

Autoclaved Aerated Concrete**SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product name: Autoclaved Aerated Concrete
Applicable In: Australia
Other Names: Hebel AAC, Hebel Closure Blocks, Hebel Floor Panels, Hebel Freeway Barriers, Hebel Lintels, Hebel Sill Blocks, Hebel Stair Panels, Hebel Stair Treads, Hebel Wall Panels, Powerpanel, Powerwall, Sonobloks, Themobloks.
Recommended use: Fire Protection, Building Blocks, Noise Suppression, Construction Blocks.
Company: CSR Building Products Limited ABN 55 008 631 356
Address: 9 Help Street
Chatswood NSW 2067
Australia
Telephone: +61 2 9235 8000 (Or 1800 807 668 (available in Australia only))
Facsimile: +61 2 9372 5819
Emergency Phone Number: Poisons Information Centre 13 11 26

This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with the Code and guidelines from the Australian Safety and Compensation Council (ASCC, formerly National Occupational Health and Safety Commission -NOHSC). The information in it must not be altered, deleted or added to. The Supplier will not accept any responsibility for any changes made to its MSDS by any other person or organization. The Supplier will issue a new MSDS when there is a change in product specifications and/or ASCC standards, guidelines, or regulations.

SECTION 2: HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE: classified as **Hazardous** according to the criteria of the Australian Safety and Compensation Council ASCC (formerly NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC:1008] 3rd Edition.

Autoclaved Aerated Concrete is classified as **Non-Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Risk Phases	Safety Phases
R21/22: Harmful in contact with skin and if swallowed	S22: Do not breathe dust
R48/20: Danger of serious damage to health by prolonged exposure through inhalation	S24/25: Avoid contact with skin and eyes

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	Proportion:	CAS Number:
Calcium silicate hydrate (tobermorite)	<60-80%	1344-95-2
Crystalline silica (quartz)	20-40%	14808-60-7
Portland cement	10-60%	65997-15-1
Chromium VI (hexavalent chromium)	2-20 ppm	1333-82-0
Additives	<5%	-



SECTION 4: FIRST AID MEASURES

The following applies to dust from this product:

Swallowed: Rinse mouth and lips with water. Do not induce vomiting. If symptoms persist, seek medical attention.

Eyes: Flush thoroughly with flowing water, while holding eyelids open, for 15 minutes to remove all traces. If symptoms such as irritation or redness persist, seek medical attention.

Skin: Remove heavily contaminated clothing. Wash off skin thoroughly with water. Use a mild soap if available. Shower if necessary. Seek medical attention for persistent redness, irritation or burning of the skin.

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

Advice to Doctor: Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Flammability: This product is non flammable.

Suitable extinguishing media: Use extinguishing media (e.g. carbon dioxide, water, foam or dry chemical) and equipment as required if fire in surrounding materials.

Hazards from combustion products: None

Special protective precautions and equipment for fire fighters: None

Hazchem Code: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spills: Collect and reuse where possible. Avoid generating dust.

SECTION 7: HANDLING AND STORAGE

Handling: Concrete is a heavy material, and appropriate control of manual handling risk is required.

Storage: Store in cool, dry, well ventilated area, removed from oxidising agents, and acids. Ensure product is adequately labeled, protected from physical damage and sealed when not in use.

Incompatibilities: None

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

The following applies to dust from this product:

Exposure Standards: **National Occupational Exposure Standard (NES) Australian Safety and Compensation Council, ASCC (formerly NOHSC)**

Exposure to dust should be kept as low as practicable, and below the following NES.

Crystalline silica (quartz): 0.1 mg/m³ TWA (time-weighted average) as respirable dust. (≤ 7 microns particle equivalent aerodynamic diameter).

Chromium VI (hexavalent): 0.05 mg/m³ - sensitiser.

Inspirable Calcium silicate dust: 10.0 mg/ m³ TWA.

Total dust (of any type, or particle size): 10 mg/m³ TWA.

Engineering Controls: Keep exposures to dust as low as practicable, with the aim of maintaining respirable crystalline silica dust levels to below 0.05 mg/m³ TWA (time-weighted average). Work in the open air and external openings (such as doors and windows in buildings) generally provides adequate ventilation. Local mechanical ventilation or extraction may be required in areas where dust could escape into the working environment. Local dust extraction and collection may be used, if necessary, to control airborne dust levels. Hand tools generate less dust when cutting, drilling or sanding. If power tools are used they should be fitted with efficient and well maintained dust extraction devices. If generated dust cannot be avoided follow personal protection recommendations. Where possible vacuum or wash down all gear, equipment or mobile plant prior to maintenance and repair work. If compressed air cleaning cannot be avoided, wear eye, respiratory protection and clothing as listed below.

Ventilation:

Personal Protection

Skin Protection:

Wear loose comfortable clothing. Direct skin contact should be avoided by wearing long sleeved shirts and long trousers, a cap or hat, and gloves (standard duty leather or equivalent AS 2161). Wash work clothes regularly. Wash hands before eating or smoking.

Eye Protection:

Ventilated non-fogging goggles (dust resistant AS/NZS 1336) should be worn when working in a dusty environment.

