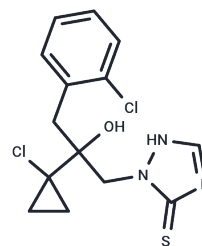


## Prothioconazole

## Chemical Properties

CAS No. :	178928-70-6
Formula:	C <sub>14</sub> H <sub>15</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>2</sub> S
Molecular Weight:	344.26
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	Prothioconazole (Proline 480 SC Fungicide) is a chiral triazole fungicide in plant pathogen control.
Targets(IC50)	Antifungal,Cytochromes P450

## Solubility Information

Solubility	DMSO: 30 mg/mL (87.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.81 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9048 mL	14.5239 mL	29.0478 mL
5 mM	0.581 mL	2.9048 mL	5.8096 mL
10 mM	0.2905 mL	1.4524 mL	2.9048 mL
50 mM	0.0581 mL	0.2905 mL	0.581 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

Smith JL, et al. Fusarium graminearum Mycotoxins in Maize Associated With Striacosta albicosta (Lepidoptera: Noctuidae) Injury. J Econ Entomol. 2018 Mar 14.

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Limay-Rios V, Schaafsma AW. Effect of Prothioconazole Application Timing on Fusarium Mycotoxin Content in Maize Grain. J Agric Food Chem. 2018 May 16;66(19):4809-4819.

Zhang Z, et al. Enantioselective degradation and transformation of the chiral fungicide prothioconazole and its chiral metabolite in soils. Sci Total Environ. 2018 Sep 1;634:875-883.

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