



Diazinon Facts

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What is Diazinon?

Diazinon is a broad-spectrum insecticide sold by Syngenta Crop Protection. It is used to control a wide variety of agricultural and home and garden pests.

How is diazinon used?

- For more than 40 years, homeowners and professionals have depended on diazinon to protect crops, gardens, lawns, ornamental plants and homes from chewing, stinging, biting and disease-carrying insects.
- Diazinon is currently labeled by the Environmental Protection Agency (EPA) for use by professionals and consumers to control outdoor pests such as fleas, fire ants, cockroaches, chiggers and spiders. It is used by gardeners to control a variety of lawn and garden pests including mealybugs, fruitworms, aphids, beetles and white grubs.
- Pest management professionals also use diazinon to control pests that contaminate food and feed around homes and businesses.

What do consumers think about diazinon?

- A 1998 study of 400 suburban homeowners conducted by Syngenta, revealed that diazinon is the third most recognized brand name in home lawn care and has twice the brand recognition of other lawn insect control products.
- 9 out of 10 users of diazinon stated that they plan to use it again.

What are the benefits of diazinon to the public health?

- In an editorial published along with a research report on childhood asthma, the *New England Journal of Medicine* urged the public to "focus on reducing the population of cockroaches (through) control of sources of food and water, routine cleaning, and regular use of insecticides. *Diazinon effectively controls cockroaches and other insects that can contaminate food with bacteria that can cause food poisoning, dysentery, or diarrhea.*
- Diazinon effectively controls a wide variety of structural and nuisance insects such as spiders, ticks, fleas and fire ants.



- Diazinon effectively controls cockroaches, which helps reduce cases of childhood asthma. And it helps reduce the spread of Lyme disease by controlling ticks on home lawns.

Is diazinon safe?

- Diazinon is one of the most studied compounds on the market. Syngenta agrees with EPA that currently labeled outdoor uses do not present an unreasonable risk to health or the environment. Diazinon is an effective product with a wide margin of safety.
- Syngenta Crop Protection exercises great care in ensuring its products provide safe and effective solutions to pest problems when used according to label directions.
- EPA uses four categories or “signal words” to describe the acute toxicity of a pesticide. All products containing diazinon are in the least acutely toxic category and are labeled CAUTION.

Is diazinon safe to use on my lawn and in my garden?

- Products containing diazinon that are purchased by consumers from retail outlets are produced to be effective when used according to label directions and have a wide margin of safety.
- Many studies have been conducted to determine homeowner’s exposure to pesticide residues from turf applications. In the cases where residues were found, they were many times less than the level that caused health effects in laboratory animals.

Is diazinon safe to use around children?

- Syngenta coordinated its planned withdrawal with the Environmental Protection Agency (EPA), to ensure that the compound meets or exceeds the margins of safety as required by the Food Quality Protection Act (FQPA) during the phase-out period.
- Studies confirm that diazinon is not oncogenic (tumor causing) or teratogenic (causing fetal abnormalities), and does not cause developmental/reproductive effects.



Does diazinon affect drinking water?

- The EPA concluded that diazinon does not pose a concern to ground water-sourced drinking water and Syngenta Crop Protection supports this conclusion.
- Most urban stream detections are associated with storm related surface run-off. The observed maximum concentrations are usually less than 1 ppb (parts per billion) and most detections are less than 0.10 ppb in studies to date - well below levels of environmental concern.

Does diazinon affect fish?

- Diazinon does not bio-accumulate in fish. Fish rapidly metabolize and eliminate diazinon if exposed.
- Studies show diazinon's seasonal and intermittent occurrence is not expected to disrupt the food supply for freshwater fish or salmon.
- Cold water fish species (i.e. lake, brook, rainbow and cutthroat trout) are relatively diazinon tolerant. Salmon response is expected to be similar. The acute toxicity of diazinon ranges from 528 to 2,620 ug/l (ppb). Based on monitored diazinon concentrations in urban streams, of typically less than 1 ppb, these concentrations do not put trout or salmon at risk from direct acute effects of diazinon because the margin of safety ranges between 528 and 2,620.

Does diazinon affect birds?

- In the 1980's, Ciba Geigy (predecessor company to Syngenta) reduced use rates and amended labeling to prohibit the use of the chemical in areas inhabited by birds and waterfowl, and made a number of other refinements to improve quality and environmental safety.