

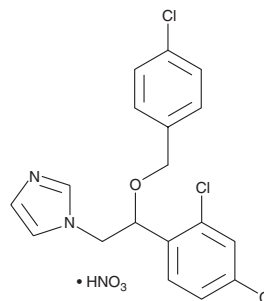
PRODUCT INFORMATION



Econazole (nitrate)

Item No. 20223

CAS Registry No.: 24169-02-6
Formal Name: 1-[2-[(4-chlorophenyl)methoxy]-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole, mononitrate
Synonyms: NSC 243115, SQ 13,020
MF: C₁₈H₁₅Cl₃N₂O • HNO₃
FW: 444.7
Purity: ≥98%
Supplied as: A crystalline solid
Storage: Room temperature
Stability: ≥4 years



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

Laboratory Procedures

Econazole (nitrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the econazole (nitrate) in the solvent of choice, which should be purged with an inert gas. Econazole (nitrate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of econazole (nitrate) in ethanol is approximately 0.1 mg/ml and approximately 25 mg/ml in DMSO and DMF.

Econazole (nitrate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, econazole (nitrate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Econazole (nitrate) has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Econazole (nitrate) is an azole-based antifungal compound that acts by inhibiting the 14 α -demethylation of lanosterol (Item No. 19521), which consequently leads to the inhibition of ergosterol (Item No. 19850) synthesis in fungal cell membranes.¹ It demonstrates broad-spectrum activity against dermatophytes, *Candida* species, other pathogenic yeasts, and some Gram-positive bacteria.¹

Reference

1. Fromtling, R.A. Overview of medically important antifungal azole derivatives. *Clin. Microbiol. Rev.* **1**(2), 187-217 (1988).

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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