

SAFETY DATA SHEET

EcoSYN™

Section 1: Identification of the Material and Supplier

Company Details

Cement Australia Pty Limited

ABN 75 104 053 474

18 Station Avenue
Darra, Queensland 4076Tel: 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

Manufactured By:

Ausmix Concrete Products Pty Ltd

Supplied By:

Alton Street, Coopers Plains, 4108 QLD

Product

Name: EcoSYN Synthetic Builders Lime

Other Names: Synthetic Builders Lime

Use: 100% Hydrated Lime & Additive replacement

Section 2: Hazards Identification

Non-Hazardous Substance. Non-dangerous Goods



Warning: Causes skin irritation

Danger: May cause allergy or asthma symptoms or breathing difficulties if inhaled

Risk Phrases

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R36/37/38: Irritating to eyes, respiratory system and skin.

R43: May cause sensitisation by skin contact.

R66: Repeated exposure may cause skin dryness or cracking.

Safety Phrases

S22: Do not breathe dust.

S24/25: Avoid contact with skin and eyes.

S29: Do not empty into drains.

S36/37/39: Wear suitable protective clothing,
gloves and eye/face protection.For more information call 1300 CEMENT (1300 236 368)
or visit www.cementaustralia.com.au*Mix it with the best.*

Section 3: Composition/Information on Ingredients

Chemical Entity	Proportion	CAS Number
Calcium formate	Not Specified	544-17-2
Sodium gluconate	Not Specified	527-07-1
Polyethylene glycol	Not Specified	25322-68-3
Ingredients, proprietary	Not Specified	

Section 4: First Aid Measures

Swallowed:	Do not induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position) to maintain open airway and prevent aspiration. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious
Eyes:	Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin:	Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhaled:	If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
First Aid Facilities:	Eye wash station. Washing facilities with running water.
Advice to Doctor:	Treat symptomatically.

Section 5: Fire Fighting Measures

Fire/Explosion Hazard:	Non-combustible. Not considered a significant fire risk, however containers may burn. May emit corrosive fumes
Hazchem Code:	None
Flammability:	None known
Extinguishing Media:	There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.
Fire Fighting:	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area.

Section 6: Accidental Release Measures

Spills:	Minor: Clean up all spills immediately. Avoid breathing dust and contact with skin and eyes. Wear protective clothing, gloves, safety glasses and dust respirator. Use dry clean up procedures and avoid generating dust. Slippery on wet and hard surfaces. Major: Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses. Slippery on wet and hard surfaces.
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Section 7: Handling and Storage

- Handling:** Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. When supplied in bags/cartons these need to be handled in accordance with manual handling Code of Practice.
- Storage:** Material is hygroscopic, i.e. absorbs moisture from the air. Keep containers well sealed in storage. Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers.
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Section 8: Exposure Controls/Personal Protection

- Exposure Controls:** The following materials had no OELs on our records
calcium formate: CAS:544- 17- 2
sodium gluconate: CAS:527- 07- 1
polyethylene CAS:25322- 68- 3 CAS:8038- 37- 7 CAS:9081- 95- 2 CAS:9085- 02- 3 CAS:9085 glycol: 03- 4 CAS:12676-74- 3 CAS:12770- 93- 3 CAS:25104- 58- 9 CAS: 25609- 81- 8 CAS:34802- 42- 1 CAS:37361- 15- 2 CAS:50809- 04- 6 CAS:50809- 59- 1 CAS:54510- 95- 1 CAS:54847- 64- 2 CAS:59763- 40- 5 CAS:60894- 12- 4 CAS:61840- 14- 0 CAS:64441- 68- 5 CAS:64640- 28- 4 CAS:67411- 64- 7 CAS:70926- 57- 7 CAS:75285- 02- 8 CAS:75285- 03- 9 CAS:77986- 38- 0 CAS: 79964- 26- 4 CAS:80341- 53- 3 CAS:85399- 22- 0 CAS:85945- 29- 5 CAS:88077- 80- 9 CAS:88747- 22- 2 CAS:90597- 70- 9 CAS:99264- 61- 6 CAS:99333- 89- 8 CAS:101677- 86- 5 CAS:106186- 24- 7 CAS:107502- 63- 6 CAS:107529- 96- 4 CAS:109550- 27- 8 CAS:112384- 37- 9 CAS:112895- 21- 3 CAS:114323- 93- 2 CAS:116549- 90- 7 CAS:119219- 06- 6 CAS:125223- 68- 9 CAS:133573- 31- 6 CAS:134919- 43- 0 CAS:150872- 82- 5 CAS:154394- 38- 4 CAS:156948- 19- 5 CAS:169046- 53- 1 CAS:174460- 08- 3 CAS:174460- 09- 4 CAS:188364- 77- 4 CAS:188924- 03- 0 CAS:189154- 62- 9 CAS:191743- 71- 2 CAS:196696- 84- 1 CAS:201163- 43- 1 CAS:206357- 86- 0
- Engineering Controls:** Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
- The basic types of engineering controls are:
Process controls which involve changing the way a job activity or process is done to reduce the risk.
Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
- Material Data:** ECOSYN™ SYNTHETIC BUILDERS LIME:
CALCIUM FORMATE:
• Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations.
ECOSYN™ SYNTHETIC BUILDERS LIME:
POLYETHYLENE GLYCOL:
• for polyethylene glycols:
For powdered forms:
The polyethylene glycols are extremely low in oral toxicity, are not significantly irritating to the eyes or skin, and are not absorbed through the skin in toxic amounts. vapour pressures are extremely low and inhalation exposure is limited to mists.
CALCIUM FORMATE:
SODIUM GLUCONATE:
• It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace. At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience).
NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.
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Personal Protection

