

BIFENTHRIN GENERAL FACT SHEET

What is bifenthrin?

Bifenthrin is an insecticide in the pyrethroid family. Pyrethroids are manmade versions of pyrethrins, which come from chrysanthemum flowers. Bifenthrin is used on various agricultural crops and in homes.

Bifenthrin was first registered for use by the United States Environmental Protection Agency (U.S. EPA) in 1985.

What are some products that contain bifenthrin?

Products containing bifenthrin come in many forms, including sprays, granules, and aerosols. There are over 600 products containing bifenthrin available in the United States.



Chrysanthemum flower

Always follow label instructions and take steps to avoid exposure. If any exposures occur, be sure to follow the First Aid instructions on the product label carefully. For additional treatment advice, contact the Poison Control Center at 1-800-222-1222. If you wish to discuss a pesticide problem, please call 1-800-858-7378.

How does bifenthrin work **?**

Bifenthrin interferes with the nervous system of insects when they eat or touch it. It's more toxic to insects than it is to people because insects have lower body temperatures and smaller body size.



How might I be exposed to bifenthrin?

You could be exposed to bifenthrin if you touch it, eat it, or breathe it in. You may be exposed if you breathe in the spray mist during an application, or eat some of it if you smoked or ate without washing your hands after you applied a product. Limit your exposure to bifenthrin by reading the product label and following all of the directions.

What are some signs and symptoms from a brief exposure to bifenthrin **?**

When bifenthrin gets on the skin, it can cause tingling, itching, burning, or numbness at the site of contact. The sensations usually go away within 48 hours. Inhaling bifenthrin can irritate the nose, throat, and lungs. People who ate large amounts of bifenthrin experienced sore throat, nausea, abdominal pain and vomiting almost immediately.

NPIC General Fact Sheets are designed to provide scientific information to the general public. This document is intended to promote informed decision-making. Please refer to the Technical Fact Sheet for more information.



Exposed pets may experience single-episode vomiting or diarrhea, reduced activity, twitching of the ear, paw flicking and increased drooling. Other signs can include hyperactivity followed by incoordination with diarrhea, depression, and dilated pupils. Some veterinarians have reported additional signs such as chewing, head bobbing, partial paralysis, and tremors.

What happens to bifenthrin when it enters the body \mathbf{P}

Bifenthrin is slowly absorbed by the body after being eaten, and most of it is excreted within 3-7 days. Studies indicate that bifenthrin does not absorb through the skin well.

Is bifenthrin likely to contribute to the development of cancer **?**

The U.S. EPA classifies bifenthrin as a possible human carcinogen. This rating was based on studies in mice. Other studies indicate that bifenthrin does not cause cancer when fed to rats.

Has anyone studied non-cancer effects from long-term exposure to bifenthrin m P

Yes, studies have been done using laboratory animals. Bifenthrin did not cause birth defects in rats or rabbits that ate bifenthrin when pregnant. In long-term studies, rats and rabbits had tremors at high doses.

Are children more sensitive to bifenthrin than adults?

While <u>children may be especially sensitive to pesticides</u> compared to adults, there are currently no data showing that children have increased sensitivity specifically to bifenthrin.

What happens to bifenthrin in the environment \mathbf{P}

Bifenthrin is not likely to reach groundwater because it binds tightly to soil. However, soil-bound bifenthrin has the potential to contaminate surface waters through runoff. Bifenthrin on soil surfaces is unlikely to become airborne.





BIFENTHRIN GENERAL FACT SHEET

Can bifenthrin affect birds, fish, or other wildlife?

Bifenthrin is low in toxicity to birds. There are potential risks for birds and mammals that eat aquatic organisms because bifenthrin can last in a long time in the environment and it may accumulate in fish.

Bifenthrin is highly toxic to fish and small aquatic organisms. It's also very highly toxic to bees.

Where can I get more information?

For more detailed information call the National Pesticide Information Center, between 8:00 AM and 12:00 PM Pacific Time (11:00 AM to 3:00 PM Eastern Time), Monday - Friday, at 1-800-858-7378 or visit us on the web at <u>http://npic.orst.edu</u>. NPIC provides objective, science-based answers to questions about pesticides.



Date Reviewed: June 2011

NPIC is a cooperative agreement between Oregon State University and the U.S. Environmental Protection Agency (U.S. EPA, cooperative agreement # X8-83458501). The information in this publication does not in any way replace or supercede the restrictions, precautions, directions, or other information on the pesticide label or any other regulatory requirements, nor does it necessarily reflect the position of the U.S. EPA.

