

ADBRI EVOCEM™

IDENTIFICATION OF THE MATERIAL AND SUPPLIER

ADBRI EVOCEM™ Product Name

Supplier Name ADELAIDE BRIGHTON CEMENT LTD T/A ADBRI CEMENT SA ABN 96 007 870 199

Address 62 Elder Road, Birkenhead, SA 5015

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TYPE GL, TYPE GL CEMENT, GENERAL LIMESTONE CEMENT, BIRKENHEAD GL CEMENT Synonym(s)

Use(s) Adbri EvoCem[™] is used as a Type GP cement alternative in structural and general concrete

applications, as a general binder for soil stabilization, and in cement based products.

2. **HAZARDS IDENTIFICATION**

This product is classified as hazardous according to Safe Work Australia criteria. Not classified as a dangerous good by the criteria of the ADG code, IMDG or IATA.

GHS Classifications

Skin Corrosion/Irritation: Category 2 Serious Eye Damage / Eye Irritation: Category 1 Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

SIGNAL WORD Pictograms

DANGER



GHS08 **Health hazard**



GHS07 **Exclamation mark**



GHS05 Corrosive

Hazard statements

H315 Causes skin irritation.

May cause an allergic skin reaction H317 H318 Causes serious eye damage.

H373 May cause damage to lungs and respiratory tract through prolonged or repeated

exposure.

Prevention statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

Response statements

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

P304 + P340 IF INHALED: Remove 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.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Disposal statements

P501 Dispose of contents/container in accordance with relevant regulations.

UN No	None Allocated	Hazchem Code	None Allocated	Pkg Group	None Allocated
DG Class	None Allocated	Subsidiary Risk(s)	None Allocated	EPG	None Allocated



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Formula	Conc.	CAS No.
PORTLAND CEMENT CLINKER	Not Available	73 – 87 %	65997-15-1
GYPSUM	CaSO₄ 2H₂O	5 – 7 %	10101-41-4
LIMESTONE	CaCO ₃	8 – 20 %	1317-65-3
CLINKER KILN DUST	Not Available	0 - 2.5 %	65997-15-1
CRYSTALLINE SILICA	SiO ₂	0 - 2 %	14808-60-7
CHROMIUM (VI) HEXAVALENT	Cr ⁶⁺	Trace	18540-29-9

4. FIRST AID MEASURES

Eye Flush thoroughly with flowing water for at least 15 minutes and seek medical attention if

symptoms persist. If wet cement is splashed into the eyes flush thoroughly with flowing

water for 15 minutes and seek urgent medical attention.

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

Skin Remove heavily contaminated clothing immediately. Wash off skin thoroughly with water.

A shower may be required. Seek medical attention for persistant irritation or burning of the

skin

Ingestion Rinse mouth and lips with water. Do not induce vomiting. Give water to drink to dilute

stomach contents. If symptoms persist, seek medical attention.

Advice to Doctor Treat symptomatically.

First Aid Facilities Eye wash station.

Additional Information - Aggravated Medical Conditions

Inhalation Over exposure resulting from prolonged and repeated inhalation of dust containing

crystalline silica can cause bronchitis, silicosis (scarring of the lung.) It may also increase the risk of scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs) and lung cancer. Epidemiological studies have shown that smoking increases the risk of bronchitis, silicosis (scaring of the lung) and lung cancer in

persons exposed to crystalline silica.

Skin Prolonged and repeated skin contact with cement in wet concrete, mortars and slurries may

result in irritant dermatitis or alkaline burns.

Eye Irritating to the eye. If wet cement is splashed into the eye alkaline burns can cause

permanent damage.

5. FIRE FIGHTING

Flammability
Fire and Explosion
Extinguishing

Non flammable. Does not support combustion of other materials.

No fire or explosion hazard exists.

Non flammable; use suitable extinguishing agent for surrounding fire.

Hazchem Code None.



