# KYOTO ELECTRONICS MANUFACTURING CO., LTD.

TIA-98009enL

## Application Memo Total Acid Number of Kerosene

Industry	Petrochemicals
Instrument	Automatic potentiometric titrator
Measurement method	Acid-base titration
Standards	

### 1. Overview

After adding the solvent to the sample, potassium hydroxide concentration is measured by titration with the titrant. The endpoint is the maximum inflexion on the titration curve. The potassium hydroxide concentration as the total acid number is calculated from the titration volume of the titrant.

#### 2. Apparatus

Main unit	Automatic potentiometric titrator (preamplifier STD)
Electrode	pH glass electrode Double junction reference electrode Temperature compensation electrode

#### 3. Reagents

Titrant	0.1mol/L potassium hydroxide (2-propanol solution)
Solvent	Toluene, 2-propanol and water

4. Example

- 1.00 17.00	—Measurement results—				
0.0 [PH]		Sample	Titer	Conc.	
$+$ $\gamma$		(g)	(mL)	(mg/g)	
	1	0.9961	1.1444	6.445	
$\left[ \right]$	2	1.0064	1.1297	6.297	
$+$ $\setminus$ .	3	1.0071	1.1415	6.363	
	Average			6.369	
	SD			0.074	
F I	RSD(%)			1.2	
L 2.0 [m]]					

-Titration curve-

Please feel free to contact us for any further information.

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