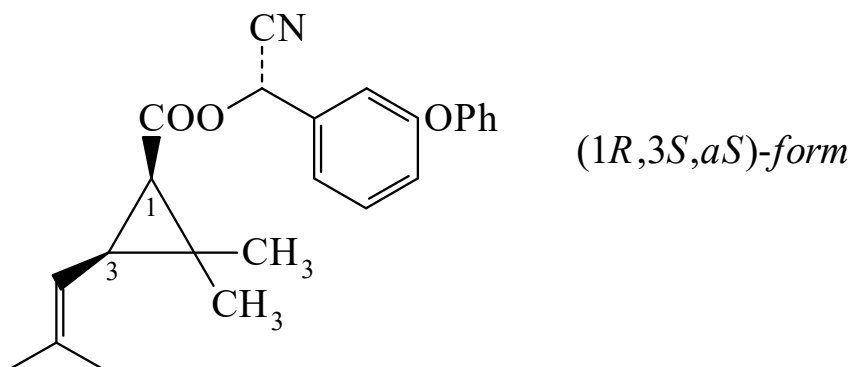




>>Entry Name: Cyphenothrin, BSI, ISO

Synonym(s): Cyano(3-phenoxyphenyl)methyl 2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate, 9Cl. α -Cyano-3-phenoxybenzyl 2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate. S 2703



CAS Registry Number: 39515-40-7

Related CAS Registry Numbers(s): 64312-65-8 64312-68-1 64312-69-2 77122-44-2 77122-45-3 77122-51-1 77122-52-2

Molecular Formula: $C_{24}H_{25}NO_3$

Molecular Weight: 375.466

Accurate Mass: 375.183444

Percentage Composition: C 76.77%; H 6.71%; N 3.73%; O 12.78%

Use/Importance: Pyrethroid insecticide

Physical Description: Yellow viscous liq.

Boiling Point: $Bp_{0.1}$ 154°

Density: d_4^{25} 1.08

Hazard & Toxicity: LD₅₀ (rat, orl) 318 mg/kg. Occup. exposure to pyrethroids can cause paresthesia and respiratory irritation

>>Variant: (1*R*,3*S*, α *S*)-form

CAS Registry Number: 64312-66-9

Molecular Formula: $C_{24}H_{25}NO_3$

Molecular Weight: 375.466

Accurate Mass: 375.183444

Percentage Composition: C 76.77%; H 6.71%; N 3.73%; O 12.78%

Melting Point: Mp 61°

Optical Rotation: $[\alpha]_D^{20}$ +59 (c, 2.09 in $CHCl_3$)

References:

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Soderland, D.M. *et al.*, *Pestic. Biochem. Physiol.*, 1977, **7**, 391, (*metab*)
Matsuo, T. *et al.*, *Pestic. Sci.*, 1980, **11**, 202, (*resoln, activity, synth*)
Elliott, M. *et al.*, *Pestic. Sci.*, 1980, **11**, 219; 1982, **13**, 407; 1983, **14**, 182, (*synth*)
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Ruza, L.O. *et al.*, *J. Agric. Food Chem.*, 1986, **34**, 937, (*synth*)
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Kobayashi, T. *et al.*, *Pestic. Biochem. Physiol.*, 1989, **35**, 231; 1990, **36**, 209, (*activity, props*)
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