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6. ACCIDENTAL RELEASE MEASURES

Spillage If spilt (bulk), contact emergency services if appropriate. Wear dust-proof goggles,

PVC/rubber gloves, a Class P2 respirator (where an inhalation risk exists), coveralls and rubber boots. Clear area of all unprotected personnel. Prevent spill entering drains or waterways. Collect and place in sealable containers for disposal or reuse. Avoid generating

dust.

Emergency Follow safety requirements for personal protection under Section 8 Exposure

Procedures Controls/Personal Protection.

7. HANDLING AND STORAGE

Storage Store off the floor in the original bags in a cool, dry, well ventilated area, removed from

excessive moisture and heat. Ensure packages are adequately labelled, protected from

physical damage and sealed when not in use.

Handling Before use carefully read the product label. Use of safe work practices are recommended to

avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing

hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

Property/ Environmental Refer to Section 13.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Do not inhale dust/powder. Use with adequate ventilation. Where a dust inhalation

hazard exists, mechanical extraction ventilation is recommended. Maintain dust levels

below the recommended exposure standard.

Exposure CALCIUM CARBONATE (1317-65-3)

Standards ES-TWA: 10mg/m³

CHROMIUM (VI) HEXAVALENT(18540-29-9)

ES-TWA: 0.05 mg/m³ (Chromium VI compounds)

GYPSUM (10101-41-4) ES-TWA: 10 mg/m³

PORTLAND CEMENT (65997-15-1)

ES-TWA: 10 mg/m³

SILICA, CRYSTALLINE - QUARTZ (14808-60-7)

ES-TWA: 0.05 mg/m³ (Respirable Dust). Under Model WHS Law adopted in most

Australian jurisdictions.

PPEWear dust-proof goggles and rubber or PVC gloves. Where an inhalation risk exists, wear a Class P2 respirator. If there is potential for prolonged and/or excessive skin contact,

wear coveralls. At high dust levels, wear a Class P3 respirator or a Powered Air Purifying

Respirator (PAPR) with Class P3 filter.









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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Fine grey powder **Solubility (water)** Slight, hardens on mixing with water

Specific Gravity 2.8 to 3.2 Odourless Odour % Volatiles Not Available Approximately 12 pН Not Available **Flammability** Non Flammable **Vapour Pressure** Not Available Flash Point Not Relevant Vapour Density Not Available **Upper Explosion Limit** Not Relevant **Boiling Point** > 1200°C **Lower Explosion Limit** Not Relevant **Melting Point** Not Available **Autoignition Temperature** Not Available **Evaporation Rate**

Bulk Density 1200 - 1600 kg/m3

Particle Size 20 - 40% of particles are $< 7 \mu m$

10. STABILITY AND REACTIVITY

Chemical Stability Chemically Stable

Conditions to Avoid Keep free of moisture

Incompatible Materials Incompatible with oxidising agents (eg hypochlorites), ethanol, acids (eg hydrofluoric acid)

and interhalogens (eg chlorine trifluoride). Water contact may increase product

Decomposition

Products

Unlikely to evolve toxic gases when heated to decomposition.

Hazardous Reactions None

11. TOXICOLOGICAL INFORMATION

Acute Toxicity No known toxicity data available for this product.

Eye Irritant upon contact with powder/dust. Over exposure may result in pain, redness, corneal

burns and ulceration with possible permanent damage.

Inhalation Slightly corrosive. Irritating to the respiratory system, causing coughing and sneezing. Over

exposure may result in severe mucous membrane irritation and bronchitis. Hexavalent chromium is reported to cause respiratory sensitisation, however due to the trace amount present, a hazard is not anticipated under normal conditions of use. Crystalline silica can cause silicosis (lung disease) with chronic over exposure, however due to low levels present

and product application, adverse health effects are not anticipated.

Skin Irritating to the skin. Prolonged and repeated contact with powder or wetted form may

result in skin rash, dermatitis and sensitisation.

