

## SAFETY DATA SHEET

PRODUCT NAME: LIMESTONE

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Other Name(s):** Agricultural lime, Stock lime, Limestone Screenings, Crushed Rubble, Scalps

**Recommended use:** Soil pH adjuster, Road Base, Cottage Gravel, Aggregate

**Supplier:** Henschke Industries Pty Ltd

**Address:** 31 Blackwell Road

Naracoorte

South Australia 5271

**Telephone:** (08) 87622080 (Monday to Friday: 7.30am – 4.00pm)

**Emergency Contact:** S.A. Poisons Information Centre on 131126

**Email:** admin@henschkeindustries.com.au

**Website:** www.henschkeindustries.com.au

### 2. HAZARD IDENTIFICATION

**1. GHS Classification:** Hazardous according to Australian criteria of the Globally Harmonised System of classification and labelling of chemicals (GHS).

**2. Signal Word:**

**WARNING**

**3. Hazard Symbol:**



**4. Hazard Statement:** H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

**5. Precautionary Statements:**

Prevention: P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P265 Wash thoroughly after handling.

P271 Use only outdoors or in a well ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

Storage: P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal: P501 Dispose of contents/container in accordance with local, regional, national and international regulations

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Contents % w/w
Calcium carbonate CaCO <sub>3</sub>	471-34-1	> 80
Magnesium carbonate MgCO <sub>3</sub>	546-93-0	< 5
Silica (Crystalline) SiO <sub>2</sub>	14808-60-7	0

### 4. FIRST AID MEASURES

**Eye Contact:** Immediately lift eyelid and flush eyes with flowing water and completely remove materials by lifting the upper and lower lids. Transport to hospital or doctor. Remove of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Skin Contact:** Remove contaminated clothing and shoes immediately. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

**Inhalation:** Remove from exposure. Go to where fresh air is available. If necessary, provide first aid.

**Ingestion:** Rinse and wash mouth with water. Lay patient down in recovery position. Get medical attention immediately if large amounts are ingested.

**First Aid Treatment and note to physician:** Treatment may vary depending on incident specifics and victim's condition.

### 5. FIRE FIGHTING MEASURES

**Flammability:** Non-flammable.

**Extinguishing Media:** Dry powder, foam and carbon dioxide extinguisher. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

**Fire/Explosion Hazard:** May decompose, emitting toxic fumes in a fire. Remain upwind and notify those downwind of hazard.

**Hazchem Code:** Not applicable.

### 6. ACCIDENTAL RELEASE MEASURES

**Spills and Disposal:** Use absorbent material to absorb liquid spills then carefully sweep up and shovel into suitable containers for reuse/recycle or disposal at an approved waste disposal site. Avoid runoff of spill material into soils, waterways or drains.

### 7. HANDLING AND STORAGE

**Safe Handling:** Wear appropriate PPE (refer to section 8). Use in a well ventilated area. Do not consume food or drink, or smoke, while handling. Wash hands with soap and water after handling.

**Storage:** Store in original container in a cool, dry, well-ventilated area, away from acidic materials. Keep out of reach of children.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>National Exposure Standard:</b>	Time Weighted Average (TWA): 10 mg/m <sup>3</sup> . Short Term Exposure Limits (STEL): Not set.
<b>Biological Limit Values:</b>	No biological limit allocated.
<b>Engineering Controls:</b>	Use only in a well ventilated area and manage dust levels.
<b>Personal Protective Equipment:</b>	Wear gloves, safety boots, protective clothing and safety glasses with side shields. Use a class P1 respirator.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Off-white, cream, light yellow
<b>Bulk density:</b>	1.3 – 1.4g/cm <sup>3</sup> , 6mm-150mm
<b>Odour:</b>	Odourless.
<b>pH:</b>	8.6
<b>Boiling Point:</b>	Not available.
<b>Melting Point:</b>	Not available.
<b>Vapour pressure:</b>	Negligible at ambient temperatures.
<b>Flash point:</b>	Not flammable.
<b>Flammability limits:</b>	Not flammable.
<b>Other:</b>	None.

