

# Thymol (5-methyl-2-isopropyl-1-phenol) (080402) Fact Sheet

## I. Description of the Active Ingredient

**Active Ingredient Name:** Thymol

**OPP Chemical Code:** 080402 (CAS #: 89-83-8)

Thymol is a constituent of oil of thyme, a naturally occurring mixture of compounds in the plant *Thymus vulgaris* (thyme).

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

- **Use Sites:** Beehives
  
- **Target Pests:** Varroa mite (*Varroa destructor*) .
  
- **Application Method:** The gel product is placed in the hive, using the dosing tools (scoop and spatula), on a piece of wax sheet, cardboard or plastic sheet centrally on top of the brood frames as a treatment tray. Using the dosing tools (scoop and spatula), apply the first dose of 50 g gel from the tub onto the tray. Ensure the scoop is full and level off the excess with the spatula. Use the spatula to scrape the gel to an even thickness over the tray area with the spatula. After two weeks apply the second dose of 50 g gel following the same procedure. Leave the product in the colony until it totally disappears from the tray or until the supers are installed, whichever is sooner.

## III. Assessing Risks to Human Health

Mammalian laboratory studies show that thymol, at high concentrations, is corrosive to skin and eye, it is also a skin sensitizer. In any case, the public will not be exposed to thymol in the registered end use product. This is due to the fact that the end-use product is applied within bee hives. Every end-use product will be assessed for potential human exposure and toxicity. Workers are required to wear appropriate personal protective equipment to minimize their exposure.

## IV. Assessing Risks to the Environment

Thymol is toxic to aquatic invertebrates. Because thymol will be used on land (inside beehives) exposure to aquatic organisms is not expected. The label of the registered end-use product instructs users not to dispose of the product in bodies of water. For each potential end product, EPA will determine if additional non-target studies are needed.

## **V. Regulatory Information**

Year the active ingredient was first registered: **1964**

Number of registered products as of March 2006: **1**

Product name: **Apiguard**

## **VI. Registrant Information**

**VITA (Europe) Limited**  
**c/o Landis International**  
P.O. Box 5126  
Valdosta, GA 31603  
Contact: Ronald Landis

## **VII. Additional Contact Information**

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