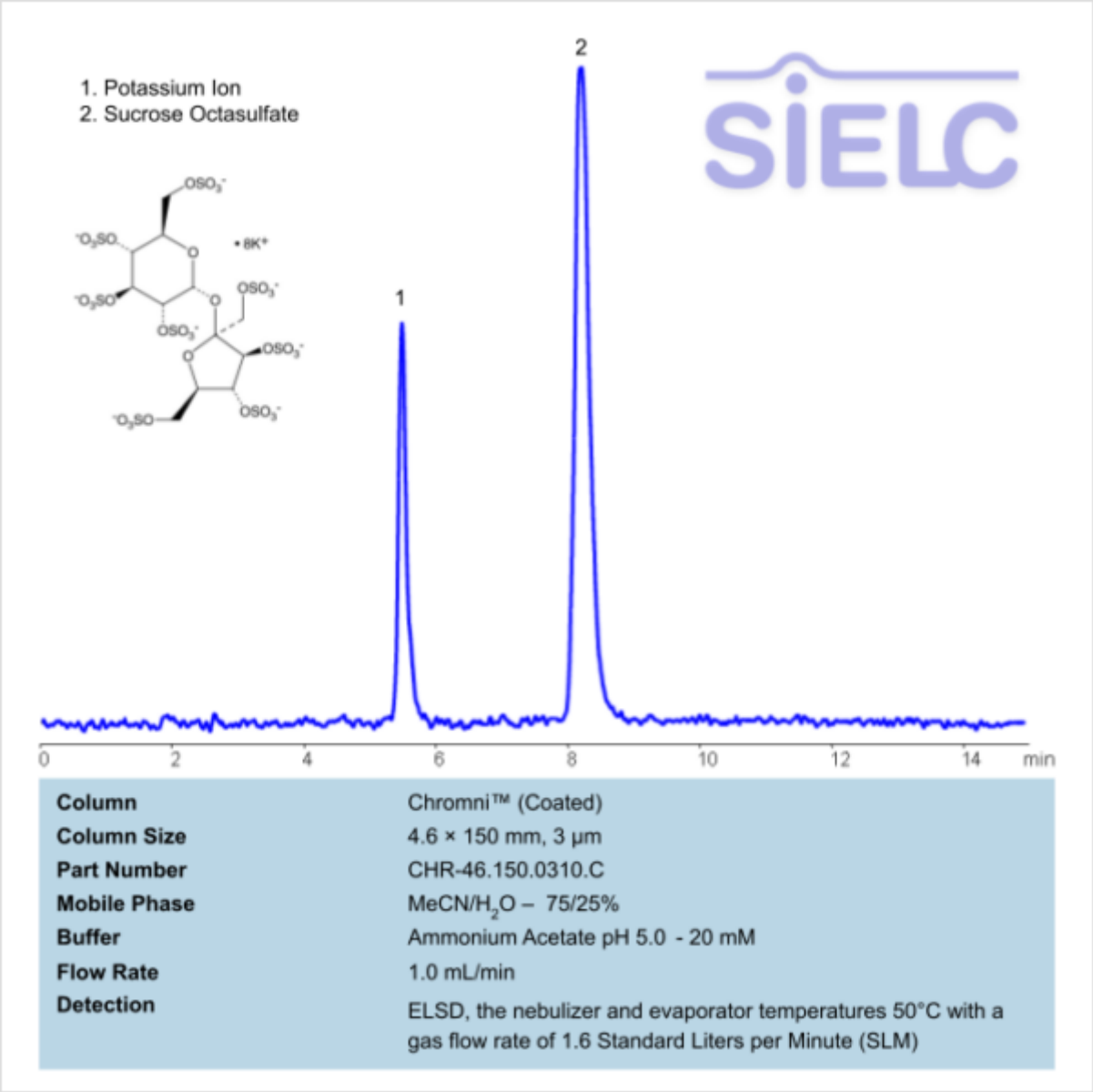
HPLC ELSD Method for Analysis of Sucrose Octasulfate on Chromni Column

https://sielc.com/hplc-analysis-of-sucrose-octasulfate

Chromatogram



Column	Chromni™ (Coated)
Column Size	4.6 × 150 mm, 3 µm
Part Number	CHR-46.150.0310.C
Mobile Phase	MeCN/H_2O – 75/25%
Buffer	Ammonium Acetate pH 5.0 - 20 mM
Flow Rate	1.0 mL/min
Detection	ELSD, the nebulizer and evaporator temperatures 50°C with a gas flow rate of 1.6 Standard Liters per Minute (SLM)

Description

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

Sucrose octasulfate is a chemical compound derived from sucrose, a common sugar with the chemical formula C 12 H 22 O 35 S 8 . It is characterized by the substitution of eight sulfate groups for hydroxyl groups in the sucrose molecule. This modification significantly changes the properties of the original sugar molecule, making sucrose octasulfate more complex and specialized in its applications.

In terms of its structure, sucrose is a disaccharide composed of glucose and fructose units. When these hydroxyl groups are replaced with sulfate groups in sucrose octasulfate, the molecule becomes highly polar and acidic due to the presence of sulfate groups, which are strong acid residues.

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

Sucrose octasulfate can be retained and analyzed using the Chromni stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a sulfuric acid as a buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN/H2O – 75/35 %
Buffer	Ammonium Acetate pH 5.0 – 10mM- 0.1%
Flow Rate	1.0 ml/min
Detection	ELSD
Class of Compounds	Sugar
Analyzing Compounds	Sucrose octasulfate

HPLC Column Used

Chromni, 4.6 x 150 mm, 3 µm, 100 A, surface coated

Order this column at hplc-shop.de →