

SAFETY DATA SHEET

Gap Sand

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

Brisbane:

77 Pamela St, Pinkenba QLD 4008

Product

Name: Gap Sand

Other Names: Paving Joint Filler
Brushing Sand

Use: Gap Sand is used to stabilise paving by filling joints between pavers

Section 2: Hazards Identification

2.1 Classification

CLASSIFIED AS HAZARDOUS SUBSTANCE ACCORDING TO SAFE WORK AUSTRALIA CRITERIA. NON-DANGEROUS GOODS

A low proportion of the fine dust in the supplied dry product will be respirable crystalline silica. Once wetted, risk of any airborne respirable dust will be low, but dry residues may contain crystalline silica.

GHS CLASSIFICATION

Hazard Class and Category

Skin corrosion/irritation: Category 2

Skin sensitisation: Category 1, 1A, 1B

Serious eye damage/irritation: Category 1

Specific target organ toxicity, single exposure; Respiratory tract irritation: Category 3

Carcinogenicity: Category 1A, 1B

Specific target organ toxicity, repeated exposure: Category 1



2.2 GHS Label elements

Signal Word: DANGER

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

Mix it with the best.

Hazard Statements

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H350 May cause cancer by inhalation.
H372 Causes damage to lungs through prolonged or repeated exposure if inhaled.

Prevention Statements

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.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P264 Wash any skin exposed to the product thoroughly after handling.
P270 Do not eat drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves in accordance with AS2161. Nitrile gloves of 8mm thickness. Wear eye protection in accordance with (AS/NZS1337.1).

Response Statements

P310 Immediately call POISON CENTRE 131126 or Doctor if you feel unwell.
P314 Get medical advice if you feel unwell.
P321 Specific treatment (see first aid requirements)
P302+P352 IF ON SKIN: Wash with plenty of soap and water
P304+P340 IF INHALED: Remove affected person to fresh air and keep at rest in a position comfortable for breathing.
P308+P313 If exposed or concerned: Get medical advice/attention.
P332+P313 If skin irritation occurs: Get medical advice.
P333+P313 If skin irritation or rash occurs: Get medical advice.
P362 +P364 Take off contaminated clothing and wash separately before reuse.
P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage Statements

P405 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal Statements

P501 Dispose of unused contents or container as normal general waste or in accordance with jurisdictional regulations.

2.3 Other hazards

Some susceptible individuals may exhibit an allergic skin response upon exposure, possibly due to trace amounts of chromium. Prolonged exposure in the wet form can cause serious, potentially irreversible skin or eye damage in the form of chemical burns. The same serious injury can occur if wet or moist skin or eyes have prolonged contact exposure to dry form.

Section 3: Composition/Information on Ingredients

The sand in this product is mainly crystalline silica and accounts for the high overall crystalline silica content. All significant constituents are listed below:

| Chemical Entity | Proportion | CAS Number |
|---|------------------------|------------|
| <u>Washed sand containing</u> | >95% | 14808-60-7 |
| Crystalline Silica (Quartz) | >95% | 14808-60-7 |
| Total respirable silica | Below reporting limits | 14808-60-7 |
| Hexavalent Chromium Cr (VI) | <1 ppm | 18540-29-9 |
| Polymeric Chemicals | <2% | |
| <u>Cement General Purpose containing:</u> | <2% | 65997-15-1 |
| Hexavalent Chromium Cr (VI) | <10 ppm | 18540-29-9 |
| Mineral and organic impurities | <5% | |

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. Give water to drink to dilute stomach contents. If symptoms persist, seek medical attention. For advice, contact a Poisons Information Centre on 13 11 26 or a doctor (immediately).

EYES: Hold eyelids apart and flush thoroughly with flowing water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes. If symptoms such as irritation or redness persist, seek medical attention.

SKIN: If skin or hair contact occurs, remove contaminated clothing, and brush off loose particles before washing off skin thoroughly with soap and water. Shower if necessary. Seek medical attention for persistent irritation, burning or redness of the skin.

Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

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

FIRST AID FACILITIES: Eye wash station. Washing facilities with running water/shower.

