

Application Memo

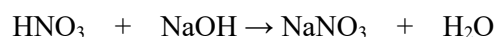
Concentration of Nitric Acid

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	JIS K 8541

1. Overview

According to ISO 6353-2: 1983, nitric acid is measured by titration with 1mol/L sodium hydroxide. The endpoint is the maximum inflexion on the titration curve.

The concentration of nitric acid is calculated from the titration volume of sodium hydroxide.



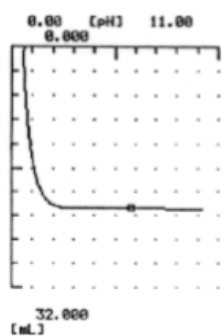
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Combined glass electrode Temperature compensation electrode

3. Reagents

Titrant	1 mol/L sodium hydroxide
Solvent	Pure water

4. Example



—Titration curve—

—Measurement results—

	Sample (g)	Titer (mL)	Nitric acid (%)
1	2.1692	21.4281	60.23
2	2.1265	21.0803	60.44
3	2.1283	21.1404	60.56
Average			60.41
SD			0.17
RSD(%)			0.28

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