Hands/Feet	<p>The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances should be obtained from the manufacturer of the protective gloves and must be observed when making a final choice. Suitability and durability of glove type is dependent on usage. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.</p> <ul style="list-style-type: none">• polychloroprene• nitrile rubber• butyl rubber• fluorocautchouc.
Eyes:	<p>Safety glasses with side shields.</p> <ul style="list-style-type: none">• Chemical goggles.• Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. <p>Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent].</p>
Respiratory:	<p>Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)</p>
Other:	<p>Overalls, P.V.C. apron, Barrier cream, Skin cleansing cream.</p>

Section 9: Physical and Chemical Properties

Appearance:	White granular with little or no odour; partially mixes with water.		
State:	Divided Solid	Molecular Weight	Not Applicable
Melting Range (°C)	Not Available	Viscosity	Not Applicable
Boiling Range (°C)	Not Applicable	Solubility in water (g/L)	Partly Miscible
Flash Point (°C)	Not Applicable	pH (1% solution)	Not Applicable
Decomposition Temp (°C)	Not Available	pH (as supplied)	Not Applicable
Autoignition Temp (°C)	Not Applicable	Vapour Pressure (kPa)	Not Applicable
Upper Explosive Limit (%)	Not Applicable	Specific Gravity (water=1)	1.7692
Lower Explosive Limit (%)	Not Applicable	Relative Vapour Density (air=1)	Not Applicable
Volatile Component (% vol)	Not Applicable	Evaporation Rate	Not Applicable

Section 10: Stability and Reactivity

CONDITIONS CONTRIBUTING TO INSTABILITY

Product is considered stable and hazardous polymerisation will not occur.
For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11: Toxicological Information

Short Term (Acute) Exposure

- Swallowed:** Not normally a hazard due to the physical form of product. The material is a physical irritant to the gastro-intestinal tract. Ingestion may result in nausea, abdominal irritation, pain and vomiting.
- Eyes:** There is some evidence to suggest that this material can cause eye irritation and damage in some persons.
- Skin:** There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Limited evidence suggests that repeated exposure may cause skin cracking, flaking or drying following normal handling and use.
- Inhaled:** Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures. The dust may be discomforting to the upper respiratory tract.

Long Term (Chronic) Exposure

Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless, exposure by all routes should be minimised as a matter of course.

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on X-ray.

Skin: polyethylene glycol
GESAMP/EHS Composite List - GESAMP Hazard Profiles
D1: skin 1
irritation/corrosion

Toxicity & Irritation Repeated exposure to the dust may result in increased nasal and respiratory secretions and coughing. Inflammation of lining tissue of the respiratory system may follow repeated exposure to high levels of dust, with increased risk of bronchitis and pneumonia.

Repeated and prolonged exposure to dust levels which exceed the OES for crystalline silica (see above) may occur. This can cause bronchitis, and silicosis (scarring of the lung). Long term overexposure to respirable crystalline silica dust may increase the risk of other irreversible and serious disorders including scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs).

Cement (Portland Cement) is not classified as a carcinogen by NOHSC. Of the ingredients Hexavalent Chromium (Cr VI) is classified as a carcinogen by NOHSC. There is debate in the medical literature concerning whether there is any risk of lung cancer arising from long term high overexposure to respirable crystalline silica. Risk of lung cancer has not been identified from using Portland Cements containing silica. The International Agency for Research on Cancer (IARC) has classified crystalline silica, inhaled in the form of quartz or cristobalite from occupational sources, as carcinogenic to humans (Group 1). NOHSC has not classified crystalline silica as a carcinogen.

