

## SAFETY DATA SHEET - FOR INFORMATION ONLY

These products are classified as NON-HAZARDOUS, and a Safety Data Sheet (SDS) is not required under Australian regulations.



### FBS-1 MINERAL WOOL (stone/rock) Insulation - Biosoluble and Low Biopersistence

Non-Hazardous

Non-Dangerous Goods

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

<b>Product Name:</b>	<b>MINERAL WOOL (stone/rock) INSULATION</b>
<b>Other Names:</b>	Man-Made Vitreous Fibres (MMVF), FBS-1 Mineral Wool (stone/rock) biosoluble and low biopersistence Insulation is made into many insulation products having individual trade names such as FBS-1 Rockwool Batts, Fibermesh 450 and 650, Fibertex 350/ 450/ 650/ 820(board, blanket & strip), Curtain wall batts, Party wall batts, Fire Damper strips, FZ Batts, Party wall sealer and Batten fillers,
<b>Recommended Use:</b>	Thermal, acoustic insulation, and fire protection. Used in homes, public and commercial buildings, warehouses, industrial and petrochemical plants, motor vehicles, ships, public transport, power stations, white goods and horticulture.
<b>Supplier:</b>	CSR Building Products Limited ABN 55 008 631 356
<b>Address:</b>	Triniti 3, Level 5, 39 Delhi Road, North Ryde NSW 2113 Australia
<b>Telephone:</b>	1800 354 044 (available in Australia only)
<b>Email address:</b>	bradfordwebenq@csr.com.au
<b>Website:</b>	<a href="https://www.csr.com.au/">https://www.csr.com.au/</a>
<b>Emergency contact:</b>	000 Fire Brigade and Police or 13 11 26 Poisons Information Centre (available in Australia only)

As FBS-1 Mineral Wool (stone/rock) Insulation products sold in Australia and New Zealand by CSR Bradford is supplied in the form of batts, slabs, rolls, panels or sheets that may be faced with foil or other facings. The fibrous wool insulation material present in these products is manufactured in the form of modified (bonded or coated) Rockwool.

FBS-1 Rockwool Insulation products are **classified as NON-HAZARDOUS, and a Safety Data Sheet (SDS) is not required under Australian regulations**. However, this SDS is issued by ICANZ members for product information to users, installers and the community. This is not specific to manufacturing. It aligns with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), as adopted by Safe Work Australia (SWA) and the SWA model SDS. These information sheets are available from <https://www.bradfordinsulation.com.au/> or on request. The health & safety information for these products must not be altered, deleted or added to.

Certified FBS-1 stone/rock wool insulation products are manufactured and assessed according to the protocols outlined by the European Certification Board for Mineral Wool.

#### SECTION 2: HAZARDS IDENTIFICATION

Stone/rock wool Insulation products are classified as **Non-Hazardous** according to the Globally Harmonised System (GHS) and Safe Work Australia. They are classified as **Non-Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. No GHS signal words, hazard statements or pictograms/symbols are applicable. Please refer to local workplace health and safety guidelines as applicable

This Safety Data Sheet has been prepared to align with Safe Work Australia Guidelines where possible.

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

<b>Chemical Name:</b>	<b>Proportion:</b>
MMVF - Mineral Wool (stone/rock) – Man-made vitreous fibres with random orientation with alkaline earth oxides and alkali earth oxides content greater than 18% by weight.	>95%
fibre coating and binding agents, dust suppression agents	<5%

**SECTION 4: FIRST AID MEASURES**

<b>Ingested:</b>	Rinse lips and mouth with water but do not swallow. If discomfort persists, seek medical attention.
<b>Eye:</b>	Flush with clean water. If discomfort persists, seek medical attention.
<b>Skin:</b>	Flush off with clean water. If discomfort persists, seek medical attention.
<b>Inhaled:</b>	Remove to fresh air. If symptoms persist, seek medical attention.
<b>Advice to doctor:</b>	<b>Not known to cause any acute or chronic health effects.</b> Can be slightly itchy on prolonged contact with skin. Treatment should be directed toward cleansing the affected area and symptomatic treatment as necessary.

