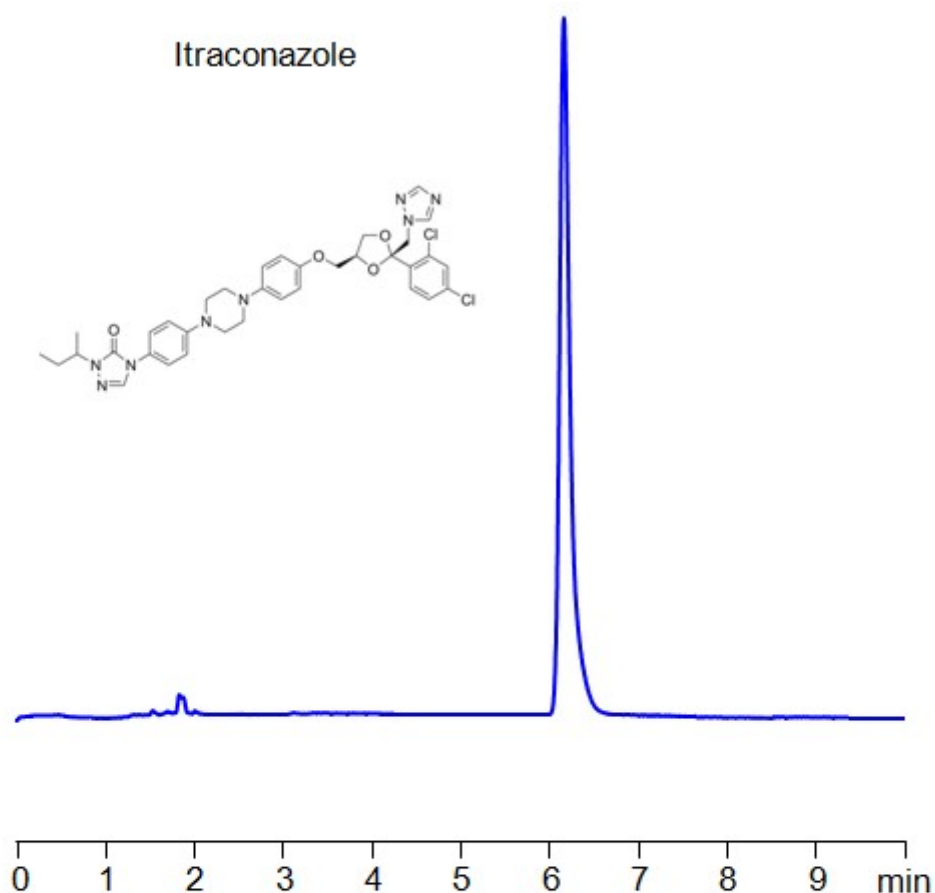


HPLC Method for Analysis of Itraconazole on Newcrom R1 Column

<https://sielc.com/hplc-determination-of-itraconazole-2>

Chromatogram



Column:	Newcrom R1
Column size:	4.6 × 150 mm, 3 µm
Column part number:	NR1-46.150.0510
Mobile phase:	MeCN – 45%
Buffer:	H ₂ SO ₄ – 0.2%
Flow rate:	1.0 ml/min
UV detection:	200 nm

Description

Itraconazole is an antifungal medication with the chemical formula C₃₅H₃₈Cl₂N₈O₄. It is used to treat a variety of fungal infections, including but not limited to: Aspergillosis, Blastomycosis, Histoplasmosis, Onychomycosis (fungal infection of the nails), and more. Itraconazole works by inhibiting the synthesis of ergosterol, a critical component of fungal cell membranes. This disruption results in increased cellular permeability, leading to leakage of cellular contents and, ultimately, the death of the fungus.

Uses: It is used to treat a wide range of fungal infections, including:

Itraconazole can be retained, and analyzed on a mixed-mode Newcrom R1 column with a mobile phase consisting of water, Acetonitrile (MeCN), and sulfuric acid. This analytical method can be detected with high resolution and peak symmetry at a wavelength of 200 nm using UV detection

Method Parameters

Mobile Phase	MeCN/H ₂ O – 45%,
Buffer	H ₂ SO ₄ – 0.2%
Flow Rate	1.0 ml/min
Detection	UV 200 nm
Class of Compounds	Diphenyl ethers
Analyzing Compounds	Itraconazole

HPLC Column Used

Newcrom R1, 4.6 x 150 mm, 3 µm, 100 A, dual ended

[Order this column at hplc-shop.de →](#)