Section 12: Ecological Information

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
calcium formate	No Data Available	No Data Available	No Data Available	No Data Available
sodium gluconate	No Data Available	No Data Available	No Data Available	No Data Available
polyethylene glycol	LOW	No Data Available	LOW	HIGH

Section 13: Disposal Considerations

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Bury residue in an authorised landfill.
- Recycle containers if possible, or dispose of in an authorised landfill.

Section 14: Transport Information

Transportation is done in bulk or bag form by Ship, Rail and Road.

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: ADG7, IATA, IMDG

Hazchem Code: None allocated

Section 15: Regulatory Information

POISONS SCHEDULE None

REGULATIONS

Regulations for ingredients calcium formate (CAS: 544-17-2) is found on the following regulatory lists;

"Acros Transport Information", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix C", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Numbering System for Food Additives", "OECD List of High Production Volume (HPV) Chemicals", "Sigma-AldrichTransport Information"

sodium gluconate (CAS: 527-07-1) is found on the following regulatory lists;

"Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "FisherTransport Information", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Numbering System for Food Additives", "OECD List of High Production Volume (HPV) Chemicals", "Sigma-AldrichTransport Information"

polyethylene glycol (CAS: 25322-68-3,8038-37-7,9081-95-2,9085-02-3,9085-03-4,12676-74-3,1277093-3,25104-58-9,25609-81-8,34802-42-1,37361-15-2,50809-04-6,50809-59-1,54510-95-1,54847-64-2, 59763-40-5,60894-12-4,61840-14-0,64441-68-5,64640-28-4,67411-64-7,70926-57-7,75285-02-8,7528503-9,77986-38-0,79964-26-4,80341-53-3,85399-22-0,85945-29-5,88077-80-9,88747-22-2,90597-70-9, 99264-61-6,99333-89-8,101677-86-5,106186-24-7,107502-63-6,107529-96-4,109550-27-8,112384-37-9, 112895-21-3,114323-93-2,116549-90-7,119219-06-6,125223-68-9,133573-31-6,134919-43-0,150872-825,154394-38-4,156948-19-5,169046-53-1,174460-08-3,174460-09-4,188364-77-4,188924-03-0,18915462-9,191743-71-2,196696-84-1,201163-43-1,206357-86-0) is found on the following regulatory lists;

"Acros Transport Information", "Australia Inventory of Chemical Substances (AICS)", "Australia National Pollutant Inventory", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 3", "FisherTransport Information", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "International Fragrance Association (IFRA) Survey: Transparency List", "International Numbering System for Food Additives", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR National List of Candidates for Substitution – United Kingdom", "Sigma-Aldrich Transport Information"

No data for EcoSYN™ (CW: 33-4230)

Section 16: Other Information

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name CAS

polyethylene glycol 25322- 68- 3, 8038- 37- 7, 9081- 95- 2, 9085- 02- 3, 9085- 03- 4, 12676- 74- 3, 12770- 93- 3, 25104- 58- 9, 25609- 81- 8, 34802- 42- 1, 37361- 15- 2, 50809- 04- 6, 50809- 59- 1, 54510- 95- 1, 54847- 64- 2, 59763- 40- 5, 60894- 12- 4, 61840- 14- 0, 64441- 68- 5, 64640- 28- 4, 67411- 64- 7, 70926- 57- 7, 75285- 02- 8, 75285- 03- 9, 77986- 38- 0, 79964- 26- 4, 80341- 53- 3, 8539922- 0, 85945- 29- 5, 88077- 80- 9, 88747- 22- 2, 90597- 70- 9, 99264- 61- 6, 99333- 89- 8, 101677- 86- 5, 106186- 24- 7, 107502- 63- 6, 107529- 96- 4, 109550- 27- 8, 112384- 37- 9, 112895- 21- 3, 114323- 93- 2, 116549- 90- 7, 119219- 06- 6, 125223- 68- 9, 133573- 31- 6, 134919- 43- 0, 150872- 82- 5, 154394- 38- 4, 156948- 19- 5, 169046- 53- 1, 174460- 08- 3, 174460- 09- 4, 188364- 77- 4, 188924- 03- 0, 189154- 62- 9, 191743- 71- 2, 196696- 84- 1, 201163- 43- 1, 206357- 86- 0

• Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at: www.chemwatch.net/references.

• The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

For further information on this product contact:

Telephone: 1300 CEMENT (1300 236 368 - Business Hours)

Facsimile: 1800 CEMENT (1800 236 368)

Next Review Date for this SDS: 31 December 2020.

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 noted below, 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. In particular, 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 SDS 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.