

VA Application Note No. V-76

Title: Cobalt in gold plating baths

Summary: Cobalt can be determined besides high concentrations of gold at the DME using 5-sulfosalicylic acid as supporting electrolyte and DMG as complexing agent.

Sample: Gold plating bath
Sample preparation: Dilution 1 : 10 with water

Cobalt:
Electrolyte: 0.1 mol/L 5-sulfosalicylic acid + 0.1 mol/L NH₃ + 5 x 10⁻⁴ mol/L DMG
AE: Pt
RE: Ag/AgCl/KCl (3 mol/L)
Parameters: DME
Determination: -1000 mV to -1400 mV
Peak potential Co: -1250 mV

Results:	Co
	258 mg/L

Determination of cobalt

