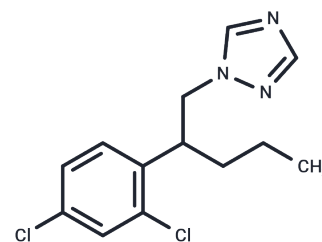


Penconazole

Chemical Properties

CAS No. : 66246-88-6
 Formula: C₁₃H₁₅Cl₂N₃
 Molecular Weight: 284.18
 Appearance: no data available
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Penconazole is a typical triazole fungicide, which mainly used to control powdery mildew in apples, grapes, and vegetables. Penconazole inhibits sterol biosynthesis in fungi. Penconazole decrease AChE activity in the cerebrum and cerebellum of rats [1] [2].
In vivo	Administered intraperitoneally at a dosage of 67 mg/kg every two days over a period of 9 days, Penconazole induces oxidative stress in the rat cerebrum and cerebellum, as demonstrated by heightened lipid peroxidation and protein oxidation, alongside disturbances in both enzymatic and non-enzymatic antioxidant defenses. This chemical compound, identified as a neurotoxicant pesticide, not only impairs the cholinergic system and activities of membrane-bound ATPases but also alters brain histoarchitecture, signifying its potential to induce oxidative damage in the adult rat brain. A significant reduction in acetylcholinesterase (AChE) activity, by 11% in the cerebrum and 25% in the cerebellum, further substantiates its neurotoxic effects. The study, which involved twelve male Wistar rats, also observed an increase in the absolute and relative weights of these brain regions, emphasizing the compound's detrimental impact.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5189 mL	17.5945 mL	35.189 mL
5 mM	0.7038 mL	3.5189 mL	7.0378 mL
10 mM	0.3519 mL	1.7594 mL	3.5189 mL
50 mM	0.0704 mL	0.3519 mL	0.7038 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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