

# Heptachlor (C<sub>10</sub>H<sub>5</sub>Cl<sub>7</sub>) & Heptachlor Epoxide (C<sub>10</sub>H<sub>5</sub>Cl<sub>7</sub>O)

## **What is Heptachlor & Heptachlor Epoxide?**

Heptachlor is a manufactured chemical and does not occur naturally. It is a pure white powder that smells like mothballs. Heptachlor was used extensively in the past for killing insects in homes, buildings, and on food crops, especially corn. These uses stopped in 1988. Currently it can only be used for fire ant control in power transformers.

Heptachlor epoxide is also a white powder. Bacteria and animals break down heptachlor to form heptachlor epoxide. The epoxide is more likely to be found in the environment than heptachlor.

Heptachlor does not dissolve easily in water, heptachlor epoxide dissolves more easily. They stick strongly to soil particles and evaporate slowly to air. Heptachlor epoxide can stay in the soil and water for many years. Plants can take up heptachlor from the soil. Levels of heptachlor and heptachlor epoxide can build up in the tissues of fish and cattle.

## **Does Heptachlor & Heptachlor Epoxide have any additional names?**

Heptagran, Basaklor, Drinox, Soleptax, Termide, and Velicol 104

## **What are the known health effects?**

Some people who drink heptachlor and heptachlor epoxide in drinking water in excess of their MCLs over many years could experience liver damage and may have an increased risk of getting cancer.

## **How does exposure occur?**

Exposure may occur by eating fish, dairy products, and fatty meats from animals exposed to heptachlor in their food. Breast milk from mothers who had high exposures can expose breastfed infants.

## **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 Heptachlor & Heptachlor Epoxide permitted in drinking water is 0.4 ppb and 0.2 ppb respectively; water supplied by the MLTMUA system has not reported any detections of Heptachlor or Heptachlor Epoxide.

## **How can I reduce exposure?**

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

**Additional information regarding Heptachlor & Heptachlor Epoxide, including the information referenced, can be found at:**

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

<https://www.atsdr.cdc.gov/toxprofiles/tp12.pdf>