

# IC Application Note No. S-274

**Title:** Major anions in cooling lubricant after Inline Dialysis

**Summary:** Determination of chloride, nitrite, bromide, nitrate, phosphate, sulfite, sulfate and oxalate in a cooling lubricant using anion chromatography with conductivity detection and subsequent UV detection (see AN U-47) after sequential suppression applying Metrohm Inline Dialysis.

**Sample:** Cooling lubricant

**Sample Preparation:** Dilution 1:10 and subsequent injection after Inline Dialysis

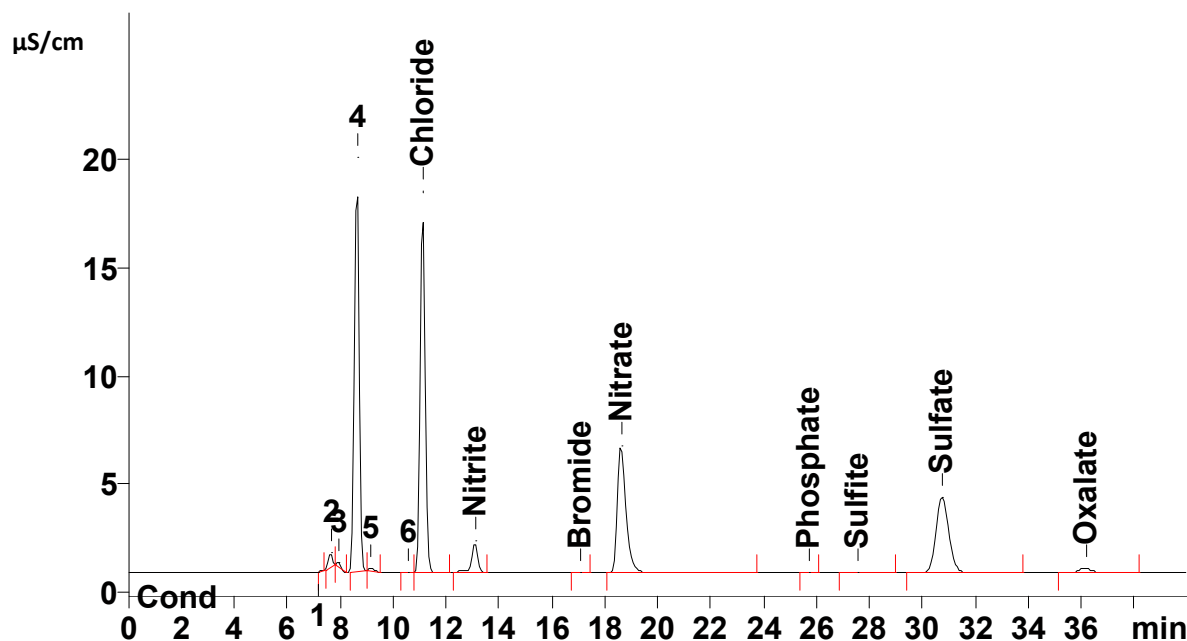
**Column:** 6.1005.340 Metrosep A Supp 1 Guard  
6.1006.530 Metrosep A Supp 5 – 250

**Eluent:** 3.2 mmol/L sodium carbonate  
1.0 mmol/L sodium hydrogen carbonate

**Suppressor:** Sequential suppression (MSM: 50 mmol/L H<sub>2</sub>SO<sub>4</sub>)

**Flow:** 0.7 mL/min

**Injection Volume:** 20 µL



<b>Results:</b>	Chloride mg/L	Nitrite mg/L	Bromide	Nitrate mg/L	Phosphate	Sulfite mg/L	Sulfate mg/L	Oxalate
	109	15.9*	n.q.	118	n.q.	5.0**	95.7	n.q.

\* Quantification of nitrite not correct due to overlapping, see AN U-47 for determination with UV detection.

\*\* Spiked sample, sulfite can not be found in the original sample.