

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

<b>Product Name:</b>	MiRender
<b>Other Names:</b>	None
<b>Product Codes/Trade Names:</b>	85553
<b>Recommended Use:</b>	Cement Render
<b>Applicable In:</b>	Australia
<b>Supplier:</b>	CSR Building Products Limited 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/Common/Contactus.asp">http://www.csr.com.au/Common/Contactus.asp</a>
<b>Web Site:</b>	<a href="http://www.csr.com.au">www.csr.com.au</a>
<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 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, codes, guidelines, or Regulations.

### SECTION 2: HAZARD IDENTIFICATION

**STATEMENT OF HAZARDOUS NATURE:** This product is 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. 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.

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

Risk Phrases	Safety Phrases
<b>R20/21/22:</b> Harmful by inhalation, in contact with skin and if swallowed.	<b>S22:</b> Do not breathe dust.
<b>R36/37/38:</b> Irritating to eyes, respiratory system and skin.	<b>S24/25:</b> Avoid contact with skin and eyes.
<b>R43:</b> May cause sensitisation by skin contact.	<b>S29:</b> Do not empty into drains.
<b>R48/20:</b> Danger of serious damage to health by prolonged exposure through inhalation.	<b>S36/37/39:</b> Wear suitable protective clothing, gloves and eye/face protection.
<b>R66:</b> Repeated exposure may cause skin dryness or	

CSR MSDS Reference: LWS-SDS-057

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cracking.	
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### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	Synonyms	Proportion:	CAS Number:
Inert Aggregates	n/a	20-70%	14808-60-7
Portland Cement	n/a	20-50%	65997-15-1
Additives	n/a	<10%	-----

Note: The inert aggregates in this product are mainly crystalline silica and account for the high overall crystalline silica content. Portland Cement consists of a crystalline mass manufactured from substances mined from the earth's crust. It contains trace amounts of naturally occurring chemical entities including metals such as chromium and nickel.

### 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 for 15 minutes to remove all traces. If symptoms such as irritation or redness persist, seek medical attention. If wet material is splashed in the eye, always treat as above, and seek urgent medical attention.
<b>Skin:</b>	Remove heavily contaminated clothing immediately. Wash off skin thoroughly with water. Use a mild soap if available. Shower if necessary. Seek medical attention for persistent irritation or burning of the skin.
<b>Inhaled:</b>	Remove to fresh air, away from dusty area. If symptoms persist, seek medical attention.
<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 to extinguish, as required for fire in surrounding materials.
<b>Hazards from combustion products:</b>	None
<b>Special protective precautions and equipment for fire fighters:</b>	As required by surrounding materials and fire conditions.
<b>HAZCHEM Code:</b>	None allocated

### SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>Emergency Procedure:</b>	Recommendations on Exposure Control and Personal Protection should be followed during spill clean-up.
<b>Containment Procedure:</b>	Spills are best cleaned up by vacuum device to avoid generating airborne dust.
<b>Clean Up Procedure:</b>	Wetting during clean-up will cause formation of setting cement. Keep product

	out of storm water and sewer drains.
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## SECTION 7: HANDLING AND STORAGE

<b>Handling:</b>	When supplied in bags these need to be handled in accordance with manual handling Regulations and Code of Practice.
<b>Storage:</b>	Protect from moisture to prevent hardening. Store in a cool dry place and out of the weather. Storage of product may be in concrete silos, steel bins, or plastic lined multi-ply paper bags.
<b>Incompatibilities:</b>	Material sets hard when mixed with water.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>National Exposure Standards:</b>	<p><b>National Occupational Exposure Standard (NES), Australian Safety &amp; Compensation Council, ASCC (formerly NOHSC)</b></p> <p>Crystalline silica (quartz): TWA - 0.1 mg/m<sup>3</sup> as respirable dust (<math>\leq 7</math> microns particle equivalent aerodynamic diameter).</p> <p>Portland Cement: TWA - 10 mg/m<sup>3</sup> as inspirable dust.</p> <p>Chromium VI (hexavalent): TWA - 0.05 mg/m<sup>3</sup> Notices – Sen</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> <p>Sen Notice: Substance can cause specific immune response in some people ("sensitisation"), causing skin rash or asthma, even when exposure is minimal.</p>
<b>Biological Limit Values:</b>	No biological limit allocated.
<b>ENGINEERING CONTROLS</b>	
<input type="checkbox"/> <b>Ventilation:</b>	All work with dry product should be carried out in such a way as to minimise dust generation, exposure to dust and repeated or extended skin contact. When handling dry, 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 instructions below if no local exhaust ventilation is available. Local dust extraction and collection may be used, if necessary, to control airborne dust levels.
<input type="checkbox"/> <b>Special Consideration for Repair &amp;/or Maintenance of Contaminated Equipment:</b>	Work areas should be cleaned regularly. Recommendations on Exposure Control and Personal Protection should be followed.
<b>PERSONAL PROTECTION</b>	
<input type="checkbox"/> <b>Personal Hygiene:</b>	Remove clothing which has become contaminated with wet or dry product to avoid prolonged contact with the skin. If wet product gets into boots, remove socks and boots immediately and wash skin thoroughly. Wash work clothes regularly. Wash hands before eating, drinking, using the toilet, or smoking.
<input type="checkbox"/> <b>Skin Protection:</b>	Work methods and engineering should aim to minimise contact with wet product

