

Application Memo

Total Acid (Free Acid) of Japanese Sake

Industry	Food & beverage
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	Official Analysis Method of National Tax Agency JAPAN

1. Overview

The acids contained in Japanese sake or synthetic sake are organic acids mainly of succinic acid and lactic acid, and total free organic acids in them are related to quality of sake. Total free acids in sake is determined by acid-base titration with sodium hydroxide specified in above standard (Item.3-5 “Test method for Total acid (Free acid)” in Chapter.3 “Sake, Synthetic sake”). The sample is titrated with 0.1mol/L sodium hydroxide up to pH 7.2. The acidity is determined by the titration volume of sodium hydroxide, and the succinic acid concentration is calculated as total acid (free acid) by converting the acidity.

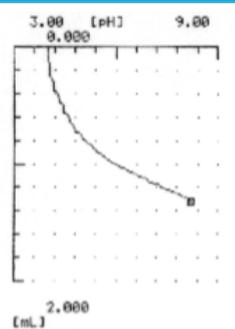
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD) Micro titration cell unit
Electrode	Combined glass electrode for micro titration Temperature compensation electrode

3. Reagents

Titrant	0.1mol/L sodium hydroxide
---------	---------------------------

4. Example



—Titration curve—

- Measurement results -

	Sample (mL)	Titer (mL)	Acidity	Succinic acid (g/100mL)
1	10.0	1.3243	1.3243	0.0781
2	10.0	1.3177	1.3177	0.0777
3	10.0	1.3230	1.3230	0.0781
Average				0.0780
SD				0.0002
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>