KYOTO ELECTRONICS MANUFACTURING CO.,LTD.

TIQ-97003enL

Application Memo

Copper in Plating Solution

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

1.Overview

After adding 20% sodium hydroxide solution, biuret reagent, 10% potassium iodide solution, and 3mol/L sulfuric acid to the diluted sample, copper concentration is measured by titration with 0.1mol/L sodium thiosulfate solution. The endpoints are the maximum inflexions on the titration curve. The copper concentration is calculated from the titration volume of sodium thiosulfate.

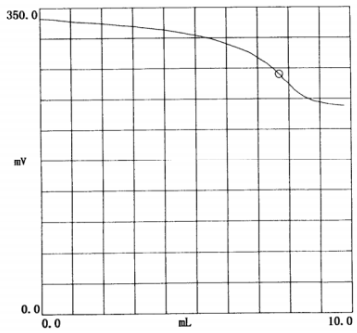
2.Apparatus

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

3.Reagents

Titrant	0.1mol/L sodium thiosulfate solution
Additive	20% sodium hydroxide solution, Biuret reagent, 10% potassium iodide solution, 3mol/L sulfuric acid

4.Example



-Titration curve-

-Measurement results-

	Concentration (g/L)
Average	4.809
SD	0.006
RSD(%)	0.1
	n=3

Please feel free to contact us for any further information.

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