# KYOTO ELECTRONICS MANUFACTURING CO., LTD.

TIQ-98019enL

## Application Memo Chloride Ion Measurement in Sodium Chloride Solution

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Precipitation titration
Standards	-

## 1. Overview

After adding acetone and nitric acid to the sample of low concentration sodium chloride solution, chloride ion is measured by titration with 0.004mol/L silver nitrate solution. The endpoint is the maximum inflexion on the titration curve. The chloride ion concentration is calculated from the titration volume of the silver nitrate solution.

### 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Silver electrode
	pH glass electrode

#### 3. Reagents

Titrant	0.0004mol/L AgNO <sub>3</sub>
Solvent	Acetone
Additive	Nitric acid

4. Example

- 208.0 50.0		—Measurement results—			
- 200.0 50.0 0.0 (m4)		Sample (g)	Titer (mL)	Conc. (ppm)	
Titration curve—	1 2 3	10.0060 10.0295 10.0120	0.7581 0.8042 0.8006	1.327 1.405 1.401	
	Average SD RSD(%)			1.378 0.044 3.2	

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