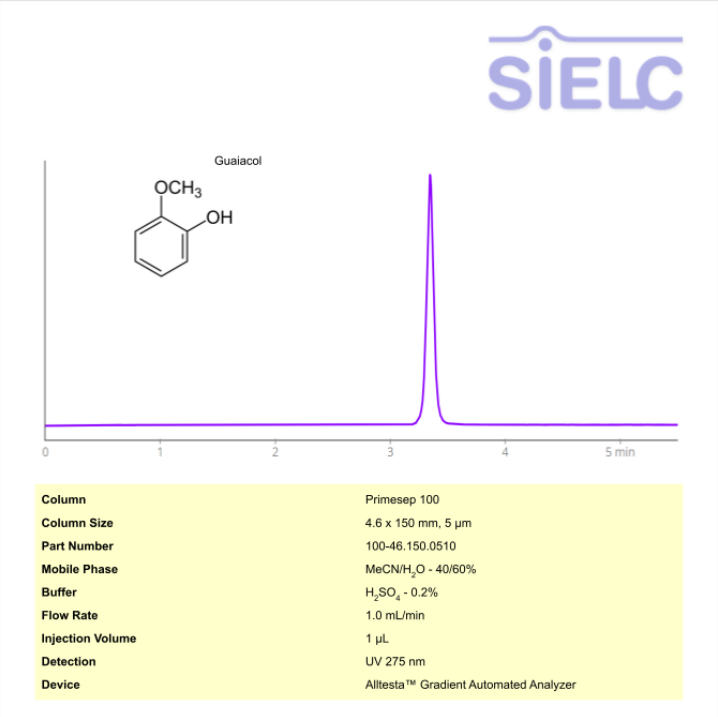
Analysis of Guaiacol on Primesep 100 Column on Alltesta™



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

Guaiacol is an organic compound with the chemical formula C7H8O2 . It is a naturally occurring substance derived from guaiacum or wood creosote, and it is known for its characteristic smoky odor. It can be naturally found in guaiacum wood, creosote, and certain plants or produced synthetically through the methylation of catechol or other methods. It is used in various foods as a smoky flavoring. Medically, it has been used in expectorants and antiseptics. Guaiacol derivatives are also used in the pharmaceutical industry. It also serves as a precursor for the synthesis of other chemicals, such as vanillin. UV spectra of Guaiacol and information about its various lambda maxima by visiting the following link.

Guaiacol 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 sulfuric acid as a 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 – 40%
Buffer	Sulfuric Acid
Flow Rate	1.0 mL/min
Detection	UV 275 nm

Quelle: https://sielc.com/hplc-method-for-analysis-of-guaiacol-2