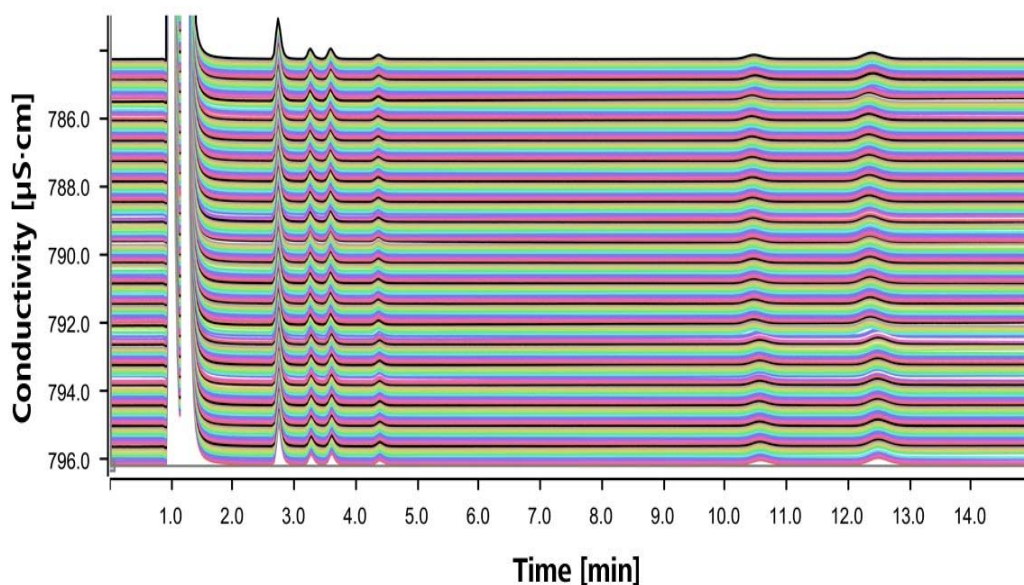


# Cation Inline Eluent Preparation using an 849 Level Control



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 required eluent concentration. The use of eluent concentrates is suitable for any eluent. This facilitates unattended operation of the system over several weeks (see AN S-296 for anion eluent preparation).

## Results

Cation	[µg/L]	Retention time	RSD <sub>RT</sub> (% , n = 830)
Lithium	250	2.74	0.15
Sodium	250	3.26	0.17
Ammonium	250	3.59	0.20
Potassium	250	4.36	0.25
Calcium	250	10.49	0.40
Magnesium	250	12.41	0.40

# Method description

## Sample

Standard solution

## Sample preparation

Direct injection

## Column

Metrosep C 4 - 100/4.0	6.1050.410
Metrosep C 4 Guard/4.0	6.1050.500

## Solutions

Eluent concentrate	42.5 mmol/L nitric acid 17.5 mmol/L dipicolinic acid
Eluent	1.7 mmol/L nitric acid 0.7 mmol/L dipicolinic acid

## Analysis

Non-suppressed conductivity

## Parameters

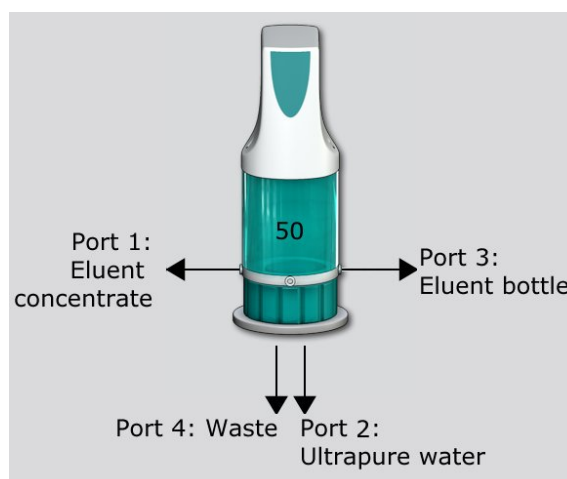
Flow rate	0.9 mL/min
Injection volume	10 $\mu$ L
P <sub>max</sub>	15.0 MPa
Recording time	30 min
Column temperature	45 °C

## Instrumentation

850 Professional IC Cation	2.850.1010
858 Professional Sample Processor – Pump	2.858.0020



## Dosino setup



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