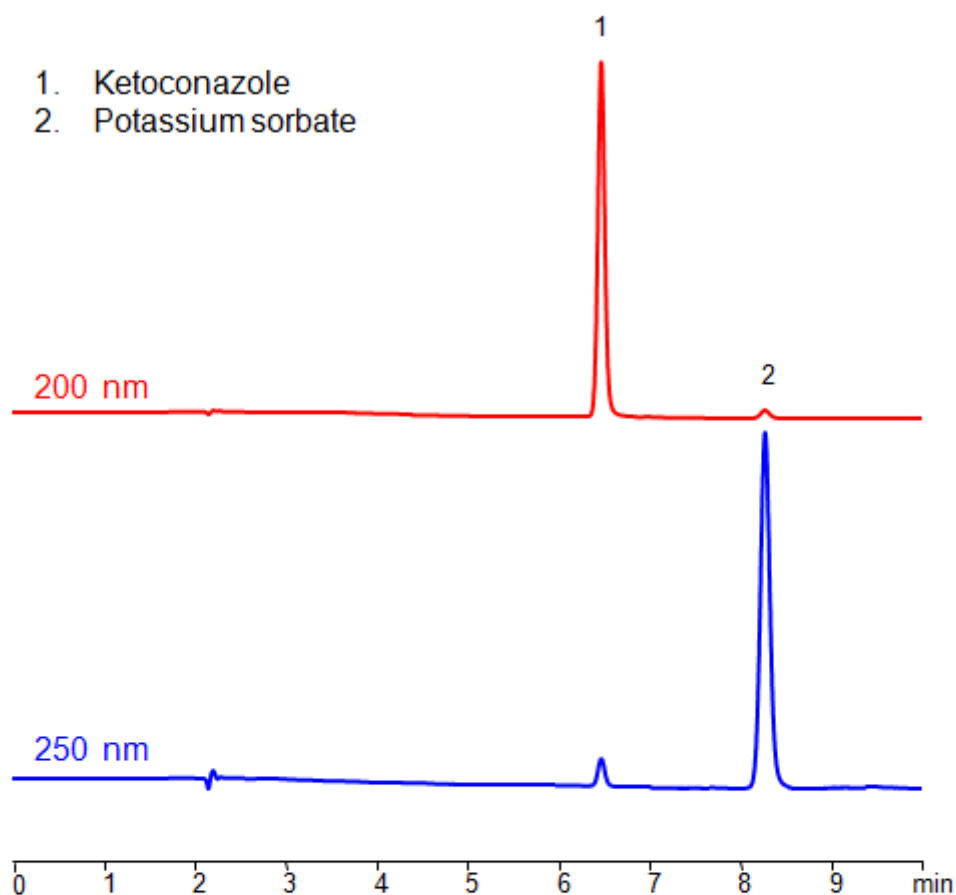


HPLC Method for Separation of Ketoconazole and Potassium Sorbate on Primesep B Column

<https://sielc.com/hplc-determination-of-ketoconazole-sorbate>

Chromatogram



Column:	Primesep B
Column size:	4.6 × 150 mm, 5 µm
Column part number:	B-46.150.0510
Mobile phase:	Gradient MeCN – 10-50%, 10 min
Buffer:	H ₂ SO ₄ – 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 200, 250 nm

Description

Ketoconazole, also known as Nizoral, is an antifungal compound with the chemical formula $C_{26}H_{28}Cl_2N_4O_4$. It is used to treat dandruff and is commonly available as a shampoo. It is applied to skin to treat other fungal infections. Ketoconazole also has antiandrogen and antiglucocorticoid properties. It works through interfering with the fungal synthesis of ergosterol and other enzymes. You can find detailed UV spectra of Ketoconazole and information about its various lambda maxima by visiting the following link.

Potassium Sorbate is a popular preservative with the chemical formula $C_6H_7KO_2$. It is used in a wide variety of foods, wines, and personal-care products. It works through inhibiting molds, yeasts, and various other microbes. You can find detailed UV spectra of Potassium Sorbate and information about its various lambda maxima by visiting the following link.

Potassium sorbate, Sodium sorbate, Ketoconazole can be retained, analyzed, and separated on a Primesep B reverse-phase column using a gradient analytical method with a mobile phase consisting of Acetonitrile (MeCN), water, and Sulfuric acid as the ionic modifier. This analysis method can be UV detected at 200 nm with high resolution and peak symmetry.

Method Parameters

Mobile Phase	Gradient MeCN – 10-50%, 10 min
Buffer	H ₂ SO ₄ – 0.2%
Flow Rate	1.0 ml/min
Detection	UV 200, 250 nm
Peak Retention Time	6.31, 8.12 min
Class of Compounds	Drug
Analyzing Compounds	Potassium sorbate, Sodium sorbate, Ketoconazole

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)