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**FREQUENTLY ASKED QUESTIONS (FAQs) ABOUT SUMITHRIN**

**Q. What is sumithrin?**

A. Sumithrin is a synthetic pyrethroid insecticide that acts in a manner similar to the natural insecticide pyrethrum (pyrethrin) produced by chrysanthemum flowers. Sumithrin contains piperonyl butoxide and petroleum distillate. Piperonyl butoxide does not directly kill insects, but acts to increase the ability of sumithrin to kill insects.

**Q. Where is sumithrin used?**

A. Sumithrin has been registered by the Environmental Protection Agency (EPA) since 1975, and is used to control adult mosquitoes in residential and outdoor recreational areas. It is also used as an insecticide and miticide in commercial, industrial, and institutional non-food areas, in homes and gardens, in greenhouses, in pet quarters, and on pets.

**Q. How is sumithrin applied to control mosquitoes?**

A. Sumithrin is applied either by aircraft or truck-mounted ultra-low volume (ULV) sprayers. ULV sprayers dispose very fine aerosol droplets that stay aloft and kill flying mosquitoes on contact. ULV applications involve small quantities of the insecticide ingredient in relation to the size of the area treated, typically less than 3 ounces per acre.

**Q. How might I be exposed to sumithrin?**

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

**Q. How can sumithrin affect my health?**

A. Sumithrin has very low toxicity to humans. Short-term or accidental exposure to very high levels of sumithrin can affect the nervous system, causing effects such as incoordination, tremors, or tingling and numbness in the area of skin contact. Since sumithrin is applied at very low concentrations, most people would not be expected to experience any adverse health effects as a result of its use to control mosquitoes.

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

A. Upon direct contact with sumithrin, some sensitive people may develop temporary eye, skin, nose and throat irritation, or breathing problems. People with existing respiratory conditions, such as asthma, are encouraged to stay indoors during spraying since sumithrin may aggravate those conditions.

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

A. It is not known whether sumithrin causes cancer, birth defects, or reproductive effects in people. However, studies have not reported effects on reproduction, birth defects, or cancer when animals were exposed to sumithrin.

**Q. What happens to sumithrin when it enters the environment?**

A. Sumithrin enters the environment primarily through ground or aerial spraying for the control of mosquitoes and other insect pests. Sumithrin binds to soils, and because of this, it is not expected to contaminate groundwater. Sumithrin 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 sumithrin?**

**A.** Sumithrin 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 sumithrin 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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