

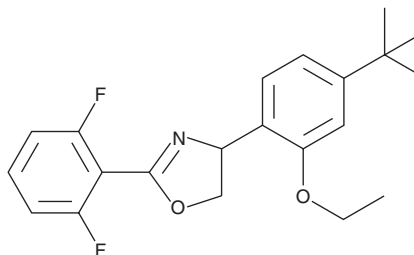
# PRODUCT INFORMATION



## Etoxazole

Item No. 25782

**CAS Registry No.:** 153233-91-1  
**Formal Name:** 2-(2,6-difluorophenyl)-4-[4-(1,1-dimethylethyl)-2-ethoxyphenyl]-4,5-dihydro-oxazole  
**MF:** C<sub>21</sub>H<sub>23</sub>F<sub>2</sub>NO<sub>2</sub>  
**FW:** 359.4  
**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

Etoxazole is supplied as a solid. A stock solution may be made by dissolving the etoxazole in the solvent of choice, which should be purged with an inert gas. Etoxazole is slightly soluble in chloroform.

### Description

Etoxazole is an organofluorine acaricide.<sup>1,2</sup> It induces toxicity in two-spotted spider mite (*T. urticae*) larvae (LC<sub>50</sub> = 0.036 mg/L for the London reference strain) through inhibition of chitin synthase 1. It reduces acetylcholinesterase (AChE) activity in the freshwater fish *O. niloticus* in a concentration-dependent manner.<sup>3</sup> Etoxazole (2.2-22 mg/kg per day) inhibits the activity of catalase, glutathione peroxidase (GPX), and AChE in the liver and kidneys of rats in a dose-dependent manner.<sup>2</sup> Formulations containing etoxazole have been used for the control of mites in agriculture.

### References

1. Demaeght, P., Osborne, E.J., Odman-Maresh, J., *et al.* High resolution genetic mapping uncovers chitin synthase-1 as the target-site of the structurally diverse mite growth inhibitors clofentezine, hexythiazox and etoxazole in *Tetranychus urticae*. *Insect Biochem. Mol. Biol.* **51**, 52-61 (2014).
2. Yilmaz, M., Rencuzogullari, E., and Canli, M. Investigations on the effects of etoxazole in the liver and kidney of Wistar rats. *Environ. Sci. Pollut. Res. Int.* **24(24)**, 19635-19639 (2017).
3. Sevgiler, Y., Oruç, E.O., and Üner, N. Evaluation of etoxazole toxicity in the liver of *Oreochromis niloticus*. *Pestic. Biochem. Physiol.* **78(1)**, 1-8 (2004).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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