# KYOTO ELECTRONICS MANUFACTURING CO., LTD.

TIQ-94021enL

## Application Memo Tin in Soldering Solution

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

### 1. Overview

Quantification of tin  $(Sn^{2+})$  of soldering solution is started first by preparing pure water and 6mol/L HCl in a beaker. Add and stir potassium sodium tartrate to dissolve. After adding sodium hydrogen carbonate and the test sample, titrate with 0.05mol/L iodine solution up to the endpoint, which is the maximum inflexion on the titration curve. The tin concentration is calculated from the titration volume of the iodine solution.

#### 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	Platinum electrode Ceramic reference electrode

#### 3. Reagents

Titrant	0.05mol/L (0.1N) iodine	
Solvent	Pure water	
Additive	6mol/L-hydrochloric acid Potassium sodium tartrate	
	Sodium hydrogen carbonate	

#### 4. Example

40.0

—Measurement results—					
	Sample	Titer	Tin		
	(mL)	(mL)	(g/L)		
1	2.0	6.7453	20.02		



-Titration curve-

Please feel free to contact us for any further information.

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