Product Information

CYPERMETHRIN

Product Number C2237
Storage Temperature 0 °C

CAS® 52315-07-8
Synonym: \((R,S)-\alpha\text{-Cyano-(3-phenoxyphenyl)methyl 3-(2,2\text{-dichlorovinyl})-2,2\text{-dimethylcyclopropanecarboxylate}}\)

**Product Description**
Formula: \(C_{22}H_{19}Cl_2NO_3\)
Formula weight: 416.3

Cypermethrin is a type II semi-synthetic pyrethrin, which acts as an inhibitor of calcineurin (protein phosphatase 2B) and has an \(IC_{50}\) of approximately 40 pM.\(^1\) This inhibitory action results in cellular hyperexcitability by causing non-mutated calcium channels to remain open for an extended period of time allowing an abundance of \(Ca^{2+}\) to enter the cell. Cypermethrin has also been demonstrated to cause significant decrease in membrane fluidity and glutathione peroxidase activity in rat erythrocytes.\(^2\)

The product is packaged as a white film.

**Preparation Instructions**
Cypermethrin is soluble in methanol or acetone. The product is insoluble in water.

**Precautions and Disclaimer**
This product is for laboratory research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

**Storage/Stability**
Storage at 0 °C is recommended. Avoid contact with alkalies.

**References**

PMH/MAM 1/03