

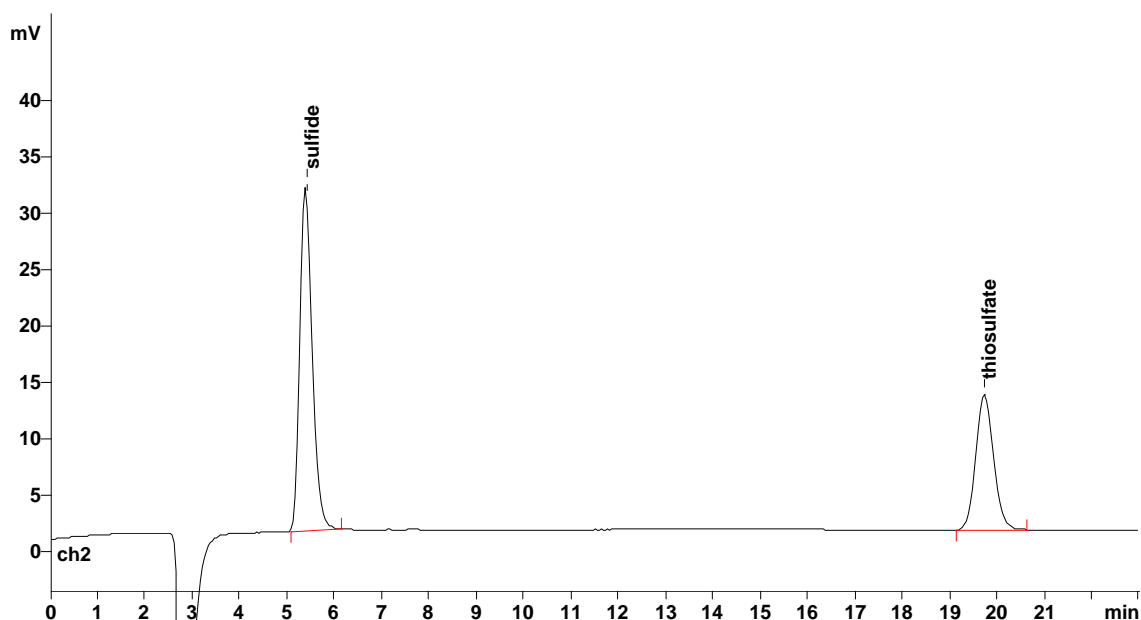
IC Application Note No. U-31

Title: Sulfur species in process water of the paper industry by simultaneous conductivity and UV detection

Summary: Determination of sulfide and thiosulfate in a process water using anion chromatography with UV/VIS detection after chemical suppression and conductivity detection.

Sample: Process water of paper industry
Sample Preparation: Dilution 1 : 500 with ultrapure water, injection through 0.45 µm filter

Column: 6.1006.520 Metrosep A Supp 5 – 150
Wavelength: 215 nm
Eluent: 3.2 mmol/L sodium carbonate
 1.0 mmol/L sodium hydrogen carbonate
 2.5% acetone
Suppressor: Metrohm Suppressor Module (MSM, 50 mmol/L H₂SO₄)
Flow: 0.7 mL/min
Injection Volume: 20 µL



Results:	Sulfide	Thiosulfate
Sample (g/L)	63.1	2.47
RSD (n=3)	1.38	1.49

See Application Note S-248 for the Conductivity results obtained with the same sample.