

IC Application Note No. S-205

Title: Traces of perchlorate in samples with a high ionic background applying heart-cut technique

Summary: Determination of traces of perchlorate in a sample with a high salt load using anion chromatography with conductivity detection after chemical suppression.

Sample: Standard solution containing 1 g/L of chloride, carbonate and sulfate each

Sample Preparation: Preseparation on system 1, loading the eluent containing the perchlorate onto a preconcentration column (Metrosep A PCC HC) on system 2 and running the final chromatogram

System 1 / System 2

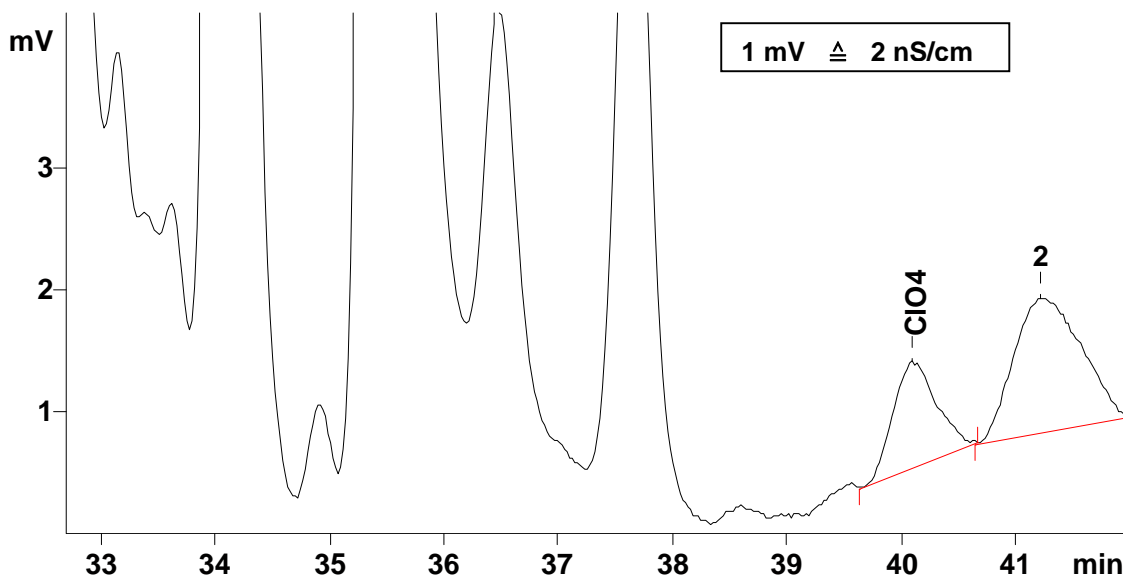
Column: 6.1006.520 Metrosep A Supp 5 – 150

Eluent: 10 mmol/L sodium carbonate, 15% acetone

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

Flow: 0.8 mL/min

Injection Volume: 3.5 mL (System 1) / 15 to 26 min (System 2)



Results:

Perchlorate
µg/L

0.1

System setup:

