

# IC Application Note No. S-223

**Title:** Chlorate and sulfate in brine

**Summary:** Determination of chlorate and sulfate in a brine solution (1.5% NaCl) applying anion chromatography with conductivity detection after chemical suppression.

**Sample:** Brine solution (1.5% NaCl)

**Sample Preparation:** –

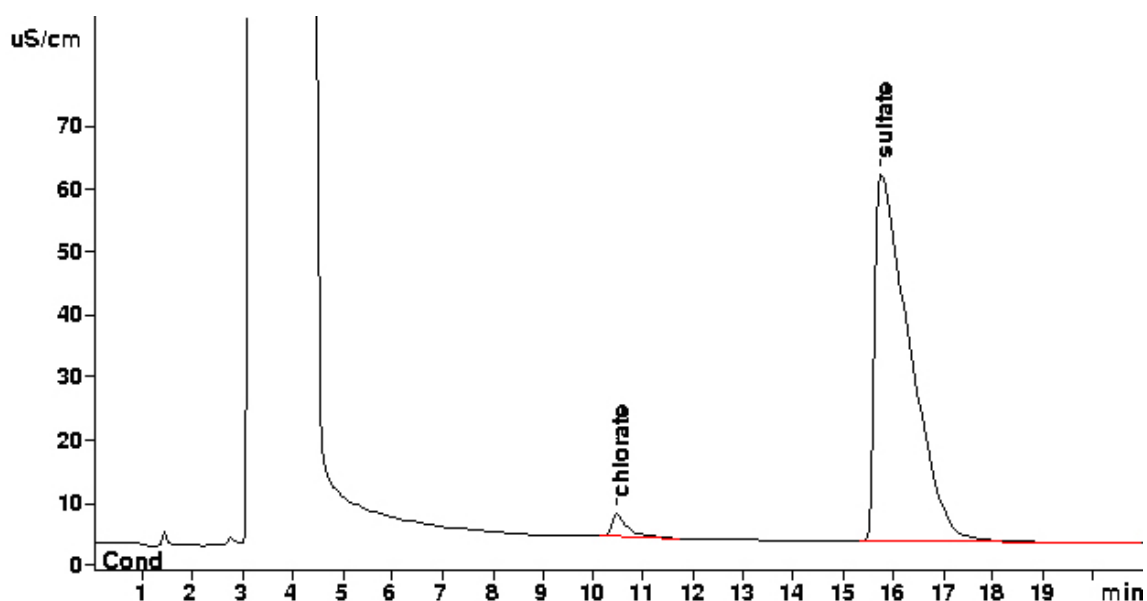
**Column:** 6.1020.010 Metrosep A Supp 10 – 100

**Eluent:** 5 mmol/L sodium carbonate  
5 mmol/L sodium hydrogencarbonate  
5 µmol/L sodium perchlorate

**Suppressor:** Metrohm Suppressor Module (MSM, 100 mmol/L sulfuric acid)

**Flow:** 1.0 mL/min

**Injection Volume:** 20 µL



<b>Results:</b>	Chlorate mg/L	Sulfate mg/L
Mean (n = 10)	<b>18.51</b>	<b>375.8</b>
Standard deviation	<b>0.06</b>	<b>0.32</b>
Relative standard deviation (%)	<b>0.31</b>	<b>0.09</b>