

IC Application Note No. S-167

Title: Arsenite, cyanide and sulfide besides standard anions or «High–Low Detection» in Ion Chromatography – simultaneous determination of anions of strong and weak acids

Summary: Determination of fluoride, arsenite, chloride, sulfide, cyanide, bromide, nitrate, sulfate, phosphate and arsenate using anion chromatography with a step gradient and a combination of suppressed and non-suppressed conductivity detection.

Sample: Standard solution

Sample preparation: –

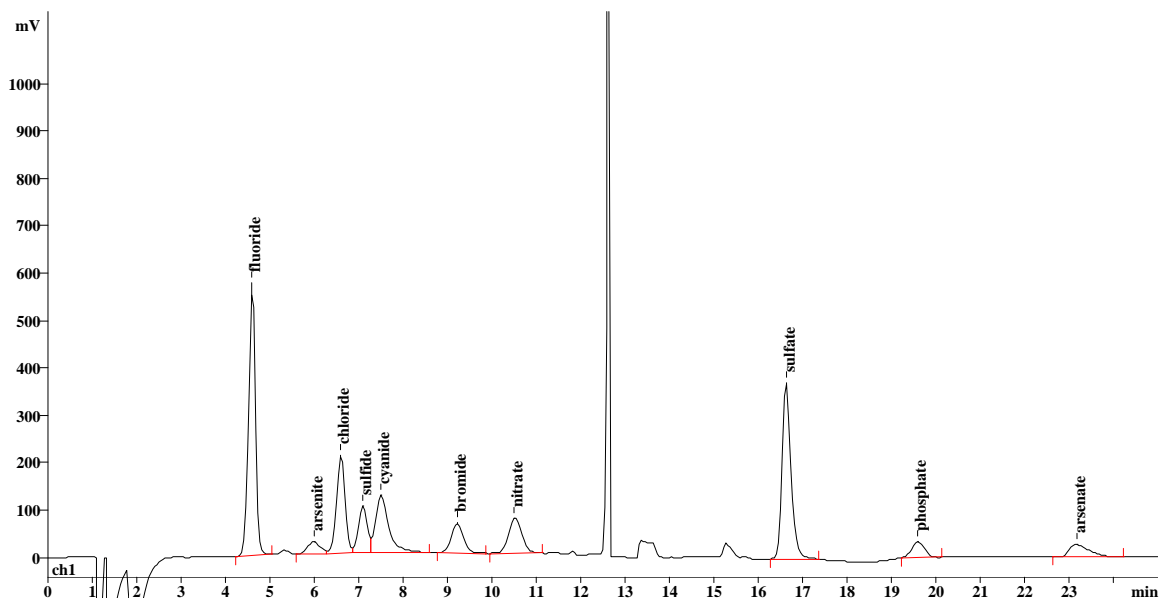
Column: 6.1006.100 Metrosep Anion Dual 2,
6.1011.020 Metrosep RP Guard

Eluent: (0 ... 11.2 min.) 2 mmol/L sodium hydroxide
(11.2 ... 25 min) 7 mmol/L sodium hydroxide

Suppressor: Metrohm Suppressor Module (MSM, 100 mmol/L H₂SO₄)

Flow: 0.8 mL/min

Injection Volume: 20 µL



Results: Fluoride, arsenite, chloride, sulfide, cyanide, bromide, nitrate, sulfate, phosphate, arsenate
mg/L

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Remarks: 0 ... 12 min non-suppressed, > 12 min with MSM, detection after suppression.