



# Rhino Batts & Blanket (Glasswool)

## 1. Identification

<b>Product Name:</b>	Rhino Batts
<b>Other Names:</b>	FBS-1 Glasswool Insulation, Rhino Wall & Ceiling Batts, Rhino Partitioning Batts, Rhino Sound Batts, Rhino Unfaced Blanket, Rhino Unfaced Acoustic Blanket.
<b>Recommended Use:</b>	Thermal and acoustic insulation, energy conservation, building applications and appliance applications. Used in homes, public and commercial buildings, warehouses, industrial and petrochemical plants, motor vehicles, ships, public transport, marine, power station and whitegoods.
<b>Applicable In:</b>	Australia
<b>Supplier:</b>	Thor Building Products Pty Ltd
<b>Address:</b>	293 Earnshaw Road, Northgate, QLD, 4013
<b>Telephone:</b>	1300 880 828
<b>Website:</b>	<a href="http://www.thorbuilding.com.au">www.thorbuilding.com.au</a>
<b>Facsimile:</b>	07 3219 6833
<b>Manufacturer:</b>	CSR Building Products Limited ABN 55 008 631 356
<b>Telephone:</b>	1800 354 044 (available in Australia only)
<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)

As FBS-1 Glasswool Insulation products manufactured or sold in Australia are classified as **NON-HAZARDOUS**, a Safety Data Sheet (SDS) is not strictly required under Australian Regulations. As such, this Safe Use Information Sheet (SUIS) is issued by CSR Bradford for the information of users, installers and the community. It has been formatted in accordance with the Code on Preparation of a Safety Data Sheets for hazardous chemicals, December 2011, Safe Work Australia (SWA – formerly ASCC/NOHSC).

The information in this SUIS must not be altered, deleted or added to. The Supplier will not accept any responsibility for any changes made to its SUIS by any other person or organization. The Supplier will issue a new SUIS when there is a change in product specifications and/or ASCC standards, codes, guidelines, or Regulations.

## 2. Hazard(s) Identification

### STATEMENT OF HAZARDOUS NATURE:

Classified as **Non-Hazardous** according to the Approved Criteria For Classifying Hazardous Substances [NOHSC: 1008] 3<sup>rd</sup> Edition. FBS-1 Glasswool Insulation is classified as **Non-Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail in typical installations there will be no identifiable risk to health from these products. Any work area presents hazards, and general safety risks.



### 3. Composition / Information on Ingredients

Chemical Name:	Synonyms	Proportion:	CAS Number:
Mineral Glasswool fibre (amorphous, non-crystalline, bio-soluble – Note Q applicable)		>85%	-
Heat-cured resin (fibre binding agent)		<15%	25104-55-6
Mineral oil (solvent-refined dust suppression agent)		<2%	8012-95-1

**Note:** Traces (<0.1%) of volatile original components of resin may remain in recently manufactured product.

### 4. First Aid Measures

<b>Swallowed:</b>	Rinse lips and mouth with water.
<b>Eyes:</b>	Flush with clean water. If discomfort persists, seek medical attention.
<b>Skin:</b>	Flush off with water, preferably running. If any itch or discomfort persists, seek medical attention.
<b>Inhaled:</b>	Remove to fresh air. If symptoms persist, seek medical attention.
<b>Advice to Doctor:</b>	Any symptoms and signs of ill-health are likely to be due to other causes. Can be slightly itchy on prolonged contact with skin. Does not produce any acute or chronic health effects. Treatment should be directed toward cleansing the skin and symptomatic treatment as necessary.

### 5. Fire Fighting Measures

<b>Flammability:</b>	Non-flammable, will not burn.
<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 Glasswool Insulation is non-flammable, but the plastic wrapping, resin binder, and some facings may decompose, smolder 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. If required, evacuate area and contact emergency services; remain upwind and notify those downwind of fire hazard; and wear protective equipment including Self-Contained Breathing Apparatus (SCBA).
<b>HAZCHEM Code:</b>	None allocated.



### 6. Accidental Release Measures

<b>Containment Procedure:</b>	If product is torn or loose, cover or reseal to minimise 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.

