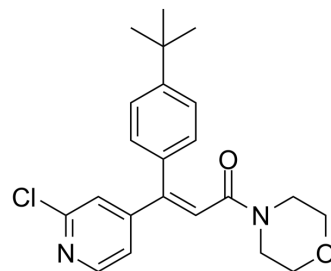


Pyrimorph

Cat. No.:	HY-123155		
CAS No.:	868390-90-3		
Molecular Formula:	C ₂₂ H ₂₅ ClN ₂ O ₂		
Molecular Weight:	384.9		
Target:	Fungal		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (324.76 mM; ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.5981 mL	12.9904 mL	25.9808 mL
	5 mM	0.5196 mL	2.5981 mL	5.1962 mL
	10 mM	0.2598 mL	1.2990 mL	2.5981 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Pyrimorph is a fungicide with excellent antifungal activity against oomycetes^[1].

In Vitro

Pyrimorph inhibits different stages in the life cycle of *P.capsici*: mycelial growth (EC₅₀ = 1.84 µg/mL), sporangia formation (EC₅₀ = 0.17 µg/mL), zoospore release (EC₅₀ = 4.92 µg/mL), cystospore germination (EC₅₀ = 0.09 µg/mL)^[1].
 Pyrimorph exhibits 40.95% inhibition of oxygen consumption of intact mycelia at 100 µg/mL^[1].
 Pyrimorph inhibits the synthesis of cell wall either directly or indirectly from ultrastructural transformation of cell wall thickening and disruption of vacuoles^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Pyrimorph (0-28 mg/L; exposure; 0-192 h) has low toxicity and accumulates quickly in zebrafish^[2].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Zebrafish (<i>Brachydanio rerio</i>), with an average body weight and length of about 0.30±0.10 g and 3.00±0.50 cm, respectively ^[2]
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Dosage:	0-28 mg/L
Administration:	Exposure, 0-192 h
Result:	Had low toxicity to zebrafish, with LC ₅₀ values ranging from 24.33 mg/L (24 h) to 19.79 mg/L (96 h). Accumulated in fish shortly.

REFERENCES

- [1]. Xiaojing Yan, et al. Study of inhibitory effects and action mechanism of the novel fungicide pyrimorph against *Phytophthora capsici*. *J Agric Food Chem*. 2010 Mar 10;58(5):2720-5.
- [2]. Chunqing Zhao, et al. Acute toxicity and bioconcentration of pyrimorph in zebrafish, *Brachydanio rerio*. *Pest Manag Sci*. 2011 Sep;67(9):1178-83.
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Caution: Product has not been fully validated for medical applications. For research use only.

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