

### SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name:</b>	<b>Autoclaved Aerated Concrete</b>
<b>Other Names:</b>	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, Thermobloks
<b>Product Codes/Trade Names:</b>	<b>Autoclaved Aerated Concrete</b>
<b>Recommended Use:</b>	Fire Protection, Building Blocks, Noise Suppression, Construction Blocks
<b>Applicable In:</b>	Australia
<b>Supplier:</b>	CSR Building Products Limited ABN 55 008 631 356
<b>Address:</b>	Trinity 3, 39 Delhi Road, North Ryde, NSW 2113, Australia
<b>Telephone:</b>	1300 712 896
<b>Email Address:</b>	info@hebel.com.au
<b>Web Site:</b>	www.hebel.com.au
<b>Emergency Phone Number:</b>	000 Fire Brigade and Police (available in Australia only)

This Safety Data Sheet (SDS) is issued by the Supplier in accordance with National standards and guidelines from Safe Work Australia (SWA). 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 SDS by any other person or organization. The Supplier will issue a new SDS when there is a change in product specifications and/or Standards, Codes, Guidelines, or Regulations.


### SECTION 2: HAZARDS IDENTIFICATION

**STATEMENT OF HAZARDOUS NATURE:** The product as supplied is **NON-HAZARDOUS**.

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

When concrete products are cut, sawn, abraded or crushed, dust is created which contains crystalline silica, some of which may be respirable (particles small enough to go into the deep parts of the lung when breathed in), and the respirable portion is classified as **Hazardous** by the Hazardous Chemical Information Scheme from Safe Work Australia.

- **All dust generation must be controlled.**
- **The following GHS classification, pictograms, hazard and precautionary statements refer only to the respirable crystalline silica portion of uncontrolled dust generation.**
- **See Section 8 for controls to effectively minimise exposure to RCS when altering Hebel Autoclaved Aerated Concrete.**

GHS Classification	GHS Signal Word	GHS Pictogram/s
Specific Target Organ Toxicity (Repeated Exposure) Category 1 Carcinogenicity – Category 1A	<b>DANGER</b>	

<b>GHS Hazard statements</b>	<b>GHS Precautionary statements</b>
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<p>H350i May cause cancer by inhalation  H372 Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled</p>	<p>P260 – Do not breathe dust.  P264 – Wash thoroughly after handling.  P271 – Use only outdoors or in a well-ventilated area.  P280 – Wear eye/face protection and protective gloves.  P302 + P352 – If on skin, wash with plenty of soap and water.  P304 + P340 – If inhaled, remove victim 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.  P312 – Call a Poison Centre or doctor if you feel unwell.  P332 + P313 – If skin irritation occurs, get medical advice/attention.  P337 + P313 – If eye irritation persists, get medical advice/attention.  P362 – Take off contaminated clothing and wash before reuse.</p>
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**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS OF FINISHED PRODUCT**

Chemical Name:	Synonyms:	Proportion:	CAS Number:
Calcium silicate hydrate	Tobermorite	<60-80%	1344-96-3
Portland Cement	CSH, CSAH, CAF, Ettringite	<10%	65997-15-1
Quartz	Silicon Dioxide	20-40%	14808-60-7
Calcium Carbonate	Calcite	<2%	1317-65-3
Calcium Sulfate	Anhydrite, Gypsum, Bassinite	<5%	13397-24-5
Total respirable crystalline silica**		≈2-4%	14808-60-7

**\*\* Note: Cutting, Sawing and crushing of concrete will produce dust, some of which may be respirable.**

**SECTION 4: FIRST AID MEASURES**

<p><b>The following advice refers mainly to exposure to uncontrolled respirable crystalline silica following cutting or crushing of product.</b></p>	
<b>Swallowed:</b>	Rinse mouth and lips with water. Do not induce vomiting. Give water to drink to dilute stomach contents. If symptoms persist, seek medical attention.
<b>Eyes:</b>	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.
<b>Skin:</b>	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.
<b>Gross Inhalation:</b>	Remove to fresh air, away from dusty area. If symptoms persist, seek medical attention.
<b>Advice to Doctor:</b>	Treat symptomatically.



## SECTION 5: FIRE FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Non flammable. Use suitable extinguishing media for surrounding fire.
<b>Specific hazards:</b>	None
<b>Special protective equipment and precautions for firefighters:</b>	None required specific to this product.
<b>HAZCHEM Code:</b>	None allocated

## SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures:</b>	Avoid generating dust during cleanup. Wear a particulate respirator when dust is present. Wear personal protective equipment as specified in Section 8.
<b>Environmental precautions:</b>	Do not allow product to enter drains, sewers or water ways.
<b>Methods and materials for containment and cleaning up:</b>	Dust is best cleaned up by by wet methods or vacuum device to avoid making dust airborne.

