

Application Memo Standardization of 0.6mol/L Ferrous Sulfate

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

1. Overview

After adding 12% potassium nitrate to 95% sulfuric acid, it is titrated with 0.6mol/L ferrous sulfate with cooling. The endpoint is the maximum inflexion on the titration curve. The factor for standardization of 0.6mol/l ferrous sulfate is calculated from the titration volume at the endpoint.

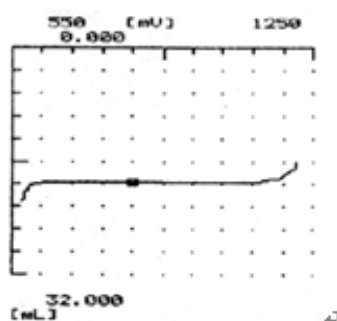
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Combined platinum electrode

3. Reagents

Titrant	0.6mol/L ferrous sulfate
Solvent	95% sulfuric acid
Additive	12% potassium nitrate

4. Example



—Titration curve—

—Measurement results—

	Sample size (mL)	Titer (mL)	Result
1	0.6002	18.922	1.045
2	0.6002	18.927	1.045
3	0.6002	18.950	1.044
4	0.6002	18.952	1.044
5	0.6002	18.950	1.044
Average			1.044
SD			0.001
RSD(%)			0.07

Please feel free to contact us for any further information.
 < Contact > Kyoto Electronics Manufacturing Co., Ltd.
 Overseas Sales & Marketing Sect.
<http://www.kyoto-kem.com/en/contact/form.php>