



DIMETHOATE

What is DIMETHOATE?

Dimethoate is an insecticide that is a white solid with a strong odor. Dimethoate has a crystalline structure, which means that it has a form resembling sand or sugar.

Where can Dimethoate be found and how is it used?

Dimethoate was first made in 1956 to kill or control insects such as the housefly. Today it is made in many countries for use in farming.

There is very little information about Dimethoate levels in the environment. It does not appear to build up in soil. It has not been found in drinking water. Insecticides containing Dimethoate are used on fruits, vegetables, cotton, tobacco, ornamentals, olives and sunflowers.

How can people be exposed to Dimethoate?

Most people will not be exposed to Dimethoate from air or water. Levels in food are very low. The main risk of exposure is if you work where Dimethoate is made or used.

You could be exposed to Dimethoate through:

Breathing Dimethoate if you work where it is made or used.

Drinking Dimethoate by accident. Drinking Dimethoate is unlikely.

Touching Dimethoate if you work where it is made or used.

Eye Contact with Dimethoate if you work where it is made or used.

How does Dimethoate work and how can it affect my health?

When Dimethoate is breathed or touched, it can cause fast and fatal poisoning, including a headache, sweating, or feeling like you will throw up. Other symptoms are diarrhea, loss of coordination and muscle twitching. People with long-term exposure to high levels can suffer from personality changes, including depression, anxiety or irritability. These central nervous system effects can last for months or years. Pregnant women who inhale or touch Dimethoate may suffer mutations to their developing fetuses.

How is Dimethoate poisoning treated?

Treatment will depend on the type of exposure. There are some drugs that may be given for Dimethoate poisoning. A doctor may suggest vomiting, stomach pumping or other treatments.

What should I do if exposed to Dimethoate?

If you touch Dimethoate, wash or shower right away. Workers who touch Dimethoate should wash any areas of the body that may have contacted it. Change into clean clothing. Protect family members by not taking exposed clothing home. Exposed work clothes should be cleaned by someone who has been told of the hazards of exposure.

If you breathe Dimethoate, move to fresh air. Get medical attention.

If you get Dimethoate in your eyes, remove contact lenses if you can do it easily. Rinse your eyes with plenty of water for at least 15 minutes. Get medical help.



What factors limit use or exposure to Dimethoate?

Avoid skin contact. Follow all safety directions. Suppliers/manufacturers can provide recommendations for protective gloves, clothing, footwear and headgear.

Is there a medical test to show whether I've been exposed to Dimethoate?

A blood test can determine Dimethoate exposure.

Technical Information for Dimethoate

CAS Number: 60-51-5

Chemical Formula: $C_5H_{12}NO_3PS_2$

Carcinogenicity (EPA): not available.

MCL (Drinking Water): There is no MCL for Dimethoate.

OSHA Standards: There are no occupational limits.

NIOSH Standards: There are no occupational limits.

References and Sources

American Conference of Governmental Industrial Hygienists (ACGIH). 2003. *Guide to Occupational Exposure Values*. Cincinnati, OH.

NIOSH Pocket Guide to Chemical Hazards. 2003. Atlanta, GA: U.S. Department of Health and Human Services.

U.S. EPA, IRIS Summary for Dimethoate, <http://www.epa.gov/IRIS/substi/0044.htm> (Accessed 10/29/09)