

Application Memo

Ferrous Chloride in Etchant

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

1. Overview

Ferrous chloride (Iron chloride (II)) in etchant is measured by titration with 0.02mol/L potassium permanganate after adding pure water and manganese sulfate solution to the sample. The endpoint is the maximum inflexion on the titration curve. The ferrous chloride concentration is calculated from the titration volume of potassium permanganate.

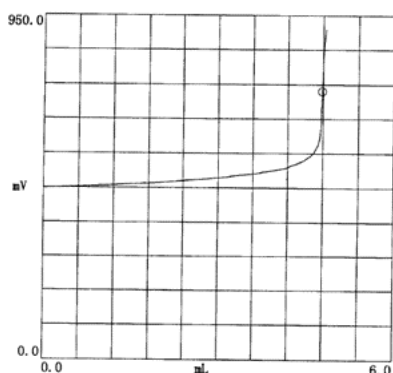
2. Apparatus

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

3. Reagents

Titrant	0.02mol/L(0.1N) potassium permanganate solution
Solvent	Pure water
Additive	Manganese sulfate solution (Manganese sulfate crystal, Phosphoric acid, Sulfuric acid, Pure water)

4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer (mL)	Ferrous chloride (g/L)
1	2.5	4.7812	24.26
2	2.5	4.7705	24.21
3	2.5	4.7826	24.27
Average			24.25
SD			0.03
RSD(%)			0.1

Please feel free to contact us for any further information.
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