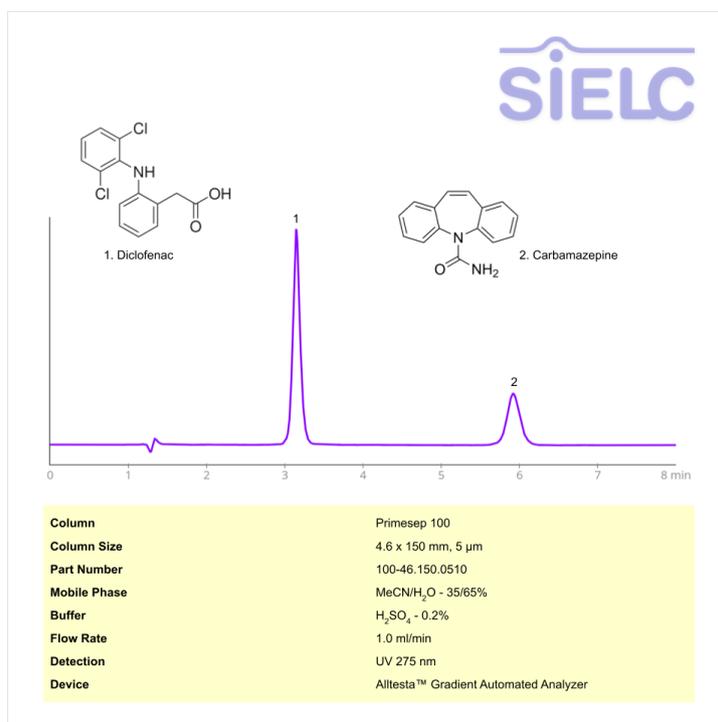


HPLC Method for Analysis of Diclofenac and Carbamazepine on Primesep 100 Column on Alltesta™



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

Diclofenac is a nonsteroidal anti-inflammatory drug (NSAID) with the molecular formula C₁₄H₁₁Cl₂N₂O₂ . It is a pain killer that also relieves symptoms of arthritis. It is only accessible through a prescription from a medical professional.

Carbamazepine is a anticonvulsant medication with the molecular formula C₁₅H₁₂N₂O . It is typically used to treat epilepsy, bipolar disorder, and nerve pain. It works through calming overactive nerves through binding voltage-dependent sodium channels.

Diclofenac , 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 and acetonitrile (MeCN) with a sulfuric acid buffer. Detection is performed using UV.

Method Parameters

| | |
|---------------------|---|
| Column | Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended |
| Mobile Phase | MeCN – 35% |
| Buffer | H ₂ SO ₄ – 0.2% |
| Flow Rate | 1.0 mL/min |
| Detection | UV 275 nm |

Quelle: <https://sielc.com/hplc-method-for-analysis-of-diclofenac-and-carbamazepine>