# **PRODUCT** INFORMATION



**Butoconazole** (nitrate)

Item No. 23554

CAS Registry No.:	64872-77-1	Cl.
Formal Name:	1-[4-(4-chlorophenyl)-2-	
	[(2,6-dichlorophenyl)thio]butyl]-	
	1H-imidazole, mononitrate	
Synonyms:	(±)-Butoconazole, RS-35887	
MF:	$C_{19}H_{17}CI_{3}N_{2}S \bullet HNO_{3}$	Ń, ĆI
FW:	474.8	~ ~ ]
Purity:	≥98%	• HNO3
UV/Vis.:	λ <sub>max</sub> : 203, 271 nm	
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥4 years	∽ Ci

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

# Laboratory Procedures

Butoconazole (nitrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the butoconazole (nitrate) in the solvent of choice, which should be purged with an inert gas. Butoconazole (nitrate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of butoconazole (nitrate) is approximately 0.1 mg/ml in ethanol and approximately 30 mg/ml in DMSO and DMF.

Butoconazole (nitrate) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, butoconazole (nitrate) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Butoconazole (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

Butoconazole is an imidazole antifungal agent that completely inhibits growth of a variety of fungi in vitro when used at concentrations of 0.05-30  $\mu$ g/ml.<sup>1</sup> It is active against vaginal infections of pure and mixed strains of C. albicans in mice when used vaginally at concentrations of 0.25-2% and 0.1-1%, respectively. Formulations containing butoconazole have been used in the treatment of vaginal yeast infections.

# Reference

1. Walker, K.A., Braemer, A.C., Hitt, S., et al. 1-[4-(4-Chlorophenyl)-2-(2,6-dichlorophenylthio)-n-butyl]-1Himidazole nitrate, a new potent antifungal agent. J. Med. Chem. 21(8), 840-843 (1978).

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

## SAFFTY 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

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/11/2022

# CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM