

Application Memo

Total Acid Number of Grease

Industry	Petrochemicals
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	

1. Overview

A test sample of grease is dissolved in mixture of toluene, 2-propanol and a small amount of water, and the sample is titrated by potentiometry with 0.1mol/L potassium hydroxide + 2-propanol solution. The endpoint is obtained on the titration curve. The total acid number is calculated from the titration volume up to the endpoint.

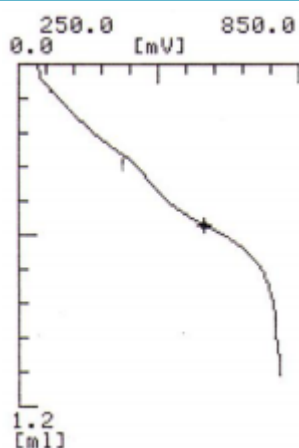
2. Apparatus

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

3. Reagents

Titrant	0.1mol/L potassium hydroxide + 2-propanol solution
Solvent	Toluene, Pure water, 2-propanol

4. Example



—Titration curve—

—Measurement results—			
	Sample (g)	Titer (mL)	Acid number (mgKOH/g)
1	3.0092	0.5722	1.0667
2	3.0093	0.5518	1.0287
3	3.0090	0.5860	1.0925
Average			1.0626
SD			0.0321
RSD(%)			3.02

Please feel free to contact us for any further information.
 <Contact> Kyoto Electronics Manufacturing Co., Ltd.
 Overseas Sales & Marketing Sect.
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