

Citronella (Oil of Citronella) (021901) Fact Sheet

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Summary

Oil of Citronella has been used for over 50 years as an insect repellent and as an animal repellent. It is found in many familiar insect repellent products: candles, lotions, gels, sprays and towelette wipes. These products, which vary in efficacy, repel various insects, some of which are public health pests, such as mosquitoes, biting flies and fleas. When used according to the label, citronella products are not expected to cause harm to humans, pets or the environment.

I. Description of the Active Ingredient

Oil of Citronella is a volatile, liquid oil derived from dried cultivated grasses. It works on insects without harming or killing them. It has a distinctive odor which may make it difficult for some pests to locate a host. The length of repellency time varies with the inert ingredients and the amount of citronella oil in the product.

II. Use Sites, Target Pests, and Application Methods

- o **Use Sites:** Oil of Citronella is used on humans to repel insects. It is used in recreational areas, outdoor household areas, and around trees and shrubs.
- o **Target pests:** Repels various specific insects including mosquitoes, black flies, fleas, and ticks.
- o **Application Methods:** Products containing Oil of Citronella are applied in various ways:
 - 1. Liquid products are sprayed or applied by hand (cloth wipe-on) on skin or clothing.
 - 2. Citronella is also used in solid products such as candles, cartridges, and rub-on products.

III. Assessing Risks to Human Health

In studies using laboratory animals, Oil of Citronella shows little or no toxicity. The only concern is skin irritation. Because some products are applied to human skin, EPA requires proper precautionary labeling to help assure safe use. Therefore, if used according to label instructions, citronella is not expected to pose health risks to people, including children and other sensitive populations.

Oil of Citronella has been used extensively since 1948 without any reports of adverse effects of concern.

IV. Assessing Risks to the Environment

Based on laboratory animal studies, Oil of Citronella poses minimal or no risks to wildlife. Because of the low toxicity and limited uses of Oil of Citronella, it is not harmful to the environment. No adverse effects are expected for use around the home.

V. Regulatory Information

Registered (licensed for use) in 1948.

Number of products: 31 (September 1999)

Oil of Citronella is considered so unlikely to cause harmful effects that some citronella products are exempt from the usual regulation. However, registration is required for those products that do not meet the criteria for exemption (for instance, they contain other ingredients that EPA has not classified as minimal risk).

VI. Products for Use Against Public Health Pests

EPA defines a public health pest as any organism that can cause or transmit human disease, or can cause human discomfort or injury. Examples include fleas, mosquitoes, ticks, and biting flies. To help protect the public's health, EPA requires registrants of products used against public health pests to prove the product meets specific standards for effectiveness as well as for safety.

VII. Producer Information

Many companies produce Oil of Citronella and products containing Oil of Citronella.

VIII. Additional Contact Information

[Ombudsman, Biopesticides and Pollution Prevention Division](#) (7511P)

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