

Application Memo

Hydrochloric Acid of Etching Solution

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	

1. Overview

Hydrochloric acid in etchant is measured by titration with 1mol/L sodium hydroxide after the sample is diluted with pure water. The endpoint is the maximum inflexion on the titration curve. The hydrochloric acid concentration is calculated from the titration volume of sodium hydroxide.

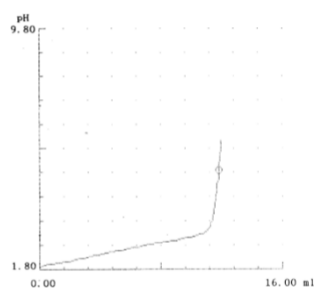
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	pH glass electrode Ceramic reference electrode Temperature compensation electrode

3. Reagents

Titrant	1mol/L sodium hydroxide
Solvent	Pure water

4. Example



—Titration curve—

—Measurement results—

	Sample (g)	Titer (mL)	HCl (%)
1	1.4459	9.4077	23.749
2	1.4327	9.3326	23.776
3	1.4178	9.2432	23.796
Average			23.774
SD			0.024
RSD(%)			0.099

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>