KYOTO ELECTRONICS MANUFACTURING CO.,LTD.

TIQ-99429-enL

Application Memo

Concentration of 48%-Sodium Hydroxide

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Neutralization titration
Standards	JIS K1200-2

1. Overview

Sodium hydroxide concentration is specified by potentiometric titration with hydrochloric acid according to the JIS K 1200-2 Appendix 2.
Two endpoints appear in this titration and the target endpoint for sodium hydroxide is the first endpoint around pH7. This can be easily detected by setting the measurement condition that requires only one endpoint. The concentration of sodium hydroxide is calculated from the titration volume at the first endpoint.

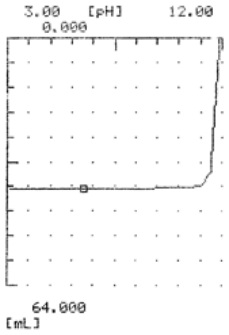
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Combined glass electrode (Internal solution 3.33M-potassium chloride) Temperature compensation electrode

3. Reagents

Titrant	1mol/L hydrochloric acid
Solvent	Water (Ion exchanged or distilled water)

4. Example



—Titration curve—

—Measurement results—

	Sample (g)	Titer (mL)	NaOH (%)
1	80.005	38.8742	48.833
2	80.005	38.8767	48.836
3	80.005	38.8813	48.842
Average			48.837
SD			0.005
RSD(%)			0.01

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