# Chloroethane - ToxFAQs™

### What is chloroethane?

Chloroethane is a colorless gas at room temperature and pressure. It has a characteristically sharp pungent smell. It is a liquid when stored in pressurized containers; however, the liquid evaporates quickly when exposed to room air.



Chloroethane was used in leaded gasoline, but strict new government regulations have reduced that use dramatically. It can be used as a solvent and degreaser and in the production of cellulose, dyes, medicinal drugs, and other chemicals. Chloroethane is also used to numb the skin before medical procedures such as ear piercing and skin biopsies and after insect bites/stings and sports injuries.

### What happens to chloroethane in the environment?

Chloroethane can get into the environment from factories that use or make it.

Once in the air, chloroethane gets broken down fairly rapidly (about half disappears within 40 days) by reacting with other chemicals in the air. Chloroethane in water or soil will quickly evaporate into the air. Small amounts may travel through the soil and can enter the groundwater. Chloroethane does not build up in large amounts in plants or animals.

### How can I be exposed to chloroethane?

Most people are not likely exposed to large amounts of chloroethane. If your water has chloroethane in it, household activities such as showering, bathing, or washing clothes or dishes may expose you to low levels of this chemical. Chloroethane found in soils can become a vapor and enter your home, usually through a basement; this is known as vapor intrusion. Workers who work in places where chloroethane is used or produced, such as in printing and publishing, painting companies, chemical manufacturing, cement manufacturing, pulp and paper, oil and gas production, petroleum refining, waste disposal, agriculture, and electric services, may be exposed to higher levels. Medical workers who use chloroethane on their patients' skin for pain relief before a procedure or people who apply it themselves on their skin for muscle or joint pain may have higher level exposure.

People who intentionally misuse chloroethane by inhaling its vapor for narcotic effects are exposing themselves to high levels.

## How can chloroethane affect my health?

Brief exposure to high levels can produce temporary feelings of intoxication. At higher levels, such as those associated with intentional misuse, it can cause dizziness, delayed reaction time,

Intentional inhalation of chloroethane vapor can cause feelings of intoxication, tremors, unconsciousness, or death.

slurred speech, sleep and movement disorders, altered reflexes, tremors, hallucinations, unconsciousness, and even death. It can also cause stomach cramps, nausea, vomiting, and eye irritation. Numbness will occur with brief skin exposure, but frostbite may occur if it is applied for too long.

In animal studies, baby mice exposed to chloroethane during pregnancy had delayed development of the skull bones. Breathing in large amounts of chloroethane had effects on the female reproductive system in mice and dogs.

Agency for Toxic Substances and Disease Registry Office of Innovation and Analytics, Toxicology Section



# Chloroethane

#### Can chloroethane cause cancer?

The ability of chloroethane to cause cancer in people has not been well studied.

Mice and rats exposed to chloroethane for a long time have developed cancer, but the type of cancer is different in males and females and in the different animal species.

The <u>U.S. Department of Health and Human Services (DHHS)</u> has not evaluated whether chloroethane is carcinogenic (causes cancer).

The <u>U.S. Environmental Protection Agency (EPA)</u> has provisionally classified chloroethane as likely to be carcinogenic to humans.

The <u>International Agency for Research on Cancer (IARC)</u> has determined that chloroethane is not classifiable as to its carcinogenicity (ability to cause cancer).

### Can I get a medical test to check for chloroethane?

Chloroethane can be measured in the blood and in exhaled breath. The tests show recent (not long-term) exposure. These tests cannot predict whether you will have health problems from the exposure. Doctor's offices do not routinely offer these tests. If you have health concerns regarding a known or potential exposure to this chemical, or any other chemical, talk to your doctor or nurse or call poison control.

### How can I protect myself and my family from chloroethane?

If you are pregnant, avoid using products that contain chloroethane. Do not sniff, breathe in, or intentionally misuse chloroethane. If applying chloroethane to yourself for muscle or joint pain, do so in a well-ventilated area or outside.

Store all products containing chloroethane safely and keep them away from children.

If you feel sick after using chloroethane on your skin or think you or your children have been exposed to chloroethane or any other chemical, talk to your health care provider or call poison control.

#### For more information:

Call **CDC-INFO** at 1-800-232-4636, or submit your question online at <u>https://wwwn.cdc.gov/dcs/ContactUs/Form</u>

Go to ATSDR's Toxicological Profile for Chloroethane: https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=827&tid=161

Go to ATSDR's Toxic Substances Portal: https://wwwn.cdc.gov/TSP/index.aspx

Find & contact your ATSDR Regional Representative at <u>https://www.atsdr.cdc.gov/regional-</u>offices/index.html



