



CHLOROBENZENE

What is chlorobenzene?

Chlorobenzene is a man-made colorless liquid that burns quickly. It has a pleasant smell like the smell of almonds. Some of it will dissolve in water. It also turns into a vapor and goes into the air. Chlorobenzene is not found in nature.

Where can chlorobenzene be found and how is it used?

Chlorobenzene production in the United States has declined by more than 60% from its peak in 1960. In the past, chlorobenzene was used to make phenol and DDT. Today, it is still used to produce pesticides and other chemicals. Chlorobenzene may also be used to degrease car parts.

Chlorobenzene sent into the air is slowly broken down by other chemicals and sunlight. It can be removed from the air by rain. In water, chlorobenzene will quickly turn into a vapor, or be broken down by bacteria. When it enters soil, most of it is broken down quickly by bacteria and the rest will turn into a vapor or leach into groundwater.

How can people be exposed to chlorobenzene?

You could be exposed to chlorobenzene through:

- **Breathing** the chemical. People who work in places where chlorobenzene is processed or handled are at greatest risk. If you live near a waste site, you could be exposed to vapors in the air.
- **Eating or drinking** food or water that has been in contact with chlorobenzene. If you live near a waste site, you could be exposed from water contaminated by chlorobenzene.
- **Touching soil** contaminated with chlorobenzene. This happens to people who live near a waste site or a factory. This is uncommon.
- **Eye Contact** by splashing chlorobenzene in the eyes. This could occur to someone who works at a factory that makes or uses chlorobenzene.

How can chlorobenzene affect my health?

When chlorobenzene enters your body, most of it leaves from your lungs when you breathe. It also leaves the body through urine. It is not known whether chlorobenzene causes cancer in people. In animal studies, it did not cause cancer in rats and mice. In male rats, pre-cancerous growths were found on the liver.

Poison Control Center 24/7 Emergency Contact Number: 1-800-222-1222
DPH 24/7 Contact Number: 1-888-295-5156



Frequently Asked Questions

A study showed that workers exposed to high levels of chlorobenzene had various symptoms such as headaches, feeling numb or tired, upset stomach, and vomiting. Since workers may have also been exposed to other chemicals at the same time, it is not known if chlorobenzene alone caused these problems.

Chlorobenzene is a solvent, a substance used to dissolve other substances. Exposure to most solvents used in industry can cause mild to severe problems with the nervous system.

How is chlorobenzene poisoning treated?

Doctors will treat the symptoms of chlorobenzene exposure. There is no specific antidote to fight the poisoning effects of chlorobenzene.

What should I do if exposed to chlorobenzene?

- **If chlorobenzene gets in your eyes**, flush your eyes with large amounts of water for at least 15 minutes. Lift your upper and lower lids from time to time.
- **If you touch chlorobenzene**, quickly remove contaminated clothing and wash contaminated skin with large amounts of soap and water.
- **If you breathe chlorobenzene**, move to an area with fresh air. Get medical attention right away. It may be necessary for someone to perform cardio-pulmonary resuscitation (CPR) or rescue breathing.

What factors limit use or exposure to chlorobenzene?

Certain industrial or manufacturing work sites are the most common sites for chlorobenzene exposure. Workers should follow safe practices. Places where chlorobenzene can be released should be closed off to prevent accidental and dangerous releases. Employees should have a source of fresh air and wear protective masks and clothing in case of exposure. Employees should wash their clothes at the end of each shift, and especially following any exposure to chlorobenzene.

Is there a medical test to show whether I was exposed to chlorobenzene?

Tests can show if chlorobenzene is in your urine, blood, and body fat. Other tests on the liver, lungs, and kidneys can show the impact of chlorobenzene exposure. A doctor may ask the patient questions to determine if the brain was affected. Some symptoms are memory problems, changing moods, headaches, trouble with concentration, or trouble sleeping.

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Technical information for chlorobenzene

CAS Number: 108-90-7

Chemical Formula: C₆H₅Cl

Carcinogenicity (EPA): Not classified.

MCL (Drinking Water): 0.1 parts per million (ppm)

OSHA Standards: 75 ppm (350 mg/m³)

NIOSH: none

ACGIH: 10 ppm (46 mg/m³)

Resources

Agency for Toxic Substances and Disease Registry (ATSDR). 2020. *Toxicological profile for chlorobenzene.*

<https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=489&tid=87>

Agency for Toxic Substances and Disease Registry (ATSDR). 2020. *ToxFAQs for chlorobenzene.*

<https://wwwn.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=488&toxid=87>