

IC Application Note No. C-118

Title: Impurities in syringe filters – Cations

Summary: Determination of lithium, sodium, ammonium, zinc, potassium, magnesium and calcium impurities in syringe filters using cation chromatography with direct conductivity detection.

Sample: Syringe filter

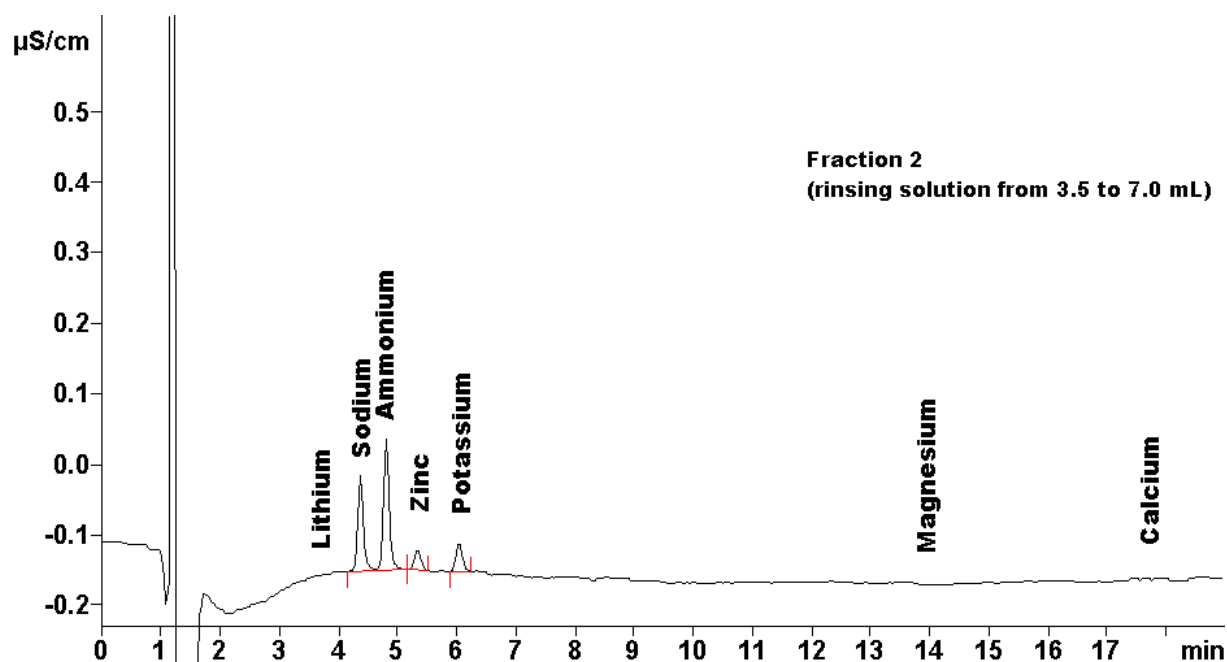
Sample Preparation: Rinsing the filter three times with 3.5 mL ultrapure water, direct injection

Column: 6.1050.420 Metrosep C 4 – 150

Eluent: 2.5 mmol/L oxalic acid

Flow: 1.0 mL/min

Injection Volume: 200 μ L



Results:	Lithium μ g/L	Sodium μ g/L	Ammonium μ g/L	Zinc μ g/L	Potassium μ g/L	Magnesium μ g/L	Calcium μ g/L
1 st fraction	n.d.	88.4	108	24.6	52.8	8.0	32.0
2 nd fraction	n.d.	7.3	9.1	2.8	5.1	n.d.	n.d.
3 rd fraction	n.d.	1.8	4.6	1.6	2.7	n.d.	n.d.