

Application Memo

Acid Number of Carboxylate Ester

Industry	Organic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	

1. Overview

The test sample is dissolved in mixture of toluene, 2-propanol and water, and titrated with the 0.1mol/L potassium hydroxide 2-propanol solution up to the endpoint which is automatically detected on the titration curve. The acid number is calculated from the titration volume of potassium hydroxide up to the endpoint.

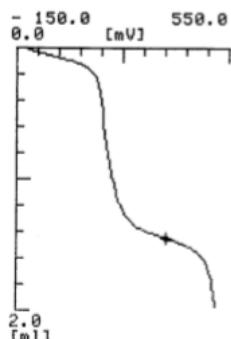
2. Apparatus

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 + 2-Propanol + Pure water (500mL+495mL+5mL)

4. Example



—Measurement results—			
	Sample (g)	Titer (mL)	Acid number (%)
1	5.0131	1.4657	1.4368
2	5.0012	1.4585	1.4321
3	5.0118	1.4656	1.4370
Average			1.4353
SD			0.0028
RSD(%)			0.19

—Titration curve—

Please feel free to contact us for any further information.

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