

# RESPIRABLE CRYSTALLINE SILICA

WORKPLACE EXPOSURE IS PREVENTABLE



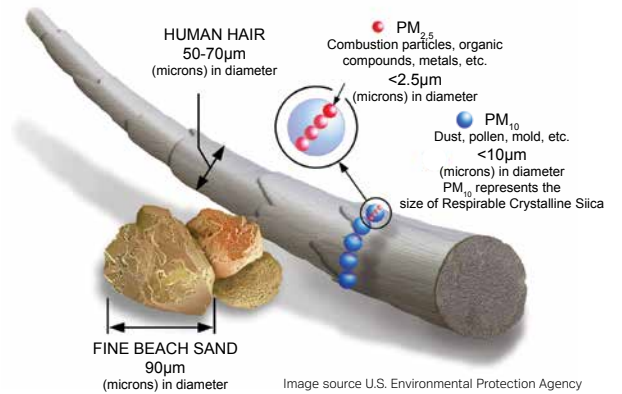
## WHAT IS CRYSTALLINE SILICA?

Crystalline Silica is everywhere. It is found in naturally in stone, rocks, sand, gravel and clay.

## WHAT IS RESPIRABLE CRYSTALLINE SILICA DUST?





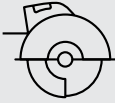





Respirable crystalline silica is dust in materials and products containing silica. It is released when mechanically treated (e.g. cutting, sawing, abrading such as rasping, scraping, grinding down, chasing or crushing). This dust is of concern due to its size as it gets caught deep in your lungs and can cause long term damage.

CSR has conducted tests which have determined the amount of Crystalline silica that may become respirable size particles when drilling or cutting fibre cement sheets.



## IF YOU USE THE CORRECT EQUIPMENT FIBRE CEMENT IS SAFE TO USE

CSR has made the following requirements

<p><b>Cut Outdoors *</b></p>	 <p>The ventilation outdoors is greater than indoors, and should reduce exposure</p>	
<p><b>Use-Tool Dust Extraction</b></p>	 <p>Use on-tool dust extraction when using power tools to drill and cut Fibre Cement, with a vacuum fitted with a HEPA M or H Class Filter</p>	
<p><b>Correct Equipment</b></p>	 <p>Use a plunge saw with a specifically designed Fibre Cement blade</p>	
<p><b>Use a Respirator</b></p>	 <p>Use a half face P2 respirator, it is essential that respirators are fit tested and workers are cleanly shaven to obtain a good seal</p>	
<p><b>Clean Up</b></p>	 <p>When completing your work, clean up using a vacuum fitted with a HEPA M or H Class Filter, rather than a broom as sweeping creates more dust</p>	

Independent testing was conducted by Safe Environments Pty Limited to EN 689 and ISO 16258-1 (NATA accreditation 17139).



### Independent testing conducted June 2021

The activity of cutting fibre cement sheets has been assessed and is considered low risk when people are trained in the task, equipment is used and maintained to manufacturer requirements and all controls as indicated are correctly in place.

### Regular monitoring of people conducting this activity is highly recommended.

Disclaimer. It is the responsibility of the user to review and confirm applied controls meet exposure standards.

[cemintel.com.au](http://cemintel.com.au) | [csr.com.au](http://csr.com.au)

**CSR**

## NON-Hazardous, NON-Dangerous Goods

### 1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

**Product name:** Cemintel® Fibre Cement

#### Synonyms

Texture Base Sheet  
Ceminseal Wallboard  
Cladding Sheet  
Eaves Lining Sheet  
Soffitline  
Compressed Sheet  
Commercial ExpressPanel  
Ceramic Tile Underlay  
Smooth and Woodgrain Plank  
Headland Weatherboard  
Endeavour Weatherboard  
Scarborough Weatherboard  
Commercial Rendaline  
Barestone Original  
Barestone Ash  
Barestone Lunar  
Barestone Graphite  
Balmoral Weatherboard  
Cemintel Trims  
Edge Ribbon 150U  
Edge Bond 75V  
Edge Oxford 150V  
Edge York 300V  
Edge Crown 400V  
Constructafloor  
Aspect Cladding  
Mosaic  
SimpleLine  
Cavity Battens  
Rigid Air Barrier

**Recommended use:** Used as external cladding (sheets, planks and weatherboards), cavity battens, internal lining including wet areas, bracing sheets, lining eaves and as compressed sheeting for flooring and underlay for tiles. Compressed sheets may be also used as building facades.

