

1,1,2,2-Tetrachloroethane (C₂H₂Cl₄)

What is 1,1,2,2-Tetrachloroethane?

1,1,2,2-tetrachloroethane is a manufactured, colorless, dense liquid that does not burn easily. It is volatile and has a sweet odor. In the past, it was used in large amounts to produce other chemicals, as an industrial solvent to clean and degrease metals, and as an ingredient in paints and pesticides. Commercial productions of 1,1,2,2-tetrachloroethane for these uses has stopped in the United States. It presently is used only as a chemical intermediate in the production of other chemicals.

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

Acetylene tetrachloride, Symmetrical tetrachloroethane

What are the known health effects?

1,1,2,2-tetrachloroethane is not life-threatening unless you intentionally or accidentally drink more than a few spoonful at one time or spill a large amount so that you breathe it and get it on your skin. The health effects of long-term (365 days or longer) exposure to low levels are not known. It is also not known whether it will cause reproductive effects in people.

How does exposure occur?

The general public is not expected to be exposed to significant amounts of 1,1,2,2-tetrachloroethane. It is not commonly found in drinking water, soil, or food.

Exposure to high amounts of 1,1,2,2-tetrachloroethane is unlikely because the chemical is no longer used in household products. If you have old household products (cleaners, degreasers, and paints) at home that contain 1,1,2,2-tetrachloroethane, make sure they are stored out of the reach of children.

Is this contaminant regulated?

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

How can I reduce exposure?

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

Additional information regarding 1,1,2,2-Tetrachloroethane, including the information referenced, can be found at:

<https://www.atsdr.cdc.gov/toxprofiles/tp93.pdf>

<https://www.epa.gov/sites/production/files/2016-09/documents/1-1-2-2-tetrachloroethane.pdf>