

Bis(2-Chloroethyl) Ether - ToxFAQs™

What is bis(2-chloroethyl) ether?

Bis(2-chloroethyl) ether is a man-made chemical that does not occur naturally. It is a colorless, nonflammable liquid with a strong unpleasant odor. It dissolves easily in water, and some will slowly evaporate to the air.

Bis(2-chloroethyl) ether is mostly used as an intermediate to make pesticides and other chemicals. It can also be used as a solvent, cleaner, component of paint and varnish, and rust inhibitor.



What happens to bis(2-chloroethyl) ether in the environment?

In the environment, bis(2-chloroethyl) ether will slowly evaporate from surface water and soil into the air. Because bis(2-chloroethyl) ether dissolves in water, it is removed from the air by rain creating a cycle between water, soil, and air. Bis(2-chloroethyl) ether does not stick strongly to the soil so some may move into the groundwater. Bis(2-chloroethyl) ether can be broken down by bacteria in water and soil. It does not build up (accumulate) in plants or animals.

How can I be exposed to bis(2-chloroethyl) ether?

The most likely way to be exposed to bis(2-chloroethyl) ether is by drinking water contaminated with it. You may also be exposed to low levels if you live near a waste site or industrial facility containing bis(2-chloroethyl) ether by either breathing contaminated air or touching contaminated soil.

You may be exposed if you work at a facility that uses bis(2-chloroethyl) ether.

How can bis(2-chloroethyl) ether affect my health?

People who breathed bis(2-chloroethyl) ether in the air for a short period of time had irritated noses, throats, and eyes.

Similar irritation effects were seen in animal studies.

Guinea pigs that breathed high levels of bis(2-chloroethyl) ether had irritated noses, skin, and lungs. In addition, some guinea pigs moved slower than normal, became unconscious (passed out), or died.

Breathing bis(2-chloroethyl) ether can irritate your nose, throat and eyes.

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Can bis(2-chloroethyl) ether cause cancer?

No information is available on the ability of bis(2-chloroethyl) ether to cause cancer in humans.

One study showed mice that ate large amounts of bis(2-chloroethyl) ether for a long period of time developed liver tumors.

The [Department of Health and Human Services \(HHS\)](#) has not evaluated whether bis(2-chloroethyl) ether can cause cancer in humans.

The [U.S. Environmental Protection Agency \(EPA\)](#) has classified bis(2-chloroethyl) ether as a probable human carcinogen (causing cancer in people).

The [International Agency for Research on Cancer \(IARC\)](#) has not evaluated whether bis(2-chloroethyl) ether can cause cancer in humans.

Can I get a medical test to check for bis(2-chloroethyl) ether?

There is currently no test to show if you have been exposed to bis(2-chloroethyl) ether.

How can I protect myself and my family from bis(2-chloroethyl) ether?

Most people don't need to take any special steps to avoid bis(2-chloroethyl) ether in their daily lives. If you use well water and live near a hazardous waste site or a facility that uses bis(2-chloroethyl) ether, you can have your water tested and take precautions if necessary. Children should not play near factories or hazardous waste sites to avoid coming in contact with bis(2-chloroethyl) ether.

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(2-Chloroethyl) Ether: <https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=817&tid=159>

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

