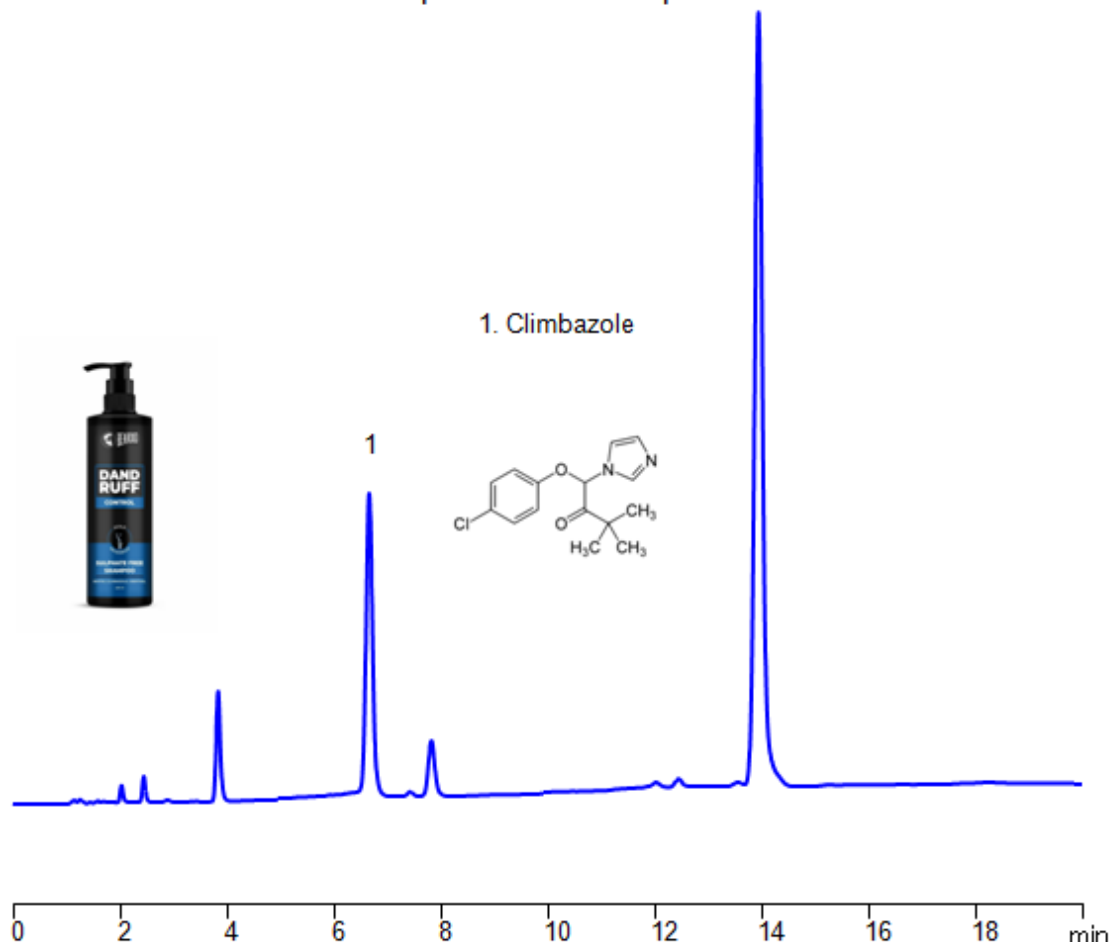


HPLC Method for Determination of Climbazole in Dandruff Shampoo on Primesep B Column

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

Chromatogram

Beardo Dandruff Control Sulphate Free Shampoo



Column:	Primesep B
Column size:	4.6 × 150 mm, 5 µm
Column part number:	B - 46.150.0510
Mobile phase:	Gradient MeCN – 40-70 %, 20 min
Buffer:	Ammonium Formate pH 4.0-20 mM
Flow rate:	1.0 mL/min
Detection:	UV 275 nm

Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Climbazole

Climbazole is an antifungal agent with the chemical formula $C_{15}H_{17}ClN_2O_2$. It is commonly used in hair care products, primarily in shampoos, to treat dandruff and seborrheic dermatitis. It works by inhibiting the growth of the fungi by interfering with ergosterol biosynthesis, which is a crucial component of fungal cell membranes. Without ergosterol, the fungal cell membrane

becomes compromised, leading to the death of the fungus.

Climbazole can be retained, and analyzed on a Primesep B mixed-mode stationary phase column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a ammonium format a buffer. This analysis method can be detected in the UV 270 nm.

Method Parameters

Mobile Phase	Gradient MeCN – 40-70%, 20 min
Buffer	Ammonium Formate pH 4.0-20 mM
Flow Rate	1.0 ml/min
Detection	UV, 275 nm
Class of Compounds	Allylamines
Analyzing Compounds	Climbazole

HPLC Column Used

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

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