

IC Application Note No. U-45

Title: Aluminum in phosphoric acid using UV/VIS detection after post-column reaction with catechol violet

Summary: Determination of aluminum in phosphoric acid using cation chromatography with UV detection after post-column reaction with catechol violet.

Sample: Phosphoric acid

Sample Preparation: Dilution 1:1000 in ultrapure water, direct injection after filtration.

Column: 6.1050.420 Metrosep C 4 – 150

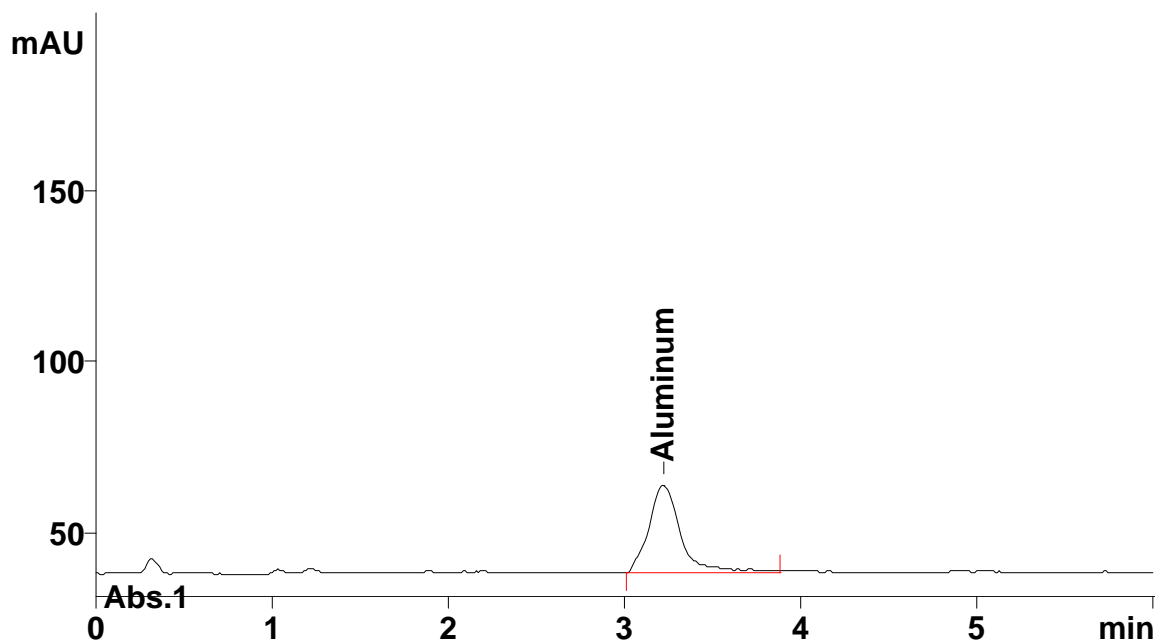
Wavelength: 570 nm

Eluent: 5.6 mmol/L sulfuric acid, 30 mmol/L ammonium sulfate

Flow: 0.9 mL/min **PCR Flow:** 0.38 mL/min

PCR Reagent: 0.2 mmol pyrocatechol violet, 250 mmol/L sodium acetate, 250 mmol/L acetic acid

Injection Volume: 1000 μ L



Results:

Aluminum
mg/L

775