### SAFETY DATA SHEET

# **General Purpose Cement**

### 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

**Brisbane:** 77 Pamela St, Pinkenba QLD 4008 **Railton:** Cement Works Rd, Railton, TAS 7305 **Port Kembla:** Off Christy Rd, Port Kembla, NSW 2505

**Product** 

Name: General Purpose Cement (Type GP)

Other Names: Portland Cement, Shrinkage Limited Cement\*, HE (High Early) Cement\*, Off White

Cement, Grey Cement, Tradies Own Type GP Cement, Sulfate Resisting Cement\*,

Manufacturers Cement

**Use:** General Purpose Cement is used as a binder in concrete, concrete masonry, mortar

and grouts. It is also used in the manufacture of fibre cement products, in soil

stabilisation in building construction and civil engineering projects.

This SDS reflects the handling of Cement Powder in bulk or bagged form. Adding water to Cement changes the properties and the SDS for those products listed

above should be referenced.

\* AS3972 prescribes whether the cement conforms to these specific sub-categories.

#### Section 2: Hazards Identification

Hazardous Substance. Non-dangerous Goods

Specific Target Organ Systemic Toxicity (Repeated Exposure): Category 2

Serious Eye Damage / Eye Irritation: Category 2A

Skin Corrosion/Irritation: Category 2

The properties of Cement change when water is added. See SDS for Wet Concrete.



**DANGER** 

Hazard statement(s)

H315
H319
Causes skin irritation.
H373
Causes serious eye irritation.

May cause damage to organs through prolonged or repeated exposure (skin).

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





Prevention statement(s)

Wash skin thoroughly after handling.

P264 Wash skill tholoughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection rated for Dust.

P260 + P261 Avoid/Do not breathe dust. Cement can become easily airborne.

Response statement(s)

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

P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

P337 + P313 easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

P314 + P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P321 Specific treatment is advised - see first aid instructions.
Take off contaminated clothing and wash before re-use.

Storage statement(s)

P403 + P233 Store in a well-ventilated place.

P405 Keep container tightly closed. Store locked up.

Disposal statement(s)

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

2.3 Other hazards No information provided.

# Section 3: Composition/Information on Ingredients

General Purpose Cement consists of a crystalline mass manufactured from substances mined from the earth's crust. It contains trace amounts of naturally occurring, but potentially hazardous chemical entities including metals such as chromium and nickel. All significant constituents are listed below:

Chemical Entity	Proportion	CAS Number			
Portland Clinker	<97%	65997-15-1			
Gypsum (CaSO₄ 2H₂O)	2-5%	10101-41-4			
Limestone (CaCO₃)	0-7.5%	1317-65-3			
Calcium Oxide	0-1%	1305-78-8			
Hexavalent Chromium Cr (VI)	<10 ppm	18540-29-9			
Total respirable silica	Below detection limits	14808-60-7			

### **Section 4: First Aid Measures**

### 4.1 Description of first aid measures

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised

to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

**Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If

swallowed, do not induce vomiting.

**First aid facilities** Eye wash facilities and safety shower should be available.

### 4.2 Most important symptoms and effects, both acute and delayed

Irritating to the eyes, skin and respiratory system. Some individuals may exhibit an allergic response upon exposure to this product, possibly due to the trace amounts of chromium present. Hexavalent chromium compounds are classified as carcinogenic to humans (IARC Group 1).

### 4.3 Immediate medical attention and special treatment needed



### **Section 5: Fire Fighting Measures**

Fire/Explosion Hazard: None Special Protective Precautions None Hazchem Code: None allocated and equipment for fire fighters: required

Flammability: Not flammable Extinguishing Media: None required

Hazards from Combustion Products: None

#### Section 6: Accidental Release Measures

**Spills:** Spills are best cleaned up by vacuum device to avoid generating airborne dust.

Recommendations on Exposure Control and Personal Protection should be followed during spill clean-up.

Keep product out of storm water and sewer drains.

Wetting during clean-up will cause formation of setting cement.

# **Section 7: Handling and Storage**

Handling: When supplied in bags these need to be handled in accordance with Hazardous Manual Tasks Code of

Practice.

**Storage:** Protect from moisture to prevent hardening. Storage of cement may be in concrete silos, steel bins, or

plastic lined multi-ply paper bags.

