

HPLC Method for Determination of Miconazole in Health Care Products on Primesep B Column



Miconazole is an antifungal medication commonly used to treat fungal infections. Here are some key points about miconazole:

Usage: It's most often used to treat skin and mucous membrane infections such as vaginal yeast infections, oral thrush, athlete's foot, jock itch, and ringworm.

Formulations: Miconazole is available in various formulations, including creams, powders, sprays, and suppositories.

Topical Cream: Applied to the skin to treat conditions like athlete's foot, ringworm, and jock itch. **Vaginal Suppositories and Cream:** Used for vaginal yeast infections. **Oral Gel:** Used for oral thrush (a fungal infection in the mouth).

Miconazole 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 an ammonium format a buffer. This analysis method can be detected in the UV 250 nm.

Method Parameters

Column	Primesep B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	Gradient MeCN – 30-80%, 20 min
Buffer	Ammonium Formate pH 3.0-20 mM
Flow Rate	1.0 mL/min
Detection	UV, 250 nm

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