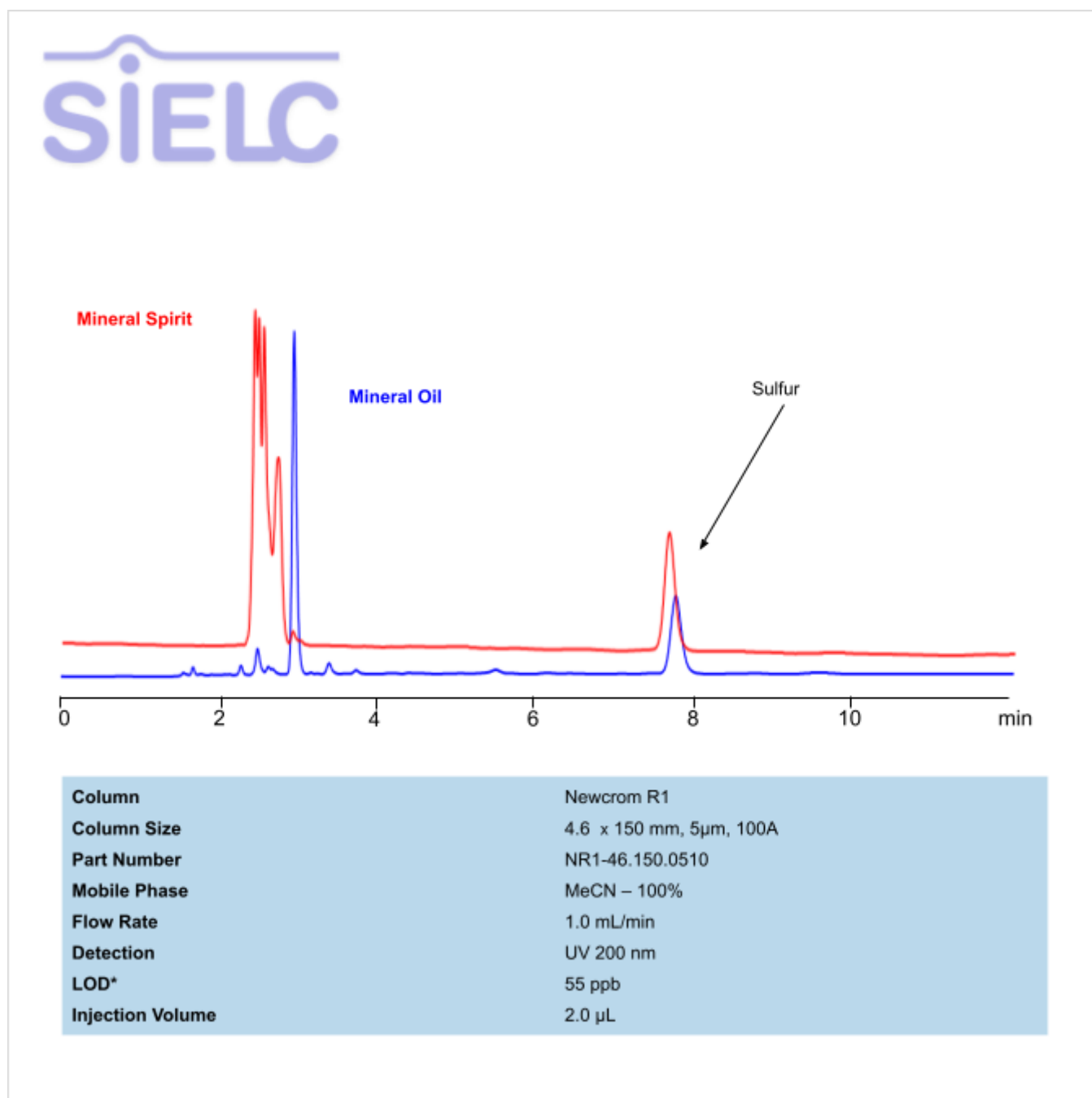


HPLC Method for Analysis of Sulfur in Mineral Oil and Mineral Spirit on Newcrom R1 Column

<https://sielc.com/hplc-analysis-of-sulfur-in-mineral-oil-and-spirit-newcrom-r1>

Chromatogram



Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Sulfur

Sulfur is a non-metal with the symbol S and atomic number 16 . Elemental sulfur is a yellow crystal at room temperature. It is one of the most abundant elements on Earth and in the universe. It is used primarily as a precursor to other chemicals or is converted to sulfuric acid.

Sample Preparation: Mix the oil sample with acetonitrile (MeCN) in a 1:20 ratio (oil : MeCN), cap the vial, and shake for 10 minutes or vortex thoroughly. After phase separation, carefully collect the MeCN layer, transfer it to an autosampler vial, and

inject for sulfur analysis.

Sulfur can be retained and analyzed using the Newcrom R1 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of acetonitrile (MeCN). Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN
Buffer	None
Flow Rate	1.0 ml/min
Detection	UV 200 nm
Limit of Detection*	55 ppb
Class of Compounds	Non-metal
Analyzing Compounds	Sulfur

HPLC Column Used

Newcrom R1, 4.6 x 150 mm, 5 µm, 100 A, dual ended

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)