KYOTO ELECTRONICS MANUFACTURING CO.,LTD.

TIQ-99172enL

Application Memo

Concentration of L-Histidine

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Neutralization titration
Standards	

1. Overview

After adding formic acid and acetic acid to the sample, L-Histidine is measured by titration with 0.1mol/L perchloric acid (acetic acid) solution up to the endpoint. The endpoint is the maximum inflexion on the titration curve. The concentration of L-Histidine is calculated from the titration volume of the perchloric acid (acetic acid) solution.

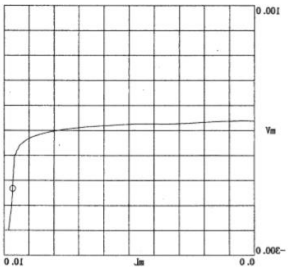
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	pH glass electrode Double junction reference electrode (Internal solution: Saturation sodium perchlorate in acetic acid) Temperature compensation electrode

3. Reagents

Titrant	0.1 mo1/L perchloric acid (acetic acid) solution
Solvent	Acetic acid
Reagent	Formic acid

4. Example



—Titration curve—

—Measurement results—

	Sample (g)	Titer (mL)	L-Histidine (%)
1	0.1508	9.6552	99.58
2	0.1504	9.7482	100.81
3	0.1517	9.8337	100.13
Average			100.40
SD			0.71
RSD(%)			0.71

Please feel free to contact us for any further information.

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