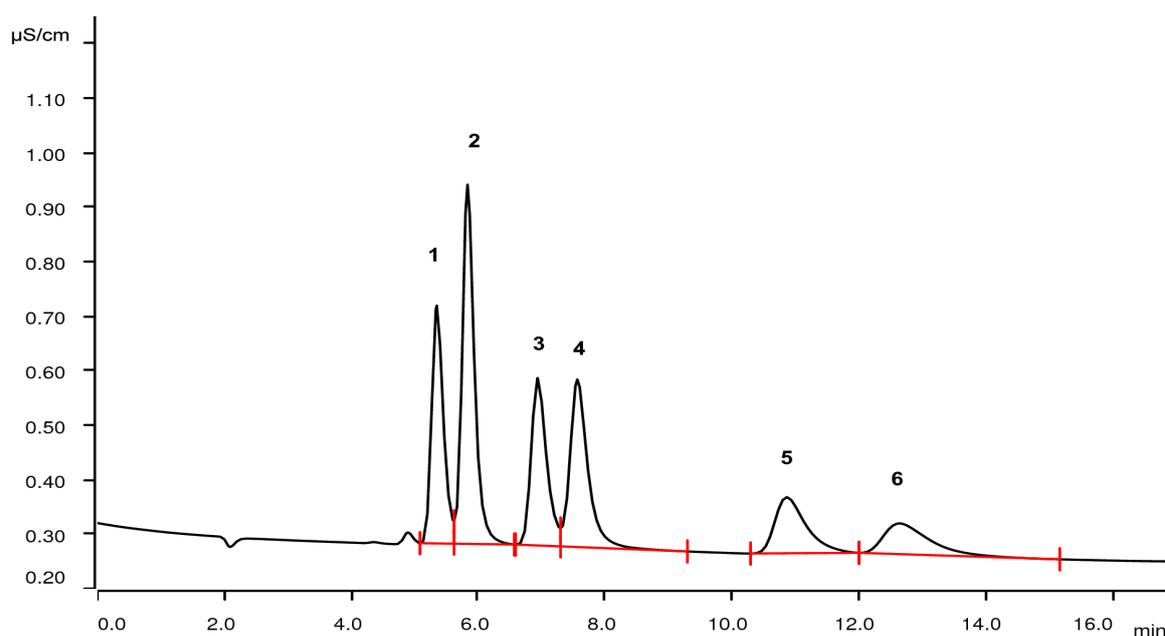


Metrosep C Supp 2 - 150/4.0: Amines applying suppressed cation chromatography



The Metrosep C Supp 2 column family is polystyrene/divinylbenzene based and therefore sequential cation suppression may be applied. This AN shows the separation and detection of different amines on the 150 mm version of the column with subsequent conductivity detection after sequential cation suppression.

Results

Cation	Conc. [mg/L]
1 Monoethanolamine	2.0
2 Monomethylamine	2.0
3 Monoethylamine	2.0
4 Dimethylamine	2.0
5 Trimethylamine	2.0
6 Diethylamine	2.0

Sample

Aqueous amine solution

Sample preparation

Direct injection

Columns

Metrosep C Supp 2 - 150/4.0	6.01053.420
Metrosep C Supp 2 Guard/4.0	6.01053.500

Solutions

Eluent	5.0 mmol/L nitric acid 50 µg/L rubidium
<u>Eluent concentrate</u>	100 mmol/L nitric acid 1 mg/L rubidium
<u>Suppressor regenerant</u>	70 mmol/L sodium carbonate 70 mmol/L sodium hydrogen carbonate
Rinsing solution	STREAM

Parameters

Flow rate	1.0 mL/min
Injection volume	20 µL
P _{max}	25 MPa
Recording time	17 min
Column temperature	60 °C

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

