## **Product** Data Sheet

## Propiconazole-d3 nitrate

**Cat. No.:** HY-B0847S1 **CAS No.:** 2699607-26-4

Molecular Formula: C<sub>15</sub>H<sub>15</sub>D<sub>3</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>5</sub>

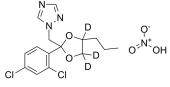
Molecular Weight: 408.25

Target: Fungal; Reactive Oxygen Species

Pathway: Anti-infection; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-кВ

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



## **BIOLOGICAL ACTIVITY**

Propiconazole-d3 nitrate is the deuterium labeled Propiconazole nitrate. Propiconazole is a broad-spectrum triazole fungicide that inhibits the conversion of lanosterol to ergosterol, leading to fungal cell membrane disruption. Propiconazole inhibits *S. cerevisiae*, but not rat liver, microsomal cytochrome P450 (IC<sub>50</sub>s=0.04 and >200 μM, respectively). Propiconazole inhibits the growth of *T. deformans* and *R. stolonifer* (ED<sub>50</sub>s=0.073 and 4.6 μg/mL, respectively). Propiconazole increases production of reactive oxygen species (ROS).

In Vitro Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as

tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to

affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

Caution: Product has not been fully validated for medical applications. For research use only.

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Inhibitors