

Bis(Chloromethyl) Ether- ToxFAQs™

What is bis(chloromethyl) ether?

Bis(chloromethyl) ether is a man-made chemical that does not occur naturally. It is a clear liquid with a strong unpleasant odor. Bis(chloromethyl) ether dissolves easily in water.

In the past, Bis(chloromethyl) ether was used to make several types of polymers, resins, and textiles, but these uses have stopped. The small quantities of bis(chloromethyl) ether that are produced in the United States are only used in enclosed systems to make other chemicals. A small amount may be formed as a byproduct during the production of another chemical.



What happens to bis(chloromethyl) ether in the environment?

Bis(chloromethyl) ether does not last long in the environment. It evaporates quickly into air where it is broken down by reactions with other chemicals and sunlight. It is also removed from air by rain. In water, bis(chloromethyl) ether dissolves and is very quickly broken-down. In soil, some will evaporate to the air, but most will be broken-down by reacting with water in the soil. Bis(chloromethyl) ether does not accumulate (build up) in plants or animals.

How can I be exposed to bis(chloromethyl) ether?

Bis(chloromethyl) ether has very limited use and is quickly broken down in the environment. Therefore, you are not likely to be exposed to this chemical. The most likely way to be exposed is by breathing it in contaminated air if you work at or live near an industrial facility that makes or uses this chemical.

How can bis(chloromethyl) ether affect my health?

Workers exposed to air containing bis(chloromethyl) ether had coughing, bronchitis, and difficulty breathing. However, the air also contained other chemicals that are known to cause breathing problems.

In animals, breathing bis(chloromethyl) ether caused breathing problems and lung damage. Extreme irritability was also seen in rats and hamsters. Skin contact with bis(chloromethyl) ether caused irritation, swelling and severe damage.

Exposure of the general population is very unlikely. Bis(chloromethyl) ether has very limited use and quickly breaks down in the environment.

Bis(Chloromethyl) Ether

Can bis(chloromethyl) ether cause cancer?

Studies have shown breathing bis(chloromethyl) ether during work causes lung cancer in some people.

Nose and lung cancers were also seen in animals after they breathed bis(chloromethyl) ether for short or long periods of time.

The [U.S. Department of Health and Human Services \(DHHS\)](#) has classified bis(chloromethyl) ether as a known human carcinogen (causing cancer in people).

The [U.S. Environmental Protection Agency \(EPA\)](#) has determined that bis(chloromethyl) ether is a known human carcinogen.

The [International Agency for Research on Cancer \(IARC\)](#) has concluded that bis(chloromethyl) ether is carcinogenic to humans.

Can I get a medical test to check for bis(chloromethyl) ether?

There are no specific tests to show if you have been exposed to bis(chloromethyl) ether. Bis(chloromethyl) ether breaks down very quickly in your body. Therefore, if you are exposed, it would be difficult to measure.

How can I protect myself and my family from bis(chloromethyl) ether?

Most people are very unlikely to come into contact with bis(chloromethyl) ether. Therefore, no special steps need to be taken to avoid exposure to this chemical. Children should not play near industrial facilities that make or use chemicals.

For more information:



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

Go to ATSDR's Toxicological Profile for Bis(Chloromethyl) Ether: <https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=919&tid=188>

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

Find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html