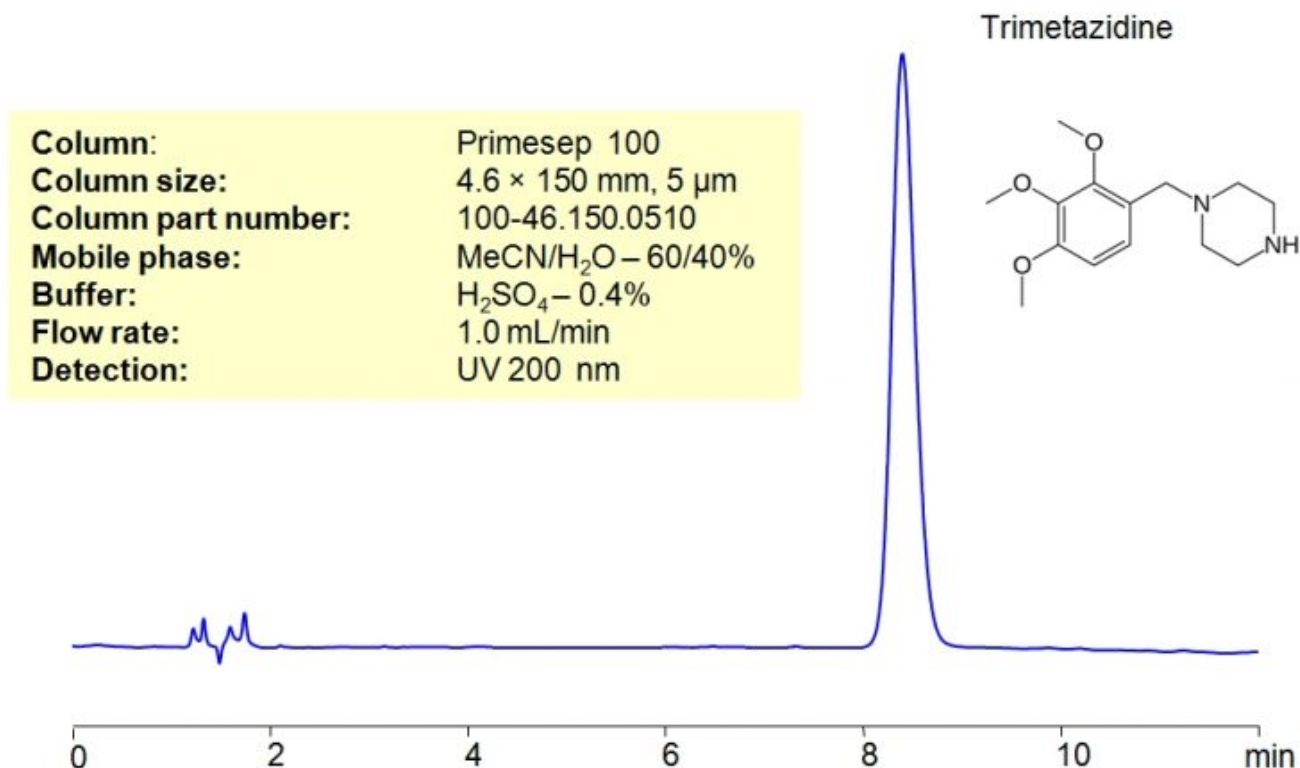


HPLC Method For Analysis Of Trimetazidine Hydrochloride on Primesep 100 Column

<https://sielc.com/hplc-method-for-analysis-of-trimetazidine-hydrochloride>

Chromatogram



Description

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

Trimetazidine (TMZ) is a medication with the chemical formula C₁₄ H₂₂ N₂ O₃ . It is taken to treat angina and other heart conditions. It inhibits the mitochondrial enzyme long-chain-3-ketoacyl-CoA thiolase which decreases fatty acids and shifts substrate utilization towards glucose oxidation. There is a debate within the sports and scientific communities about whether or not TMZ is a performance-enhancing drug. The World Anti-Doping Agency considers it to be a hormone and metabolic modulator.

Trimetazidine can be retained and analyzed using the Primesep 100 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a sulfuric acid buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 60/40%
Buffer	H ₂ SO ₄ – 0.4%
Flow Rate	1.0 ml/min
Detection	UV, 200 nm,

Class of Compounds	Drug
Analyzing Compounds	Trimetazidine

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 µm, 100 A, dual ended

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