

Application Memo

Calcium Oxide in Ash

Industry	Ores
Instrument	Automatic potentiometric titrator
Measurement method	Chelatometric titration
Standards	

1. Overview

To measure calcium oxide in ash, prepare a dissolved sample in nitric acid and add pure water. Add potassium hydroxide to the sample solution and titrate with 0.01mol/L EDTA. The endpoint is obtained by the color change of the indicator on the titration curve. Calcium oxide is calculated from the titration volume of EDTA.

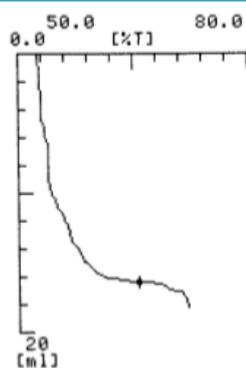
2. Apparatus

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

3. Reagents

Titrant	0.01mol /L EDTA
Additive	Pure water, Nitric acid, 8mol/L potassium hydroxide
Indicator	NN indicator (mixed with 100 times mass of potassium sulfate)

4. Example



—Measurement results—			
	Sample (g)	Titer (mL)	Calcium oxide (%)
1	0.010016	9.0033	50.410
2	0.010016	9.0003	50.393
3	0.010016	9.0094	50.444
Average			50.416
SD			0.026
RSD(%)			0.052

Please feel free to contact us for any further information.
 <Contact> Kyoto Electronics Manufacturing Co., Ltd.
 Overseas Sales & Marketing Sect.
<http://www.kyoto-kem.com/en/contact/form.php>