

## Test Method

# Residue of Quicklime after Slaking

RC 131.00

## 1. Scope

This test is used to determine the percentage by mass of quicklime retained on the 425 µm sieve after slaking with water.

## 2. Apparatus

- Balance with a limit of performance not exceeding 0.5 g.
- Oven thermostatically controlled to operate at a temperature of 105-110°C preferably with mechanical ventilation.
- 425 µm AS Sieve.
- A beaker of about 1 litre capacity.
- Scoops, spatulas, metal dishes, gloves and safety goggles.

## 3. Procedure

- Clean and dry a container and determine its mass ( $M_1$ ) to the nearest 0.1 g.
- Weigh about 100 g of the quicklime into the container and determine the mass of the container plus quicklime ( $M_2$ ) to the nearest 0.1 g (see Note 1).
- Pour the quicklime onto the 425 µm sieve and wash it with water until the main wash water is practically clear. Discard the washings.
- Transfer the material retained on the sieve to the beaker, fill the beaker with water and allow to stand undisturbed for  $30 \pm 2$  minutes.

- Decant the water through the 425 µm sieve and wash the residue until the wash water is practically clear.
- Transfer the material retained on the sieve to the beaker and allow the materials to settle. Decant as much water from the beaker as possible.
- Dry the material to constant mass (see AS 1289.2.1.1) at 105-110 °C in the original container and determine the mass of the container plus residue ( $M_3$ ) to the nearest 0.1g.

## 4. Calculation

Calculate the residue of quicklime after slaking ( $R_s$ ) from:

$$R_s = \frac{(M_3 - M_1)}{(M_2 - M_1)} \times 100$$

where  $R_s$  = residue of quicklime after slaking (%)  
 $M_1$  = Mass of container (g)  
 $M_2$  = Mass of container plus sample (g)  
 $M_3$  = Mass of container plus dry residue (g)

## 5. Report

Report the percentage of residue after slaking to the nearest whole number.

### Note:

- When handling quicklime, care should be taken to avoid contact with the skin and eyes. Gloves and safety glasses should be worn.

### Test Method - Revision Summary

#### RC 131.00 Residue of Quicklime After Slaking

| Date      | Clause Number | Description of Revision  | Authorised by                       |
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