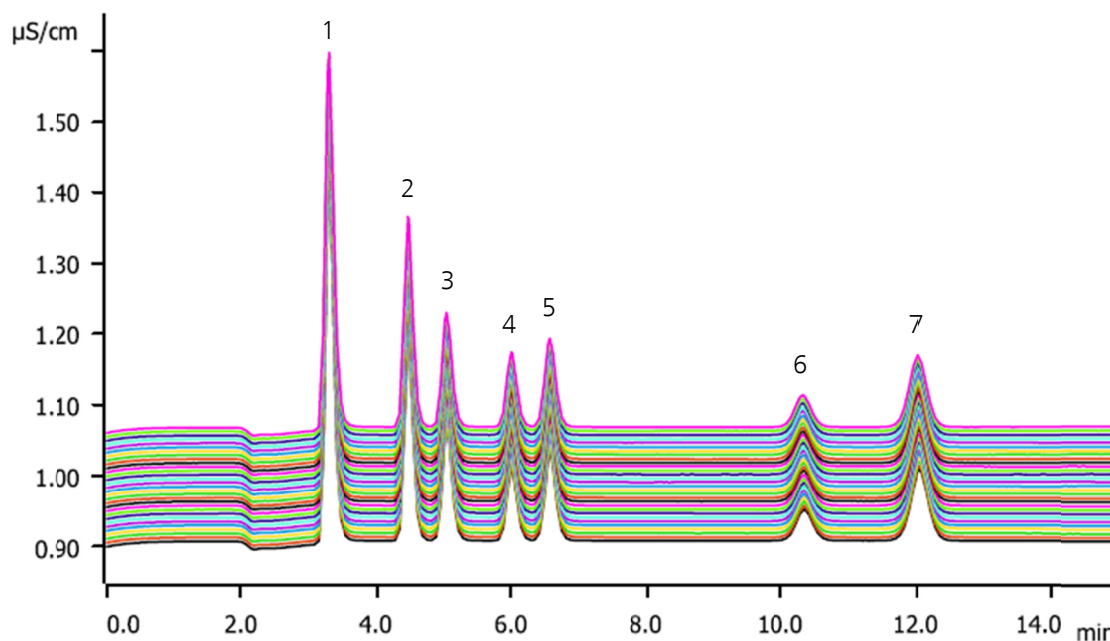


Reproducibility of the Metrohm Suppressor Module (MSM)



The state-of-the-art tri-chamber suppressor technology provides a fresh suppressor chamber for each measurement. The complete regeneration of the chamber after each sample ensures highly efficient cation exchange – today, tomorrow, and even after years of continuous operation.

The chromatograms as well as the statistical data demonstrate the outstanding reproducibility of the measurements with the Metrohm Suppressor Module.

Results

Peak	1	2	3	4	5	6	7
Anion	Fluoride	Chloride	Nitrite	Bromide	Nitrate	Phosphate	Sulfate
Concentration in mg/L	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Relative standard deviation in % (n = 30)	0.26	0.06	0.42	0.17	0.30	0.46	0.25

Method description

Sample

Standard solution

Sample preparation

Direct injection

Column

Metrosep A Supp 5 - 100/4.0 6.1006.510

Solutions

Eluent	3.2 mmol/L sodium carbonate 1.0 mmol/L sodium hydrogen carbonate
Regenerant	100 mmol/L sulfuric acid
Rinsing solution	Ultrapure water

Analysis

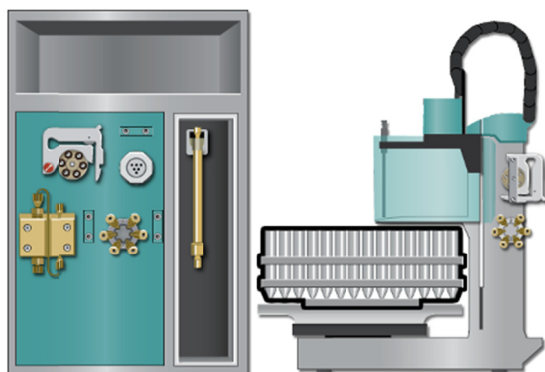
Sequential suppression

Parameters

Flow rate	0.7 mL/min
Injection volume	20 µL
P _{max}	20.0 MPa
Recording time	15 min
Column temperature	45 °C

Instrumentation

850 Professional IC Anion – MCS	2.850.2030
858 Professional Sample Processor – Pump	2.858.0020



m