

## Application Memo

# Total Nickel Content in Nickel Plating Solution

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

### 1. Overview

After adding ammonia water, triethanolamine solution, and the indicator solution to the diluted sample, it is titrated with 0.01mol /L EDTA solution. The endpoint is found at the maximum point of inflection. The nickel concentration is calculated from the titration volume of the EDTA solution.

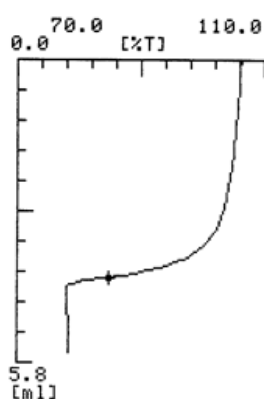
### 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier PTA)
Electrode	Photometric sensor Interference filter (630nm)

### 3. Reagents

Titrant	0.01mol /L EDTA solution
Additive	Pure water, Ammonia water, Triethanolamine
Indicator	Murexide powder mixture (0.02g Murexide and 10g Potassium sulfate)

### 4. Example



—Titration curve—

—Measurement results—

	Sample size (mL)	Titer (mL)	Concentration (g/L)
1	5.0	4.1860	49.15
2	5.0	4.1886	49.18
3	5.0	4.1886	49.18
Average			49.17
SD			0.02
RSD(%)			0.04

Please feel free to contact us for any further information.  
 <Contact>Kyoto Electronics Manufacturing Co., Ltd.  
 Overseas Sales & Marketing Sect.  
<http://www.kyoto-kem.com/en/contact/form.php>