ADVICE TO DOCTOR: Treat symptomatically. Skin contact with wet cement, mortars and slurries may result in irritant dermatitis. Prolonged skin contact with wet cement may result in skin burns 12 to 48 hours after exposure. There may be no pain at the time of exposure. If wet cement is splashed into the eye, alkali burns can cause permanent damage.

4.2 Symptoms caused by exposure.

Irritating to the eyes, skin, and respiratory system. Chronic over exposure to silica quartz dust may result in silicosis (lung disease). Principal symptoms of silicosis are coughing and breathlessness. Some individuals may exhibit an allergic response upon exposure to this product, possibly due to the trace amounts of chromium present. Crystalline silica is classified as carcinogenic to humans (IARC Group 1), if respirable material is inhaled. Hexavalent chromium compounds are also classified as carcinogenic to humans (IARC Group 1).

4.3 Medical attention and special treatment

Treat as for moderate to strong alkali and symptomatically.

Section 5: Fire Fighting Measures

| | |
|--|----------------|
| Fire/Explosion Hazard: | None |
| Hazchem Code: | None allocated |
| Flammability: | Not flammable |
| Extinguishing Media: | None required |
| Hazards from Combustion Products: | None |
| Special Protective Precautions and equipment for fire fighters: | None required |

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).

6.2 Environmental precautions

Prevent product from entering storm water and sewer drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, then collect and place in suitable containers for reuse or disposal. 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.

DO NOT USE WATER: Wetting during clean-up will cause formation of setting cement.

Section 7: Handling and Storage

7.1 Precautions for safe handling

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

7.2 Conditions for safe storage, including any incompatibilities.

Store in a cool, dry, well-ventilated area, removed from moisture (to prevent hardening), incompatible substances, strong oxidants or acids, foodstuffs and to minimise dust emissions. Ensure packages are adequately labelled, protected from physical damage, and sealed when not in use. Storage in steel or concrete bins and silos, or plastic lined bags, is appropriate.

Store locked up with containers tightly closed.

Section 8: Exposure Controls/Personal Protection

8.1 Exposure control measures

Exposure standards

| Ingredient | Reference | TWA | | STEL | |
|---------------------------------|-----------|-----|-------------------|------|-------------------|
| | | ppm | mg/m ³ | ppm | mg/m ³ |
| Chromium (VI) compounds (as Cr) | SWA (AUS) | -- | 0.05 | -- | -- |
| Portland Cement | SWA (AUS) | -- | 10 | -- | -- |
| Quartz (respirable silica) | SWA (AUS) | -- | 0.05 | -- | -- |

Biological limits

No biological limit values have been entered for this product.

8.2 Engineering controls

Use outdoors or in well-ventilated areas. Employ natural or mechanical ventilation to maintain exposure within applicable limits. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

8.3 Individual protection measures

Eyes and face protection: Safety glasses with side shields or protective goggles should be worn while using this product. For extremely dusty conditions, non-vented goggles or goggles with indirect venting are recommended. Avoid contact lens wear when using this product.

Skin protection: Long sleeved shirts and trousers should be worn while using this material. Avoid direct contact with skin. If working in dusty conditions, impervious over garments are recommended. Protective gloves with wrist/arm cuffs should be worn to avoid direct contact with skin. Wear PVC, rubber or cotton gloves when handling material to prevent skin contact.

Respiratory protection: If exposure levels cannot be maintained below acceptable limits, suitable particulate-filtering facemasks or respirators approved by MSHA/NIOSH should be worn in accordance with the user's respiratory protection program and OSHA/MSHA guidelines. Where an inhalation risk exists wear a Class P1 (Particulate) respirator, dependent on a site-specific risk assessment. Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly.

