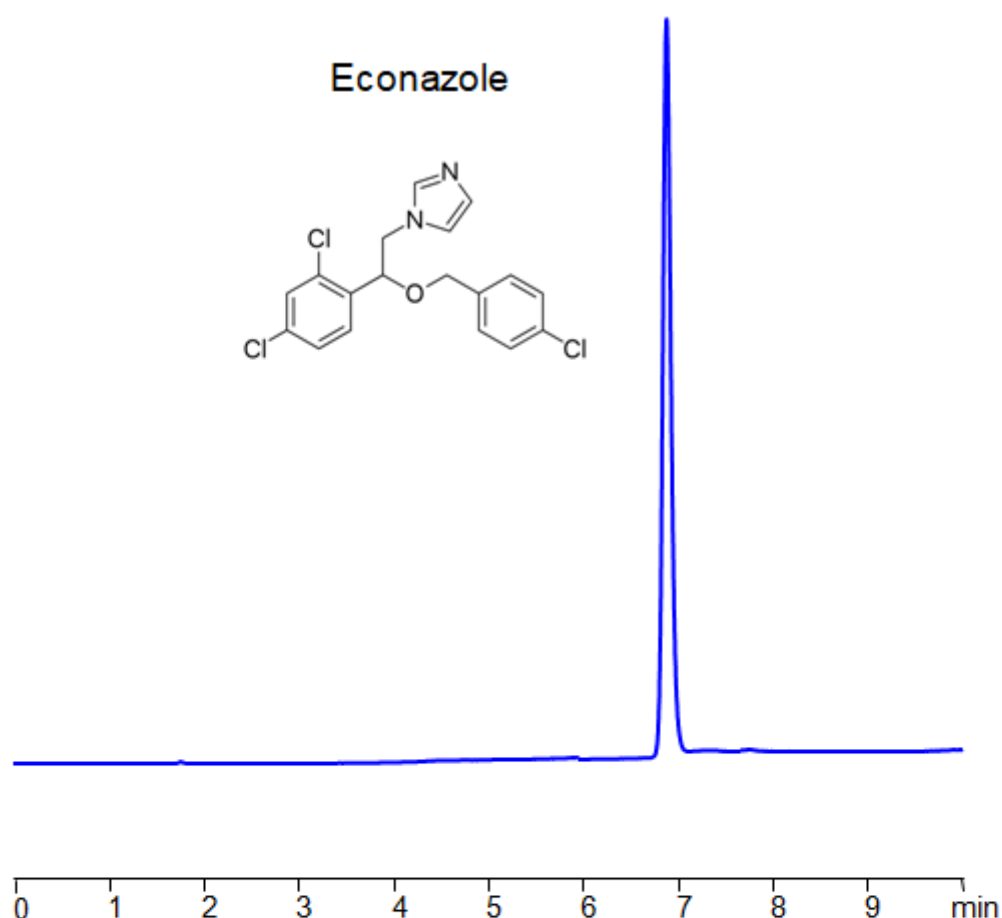


HPLC Method for Analysis of Econazole on Primesep 200 Column

<https://sielc.com/hplc-method-for-analysis-of-econazole>

Chromatogram



Column:	Primesep 200
Column size:	4.6 × 150 mm, 5 µm
Column part number:	200-46.150.0510
Mobile phase:	Gradient MeCN – 40-70%, 10 min
Buffer:	H ₂ SO ₄ – 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 200 nm

Description

Econazole is an antifungal medication with the chemical formula C₁₈H₁₅Cl₃N₂O. It is primarily used to treat a variety of fungal skin infections including but not limited to athlete's foot, tinea, ringworm, and jock itch. It belongs to the imidazole class of antifungal agents. Like other imidazole antifungals, econazole works by inhibiting the enzyme responsible for producing ergosterol, a key component of the fungal cell membrane. A lack of ergosterol disrupts the integrity of the fungal cell membrane, leading to the death of the fungus. You can find detailed UV spectra of Econazole and information about its various lambda maxima by visiting the following link.

Econazole can be retained, and analyzed on a Primesep 200 mixed-mode stationary phase column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a sulfuric acid as a buffer. This analysis method can be detected in the UV 200 nm.

Method Parameters

Mobile Phase	Gradient MeCN – 40-70%, 10 min
Buffer	H ₂ SO ₄ – 0.2%
Flow Rate	1.0 ml/min
Detection	UV, 200 nm
Peak Retention Time	6.89 min
Class of Compounds	Allylamines
Analyzing Compounds	Econazole

HPLC Column Used

Primesep 200, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)