



# CSR MATERIAL SAFETY DATA SHEET

## Hebel Mortar

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

<b>Product Name:</b>	Hebel Mortar
<b>Other Names:</b>	Cement Thick Bed Mortar
<b>Product Codes/Trade Names:</b>	Not Applicable
<b>Recommended Use:</b>	Cement-based thick-bed mortar used at the base as load-bearing levelling mortar for masonry construction, load-bearing mortar for panel construction, or as filler material
<b>Applicable In:</b>	Australia
<b>Supplier:</b>	CSR Building Products Limited ABN 55 008 631 356
<b>Address:</b>	Triniti 3, 39 Delhi Road, North Ryde, NSW 2113, Australia
<b>Telephone:</b>	+61 2 9235 8000 (or 1800 807 668 (available in Australia only))
<b>Email Address:</b>	<a href="http://www.csr.com.au/Pages/Contact-Us.aspx">http://www.csr.com.au/Pages/Contact-Us.aspx</a>
<b>Web Site:</b>	www.csr.com.au
<b>Facsimile:</b>	+61 2 9372 5819
<b>Emergency Phone Number:</b>	000 Fire Brigade and Police (available in Australia only)
<b>Poisons Information Centre:</b>	13 11 26 (available in Australia only)

This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with National standards and guidelines from Safe Work Australia (SWA – formerly ASCC/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 Standards, Codes, Guidelines, or Regulations.

### SECTION 2: HAZARD 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] 3<sup>rd</sup> Edition.

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

A low proportion of the fine dust in the supplied dry product will be respirable crystalline silica. Once wetted, in the wet or final set form, risk of any airborne respirable dust will be low, but dry residues, or dust from cutting, grinding, abrading or finishing the set product may contain respirable crystalline silica.

Risk Phrases	Safety Phrases
<b>R36/37/38:</b> Irritating to eyes, respiratory system and skin.	<b>S22:</b> Do not breathe dust.
<b>R43:</b> May cause sensitisation by skin contact.	<b>S24/25:</b> Avoid contact with skin and eyes.
<b>R48/20:</b> Harmful: danger of serious damage to health by prolonged exposure through inhalation.	<b>S29:</b> Do not empty into drains.
<b>R66:</b> Repeated exposure may cause skin dryness or cracking.	<b>S36/37/39:</b> Wear suitable protective clothing, gloves and eye/face protection.

CSR MSDS Reference: LWS-SDS-149

Date Issued: 10/08/2011



**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name:	Synonyms:	Proportion:	CAS Number:
Graded sand containing crystalline silica	Quartz	50-70%	14808-60-7
Portland cement	-	10-30%	65997-15-1
Blast furnace slag	-	10-30%	65996-69-2
Non hazardous ingredients	-	5-10%	-

**Note:** Cement in concrete contains traces (2-20 ppm) of Chromium VI (hexavalent).

**SECTION 4: FIRST AID MEASURES**

<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. If wet cement is splashed in the eye, always treat as above, and seek urgent 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>Inhaled:</b>	Remove to fresh air, away from dusty area. If symptoms persist, seek medical attention.
<b>First Aid Facilities:</b>	Eye wash station. Washing facilities with running water.
<b>Advice to Doctor:</b>	Treat symptomatically. Wet cement burns to skin or eye may result in corrosive caustic burns. Ingestion of significant amounts of cement dry or wet is unlikely. Do not induce emesis or perform gastric lavage. Neutralization with acidic agents is not advised because of increased risks of exothermic burns. Water-mineral oil soaks may aid in removing hardened cement from the skin. Ophthalmological opinion should be sought for ocular burns.

**SECTION 5: FIRE FIGHTING MEASURES**

<b>Flammability:</b>	Non flammable
<b>Suitable extinguishing media:</b>	Use carbon dioxide, foam, dry chemical or water spray as required for fire in surrounding materials.
<b>Hazards from combustion products:</b>	None
<b>Special protective precautions and equipment for fire fighters:</b>	None
<b>HAZCHEM Code:</b>	None

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

<b>Methods and materials for containment and clean up:</b>	Bag waste materials. Dust is best cleaned up by wet sweeping and/or vacuuming to avoid making dust airborne. Wetting down before sweeping up dust may be a useful control measure but will result in setting. Recommendations on Exposure Controls / Personal Protection (see Section 8 below) should be followed during spill and clean-up. Keep product out of storm water and sewer drains.
--	--

**SECTION 7: HANDLING AND STORAGE**

<b>Precautions for safe handling:</b>	When supplied in bags these need to be handled in accordance with Manual Handling Regulations and Code of Practice.
<b>Conditions for safe storage:</b>	This product should be stored in its factory packaging in a dry area. Protect from moisture to prevent hardening.
<b>Incompatibilities:</b>	None

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>National Exposure Standards:</b>	<p><b>National Occupational Exposure Standard (NES), Safe Work Australia (formerly ASCC/NOHSC)</b></p> <p>Crystalline silica (quartz): TWA – 0.1 mg/m<sup>3</sup> respirable dust (≤ 7 microns particle equivalent aerodynamic diameter)</p> <p>Portland cement: TWA – 10 mg/m<sup>3</sup> as inspirable dust</p> <p>Total dust (of any type or particle size): TWA – 10 mg/m<sup>3</sup></p>
<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 National Standard.</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. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.</p>
<b>Biological Limit Values:</b>	No biological limit allocated.
<b>ENGINEERING CONTROLS</b>	
<input type="checkbox"/> <b>Ventilation:</b>	Work methods and engineering should aim to prevent skin contact with the wet product. Keep exposures to dust as low as practicable, with the aim of maintaining respirable crystalline silica dust levels to below the NES. 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 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.
<input type="checkbox"/> <b>Special Consideration for Repair &amp;/or Maintenance of Contaminated Equipment:</b>	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. Recommendations on Exposure Control and Personal Protection should be followed.
<b>PERSONAL PROTECTION</b>	
• <b>Personal Hygiene</b>	Wash hands before eating, drinking, using the toilet, or smoking. Wash work clothes regularly.
• <b>Skin Protection:</b>	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). Impervious gloves or gauntlets and footwear are required to protect skin. Never kneel in wet cement, or allow extended contact of skin with wet cement. Remove clothing which has become

