

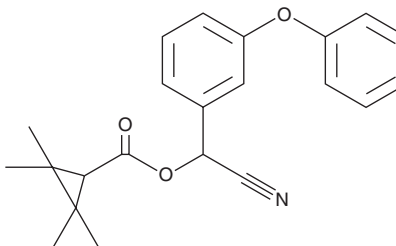
# PRODUCT INFORMATION



## Fenpropathrin

Item No. 34478

**CAS Registry No.:** 39515-41-8  
**Formal Name:** 2,2,3,3-tetramethyl-cyclopropanecarboxylic acid, cyano(3-phenoxyphenyl)methyl ester  
**Synonyms:** Fenpropanate, WL 41706  
**MF:** C<sub>22</sub>H<sub>23</sub>NO<sub>3</sub>  
**FW:** 349.4  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Fenpropathrin is supplied as a solid. A stock solution may be made by dissolving the fenpropathrin in the solvent of choice, which should be purged with an inert gas. Fenpropathrin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of fenpropathrin in ethanol is approximately 15 mg/ml and approximately 30 mg/ml in DMSO and DMF.

### Description

Fenpropathrin is a pyrethroid insecticide.<sup>1</sup> It is a slow activator of voltage-gated sodium channel 1.8 (Na<sub>v</sub>1.8). Fenpropathrin induces mortality in the two-spotted spider mite (*T. urticae*) with an LC<sub>50</sub> value of 2.35 g AI/L in a slide-dip assay.<sup>2</sup> It has been found in watershed sediment samples.<sup>3</sup> Formulations containing fenpropathrin have been used as insecticides in agriculture.

### References

1. Choi, J.S. and Soderlund, D.M. Structure-activity relationships for the action of 11 pyrethroid insecticides on rat Na<sub>v</sub>1.8 sodium channels expressed in *Xenopus* oocytes. *Toxicol. Appl. Pharmacol.* **211(3)**, 233-244 (2006).
2. Penman, D.R., Chapman, R.B., and Bowie, M.H. Direct toxicity and repellent activity of pyrethroids against *Tetranychus urticae* (Acari: Tetranychidae). *J. Econ. Entomol.* **79(5)**, 1183-1187 (1986).
3. Budd, R., Bondarenko, S., Haver, D., et al. Occurrence and bioavailability of pyrethroids in a mixed land use watershed. *Environ. Qual.* **36(4)**, 1006-1012 (2007).

#### 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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