

Zoxamide

Chemical Properties

CAS No. :	156052-68-5
Formula:	C ₁₄ H ₁₆ Cl ₃ NO ₂
Molecular Weight:	336.64
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	Zoxamide is a selective fungicide that targets oomycetes. It exerts its antifungal activity by covalently binding to β -tubulin, thereby inhibiting microtubule assembly and disrupting cytoskeletal structure. Zoxamide blocks nuclear division during germ tube formation in <i>Phytophthora capsici</i> and significantly suppresses hyphal growth. Its fungicidal activity is closely associated with interference in microtubule function.
Targets(IC50)	Microtubule Associated,Antifungal
In vitro	Method: Isolated bovine tubulin was incubated with zoxamide (RH-7281) to assess the in vitro assembly of tubulin into microtubules. Rresult: Zoxamide inhibited the in vitro assembly of bovine tubulin into microtubules. [1] Method: The baseline sensitivity of 73 <i>Phytophthora cactorum</i> isolates to zoxamide was evaluated by measuring inhibition of mycelial growth. Rresult: All 73 isolates were sensitive to zoxamide, with EC50 values ranging from 0.04 to 0.29 mg/L and a mean EC50 of 0.15 mg/L.[2]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9705 mL	14.8527 mL	29.7053 mL
5 mM	0.5941 mL	2.9705 mL	5.9411 mL
10 mM	0.2971 mL	1.4853 mL	2.9705 mL
50 mM	0.0594 mL	0.2971 mL	0.5941 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Young DH, et al. Mode of action of zoxamide (RH-7281), a new oomycete fungicide. Pestic Biochem Physiol. 2001; 69(2):100-111.

Mei X, et al. Proteomic analysis on zoxamide-induced sensitivity changes in Phytophthora cactorum. Pestic Biochem Physiol. 2015;123:9-18.

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