SAFETY DATA SHEET

# GREENCEM3®

## 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

**Location (e.g. Gladstone):**

Landing Rd, Gladstone QLD 4680,
PO Box 802, Mt Ommaney Qld 4074
Australia

### Product

**Name:** **Greencem 3**

**Other Names:** Greencem

**Use:** GreenCem 3 is concrete admixture compliant to *AS 1478.2—2005, Chemical admixtures for concrete, mortar and grout*.

## 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)

### Hazard Class and Category

**Serious Eye Damage/Eye Irritation: Category 1**

## 2.2 GHS Label elements

### Pictograms and Signal Words

**DANGER**

### Hazard Statement(s)

| | |
|---|---|
| **H318** | Causes serious eye damage. |

### Prevention Statement(s)

| | |
|---|---|
| **P101** | If medical advice is needed, have product container or label at hand. |
| **P102** | Keep out of reach of children. |
| **P103** | Read label before use. |
| **P261** | Avoid breathing dust/ Dry cement can become easily airborne. Wet surface before cutting to reduce dust emissions/ |
| **P264** | Wash any skin exposed to the product thoroughly after handling. Do not touch eyes until hands are thoroughly washed clean of material. |
| **P271** | Use only outdoors or in a well-ventilated area. |
| **P280** | Wear protective gloves in accordance with AS2161. Nitrile gloves of 8mil thickness. Wear dust proof eye protection in accordance with (AS/NZS1337.1). |

### Response Statement(s)

| | |
|---|---|
| **P310** | Immediately call POISON CENTRE 131126 or Doctor if you feel unwell. |
| **P321** | Specific treatment is advised - see first aid instructions. |
| **P302 + P352** | IF ON SKIN: Wash with plenty of soap and water. |
| **P304 + P340 + P305** | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. |
| **P30P330+P331** | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately seek medical attention showing the SDS and label. |
| **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. |
| **P280** | Wear protective gloves in accordance with AS2161. Nitrile gloves of 8mil thickness. Wear dust proof eye protection in accordance with (AS/NZS1337.1). |

### 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 as normal general waste or in accordance with jurisdictional regulations.

### 2.3 Other hazards

No other physicochemical, human health or environmental hazards.

## Section 3: Composition/Information on Ingredients

Greencem consists of a crystalline mass manufactured from substances mined from the earth's crust.

The product contains: Greencem Powdered Admixture.

The following substances shall be indicated according to legislation:

| Chemical Entity | Proportion | CAS Number | EC Number |
|---|---|---|---|
| Limestone (Calcium Carbonate) | 30 - 60 % | 471-34-1 | 207-439-9 |
| Formic Acid Salts | 3 - 35% | 544-17-2 | 208-863-7 |
| Other Non-Hazardous Materials | 30 – 60% | - | - |

## Section 4: First Aid Measures

### 4.1 Description of necessary first aid measures

**First Aid**

**Ingestion/Swallowed:** Rinse mouth and lips with water. Do not induce vomiting, get medical attention showing the SDS and the hazard label. If feeling unwell, seek medical attention. For advice, contact a Poisons Information Centre on 13 11 26 or a doctor.

**Eyes:** After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye.

**Skin:** Immediately take off all contaminated clothing. Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap. Wash thoroughly the body (shower or bath). Remove contaminated clothing immediately and dispose of safely.

**Inhalation:** Remove to fresh air, away from dusty area. If symptoms persist, seek medical attention.

**Skin:** Remove heavily contaminated clothing immediately. Wash material off the skin thoroughly with water. Use a mild soap if available. Shower if necessary. Seek medical attention for persistent irritation or burning of the skin.

**Advice to Doctor:** Eye wash station. Washing facilities with running water/shower.

**First Aid Facilities:** Treat symptomatically. Treat symptomatically. Ensure eyes are flushed clear of powder, and avoid touching patient's or own eyes after contact with contaminated clothing or skin

## 4.2 Symptoms caused by exposure

Eye Damage
Eye Irritation

## 4.3 Medical attention and special treatment

In case of accident (such as eye exposure) or feeling unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:
(see paragraph 4.1)

# Section 5: Fire Fighting Measures

| | |
|---|---|
| **Fire/Explosion Hazard:** | None |
| **Hazchem Code:** | None allocated |
| **Flammability:** | Not flammable |
| **Extinguishing Media:** | None in particular, Water, Carbon Dioxide ($CO_2$) |
| **Hazards from Combustion Products:** | Do not inhale explosion and combustion gases. Burning produces heavy smoke. |
| **Special Protective Precautions and equipment for fire fighters:** | Use suitable breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely. |

# Section 6: Accidental Release Measures

## 6.1 Personal precautions, protective equipment and emergency procedure

Recommended protective clothing when handling product includes gloves (AS2161), boots, long sleeves/pants, eye protection i.e., goggles (AS/NZS1337.1), suitable respirator (AS/NZS1715, 1716).

