



MATERIAL SAFETY DATA SHEET

Eureka GP Cement

STATEMENT OF HAZARDOUS NATURE

This product is classified as hazardous according to criteria of Worksafe Australia

Company Details:

Building Products Supplies Pty Ltd
750 Lorimer Street
Port Melbourne
Victoria 3207

ABN: 95 006 150 036

Telephone No: VIC: 1800 035 046
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IDENTIFICATION

| | |
|---|--|
| Specification | Australian Builders Portland and Blended Cements are manufactured to comply with all applicable requirements of AS3972, |
| Product Name: | Eureka GP Cement |
| Barcode Number: | 40kg: 9316061 160180 20kg: 9316061 160197 |
| UN Number: | None allocated. |
| Dangerous goods class & subsidiary risk: | None allocated. |
| Hazchem Code: | None allocated. |
| Poisons schedule number: | None allocated. |
| Use: | Portland & Blended cements may be used as a binder in concrete, concrete masonry, mortar and grouts. They may also be used in the manufacture of fibre cement products and in soil stabilization in construction and civil engineering projects. |

Physical Description/ Properties:

| | |
|--------------------------------------|----------------------------------|
| Appearance: | Fine powder light grey in colour |
| Boiling point/ melting point: | MP > 1200° c |
| Vapour pressure: | Not applicable |
| Flashpoint: | Not applicable |
| Flammability limits: | Not applicable |

| | |
|-----------------------------|--|
| Solubility in water: | Sight – hardens on mixing with water. |
| pH: | Approx. 12 |
| Particle Size: | 20 – 40% of particles are $\leq 7 \mu\text{m}$ (i.e.) in the respirable range. |
| Packaging: | 40 Kg Bags - 42 per pallet 20 Kg Bags - 56 per pallet |

Composition:

| Chemical Name | CAS Number | Proportion |
|--|------------|------------|
| Portland Cement (Clinker) | 65997-15-1 | < 97% |
| Sag | 65999-69-2 | 0-80% |
| CaSO ₄ 2H ₂ O (Gypsum) | 10101-41-4 | 3-8% |
| CaCO ₃ (Limestone) | 1317-65-3 | 0-5% |
| Ca(OH) ₂ (Lime) | 1305-62-0 | 0-50% |
| Hexavalent Chromium (water soluble) | - | <10ppm |

NOTE: Cement may contain 0.1%-1.0% crystalline silica (CAS No. 14808-60-7) depending on the proportion and crystalline silica content of the ingredients. All ingredients may contain crystalline silica.

APPLICATIONS

Australian Builders Portland and Blended Cement is a cost-effective, basic building material which is suitable for use in a wide range of concrete and masonry applications. These applications include cast-in-place, pre-cast, tilt-up, bridges, pavements, concrete masonry units, pre-stressed concrete members, masonry mortars and grouts. Australian Builders Portland and Blended Cement is suitable for use with a wide range of additives and admixtures to extend the properties and uses of concrete. When used to make concrete with the proper mix design and proper construction practices are used, Australian Builders Portland and Blended Cement can resist the attack of harsh environmental influences such as frost, water, oil and de-icing chemicals. Australian Builders Portland and Blended Cement may be used in a wide range of mortars, for brick and block laying.

QUALITY

Australian Builders Portland and Blended Cement is manufactured using carefully selected raw materials. Strict quality control throughout each stage of the manufacturing process ensures that a consistent final product is produced. Australian Builders Portland and Blended Cement is manufactured to meet and exceed the requirements of AS3972.

STORAGE

Australian Builders Portland and Blended Cement is a moisture sensitive material. It must be kept dry in order to retain its quality. Bulk Australian Builders Portland and Blended Cement should be stored in weather tight bins or silos. Australian Builders Portland and Blended Cement bags should be kept in a dry area and stored on pallets when possible.

MIXING / BATCHING

All concrete should be mixed thoroughly until it is uniform in appearance, with all ingredients evenly distributed. The properties of a plastic or hardened concrete can be changed by adding chemical and mineral admixtures to the mix during batching. Admixtures are used to adjust setting times, reduce water demand, increase workability, entrain air, provide a more economical mix, and adjust other concrete properties. Optimum performance in terms of strength and durability can be achieved in concrete when the water/cement ratio is kept at a minimum as to provide satisfactory placing and thorough consolidation. Proper proportioning, batching, mixing, placing, consolidating, finishing, and curing are essential to achieve the desired results.

