

Application Memo

Iodine Number of Octanol

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

1. Overview

The iodine number of octanol is measured by as follows: Firstly, the sample is added with the Wijs solution and left in a dark room for reaction. Then, 10% potassium iodide is added for titration with 0.1mol/L sodium thiosulfate. The endpoint is the maximum inflexion point on the titration curve. The iodine number is calculated from titration volume of sodium thiosulfate.

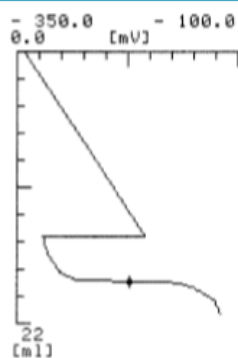
2. Apparatus

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

3. Reagents

Reagent	0.1mol/L sodium thiosulfate
Additive	Wijs solution (7.9g iodine trichloride and 8.9g iodine each dissolved in acetic acid and mixed together into 1L in total) 10% potassium iodide

4. Example



—Titration curve—

—Measurement results—			
	Sample (g)	Titer (mL)	Iodine number (I _g /100g)
1	25.0171	18.6647	0.00306
2	25.0247	18.6946	0.00154
3	25.0168	18.6875	0.00190
Average			0.00217
SD			0.00079
RSD(%)			37

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>