

## PRODUCT DATA SHEET

### HYDRATED LIME

Issued 27/08/2021

**Description:** Pale brown high quality lime in powder form.

**Other Names:** Slaked lime, Calcium hydroxide.

**Chemical Formula:**  $\text{Ca(OH)}_2$

### **Typical chemical analysis:**

Available lime as CaO 65% - 68% (Minimum 65%)

### **Loss Free Analysis:**

Ca (OH) <sub>2</sub> as CaO	70 %
MgO	2.8%
SiO <sub>2</sub>	2.0%
Fe <sub>2</sub> O <sub>3</sub>	0.3%
Al <sub>2</sub> O <sub>3</sub>	0.3%
Mn <sub>2</sub> O <sub>3</sub>	1.0%
SO <sub>3</sub>	900 ppm
P <sub>2</sub> O <sub>5</sub>	200 ppm
CO <sub>2</sub> (CaCO <sub>3</sub> )	1.7%
1000° C Ignition loss	23.0%
Acid insolubles	1.3%
Free moisture	0.7%
Non slakeables	approx. 8%.

**Physical characteristics:**

Particle size: percentage remaining on sieved (Max.)

850  $\mu\text{m}$  - 0 %  
600  $\mu\text{m}$  - < 0.5 %  
75  $\mu\text{m}$  - < 30 %

General Expansion Soundness factor: < 30

Bulk density (Aerated)	496 $\text{Kg/m}^3$	400 $\text{Kg/m}^3$ – 550 $\text{Kg/m}^3$
(Settled)	600 $\text{Kg/m}^3$	600 $\text{Kg/m}^3$ – 700 $\text{Kg/m}^3$

**Storage:**

Hydrated lime is a fine powder, and should be stored in bins or silos and kept dry. “Shelf-life” is moderate, but re-carbonation can occur in the presence of moisture, and the lime should not be kept in storage for long periods before use.

**Safety:**

Hydrated lime is a strong caustic alkali and should be handled with care. Avoid excessive contact with skin; the use of eye protection, respirators and gloves is required when handling this product (see Material safety data sheet).

**Applications:**

1. Neutralization of acids in aqueous processes.
2. Water purification and softening.
3. A causticizing agent in chemical processes.
4. A source of calcium for various chemical products.
5. Soil stabilization (conforms to SABS 824: 2006)
6. Liming and plumping of hides before leather tanning.