Ingestion Slightly corrosive. Ingestion may result in burns to the mouth and throat, with vomiting and

abdominal pain. Due to product form, ingestion is not considered a likely exposure route.

Mutagenicity Insufficient data available for this product to classify as a mutagen.

Carcinogenicity General Purpose Limestone Cement is not classified as a carcinogen by NOHSC. Crystalline

silica and hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1), however due to low levels present and product application, the criteria for

classification is not met.



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12. ECOLOGICAL INFORMATION

Toxicity Product forms an alkaline slurry when mixed with water. This product is non toxic to aquatic

life forms when present in cured solid form.

Persistence & Degradability Product is persistent and would have a low degradability.

Mobility in soil A low mobility would be expected in a landfill situation.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to

prevent dust generation and dispose of to an approved landfill site. Contact the

manufacturer for additional information.

Legislation Dispose of in accordance with relevant local legislation. Keep out of sewer and stormwater

drains.

14. TRANSPORT INFORMATION

Not classified as a dangerous good by the criteria of the ADG Code.

Transport is by rail or road in bulk or bag form.

Drivers of trucks transporting bagged product should ensure that the bags are properly restrained.

Shipping Name None Allocated

UN No None Allocated Hazchem Code None Allocated Pkg Group None Allocated DG Class None Allocated Subsidiary Risk(s) None Allocated EPG None Allocated

15. REGULATORY INFORMATION

Poison Schedule AICS 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).

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

16. OTHER INFORMATION

Additional Information

CEMENT CONTACT DERMATITIS: Individuals using wet cement, mortar, grout or concrete could be at risk of developing cement dermatitis. Symptoms of exposure include itchy, tender, swollen, hot, cracked or blistering skin with the potential for sensitisation. The dermatitis is due to the presence of soluble (hexavalent) chromium.

IARC – GROUP 1 – PROVEN HUMAN CARCINOGEN. This product contains an ingredient for which there is sufficient evidence to have been classified by the International Agency for Research into Cancer as a human carcinogen. The use of products known to be human carcinogens should be strictly monitored and controlled.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The Recommendation for protective equipment contained within this SDS report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.



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HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare an SDS report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

ABBREVIATIONS:

mg/m³ - Milligrams per cubic metre

ppm - Parts Per Million

ES-TWA - Exposure Standard - Time Weighted Average

CNS - Central Nervous System NOS - Not Otherwise Specified

pH – relates to hydrogen ion concentration – this value will relate to a scale of 0 – 14, where 0 is highly acidic and 14 is highly alkaline.

CAS# - Chemical Abstract Service Number - used to uniquely identify chemical compounds.

IARC - International Agency for Research on Cancer.

Report Status

This document has been compiled by Adelaide Brighton Cement the manufacturer of the product and serves as the manufacturer's Safety Data Sheet.

While the information in this Safety Data Sheet has been prepared in good faith, Adelaide Brighton Cement Limited does not warrant that the information is accurate, complete or up to date.

Contact Point

For further information on this product contact:

Telephone: Office hours 08 8300 0300

After hours 08 8300 0530

Web site: <u>www.adbricement.com.au</u>

Advice Note

The information in this document is believed to be accurate. Please check the currency of this SDS by contacting:

08 8300 0300

or

www.adbricement.com.au

Each user of any information, or any product referred to, in this Safety Data Sheet must:

- determine whether the information or product is suitable for their purpose;
- assess and control any risks associated with the information or product; and
- obtain professional advice in relation to the use of the information or product.

To the extent permitted by law, Adelaide Brighton Cement Limited:

- excludes all representations, warranties and guarantees in relation to any information in this Safety Data Sheet; and
- will not be liable for any direct, indirect, consequential, incidental, special or economic
 loss (including but not limited to any loss of actual or anticipated profits, revenue,
 savings, production, business, opportunity, access to markets, goodwill, reputation,
 publicity, or use) arising from any use of or reliance on any information in this Safety
 Data Sheet.