

Application Memo

Determination of Hydrochloric Acid Concentration

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	GB/T 601

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.

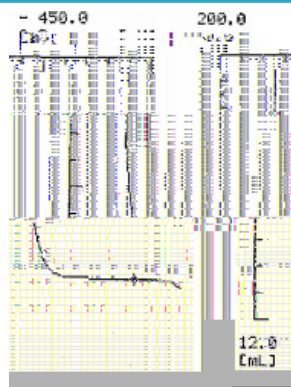
2. Apparatus

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.

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Overseas Sales & Marketing Sect.