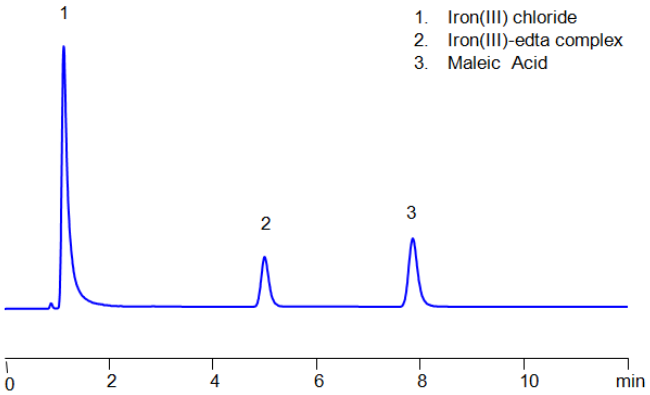
HPLC Method For Analysis Of EDTA and Maleic Acid



Column:	Newcrom BH
Column size:	4.6 × 150 mm, 5 µm
Column part number:	NBH-46.150.0510
Mobile phase:	MeCN/H_2O – 2/98%
Buffer:	$HClO_4$ – 0.1 %
Flow rate:	1.0 mL/min
Detection:	UV 220 nm

Separation type: Liquid Chromatography Mixed-mode

Ethylenediaminetetraacetic acid (EDTA) is a very common chelating agent, used particularly for collecting Iron and Calcium ions. It has a wide range of applications, including in the textile industry, paper industry, pharmaceutical industry, and in cosmetics, where it is used to capture unwanted metal ions in solution. Maleic acid, a dicarboxylic acid, has a few interesting applications, such in medicine to form salts with drugs to increase their stability and as a precursor for the production of glyoxylic acid, which is used in cosmetics. An Iron (III)-EDTA complex and Maleic acid can both be retained, separated, and analyzed on a mixed-mode Newcrom BH column with a mobile phase consisting of (mostly) water, Acetonitrile (MeCN), and Perchloric acid (HClO4). This analytical method can be UV detected at 220 nm with high resolution and peak symmetry.

High Performance Liquid Chromatography (HPLC) Method for Analysis of EDTA and Maleic Acid

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.

AugustaChrom - Dr. Roland Kießwetter
Tel.: +49 821 599 783 70
Fax: +49 821 599 783 71
E-Mail: info@hplc-shop.de

Method Parameters

Column	Newcrom BH, 4.6×150 mm, 100 Å
Mobile Phase	MeCN – 2%
Buffer	HClO4 – 0.1%
Flow Rate	1.0 mL/min
Detection	UV 220 nm

Quelle: https://sielc.com/hplc-method-for-analysis-of-edta-and-maleic-acid