

BRIGHTONLITE® CEMENT

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name BRIGHTONLITE CEMENT

Supplier Name ADELAIDE BRIGHTON CEMENT LTD ABN 96 007 870 199

Address 62 Elder Road, Birkenhead, SA 5015

Manufacturing Plant Angaston Works, Stockwell Road, Angaston, SA 5353

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Web Site www.adelaidebrighton.com.au

Synonym(s) Use(s) TYPE HE (BRIGHTONLITE), HIGH EARLY STRENGTH, HES, OFF WHITE CEMENT.

Brightonlite is used as a binder in structural concrete, masonry, renders, mortars and grouts. It is also used as a general binder in cementitious backfill in underground mines, in the manufacture of fibre cement products and in soil stabilisation in construction and

civil engineering projects.

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

SIGNAL WORD Pictograms

DANGER



Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. 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.

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

CAS No. **Formula** Conc. **Ingredient** PORTLAND CEMENT CLINKER < 90% 65997-15-1 Not Available **GYPSUM** CaSO₄ 2H₂O 3 - 8% 10101-41-4 CaCO₃ 0 - 7.5% LIMESTONE 1317-65-3 Cr6+ CHROMIUM (VI) HEXAVALENT 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 (found in this product below the reportable limit) 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
Hazchem Code

Non flammable. Does not support combustion of other materials.

No fire or explosion hazard exists.

Non flammable; use suitable extinguishing agent for surrounding fire.

None.



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ACCIDENTAL RELEASE MEASURES 6.

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

> 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 Collect and place in sealable containers for disposal or reuse. Avoid waterways.

generating dust.

Emergency Follow safety requirements for personal protection under Section 8 Exposure

Controls/Personal Protection. **Procedures**

HANDLING AND STORAGE

Storage Store in a cool, dry, well ventilated area, removed from excessive moisture and heat.

> Storage of bulk cement may be in concrete silos or steel bins. 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.

EXPOSURE CONTROLS/PERSONAL PROTECTION 8.

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) ES-TWA: 10 mg/m³ (Respirable Dust) **Standards**

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

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

GYPSUM (10101-41-4)

ES-TWA: 10 mg/m³ (Respirable Dust)

PORTLAND CEMENT (65997-15-1)

ES-TWA: 10 mg/m³ (Respirable Dust) SILICA, CRYSTALLINE - QUARTZ (14808-60-7)

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

Australian jurisdictions.

PPE Wear 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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PHYSICAL AND CHEMICAL PROPERTIES

Appearance Solubility (water) Slight, hardens on mixing Fine off-white powder with water

Odour Odourless Specific Gravity 3.0 to 3.2 Approximately 12 % Volatiles Not Available pΗ **Vapour Pressure** Not Available **Flammability** Non Flammable Not Available **Vapour Density Flash Point** Not Relevant **Boiling Point** Not Available **Upper Explosion Limit** Not Relevant > 1200°C Not Relevant **Melting Point Lower Explosion Limit Evaporation Rate** Not Available **Autoignition Temperature** Not Available

Bulk Density 1200 - 1600 kg/m3

Particle Size 20 - 40% of particles are $< 7 \mu m$ (Respirable Range)

STABILITY AND REACTIVITY 10.

Chemical Stability Chemically Stable

Conditions to Avoid Keep free of moisture

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

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

Decomposition

Products

Unlikely to evolve toxic gases when heated to decomposition.

Hazardous Reactions None

TOXICOLOGICAL INFORMATION

Acute Toxicity No known toxicity data available for this product.

Eve Irritant upon contact with dust. Over exposure may result in pain, redness, corneal burns

and ulceration with possible permanent damage.

Inhalation 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 (found in this product below the reportable limit) 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.

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

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.

Brightonlite® Cement is not classified as a carcinogen by NOHSC. Crystalline silica and Carcinogenicity

> 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. Large quantities, especially in static

water, will result in increased pH levels which may result in death of aquatic life.

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



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availability of engineering controls should be considered before final selection of personal protective equipment is made.

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:

SDS - Safety Data Sheet

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

Facsimile: 08 8341 1591

Web site: www.adelaidebrighton.com.au

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.adelaidebrighton.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.