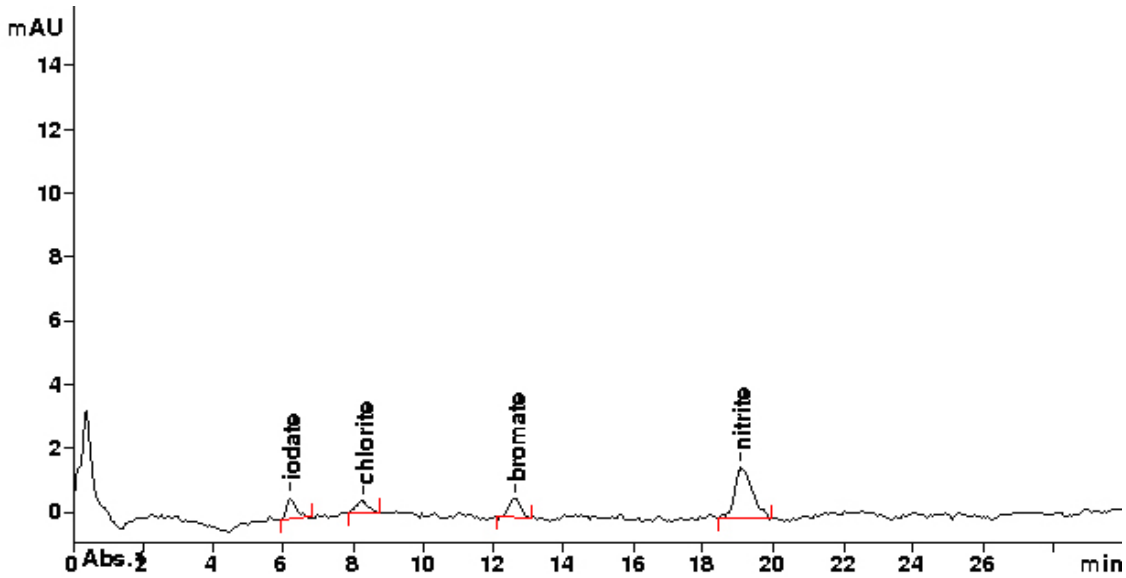
IC Application Note No. U-9

Title:	**Iodate, chlorite, bromate and nitrite by suppressed ion chromatography applying post column reaction (PCR) and UV/VIS detection**

***Summary*:**	Determination of iodate, chlorite, bromate and nitrite using suppressed anion chromatography with UV/VIS detection after post column reaction.

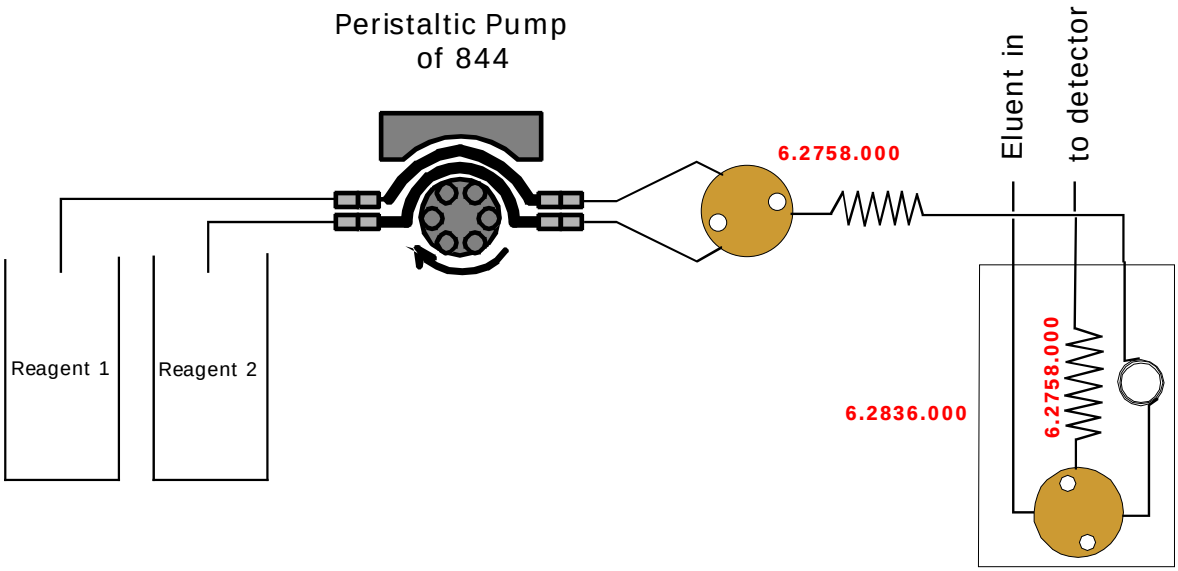
Sample:	Standard solution
Sample Preparation:	–

Column:	6.1020.030 Metrosep A Supp 10 – 250
Wavelength:	352 nm
Eluent:	20 mmol/L sodium hydrogencarbonate
PCR reagent 1:	0.2 mmol/L ammonium molybdate in 1 mmol/L sulfuric acid
PCR reagent 2:	40 g/L potassium iodide
PCR flow:	0.5 mL/min
Flow:	1.0 mL/min
Injection Volume:	1000 µL



Results:	Iodate µg/L	Chlorite µg/L	Bromate µg/L	Nitrite µg/L
	1	**1**	**1**	**1**

Setup of the PCR unit:



It is important to replace the PTFE mixing coil of the Post Column Reactor (6.2836.000) by a PEEK mixing coil (6.2758.000). Iodine can diffuse through PTFE and this will lead to severe peak tailing.