**SECTION 5: FIRE FIGHTING MEASURES**

<b>Flammability:</b>	Non-flammable.
<b>Suitable Extinguishing Media:</b>	As needed for surrounding fire conditions. Any extinguishing media may be used as required. Water fog may be used to cool intact containers and nearby storage areas.
<b>Hazards from combustion products:</b>	FBS-1 Mineral Wool (stone/rock) Insulation is non-flammable, but the plastic wrapping, fibre coating and binding agents, dust suppression agents, and some facings, may decompose, smoulder or burn in a fire or when heated above 300°C. If product is present in a fire, toxic gases or smoke may be evolved depending on surrounding fire conditions.
<b>Fire Fighting Procedures:</b>	As needed for surrounding fire conditions.
<b>HAZCHEM Code:</b>	None allocated.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

<b>Containment Procedure:</b>	If product is torn or loose, cover or reseal to minimise dust and fibre release. Reuse where possible or place in a sealable plastic bag for disposal according to local authority guidelines.
<b>Clean Up Procedure:</b>	Personnel directly involved in clean-up of loose material should wear personal protective equipment as described in Section 8. Clean area so as to avoid dispersion of loose material or fibre using wet sweep methods if practicable, or vacuum cleaner.

**SECTION 7: HANDLING & STORAGE**

<b>Handling:</b>	<p>These products are safe in use.</p> <p>Once installed, the product does not release dust or fibres unless disturbed.</p> <p>Handling, installing or removing the product may result in some dust and airborne fibre.</p> <p>Product must be kept dry during installation and use.</p> <p>Minimise eye or skin contact and inhalation during handling, installation and removal (see Section 8). Observe good personal hygiene, including washing hands before eating. Remove personal protective equipment with care and before entering eating areas.</p>
<b>Storage:</b>	Store in original packing in cool dry area, away from exposure to weather, foodstuffs and children. Do not allow to get wet. Avoid storing for long periods under UV light (direct sunlight). Ensure packages retain their original labels or are correctly re-labelled, protected from physical damage, and sealed when not in use.
<b>Incompatibilities:</b>	None

This Safety Data Sheet has been prepared to align with Safe Work Australia Guidelines where possible.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>National occupational exposure limits:</b>	<p>No value assigned for this specific material. However, when the material is cut, ground or abraded the following is applicable:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">TWA</th> <th colspan="2">STEL</th> <th rowspan="2">NOTICES</th> </tr> <tr> <th>ppm</th> <th>mg/m3</th> <th>ppm</th> <th>mg/m3</th> </tr> </thead> <tbody> <tr> <td>Inhalable dust</td> <td style="text-align: center;">-</td> <td style="text-align: center;">10</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Man-Made Vitreous (Silicate) Fibres (MMVF) - [Glass wool, rock (stone) wool, slag wool and continuous glass filament] (i)(k) and Low Biopersistence MMVF(m)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">2 mg/m3 (inhalable dust)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> </tbody> </table> <p>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.</p>		TWA		STEL		NOTICES	ppm	mg/m3	ppm	mg/m3	Inhalable dust	-	10	-	-	-	Man-Made Vitreous (Silicate) Fibres (MMVF) - [Glass wool, rock (stone) wool, slag wool and continuous glass filament] (i)(k) and Low Biopersistence MMVF(m)	-	2 mg/m3 (inhalable dust)	-	-	-
	TWA		STEL		NOTICES																		
	ppm	mg/m3	ppm	mg/m3																			
Inhalable dust	-	10	-	-	-																		
Man-Made Vitreous (Silicate) Fibres (MMVF) - [Glass wool, rock (stone) wool, slag wool and continuous glass filament] (i)(k) and Low Biopersistence MMVF(m)	-	2 mg/m3 (inhalable dust)	-	-	-																		
<b>Engineering Controls, Ventilation:</b>	<p>During most applications and installations no special ventilation will be required. However, if installing in dusty or poorly ventilated areas, or during the first heat-up cycle in high-temperature applications, local exhaust ventilation should be considered. Work practices should aim to minimise the release of, and exposure to, fibres and/or dust. Hand tools generate the least amount of dust and fibres. If power tools are used directly on the product appropriate dust collection systems are recommended. Work areas should be cleaned regularly, and vacuuming or wet sweeping is recommended.</p>																						
<b>Personal Protection</b>																							
<b>Skin Protection:</b>	<p>Direct skin contact can be minimised by wearing long-sleeved shirts and long trousers, a cap or hat, and standard duty gloves conforming to Australian Standard AS 2161. Work clothes should be washed regularly and separately from other clothes</p>																						
<b>Eye Protection:</b>	<p>When handling these products, particularly overhead or in enclosed or poorly ventilated areas such as ceiling spaces or risers, eye contact with dust or fibre can be avoided by wearing ventilated non-fogging dust-resistant goggles conforming to Australian and New Zealand Standards AS/NZS 1336.</p>																						
<b>Respiratory Protection:</b>	<p>If dust is generated in enclosed or poorly ventilated areas, an approved particulate respirator conforming to Australian and New Zealand Standards AS/NZS 1715 and 1716 is recommended. P1, P2 or N95 type respirators are appropriate. Use only respirators that bear the Australian Standards mark and are fitted and maintained correctly and kept in clean storage when not in use.</p>																						
<b>Personal Hygiene:</b>	<p>Washing of exposed skin with soap and water as required is recommended as a comfort and hygiene measure.</p>																						

