

Application Memo

Calcium Oxide in Lime

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Chelatometric titration
Standards	

1. Overview

The sample is dissolved in the water and hydrochloric acid. After adding water and triethanolamine (1+1) to the prepared sample, add potassium hydroxide to adjust pH from 12.5 to 13. After adding the NN indicator to it, it is titrated with 0.02mol/L EDTA. The endpoint is the maximum inflexion on the titration curve. The calcium oxide concentration is calculated from the titration volume of the EDTA.

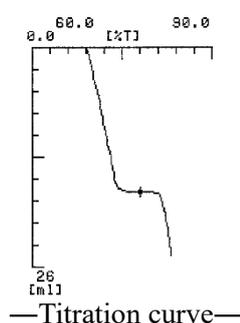
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier PTA)
Electrode	Photometric sensor Interference Filter (530nm)

3. Reagents

Titrant	0.02mol/L-EDTA
Solvent	Pure water
Additive	Triethanolamine(1+1), 8mol/L potassium hydroxide
Indicator	NN indicator(diluted powder)

4. Example



—Measurement results—			
	Sample (g)	Titer (mL)	Conc. (mg/mL)
1	1.0	17.2925	96.98
2	1.0	17.2907	96.97
3	1.0	17.3029	97.04
Average			96.99
SD			0.037
RSD(%)			0.038

Please feel free to contact us for any further information.
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