

## Application Memo

# Quantification of Bismuth

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

## 1. Overview

Bismuth is measured by titration of XO added test sample with 0.01mol/L EDTA solution up to the endpoint, which is determined by the color change of the indicator.

The bismuth concentration is calculated from the titration volume of EDTA.

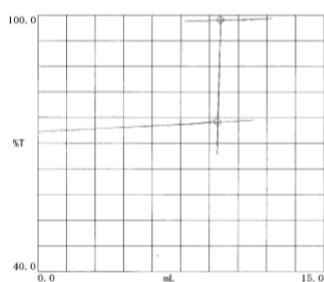
## 2. Apparatus

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

## 3. Reagents

Titrant	0.01mol/L EDTA solution
Solvent	Pure water
Indicator	0.1% XO indicator (Xylenol orange)

## 4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer (mL)	Bismuth (mg/L)
1	20.0	9.5864	1001.7
2	20.0	9.5870	1001.8
3	20.0	9.5922	1002.3
Average			1001.9
SD			0.3
RSD(%)			0.03

Please feel free to contact us for any further information.  
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