

<b>Product Name:</b>	Econazole nitrate
<b>Product Number:</b>	E001
<b>CAS Number:</b>	68797-31-9
<b>Molecular Formula:</b>	$C_{18}H_{15}Cl_3N_2O \cdot HNO_3$
<b>Molecular Weight:</b>	444.70
<b>Form:</b>	Powder
<b>Appearance:</b>	White or almost white crystalline powder
<b>Source:</b>	Synthetic
<b>Water Content (Karl Fischer):</b>	Loss on drying: <0.5%
<b>Melting Point:</b>	162 -166°C
<b>Storage Conditions:</b>	2-8°C
<b>Description:</b>	Econazole nitrate is an insoluble (0.00148 mg/mL) imidazole antifungal that specifically targets the cell membrane of fungi.
<b>Mechanism of Action:</b>	Econazole nitrate increases cell permeability by inhibiting enzymes involved in ergosterol synthesis. The increase of permeability has a toxic effect on the fungi and leads to cell death.
<b>Spectrum:</b>	Econazole nitrate targets fungi responsible for tinea (ringworm) especially Trichophyton and Microsporum species.
<b>References:</b>	<p>Rice, Louis B., and Mahmoud A. Ghannoum. "Antifungal Agents: Mode of Action, Mechanisms of Resistance, and Correlation of These Mechanisms with Bacterial Resistance." Clinical Microbiology Reviews (1999): 501-17. www.ncbi.gov. Oct. 1999. Web. 22 Aug. 2012.</p> <p>Bygrave, F. L., R. Fulceri, and A. Benedetti. "On the Mechanism of Action of Econazole, the Capacitative Calcium Inflow Blocker." PubMed (1998): 75-77. Web. 22 Aug. 2012.</p>