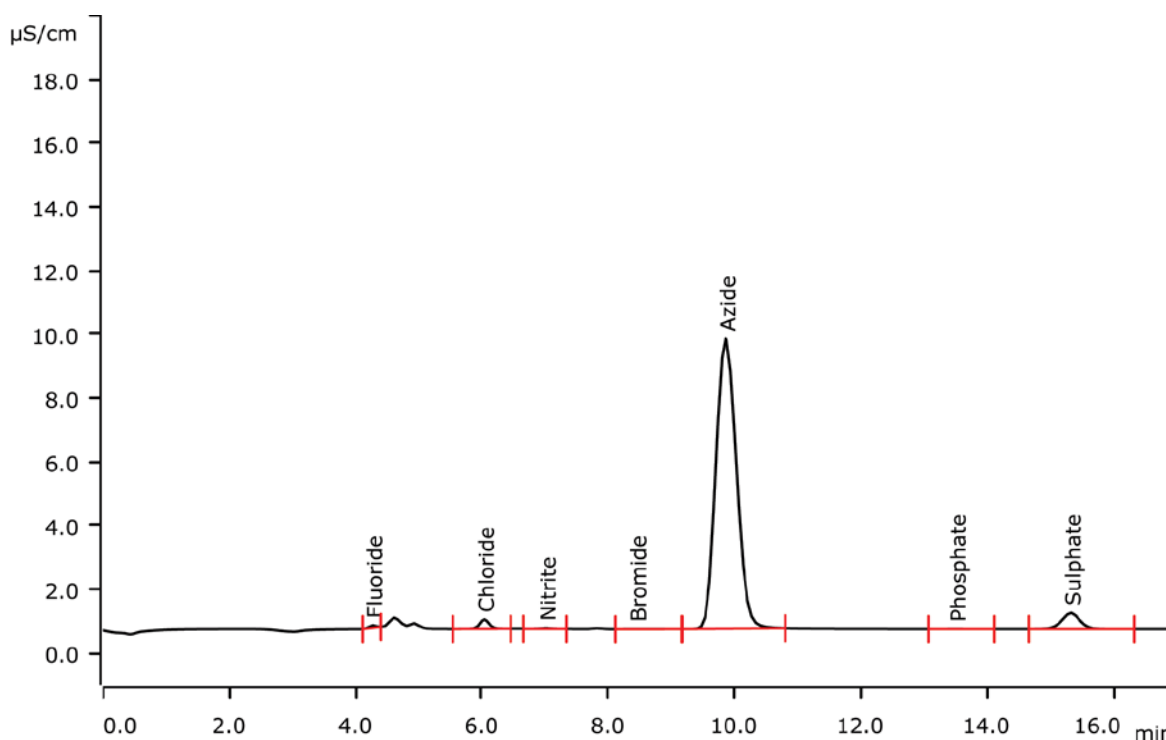


Azide in air from pharmaceutical production



During the production of certain pharmaceutical products, azide may be formed. Azide can cause explosions during manufacturing. To prevent such accidents, its concentration in air has to be monitored. Azide (N_3^-) is well separated from standard anions on the Metrosep A Supp 5 - 250/4.0 under standard conditions.

Results

Azide

56.9 µg/L

Other ions not quantified

Sample

Impinger solution

Sample preparation

Dilution 1 : 10

Columns

Metrosep A Supp 5 - 150/4.0	6.1006.520
Metrosep A Supp 4/5 Guard/4.0	6.1006.500

Solutions

<u>Eluent</u>	3.2 mmol/L sodium carbonate 1.0 mmol/L sodium hydrogen carbonate
Suppressor regenerant	100 mmol/L sulfuric acid
Rinsing solution	STREAM

Parameters

Flow rate	0.7 mL/min
Injection volume	100 µL
P _{max}	15 MPa
Recording time	17 min
Column temperature	30 °C

Analysis

Conductivity after sequential suppression

Instrumentation

930 Compact IC Vario pro Oven/SeS/PP/Deg	2.930.2560
IC Conductivity Detector	2.850.9010
863 Compact Autosampler	2.863.0010
MSM Rotor A	6.2832.000
Adapter sleeve for Suppressor Vario	6.2842.020

