



**MMS Quicklime** is a high quality Calcium Oxide product manufactured to a very fine grain size (typically less than 150 µm) maximising the availability of calcium oxide for chemical processes. Calcium Oxide (CaO), commonly called "Quicklime" or "Burnt Lime" is a highly reactive chemical with variety of uses in the mining, construction and industrial sectors. Quicklime is most commonly used for its ability to stabilise pH, soften water, stabilise bio-solids, and precipitate nutrients.

**Quicklime for Mining sector**

Quicklime is used by the mining industry to treat runoff and process waters from coal mining, metal mining and non-metal mines. Quicklime used with accurately designed slaking plants helps to neutralise acids from mining waters and precipitate metals and non-metals. MMS has supplied individual customers up to 20,000 tonnes per annum of Quicklime utilising in-house designed innovative handling & storage solutions.

**MMS Quicklime** services a variety of mining applications:

- Heavy Rare Earths Mineral Processing
- Acid Tailings & Water Treatment for Gold and Uranium mines
- Quicklime for domestic waste water treatment and industrial binder applications
- Quicklime to mine sites for use with in-house slaking plants.

**Quicklime for Civil/Industrial sector**

Quicklime has important applications in construction operations. It can be used for Road and Soil stabilisation; Dry-up wet soil at construction sites and improve soil-workability and short-term strength.

**Road/Soil Stabilisation** - When adequate quantities of Quicklime and water are added, the pH of the soil quickly increases to above 10.5 which enables the clay particles to breakdown. The chemical reaction forms cementitious products forming matrix that contributes to the strength of lime-stabilised soil layers. The matrix is permanent, durable and significantly impermeable, producing a structural layer that is both strong and flexible.

- Packaging options:** 1350 kgs Bulker Bags / Road Tankers / ISOs and purpose-built tipping containers

Physical Properties	Typical	Range
Grain Size (<100 µm)	93%	>90% passing
Bulk Density	950 kg/m <sup>3</sup>	950–1100 kg/m <sup>3</sup>

PROPERTIES	METHOD	TYPICAL	RANGE
CaO Available	AS4489-1997	90%	90-93%
SiO <sub>2</sub>	XRF	0.5%	1.0% Max
Al <sub>2</sub> O <sub>3</sub>	XRF	0.2%	0.5% Max
Fe <sub>2</sub> O <sub>3</sub>	XRF	0.1%	0.4% Max
MgO	XRF	0.7%	1.5% Max
SO <sub>3</sub>	XRF	<0.05%	0.2% Max
pH in slurry	AS4489-1997	12.4	12 Min.