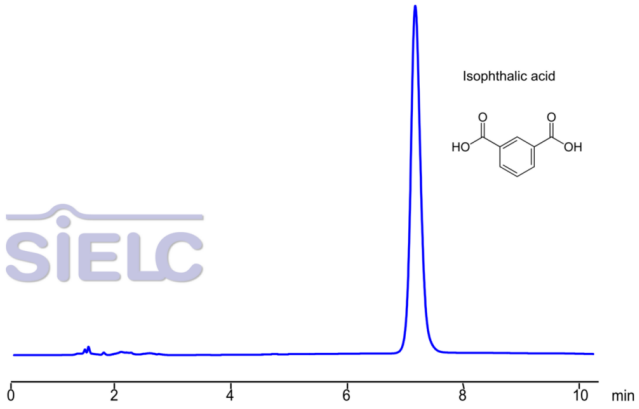
# HPLC Method for Analysis of Isophthalic acid on Primesep B Column

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|---|---|
| **Column:** | Primesep B |
| **Column size:** | 4.6 × 150 mm, 5 µm |
| **Column part number:** | B-46.150.0510 |
| **Mobile phase:** | Gradient MeCN - 30-70%, 10 min |
| **Buffer:** | $H_3PO_4$ - 0.4% |
| **Flow rate** | 1.0 ml/min |
| **Detection:** | UV 210 nm |
| **Concentration:** | 1.0 mg/ml |
| **Injection Volume:** | 1 µL |
| **Diluent:** | MeCN/H2O - 50/50% |
| **Limit of Detection:** | 5 ppb |

Separation type: Liquid Chromatography Mixed-mode SIELC Technologies

Isophthalic acid is an aromatic dicarboxylic acid with the chemical formula C6H4(CO2H)2. It is a colorless crystalline solid and is one of the three isomers of benzene dicarboxylic acid, the others being phthalic acid and terephthalic acid. In isophthalic acid, the two carboxyl groups (–COOH) are positioned on the 1st and 3rd carbons of the benzene ring, making it a meta isomer.

Isophthalic 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 210 nm.

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

## Method Parameters

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|---|---|
| **Column** | Primesep B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended |
| **Mobile Phase** | Gradient MeCN – 30-70%, 10 min |
| **Buffer** | H3PO4 – 0.4% |
| **Flow Rate** | 1.0 mL/min |
| **Detection** | UV 210 nm |
| **Limit of Detection** | 5 ppb |

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Quelle: https://sielc.com/hplc-method-isophthalic-acid