**Supplier:** CSR Building Products Ltd  
**ABN:** 55 008 631 356  
**Street Address:** Triniti 3, 39 Delhi Road  
North Ryde NSW 2113  
Australia  
**Telephone:** +61 2 9235 8000 (or 1800 807 668 within Australia)

**Emergency Telephone number:** 1300 369 448 (Bus Hrs, Mon-Fri, 8am-5pm, AEST)

## 2. HAZARDS IDENTIFICATION

Based on available information, this material is not classified as hazardous according to criteria of Safe Work Australia GHS 7.

The fine dust in/on the supplied product may include respirable crystalline silica. Cutting, breaking, drilling, sawing, grinding and finishing may generate dust which is **Hazardous**. Recommendations on Exposure Controls/Personal Protection (see Section 8 below) should be followed.

**Poison Schedule:** Not Applicable

### DANGEROUS GOOD CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

## 3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Calcium silicate hydrate	1344-95-2	<60 % (w/w)
Crystalline Silica (Sand, Quartz)	14808-60-7	20 - 55 % (w/w)
Cellulose (from wood pulp)	9004-34-6	<15 % (w/w)
Water	7732-18-5	<15 % (w/w)
Other non hazardous ingredients (fillers, pigments, acrylic sealers and surface coatings)		<10 % (w/w)
		100%

Note: The respirable crystalline silica (quartz) content (if any) is less than 0.1%

## 4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

**Inhalation:** Not applicable as supplied.

**Skin Contact:** Not applicable as supplied.

**Eye contact:** If in eyes wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**Ingestion:** Not applicable as supplied.

**Notes to physician:** Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

**Hazchem Code:** Not applicable.

**Suitable extinguishing media:** If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

# Safety Data Sheet

CEMINTEL®

**Specific hazards:** Non-combustible material.

**Fire fighting further advice:** Not applicable.

## 6. ACCIDENTAL RELEASE MEASURES

### SMALL SPILLS

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. Bag waste materials.

### LARGE SPILLS

Collect and dispose of large pieces. 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. Bag waste materials.

**Dangerous Goods - Initial Emergency Response Guide No:** Not applicable

## 7. HANDLING AND STORAGE

**Handling:** Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

**Storage:** Not applicable as supplied.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### National occupational exposure limits:

	TWA		STEL		NOTICES
	ppm	mg/m3	ppm	mg/m3	
Calcium silicate	-	10	-	-	-
Cellulose (paper fibre)	-	10	-	-	-
Crystalline Silica - Quartz (respirable dust)	-	0.05	-	-	-

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

**Biological Limit Values:** As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the following ingredients in this material may require Health Surveillance:

Crystalline silica

For detailed information see "Guidelines for Health Surveillance (Safe Work Australia)"

**Engineering Measures:** Keep exposures to dust as low as practicable. If power tools are used, they should be fitted with an efficient and well maintained on tool dust extraction device with a HEPA M class filter. Use a plunge saw with a specifically designed fibre cement blade.

Work in the open air and within external openings (such as doors and windows in buildings) is recommended. Local mechanical ventilation/extraction may be required to control airborne dust levels. Unpowered hand tools generate less dust when cutting or sanding. If generated dust cannot be avoided follow personal protection recommendations. Use a vacuum fitted with a HEPA M class filter instead of sweeping when cleaning dust generated from fibre cement panels.

**Special Consideration for Repair and/or Maintenance of Contaminated Equipment:** 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, recommendations on Exposure Control and Personal Protection should be followed.

**Personal Protection Equipment:** SAFETY SHOES, OVERALLS, GLOVES, RESPIRATOR.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

When handling fibre cement, the use of a respirator is not required. When using power tools for cutting, drilling and sanding, personal respiratory protection must be used to reduce exposure to the level of airborne respirable crystalline silica.

