

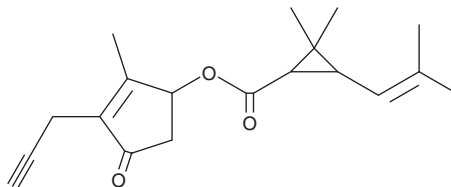
PRODUCT INFORMATION



Prallethrin

Item No. 25813

CAS Registry No.: 23031-36-9
Formal Name: 2,2-dimethyl-3-(2-methyl-1-propen-1-yl)-cyclopropanecarboxylic acid, 2-methyl-4-oxo-3-(2-propyn-1-yl)-2-cyclopenten-1-yl ester
Synonym: Acetylene C Permethrin
MF: C₁₉H₂₄O₃
FW: 300.4
Purity: ≥90% (mixture of diastereomers)
Supplied as: An oil
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Prallethrin is supplied as an oil. A stock solution may be made by dissolving the prallethrin in the solvent of choice, which should be purged with an inert gas. Prallethrin is soluble in acetonitrile. Prallethrin is slightly soluble in chloroform and methanol.

Description

Prallethrin is a pyrethroid insecticide.¹ Aerosolized prallethrin is lethal to *A. albopictus*, *A. aegypti*, *C. quinquefasciatus*, and *A. quadrimaculatus* mosquitoes (LC₅₀s = 0.28, 0.36, 0.12, and 0.27 g/100 ml, respectively). It increases lipid peroxidation and decreases activity of superoxide dismutase (SOD) and glutathione peroxidase (Gpx) in rat kidney when administered at a dose of 64 mg/kg.² Prallethrin is lethal to rats (LD₅₀ = 640 mg/kg). Formulations containing prallethrin have been used in the control of insects in residential areas.

References

1. Bibbs, C.S., Tsikolia, M., Bloomquist, J.R., *et al.* Vapor toxicity of five volatile pyrethroids against *Aedes aegypti*, *Aedes albopictus*, *Culex quinquefasciatus*, and *Anopheles quadrimaculatus* (Diptera: Culicidae). *Pest Manag. Sci.* **74**(12), 2699-2706 (2018).
2. Refaie, A.A., Ramadan, A., and Mossa, A.T. Oxidative damage and nephrotoxicity induced by prallethrin in rat and the protective effect of *Origanum majorana* essential oil. *Asian Pac. J. Trop. Med.* **7**(Suppl 1), S506-S513 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM