

## Product Data Sheet

### Hydrated Lime (Calcium Hydroxide)

#### Description

|                     |                                                                                                                                                                                                                                                                                                                                                              |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>  | Hydrated Lime (Calcium Hydroxide, $\text{Ca(OH)}_2$ ) is produced by controlled hydration (slaking) of quicklime with water, yielding a fine, reactive white powder. It is widely used across construction, water/wastewater treatment, flue gas treatment, and soil stabilisation applications where a stable, easy-to-handle alkaline reagent is required. |
| <b>Applications</b> | Construction – mortar, plaster and masonry lime production<br>Water and wastewater treatment – pH adjustment, softening and coagulation aid<br>Flue gas treatment – acid gas ( $\text{SO}_x/\text{HCl}$ ) scrubbing<br>Soil stabilisation and road construction (anti-stripping agent in asphalt)                                                            |
| <b>Grade</b>        | Standard Industrial Grade                                                                                                                                                                                                                                                                                                                                    |
| <b>CAS No.</b>      | 1305-62-0                                                                                                                                                                                                                                                                                                                                                    |

#### Key Benefits

1. High  $\text{Ca(OH)}_2$  content supporting strong, consistent alkaline reactivity
2. Stable, easy-to-handle powder form versus reactive quicklime – simplifies storage and dosing
3. Fine particle size supporting rapid reaction in water treatment and flue gas applications
4. Widely accepted standard grade across construction, water treatment and environmental applications

#### Chemical Analysis & Physical Data

#### Typical Specification

| Parameter                                                                                      | Test Method        | Unit | Specification |
|------------------------------------------------------------------------------------------------|--------------------|------|---------------|
| Calcium Hydroxide (Ca(OH) <sub>2</sub> )                                                       | Titration Method   | wt%  | Min. 90.0     |
| Available Lime (as CaO)                                                                        | Titration Method   | wt%  | Min. 70.0     |
| Magnesium Oxide (MgO)                                                                          | XRF Method         | wt%  | Max. 2.0      |
| Silicon Dioxide (SiO <sub>2</sub> )                                                            | XRF Method         | wt%  | Max. 2.0      |
| Iron Oxide + Aluminium Oxide (Fe <sub>2</sub> O <sub>3</sub> +Al <sub>2</sub> O <sub>3</sub> ) | XRF Method         | wt%  | Max. 1.0      |
| Moisture                                                                                       | Oven-Drying Method | wt%  | Max. 1.0      |
| Fineness (through 90 micron)                                                                   | Sieve Analysis     | wt%  | Min. 85       |
| Appearance                                                                                     | Visual             | –    | White powder  |

## Packaging

**Packaging**     25 kg / 50 kg Moisture-Proof Bags  
1,000 kg Jumbo Bags (FIBC, moisture-proof liner)  
Bulk (bulker truck) available on request for large orders

## Storage & Handling

1. Store in a dry, covered warehouse away from moisture and carbon dioxide exposure
2. Keep bags sealed until point of use – product will carbonate (revert to calcium carbonate) on prolonged air exposure
3. Handle per alkaline-material precautions – see accompanying MSDS before storage/handling decisions are finalised

## Quality Assurance

1. Every batch is tested against the specification above before dispatch
2. A batch-specific Certificate of Analysis (COA) accompanies each shipment, reporting Ca(OH)<sub>2</sub> content, available lime and fineness against this TDS
3. COA available on request prior to shipment for buyer pre-approval
4. Third-party inspection (SGS/Intertek) can be arranged on request for regulated-market shipments

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*Disclaimer: The information provided in this document is based on our current knowledge and is intended as a general guide. Ochnology Solution Pvt. Ltd. reserves the right to modify specifications without prior notice. Buyers are advised to conduct their own testing for specific applications. A batch-specific Certificate of Analysis (COA) is available on request for each shipment.*