

US EPA ARCHIVE DOCUMENT

Hexachlorobutadiene

CAS Number: 87-68-3

What is hexachlorobutadiene?

Hexachlorobutadiene is a colorless liquid that smells like turpentine. It is formed when making other chemicals. This is called a by-product.

What is hexachlorobutadiene used for?

Most of the hexachlorobutadiene in the United States is imported from Germany. It has a number of uses. It is used to make rubber, it is used as a solvent and to make lubricants, in gyroscopes, as a heat transfer liquid, and as a hydraulic fluid.

How can hexachlorobutadiene enter and leave your body?

Hexachlorobutadiene can enter your body through breathing contaminated air, eating contaminated food, or drinking contaminated water. It can leave the body through urine.

How can you be exposed to hexachlorobutadiene?

You can be exposed to hexachlorobutadiene if you work in an industry that makes or uses hexachlorobutadiene. For example, a rubber manufacturer may use this chemical. If you work at a hazardous waste site where the chemical is disposed, you can breathe contaminated air. You can also be exposed to hexachlorobutadiene by eating contaminated food like fish or by drinking contaminated water.

What are the health effects of exposure to

hexachlorobutadiene?

No studies have looked at the health effects of hexachlorobutadiene in humans. But animal studies show that mice that breathed large doses of hexachlorobutadiene for a short period of time experienced nose irritation.

None of the studies looked at the effects of breathing low doses of hexachlorobutadiene over a long period of time.

Rats and mice that drank low doses of hexachlorobutadiene over the short- and long-term showed kidney damage and liver damage.

Other studies show that rabbits exposed to hexachlorobutadiene through the skin for a short period of time showed kidney and liver damage.

The U.S. Environmental Protection Agency (EPA) believes hexachlorobutadiene can possibly cause cancer. One animal study showed that rats exposed to low doses of hexachlorobutadiene developed kidney tumors. However, it is not known if this exposure will cause cancer in humans.

What levels of exposure can result in harmful health effects?

No information available.

Where can you get more information?

Contact your state health or environmental department, or:

Agency for Toxic Substances and Disease Registry

Division of Toxicology
1600 Clifton Road, N.E., E-29
Atlanta, Georgia 30333

References

1. Agency for Toxic Substances and Disease Registry (ATSDR). *Toxicological Profile for Hexachlorobutadiene*. Atlanta, GA: U.S. Department of Health and Human Services, 1995.
2. U.S. Environmental Protection Agency. *Health Effects Notebook for Hazardous Air Pollutants, Hexachlorobutadiene*. Office of Air Planning & Standards, 1994.