

Hexachlorobenzene (C₆Cl₆)

What is Hexachlorobenzene ?

Hexachlorobenzene is a fungicide that was used in the US until 1984. It has not been commercially produced in the US since the late 1970's. Hexachlorobenzene is a white crystalline solid that does not occur naturally in the environment. Although not currently manufactured in the US, it is formed as a waste product during the manufacture of other chemicals such as trichloroethylene and tetrachloroethylene and is a contaminant in some pesticides. Small amounts can also be produced during combustion of municipal waste.

Does Hexachlorobenzene have any additional names?

Perchlorobenzene, Benzene hexachloride, HCB, BHC

What are the known health effects?

Some people who drink water contaminated with hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.

How does exposure occur?

Hexachlorobenzene is very slow to break down in air and is subject to long-range transport in the atmosphere. It does not dissolve easily in water. Once in water, it binds to sediments and settles to the bottom. Hexachlorobenzene sticks strongly to soil and can be slowly degraded by microorganisms. It is highly bioaccumulated by animals that live in contaminated water.

The main route of exposure for the general public is from the ingestion of food, typically low levels.

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 Hexachlorobenzene permitted in drinking water is 1 ppb; water supplied by the MLTMUA system has not reported any detections of Hexachlorobenzene .

How can I reduce exposure?

Hexachlorobenzene in drinking water can be removed at point of use by granular activated carbon filtration.

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

<https://www.atsdr.cdc.gov/ToxProfiles/tp90.pdf>

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