



## CERTIFICATE OF ANALYSIS

**Product:** Quicklime (Calcium Oxide / CaO)

**Appearance:** White to Light Grey Lumps

**Batch No.:** QL-260602-04

**HS Code:** 2522.10

**CAS No.:** 1305-78-8

**Grade:** Industrial Grade

**Origin:** Thatta, Sindh, Pakistan

### Typical Result

| Chemical Parameter       | Chemical Formula               | Specification Limit    | Test Result (%)    |
|--------------------------|--------------------------------|------------------------|--------------------|
| Available Calcium Oxide  | CaO                            | $\geq 90.0\%$          | <b>91.85%</b>      |
| Total Calcium Oxide      | CaO                            | $\geq 88.0\%$          | <b>90.50%</b>      |
| Magnesium Oxide          | MgO                            | $\leq 3.0\%$           | <b>1.60%</b>       |
| Silicon Dioxide (Silica) | SiO <sub>2</sub>               | $\leq 2.5\%$           | <b>1.12%</b>       |
| Ferric Oxide             | Fe <sub>2</sub> O <sub>3</sub> | $\leq 0.5\%$           | <b>0.25%</b>       |
| Aluminum Oxide           | Al <sub>2</sub> O <sub>3</sub> | $\leq 1.0\%$           | <b>0.45%</b>       |
| Sulfur Content           | S                              | $\leq 0.1\%$           | <b>0.04%</b>       |
| Calcium Carbonate        | CaCO <sub>3</sub>              | $\leq 3.0\%$           | <b>1.80%</b>       |
| Insoluble Matter         | —                              | $\leq 2.0\%$           | <b>0.80%</b>       |
| Moisture                 | —                              | $\leq 1.0\%$           | <b>0.35%</b>       |
| Reactivity               | —                              | $\leq 3.0$ Minutes     | <b>2.1 Minutes</b> |
| Particle Size            | —                              | 50-150 mm (or as reqd) | <b>Conforms</b>    |

### Physical Analysis

| Parameter                 | Specification              | Typical Result        |
|---------------------------|----------------------------|-----------------------|
| Color                     | White                      | White                 |
| Form                      | Fine Powder                | Fine Powder           |
| Bulk Density              | 0.90–1.20 t/m <sup>3</sup> | 1.06 t/m <sup>3</sup> |
| Specific Gravity          | 3.30–3.37                  | 3.34                  |
| Reactivity (T60)*         | $\leq 3$ Minutes           | 2 min 15 sec          |
| Slaking Temperature       | $\geq 75^{\circ}\text{C}$  | 83°C                  |
| Available Lime Reactivity | High                       | High                  |

\*T60: Time required to reach 60°C during the standardized slaking test (EN 459).



# MEHRAN LIME INDUSTRIES

## Particle Size (Lump Grade)

| Size      | Specification | Result |
|-----------|---------------|--------|
| 20–50 mm  | ≥ 90%         | 93%    |
| Oversize  | ≤ 5%          | 3%     |
| Undersize | ≤ 5%          | 4%     |

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## Particle Size (Powder Grade)

| Parameter        | Specification |
|------------------|---------------|
| Passing 100 Mesh | ≥ 95%         |
| Passing 200 Mesh | ≥ 90%         |

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## Heavy Metals

| Parameter    | Specification | Result    |
|--------------|---------------|-----------|
| Lead (Pb)    | <5 ppm        | <2 ppm    |
| Arsenic (As) | <2 ppm        | <1 ppm    |
| Cadmium (Cd) | <1 ppm        | <0.2 ppm  |
| Mercury (Hg) | <0.1 ppm      | <0.05 ppm |

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## Packaging

- 25 Kgs PP Woven Bags with Inner PE Liner Ploy Bag
- 40 Kgs PP Woven Bags with Inner PE Liner Ploy Bag
- 50 Kgs PP Woven Bags with Inner PE Liner Ploy Bag
- 1000 kg Jumbo Bags
- Customized packaging available

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Plot # 19/B , SITE, Hyderabad, Pakistan. Landline # 022-3886198, Cell # 0333-2616656,

Email: [sales@mehranlime.com](mailto:sales@mehranlime.com), Website: [www.mehranlime.com](http://www.mehranlime.com)



# MEHRAN LIME INDUSTRIES

## **Storage**

Store in a cool, dry, and well-ventilated place. Protect from moisture, rain, and carbon dioxide. Keep containers tightly sealed to prevent hydration and carbonation.

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## **Shelf Life**

12 Months from the manufacturing date when stored under recommended conditions.

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## **Compliance**

Manufactured in accordance with Good Manufacturing Practices (GMP) and applicable industrial quality standards.

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## **Quality Assurance Declaration**

We hereby certify that the above product has been sampled and tested in accordance with our Quality Control procedures. The analytical results shown are representative of the batch identified above and comply with the stated specifications.

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Prepared By:



**QC Laboratory Analyst**

Approved By:



**Head of Quality Control**

Date: 02/06/2026

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