

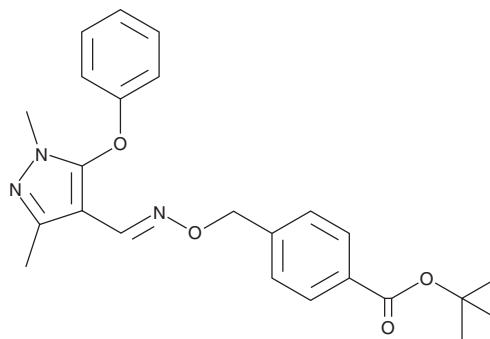
# PRODUCT INFORMATION



## (E)-Fenpyroximate

Item No. 25625

**CAS Registry No.:** 134098-61-6  
**Formal Name:** 4-[[[(E)-[(1,3-dimethyl-5-phenoxy-1H-pyrazol-4-yl)methylene]amino]oxy)methyl]-benzoic acid, 1,1-dimethylethyl ester  
**Synonyms:** Fenpyroximate, NNI-850  
**MF:** C<sub>24</sub>H<sub>27</sub>N<sub>3</sub>O<sub>4</sub>  
**FW:** 421.5  
**Purity:** ≥98%  
**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

(E)-Fenpyroximate is supplied as a solid. A stock solution may be made by dissolving the (E)-fenpyroximate in the solvent of choice, which should be purged with an inert gas. (E)-Fenpyroximate is slightly soluble in chloroform and methanol.

### Description

(E)-Fenpyroximate is a phenoxy pyrazole acaricide.<sup>1</sup> It is lethal to mobile adult phytophagous mites of the genera *Tetranychidae*, *Eriophyidae*, and *Tarsonemidae* and inhibits molting at immature stages. (E)-Fenpyroximate reduces the number of eggs laid per female and is lethal to female *A. swirskii* predatory mites.<sup>2</sup> It is also selectively lethal to worker over queen honey bees (LD<sub>50</sub>s = 30 and >1,620 µg/g, respectively).<sup>3</sup> (E)-Fenpyroximate induces cell death in marine flounder (*P. olivaceus*) gill cells (IC<sub>50</sub> = 800-1,250 nM) and is lethal to adult living flounder (LC<sub>50</sub> = 28.84 nM in seawater).<sup>4</sup> Formulations containing (E)-fenpyroximate have been used in the control of insects and mites in agriculture.

### References

1. Konno, T., Kuriyama, K., and Hamaguchi, H. Fenpyroximate (NNI-850), a new acaricide. *Brighton Crop Protection Conference, Pests and Diseases* **1**, 71-78 (1990).
2. Lopez, L., Smith, H.A., Hoy, M.A., et al. Acute toxicity and sublethal effects of fenpyroximate to *Amblyseius swirskii* (Acari: Phytoseiidae). *J. Econ. Entomol.* **108(3)**, 1047-1053 (2015).
3. Dahlgren, L., Johnson, R.M., Siegfried, B.D., et al. Comparative toxicity of acaricides to honey bee (Hymenoptera: Apidae) workers and queens. *J. Econ. Entomol.* **105(6)**, 1895-1902 (2012).
4. Na, N., Guo, H., Zhang, S., et al. *In vitro* and *in vivo* acute toxicity of fenpyroximate to flounder *Paralichthys olivaceus* and its gill cell line FG. *Aquat. Toxicol.* **92(2)**, 76-85 (2009).

#### 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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