

Dichlorobenzenes (C₆H₄ CL₂)

What are Dichlorobenzenes?

Dichlorobenzenes do not occur naturally in the environment. O-Dichlorobenzene is a colorless to pale yellow liquid used to make herbicides. M-Dichlorobenzene is a colorless liquid used to make herbicides, insecticides, medicine, and dyes. P-Dichlorobenzene, the most important of the three isomers, is a colorless to white solid with a strong pungent odor. When exposed to air, it slowly changes from a solid to a vapor.

P-Dichlorobenzene enters the environment when it is used in mothballs and in toilet-deodorizer blocks. Some O- and M-Dichlorobenzenes are released into the environment when used to make herbicides and when people use products that contain these chemicals. Dichlorobenzenes do not dissolve easily in water, the small amounts that enter water quickly evaporate into the air.

Do Dichlorobenzenes have any additional names?

There are three forms (or isomers) of Dichlorobenzenes: O-Dichlorobenzene (1,2-Dichlorobenzene), M-Dichlorobenzene (1,3-Dichlorobenzene), and P-Dichlorobenzene (1,4-Dichlorobenzene).

What are the known health effects?

Some people who drink water containing dichlorobenzenes well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

How does exposure occur?

You may be exposed to P-dichlorobenzene by breathing vapors from products used in home or in buildings, such as air fresheners, mothballs, and toilet-deodorizer blocks. O- and M-dichlorobenzene are not found in the air of homes and buildings because these chemicals are not used in household products.

Is this contaminant regulated?

Yes, and water supplied to customers of Mount Laurel MUA is in compliance with USEPA and NJDEP requirements. The USEPA has set an MCL of 600 ug/L (ppb) for O-Dichlorobenzene in drinking water and 75 ug/L (ppb) of P-Dichlorobenzene in drinking water. The USEPA has not set an MCL for M-Dichlorobenzene, however, the NJDEP has set an MCL of 600 ug/L (ppb) of M-Dichlorobenzene in drinking water; water supplied to MLTMUA customers has not detected any Dichlorobenzenes.

How can I reduce exposure?

Dichlorobenzenes can be removed from drinking water through granular activated carbon filtration.

Additional information for Dichlorobenzenes, including the information referenced, can be found at:

https://iris.epa.gov/static/pdfs/0408_summary.pdf

<https://www.atsdr.cdc.gov/toxprofiles/tp10.pdf>