KYOTO ELECTRONICS MANUFACTURING CO.,LTD.

TIQ-99062enL

Application Memo

Quantitative Determination of Copper (Cu^{2+}) in Solution

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Oxidation reduction titration
Standards	

1. Overview

After adding 10% potassium iodide and acetic acid to the sample including Cu^{2+}, it is titrated with 0.1 mol / L sodium thiosulfate solution. The endpoint is the maximum inflexion on the titration curve. The copper ion concentration is calculated from the titration volume.

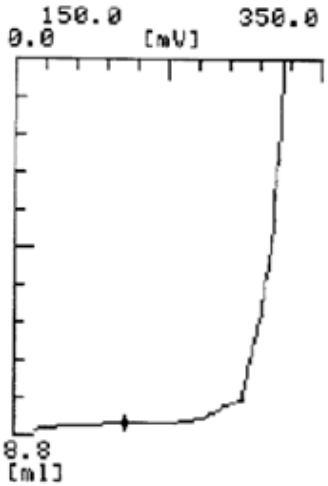
2. Apparatus

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

3. Reagents

Titrant	0.1mol/L sodium thiosulfate solution
Solvent	Water
Additive	10% potassium iodide, Acetic acid

4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer (mL)	Concentration (g/L)
1	5.0	8.5583	10.88
2	5.0	8.5728	10.90
3	5.0	8.5538	10.87
Average			10.83
SD			0.02
RSD(%)			0.2

Please feel free to contact us for any further information.

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