

PRODUCT INFORMATION



Kresoxim-methyl-d₇

Item No. 39603

Formal Name: αE-(methoxyimino)-2-[(2-(methyl-d₃)phenoxy-3,4,5,6-d₄)methyl]-benzeneacetic acid, methyl ester

MF: C₁₈H₁₂D₇NO₄

FW: 320.4

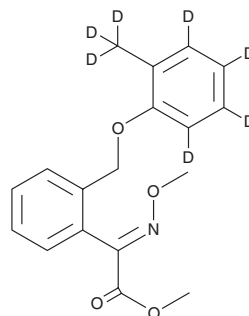
Chemical Purity: ≥95% (Kresoxim-methyl)

Deuterium Incorporation: ≥99% deuterated forms (d₁-d₇); ≤1% d₀

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

Kresoxim-methyl-d₇ is intended for use as an internal standard for the quantification of kresoxim-methyl (Item No. 25816) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Kresoxim-methyl-d₇ is supplied as a solid. A stock solution may be made by dissolving the kresoxim-methyl-d₇ in the solvent of choice, which should be purged with an inert gas. Kresoxim-methyl-d₇ is slightly soluble in chloroform and methanol.

Description

Kresoxim-methyl is a strobilurin fungicide.¹ It inhibits conidial germination of *V. inaequalis* isolates from apple orchards (EC₅₀s = 0.00033-0.0078 mg/L). Kresoxim-methyl also inhibits mycelial growth (EC₅₀ = 0.240 mg/L) and is fungicidal against *Saprolegnia* (MIC = 1 mg/L).² It increases intracellular calcium levels and disrupts the mitochondrial membrane potential in mouse cortical cultures in a concentration-dependent manner.³ Kresoxim-methyl is toxic to goldfish (*C. auratus*; LC₅₀ = 0.807 mg/L).² Formulations containing kresoxim-methyl have been used in the control of fungi in agriculture.

References

1. Fiaccadori, R., Cicognani, E., Alberoni, G., *et al.* Sensitivity to strobilurin fungicides of Italian *Venturia inaequalis* populations with different origin and scab control. *Pest Manag. Sci.* **67**(5), 535-540 (2011).
2. Hu, X.-G., Liu, L., Hu, K., *et al.* *In vitro* screening of fungicidal chemicals for antifungal activity against *Saprolegnia*. *J. World Aquac. Soc.* **44**(4), 528-535 (2013).
3. Regueiro, J., Olguín, N., Simal-Gándara, J., *et al.* Toxicity evaluation of new agricultural fungicides in primary cultured cortical neurons. *Environ. Res.* **140**, 37-44 (2015).

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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