### 7. Handling and Storage

<b>Handling:</b>	These products are safe in use. Once installed, the product does not release dust or fibres.  Handling, installing or removing the product may result in some dust and airborne fibre.  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 before entering eating areas.
<b>Storage:</b>	Store in original packaging in cool, dry area, removed from foodstuffs. Ensure packages are adequately labeled, protected from physical damage, and sealed when not in use. Avoid packaging being stored under UV light (direct sunlight) for long periods.
<b>Incompatibilities:</b>	None

### 8. Exposure Controls / Personal Protection

<b>National Exposure Standards:</b>	It is recommended to keep exposures to dust and other atmospheric contaminants to as low a level as is reasonably practicable. No specific Workplace Exposure Standard (WES) applies to the dust or modified bonded fibre from FBS-1 Glasswool Insulation products. FBS-1 Glasswool insulation manufactured by ICANZ member companies, are of low biopersistence. Dust from these products is regarded as nuisance dust, and the exposure standard for nuisance dusts of 10 mg/m <sup>3</sup> , measured as inhalable dust (8-hour TWA*) should be applied.  In typical installation conditions or where work is being done on insulated premises, a variety of dusts will be present. In any work area where almost all the airborne material is fibrous FBS-1, then a Workplace Exposure Standard (WES) of 2 mg/m <sup>3</sup> (inhalable dust) applies.  *An 8-hour time-weighted average (TWA) exposure is the average airborne concentration measured over an eight-hour working day and a 5-day working week.
<b>Notes on Exposure Standards</b>	Exposure Standard (TWA) is 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 not impair the health or cause undue discomfort to nearly all workers.
<b>Biological Limit Values:</b>	Not applicable



ENGINEERING CONTROLS	
<b>Ventilation:</b>	<p>During most applications and installation 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 industrial 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.</p> <p>Work areas should be cleaned regularly to minimise dust.</p>
PERSONAL PROTECTION EQUIPMENT	
<b>Personal Hygiene</b>	<p>Washing of exposed skin with soap and water at the end of a shift or as required is recommended as a comfort measure.</p>
SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION continued	
<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. Bradford Comfortsleeve™ gloves can also be used as an alternative to long sleeves and gloves.</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>None normally required. 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.</p> <p>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>

## 9. Physical and Chemical Properties

<b>Appearance:</b>	<p>A matt of yellow 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.</p>
<b>Odour:</b>	<p>Slight amine/sour odour, particularly when recently manufactured, then odourless</p>
<b>pH, at stated concentration:</b>	<p>Not applicable</p>
<b>Vapour Pressure/Density:</b>	<p>Not applicable</p>
<b>Boiling Point/range (°C):</b>	<p>Not applicable</p>



<b>Melting Point (°C):</b>	>704°C
<b>Solubility in water:</b>	Insoluble
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	Generally low, but variable depending on facings
<b>Decomposition Temperature</b>	>300°C
<b>Volatile Organic Compounds (VOC) content/Percent Volatiles:</b>	Very low; <1% (as specified by the Green Building Council of Australia)
<b>FLAMMABLE MATERIALS</b>	
<b>Flash Point:</b>	Not applicable
<b>Flash Point Method:</b>	Not applicable
<b>Flammable (Explosive) Limit - Upper:</b>	Not applicable
<b>Flammable (Explosive) Limit - Lower:</b>	Not applicable
<b>Auto-ignition Temperature:</b>	Not applicable

## 10. Stability and Reactivity

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

## 11. Toxicological Information

**Toxicology data:** – The fibre component of these FBS-1 products is listed by Safe Work Australia as Man-made Vitreous Fibre (Glasswool) of certified low biopersistence as specified under Note Q as listed in the Australian Hazardous Substances Information System and in the Australian Approved Criteria documentation.