### 10. STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Material is stable under normal storage and handling conditions.
<b>Conditions to avoid:</b>	Extreme heat.
<b>Incompatible materials:</b>	Fluorine, magnesium, aluminium, silicon, mercury, ammonium salts, acids.
<b>Decomposition products:</b>	Decomposes at 870°C to form carbon dioxide gas and calcium oxide.
<b>Hazardous reactions:</b>	Hazardous polymerization reactions will not occur.

### 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this SDS and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

<b>Ingestion:</b>	Ingestion of this material may cause oral, esophageal, glottis redness, irritation, ulceration, edema, and stomach and intestinal irritation and burns. Ingestion of large quantities may cause ulceration, vomiting, shock and death.
<b>Eye contact:</b>	Exposure may cause severe irritation and redness to the eye lids, conjunctiva. Untreated, prolonged eye contact can cause permanent and severe eye damage.
<b>Skin contact:</b>	Exposure to skin may cause redness, irritation, burning sensation, and swelling.
<b>Inhalation:</b>	Inhalation of this material may cause upper airway irritation, cough, redness of mouth and upper airways.
<b>Sensitization hazard:</b>	Not classified as a skin sensitizer.
<b>Long Term Effects:</b>	No information available for the product.

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**Carcinogenicity:** Not classified as a carcinogen.  
**Specific target organ toxicity.** Category 3 – Respiratory Tract Irritation.  
**Mutagenic Data:** Not classified as a mutagen.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Not harmful to the environment. Will increase the pH of acidic soil.  
**Additional:** May increase pH of waterways and adversely affect aquatic life.

### 13. DISPOSAL CONSIDERATIONS

**Waste from material:** Reuse or reprocess if possible. May be subject to disposal regulations. Check solution pH to determine disposal restrictions. Dispose in accordance with all applicable regulations.  
**Container Management:** Dispose of container in accordance with applicable local, regional, national and/or international regulations.

### 14. TRANSPORT INFORMATION

<b>UN Number:</b>	N/A	<b>UN Proper Shipping Name:</b>	N/A	<b>Class and Subsidiary Risk(s):</b>	N/A
<b>Packing Group:</b>	N/A	<b>Special precautions for user:</b>	None	<b>Hazchem code:</b>	N/A

### 15. REGULATORY INFORMATION

**AICS** All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

### 16. OTHER INFORMATION

#### CHEMICAL ANALYSIS AND PARTICLE SIZE

		Level detected	Ideal %
Calcium	Ca %	37.60	36 to 39
As Calcium Oxide	CaO%	52.62	
Calcium Carbonate	CaCO <sub>3</sub> %	93.91	90 to 98
Magnesium	Mg%	0.25	
As Magnesium Oxide	MgO%	0.41	
As Magnesium Carbonate	MgCO <sub>3</sub> %	0.85	
As CaCO <sub>3</sub> equivalent	%	1.01	
Total Neutralizing value (CaCO <sub>3</sub> )	%	95	90 to 100
Effective neutralizing value	%	73	65 to 80

Limestone is a naturally occurring mineral which, when finely ground, is referred to as Agricultural Lime. The main constituents are Calcium Carbonate and small quantities of Magnesium Carbonate. The fineness and purity of the Limestone has a crucial bearing on its efficiency in correcting soil acidity.

Liming is the only cost effective way to manage low soil pH (acidity). Lime has an important role in reversing the effects of soil acidification. This neutralizing process encourages increased levels of beneficial soil micro-organisms. This contributes to improved pasture and increased crop production. It will result in increased Calcium levels in livestock. It also benefits egg production because of increased Calcium levels, important for egg shell production.

The material used in Henschke Industries Lime (known as "Mossville Agricultural Lime"), is Gambier Limestone. It is sourced and crushed on site at our family quarry at Naracoorte, South Australia. Henschke Industries has been producing Mossville Agricultural lime for over fifty years. Ag lime started out as a by-product of our mainstream quarrying operations and has gradually taken over as our main selling item. We still produce all types of quarry products ranging from Agricultural Lime to Gravels and Road Base. The Quarry operates all year round.

Henschke Industries Agricultural Lime has a Total Neutralizing Value of 95% and Effective Neutralizing Value of 73% as per Australian Perry Agricultural Laboratory test results (most recent analysis performed 13th March 2012). The lime is very soluble and is able to start the neutralizing effect on the first application. Application prior to sowing will produce the best results.

Best results are achieved by working the Ag Lime into the soil but surface application is suitable for grazing situations.