

PRODUCT DATA SHEET

HYDRATED LIME

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Description: Pale brown high quality lime in powder form.

Other Names: Slaked lime, Calcium hydroxide.

Chemical Formula: Ca(OH)_2

Typical Chemical Analysis:

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

Loss Free Analysis:

Ca(OH) ₂	70 %
MgO	2.8%
SiO ₂	2.0%
Fe ₂ O ₃	0.3%
Al ₂ O ₃	0.3%
Mn ₂ O ₃	1.0%
SO ₃	900 ppm
Ca SO ₄	500 ppm
P ₂ O ₅	200 ppm
CO ₂ (CaCO ₃)	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.)

4750 µm – 0 %
850 µm - < 1.5 %
600 µm - < 2.5 %
150 µm - <5 %
75 µm - < 35 %

General Expansion Soundness factor: < 30

Bulk density (Aerated)	496 Kg/m ³	400 Kg/m ³ – 550 Kg/m ³
(Settled)	600 Kg/m ³	600 Kg/m ³ – 700 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. Neutralisation of acids in aqueous processes.
2. Water purification and softening.
3. A causticising agent in chemical processes.
4. A source of calcium for various chemical products.
5. Soil stabilisation (conforms to SABS 824: 1999).
6. Building lime (conforms to SABS 532: 1999 Type A2).
7. Liming and plumping of hides before leather tanning.