

Benzene (C₆H₆)

What is Benzene?

Benzene is a colorless or light yellow liquid at room temperature. It has a sweet odor and is highly flammable. Benzene evaporates quickly in air. It dissolves only slightly in water and will float on top of water.

Benzene is formed from both natural processes and human activity. Natural sources of benzene include volcanoes and forest fires. Benzene is also a natural part of crude oil, gasoline, and cigarette smoke.

It is widely used in the United States and ranks in the top 20 chemicals for production volume. Benzene is used to make plastics, resins, and nylon and synthetic fibers. It is also used to make lubricants, rubbers, dyes, detergents, drugs, and pesticides.

Does Benzene have any additional names?

Benzol (outdated German name); 1,3,5-Cyclohexatriene (rarely used)

What are the known health effects?

Eating or drinking foods containing high levels of benzene can cause vomiting, irritation of the stomach, dizziness, sleepiness, convulsions, rapid heart rate, and death.

Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets and may have an increased risk of getting cancer.

How does exposure occur?

Leaks from underground storage tanks or from hazardous waste sites containing benzene can contaminate well water. Exposure typically occurs by breathing outdoor air containing low levels of benzene from tobacco smoke, automobile service stations, exhaust from motor vehicles, and industrial emissions.

Is this contaminant regulated?

Yes, and water supplied to Mount Laurel MUA customers is in compliance with USEPA requirements. The maximum concentration of Benzene permitted in drinking water is 1 ppb; water supplied by the MLTMUA system has not detected Benzene.

How can I reduce exposure?

Benzene can be removed from drinking water by granulated activated carbon filtration or reverse osmosis.

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

<https://www.atsdr.cdc.gov/toxprofiles/tp3.pdf>

<https://emergency.cdc.gov/agent/benzene/basics/facts.asp>