

# IC Application Note No. S-267

**Title:** Anions in an E85 blend (85% ethanol and 15% gasoline) applying Inline Matrix Elimination

**Summary:** Determination of fluoride, acetate, formate, chloride, nitrite, nitrate, phosphate and sulfate in an E85 blend (85% ethanol and 15% gasoline) applying Inline Matrix Elimination prior to anion chromatography with conductivity detection after sequential suppression.

**Sample:** E85 (85% ethanol and 15% gasoline)

**Sample Preparation:** Direct injection after Inline Matrix Elimination (transfer solution: ultrapure water with 7.5% acetone)

**Column:** 6.1006.630 Metrosep A Supp 7 – 250

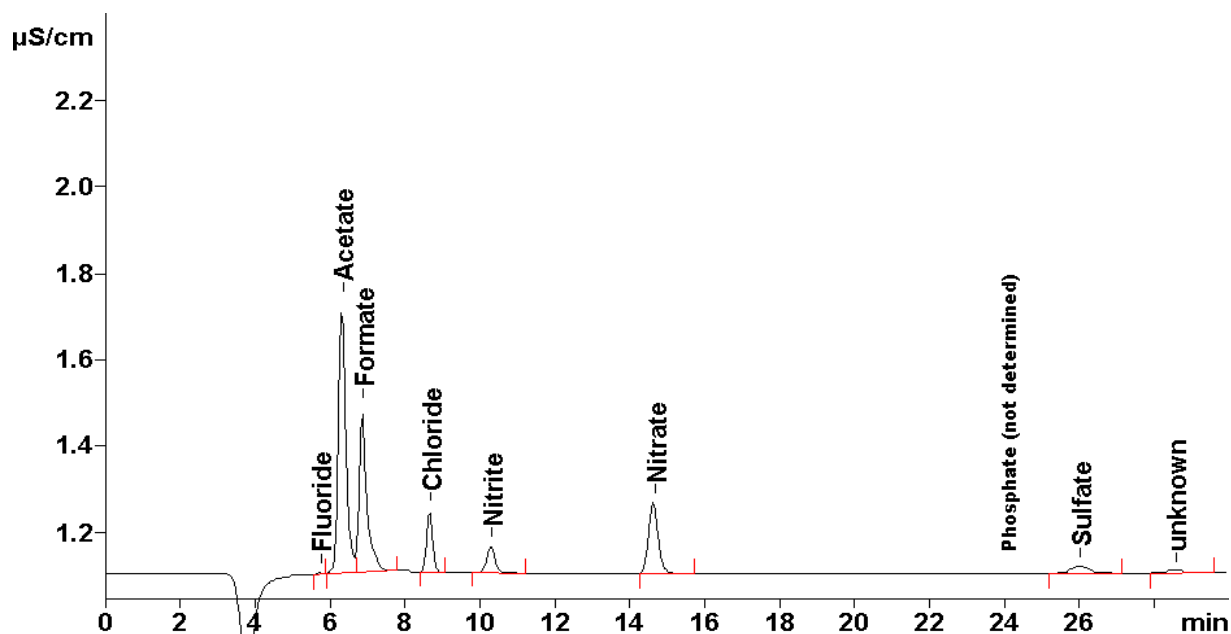
**Column temperature:** 45 °C

**Eluent:** 3.6 mmol/L sodium carbonate  
7.5% acetone

**Suppressor:** Sequential suppression (MSM: 50 mmol/L H<sub>2</sub>SO<sub>4</sub>)

**Flow:** 0.8 mL/min

**Injection Volume:** 10 µL



<b>Results:</b>	F <sup>-</sup>	Acetate mg/L	Formate mg/L	Cl <sup>-</sup> mg/L	NO <sub>2</sub> <sup>-</sup> mg/L	NO <sub>3</sub> <sup>-</sup> mg/L	PO <sub>4</sub> <sup>3-</sup> mg/L	SO <sub>4</sub> <sup>2-</sup> mg/L
		n.q.	3.32	0.88	0.28	0.25	0.89	n.d.