# **Section 8: Exposure Controls/Personal Protection**

### 8.1 Control parameters

#### **Exposure standards**

			TWA		STEL	
Ingredient		Reference	ppm	mg/m³	ppm	mg/m³
	Calcium carbonate (Limestone, Marble, Whiting)	SWA (AUS)		10		
	Calcium oxide	SWA (AUS)		2		
	Chromium (VI) compounds (as Cr)	SWA (AUS)		0.05		
	Gypsum (Calcium sulphate)	SWA (AUS)		10		
	Magnesium oxide (fume)	SWA (AUS)		10		
	Portland Cement	SWA (AUS)		10		

#### 8.2 Exposure controls

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.

**PPE** 

Eye / Face Wear safety glasses or dust-proof goggles when handling material to avoid contact with eyes.

Hands Wear PVC, rubber or cotton gloves when handling material to prevent skin contact.

Body Wear long sleeved shirt and full-length trousers.

Respiratory Where an inhalation risk exists wear a Class P1 (Particulate) respirator, dependent on a site-specific

risk assessment.



# **Section 9: Physical and Chemical Properties**

**Appearance:** A fine powder ranging in colour from grey to off-white

Odour: No distinctive odour

Boiling/Melting Point: Melting point >1200°C

Vapour Pressure:Not applicableSpecific Gravity:3.0 - 3.2Flash Point:Non-applicableFlammability Limits:Not applicable

**Solubility in Water:** Slight, reacts on mixing with water forming an alkaline (caustic) solution (pH >11)

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: Keep free of moisture

Incompatible Materials: None Hazardous Decomposition Products: None

Hazardous Reactions: A corrosive substance harmful to exposed skin is the result of water addition

to the point of creating a paste or slurry. See SDS for Wet Concrete.

# **Section 11: Toxicological Information**

General Purpose Cements are stable substances, compatible with most other building materials, will not decompose into hazardous by-products and do not polymerise.

### **Short Term (Acute) Exposure**

Swallowed: Unlikely under normal industrial use. Mildly abrasive and corrosive to mouth and throat if swallowed. May

cause nausea, stomach cramps and constipation.

**Eyes:** Irritating and corrosive to the eyes and may cause alkaline burns. Cement dust is irritating to the eyes.

Exposure to dust may aggravate existing eye irritations.

Skin: Dust is irritating and drying to the skin. Direct contact with wet cement may cause serious skin burns. Within

12 to 48 hours (after one- to six-hour exposures) possible first, second or third degree burns may occur. There may be no obvious pain at the time of the exposure. Chronic skin disorders may be aggravated by exposure to

dust or contact with wet cement.

**Inhaled:** Cement dust is irritating to the nose, throat and respiratory tract causing coughing and sneezing.

Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.



### Long Term (Chronic) Exposure

**Eyes:** Dust may cause irritation and inflammation of the cornea.

Skin: Repeated contact causes irritation and drying of the skin and can result in skin reddening and skin rash

(dermatitis). Over time this may become chronic and can also become infected. Persons who are allergic to chromium may develop an allergic dermatitis which aggravates the irritant effects and this combination can

lead to chronic cement dermatitis and serious disability particularly affecting the hands.

Of the ingredients, Water soluble Hexavalent Chromium (Cr VI) is not classified as a carcinogen by the Hazardous Chemical Information System (HCIS); may trigger skin sensitisation issues in some users.

**Inhaled:** 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).

# **Section 12: Ecological Information**

**Ecotoxicity:** Product forms an alkaline slurry when mixed with water.

Bio accumulative potential: This product is not expected to bioaccumulate.

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

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

# **Section 13: Disposal Considerations**

General Purpose Cement can be treated as a common waste for disposal or dumped into a landfill site, in accordance with local authority guidelines.

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)

# **Section 14: Transport Information**

May be transported by Ship, Rail, Air and Road.

UN Number:

Proper Shipping Name:

Class and Subsidiary Risk:

None allocated

None allocated

None allocated

**Special precautions for user:** Avoid generating and breathing dust

Hazchem Code: None allocated

# **Section 15: Regulatory Information**

General Purpose cement is not classified as Dangerous Goods.

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)



### **Section 16: Other Information**

For further information on this Telephone: 1300 CEMENT (1300 236 368 - Business Hours)

product contact: Facsimile: 1800 CEMENT (1800 236 368)

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

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, 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.

[End SDS]

