

IC Application Note No. S-160

Title: Hexafluorophosphate in ionic liquid

Summary: Determination of hexafluorophosphate in an ionic liquid BMIHFP (1-butyl-3-methylimidazolium hexafluorophosphate, >97%) using anion chromatography with conductivity detection after chemical suppression.

Sample: BMIHFP (1-butyl-3-methylimidazolium hexafluorophosphate, >97%)

Sample preparation: 1 g sample is dissolved in 100 mL acetonitrile / water (40/60), further dilution 1:100 with ultrapure water

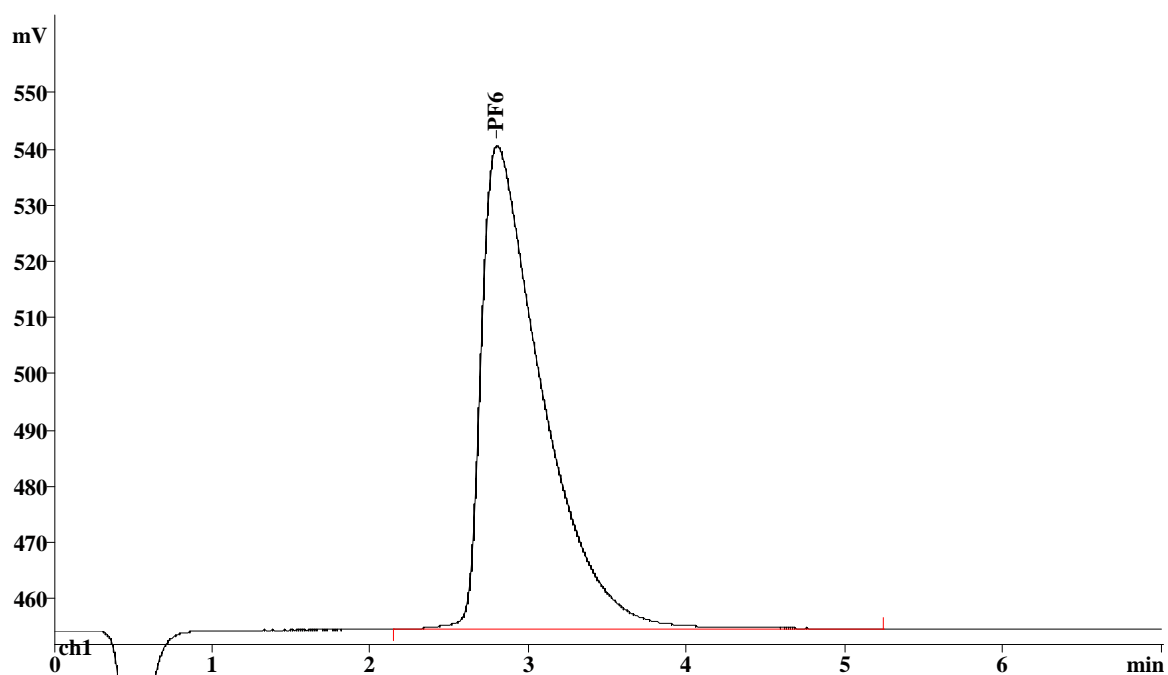
Column: 6.1006.500 Metrosep A SUPP 4/5 Guard (used as analytical column)

Eluent: 2.0 mmol/L sodium hydrogen carbonate
6.4 mmol/L sodium carbonate

Suppressor: Metrohm Suppressor Module (MSM, 50 mmol/L H₂SO₄)

Flow: 0.8 mL/min

Injection Volume: 20 µL



| | |
|-----------------|-----------------------------|
| Results: | Hexafluorophosphate g/kg |
| | 512.2 |