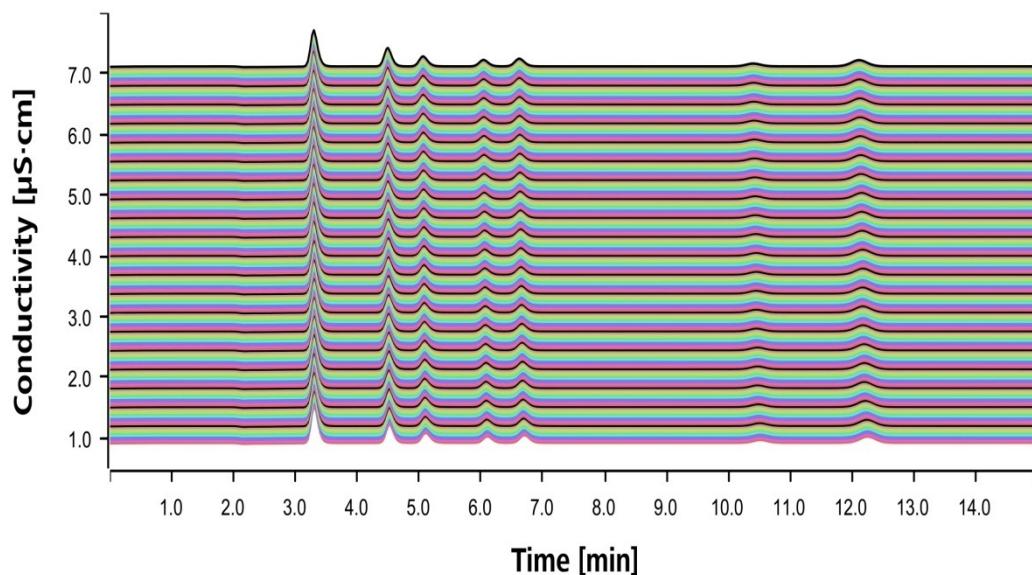


Anion Inline Eluent Preparation using an 849 Level Control



Eluent preparation on demand (EPOD) is the convenient and flexible way of automatic eluent preparation. The 849 Level Control together with an 800 Dosino equipped with a 50 mL dosing unit are used to dilute an eluent concentrate to the final eluent concentration. The use of eluent concentrates is suitable for any type of eluent. This facilitates unattended operation of the system over several weeks (see AN C-134 for cation eluent preparation).

Results

Anion	[µg/L]	Retention time	RSD _{RT} (%), n = 887)
Fluoride	250	3.29	0.17
Chloride	250	4.48	0.35
Nitrite	250	5.05	0.42
Bromide	250	6.02	0.48
Nitrate	250	6.59	0.55
Phosphate	250	10.38	0.50
Sulfate	250	12.08	0.51

Method description

Sample

Standard solution

Sample preparation

Direct injection

Column

Metrosep A Supp 5 - 100/4.0	6.1006.510
Metrosep A Supp 4/5 Guard/4.0	6.1050.500



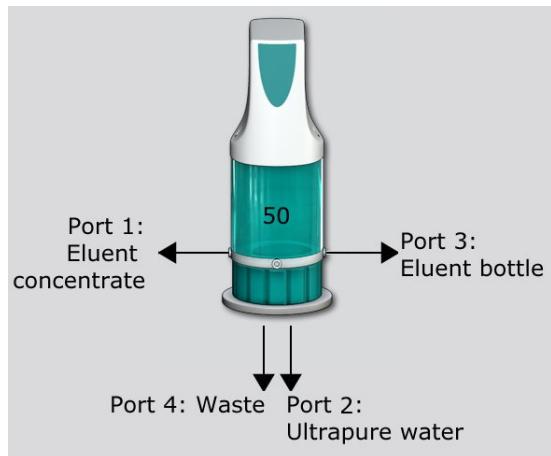
Solutions

Eluent concentrate	64.0 mmol/L sodium carbonate 20.0 mmol/L sodium hydrogen carbonate
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

Suppressed conductivity

Dosino setup



Parameters

Flow rate	0.7 mL/min
Injection volume	20 µL
P _{max}	15.0 MPa
Recording time	30 min
Column temperature	45 °C

Instrumentation

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

www.metrohm.com

 **Metrohm**