This Safety Data Sheet has been prepared to align with Safe Work Australia Guidelines where possible.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	A matt of fibrous material resembling wool. It is supplied in different shapes and sizes, in outer packaging. It may be rigid or flexible, and facings such as aluminium foil, vinyl, and synthetic tissues applied to meet specific purposes.
<b>Odour:</b>	Normally a slight amine odour when the package is first opened, however under certain atmospheric, moisture or production conditions the intensity of the odour may increase for a short period of time. Refer to the manufacturer for further information.
<b>pH:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable
<b>Melting Point:</b>	> 1000°C
<b>Vapour Pressure/Density:</b>	Not applicable
<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	Generally low, but variable depending on facings
<b>Solubility in water:</b>	Insoluble
<b>Volatile Organic Compounds (VOC) Content / % Volatiles:</b>	extremely low; <1, < 0.02mg/m <sup>3</sup>
<b>Flash Point:</b>	Not applicable
<b>Decomposition Temperature:</b>	> 250°C (Depends on the products, e.g. Fibertex/ Fireseal 100kg/m <sup>3</sup> products are suitable for a maximum surface temperature of 650°C in accordance with ASTM C411-19, ASMT C447-15 and ASTM C612-14 (2019))
<b>Lower/Upper Explosive Limits:</b>	Not applicable

**SECTION 10: STABILITY AND REACTIVITY**

<b>Chemical Stability:</b>	Products are stable. The binder is also stable and will remain intact for the life of the product when kept dry and under normal atmospheric conditions.
<b>Incompatible Materials/ Conditions to Avoid:</b>	No reported incompatibilities. Acids, alkalis or organic solvents may cause degradation of resin binder.
<b>Hazardous Reactions/ Decomposition Products:</b>	None known

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Toxicology data:** The fibre component of these products, before modification into the final Mineral Wool (stone/rock) insulation material, is listed by Safe Work Australia as Man-made Vitreous Fibre (MMVF) (stone/rock), which is Mineral Wool, biosoluble and of low biopersistence. It is considered non-hazardous.

Refer IARC 2002 Note Q for more detail.