## SECTION 7: HANDLING AND STORAGE

<b>Precautions for safe handling:</b>	<p>Concrete is a heavy material, and appropriate control of manual handling risk is required. Manual handling should be in accordance with Manual Handling Regulations and Codes.</p> <p>When concrete products are cut, sawn, abraded or crushed, dust is created which contains crystalline silica, some of which may be respirable. Risk assessment and controls must be used to minimise exposure to dust. See Section 8.</p>
<b>Conditions for safe storage:</b>	No special requirements. Safety aspects of stockpiles and storage areas require risk assessment and control.
<b>Incompatibilities:</b>	None

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Standards:</b>	<b>Workplace Exposure Standards for Airborne Contaminants, Safe Work Australia</b>	
	Crystalline silica (respirable dust):	TWA – 0.1 mg/m <sup>3</sup>
	Calcium silicate dust:	TWA - 10 mg/m <sup>3</sup>
	Portland cement: as respirable dust	TWA – 10 mg/m <sup>3</sup>
	Total dust (of any type or particle size):	TWA - 10 mg/m <sup>3</sup>
<b>Notes on Exposure Standards:</b>	<p>All occupational exposures to atmospheric contaminants should be kept to as low a level as is workable (practicable) and in all cases to below the Workplace Exposure Standard (WES).</p> <p>TWA (Time Weighted Average): the time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.</p>	
<b>Biological Limit Values:</b>	No biological limit allocated.	

<b>ENGINEERING CONTROLS</b>	
<input type="checkbox"/> <b>Ventilation:</b>	<p>General product use does not require ventilation.</p> <p>In situations when concrete products are cut, sawn, abraded or crushed, dust is created which contains crystalline silica, some of which may be respirable. Where this occurs:</p> <ul style="list-style-type: none"> <li>• A 75mm drop saw with cutting shroud with local extraction ventilation via a HEPA filtered Class H industrial vacuum.</li> <li>• When cutting inside a structure, use of an enclosure i.e a cutting room. Ventilation is advised to reduce dust concentrations and this will vary from natural to mechanical, with mechanical being best practice.</li> <li>• Wet cutting reduces airborne dust.</li> </ul> <p>If dust generation cannot be avoided, follow personal protection recommendations.</p>
<input type="checkbox"/> <b>Special Consideration for Repair &amp;/or Maintenance of Contaminated Equipment:</b>	<p>Recommendations on Exposure Control and Personal Protection should be followed. When dry concrete dust is present, ensure exposures to respirable crystalline silica (quartz) are maintained below WES. 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 and respiratory protection and clothing as listed below.</p>
<b>PERSONAL PROTECTION</b>	
<input type="checkbox"/> <b>Personal Hygiene</b>	Wash hands before eating, drinking, using the toilet, or smoking. Wash work clothes regularly.
<input type="checkbox"/> <b>Skin Protection:</b>	Wear loose comfortable clothing and gloves (AS 2161).
<input type="checkbox"/> <b>Eye Protection:</b>	Dust proof goggles or safety glasses with side shields or (AS 1336) to avoid grit or dust contact with eyes.
<input type="checkbox"/> <b>Respiratory Protection:</b>	<p>General product use does not require respiratory protection.</p> <p>In situations when concrete products are cut, sawn, abraded or crushed, dust is created which contains crystalline silica, some of which may be respirable.</p> <p>Wherever there is exposure to any type of dust, personal respiratory protection should be used.</p> <p>A P2 half face respirator is recommended (AS 1715 and 1716).</p> <p>When donning respiratory devices always perform a fit check. Always ensure respiratory devices are fit tested.</p>

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Off-white blocks
<b>Odour:</b>	None
<b>Odour threshold:</b>	Not applicable
<b>pH:</b>	8-10
<b>Melting point/Freezing point:</b>	Not determined
<b>Initial boiling point and range:</b>	Not applicable
<b>Vapour pressure:</b>	Not applicable
<b>Vapour density:</b>	Not applicable
<b>Specific gravity (Relative density):</b>	0.4-0.7

<b>Solubility:</b>	Not soluble
<b>Evaporation rate:</b>	Not applicable
<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>Viscosity:</b>	Not applicable
<b>Flammability:</b>	Not flammable
<b>Flash point:</b>	Not applicable
<b>Upper/lower flammability or explosive limits:</b>	Not applicable
<b>Auto-ignition temperature:</b>	Not applicable
<b>Decomposition temperature:</b>	Not determined
<b>% Volatiles:</b>	0%
<b>Volatile Organic Compounds (VOC) Content:</b> (as specified by the Green Building Council of Australia)	None

## SECTION 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable
<b>Hazardous Reactions:</b>	None
<b>Conditions to avoid:</b>	Dust generation
<b>Incompatible Materials:</b>	None
<b>Hazardous Decomposition Products:</b>	None

The following advice refers mainly to exposure to uncontrolled respirable crystalline silica following cutting or crushing of product.

Health effects information is based on reported effects in use from overseas and Australian reports.

