

Application Memo

Quantification of Iodine Ion Concentration

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

1. Overview

The thiosulfate ion is oxidized by iodine to the tetrathionate ion without interference. This reaction is used to measure the iodine ion concentration in the iodine solution. The diluted sample is titrated with 0.1 mol/L sodium thiosulfate solution. The iodine concentration is calculated from the titration volume of the sodium thiosulfate solution.

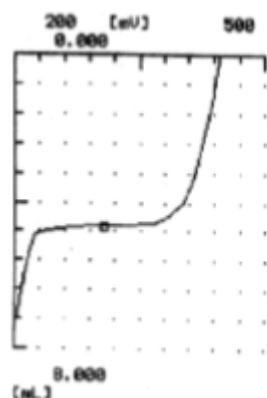
2. Apparatus

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

3. Reagents

Titrant	0.1mol/L sodium thiosulfate
Solvent	Pure water

4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer (mL)	Iodine (g/L)
1	5.00	4.6973	12.01
2	5.00	4.5723	11.69
3	5.00	4.6559	11.90
Average			11.86
SD			0.16
RSD(%)			1.4

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>