

## Application Memo

|                    |                                   |
|--------------------|-----------------------------------|
| Industry           | inorganic chemical industry       |
| Instrument         | automatic potentiometric titrator |
| Measurement method | acid-base titration               |
| Standards          | GB/T 1291, JIS K 8809             |

### 1. Overview

According to the standard testing method JIS K 8809-2014 Potassium hydrogen phthalate (Reagent), the test liquid is measured by titration with 1mol/L sodium hydroxide after the sample is diluted with water.

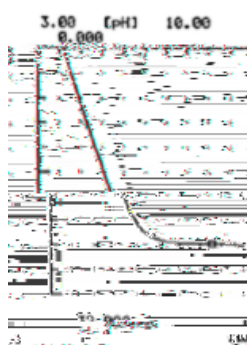
The endpoint is the maximum inflexion on the titration curve. The purity of potassium hydrogen phthalate is calculated from the titration volume of sodium hydroxide.

### 2. Apparatus

|           |                                                                |
|-----------|----------------------------------------------------------------|
| Main unit | Automatic potentiometric titrator (preamplifier: STD)          |
| Electrode | Combined glass electrode<br>Temperature compensation electrode |

### 3. Reagents

|         |                          |
|---------|--------------------------|
| Titrant | 1 mol/L sodium hydroxide |
| Solvent | Pure water               |



Titration curve

Measurement results

|         | Sample<br>(g) | Titer<br>(mL) | Purity<br>(%) |
|---------|---------------|---------------|---------------|
| 1       | 5.002         | 25.3986       | 98.82         |
| 2       | 5.055         | 25.6515       | 98.76         |
| 3       | 4.978         | 25.2317       | 98.65         |
| Average |               |               | 98.74         |
| SD      |               |               | 0.09          |
| RSD(%)  |               |               | 0.09          |

Please feel free to contact us for any further information.

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