

IC Application Note No. S-51

Title: Chloride, sulfate, chromate and sulfonic acids in chromium a plating bath

Summary: Determination of chloride, sulfate, chromate, methanesulfonic acid (MSA), methanedisulfonic acid (MDSA) and ethanedisulfonic acid (EDSA) in a chromium plating bath using anion chromatography with conductivity detection after chemical suppression.

Sample: Chromium plating bath

Sample Preparation: Dilution 1 : 500

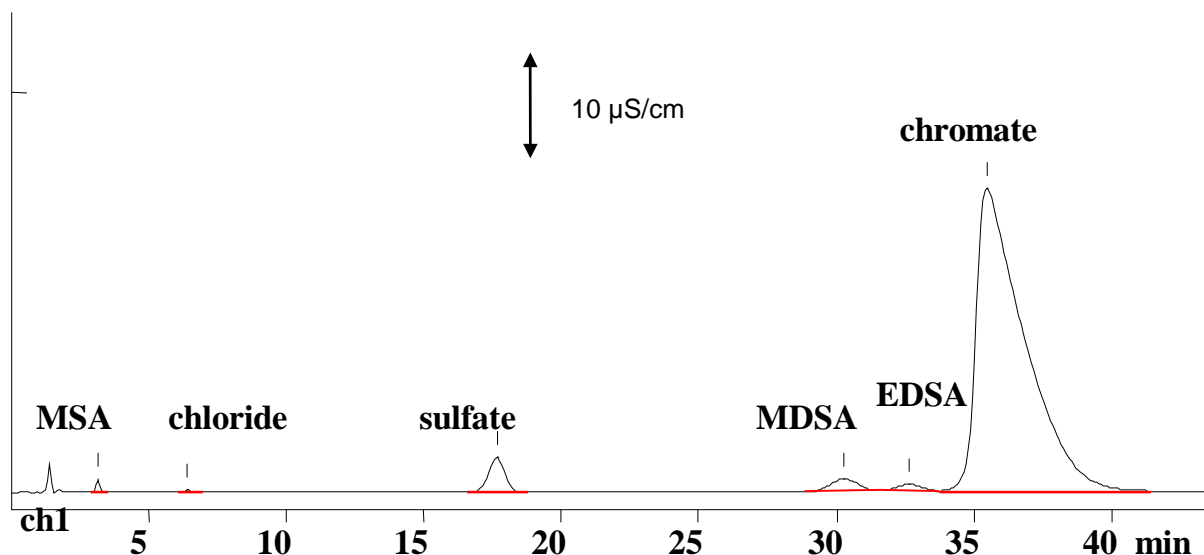
Column: 6.1006.100 Metrosep Anion Dual 2

Eluent: 2.0 mmol/L sodium hydrogencarbonate,
1.2 mmol/L sodium carbonate, 18 % acetone

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

Flow: 0.85 mL/min

Injection Volume: 5 µL



Results:	MSA g/L	Cl ⁻ g/L	SO ₄ ²⁻ g/L	MDSA g/L	EDSA g/L	CrO ₄ ²⁻ g/L
	47	5	16	28	16	1100