

## Application Memo

# Determination of Hydrochloric Acid Concentration

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

## 1. Overview

The concentration of 0.1mol/L hydrochloric acid solution is examined by titration with 1mol/L sodium hydroxide solution. The endpoint is the maximum inflexion on the titration curve. The hydrochloric acid concentration is calculated from the titration volume of the sodium hydroxide solution.

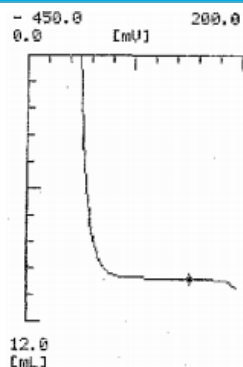
## 2. Apparatus

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

## 3. Reagents

Titrant	0.1 mol/L sodium hydroxide
Additive:	Pure water

## 4. Example



-Titration curve-

—Measurement results—

	Sample (mL)	Titer (mL)	Concentration (mol/L)
1	10	10.1384	0.1020
2		10.1155	0.1018
3		10.0817	0.1014
Average			0.1017
SD			0.0003
RSD(%)			0.3

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>