

# IC Application Note No. S-197

**Title:** Fluoride, acetate, formate and chloride in gasoline

**Summary:** Determination of fluoride, acetate, formate and chloride in gasoline using anion chromatography with conductivity detection after chemical suppression.

**Sample:** Gasoline

**Sample Preparation:** Metrohm Inline Matrix Elimination, transfer solution: 10% acetone

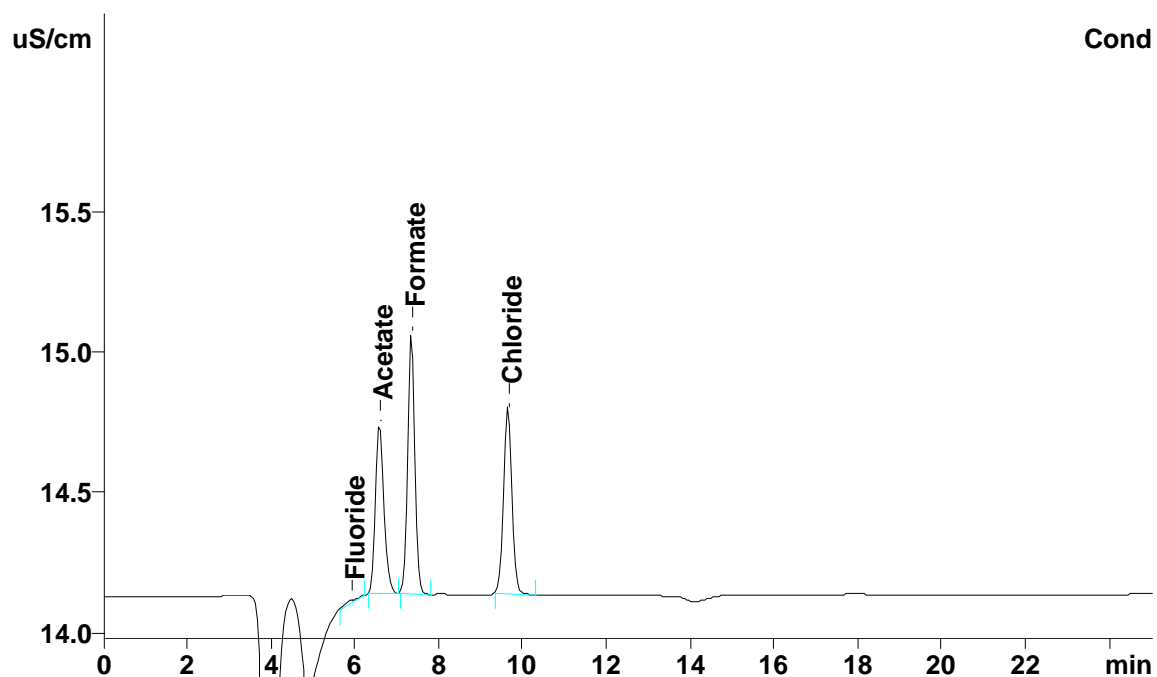
**Column:** 6.1006.530 Metrosep A Supp 5 – 250  
6.1006.300 Metrosep Anion IC preconcentration column

**Eluent:** 3.2 mmol/L sodium carbonate  
1.0 mmol/L sodium hydrogencarbonate

**Suppressor:** Metrohm Suppressor Module (MSM, 50 mmol/L sulfuric acid)

**Flow:** 0.7 mL/min

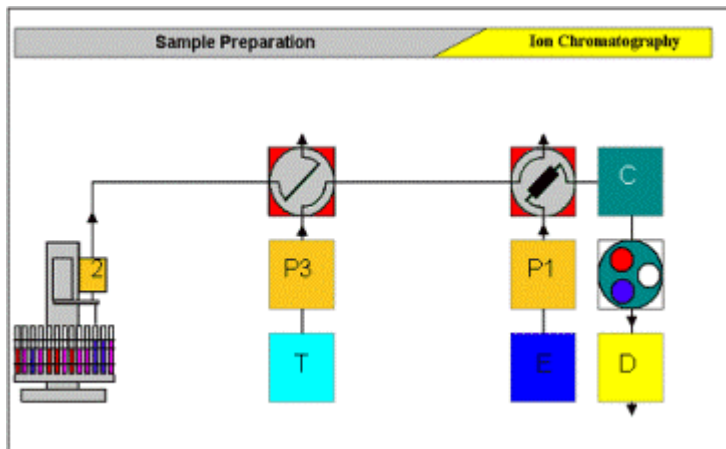
**Injection Volume:** 10  $\mu$ L



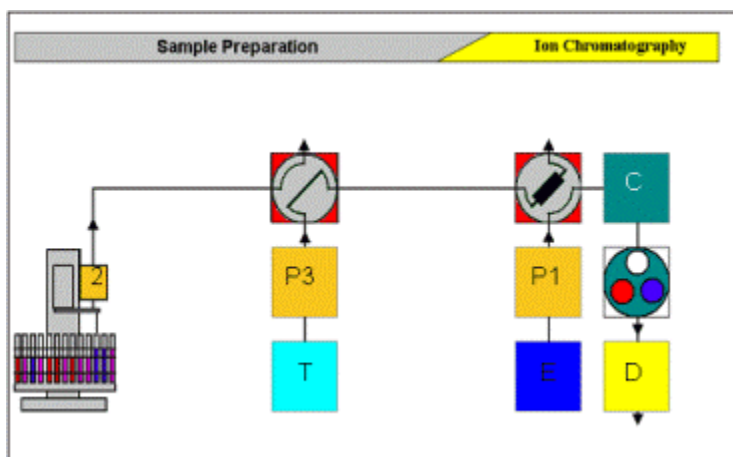
<b>Results:</b>	Fluoride mg/L	Acetate mg/L	Formate mg/L	Chloride mg/L
	< 0.2	11.2	3.0	1.4

**Matrix elimination flow chart:**

The loop is filled with the sample.



The sample in the loop is transferred to the preconcentration column using transfer solution and the matrix is eliminated.



The retained anions are transferred in counterflow with the eluent to the analytical column.

