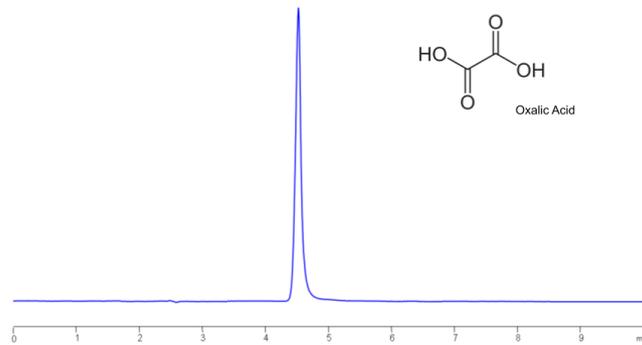


HPLC Method for Determination of Oxalic acid on Newcrom BH

SIELC



Column	Newcrom BH
Column Size	4.6 x 150 mm, 3µm, 100Å
Part Number	NBH-46.150.0310
Mobile Phase	MeCN/H ₂ O - 10/90%
Buffer	H ₂ SO ₄ - 0.1%
Flow Rate	1.0 mL/min
Detection	UV 196nm
LOD*	200 ppb
Sample	0.6 mg/ml in H ₂ O
Injection Volume	1µL

High Performance Liquid Chromatography (HPLC) Method for Analysis of Oxalic Acid .

Oxalic Acid is an organic acid with the chemical formula C₂H₂O₄ . It is considered the simplest dicarboxylic acid, with it's name being derived from the genus of the plant from which it was isolated, Oxalis. It is primarily used as a bleaching agent in cleaning solutions, rust removal, and teeth whitening. Oxalic acid has an oral lowest published lethal dose of 600 mg/kg. You can find detailed UV spectra of Oxalic Acid and information about its various lambda maxima by visiting the following link.

Multi-charged molecules, such as oxaloacetate and oxalate, generally have a tendency to exhibit poor peak shape on reverse-phase HPLC columns, where they show significant tailing. Oxalic Acid can be retained with great peak shape on a Newcrom BH mixed-mode column. Oxalic acid can be measured at low UV. Using a Newcrom BH mixed-mode column and a mobile phase consisting of acetonitrile (ACN) and water with sulfuric acid (H₂SO₄) buffer, oxaloacetic acid and oxalic acid can be retained, separated, and UV detected at 200 nm with precise resolution.

Method Parameters

Column	Newcrom BH, 4.6 x 150 mm, 3 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O – 10/90%
Buffer	H ₂ SO ₄ - 0.1%
Flow Rate	1.0 mL/min
Detection	UV, 196 nm

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