

Application Memo

Magnesium 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 the buffer solution to adjust pH from 9.5 to 10. Magnesium oxide concentration in it is measured by titration with 0.02mol/L EDTA. The endpoint is the maximum inflexion on the titration curve. The magnesium oxide concentration is calculated from the titration volume of the EDTA.

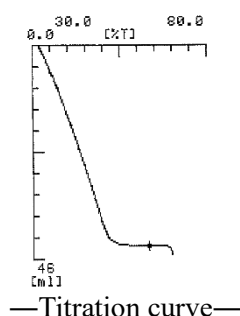
2. Apparatus

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), Buffer solution(NH ₄ Cl-NH ₃)
Indicator	EBT indicator

4. Example



—Measurement results—

	Sample (g)	Titer (mL)	Conc. (mg/mL)
1	2.5	43.4538	0.3480
2	2.5	43.4714	0.3763
3	2.5	43.4507	0.3430
Average			0.3558
SD			0.0180
RSD(%)			5.06

Please feel free to contact us for any further information.
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