

IC Application Note No. S-29

Title: Anions in etching reagent

Summary: Determination of fluoride, nitrate, phosphate and sulfate in etching reagent using anion chromatography with conductivity detection after chemical suppression.

Sample: Etching reagent

Sample Preparation: Dilution 1:10'000 in ultrapure water

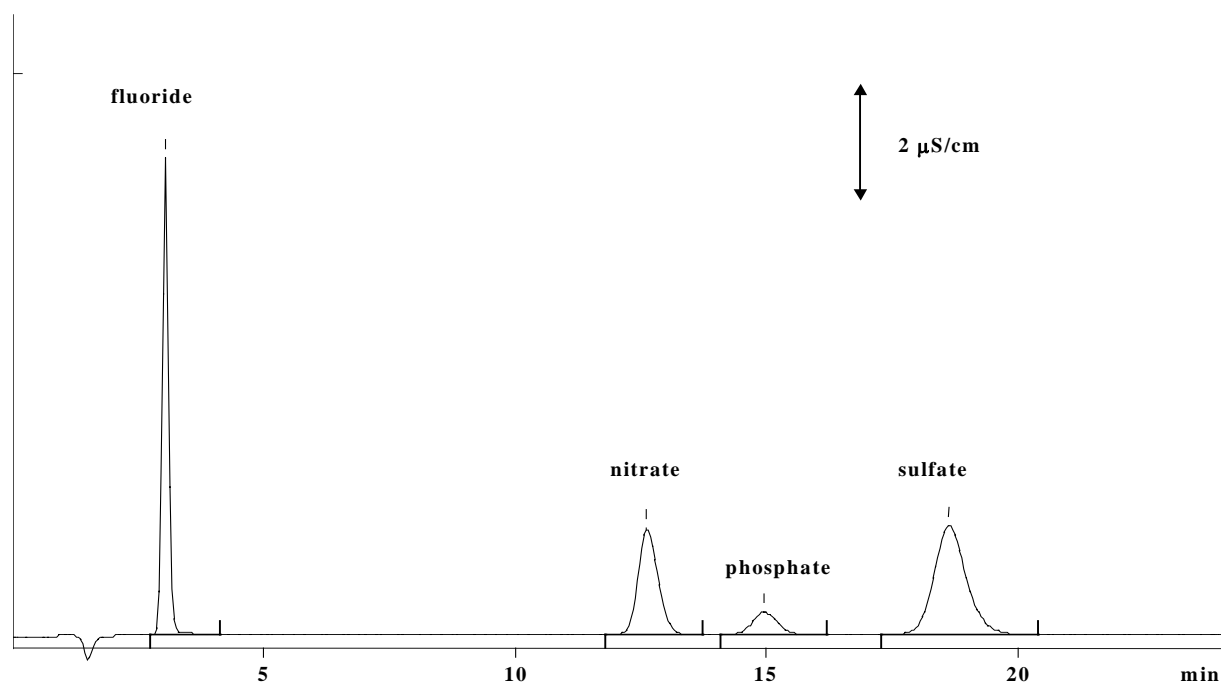
Column: 6.1006.100 Metrosep Anion Dual 2

Eluent: 2.0 mmol/L sodium hydrogencarbonate,
1.3 mmol/L sodium carbonate

Suppressor: Metrohm Suppressor Module (MSM, 20 mmol/L H₂SO₄)

Flow: 0.8 mL/min

Injection Volume: 20 µL



| Results: | F ⁻ g/kg | NO ₃ ⁻ g/kg | HPO ₄ ²⁻ g/kg | SO ₄ ²⁻ g/kg |
|-----------------|------------------------|--------------------------------------|--|---------------------------------------|
| | 87.4 | 196 | 106 | 248 |