Section 9: Physical and Chemical Properties

| | |
|-------------------------------|--|
| Appearance (dry): | A sandy mixture of fine and coarse solid particles |
| Odour: | No distinctive odour |
| Boiling/Melting Point: | Melting point >1200°C |
| Vapour Pressure: | Not applicable |
| Specific Gravity: | 2.7 |
| Flash Point: | Not applicable |
| Flammability Limits: | Not applicable |
| Solubility In Water: | None |
| Particle Size: | Up to 10% of the fresh dry material may be respirable (below 10 microns) |

Section 10: Stability and Reactivity

Gap Sand is stable, compatible with most other building materials, will not decompose into hazardous by-products and does not polymerise.

| | |
|--|---------------------------------------|
| Chemical Stability: | Chemically stable |
| Conditions to Avoid: | Keep free of moisture during storage. |
| Incompatible Materials: | None |
| Hazardous Decomposition Products: | None |
| Hazardous Reactions: | None |

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.

There is no direct toxicological data on this product. Health effects information is based on reported effects in use from overseas and Australian reports on mixtures of Portland Cements and sand.

11.1 Early onset symptoms related to exposure.

INGESTION/SWALLOWING: Mildly abrasive and corrosive to mouth and throat if swallowed. May cause nausea, stomach cramps and constipation.

INHALATION: Irritating to the respiratory system. Over exposure may result in irritation of the nose and throat, with coughing. High level exposure may result in breathing difficulties. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.

EYE EXPOSURE: Causes serious eye damage. 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. Contact with moisture in the eyes may result in irritation, flow of tears, pain, redness, conjunctivitis, and possible alkaline burns aided by mechanical irritation and abrasion. Exposure to wet cement can cause serious, potentially irreversible eye damage in the form of chemical burns.

SKIN EXPOSURE: Irritating to the skin. Direct contact with powder or wetted form may result in irritation, rash and dermatitis. Prolonged exposure to wet cement can cause serious, potentially irreversible skin damage in the form of chemical 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 product.

11.2 Delayed health effects from exposure

INGESTION/SWALLOWING: Mildly abrasive and corrosive to mouth and throat if swallowed. May cause nausea, stomach cramps and constipation.

INHALATION: 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 exposure to respirable silica may result in pulmonary fibrosis (silicosis). Silicosis is a fibronodular lung disease caused by deposition in the lungs of fine respirable particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness. In the wet state, the likelihood of an inhalation hazard is reduced.

EYE EXPOSURE: Dust may cause irritation and inflammation of the cornea.

SKIN EXPOSURE: 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.

CARCINOGENICITY: This product contains crystalline silica which is classified as carcinogenic to humans (IARC Group 1). However, there is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis. Therefore, preventing the onset of silicosis will also reduce the cancer risk. Epidemiological studies have shown that smoking increases the risk of bronchitis, silicosis (scarring of the lung) and lung cancer in persons exposed to respirable crystalline silica.

Hexavalent chromium compounds are also classified as carcinogenic to humans (IARC Group 1). However due to the trace amounts present, no adverse effects are expected due to this component. In the wet state, the likelihood of an inhalation hazard is reduced.

| Components | Toxicity | Carc: IARC | Carc: NTP | Carc: OSHA |
|-----------------------------|--|------------|-----------|------------|
| Crystalline Silica (Quartz) | Oral LD50 Rat >22,500 mg/kg LC50 Carp >10,000 mg/L (72 h) | Group 1 | Known | Not listed |

Section 12: Ecological Information

12.1 Ecotoxicity

Product forms an alkaline slurry when mixed with water. Based on available data, classification criteria is not met, and there is a high probability that the product is not acutely harmful to aquatic organisms. However, due to the high pH of Portland Cement, the pH of waterways may be increased with adverse effects on aquatic life. This product is non-toxic to aquatic organisms when present as a cured solid.

12.2 Bio accumulative potential

This product is not expected to bioaccumulate.

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

Reuse or recycle where possible. General Purpose Cement 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)

Section 14: Transport Information

Transportation is done in bulk or bag form by Ship, Rail 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: | Avoid generating and breathing dust |
| Hazchem Code: | None allocated |

Section 15: Regulatory Information

Gap Sand 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 product contact: **Telephone:** 1300 CEMENT (1300 236 368 - Business Hours)
Facsimile: 1800 CEMENT (1800 236 368)

IARC International Agency for Research on Cancer

Next Review Date for this MSDS: 31 December 2024.

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 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]