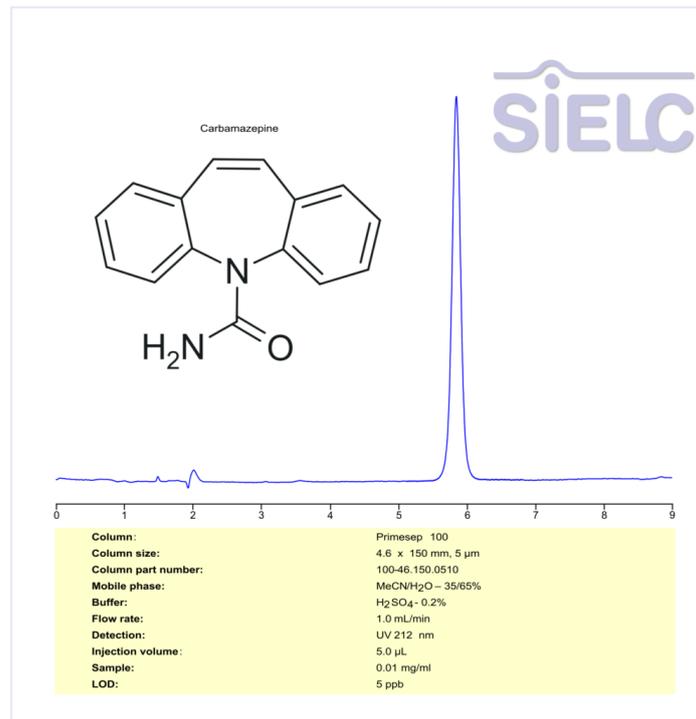


HPLC Method for Analysis of Carbamazepine on Primesep 100 Column



High Performance Liquid Chromatography (HPLC) Method for Analysis of Carbamazepine

Carbamazepine is an organic compound with the molecular formula C₁₅H₁₂N₂O .

Properties: Appearance: Typically a white to off-white crystalline powder.

Molecular weight: ~236.27 g/mol

Solubility: Soluble in organic solvents like ethanol.

Uses: Mainly used to treat several conditions affecting the nervous system such as epilepsy.

Carbamazepine 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, acetonitrile (MeCN), and sulfuric acid. Detection is performed using UV at 212 nm.

*LOD was determined for this combination of instrument, method, and analyte, and it can vary from one laboratory to another even when the same general type of analysis is being performed.

Method Parameters

Column	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 35%
Buffer	H2SO4 – 0.2%
Flow Rate	1.0 mL/min
Detection	UV 212 nm
Limit of Detection	5 ppb

Quelle: <https://sielc.com/hplc-ms-method-for-analysis-carbamazepine>