

Application Memo

Factor of Sodium Thiosulfate

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Precipitation titration
Standards	JIS K8001

1. Overview

Factor measurement of 0.1mol/L sodium thiosulfate solution is specified by JIS K 8001-2017 “General rules for test methods of reagents”. Adding potassium iodate and sulfuric acid to the diluted potassium iodate releases iodine. The prepared solution is titrated with 0.1mol/L sodium thiosulfate solution up to the endpoint, which is the maximum inflexion on the titration curve. The factor for standardization of 0.1mol/L sodium thiosulfate is calculated from the titration volume of sodium thiosulfate.

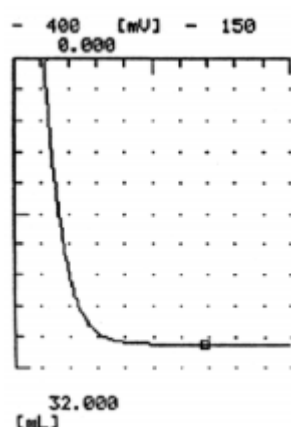
2. Apparatus

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

3. Reagents

Titrant	0.1mol/L silver nitrate solution
Solvent	Potassium iodate, Sulfuric acid (1+1), Potassium iodide

4. Example



-Titration curve-

-Measurement results-			
	Sample (g)	Titer (mL)	Factor
1	1.0483	29.5322	0.9922
2	1.0483	29.4642	0.9945
3	1.0483	29.5241	0.9925
Average			0.9931
SD			0.0013
RSD(%)			0.13

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>