

## Application Memo

# Chlorine Ion in Plating Solution

Industry	Non-ferrous metal
Instrument	Automatic potentiometric titrator
Measurement method	Redox titration
Standards	

### 1. Overview

After adding 0.02 mol/L silver nitrate solution and pure water to the sample, chlorine ion concentration is measured by titration with 0.01 mol/L potassium thiocyanate solution. The endpoint is the maximum inflexion on the titration curve. The chlorine ion concentration is calculated from the titration volume of the potassium thiocyanate solution.

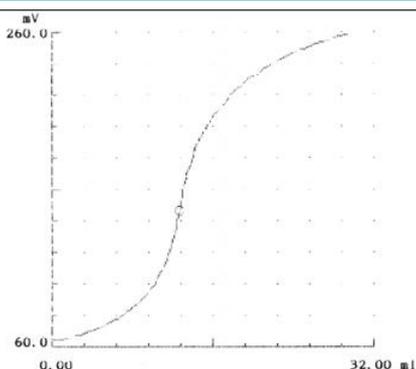
### 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Chlorine ion electrode Mercury sulfate reference electrode

### 3. Reagents

Titrant	0.01 mol/L potassium thiocyanate solution
Solvent	Pure water
Additive	0.02 mol/L silver nitrate solution

### 4. Example



-Titration curve-

-Measurement results-			
	Sample (mL)	Titer (mL)	Concentration (ppm)
1	25	12.7434	101.5
2	25	12.8049	100.6
3	25	12.8351	100.2
Average			100.8
SD			0.7
RSD(%)			0.7

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