

# IC Application Note No. S-270

**Title:** Impurities in syringe filters – Anions

**Summary:** Determination of fluoride, acetate, formate, chloride, nitrite, nitrate, phosphate and sulfate impurities in syringe filters using anion chromatography with conductivity detection after sequential suppression.

**Sample:** Syringe filter

**Sample Preparation:** Rinsing the filter three times with 3.5 mL ultrapure water, direct injection

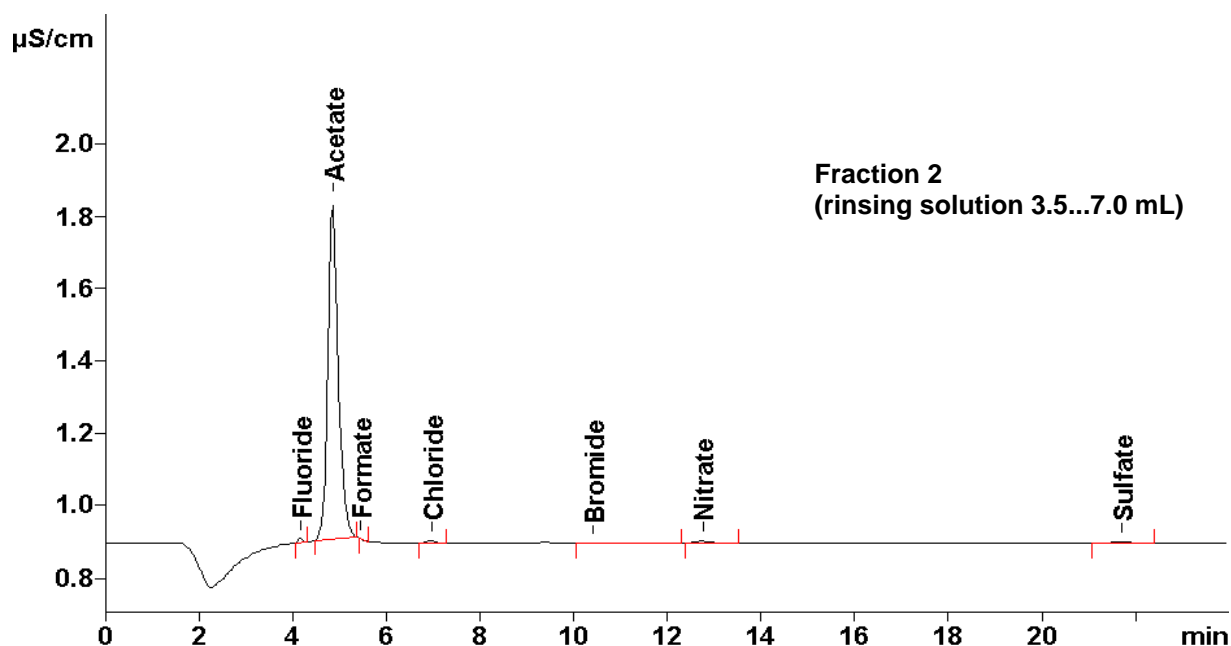
**Column:** 6.1006.530 Metrosep A Supp 5 – 250

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

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

**Flow:** 0.8 mL/min

**Injection Volume:** 200 µL



<b>Results:</b>	Fluoride µg/L	Acetate µg/L	Formate µg/L	Chloride µg/L	Nitrite µg/L	Nitrate µg/L	Phosphate µg/L	Sulfate µg/L
1 <sup>st</sup> fraction	0.7	438	n.d.	2.6	0.6	5.7	n.d.	1.67
2 <sup>nd</sup> fraction	0.6	236	n.d.	0.8	0.1	1.8	n.d.	0.8
3 <sup>rd</sup> fraction	n.d.	180	n.d.	n.d.	0.1	0.7	n.d.	n.d.