

Application Memo

Total Base Number of Carboxylate Ester

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

1. Overview

After adding mixture of chlorobenzene and acetic acid to the sample, it is titrated with 0.1mol/L perchloric acid (acetic acid solution). The endpoint is determined by the maximum inflexion point on the titration curve. The potassium hydroxide concentration is calculated as total base number from the titration volume of perchloric acid.

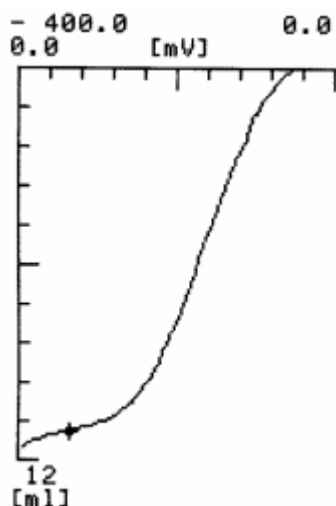
2. Apparatus

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

3. Reagents

Titrant	0.1mol/L perchloric acid (acetic acid solution)
Solvent	Chlorobenzene + Acetic acid (2+1)

4. Example



-Titration curve-

-Measurement results-

	Sample (g)	Titer (mL)	Concentration (mg/g)
1	2.5061	11.1375	24.907
2	2.5048	11.1137	24.866
3	2.5019	11.0803	24.820
Average			24.864
SD			0.044
RSD(%)			0.18

Please feel free to contact us for any further information.

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