

US EPA ARCHIVE DOCUMENT

Methoxychlor

CAS Number: 72-43-5

What is methoxychlor?

Methoxychlor is a man-made chemical that looks like a pale-yellow powder and has a fruity or musty odor.

What is methoxychlor used for?

Methoxychlor is used to kill insects such as flies, mosquitoes, cockroaches, chiggers and others. It is also used on food crops, as an insecticide on farm animals (livestock), animal feed, grain, home gardens and pets.

How can methoxychlor enter and leave your body?

Methoxychlor can enter your body when you breathe contaminated air or if you eat contaminated food. It can leave the body very quickly. You can also get it on your skin if you touch it. Once in your body, methoxychlor can change into other chemicals and be released from the body.

How can you be exposed to methoxychlor?

Sometimes low doses of methoxychlor are found in food from when it was applied to farm crops. If you work in a factory that makes methoxychlor you are more likely to breathe it in the air or get it on your skin. You could also be exposed by way of air, soil or water if you work on a farm that uses methoxychlor on farm crops or farm animals. If you use gardening products or pet sprays that contain methoxychlor you could be exposed to above average levels.

Methoxychlor may be present in higher levels

in air, water and soil near hazardous waste sites that dispose of the substance. If you work in or near these sites, your exposure could be greater.

What are the health effects of exposure to methoxychlor?

There isn't a lot of information on how methoxychlor can affect your health. Studies show that animals exposed to high doses of methoxychlor experienced tremors, convulsions and seizures. Really high doses of methoxychlor could cause some damage to your body's nervous system. Unless you are exposed to high doses, methoxychlor will leave the body so quickly that this type of damage is not likely to happen.

The International Agency for Research on Cancer has determined that there is not enough information or evidence to show that methoxychlor causes cancer.

What levels of exposure have resulted in harmful health effects?

The U.S. Environmental Protection Agency (EPA) has set a reference dose (RfD) for methoxychlor at 0.005 milligrams per day. The RfD is an estimate of the highest daily oral exposure humans can be exposed to without resulting in harmful effects. EPA believes that consuming this amount or less over a lifetime will not cause chronic or noncancer effects. EPA has also set a limit of 0.04 parts per million (ppm) of methoxychlor in water. Children should not drink water containing more than 0.05 ppm for more than one day. In addition, adults should not drink water containing more than 0.2 ppm for up to seven

years. The Occupational Safety and Health Administration has established a work place exposure limit for methoxychlor at 15 milligrams per cubic meter (mg/m³) for an 8-hour work day and 40-hour work week.

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 Methoxychlor*. Atlanta, GA: U.S. Department of Health and Human Services, 1995.
2. Reigart, Routt J. and Roberts, James R. Medical University of South Carolina. *Recognition and Management of Pesticide Poisonings*. Fifth ed. Washington, D.C.: U.S. Environmental Protection Agency, Office of Pesticide Programs, 1999.
3. U.S. Environmental Protection Agency. *Health Effects Notebook for Hazardous Air Pollutants, Methoxychlor*. Office of Air Planning & Standards, 1994.