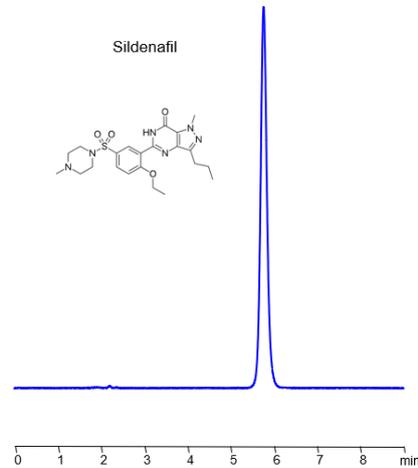


HPLC Method for Analysis of Sildenafil Citrate (Viagra) in a Tablet Primesep 100 Column



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN – 60%
Buffer:	H ₂ SO ₄ – 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 214, 294 nm

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 a Sulfuric acid (H₂SO₄) buffer. This analysis method can be detected in the UV regime at 214 nm and 294 nm with high resolution and peak symmetry.

Method Parameters

Column	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 60%
Buffer	H ₂ SO ₄ – 0.2%
Flow Rate	1.0 mL/min
Detection	λ _{max} 214, 294 nm

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