

## Application Memo

# EDTA in Boiler Feed Water

Industry	Inorganic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Chelatometric titration
Standards	JIS K 8107

## 1. Overview

EDTA means disodium dihydrogen ethylenediamine tetraacetate dehydrate. The EDTA in boiler water is measured according to JIS K 8107-2017 by chelatometric titration with zinc chloride as a titrant using photometric sensor. The endpoint is determined by the color change from blue to red on the Eriochrome black T indicator. The concentration of EDTA is obtained from the titration volume of zinc chloride up to the endpoint.

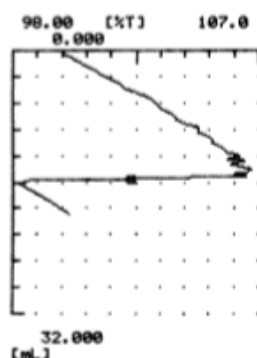
## 2. Apparatus

Main unit	Automatic potentiometric titrator (amplifier PTA)
Detector	Photometric sensor Interference Filter (530nm)

## 3. Reagents

Titrant	0.05mol/L zinc chloride solution
Solvent	Pure water
Additive	Ammoniacal ammonium chloride buffer (pH10)
Indicator	Eriochrome black T

## 4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Titer (mL)	EDTA (%)
1	2.0042	15.7518	14.686
2	2.0039	15.7505	14.687
3	2.0040	15.7478	14.684
Average			14.686
SD			0.002
RSD(%)			0.01

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>