

## Application Memo

# Hydrogen Peroxide in Hair Dye

Industry	Cosmetics soap
Instrument	Automatic potentiometric titrator
Measurement method	Redox titration
Standards	QB/T 1978

### 1. Overview

Hydrogen peroxide in hair dye is measured by titration up to the endpoint with 0.02mol/L potassium permanganate after the sample is added with pure water and 6mol/L sulfuric acid, dissolving by heating. The endpoint is the maximum inflection on the titration curve. Concentration of hydrogen peroxide is calculated from the titration volume of potassium permanganate.

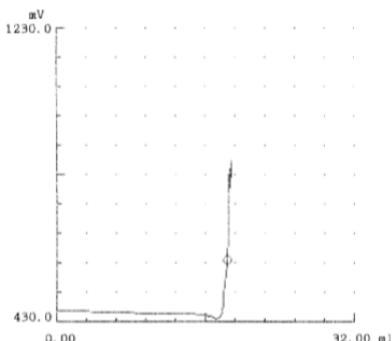
### 2. Apparatus

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

### 3. Reagents

Titrant	0.02mol/L(0.1N) potassium permanganate
Solvent	Pure water
Additive	6mol/L sulfuric acid

### 4. Example



—Measurement results—

	Sample (g)	Titer (mL)	Concentration (%)
1	0.5184	18.4500	6.090
2	0.5074	18.0000	6.070
3	0.5126	18.2610	6.095
Average			6.0850
SD			0.0134
RSD(%)			0.220

—Titration curve—

Please feel free to contact us for any further information.

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