

# IC Application Note No. U-13

**Title:** HEDPA, PBTC and NTP

**Summary:** Determination of HEDPA, PBTC and NTP using anion chromatography with UV/VIS detection after post column reaction (PCR).

**Sample:** Aqueous solutions

**Sample Preparation:** –

**Column:** 6.1005.320 Metrosep A Supp 3

**Wavelength:** 330 nm

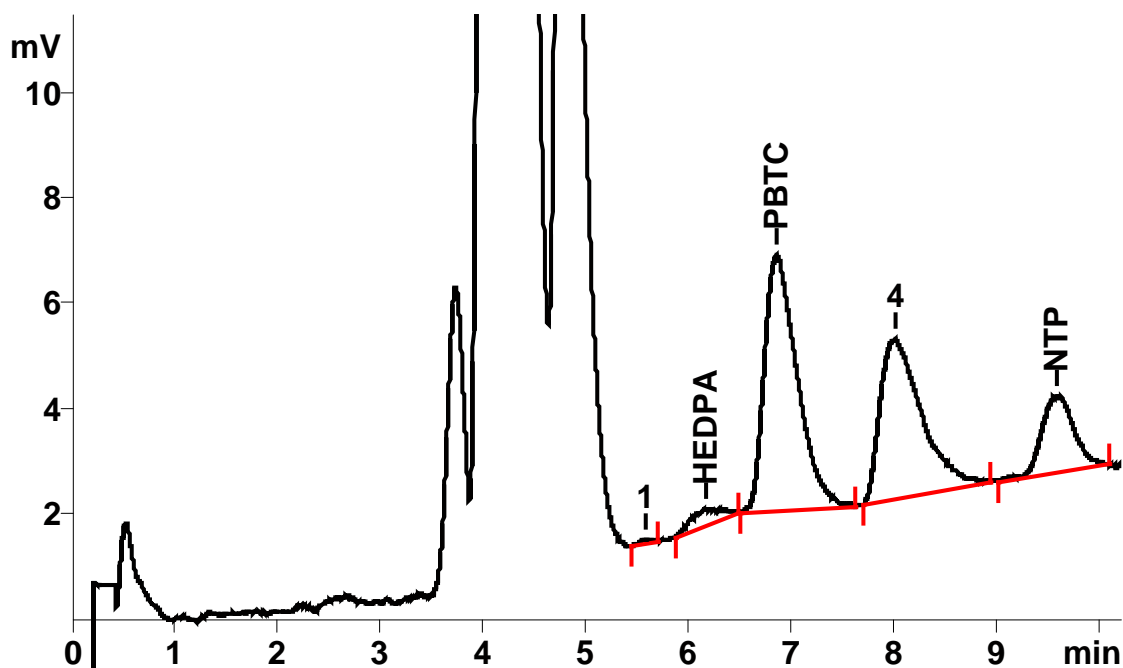
**Eluent:** 15 mmol/L nitric acid

**Flow:** 0.8 mL/min

**PCR reagent:** 1.0 g/L Fe(NO<sub>3</sub>)<sub>2</sub>,  
2% perchloric acid

**PCR Flow:** 0.5 mL/min

**Injection Volume:** 250 µL



<b>Results:</b>	HEDPA mg/L	PBTC mg/L	NTP mg/L
Sample	2.35	2.51	2.67

HEDPA = 1-hydroxyethylidene-1,1-diphosphonic acid  
 PBTC = 2-phosphonobutane-1,2,4 tricarboxylic acid  
 NTP (AMP) = aminotri(methylene phosphonic acid)