

Application Memo

Boric Acid in Electrolyte

Industry	Nonferrous metal
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	JIS K 8863, ISO 6353-3

1. Overview

Boric acid in the electrolyte solution is quantified according to JIS K 8863-2007 Boric acid (Reagent). After mannitol and pure water are added to the sample, it is titrated with 0.1mol/L sodium hydroxide up to the endpoint. The endpoint is the maximum inflexion point on the titration curve. The concentration of boric acid is calculated from the titration volume.

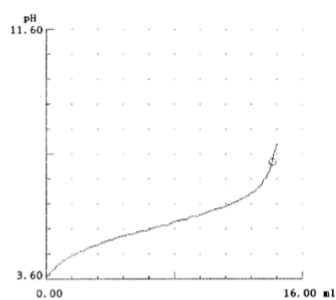
2. Apparatus

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

3. Reagents

Titrant	0.1 mol/L sodium hydroxide
Solvent	Pure water, Mannitol

4. Example



—Titration curve—

—Measurement results—

	Sample (mL)	Concentration (g/L)
1	2.0	43.976
2	2.0	44.658
3	2.0	44.469
Average		44.368
SD		0.352
RSD(%)		0.794

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>