

# HYDRATED LIME

## PRODUCT DESCRIPTION

Adelaide Brighton Cement produces Hydrated Lime at its Angaston Works in Angaston, South Australia. Hydrated Lime is manufactured by treating Quicklime with enough water to satisfy its chemical affinity for water, before being ground and air classified to produce a fine white powder.

### What is Lime?

Hydrated Lime (Calcium hydroxide) is an important material for use in the chemical processing industry, in the building industry, and in water treatment processes.

The manufacture of Hydrated Lime starts by calcining high quality limestone (Calcium Carbonate) at elevated temperatures to produce Quicklime (Calcium oxide) a volatile powder.

Hydrated Lime in turn is produced by reacting Quicklime with a controlled amount of water to form a dry white powder.

Reactions are as follows:

- Limestone + Heat (800°C) = Calcium Oxide + Carbon Dioxide  
 $CaCO_3 + Heat = CaO + CO_2$
- Quicklime + Water = Hydrated Lime + Heat  
 $CaO + H_2O = Ca(OH)_2$

## SUPPLY

Adelaide Brighton Hydrated Lime is available in the following forms:

- Bulk
- Nominal 1000 kg capacity bulk bags
- 20 kg multi-walled paper bags

## SPECIFICATION

Adelaide Brighton Hydrated Lime is a high Calcium Lime complying with the Australian Standard Specification AS 1672.1 (Limes for Building).

All products are manufactured under a third party certified manufacturing and supply quality assurance system to AS/NZS ISO 9001 (BSI Certification No FS 604665).

## HANDLING AND STORAGE

Transportation may be in bulk road or rail tankers, in bulk bags, or in paper bags. Hydrated Lime can be stored in fit-for-purpose silos, or in bulk or paper bags for up to one (1) year, provided suitable protection against moisture ingress.

## SAFETY INFORMATION

For safety information, refer to the Safety Data Sheet for Adelaide Brighton Hydrated Lime.

## TYPICAL PROPERTIES

Chemical Composition		
Oxide	AS 1672.1-1997 Requirement	Typical Analysis %
SiO <sub>2</sub>	No requirement	2.1
Al <sub>2</sub> O <sub>3</sub>	No requirement	0.6
Fe <sub>2</sub> O <sub>3</sub>	No requirement	0.4
CaO	No requirement	72.0
MgO	No requirement	0.8
Loss On Ignition	No requirement	24.0
CO <sub>2</sub>	<5%	2.5

### Physical Properties

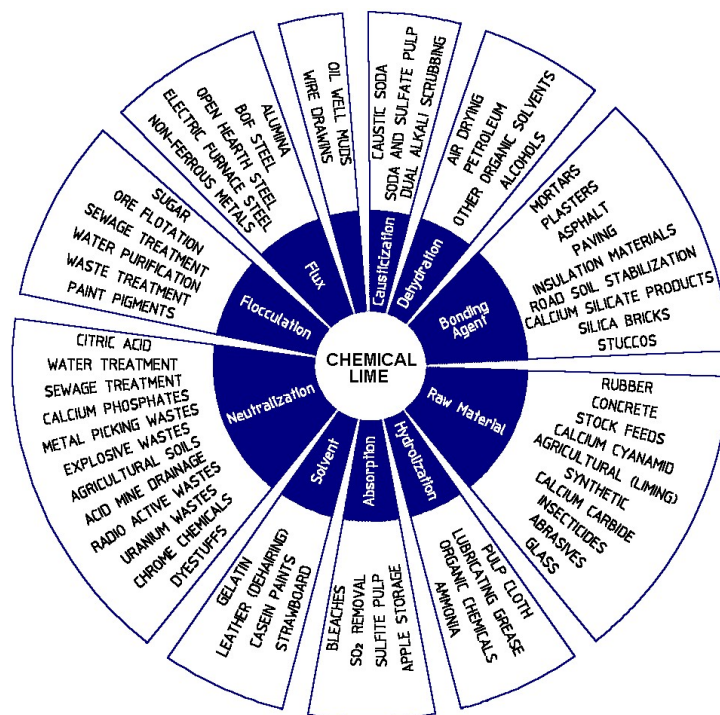
Fineness by wet sieving	Typical fineness is <3% retained on a 75 micron sieve and <1% retained on a 300 micron sieve
Specific Gravity	2.2-2.3
Bulk Density	400-600 kg/m <sup>3</sup>

## AVAILABLE LIME INDEX

In accordance with the standard specification AS1672.1 Adelaide Brighton Hydrated Lime has an available lime index, expressed in terms of calcium hydroxide [Ca(OH)<sub>2</sub>] of 90% typically.

## APPLICATIONS

Hydrated Lime is an extremely versatile material, which is suitable for a range of chemical applications, some of which are detailed below.





# HYDRATED LIME

## CONTACT POINTS

**For further information contact the Sales and Marketing Department at:**

Adelaide Brighton Cement Ltd  
ABN 96 007 870 199  
62 Elder Road  
BIRKENHEAD SA 5015

**Telephone: 08 8300 0300**

**Facsimile: 08 8341 1591**

**Web Site: [www.adelaidebrighton.com.au](http://www.adelaidebrighton.com.au)**

### DISCLAIMER

While the information in this Product Data Sheet has been prepared in good faith, Adelaide Brighton Cement Limited does not warrant that the information is accurate, complete or up to date.

Each user of any information, or any product referred to, in this Product Data Sheet must:

- determine whether the information or product is suitable for their purpose;
- assess and control any risks associated with the information or product; and
- obtain professional advice in relation to the use of the information or product.

Failure to do so may result in serious damage or injury.

To the extent permitted by law, Adelaide Brighton Cement Limited:

- excludes all representations, warranties and guarantees in relation to any information in this Product Data Sheet; and
- will not be liable for any direct, indirect, consequential, incidental, special or economic loss (including but not limited to any loss of actual or anticipated profits, revenue, savings, production, business, opportunity, access to markets, goodwill, reputation, publicity, or use) arising from any use of or reliance on any information in this Product Data Sheet.

The Adelaide Brighton logo and Adelaide Brighton Cement are registered trade marks of Adelaide Brighton Limited and its related entities.