncommon.

Is this contaminant regulated?

Yes, and water supplied to customers of Mount Laurel MUA is in compliance with USEPA and NJDEP requirements. The maximum concentration of 1,1,2-Trichloroethane permitted in drinking water is 3 ppb; 1,1,2-Trichloroethane is not currently detected in water supplied to MLTMUA customers.

How can I reduce exposure?

1,1,2-Trichloroethane in drinking water can be removed at point of use by granular activated carbon and reverse osmosis filtration.

Additional information for 1,1,2-Trichloroethane, including the information referenced, can be found at:

<https://www.atsdr.cdc.gov/toxfaqs/tfacts148.pdf>

<https://nj.gov/health/eoh/rtkweb/documents/fs/1889.pdf>