I-Carvone (PC Code 079500)

Summary

I-Carvone, which is the fragrance of mint, comprises 50-65% of the essential oil from the spearmint plant (Mentha spicata). It can also be made synthetically from d-limonene. I-Carvone has a long history of use as a flavoring in a variety of foods and beverages, as well as in toothpaste and mouthwash. It is also used as a fragrance in personal care products, and in consumer products such as air fresheners. The technical grade active ingredient (TGAI) is identified as Bedoukian L-Carvone and is intended for use in the manufacture of an area repellent for mosquitoes and biting flies.

I. Description of the Active Ingredient

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II. Use Sites, Target Pests, and Application Methods

I-Carvone is intended for use as a manufacturing use product to be formulated into end use products for the control of mosquitoes. The end use product will be a mosquito repellent.

III. Assessing Risks to Human Health

For acute toxicity data requirements, toxicity categories are assigned based on the hazard(s) identified from studies and/or information on file with the Agency. The active ingredient is classified into Toxicity Category I, II, III or IV where Toxicity Category I represents the highest toxicity and Toxicity Category IV indicates the lowest toxicity. For more information, refer to http://www.epa.gov/pesticides/pestlabels/.

The registrant requested waivers for the Tier I mammalian toxicity studies (Table 3) based on the historically safe use of I-Carvone as a flavoring and fragrance agent, and the availability of previously-generated toxicity data for I-Carvone or surrogate compounds in the open literature. The Agency has reviewed the information submitted to support the mammalian toxicity data waivers and found it to be adequate to support registration of I-Carvone.

Adequate mammalian toxicology data/information is available to support registration of I-Carvone. All toxicology data requirements for I-Carvone have been satisfied.
IV. Assessing Risks to the Environment

Adequate information from the scientific literature was submitted to address the nontarget data requirements. All of the literature supported the fact that there would be no toxicity or adverse effects to nontarget organisms. Data demonstrated that the \( l \)-Carvone is not toxic to nontarget insects.

V. Producer Information

Producer Information
Bedoukin Research, Inc.
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VI. Additional Contact Information

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