Remove persons to safety.

## 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Limit leakages with earth or sand.

## 6.3 Methods and materials for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations
Suitable material for taking up: absorbing material, organic, sand
Retain contaminated washing water and material, and dispose it.

# Section 7: Handling and Storage

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas. Do not eat or drink while working.
See also section 8 for recommended protective equipment.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.
Incompatible materials: None in particular.
Instructions as regards storage premises: Adequately ventilated premises.

# Section 8: Exposure Controls/Personal Protection

## 8.1 Exposure control measures

### Exposure standards

Note: exposure of formate salt would occur as a formic acid, as it would become aqueous

| Ingredient | Reference | HCIS | | STEL | |
|---|---|---|---|---|---|
| | | ppm | mg/m³ | ppm | mg/m³ |
| Calcium Carbonate | SWA-HCIS (AUS) | -- | 10 | -- | -- |
| Formic Acid | SWA-HCIS (AUS) | 5 | 9.4 | 10 | 19 |

### Biological limits

Derived No Effect Level. (DNEL)

| Component | CAS-No. | Worker Industry | Consumer | Exposure Route | Exposure Frequency Remark |
|---|---|---|---|---|---|
| Calcium Carbonate | 471-34-1 | 6.36 mg/m3 | 1.06 mg/m3 | Human Inhalation | Long Term, local effects |
| | | | 6.1 mg/m3 | Human Oral | Long Term, systemic effects |
| | | | 6.1 mg/m3 | Human Oral | Short Term, systemic effects |
| Formic Acid Salt | 544-17-2 | | 23.9 mg/m3 | Human Oral | Long Term, systemic effects |
| | | 337 mg/m3 | 83.2 mg/m3 | Human Inhalation | Long Term, systemic effects |
| | | 337 mg/m3 | 83.2 mg/m3 | Human Inhalation | Short Term, systemic effects |
| | | 4780 mg/kg | 2390 mg/kg | Human Dermal | Short Term, systemic effects |
| | | 4780mg/kg | 2390 mg/kg | Human Dermal | Long Term, systemic effects |
| | | 16.7 mg/cm2 | 8.3 mg/kg | Human Dermal | Short Term, local effects |
| | | 16.7 mg/cm2 | 8.3 mg/kg | Human Dermal | Long Term, local effects |

## 8.2 Engineering controls

Avoid inhalation. Use in well-ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

## 8.3 Individual protection measures

| | |
|---|---|
| Eyes / Face: | Use close fitting dust-proof safety goggles only; do not substitute for safety glasses/lenses or face shields. |
| Body/Skin: | Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. |
| Hands: | Suitable materials for safety gloves; AS/NZS 2161.10: |
| | Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min. |
| | Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min. |
| | Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min. |
| | Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min. |
| Respiratory: | Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to AS/NZS 1715-1716 for information on selection and use of appropriate respiratory protection equipment. |

# Section 9: Physical and Chemical Properties

| | |
|---|---|
| **Appearance:** | A red, powdered solid |
| **Odour:** | No distinctive odour |
| **Boiling/Melting Point:** | Melting point >825ºC |
| **Vapour Pressure:** | Not applicable |
| **Specific Gravity:** | 2.5 |
| **Flash Point:** | Not applicable |
| **Flammability Limits:** | Not applicable |
| **Solubility in Water:** | Not applicable |
| **Particle Size:** | Up to 50% of the fresh dry material may be respirable (below 10 microns) |

# Section 10: Stability and Reactivity

| | |
|---|---|
| **Chemical Stability:** | Chemically stable |
| **Conditions to Avoid:** | Chemically Stable |
| **Incompatible Materials:** | None |
| **Hazardous Decomposition Products:** | None |
| **Hazardous Reactions:** | None |

# Section 11: Toxicological Information

Greencem 3 is a stable substance, compatible with most other building materials, and will not decompose into hazardous by-products.

| | |
|---|---|
| **Acute toxicity** | Data does not suggest the classification for Acute toxicity |
| **Skin** | Not thought to cause direct irritation or corrosion, but may cause inflammation or accentuate pre-existing skin conditions for some persons. Contact with open cuts |

| | |
|---|---|
| | or irritated skin may result in systemic injury or harmful effects. |
| **Eye** | Causes serious eye damage, with a risk of blindness |
| **Sensitisation** | Data does not suggest classification as a respiratory or skin sensitiser. May cause irritation for those with pre-exisiting dermatitis or irritated skin. |
| **Mutagenicity** | Not classified as a Mutagen |
| **Carcinogenicity** | Not classified as a Carcinogen |
| **Reproductive** | Not classified as a reproductive toxicant |
| **STOT – single exposure** | Not classified for specific target organ toxicity (single exposure) |
| **STOT – repeated exposure** | Not classified for specific target organ toxicity (repeated exposure) |
| **Aspiration** | This product is a stable solid and aspiration hazards are not expected to occur |