Respiratory Protection:

None required if engineering and handling controls are adequate. Where engineering and handling controls cannot minimise exposure to total dust and to respirable crystalline silica, personal respiratory protection may be required. The type of respiratory protection required depends primarily on the concentration of the respirable crystalline silica dust in the air, and the frequency and length of exposure time. Amount of exertion required during the work, and personal comfort are other considerations in choice of respirator. A suitable P1 or P2 particulate respirator chosen and used in accordance with AS/NZS 1715 and AS/NZS 1716 may be sufficient for many situations, but where high levels of dust are encountered, more efficient cartridge-type or powered respirators or supplied-air helmets or suits may be necessary. Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly, and kept in clean storage when not in use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off-white blocks
Odour:	None
pH, at stated concentration:	8-10
Vapour pressure:	Not determined
Vapour Density:	Not determined
Boiling Point/range: (°C)	Not determined
Freezing/Melting Point: (°C)	Not applicable
Solubility in water:	Not applicable
Solubility (Other):	Not applicable
Specific gravity: (H₂O = 1)	0.4-0.7
Evaporation Rate:	Not applicable
Flammability Limits:	Not applicable
Flash Point:	Not applicable
Explosive Properties:	Not flammable



SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable
Incompatible Materials:	None
Conditions to avoid:	Dust generation
Hazardous Decomposition products:	None
Hazardous Polymerisation:	None

SECTION 11: TOXICOLOGICAL INFORMATION

Health Effects

Acute (short term).

Swallowed: Unlikely under normal industrial use, but swallowing the dust from this product may result in abdominal discomfort.

Eye: Dust is irritating to the eyes causing watering and redness. Exposure to dust may aggravate pre-existing eye conditions.

Skin: The dust from this product, particularly in association with heat and sweat, may cause irritation. The dust is not absorbed through the skin but, may be mildly irritating and drying to the skin due to its physical characteristics.

Inhaled: Dust is mildly irritating to the nose, throat and respiratory tract and may cause coughing and sneezing. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.

Chronic (long term):

Eyes: Dust may cause irritation and inflammation of the eyes and aggravate pre-existing eye conditions.

Skin: Repeated heavy contact with the dust may cause drying of the skin and can result in skin rash (dermatitis) typically affecting the hands. Over time this may become chronic and can also become infected.

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.

Long term occupational over-exposure or prolonged breathing-in (or inhalation) of crystalline silica dust at levels above the NES carries the risk of causing serious and irreversible lung disease, including bronchitis, and silicosis (scarring of the lung), including acute and/or accelerated silicosis. It may also increase the risk of other irreversible and serious disorders including scleroderma (a disease affecting the skin, joints, blood vessels and internal organs) and other auto-immune disorders. Inhalation of dust, including crystalline silica dust, is considered by medical authorities to increase the risk of lung disease due to tobacco smoking.

The product contains a proportion of respirable free crystalline silica in the quartz component. Crystalline silica (inhaled in the form of quartz or cristobalite from occupational sources) and chromium VI (hexavalent) have been classified by The International Agency for Research on Cancer (IARC) as carcinogenic to humans (Group 1). However the research on this is inconclusive and ASCC/NOHSC has not classified crystalline silica as a carcinogen. The most current research indicates no excess risk of lung cancer or other cancers from using these products.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Product is non-toxic to aquatic and terrestrial organisms.

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

Autoclaved Aerated Concrete can be treated as a common waste for disposal or dumped into a landfill site in accordance with relevant authority guidelines.

Measures should be taken to prevent dust generation during disposal and exposure and personal precautions should be observed (see Section 8 above).



SECTION 14: TRANSPORT INFORMATION

Transport Requirements:	No special transport requirements are necessary.
UN number:	None allocated
Class:	None allocated
Subsidiary Risk 1:	None allocated
Packaging Group:	None allocated
Hazchem code:	None allocated
DG Class:	None allocated
EPG:	None
Incompatibilities:	None
Proper Shipping Name:	None allocated
Marine Pollutant:	No

SECTION 15: REGULATORY INFORMATION

Poisons Schedule: None Scheduled

Exposures by inhalation to high levels of dust may be regulated under the Hazardous Substances Regulations (State and Territory) as they are applicable to Respirable Crystalline Silica, requiring exposure assessment, and control of inhalation exposure below the NES.

Persons who have potential for exposure above the NES may be required by Regulations to have periodic health surveillance including Chest X-ray (see relevant State Government Regulations and ASCC/NOHSC documentation).

SECTION 16: OTHER INFORMATION

Emergency Contact Number: Poisons Information Centre 13 11 26

For further information on this product, please contact the following:
CSR Building Products Limited (ABN 55 008 631 356),
9 Help Street, Chatswood NSW 2067, Australia.
Phone +61 2 9235 8000 or 1800 807 668 (available in Australia only). Fax +61 2 9372 5819.

Additional information:

Australian Standards References:

- AS/NZS 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 2161 Industrial Safety Gloves and Mittens (excluding electrical and medical gloves).

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)], April 2003, National Occupational Health and Safety Commission.

Authorised by:

Date of issue: June 2006

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END OF MSDS

