



FREQUENTLY ASKED QUESTIONS (FAQs) ABOUT PERMETHRIN

Q. What is permethrin?

A. Permethrin is a synthetic pyrethroid insecticide that acts in a manner similar to the natural insecticide pyrethrum (pyrethrin) produced by chrysanthemum flowers.

Q. Where is permethrin used?

A. Permethrin has been registered by the Environmental Protection Agency (EPA) since 1977, and is commonly used in mosquito control programs to kill adult mosquitoes. It is also used in household insect foggers and sprays, tick and flea sprays for yards, flea dips and sprays for cats and dogs, termite treatments, agriculture and livestock products, and mosquito abatement products.

Q. How is permethrin applied to control mosquitoes?

A. Permethrin can be applied from aircraft, vehicles on the ground, or by professional applicators on foot. It is applied with ultra-low volume (ULV) spray equipment which releases tiny particles of insecticide solution into the air. The amount of permethrin released is typically less than 3 ounces per acre.

Q. How might I be exposed to permethrin?

A. Most people are not exposed to permethrin. Exposure is most likely for those people living or working near or in a place where permethrin is being sprayed for mosquitoes.

Q. How can permethrin affect my health?

A. Permethrin poses minimal risk to human health when used according to label directions. Since permethrin is applied at very low concentrations, it is unlikely that adverse health effects will occur as a result of its use to control mosquitoes.

Q. What are the health effects of permethrin to chemically sensitive individuals?

A. There is no evidence that short-term exposure to small amounts of permethrin causes any harmful effects in people. However, it is possible that some sensitive individuals might develop short-term allergic reactions. People with existing respiratory conditions, such as asthma, are encouraged to stay indoors during spraying since permethrin may aggravate those conditions.

Q. How likely is permethrin to cause cancer, birth defects, or reproductive effects?

A. It is not known whether permethrin causes cancer, birth defects, or reproductive effects in people. Some effects occurred in laboratory animals that were given large amounts of permethrin. These exposures far exceed the amounts that individuals are likely to receive when permethrin is sprayed for mosquito control.

Q. What happens to permethrin when it enters the environment?

A. Permethrin enters the environment primarily via aerial or ground spraying for the control of mosquitoes and other insect pests. Permethrin binds to soils, and because of this, it is not expected to contaminate ground water. Permethrin has a low to moderate persistence in the environment, but breaks down quickly in sunlight and in water.

Q. What are the ecological effects of permethrin?

A. Permethrin is highly toxic to honeybees. It is also highly toxic to fish and other aquatic life forms. To reduce such risks, EPA has established specific precautions on the label, including restrictions that prohibit the direct application of permethrin to open water or within 100 feet of lakes, streams, rivers, or bays.

Q. Where can I get more information?

A. For health effects information, contact the Virginia Department of Health, Division of Health Hazards Control, 1500 East Main Street, Room 124, Richmond, VA 23219; Phone: 804-786-1763.

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