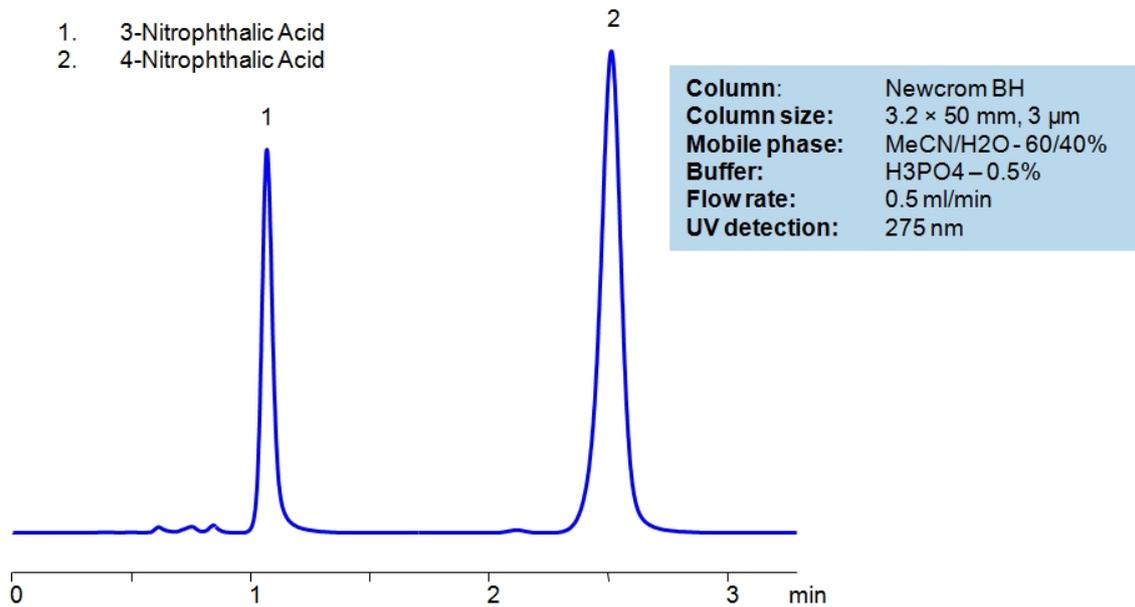


HPLC Separation of 3-Nitrophthalic and 4-Nitrophthalic Acids



Nitrophthalic acid exist in the form of two isomers: 3-nitrophthalic and 4-nitrophthalic acid. Both forms have similar hydrophobicity and ionic properties. Isomers of nitrophthalic acid are separated on Primesep D column by combination of reverse phase and anion-exchange mechanisms. Method developed on a short-50 mm- column and allows fast analysis of these two isomers.

The Newcrom columns are a family of reverse-phase-based columns. Newcrom A , AH , B , and BH are all mixed-mode columns with either positive or negative ion-pairing groups attached to either short (25 Å) or long (100 Å) ligand chains. Newcrom R1 is a special reverse-phase column with low silanol activity.

Method Parameters

Column	Newcrom BH, 3.2x50 mm, 3 µm, 100 Å
Mobile Phase	MeCN/H ₂ O – 60/40%
Buffer	H ₃ PO ₄ – 0.5%
Flow Rate	0.5 mL/min
Detection	UV 275 nm

Quelle: <https://sielc.com/Application-HPLC-Separation-of-3-Nitrophthalic-and-4-Nitrophthalic-Acids-on-Primesep-D-H-PLC-Column>