APPLICABLE AUSTRALIAN STANDARDS

AS3972 Standard Specification for Portland Cement

AS2350.4 Standard test method for time of setting of hydraulic cement by vicat needle

AS2350.8 Standard test method for fineness of hydraulic cement by air permeability apparatus

HEALTH EFFECTS

Acute: *(effects may occur immediately or shortly after a single exposure.)*

Swallowed: May cause a burning sensation and abdominal discomfort. Corrosive to mouth and throat.

Eyes: Irritating and corrosive to eyes. May cause chemical conjunctivitis, redness and watering of eyes with damage to cornea.

Skin: Irritating and drying of skin. May cause alkaline burns, irritation or allergic dermatitis, especially as an ingredient in plastic (unhardened), wet concrete, mortar & slurry. Water soluble hexavalent chromium may sensitise individuals.

Inhaled: Irritating the nose, throat and respiratory system causing coughing and sneezing.

Chronic: *(effects may occur after repeated or prolonged exposure)*

Inhaled: Repeated inhalation of dust containing crystalline silica can cause bronchitis, silicosis (scarring of the lungs) and lung cancer. It may also increase the risk of scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs).

Studies have shown that smoking increases the risk of bronchitis, silicosis and lung cancer in persons exposed to crystalline silica.

FIRST AID

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.

Eyes: Flush thoroughly with flowing water for at least 15 minutes. Seek medical attention if symptoms persist.

Skin: Wash thoroughly with water. A shower may be required.

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

First Aid Facilities: Eye Wash Station

Advice to Doctor: Treat symptomatically

PRECAUTIONS FOR USE

Exposure standards: WorkSafe Australia Exposure Standard

Crystalline silica (quartz): 0.2mg/m³ TWA (time weighted average) as inspirable dust (up to 7 µm particle size).

Dust (NOS – not otherwise specified): 10 mg/m³ TWA as inspirable dust (up to 10 µm particle size).

However, where a State or Territory prescribes a lower exposure standard, the lower exposure standard applies.

Manufacturers' Recommendations:

Keep exposure of dust as low as practicable.

If respirable dust levels are kept below 2 mg/m³, health problems such as skin, eye and respiratory irritation will be minimized. Respirable crystalline silica (quartz) exposure levels should be kept to below 0.1 mg/m³ TWA.

Avoid repeated skin contact with plastic concrete and dry and wet cement.

Engineering Controls:

Avoid generating dust. All work with cement should be carried out in such a way as to minimize exposure to dust and repeated skin contact. Where dust could be generated whilst handling cement, use local mechanical ventilation or extraction in areas where dust could escape into the work environment. For bulk deliveries, closed pumping systems are recommended. For handling of individual bags, follow personal protection instruction below if no local exhaust ventilation is available.

Personal protection:

Skin:

Wear loose comfortable protective clothing and impervious boots.

Apply barrier cream to hand or wear gloves (AS 2161). Wash thoroughly after handling.

Eyes:

Safety spectacles with side shields or safety goggles (dust resistant AS/NZS 1336) should be worn if dust is likely to be generated.

Respiratory:

If dust is generated wear a class P1 or P2 particulate respirator (AS/NZS 1715 and 1716). Use only respirators which bear the Australian Standards mark and are fitted correctly. Note that persons with facial hair will have difficulty in obtaining a satisfactory face seal. For alternatives see AS/NZS 1715: Selection and use of respirator protective devices.

Flammability:

Not flammable. Does not support combustion of other materials.

SAFETY HANDLING INFORMATION

Storage and transport:

Transportation is by rail, road or ship – in bag or bulk form.

Keep in moisture-proof containers/silos to prevent hardening.

Concrete or steel bins and silos or plastic lined paper sacks are the recommended forms of storage.

Spills and disposal:

Follow safety requirements for personal protection under "Precautions for Use" on skin, eye and respiratory protection and sweep, vacuum or shovel whilst trying to minimize dust generation.

Collect in containers and dispose of as trade waste in accordance with local authority guidelines.

Keep out of sewer and storm water drains.

Fire/explosive hazard:

Not flammable. Does not cause dust explosions.

OTHER INFORMATION

In June 1997, Crystalline silica was evaluated by the International Agency for Research on Cancer (IARC): "Crystalline silica in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

Smoking: Cigarette smoking increases the risk of occupational respiratory diseases. It is recommended that all storage and work areas should be smoke-free zones.

CONTACT POINT

For further information on this product, contact:

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Advice Note:

The information in this document is believed to be accurate. Please check the currency of this MSDS by contacting: (03) 9676 0000

The provision of this information should not be construed as a recommendation to use this product in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Users 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.