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

<b>Swallowed:</b>	Unlikely in normal use, but may result in temporary itching of the lips, mouth, and throat. Attempting to swallow large amounts would be expected to cause gagging and possibly vomiting and refer to Section 4
<b>Eyes:</b>	May cause eye discomfort resulting in watering and redness.
<b>Skin:</b>	Handling repeatedly during installation may cause temporary irritation of exposed skin. This is not an allergy, or chemical irritation; it is a micro abrasion and usually disappears quickly.
<b>Inhaled:</b>	Unprotected exposure to high levels of dust of these products (during installation or removal) may cause discomfort of the nose, throat, and upper and lower respiratory tract.

**Note: Products used in high temperature applications** (above 200°C) may release fumes from the bonding and or dust suppression agents, during initial heat-up. In these applications and where suitable protective equipment is not worn (see Section 8), then some irritation to the eyes, nose, throat and respiratory tract may occur. In confined or poorly ventilated areas, use air-supplied respirators during the first heat-up cycle.

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

There are no known long-term health effects.

This Safety Data Sheet has been prepared to align with Safe Work Australia Guidelines where possible.

**SECTION 12: ECOLOGICAL INFORMATION**

<b>Ecotoxicity:</b>	These products are widely used for energy efficiency applications. Neither the raw materials nor the finished product contain ozone-depleting chemicals. These products are not classified as hazardous air pollutants. No specific data is available on ecotoxicity, but estimations based on toxicity information suggest that the materials in these products are not toxic or harmful to fish, birds, insects, wildlife or organisms in the environment.
<b>Persistence and Degradability:</b>	In most ecosystems, it would be expected to solubilize or biodegrade over a period of weeks to months. Binder-coated insulation wool is hydrophobic, and in water or soil no adverse environmental effects would be expected.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Place in plastic bags or containers for disposal in accordance with local authority guidelines. Label as NON-HAZARDOUS insulation wool or as general building waste (non-hazardous), to assist local authorities waste disposal sites. Local and State authorities usually regard Mineral Wool (stone/rock). Insulation as General Solid Waste (non-putrescible), and local authorities will advise any local handling arrangements at their disposal sites.

**SECTION 14: TRANSPORTATION INFORMATION**

<b>Transport Requirements:</b>	FBS-1 Mineral Wool (stone/rock) Insulation products are not classified as Dangerous Goods and have no special transport requirements.		
<b>UN number:</b> None allocated	<b>Class:</b> None allocated	<b>Subsidiary Risk:</b> None allocated	
<b>Packing Group:</b> None allocated	<b>HAZCHEM code:</b> None allocated		

**SECTION 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: All components of this product are listed on or exempt from the Australian Inventory of Industrial Chemicals (AIC).

This Safety Data Sheet has been prepared to align with Safe Work Australia Guidelines where possible.

## SECTION 16: OTHER INFORMATION

The following references are intended as guides to good industrial practice applicable to building and construction products.

### Australian Standards References:

AS/NZS 1336	Recommended Practices for Occupational Eye Protection
AS/NZS 1715, 1716	Selection, Use and Maintenance of Respiratory Protective Devices
AS 2161	Industrial Safety Gloves and Mittens (excluding electrical and medical gloves)

### Other References:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition, National Transport Commission.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 7th revised edition, United Nations, New York, and Geneva, 2013.
HSIS	Hazardous Substances Information System (HSIS), internet advisory service, Safe Work Australia.
IARC	International Agency for Research on Cancer (2002 Monograph)
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.
NOHSC:1008 (2004)	Approved Criteria for Classifying Hazardous Substances
WES/WEL	Workplace Exposure Standards/Limits For Airborne Contaminants, Safe Work Australia.
WES/WEL	Guidance On The Interpretation Of Workplace Exposure Standards/Limits For Airborne Contaminants, Safe Work Australia.

The information contained in this document is accurate and reliable at the time of preparation. The provision of this information should not be construed as a recommendation to use any 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.

**Issue Date: 06/02/2024**

**END of SDS**

This Safety Data Sheet has been prepared to align with Safe Work Australia Guidelines where possible.