KYOTO ELECTRONICS MANUFACTURING CO.,LTD.

TIE-00025enL

Application Memo

Quantitative Determination of Hydrogen Peroxide in Cosmetics

Industry	Cosmetics & soap
Instrument	Automatic potentiometric titrator
Measurement method	Oxidation-reduction titration
Standards	

1. Overview

After adding distilled water, 30% sulfuric acid and potassium iodine to the sample, and leaving in a cool dark place for 30 minutes, hydrogen peroxide concentration is measured by titration with 0.1mol/L sodium thiosulfate solution. The endpoint is the maximum inflexion on the titration curve. The hydrogen peroxide concentration is calculated from the titration volume of the sodium thiosulfate solution.

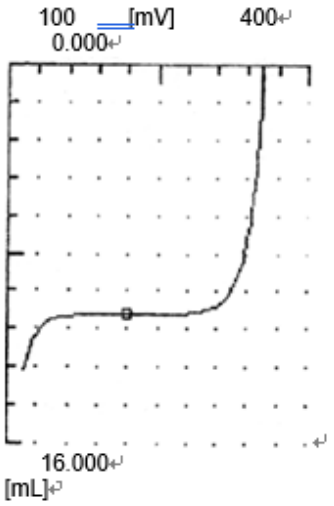
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Combined platinum electrode

3. Reagents

Titrant	0.1mol/L sodium thiosulfate solution
Solvent	Distilled water
Additive	30% sulfuric acid, Potassium iodine

4. Example



—Titration curve—

—Measurement results—

	Sample size (g)	Titer (mL)	Concentration (%)
1	0.3035	10.5612	5.9536
2	0.3003	10.4538	5.9559
Average			5.9548

Please feel free to contact us for any further information.

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