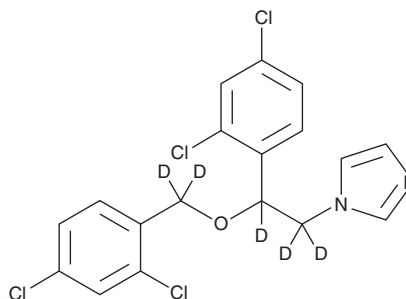


# PRODUCT INFORMATION



## Miconazole-d<sub>5</sub> Item No. 31175

**CAS Registry No.:** 1216653-50-7  
**Formal Name:** 1-[2-(2,4-dichlorophenyl)-2-[(2,4-dichlorophenyl)methoxy-d<sub>2</sub>]ethyl-d<sub>3</sub>]-1H-imidazole  
**MF:** C<sub>18</sub>H<sub>9</sub>Cl<sub>4</sub>D<sub>5</sub>N<sub>2</sub>O  
**FW:** 421.2  
**Chemical Purity:** ≥98% (Miconazole)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>5</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Miconazole-d<sub>5</sub> is intended for use as an internal standard for the quantification of miconazole (Item No. 15420) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Miconazole-d<sub>5</sub> is supplied as a solid. A stock solution may be made by dissolving the miconazole-d<sub>5</sub> in the solvent of choice, which should be purged with an inert gas. Miconazole-d<sub>5</sub> is soluble in methanol, DMSO, and acetonitrile.

### Description

Miconazole is an imidazole antifungal.<sup>1</sup> It is active against *C. parapsilosis*, *C. pseudotropicalis*, *C. albicans*, *C. neoformans*, *C. tropicalis*, and *C. guilliermondii* (MICs = <0.1-10 µg/ml). It is also active against various *Trichophyton* species, *A. fumigatus*, *A. niger*, *B. brasiliensis*, and *B. dermatitidis*. Miconazole (160 mg/kg) prevents infection with *T. mentagrophytes* and *M. canis* in mice. It also reduces lesion size in a guinea pig model of *C. albicans* infection. Formulations containing miconazole have been used in the treatment of various fungal infections.

### Reference

1. Sawyer, P.R., Brogden, R.N., Pinder, R.M., *et al.* Miconazole: A review of its antifungal activity and therapeutic efficacy. *Drugs* **9(6)**, 406-423 (1975).

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
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