## 11.1 Early onset symptoms related to exposure

**None – no data available suggesting the case**

## 11.2 Delayed health effects from exposure

**None- no data available suggesting the case**

**Toxicological Information on main components of the mixture:**

| Components | Toxicity |
|---|---|
| **Calcium Carbonate** | Acute toxicity:<br>LD50 Oral Rat > 2000 mg/kg<br>LC50 Inhalation Rat > 3 mg/l<br>LD50 Skin Rat > 2000 mg/kg (4h)<br>LD50 Oral Rat = 6450 mg/kg<br><br>Reproductive Toxicity:<br>NOAEL Rat = 1000 mg/kg |
| **Formic Acid Salts** | Acute Toxicity:<br>LD50 Oral Rat = 2650 mg/kg<br>LD50 Skin > 2000 mg/kg<br>LC50 Inhalation Rat = 0.64 mg/l (4h)<br>LD50 Oral Rat = 2650 mg/kg<br><br>Reproductive Toxicity:<br>NOAEL Oral Rat = 956 mg/kg |

# Section 12: Ecological Information

## 12.1 Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

**List of components with eco-toxicological properties**

| Component | CAS | Eco-Toxicological Information |
|---|---|---|
| **Calcium Carbonate** | 471-34-1 | c) Bacteria toxicity : NOEC Bacteria = 1000 mg/L 3h<br>d) Terrestrial toxicity : LC50 > 1000 mg/kg<br>d) Terrestrial toxicity : NOEC = 1000 mg/kg - 28d<br>e) Plant toxicity : NOEC = 1000 mg/kg - 21d |
| **Formic Acid Salts** | 544-17-2 | a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96h<br>a) Aquatic acute toxicity : EC50 Bacteria > 1000 mg/L 3h<br>a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 48h<br>c) Bacteria toxicity : EC50 Bacteria > 22.1 mg/L<br>b) Aquatic chronic toxicity : NOEC Daphnia > 100 mg/L - 21d<br>b) Aquatic chronic toxicity : NOEC Algae > 500 mg/L<br>a) Aquatic acute toxicity : EC50 Algae > 500 mg/L 72h<br>a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio >= 1000 mg/L 96h IUCLID |

### 12.2 Bio-accumulative potential

This product is not expected to bio-accumulate.

### 12.3 Persistence and Degradability

Product is persistent and would have a low degradability.

### 12.4 Mobility

A low mobility would be expected in a landfill situation.

## Section 13: Disposal Considerations

Reclaim excess material where possible, with extreme care taken to avoid dust generation. Use a vacuum to collect where possible, and wear PPE as indicated in section 8.3.

Greencem can be treated as a common waste for disposal to an approved landfill site, in accordance with local authority guidelines. Alternatively, ensure product is covered with moist soil to prevent dust generation.

Keep material out of storm water and sewer drains.

Measures should be taken to prevent dust generation during disposal, and exposure and personal precautions should be observed (see above).

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Do not re-use empty containers unless thoroughly cleaned.

## Section 14: Transport Information

Not classified as dangerous in the meaning of transport regulations. May be transported by Ship, Rail, Air and Road.

**UN Number:** None allocated

| | |
|---|---|
| **Proper Shipping Name:** | None allocated |
| **Class and Subsidiary Risk:** | None allocated |
| **Packing Group:** | None allocated |
| **Special precautions for user:** | None allocated |
| **Hazchem Code:** | None allocated |

## Section 15: Regulatory Information

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

This Safety Data Sheet has been prepared according to the Australian Work Health and Safety (WHS) act and the Code of Practice on preparation of safety data sheets for Hazardous Chemicals.

All components are listed on the Australian Inventory of Chemical Substances (AICS).

## Section 16: Other Information

**For further information on this product contact:**

**Telephone:** 1300 CEMENT (1300 236 368 - Business Hours)
**Facsimile:** 1800 CEMENT (1800 236 368)

**Previous Edition and edits made:**

**2022** – SDS generated according to GHS

**Next Review Date for this SDS: 31 December 2026.**

IARC International Agency for Research on Cancer

NOHSC National Occupational Health and Safety Commission

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

## 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:

Cement Australia believes the information in this document to be accurate as at the date of preparation, but, to the maximum extent permitted by law, Cement Australia accepts no responsibility for any loss or damage caused by any person acting or refraining from action because of this information.

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]**