

## Application Memo

# Quantitative Determination of Calcium in Syrup

Industry	Food & beverage
Instrument	Automatic potentiometric titrator
Measurement method	Chelatometric titration
Standards	

### 1. Overview

After adding 10% sodium sulfide, ammoniac buffer solution (Ammonium chloride + Ammonia water) and BT indicator to the diluted sample, calcium oxide concentration in the sample is measured by titration with the EDTA. The endpoint is the maximum inflexion on the titration curve.

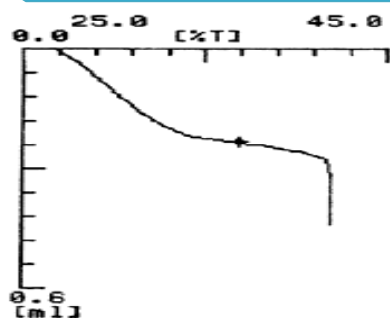
### 2. Apparatus

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

### 3. Reagents

Titrant	EDTA
Solvent	Water
Additive	10% sodium sulfide, Ammonium chloride, Ammonia water
Indicator	BT indicator

### 4. Example



—Titration curve—

—Measurement results—

	Sample size (g)	Titer (mL)	Concentration (mg/100g)
1	1.0472	0.2353	22.469
2	1.0652	0.2435	22.860
3	1.0192	0.2303	22.596
Average			22.642
SD			0.199
RSD(%)			0.881

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