<b>Health Effects: Acute (short term)</b>	
<b>Swallowed:</b>	Unlikely under normal industrial use, but swallowing the dust from this product may result in abdominal discomfort.
<b>Eyes:</b>	Dust is irritating to the eyes causing watering and redness. Exposure to dust may aggravate pre-existing eye conditions.
<b>Skin:</b>	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.
<b>Inhaled:</b>	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.

<b>Health Effects: Chronic (long term)</b>	
<b>Eyes:</b>	Dust may cause irritation and inflammation of the eyes and aggravate pre-existing eye conditions.
<b>Skin:</b>	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.
<b>Inhaled:</b>	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.

<b>Additional Notes</b>	
<b>Long Term Effects:</b>	Long term occupational over-exposure or prolonged breathing-in (or inhalation) of crystalline silica dust at levels above the WES carries the risk of causing serious and irreversible lung disease, including bronchitis, and silicosis (scarring of the lung) and lung cancer. 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.

#### **Acute Toxicity Data**

No specific toxicology data available, but toxicity of this product is anticipated to be very low with LD50 >5,000mg/kg.

### **SECTION 12: ECOLOGICAL INFORMATION**

<b>Eco-toxicity:</b>	Products as delivered are not biodegradable, have low ecotoxicity and are not regarded as posing any ecological risk. Crushed product and dust may form a mildly alkaline or neutral slurry when mixed with water.
<b>Persistence and Degradability:</b>	Product is persistent and would have a low degradability.
<b>Bioaccumulative potential:</b>	There is no evidence to suggest bioaccumulation will occur.
<b>Mobility in soil:</b>	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 local authority guidelines. Crushed product and dust should be kept out of storm water and sewer drains.

Measures should be taken to prevent dust generation during disposal, including using vacuum and wet sweeping dust into sealed containers with personal precautions being observed (see Section 8 above).

### **SECTION 14: TRANSPORT INFORMATION**

<b>UN number:</b>	None allocated
<b>UN Proper Shipping Name:</b>	None allocated
<b>Class and Subsidiary Risk :</b>	None allocated
<b>Packaging Group:</b>	None allocated
<b>Special Precautions for User:</b>	None
<b>HAZCHEM code:</b>	None allocated

## SECTION 15: REGULATORY INFORMATION

<b>Poisons Schedule:</b>	None Scheduled
Exposures by inhalation to high levels of dust may be regulated under the Hazardous Substances Regulations (State) as they are applicable to Respirable Crystalline Silica, requiring exposure assessment, controls and health surveillance (SWA).	

## SECTION 16: OTHER INFORMATION

<b>For further information on this product, please contact:</b>	
CSR Building Products Limited (ABN 55 008 631 356), Trinita 3, 39 Delhi Road, North Ryde, NSW 2113, Australia.	
<b>Phone:</b>	+61 2 9372 5888 or 1800 807 668 (available in Australia only)
<b>Fax:</b>	+61 2 9372 5877

### ADDITIONAL INFORMATION

#### Australian Standards References:

AS 1336	Recommended Practices for Occupational Eye Protection
AS 1715	Selection, Use and Maintenance of Respiratory Protective Devices
AS 1716	Respiratory Protective Devices
AS 2161	Industrial Safety Gloves and Mittens (excluding electrical and medical gloves)
AS NZS:4501	Occupational protective clothing
AS NZS:60335.2.69	Household and similar electrical appliances – Safety Particular requirements for wet and dry vacuum cleaners including power brush, for commercial use

#### Other References:

NOHSC:1008 (2004)	Approved Criteria for Classifying Hazardous Substances
Model Code of Practice	Preparation of Safety Data Sheets for Hazardous Chemicals, December 2011, Safe Work Australia.
Model Code of Practice	Labelling of Workplace Hazardous Chemicals, December 2011, Safe Work Australia.
Model Code of Practice	Managing Risks Of Hazardous Chemicals In The Workplace, July 2012, Safe Work Australia.
WHS	Guidance on the Classification of Hazardous Chemicals under the WHS Regulations, April 2012, Safe Work Australia.
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail, 7 <sup>th</sup> edition, National Transport Commission.
WES	Workplace Exposure Standards For Airborne Contaminants, April 2013, Safe Work Australia.
WES	Guidance On The Interpretation Of Workplace Exposure Standards For Airborne Contaminants, April 2013, Safe Work Australia.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 3 <sup>rd</sup> revised edition, United Nations, New York and Geneva, 2009.
GHS	Understanding the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), United Nations, New York and Geneva, 2010.
HSIS	Hazardous Substances Information System (HSIS), internet advisory service, Safe Work Australia.
HCIS	GHS Hazardous Chemical Information System (HCIS), internet advisory service, Safe Work Australia.

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**AUTHORISATION**

<b>Reason for Issue:</b>	Update to GHS format
<b>Authorised by:</b>	Safety Manager – CSR Hebel
<b>Date of Issue:</b>	10/5/2019

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END OF SDS

