Carbon Tetrachloride (CCl₄)

What is Carbon tetrachloride?

Carbon tetrachloride is a manufactured chemical that does not occur naturally. It is a clear liquid with a sweet smell.

Carbon tetrachloride is most often found in the air as a colorless gas. It is not flammable and does not dissolve in water very easily. It was used in the production of refrigeration fluid and propellants for aerosol cans, as a pesticide, as a cleaning fluid and degreasing agent, in fire extinguishers, and in spot removers. Because of its harmful effects, these uses are now banned, and it is only used in some industrial applications.

Does Carbon tetrachloride have any additional names?

Tetrachloromethane, Carbon Tet, Benziform

What are the known health effects?

High exposure to carbon tetrachloride can cause liver, kidney, and central nervous system damage. These effects can occur after ingestion or breathing carbon tetrachloride, and possibly from exposure to the skin.

Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

How does exposure occur?

Exposure occurs mainly from breathing air, drinking water, or coming in contact with soil that is contaminated with it.

Exposure can be reduced by discarding any products containing carbon tetrachloride that you may have at home and may have used in the past.

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 Carbon tetrachloride permitted in drinking water is 2 ppb; water supplied by the MLTMUA system has not reported any detections of Carbon tetrachloride.

How can I reduce exposure?

Carbon tetrachloride can be removed from drinking water through reverse osmosis and granulated activated carbon filtration.

Additional information regarding Carbon tetrachloride, including the information referenced, can be found at:

https://www.atsdr.cdc.gov/toxfaqs/tfacts30.pdf https://www.epa.gov/sites/production/files/2016-09/documents/carbon-tetrachloride.pdf