

Application Memo

Quantitative Determination of Magnesium in Salty Water

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Chelatometric titration

1. Overview

After adding the buffer solution, hydroxylammonium chloride and the indicator to the warmed sample, magnesium concentration is measured by titration with 0.01mol/L EDTA solution. The endpoint is the maximum inflexion on the titration curve. The magnesium concentration is calculated from the titration volume of the EDTA.

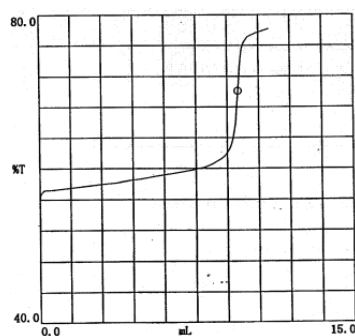
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Potentiometric sensor Interference filter (530nm)

3. Reagents

Titrant	0.01mol/L sodium ethylenediaminetetraacetic acid (EDTA) solution
Indicator	Eriochrome Black T
Additive	pH 10.7 ammonia-ammonium chloride buffer solution, Hydroxylammonium chloride

4. Example



-Titration curve-

-Measurement results-

	Sample (g)	Titer (mL)	Conc. (%)
1	0.5	9.5145	1.811
2	0.5	9.4997	1.809
3	0.5	9.4980	1.809
Average			1.810
SD			0.002
RSD(%)			0.1

Please feel free to contact us for any further information.

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