

## Application Memo

# Copper Sulfate in Plating Solution

Industry	Nonferrous metal
Instrument	Automatic potentiometric titrator
Measurement method	Redox titration
Standards	

## 1. Overview

Copper sulfate in copper sulfate plating solution is measured by titration with 0.025mol/L sodium thiosulfate after the sample is added with pure water, ammonia water and 30% acetic acid and 20% potassium iodide.

The endpoint is the maximum inflexion on the titration curve. The copper sulfate concentration is calculated from the titration volume of sodium thiosulfate.

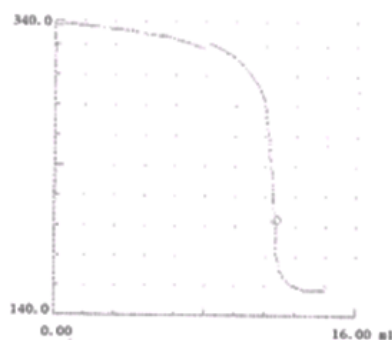
## 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Platinum electrode Ceramic reference electrode

## 3. Reagents

Titrant	0.025mol/L sodium thiosulfate (f=1.004)
Solvent	Pure water
Additive	Ammonia water, 30% acetic acid, 20% potassium iodide

## 4. Example



-Titration curve-

-Measurement results-

	Sample (mL)	Titration (mL)	Copper sulfate (g/L)
1	5.0	11.7575	9.420

Please feel free to contact us for any further information.  
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