

**Safety data sheet**  
according to 1907/2006/EC, Article 31



**Protea  
Chemicals**

A member of the Omnia Group  
"more than just a chemical supplier"

Printing date 16.09.2015

Version number 2

Revision: 16.09.2015

## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** CALCIUM HYDROXIDE (LIME)
- **Article number:** PP0062
- **EC number:**  
215-137-3
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Neutralization, flocculation, stabilisation, absorption.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Protea Chemicals Wadeville  
1 Berrange Road  
Wadeville, Germiston  
Tel: 011-821 3300
  
- Protea Chemicals PE  
127 Grahamstown Road  
Deal Party, Port Elizabeth  
Tel: 041-403 1000
  
- Protea Chemicals CT  
54 Killarney Avenue  
Killarney Gardens, Milnerton, Cape Town  
Tel: 021-550 8100
  
- Protea Chemicals KZN  
150 Quality Street,  
Jacobs, Durban  
Tel: 031-468 5424
- **Further information obtainable from:** Protea Chemicals
- **Emergency telephone number:**  
08610 OMNIA or  
08610 66642

## 2 Hazards identification

- **Classification of the substance or mixture**



corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements**  
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS05

- **Signal word** Danger

(Contd. on page 2)

PRC

**Safety data sheet**  
according to 1907/2006/EC, Article 31



**Trade name: CALCIUM HYDROXIDE (LIME)**

(Contd. of page 1)

- **Hazard statements**  
Causes severe skin burns and eye damage.
- **Precautionary statements**  
Do not breathe dust/fume/gas/mist/vapours/spray.  
*IF ON SKIN (or hair):* Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
*IF IN EYES:* Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER/doctor.  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterisation: Substances**
- **CAS No. Description**  
CALCIUM HYDROXIDE (LIME)
- **Identification number(s)**
- **EC number:** 215-137-3

### 4 First aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Wash off with soap and plenty of water. Wash contaminated clothing before re-use.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Use breathing apparatus with independent air supply (Isolated)

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective gear. Do not inhale the material or its combustion products. Go against the wind and keep out of low areas. Evacuate personnel to safe area.
- **Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water. Should not be released into the environment.
- **Methods and material for containment and cleaning up:**  
Pick up mechanically. Sweep up and shovel. Keep in suitable, closed containers for disposal.

(Contd. on page 3)

**Safety data sheet**  
according to 1907/2006/EC, Article 31



**Trade name: CALCIUM HYDROXIDE (LIME)**

(Contd. of page 2)

- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Precautions for safe handling** Prevent formation of dust.
- **Information about fire - and explosion protection:**  
Put on appropriate personal protective equipment. Keep away from open flames, shut off the production of sources of ignition. Electricity: static electricity, electricity sparks, heat. Do not breathe vapor or mist. No smoking.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Observe the rules usually applicable when handling chemicals.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep containers tightly closed in a cool, well-ventilated place.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:**  
Ensure eyewash stations and safety showers are close to the workstation location.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**  
Due to missing tests no recommendation to the glove material can be given for the product/the preparation/the chemical mixture.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31



**Trade name: CALCIUM HYDROXIDE (LIME)**

(Contd. of page 3)

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Powder
· <b>Colour:</b>	White or brown
· <b>Odour:</b>	Odourless
· <b>Odour threshold:</b>	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

· <b>Melting point/Melting range:</b>	580 °C (-H <sub>2</sub> O)
· <b>Boiling point/Boiling range:</b>	Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Product is not flammable.

· **Ignition temperature:**

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· **Vapour pressure at 20 °C:** 0 hPa

· **Density at 20 °C:** 2,24 g/cm<sup>3</sup>

· <b>Bulk density at 20 °C:</b>	400 kg/m <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not applicable.
· <b>Evaporation rate</b>	Not applicable.

· **Solubility in / Miscibility with water at 20 °C:** 1,7 g/l

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

· <b>Dynamic:</b>	Not applicable.
· <b>Kinematic:</b>	Not applicable.

· **Other information** No further relevant information available.

PRC

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31



**Trade name: CALCIUM HYDROXIDE (LIME)**

(Contd. of page 4)

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Acids, Phosphorus, Nitroparrafins, Nitropropane and some metals.
- **Hazardous decomposition products:** Calcium oxide

### 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
- |  |      |                  |
|--|------|------------------|
| · <b>LD/LC50 values relevant for classification:</b> |      |                  |
| Oral   | LD50 | 7340 mg/kg (rat) |
- **Primary irritant effect:**
  - **on the skin:** No irritant effect.
  - **on the eye:** Strong irritant with the danger of severe eye injury.
  - **Sensitisation:** No sensitising effects known.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
- **ADR, IMDG, IATA** UN3262

(Contd. on page 6)

**Safety data sheet**  
according to 1907/2006/EC, Article 31



**Protea**  
**Chemicals**

A member of the Omnia Group  
"more than just a chemical supplier"

Printing date 16.09.2015

Version number 2

Revision: 16.09.2015

**Trade name: CALCIUM HYDROXIDE (LIME)**

(Contd. of page 5)

· <b>UN proper shipping name</b>	
· <b>ADR</b>	3262 CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (CALCIUM HYDROXIDE (LIME))
· <b>IMDG, IATA</b>	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (CALCIUM HYDROXIDE (LIME))

· <b>Transport hazard class(es)</b>	
· <b>ADR, IMDG, IATA</b>	



· <b>Class</b>	8 Corrosive substances.
· <b>Label</b>	8
· <b>Subsidiary risk</b>	-

· <b>Packing group</b>	
· <b>ADR, IMDG, IATA</b>	III

· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No

· <b>Special precautions for user</b>	Warning: Corrosive substances.
· <b>Danger code (Kemler):</b>	80
· <b>EMS Number:</b>	F-A,S-B
· <b>Segregation groups</b>	Alkalis
· <b>ERG No.</b>	154

· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
--	-----------------

· **Transport/Additional information:**

· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	E

· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5 kg
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

· <b>UN "Model Regulation":</b>	UN3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (CALCIUM HYDROXIDE (LIME)), 8, III
---------------------------------	--

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements**  
The substance is classified and labelled according to the Globally Harmonised System (GHS).

(Contd. on page 7)

PRC

**Safety data sheet**  
according to 1907/2006/EC, Article 31



**Protea**  
**Chemicals**

A member of the Omnia Group  
"more than just a chemical supplier"

Printing date 16.09.2015

Version number 2

Revision: 16.09.2015

**Trade name: CALCIUM HYDROXIDE (LIME)**

(Contd. of page 6)

· **Hazard pictograms**



GHS05

· **Signal word** *Danger*

· **Hazard statements**

*Causes severe skin burns and eye damage.*

· **Precautionary statements**

*Do not breathe dust/fume/gas/mist/vapours/spray.*

*IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*Immediately call a POISON CENTER/doctor.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ICAO: International Civil Aviation Organisation*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C*

*Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1*