

Application Memo

Total Free Acid in Plating Solution

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

1. Overview

After adding potassium oxalate solution to the diluted sample, total free acid concentration is measured by titration with 1mol/L sodium hydroxide solution. The endpoint is the maximum inflexion on the titration curve. The total free acid concentration is calculated from the titration volume of the sodium hydroxide solution.

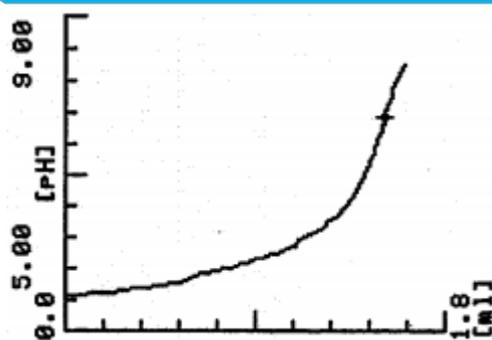
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	pH glass electrode Ceramic reference electrode Temperature compensation electrode

3. Reagents

Titrant	1mol/L sodium hydroxide solution
Additive	Potassium oxalate solution (1g/4mL H ₂ O)

4. Example



-Titration curve-

-Measurement results-

	Sample (mL)	Titer (mL)	Conc. (g/L)
1	1.0	1.5167	212.3
2	1.0	1.5320	214.5
3	1.0	1.5360	215.0
Average			214.0
SD			1.4
RSD(%)			0.67

Please feel free to contact us for any further information.
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