KYOTO ELECTRONICS MANUFACTURING CO.,LTD.

TIQ-94013enL

Application Memo

Chromium Trioxide of Plating Solution

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

1. Overview

Chromium trioxide (CrO_3) of plating solution is measured by titration with 0.1mol/L sodium thiosulfate after the sample is added with ammonium fluoride, potassium iodide and 3mol/L (6N) sulfuric acid. The endpoint is the maximum inflexion on the titration curve.
The concentration of chromium trioxide is calculated from the titration volume of sodium thiosulfate.

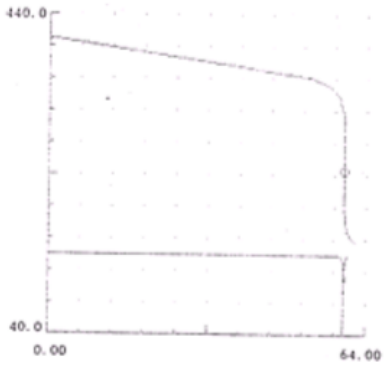
2. Apparatus

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

3. Reagents

Titrant	0.1mol/L sodium thiosulfate (f = 1.002)
Solvent	Pure water Ammonium fluoride, Potassium iodide, 3mol/L (6N) sulfuric acid

4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer (mL)	Chromium trioxide(g/L)
1	2.0	59.763	50.00

Please feel free to contact us for any further information.

＜Contact＞Kyoto Electronics Manufacturing Co., Ltd.
Overseas Sales & Marketing Sect.
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