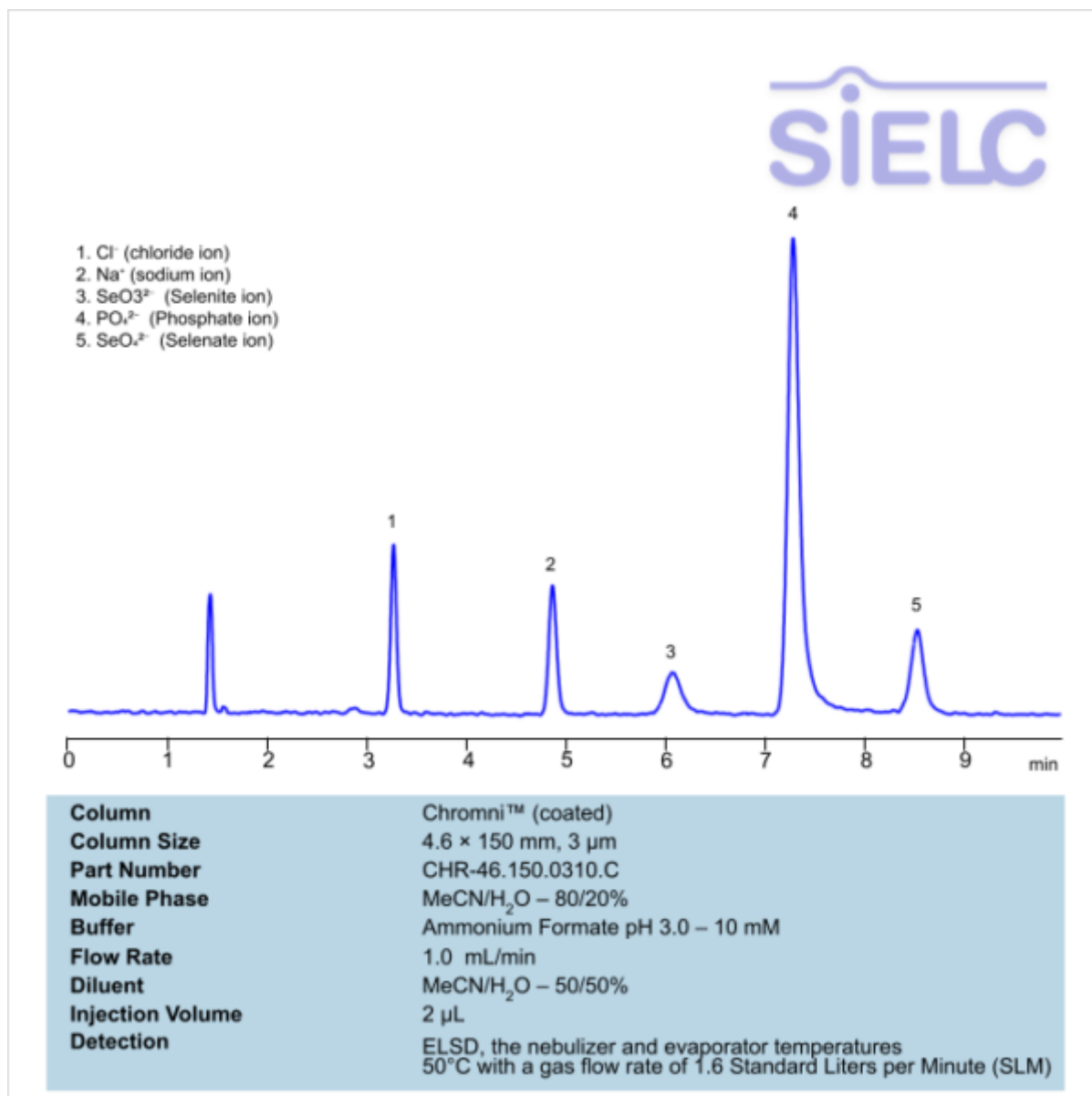


HPLC Method for Separation of Chloride, Selenite, Selenate, and Phosphate on Chromni Column

<https://sielc.com/hplc-method-for-analysis-of-sodium-chloride-selenite-selenate-phosphate>

Chromatogram



Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Selenite , Selenate , Chloride , Sodium , Phosphate .

Chloride is typically used to refer to a compound or molecule that contains a chlorine anion: Cl^- . It is an electrolyte that is essential for bodily functions including blood pH, fluid balance, cellular functions, and more. Imbalance of chloride can indicate underlying health problems.

Sodium , which has a chemical symbol of Na , is a soft alkali metal that is highly reactive. It is found in abundance in everyday materials like table salt, sea water, and even the Earth's crust. It is crucial for the body's function and fluid balance.

Selenite , the anion, not the crystal, has the chemical formula SeO_3^{2-} . It's an oxyanion of selenium.

Phosphate, PO_4^{3-} , is a compound that plays an important part in biological energy transfer. It contains phosphorus, which is also a key component in bones and teeth. It is also a buffer, which helps maintain pH levels in a body.

Selenate is an ion of selenium with the chemical formula SeO_3^{2-} . It is a good oxidizer, easily reduced to selenite and selenium.

Selenite, Selenate, Chloride, Sodium, Phosphate 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). Detection is performed using ELSD.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 80/20
Buffer	AmFM pH 3.0 – 10 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)
Class of Compounds	Ions
Analyzing Compounds	Selenite, Selenate, Chloride, Sodium, Phosphate

HPLC Column Used

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

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