1,2,4-Trichlorobenzene ($C_6H_3Cl_3$)

What is 1,2,4-Trichlorobenzene?

1,2,4-Trichlorobenzene is a man-made colorless liquid that is used as a solvent to dissolve special materials such as oils, waxes, resins, greases, and rubber. It is also used frequently to produce dyes and textiles.

Does 1,2,4-Trichlorobenzene have any additional names?

1,2,4-TCB

What are the known health effects?

Exposure to high levels of 1,2,4-Trichlorobenzene may cause changes in the liver, kidneys, and adrenal glands. There is currently no evidence that it has a potential to cause cancer from a lifetime exposure in drinking water.

How does exposure occur?

The general population may be exposed to 1,2,4-Trichlorobenzene by inhaling air and through the ingestion of food and drinking water. 1,2,4-Trichlorobenzene has been detected in groundwater and surface water. It tends to evaporate from water but can also bind to suspended solids and sediment in water. High levels of 1,2,4-Trichlorobenzene are often detected in fish living in contaminated waters because it can accumulate in fatty tissue.

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 1,2,4-Trichlorobenzene permitted in drinking water is 9 ppb; 1,2,4-Trichlorobenzene is not currently detected in water supplied to MLTMUA customers.

How can I reduce exposure?

1,2,4-Trichlorobenzene can be removed from drinking water by Granulated Activated Carbon filtration.

Additional information regarding 1,2,4-Trichlorobenzene, including the information referenced, can be found at:

https://www.atsdr.cdc.gov/toxprofiles/tp199.pdf

https://www.epa.gov/sites/production/files/2016-09/documents/1-2-4-trichlorobenzene.pdf