

### **CONSISTENTLY DELIVERING**

# Cape Lime (Proprietary) Limited<br/>Registration no: 1999/002171/07<br/>Vat no: 4720186321<br/>Vredendal OfficeVredendal Office027Postal address:00 ETelephone:027Fax:027Email:salesRobertson Office023Postal address:PO ETelephone:023Fax:023Fax:023Fax:023Fax:023Fax:024Mathematication023Fax:023Fax:023Fax:024MathematicationsalesWebsite:WW

PO Box 400, Vredendal 8160 027 – 213 3090/ 027 – 201 1200 027 – 213 3095 sales.vredendal@afrimat.co.za

PO Box 134, Robertson 6705 023 – 626 3190 023 – 626 1260 sales.langvlei@afrimat.co.za www.capelime.co.za, www.afrimat.co.za

# SOIL STABILISATION LIME

**DESCRIPTION:** Soil Stabilisation Lime is a fine pressure hydrated dolomitic lime

**PACKAGING:** 25kg in multi-ply paper bags

APPLICATIONS: Soil stabilisation, modification of soil PI (Plasticity Index). Road construction selected layer works stabilisation

# **\*TYPICAL CHEMICAL ANALYSIS:**

Calcium Oxide (CaO)	35.0%
Magnesium Oxide (MgO)	24.2%
Silica (SiO <sub>2</sub> )	12.2%
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.4%
Alumina (Al <sub>2</sub> O <sub>3</sub> )	0.9%
Carbon Dioxide (CO <sub>2</sub> )	Max 5.0%
Available Lime (CaO)	Min 30%
Soundness Factor	Max 30
Free Moisture	<3.0%
рН	>12
*Tested when required	

#### **PARTICLE SIZE:**

Retained on 850 μm	Max 1.5%
Retained on 75 μm	Max 35%
Mean Particle Size	75 μ



# Action in Soil:

Soil Stabilisation Lime fixes clay minerals in the soil to reduce the Plasticity Index (PI), shrinkage and swell. Soil Stabilisation Lime reduces the water retention of the soil and improves its structure by cementation and modification of the clay minerals thereby improving both the workability and strength of the soil.

# **Application Recommendation:**

Determine the Initial Consumption of Lime (ICL) for the specific soil to be stabilised in a laboratory.

The design mix concentration of lime is 1,6 times the ICL with a minimum of 2% by mass dry soil. Apply the determined quantity of SSL to the soil being treated. This is typically 3-6% of SSL.

### **In-situ Application Method Steps**

- scarifying or partially pulverizing soil,
- spreading determined amount of SSL,
- adding water and mixing,
- compacting to maximum practical density, and
- curing prior to placing the next layer or wearing course.

### Alternative Method – Off-Site Mixing

Mix the design quantity of SSL with the aggregates prior to placing. Add water, mix and compact.

### Curing

The stabilised area should be allowed to cure for a minimum of 7 days until it can withstand the load of construction vehicles without damaging the surface. The surface must be kept moist during this time.

For detailed information on the stabilisation of surfaces for road building, please refer to Manual M5 Chemical Stabilization issued by the Department of Transport, Chief Directorate: National Roads 1987.

SAFETY DATA: Refer to the Soil Stabilisation Lime MSDS

