

Product Data Sheet

Product Name: Allethrin
Cat. No.: GC40476

Chemical Properties

Cas. No. 584-79-2

SMILES C/C(C)=C/C1C(C)(C)C1C(OC2C(C)=C(CC=C)C(C2)=O)=O

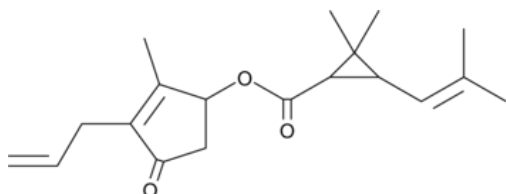
Formula C₁₉H₂₆O₃ M.Wt 302.4

Solubility Chloroform: Slightly Soluble Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Allethrin is a pyrethroid insecticide and modulator of voltage-gated sodium channels (NaV). It delays channel deactivation in cockroach giant axons when used at a concentration of 1 µM. Allethrin is 100-fold more potent at insect than rat NaV1.8 channels expressed in *Xenopus* oocytes. It decreases egg production by and is lethal to mosquitoes (LC₅₀ = 0.01%). Allethrin induces production of reactive oxygen species (ROS), lipid peroxidation, and apoptosis in rat primary Leydig cells. In vivo, the smoke of an allethrin-based mosquito coil increases levels of the hepatic enzymes ALT and AST and induces hepatocyte apoptosis as well as emphysema and lung hyperplasia in mice.

Caution: Product has not been fully validated for medical applications. For research use only.

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