

HPLC Method for Analysis of Labetalol (stereoisomers) in Pharmaceutical Dosage Form on Primesep B Column



Separation type: Liquid Chromatography Mixed-mode SIELC Technologies

Labetalol is primarily used for the management of hypertension. It is classified as a beta-blocker, which works by blocking the effects of endogenous chemicals such as epinephrine on the heart and blood vessels. Through this mechanism, a reduction in heart rate, blood pressure, and myocardial strain is achieved.

Labetalol can be retained, separated and analyzed using a Primesep B mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase comprising water, acetonitrile (MeCN), and sulfuric acid as a buffer. This method allows for detection using UV 230 nm.

You can find detailed UV spectra of Labetalol and information about its various lambda maxima by visiting the following link .

Method Parameters

Column	Primesep B, 4.6 x 250 mm, 5 μ m, 100 Å, dual ended
Mobile Phase	MeCN – 15%
Buffer	H ₂ SO ₄ -0.2%
Flow Rate	0.7 mL/min
Detection	UV 230 nm

Quelle: <https://sielc.com/hplc-method-labetalol>