

Product Name:	Miconazole
Product Number:	M041
CAS Number:	22916-47-8
Molecular Formula:	$C_{18}H_{14}Cl_4N_2O$
Molecular Weight:	416.13
Form:	Powder
Appearance:	White or off white powder
Melting Point:	83°C - 87°C
Optical Rotation:	-0.10° - +0.10°
Description:	Miconazole is an imidazole antimycotic compound.
Mechanism of Action:	Miconazole 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.
Spectrum:	Miconazole targets fungi that cause tinea (ringworm) especially <i>Trichophyton</i> species.
References:	<p>Rice L.B. and Ghannoum M.A.. "Antifungal Agents: Mode of Action, Mechanisms of Resistance, and Correlation of These Mechanisms with Bacterial Resistance. <i>Clinical Microbiology Reviews</i> (1999): 501-17.</p> <p>Sreedhara, K. H. "Studies on the Mechanism of Action of Miconazole: Effect of Miconazole on Respiration and Cell Permeability of <i>Candida Albicans</i>." <i>Antimicrobial Agents and Chemotherapy</i> 5.4 (1974): 420-25. w www.ncbi.gov. American Society for Microbiology. Web. 22 Aug. 2012.</p>