KYOTO ELECTRONICS MANUFACTURING CO., LTD.

TIQ-97071enL

Application Memo Chlorine Ion of Ground Water

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

1. Overview

Chlorine ion of ground water is measured by potentiometric titration with a 0.005mol/L silver nitrate solution after the test sample is added with pure water and nitric acid. The endpoint is the maximum inflexion on the titration curve. Chlorine ion concentration is calculated from the titration volume of silver nitrate.

2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Silver electrode
	Mercury sulfate reference electrode

3. Reagents

Titrant	0.005mol/L silver nitrate solution
Additive	Pure water, Nitric acid solution

4. Example

-200.0 0.0 0.0 [mV]	—Measurement results—				
		Sample	Titer	Chlorine ion	
		(g)	(mL)	(ppm)	
	1	20.0237	1.0532	9.3256	
	2	20.2098	1.1078	9.7187	
	3	20.0501	1.0594	9.3681	
	Average			9.4708	
	SD			0.2157	
- 1	RSD(%)			2.277	
8.4 [m1]					

-Titration curve-

Please feel free to contact us for any further information.

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