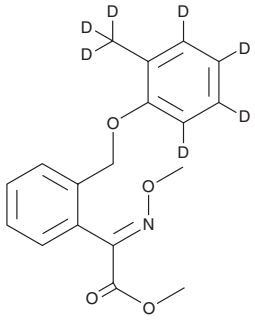
PRODUCT INFORMATION

Kresoxim-methyl-d_7

Item No. 39603

Formal Name:	αE-(methoxyimino)-2-[(2-(methyl-d_3) phenoxy-3,4,5,6-d_4)methyl]-benzeneacetic acid, methyl ester
MF:	$C_{18}H_{12}D_7NO_4$
FW:	320.4
Chemical Purity:	≥95% (Kresoxim-methyl)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_7); ≤1% d_0
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-d_7 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-d_7 is supplied as a solid. A stock solution may be made by dissolving the kresoxim-methyl-d_7 in the solvent of choice, which should be purged with an inert gas. Kresoxim-methyl-d_7 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 (EC_{50}s = 0.00033-0.0078 mg/L). Kresoxim-methyl also inhibits mycelial growth (EC_{50} = 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*; LC_{50} = 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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM