

## Application Memo

# Determination of Ascorbic Acid Concentration

Industry	Organic chemical Industry
Instrument	Automatic potentiometric titrator
Measurement method	Oxidation reduction titration
Standards	

## 1. Overview

After adding (1 + 49) metaphosphoric acid solution to 0.2g ascorbic acid sample, it is titrated with 0.05mol/L iodine solution. The endpoint is the maximum inflexion on the titration curve. The salt concentration is calculated from the titration volume of the iodine solution. The result shows this method is useful for the purity evaluation of ascorbic acid.

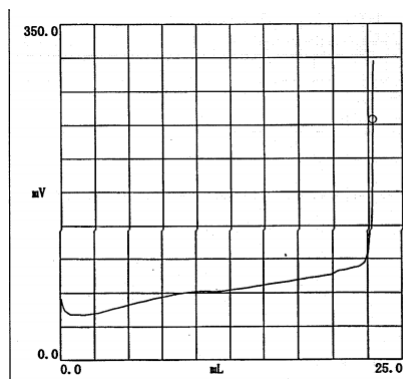
## 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Platinum electrode Ceramic reference electrode

## 3. Reagents

Titrant	0.05mol/L iodine solution
Solvent	(1 + 49) metaphosphoric acid solution

## 4. Example



—Measurement results—

	Sample (mL)	Titration (mL)	Conc. (%)
1	0.2108	23.7886	99.3/
2	0.2025	22.8357	99.30
3	0.2110	23.8246	99.43
Average			99.37
SD			0.06
RSD(%)			0.06

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