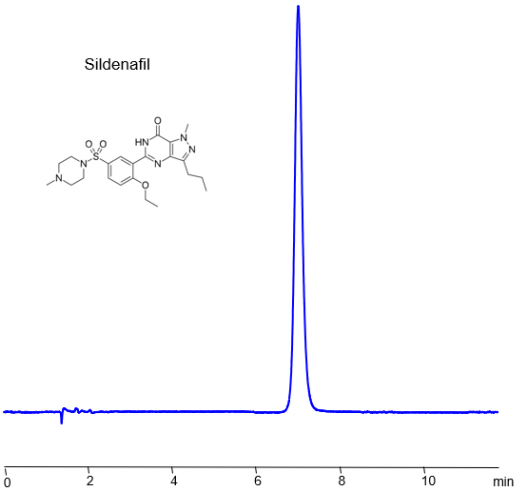
HPLC Method for Analysis of Sildenafil Citrate (Viagra) MS-compatible Mobile Phase on Primesep 100 Column



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN/H_2O – 70/30%
Buffer:	Ammonium Formate pH 3.0 – 60 mM
Flow rate:	1.0 mL/min
Detection:	UV 294 nm, MS-compatible mobile phase

Sildenafil Citrate (also known as Viagra) is one of the most popular medications used to treat erectile dysfunction and pulmonary hypertension. It works primarily through increasing bloodflow. It has the chemical formula C28H38N6O11S . It is a part of the group called phosphodiesterase 5 (PDE5) inhibitors, which prevent the enzyme called “phosphodiesterase type-5” from working.

Sildenafil or Viagra can be retained and analyzed on a Primesep 100 mixed-mode stationary phase column using an isocratic analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and an Ammonium Formate (AmFm) buffer. This analysis method can be detected in the UV regime at 294 nm, and due to the Ammonium Formate buffer, is also compatible with evaporative detection methods such as Evaporative Light Scattering Detection (ELSD), Charged Aerosol Detection (CAD), and Electrospray Ionization (ESI) for Mass Spectrometry (MS).

Method Parameters

Column	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 70%
Buffer	Ammonium Formate pH 3.0 – 60 mM
Flow Rate	1.0 mL/min
Detection	λmax 294 nm

Quelle: https://sielc.com/hplc-determination-of-sildenafil-ms

AugustaChrom - Dr. Roland Kießwetter
Tel.: +49 821 599 783 70
Fax: +49 821 599 783 71
E-Mail: info@hplc-shop.de