	contaminated with wet or dry cement to avoid prolonged contact with the skin. If cement gets into boots, remove socks and boots immediately and wash skin thoroughly.
<ul style="list-style-type: none"> <li>• <b>Eye Protection:</b></li> </ul>	When working with wet product, splash-resistant safety glasses with side shields or safety goggles (AS/NZ 1336) or a face shield should be worn to ensure all contact with eyes is avoided. Ventilated non-fogging goggles (dust resistant AS/NZS 1336) should be worn when working in a dusty environment.
<ul style="list-style-type: none"> <li>• <b>Respiratory Protection:</b></li> </ul>	None required if engineering and handling controls are adequate. Where engineering and handling controls are not enough to 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

<b>Appearance:</b>	Fine to medium grey coarse powder
<b>Odour:</b>	None
<b>pH, at stated concentration:</b>	11-12 (alkaline)
<b>Vapour Pressure:</b>	Not Applicable
<b>Vapour Density:</b>	Not Applicable
<b>Boiling Point/Range (°C):</b>	Not Applicable
<b>Melting Point (°C):</b>	>1200°C
<b>Solubility In Water:</b>	Slight, reacts on mixing with water forming an alkaline (caustic) solution (pH >11)
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	2.8 – 3.2
<b>FLAMMABLE MATERIALS</b>	
<ul style="list-style-type: none"> <li>• <b>Flash Point:</b></li> </ul>	Not Applicable
<ul style="list-style-type: none"> <li>• <b>Flammable (Explosive) Limits:</b></li> </ul>	Not Applicable
<ul style="list-style-type: none"> <li>• <b>Autoignition Temperature:</b></li> </ul>	Not Applicable
<b>ADDITIONAL PROPERTIES</b>	
<ul style="list-style-type: none"> <li>• <b>Evaporation Rate:</b></li> </ul>	Not Applicable
<ul style="list-style-type: none"> <li>• <b>% Volatiles:</b></li> </ul>	0%
<ul style="list-style-type: none"> <li>• <b>Volatile Organic Compounds Content (VOC):</b> (as specified by the Green Building Council of Australia)</li> </ul>	None

**SECTION 10: STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Stable
<b>Incompatible Materials:</b>	None
<b>Conditions to avoid:</b>	Dust generation. Keep free of moisture during storage.
<b>Hazardous Decomposition Products:</b>	None
<b>Hazardous Reactions:</b>	None

**SECTION 11: TOXICOLOGICAL INFORMATION**

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

**Health Effects: Acute (short term)**

<b>Swallowed:</b>	Unlikely under normal industrial use. Mildly abrasive and corrosive to mouth and throat if swallowed. May cause nausea, stomach cramps and constipation.
<b>Eyes:</b>	Irritating and corrosive to the eyes and may cause alkaline burns. Dust is irritating to the eyes. Exposure to dust may aggravate existing eye irritations.
<b>Skin:</b>	Dust is irritating and drying to the skin. Direct contact with wet product 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 product due to presence of Portland Cement.
<b>Inhaled:</b>	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.

**Health Effects: Chronic (long term)**

<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. 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.
<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.

**Additional Notes**

<b>Long Term Effects:</b>	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.  SWA has not classified crystalline silica as a carcinogen.
<b>Special Toxic Effects:</b>	Inhalation of dust, including crystalline silica dust, is considered by medical authorities to increase the risk of lung disease due to tobacco smoking.

**SECTION 12: ECOLOGICAL INFORMATION**

<b>Eco-toxicity:</b>	Product forms an alkaline slurry when mixed with water.
<b>Persistence and Degradability:</b>	Product is persistent and would have a low degradability.
<b>Mobility:</b>	A low mobility would be expected in a landfill situation.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Hebel Mortar** 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 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>	Not 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 (ASCC/NOHSC).	

**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/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 1940	The Storage and Handling of Flammable and Combustible Liquids
AS 2161	Industrial Safety Gloves and Mittens (excluding electrical and medical gloves)

**Other References:**

NOHSC:2011(2003)	National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition, April 2003, National Occupational Health and Safety Commission.
NOHSC:10005(1999)	List Of Designated Hazardous Substances, April 1999, National Occupational Health and Safety Commission, Sydney.
NOHSC:2007(1994)	National Code of Practice for the Control of Workplace Hazardous Substances (Australian States have similar Codes of Practice in each State).
NOHSC: 2012(1994)	National Code of Practice for the Labelling of Workplace Substances, March 1994, Australian Government Publishing Service, Canberra.
NES	National Occupational Exposure Standards for workplace Atmospheric Contaminants (NES) Australian Safety and Compensation Council, ASCC (Formerly NOHSC) 1995 as amended.
ADG Code	Australian Dangerous Goods Code 7 <sup>th</sup> Edition.

**AUTHORISATION**

<b>Reason for Issue:</b>	5-yearly review and update
<b>Authorised by:</b>	Marketing Manager
<b>Date of Issue:</b>	10/08/2011

Whilst the information contained in this document is based on data which, to the best of our knowledge, was accurate and reliable at the time of preparation, no responsibility can be accepted by us for errors and omissions. The provision of this information should not be construed as a recommendation to use any of our products 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. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage caused by any person acting or refraining from action as a result of this information.

END OF MSDS