In accord with EU ATP 31 (2009) these fibres are not classified as irritant, or as carcinogenic. Previous concerns regarding any health effects from exposure to the fibres from which these products are made, were finally dispelled in 2002 when IARC (part of the World Health Organisation) completed a review of all the health research about FBS-1. The conclusion of IARC was that FBS-1 (including those types used in Australian glasswool, rockwool and slagwool insulation for many decades) was placed in IARC Group 3: not classified as carcinogenic.

Fibres of these products comply with the short-term bio-persistence test and fulfill the requirements of Australian and international authorities on bio-solubility. SWA (formerly ASCC/NOHSC) and international authorities do not classify mineral wool fibres with high bio-solubility as carcinogenic or as capable of causing fibrosis.

Fibres are generally clumped by the binder or resin coating and single strand respirable fibre is present only in trace amounts when any dust is formed in the workplace during installation. Bound fibre is not of respirable size. Extensive research over the past 50 years on workers handling these fibres and products in many countries has shown that the inspirable and respirable size fibres are not harmful, having no long term health effects or respiratory effects.

Toxicology test data is generally not available on the products, but is estimated as being very low with LD50 >5000 mg/kg.

**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.
<b>Eyes:</b>	May cause eye discomfort resulting in watering and redness.
<b>Skin:</b>	Handling repeatedly during installation may cause temporary itching of exposed skin. This is not an allergy, or chemical irritation, and any symptoms usually disappear 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, especially in persons suffering from upper respiratory or chest complaints such as hay fever, asthma or bronchitis.

Note: Products used in high temperature applications (above 177°C) may release fumes from the resin bonding 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.

## 12. Ecological Information

<b>Eco-toxicity:</b>	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 Eco-toxicity, 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>	FBS-1 Glasswool Insulation is bio-soluble and in most eco-systems it would be expected to solubilise over a period of weeks to months. Binder-coated insulation wool is hydrophobic, and no adverse environmental effects would be expected if accidentally released in water or soil.
<b>Ozone Depleting Potential</b>	As referenced in the US EPA list of Ozone Depleting Substances (Class 1 and Class 2), no Ozone Depleting Substances are involved in either the manufacture or composition of this product & therefore has an ozone depletion potential of zero.

## 13. Disposal Considerations

Place in plastic bags or containers and close or seal for disposal in accordance with local authority guidelines. Label as NON-HAZARDOUS insulation wool or as general building waste (non-hazardous), as appropriate to assist local authorities waste disposal sites. Department of Environment and Climate Change NSW classifies Glasswool insulation as General Solid Waste (non-putrescible), & local authorities will usually advise any local handling arrangements at their disposal sites.

## 14. Transport Information

<b>Transport Requirements:</b>	FBS-1 wool insulation are not classified as Dangerous Goods and have no special transport requirements.		
<b>UN number:</b>	None allocated	<b>Subsidiary Risk 1:</b>	None allocated
<b>DG Class:</b>	None allocated	<b>Packaging Group:</b>	None allocated
<b>HAZCHEM code:</b>	None allocated		



### 15. Regulation Information

<b>Poisons Schedule</b>	Not scheduled. No specific regulatory requirements are applicable regarding occupational health and safety, consumer protection or environmental protection measures.
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### 16. Additional Information

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

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

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Other References:

<b>NOHSC:1008 (2004)</b>	Approved Criteria for Classifying Hazardous Substances
<b>Model Code of Practice</b>	Preparation of Safety Data Sheets for Hazardous Chemicals, December 2011, Safe Work Australia.
<b>Model Code of</b>	Labelling of Workplace Hazardous Chemicals, December 2011, Safe Work Australia.
<b>Model Code of</b>	Managing Risks Of Hazardous Chemicals In The Workplace, July 2012, Safe Work Australia.
<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition, National Transport Commission.
<b>WES</b>	Workplace Exposure Standards For Airborne Contaminants, April 2013, Safe Work Australia.
<b>WES</b>	Guidance On The Interpretation Of Workplace Exposure Standards For Airborne Contaminants, April 2013, Safe Work Australia.
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 5th revised edition, United Nations, New York and Geneva, 2013.
<b>HSIS</b>	Hazardous Substances Information System (HSIS), internet advisory service, Safe Work Australia.