

## Application Memo

# Calcium Oxide in Lime Milk

|                    |                                   |
|--------------------|-----------------------------------|
| Industry           | Inorganic chemical industry       |
| Instrument         | Automatic potentiometric titrator |
| Measurement method | Neutralization titration          |

## 1. Overview

Calcium oxide concentration in the diluted sample is measured by titration with 1mol/L hydrochloric acid solution. The endpoint is the maximum inflexion on the titration curve. The calcium oxide concentration is calculated from the titration volume of the hydrochloric acid solution.

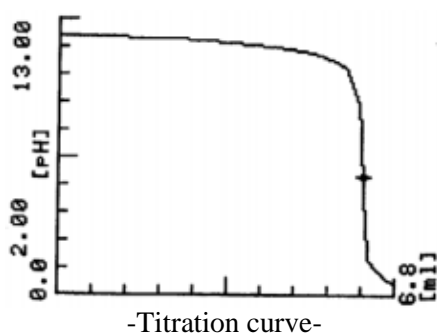
## 2. Apparatus

|           |   |
|-----------|---|
| Main unit | Automatic potentiometric titrator (preamplifier STD)                                    |
| Electrode | pH glass electrode<br>Ceramic reference electrode<br>Temperature compensation electrode |

## 3. Reagents

|         |                                   |
|---------|-----------------------------------|
| Titrant | 1mol/L hydrochloric acid solution |
|---------|-----------------------------------|

## 4. Example



| -Measurement results- |               |               |                 |
|-----------------------|---------------|---------------|-----------------|
|                       | Sample<br>(g) | Titer<br>(mL) | Conc.<br>(mg/g) |
| 1                     | 2.0234        | 6.2161        | 86.02           |
| 2                     | 2.0360        | 6.2650        | 86.16           |
| 3                     | 2.0280        | 6.2534        | 86.34           |
| Average               |               |               | 86.17           |
| SD                    |               |               | 0.16            |
| RSD(%)                |               |               | 0.19            |

Please feel free to contact us for any further information.  
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