

IC Application Note No. S-244

Title: Anions in a gasoline/bioethanol mixture using Inline Matrix Elimination

Summary: Determination of fluoride, acetate, formate, nitrate and sulfate in a gasoline/bioethanol mixture (85% gasoline, 15% ethanol) using anion chromatography with conductivity detection after sequential suppression applying Metrohm Inline Matrix Elimination.

Sample: Gasoline/bioethanol mixture

Sample Preparation: Metrohm Inline Matrix Elimination (transfer solution: 7.5% acetone)

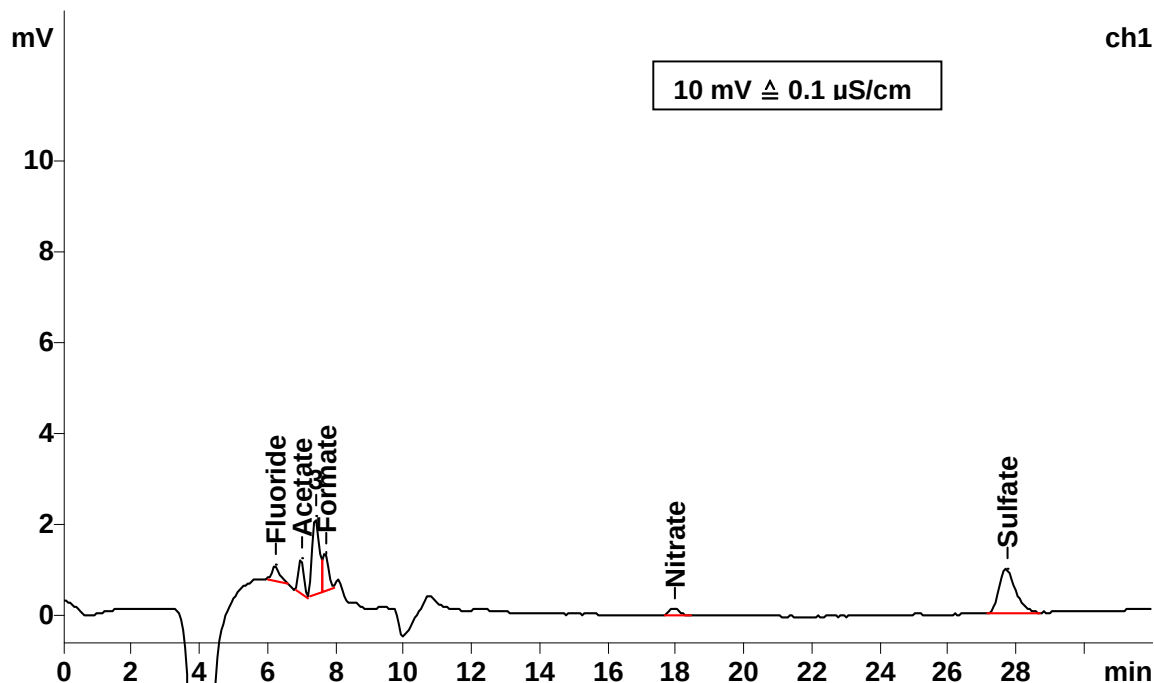
Column: 6.1006.630 Metrosep A Supp 7 – 250

Eluent: 3.6 mmol/L sodium carbonate
7.5% acetone

Suppressor: Sequential suppression: MSM (50 mmol/L H₂SO₄), MCS

Flow: 0.8 mL/min

Injection Volume: 10 µL (transfer volume 1 mL)



Results:	Fluoride mg/L	Acetate mg/L	Formate mg/L	Nitrate mg/L	Sulfate ⁻ mg/L
	< 20	< 20	< 20	< 20	39.5