What is 1,2-dibromo-3-chloropropane?

1,2-Dibromo-3-chloropropane is a man-made chemical. It is a colorless liquid with a strong smell. Small amounts can be tasted in water.

1,2-Dibromo-3-chloropropane was used in the past to kill pests that harmed crops. In 1979, this use was stopped throughout the United States, except Hawaii. Hawaii stopped using it in 1985.

1,2-Dibromo-3-chloropropane is used to make other chemicals.

What happens to 1,2-dibromo-3-chloropropane in the environment?

Most of the 1,2-dibromo-3-chloropropane in surface water (ponds or lakes) will evaporate into the air within several days to a week. Once in the air, it takes several months for 1,2-dibromo-3-chloropropane to break down. In soil, some 1,2-dibromo-3-chloropropane will evaporate into the air and some will go into the groundwater or stay in the soil for several years.

How can I be exposed to 1,2-dibromo-3-chloropropane?

You are not likely to come into contact with 1,2-dibromo-3-chloropropane because it is no longer used in the United States. It is possible that you could be exposed to very small amounts from eating food or drinking water that contains 1,2-dibromo-3-chloropropane. You could also be exposed by breathing air or touching soil at or near agricultural areas where 1,2-dibromo-3-chloropropane was used in the past. If you work in an industry that uses 1,2-dibromo-3-chloropropane, you may be exposed to this chemical.

How can 1,2-dibromo-3-chloropropane affect my health?

Studies show that some workers who breathed high levels of 1,2-dibromo-3-chloropropane had less or no sperm, which decreased their ability to have children. For many of these workers, sperm function was restored many years after exposure. Headaches, nausea, lightheadedness, and weakness were also seen in these workers. Drinking water contaminated with low levels of 1,2-dibromo-3-chloropropane did not affect the ability of people to reproduce or increase the number of birth defects.

Animals that breathed or ate 1,2-dibromo-3-chloropropane had damage to male reproductive organs and had decreased fertility. In addition, damage was observed in the stomach, liver, kidneys, brain, spleen, blood, and lungs.

Exposure of the general population to 1,2-dibromo-3-chloropropane is not likely. Breathing high levels may damage the male reproductive system, although it may be reversible.
1,2-Dibromo-3-Chloropropane

Can 1,2-dibromo-3-chloropropane cause cancer?

No increase in cancer was seen in workers exposed to 1,2-dibromo-3-chloropropane or in people who had increased levels in their drinking water.

Several studies in animals exposed to 1,2-dibromo-3-chloropropane for a long period of time found cancer of the nose, stomach, kidneys, and skin.

The U.S. Department of Health and Human Services (DHHS) has classified 1,2-dibromo-3-chloropropane as reasonably anticipated to be a human carcinogen (cancer causing).

The U.S. Environmental Protection Agency (EPA) has not evaluated whether 1,2-dibromo-3-chloropropane can cause cancer in people.

The International Agency for Research on Cancer (IARC) has classified 1,2-dibromo-3-chloropropane as possibly carcinogenic to humans.

Can I get a medical test to check for 1,2-dibromo-3-chloropropane?

There is no reliable medical test that can be used to determine if you have been exposed to 1,2-dibromo-3-chloropropane.

How can I protect myself and my family from 1,2-dibromo-3-chloropropane?

Most people don’t need to take any special steps to avoid 1,2-dibromo-3-chloropropane in their daily lives. Keep children from playing in areas where pesticides were used and near hazardous waste sites to avoid coming in contact with 1,2-dibromo-3-chloropropane.

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 1,2-Dibromo-3-Chloropropane: https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=852&tid=166

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