

SAFETY DATA SHEET

Slag Lime Blend

Section 1: Identification of the Material and Supplier

Company Details

Cement Australia Pty Limited

ABN 75 104 053 474

18 Station Avenue
Darra, Queensland 4076

Tel: 1300 CEMENT (1300 236 368)

Fax: 1800 CEMENT (1800 236 368)

Website: www.cementaustralia.com.au

Emergency Contact Number: **Contact Person:** Technical Manager
Telephone: 1300 CEMENT (1300 236 368 - Business Hours) or
Poisons Information Centre 13 11 26

Manufacturing Plants

Gladstone: Landing Rd, Fisherman's Landing, Gladstone QLD 4680

Product

Name: **Slag Lime Blend**

Other Names: Mine Tailings Binder
Premium Ground Granulated Blast Furnace Slag Product for Mining Applications

Use: Supplementary cementitious material for concrete. Also, used in soil stabilisation and as a fine filler in asphalt and other products.

Section 2: Hazards Identification

2.1 Classification



DANGER

GHS CLASSIFICATION

Classified as Hazardous according to the Safe Work Australia guidelines for Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

For more information call **1300 CEMENT** (1300 236 368)
or visit www.cementaustralia.com.au

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Hazard Class and Category

Skin Corrosion/ Irritation: **Category 1C**

Sensitisation – Respiratory **Category 1**

2.2 GHS Label elements

Pictograms and Signal Words



DANGER

Hazard Statement(s)

- H314** Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Prevention Statement(s)

- P101** If medical advice is needed, have product container or label at hand.
P103 Read label before use.
P103 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash any skin exposed thoroughly to the product thoroughly after handling. Do not touch eyes until hands are thoroughly washed clean of material.
P280 Wear protective gloves in accordance with AS2161. Wear dust proof eye protection in accordance with (AS/NZS1337.1).
P271 Use only outdoors or in a well-ventilated area.

Response Statement(s)

- P305+P351+P338** IF IN EYES: Immediately call POISON CENTRE 131126 or Doctor. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P362 Take off contaminated clothing and wash before re-use.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P304 + P340 + P305 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage Statement(s)

- P403+P233** Store in a well-ventilated place. Keep container tightly closed.
P405 Keep container tightly closed. Store locked up.

Disposal Statement(s)

- P501** Dispose of unused contents or container in accordance with local authority guidelines. Please dispose of packaging in appropriate general waste collection (not suitable for recycling).

Section 3: Composition/Information on Ingredients

| Chemical Entity | Proportion | CAS No. |
|---------------------------|------------------------|------------|
| Fly ash containing | <1-10% | 68131-74-8 |
| Total respirable silica | Below reporting limits | 14808-60-7 |
| Ground Blast Furnace Slag | 75-90% | 65996-69-2 |
| Lime | 10-20% | 1305-78-8 |
| Gypsum | <5% | 13397-24-5 |

Section 4: First Aid Measures

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| Swallowed: | Wash mouth and lips with copious amounts of water, and give limited amounts of milk or water to |
| Eyes: | Drink (150ml). Do not induce vomiting. Seek medical attention. Hold eyes open and flush with copious amounts of water for at least 10 minutes. Seek medical attention. |
| Skin: | Immediately remove all contaminated clothing, including footwear. Wash material off skin, using plenty of water preferably under shower. If effects persist, seek medical attention. |
| Inhalation: | Remove to fresh air away from the dusty area. Seek medical attention. |
| First Aid Facilities: | Eye wash station. |
| Advice to Doctor: | Treat symptomatically as for poisoning with strong alkali. Contact Poisons Information Centre: Tel 13 11 26 (Australia wide) |

Section 5: Fire Fighting Measures

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| Fire/Explosion Hazard: | Hydrated Lime is non-combustible |
| Hazchem Code: | None allocated |
| Flammability: | Not flammable |
| Extinguishing Media: | Water |
| Hazards from Combustion Products: | None |
| Danger of violent reaction or explosion: | Violent reactions with maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane and phosphorus. |
| Evacuate | No |

Section 6: Accidental Release Measures

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| Spills: | PPE must be worn to clean up spillages with broom, shovel, or vacuum equipment. Keep out of sewer, storm water drains, and natural waterways. |
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Section 7: Handling and Storage

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| Handling: | When supplied in bags these need to be handled in accordance with manual handling Code of Practice. |
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Storage: Hydrated Lime should be stored in a cool protected place away from moisture, strong oxidants or acids and to minimize dust emissions. Storage in steel or concrete bins and silos, or plastic lined bags, is appropriate.

Section 8: Exposure Controls/Personal Protection

Occupational exposure limit values

No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Calcium hydroxide TWA: 5 mg/m³

Crystalline Silica (Quartz)TWA: 0.05 mg/m³ (i.e. the average airborne concentration of a substance when calculated over a normal eight hour working day, for a five-day week.)

Biological Limit Values

No biological limits allocated.

