



# ***p*-Menthane-3,8-diol (011550) Fact Sheet**

## Related Information

**Summary** *p*-Menthane-3,8-diol is a biochemical pesticide derived from eucalyptus plants. This active ingredient is used to make products that are applied to human skin and clothing for the purpose of repelling insects, such as mosquitoes. It can be used in two types of consumer pesticide products: a spray and a lotion. When used according to the label, *p*-Menthane-3,8-diol products are not expected to cause harm to humans or the environment.

### **I. Description of the Active Ingredient**

*p*-Menthane-3,8-diol occurs naturally in the lemon eucalyptus plant. The natural oil can be extracted from the eucalyptus leaves and twigs. For commercial use, the active ingredient is chemically synthesized. *p*-Menthane-3,8-diol is structurally similar to menthol. (CAS No. 42822-86-6)

### **II. Use Sites, Target Pests, and Application Methods**

- **Use Sites:** *p*-Menthane-3,8-diol is used on humans and their clothing to repel insects.
- **Target pests:** Repels specific insects including mosquitoes, biting flies, and gnats.
- **Application Methods:** Products containing *p*-Menthane-3,8-diol can be in the form of liquids that are sprayed on skin or clothing, or lotions that are rubbed on skin.

### **III. Assessing Risks to Human Health**

In studies using laboratory animals, *p*-Menthane-3,8-diol shows no adverse effects except for eye irritation. Therefore, special precautions were put on the label to prevent the product from contacting people's eyes. For example, "Do not get in eyes. Do not apply on face or hands of small children." and "Do not spray directly on or near face. Instead, spray in palm of hand and spread on face and neck." If used according to label instructions, *p*-Menthane-3,8-

diol is not expected to pose health risks to people, including children and other sensitive populations.

#### **IV. Assessing Risks to the Environment**

Based on laboratory animal studies, *p*-Menthane-3,8-diol poses minimal or no risks to wildlife. Because of the low toxicity and limited uses of *p*-Menthane-3,8-diol, it is not harmful to the environment

#### **V. Regulatory Information**

*p*-Menthane-3,8-diol was registered (licensed for sale) in March 2000. A consumer spray product was registered at the same time.

#### **VI. Effectiveness Of Productducts For Use Againts Public Health Pests**

EPA requires registrants of products used against public health pests to show that the product meets specific standards for *effectiveness* as well as for safety. EPA considers 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 certain rodents. The product currently registered with *p*-Menthane-3,8-diol for use against public health pests has met the required standards.

#### **VII. Registrant Information**

S.C. Johnson & Son, Inc.  
1525 Howe St., Racine  
WI 53403-2236

#### **VIII. Additional Contact Information**

[Ombudsman, Biopesticides and Pollution Prevention Division](#)  
(7511P)  
Office of Pesticide Programs  
Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

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[http://www.epa.gov/oppbppd1/biopesticides/ingredients/factsheets/factsheet\\_0115](http://www.epa.gov/oppbppd1/biopesticides/ingredients/factsheets/factsheet_0115)