

## Application Memo

# Bromine Number of Cyclohexane

Industry	Organic chemical industry
Instrument	Automatic potentiometric titrator
Measurement method	Redox titration
Standards	JIS K 2605, ASTM D 1159, ISO 3839

## 1. Overview

According to JIS K 2605-1996 Petroleum distillates and commercial aliphatic olefins - Determination of bromine number -Electrometric method, bromine number of cyclohexane is measured by titration with potassium bromide-potassium bromate solution while the test sample dissolved in buffer is maintained at 5°C or less. The endpoint is determined by the inflexion caused by sharp polar potential change due to free iodine in titration. The bromine number is calculated from the titration volume of potassium bromide- potassium bromate solution.

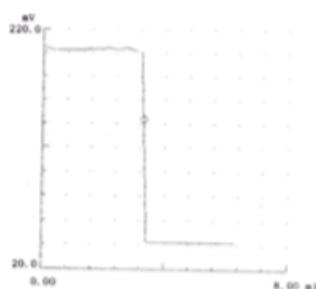
## 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier POT)
Electrode	Twin platinum electrode

## 3. Reagents

Titrant	0.25mol/L-potassium bromine-potassium bromate solution
Solvent	Acetic acid, Toluene, Methanol, Sulfuric acid (1+5)

## 4. Example



—Titration curve—

—Measurement results—

	Sample (g)	Titer (mL)	Bromine number (gBr <sub>2</sub> /100g)
1	0.7143	3.3214	186.0

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 <Contact> Kyoto Electronics Manufacturing Co., Ltd.  
 Overseas Sales & Marketing Sect.  
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