# KYOTO ELECTRONICS MANUFACTURING CO., LTD.

TIE-00024enL

# Application Memo Oxidation Power of 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 5 minutes, oxidation power is measured by titration with 0.1mol/L sodium thiosulfate solution. The endpoint is the maximum inflexion on the titration curve. The oxidation power 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

	100[mV] 0.000⊷							350⊷		
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	—Titration curve—									

—Measurement results—						
	Sample size	Titer	Oxidation power			
	(g)	(mL)	(%)			
1	0.4013	8.5285	5.3770			
2	0.4020	8.6002	5.4127			
Average			5.3949			

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