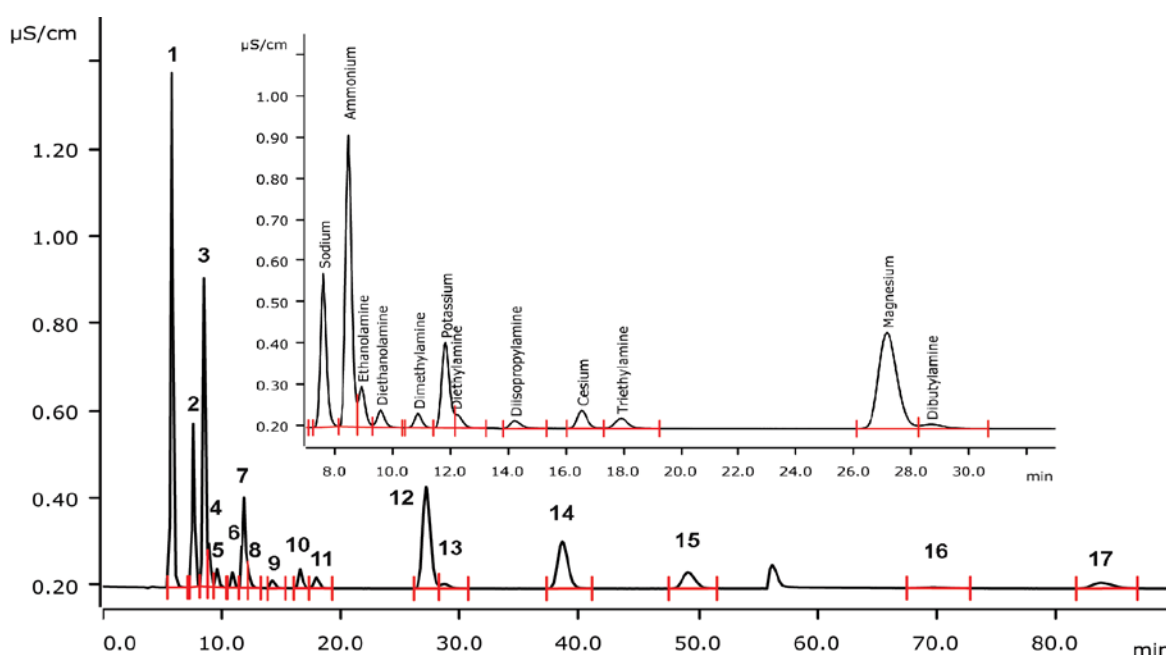


# Aliphatic amines as well as ethanolamines besides standard cations applying sequential suppression



This Application shows the selectivity of the Metrosep C Supp 1 - 250/4.0 column for alkylamines and ethanolamines besides standard cations. Separations is achieved under isocratic conditions; quantification includes conductivity detection after sequential suppression.

## Results

Cation [1 mg/L each]		Cation [1 mg/L each]		Cation [1 mg/L each]	
1	Lithium	7	Potassium	13	Dibutylamine
2	Sodium	8	Diethylamine	14	Calcium
3	Ammonium	9	Diisopropylamine	15	Strontium
4	Monothanolamine	10	Cesium	16	Tributylamine
5	Diethanolamine	11	Triethylamine	17	Barium
6	Dimethylamine	12	Magnesium		

### Sample

Standard solution

### Sample preparation

None

### Columns

Metrosep C Supp 1 - 250/4.0	6.1052.430
Metrosep C Supp 1 Guard/4.0	6.1052.500

### Solutions

Eluent	2.5 mmol/L nitric acid 50 µg/L rubidium 7.5% acetonitril
<u>Suppressor regenerant</u>	70 mmol/L sodium carbonate 70 mmol/L sodium hydrogen carbonate
Rinsing solution	Ultrapure water

### Analysis

Conductivity detection after sequential suppression

### Instrumentation

940 Professional IC Vario ONE/SeS/PP	2.940.1500
IC Conductivity Detector	2.850.9010
858 Professional Sample Processor	2.858.0020
MSM-HC Rotor C	6.2842.200

### Parameters

Flow rate	1.0 mL/min
Injection volume	20 µL
P <sub>max</sub>	15 MPa
Recording time	90 min (suppressor step at 56 min)
Column temperature	40 °C