	onto exposed skin because of the cement content. When handling dry or wet mortar, wet concrete, or grout, personnel should wear protective clothing and impervious footwear, and gloves such as PVC (see Australian and New Zealand Standards AS/NZS 4501 and AS 2161). Never kneel in wet product, or allow extended contact of skin with wet cement.
<input type="checkbox"/> <b>Eye Protection:</b>	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.
<input type="checkbox"/> <b>Respiratory Protection:</b>	Where engineering and handling controls are not adequate to minimise exposure to total dust and to respirable crystalline silica wear a suitable P1 or P2 particulate respirator (AS/NZS 1715 and AS/NZS 1716). Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly. For dust levels approaching or exceeding the NES (see above) a more effective particulate respirator as described in AS/NZS 1715 should be worn. Procedures for effective use of respirators should be applied and supervised.
<input type="checkbox"/> <b>Thermal Protection:</b>	None should be needed under normal circumstances.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Grey Powder
<b>Odour:</b>	Cement
<b>pH, at stated concentration:</b>	Alkaline (approx 12)
<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>	approx 2
<b>FLAMMABLE MATERIALS</b>	
<input type="checkbox"/> <b>Flash Point:</b>	Not applicable
<input type="checkbox"/> <b>Flash Point Method:</b>	Not applicable
<input type="checkbox"/> <b>Flammable (Explosive) Limit - Upper:</b>	Not applicable
<input type="checkbox"/> <b>Flammable (Explosive) Limit - Lower:</b>	Not applicable
<input type="checkbox"/> <b>Autoignition Temperature:</b>	Not applicable
<b>ADDITIONAL PROPERTIES</b>	
<input type="checkbox"/> <b>Evaporation Rate</b>	Not applicable
<input type="checkbox"/> <b>% Volatiles</b>	0%
<input type="checkbox"/> <b>Volatile Organic Compounds Content (VOC):</b> (as specified by the Green Building Council of Australia)	0%

**SECTION 10: STABILITY AND REACTIVITY**

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

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Toxicology data:** No specific toxicology data available for this product. Health effects information is based on reported effects in use from overseas and Australian reports on mixtures of Portland Cements and aggregates.

**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>Swallowed:</b>	No chronic effects reported.
<b>Eyes:</b>	Dust may cause irritation and inflammation of the cornea.
<b>Skin:</b>	Repeated contact causes irritation and drying of the skin and can result in skin reddening and skin rash (dermatitis) due to presence of Portland Cement. 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.  Repeated and prolonged exposure to dust levels which exceed the NES for crystalline silica (see above) may occur. This can cause bronchitis, and silicosis (scarring of the lung). Long term overexposure to respirable crystalline silica dust may increase the risk of other irreversible and serious disorders including scleroderma (a disease affecting the connective tissue of the skin, joints, blood vessels and internal organs).

**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
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	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.  ASCC/NOHSC has not classified crystalline silica as a carcinogen. Portland Cement is not classified as a carcinogen by ASCC. Of the ingredients, Hexavalent Chromium (Cr VI) is classified as a carcinogen by ASCC.
<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

MiRender 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 above).

## SECTION 14: TRANSPORT INFORMATION

<b>Proper Shipping Name:</b>	None allocated
<b>UN number:</b>	None allocated
<b>DG Class:</b>	None allocated
<b>Subsidiary Risk 1:</b>	None allocated
<b>Packaging Group:</b>	None allocated
<b>HAZCHEM code:</b>	None allocated
<b>Marine Pollutant:</b>	No
<b>Special Precautions for User:</b>	Avoid generating and breathing dust.

## SECTION 15: REGULATORY INFORMATION

<b>Poisons Schedule:</b>	Not scheduled
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## SECTION 16: OTHER INFORMATION

**For further information on this product, please contact:**

CSR Building Products Limited (ABN 55 008 631 356), Trinita 3, 39 Delhi Road, North Ryde, NSW 2113, Australia

<b>Phone:</b>	Phone +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 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 6 <sup>th</sup> Edition.

## AUTHORISATION

Reason for Issue: New CSR address  
 Authorised by: Renee Bailey  
 Date of Issue: 1/09/2010

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END OF MSDS