

IC Application Note No. S-204

Title: Nitrate and sulfate in fertilizer after acid digestion

Summary: Determination of nitrate and sulfate in a fertilizer after acid digestion using anion chromatography with conductivity detection after chemical suppression.

Sample: Fertilizer

Sample Preparation: 2.5 g extracted with 6% hydrochloric acid, further diluted to 0.1 g/L with ultrapure water

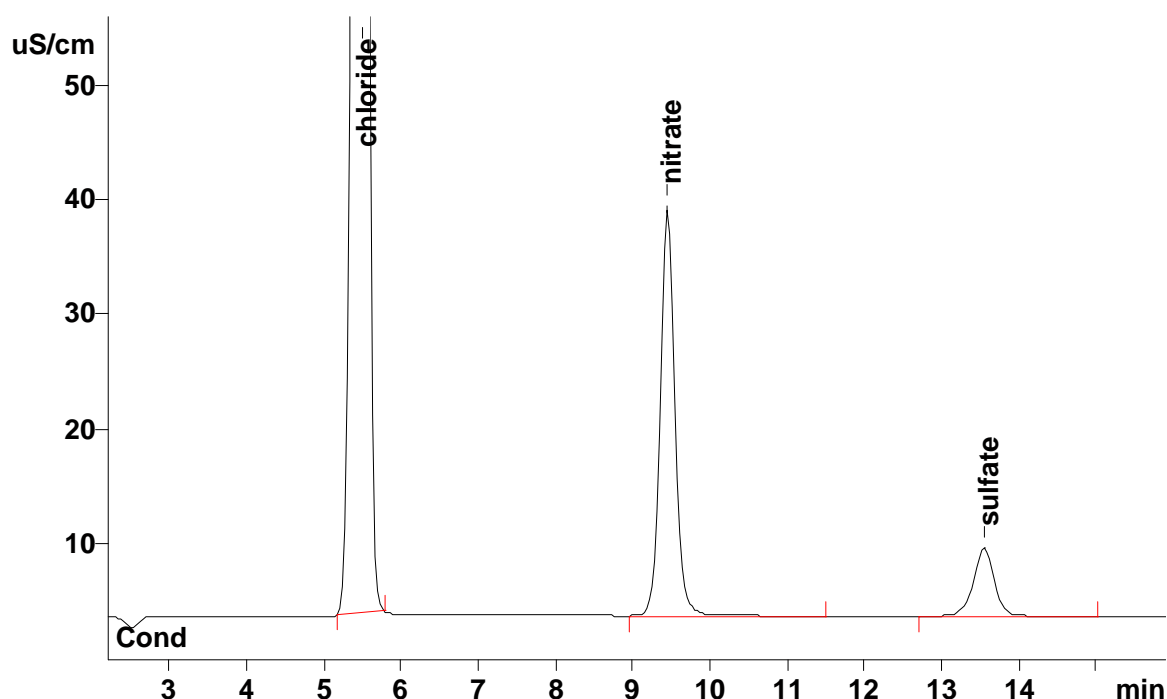
Column: 6.1006.520 Metrosep A Supp 5 – 150

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: 20 µL



Results:	Chloride from hydrochloric acid	Nitrate	Sulfate mg/tablet
g/kg	n.q.	621	134
%	n.q.	62.1	13.4

See AN C-82 for the determination of cations in fertilizers.