KYOTO ELECTRONICS MANUFACTURING CO.,LTD.

TIC-98007enL

Application Memo

Potassium Permanganate Consumption of Pharmaceuticals

Industry	Pharmaceutical
Instrument	Automatic potentiometric titrator
Measurement method	Reduction titration
Standards	

1. Overview

Add potassium permanganate solution and dilute sulfuric acid to the sample and boil it. After cooling, prepare the sample by adding water and potassium iodide. The prepared sample is titrated with 0.01mol/L sodium thiosulfate solution immediately. The endpoint is the maximum inflexion on the titration curve. The potassium permanganate consumption is calculated from the titration volume of the sodium thiosulfate solution.

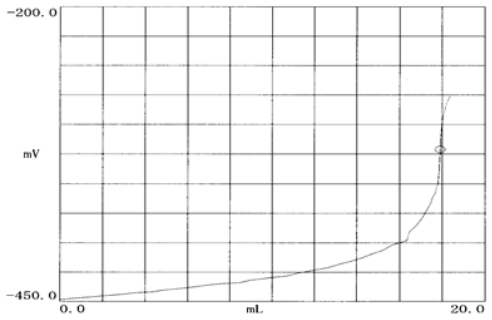
2. Apparatus

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

3. Reagents

Titrant	0.01mol/L $Na_2S_2O_3$
Solvent	0.002mol/L $KMnO_4$, 10% H_2SO_4, KI

4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer (mL)	Consumption (mL)
1	10.0	17.8590	1.516
2		17.9727	1.401
3		17.9169	1.457
Average			1.458
SD			0.057
RSD(%)			3.9

Please feel free to contact us for any further information.

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