

Application Memo

Calcium in Tablets

Industry	Pharmaceutical
Instrument	Automatic potentiometric titrator
Measurement method	Chelatometric titration
Standards	

1. Overview

The amount of calcium in tablets is quantified as follows. Crush the sample tablet and add pure water and 10% hydrochloric acid. Warm the liquid in bath at 80°C, and cool. Then, filter, and add water to make test sample liquid. Add water, 10% potassium hydroxide and potassium cyanide to the test sample liquid, then titrate it with 0.05mol/L EDTA. The endpoint is determined by the color change of the indicator on the titration curve. Calcium is calculated from the titration volume of EDTA.

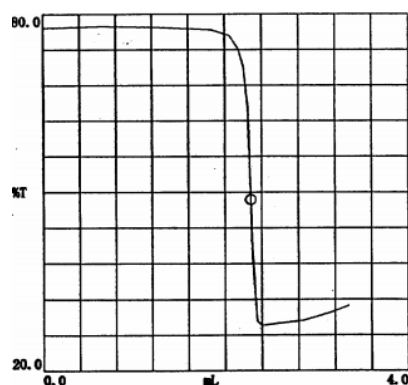
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier PTA)
Detector	Photometric sensor Interference filter (630nm)

3. Reagents

Titrant	0.05mol /L EDTA solution
Solvent	Pure water
Additive	10% Potassium hydroxide, Potassium cyanide (1g/10mL)
Indicator	NN Indicator

4. Example



-Titration curve-

-Measurement results-			
	Sample (g)	Titer (mL)	Conc. (%)
1	3.0661	2.2811	14.879
2	3.0661	2.2822	14.887
3	3.0661	2.2830	14.892
Average			14.886
SD			0.007
RSD(%)			0.04

Please feel free to contact us for any further information.
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