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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Piperitone

Cat. No.: HY-N9496

CAS No.: 89-81-6

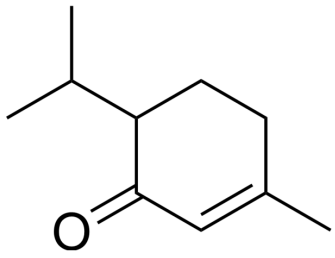
Molecular Formula: $C_{10}H_{16}O$

Molecular Weight: 152.24

Target: Insecticide

Storage:

Pure form	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (656.87 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	6.5687 mL	32.8435 mL	65.6871 mL
	5 mM	1.3137 mL	6.5687 mL	13.1374 mL
	10 mM	0.6569 mL	3.2844 mL	6.5687 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (16.42 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (16.42 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (16.42 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Piperitone is as a powerful repellent and antiappetent agent. Piperitone is very toxic to Cymbopogon schoenanthus (C. schoenanthus) adults, newly laid eggs and to neonate larvae. Insecticidal activity[1].

In Vitro

Piperitone isolated from Cymbopogon schoenanthus (C. schoenanthus)[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

The insecticidal activity of crude essential oil extracted from Cymbopogon schoenanthus and of its main constituent, Piperitone, is assessed on different developmental stages of Callosobruchus maculatus (C. maculatus). Piperitone is toxic to C. maculatus adults with a LC_{50} value of 1.6 µL/L. Piperitone inhibits the development of newly laid eggs and of neonate

larvae, but is less toxic than the crude extract to individuals developing inside the seeds. Piperitone shows the strongest ovicidal activity. All the eggs were aborted at 6.7 μL/L. Piperitone (10 μM) kills all the neonate larvae[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Fifty pairs of C. maculatus adults[1]
Dosage:	6.7, 10, 16.7 or 33.3 μL/L
Administration:	24 hours
Result:	Piperiton was more toxic than crude oil because the LC_{50} recorded was 1.6 μL/L for Piperitone vs. 2.7 μL/L for the crude oil.

REFERENCES

[1]. Guillaume K Ketoh, et al. Comparative effects of Cymbopogon schoenanthus essential oil and piperitone on Callosobruchus maculatus development. Fitoterapia. 2006 Dec;77(7-8):506-10.

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