

# IC Application Note No. S-247

**Title:** Hypophosphite, phosphite and phosphate in a nickel bath

**Summary:** Determination of hypophosphite, phosphite and phosphate in a nickel bath using anion chromatography with conductivity detection after chemical suppression applying Inline Cation Exchange.

**Sample:** Nickel bath

**Sample Preparation:** Dilution 1 : 1000 with ultrapure water and Inline Cation exchange

**Column:** 6.1006.100 Metrosep Dual 2

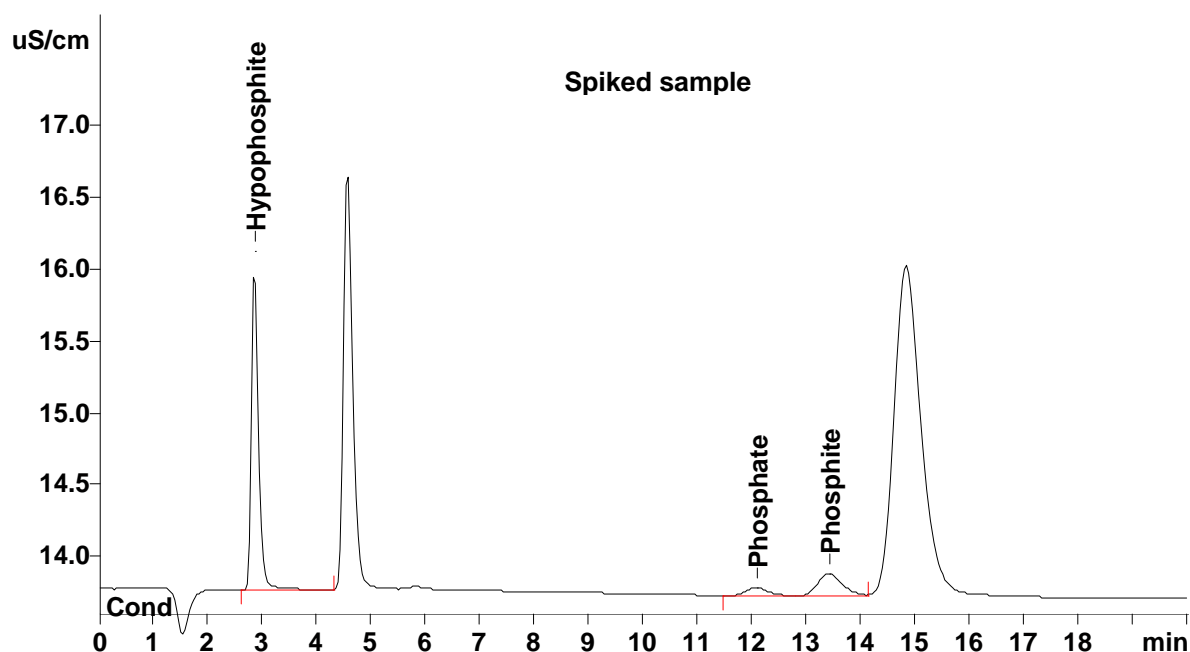
**Eluent:** 1.3 mmol/L sodium carbonate  
2.0 mmol/L sodium hydrogen carbonate

**Suppressor:** Metrohm Suppression Module (MSM, 50 mmol/L H<sub>2</sub>SO<sub>4</sub>)

**Sample Prep.:** 1 mol/L sulfuric acid, 0.2 mol/L oxalic acid

**Flow:** 0.8 mL/min

**Injection Volume:** 10 µL



<b>Results:</b>	Hypophosphite g/L	Phosphite g/L	Phosphate g/L
Sample	13.9	< 0.1	< 0.1
Spiked sample	18.9	2.0	2.0