Application Memo

Total Acids and Amino Acid of Ume Plum Vinegar

Industry	Food & beverage
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	

1. Overview

The diluted sample is titrated with 0.1ml/L sodium hydroxide up to pH7.2 and pH8.3. The total acidity is calculated from the titration volume of sodium hydroxide at pH7.2 endpoint on the titration curve. After adding the neutral formalin to the measured sample, it is titrated with 0.1ml/L sodium hydroxide up to pH8.3 again. The amino acidity is calculated from the titration volume data of sodium hydroxide at second and third endpoints at pH8.3 on the titration curve.

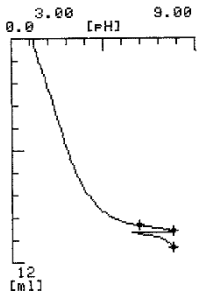
2. Apparatus

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

3. Reagents

Titrant	0.1mol/L sodium hydroxide
Solvent	Pure water
Additive	Neutral formalin

4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer1 (mL)	Titer2 (mL)	Titer3 (mL)	Total Acidity	Amino Acidity
1	10.0	10.0732	10.3905	11.2679	50.37	4.387
2		10.0748	10.3992	11.2990	50.37	4.499
3		10.0860	10.4148	11.3049	50.43	4.451
Average					50.39	4.446
SD					0.035	0.056
RSD(%)					0.069	1.3

Please feel free to contact us for any further information.

＜Contact＞Kyoto Electronics Manufacturing Co., Ltd.
Overseas Sales & Marketing Sect.
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