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing solid/dust away from workers' breathing zone. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure, then an approved respirator with a replaceable dust/ particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Eye Protection

Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations.

Hand Protection

Wear gloves of impervious material such as PVC and conforms to relevant regulations.

Body Protection

Suitable protective work wear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Section 9: Physical and Chemical Properties

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| Appearance: | White to off-white powder |
| Odour: | No odour |
| Boiling/Melting Point: | Decomposes to water and calcium oxide at 580°C |
| Vapour Pressure: | Not applicable |
| Specific Gravity: | 2.4 – 2.8 |
| Bulk Density: | 450-800kg/m ³ |
| Flash Point: | Not applicable |
| Flammability Limits: | Non-combustible |
| Solubility in Water: | Approx. 1.6g/L @20°C |
| pH: | Approximately 12 |
| Particle Size: | 9% < 100µm |

Section 10: Stability and Reactivity

An alkaline material that reacts vigorously with acids, generating some heat. May absorb carbon dioxide from the atmosphere, forming calcium carbonate. Soluble in glycerol, aqueous solution of sucrose, and ammonium chloride. Incompatible with maleic anhydride, nitroparaffins, and phosphorus.

Section 11: Toxicological Information

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| Acute Toxicity – Oral Ingestion | For calcium hydroxide: LD50 (rat): 7,340 mg/kg Ingestion of this product may irritate the gastric tract causing nausea and vomiting. |
| Inhalation | May cause respiratory irritation. Inhalation of product dust can cause irritation of the nose, throat and respiratory system. Repeated exposure to respirable crystalline silica dust may lead to silicosis, or other serious delayed lung injury. The onset of silicosis is usually slow and lung damage may occur even when no symptoms or signs of ill-health have occurred. Silicosis can develop to a more serious degree even after exposure has ceased and may also lead to other diseases including heart disease and scleroderma. Exposure by inhalation may aggravate pre-existing upper respiratory and lung disorders such as bronchitis, emphysema, and asthma. Chronic exposure to this material may aggravate existing respiratory disorders and lung disorders such as bronchitis, emphysema, and asthma. Onset and progression are related to dust concentrations and duration of exposure. |
| Skin | Causes skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis. |
| Eye | Causes serious eye damage. On eye contact this product will cause tearing, stinging, blurred vision, and redness. For calcium hydroxide - Eye Irritation (rabbit): Severe (Standard Draize Test, 10 mg) |
| Germ cell mutagenicity | Not considered to be a mutagenic hazard. |
| Carcinogenicity | May cause cancer. Classified as a Known or presumed human carcinogen. May cause cancer by inhalation. Respirable crystalline silica is classified by International Agency for Research on Cancer (IARC) as carcinogenic to humans by inhalation (Group 1) |
| Reproductive Toxicity | Not considered to be toxic to reproduction. |
| STOT-single exposure | Not expected to cause toxicity to a specific target organ. |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure by inhalation. |
| Aspiration Hazard | Not expected to be an aspiration hazard. |

Section 12: Ecological Information

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| Ecotoxicity: | Because of the high pH of this product, it would be expected to produce significant acute ecotoxicity upon exposure to aquatic organisms and aquatic systems. |
| Persistence and Degradability: | Product has no bioaccumulation or food chain toxicity potential. |
| Mobility: | Soluble in water (as hydroxide) to form alkaline solution. Low mobility in most ground conditions. |

Section 13: Disposal Considerations

Material should be recycled or neutralised with dilute hydrochloric acid to a pH of 6-9, before disposal in accordance with local authority guidelines. Keep out of sewer, storm water drains, and natural waterways.

Section 14: Transport Information

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| UN Number: | None allocated |
| Proper Shipping Name: | None allocated |
| Class and Subsidiary Risk: | None allocated |
| Packing Group: | None allocated |
| Special precautions for user: | Avoid generating and breathing dust |
| Hazchem Code: | None allocated |

Section 15: Regulatory Information

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

Section 16: Other Information

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| For further information on this product contact: | Telephone: 1300 CEMENT (1300 236 368) (Business Hours) |
| | Facsimile: 1800 CEMENT (1800 236 368) |

Previous Edition: 2014 – GHS Compliance edits made, and supplementary compliance edits added.

2020 – Format updates

2022/2023 – Format updates

Next Review Date for this SDS: 31 December 2026.

Australian and New Zealand Standards:

AS 2161: Industrial Safety Gloves and Mittens (excluding electrical and medical gloves).

AS/NZ 1336: Recommended Practices for Occupational Eye Protection.

AS/NZS 1715: Selection, use and maintenance of respiratory protective devices.

AS/NZS 1716: Respiratory protective devices.

AS/NZS 4501: Occupational protective clothing

Advice Note:

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The provision of this information should not be construed by anyone as a recommendation to use this product. No one should use any product in violation of any patent or other intellectual proprietary rights or in breach of any statute or regulation.

Users should rely on their own knowledge and inquiries and make their own determination as to the applicability of this information in relation to their particular purposes and specific circumstances. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products.

[SDS Ends]