A suitable P1 or P2 particulate respirator 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.

Wear safety shoes, overalls, gloves. Available information suggests that gloves made from leather should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

**Hygiene measures:** Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form:** Flat sheets or mouldings, which may have a tinted or primed finish  
**Colour:** Grey  
**Odour:** Odourless

**Solubility:** Insoluble in water  
**Specific Gravity:** 1.3 – 1.7  
**Relative Vapour Density (air=1):** N App  
**Vapour Pressure (20 °C):** N App  
**Flash Point (°C):** N App  
**Flammability Limits (%):** Non flammable  
**Autoignition Temperature (°C):** N App  
**Melting Point/Range (°C):** N App  
**Boiling Point/Range (°C):** N App  
**pH:** N App  
**Viscosity:** N App  
**Total VOC (g/Litre):** N App

(Typical values only - consult specification sheet)  
N Av = Not available, N App = Not applicable

## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable

**Conditions to avoid:** Dust generation

**Incompatible materials:** Strong acids

**Hazardous decomposition products:** None

**Hazardous reactions:** None

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

### Acute Effects

**Inhalation:** Not applicable as supplied. If material is cut or mechanically abraded may be an irritant to mucous membranes and respiratory tract.

**Skin contact:** Not applicable as supplied. If material is cut or mechanically abraded, contact with skin may result in irritation.

**Ingestion:** Not applicable as supplied. If material is cut or mechanically abraded swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

**Eye contact:** Not applicable as supplied. If material is cut or mechanically abraded may be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

### Acute toxicity

**Inhalation:** This material has been classified as not hazardous for acute inhalation exposure. Acute toxicity estimate (based on ingredients):  $LC_{50} > 5.0$  mg/L for dust.

**Skin contact:** This material has been classified as not hazardous for acute dermal exposure. Acute toxicity estimate (based on ingredients):  $LD_{50} > 2,000$  mg/Kg bw

**Ingestion:** This material has been classified as not hazardous for acute ingestion exposure. Acute toxicity estimate (based on ingredients):  $LD_{50} > 2,000$  mg/Kg bw

**Corrosion/Irritancy:** Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as not corrosive or irritating to skin.

**Sensitisation:** Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

**Aspiration hazard:** This material has been classified as not an aspiration hazard.

**Specific target organ toxicity (single exposure):** This material has been classified as not a specific hazard to target organs by a single exposure.

### Chronic Toxicity

**Mutagenicity:** This material has been classified as not a mutagen.

**Carcinogenicity:** This material has been classified as not a carcinogen.

**Reproductive toxicity (including via lactation):** This material has been classified as not a reproductive toxicant.

**Specific target organ toxicity (repeat exposure):** This material has been classified as not a specific hazard to target organs by repeat exposure.

**Crystalline Silica:** Long term occupational over-exposure or prolonged breathing-in (or inhalation) of crystalline silica dust at levels above the TWA 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.

**Specific Toxic Effects:** Inhalation of dust, including crystalline silica dust, is considered by medical authorities to increase the risk of lung disease due to tobacco smoking.

## 12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

**Acute aquatic hazard:** This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

**Long-term aquatic hazard:** This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, Acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log K<sub>ow</sub> < 4.

**Ecotoxicity:** No information available.

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

## 14. TRANSPORT INFORMATION

### ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

### MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

### AIR TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous

Goods Regulations for transport by air.

## 15. REGULATORY INFORMATION

**This material is not subject to the following international agreements:**

Montreal Protocol (Ozone depleting substances)  
The Stockholm Convention (Persistent Organic Pollutants)  
The Rotterdam Convention (Prior Informed Consent)  
Basel Convention (Hazardous Waste)  
International Convention for the Prevention of Pollution from Ships (MARPOL)

**This material/constituent(s) is covered by the following requirements:**

The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth): Not Applicable.

AICIS Status: Formulations where all components are AICS listed.

## 16. OTHER INFORMATION

Reason for issue: Revised

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd on behalf of its client.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.