

Application Memo

P and M Alkalinity of Drinking Water

Industry	Food & beverage
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	

1. Overview

P alkalinity of drinking water is measured by titration with 0.01mol/L sulfuric acid after adding sodium thiosulfate and phenolphthalein indicator to the sample. The endpoint is determined by the inflexion point where the indicator color changes.

Then, M alkalinity is titrated again with 0.01mol/L sulfuric acid after adding methyl red indicator to the sample. The endpoint is determined by the inflexion point where the indicator color changes.

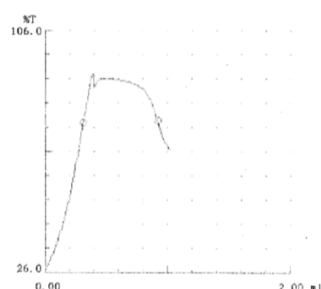
2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier PTA)
Electrode	Photometric sensor, Interference filter (530nm)

3. Reagents

Titrant	0.01mol/L sulfuric acid
Additive	Sodium thiosulfate
Indicator	Phenolphthalein (for P alkalinity), Methyl red (for M alkalinity)

4. Example



—Titration curve—

—Measurement results— (P alkalinity only)

	Sample (mL)	Titer (mL)	Alkalinity
1	50.0	0.3196	0.3196
2	50.0	0.3188	0.3188
3	50.0	0.3171	0.3171
Average			0.3184
SD			0.0013
RSD(%)			0.40

Please feel free to contact us for any further information.
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