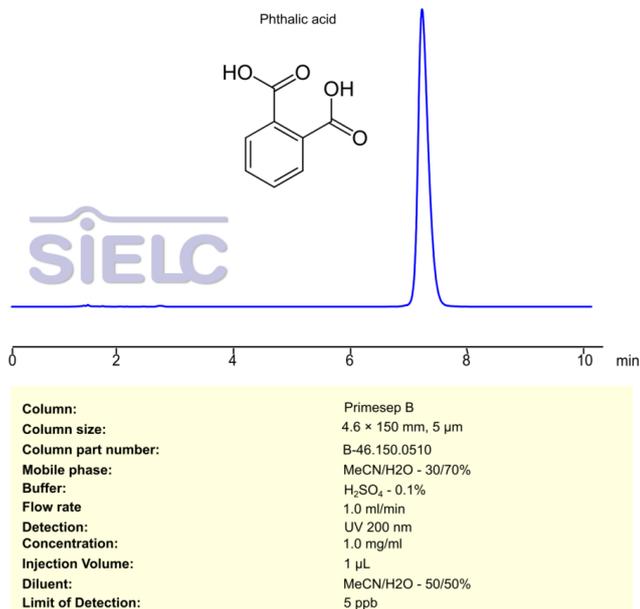


HPLC Method for Analysis of Phthalic acid on Primesep B Column



Separation type: Liquid Chromatography Mixed-mode SIELC Technologies

Phthalic acid is an aromatic dicarboxylic acid with the chemical formula C₆H₄(CO₂H)₂. It consists of a benzene ring with two carboxylic acid groups (-COOH) attached to adjacent carbon atoms (in the ortho position). It is mainly produced by the oxidation of naphthalene or o-xylene.

Uses Phthalic acid is primarily used as a precursor to other chemicals, including:

Phthalic anhydride: Used in the production of plasticizers for PVC (polyvinyl chloride). Alkyd resins: Important in the manufacture of paints and coatings. Dyes and pigments: Phthalic acid derivatives are often used in the production of dyes.

Phthalic Acid can be retained, separated and analyzed using a Primesep B mixed-mode stationary phase column. The analysis employs a gradient method with a simple mobile phase comprising water, acetonitrile (MeCN), and phosphoric acid as a buffer. This method allows for detection using UV 200 nm.

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

Method Parameters

Column	Primesep B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O – 30/70%
Buffer	H ₂ SO ₄ – 0.1%
Flow Rate	1.0 mL/min
Detection	UV 200 nm
Limit of Detection	5 ppb

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