

Application Memo Purity of Aromatic Amine

Industry	Pharmaceutical
Instrument	Automatic potentiometric titrator
Measurement method	Redox titration
Standards	Japanese pharmacopoeia

1. Overview

After adding hydrochloric acid, pure water and potassium bromide to the sample, aromatic amine concentration is measured by titration with 0.1mol/L sodium nitrite while maintaining temperature below 15°C. The endpoint is the maximum inflection point on the titration curve. The purity of aromatic amine is calculated from the titration volume of the 0.1mol/L sodium nitrite.

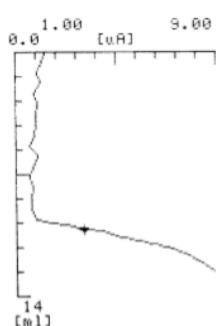
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier POT)
Electrode	Twin platinum electrode

3. Reagents

Titrant	0.1mol/L sodium nitrite
Solvent	Pure water
Additive	Hydrochloric acid, 30% potassium bromide

4. Example



—Titration curve—

—Measurement results—			
	Sample (g)	Titer (mL)	Aromatic amine (%)
1	0.1466	10.1865	100.7
2	0.1481	10.3442	101.2
3	0.1409	9.8282	101.1
Average			101.0
SD			0.3
RSD(%)			0.3

Please feel free to contact us for any further information.

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