

**MATERIAL SAFETY DATA SHEET**
**SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

<b>Product name:</b>	<b>Guardian Fibreglass Insulation</b>	
<b>Other names:</b>	Boral Glasswool Insulation Batts	
<b>Recommended Use:</b>	Acoustic and thermal insulation including energy conservation. For use in domestic, public and commercial buildings, warehouses, industrial plants, motor vehicles, ships, public transport, power stations and white goods.	
<b>Manufacturer:</b>	Guardian Fiberglass, Inc. 1000 E. North Street Albion, MI 49224 USA <a href="http://www.guardianbp.com">www.guardianbp.com</a>	<b>Emergency Contact:</b> +1-517-629-9464 (telephone) +1-517-629-4860 (facsimile) jeridevlin@bp.guardian.com
<b>Supplier:</b>	Boral Australian Gypsum Limited 676 Lorimer St., Port Melbourne Vic., 3207 <a href="http://www.boral.com.au">www.boral.com.au</a>	<b>Emergency Contact:</b> 1800 033 11 Technical Support 1800 811 222

Because finished fibreglass insulation products are classified as "articles" under the NOHSC's Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)], a Material Safety Data Sheet (MSDS) is not strictly required under Australian Regulations. This MSDS is issued by Guardian for the information of users, installers and the community. It has been formatted in accordance with the National Code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC: 2011(2003)].

The information in this MSDS must not be altered, deleted or added to. Neither Guardian nor the Supplier will accept any responsibility for any changes made to its MSDS by any other person or organisation. Guardian will issue a new MSDS when there is a change in product specifications and/or applicable standards, guidelines or regulations.

**SECTION 2. HAZARDS IDENTIFICATION**

Temporary mechanical irritant.

**STATEMENT OF HAZARDOUS NATURE:** Not subject to classification according to the criteria of the Australian Safety and Compensation Council SWA (formerly ASCC / NOHSC) Approved Criteria For Classifying Hazardous Substances [NOHSC: 1008] 3rd Edition. Guardian Fibreglass Insulation is classified as **Non-Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

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

CAS/EC number	Chemical Name of the ingredient	Proportion
65997-17-3	Inert Vitreous silicate mineral wool (>18% alkali and earth alkali oxides)	90-100%
25104-55-6	Cured Organic Binding Material (fibre binding agent)	0-10%
N/A	De-dusting oil	<1%
Adhesives used to adhere faced products include):		
<u>Kraft/Foil Faced:</u>		
8042-47-5	Mineral Oil, white	5-10%
9002-88-4	Wax, polyethylene	1-5%
8002-74-2	Waxes, paraffin	1-5%
<u>Vinyl-faced laminated:</u>		
7784-27-2	Aluminum nitrate -9-hydrate	1-5%

---

## SECTION 4. FIRST AID MEASURES

---

<b>Special instructions:</b>	Mechanical irritation of upper respiratory tract or a skin irritation and rash may occur in dusty conditions. Seek medical advice if irritation persists.
<b>Inhalation:</b>	Remove to fresh air.
<b>Swallowed:</b>	Rinse the lips and mouth with water, give water to drink.
<b>Skin contact:</b>	Rinse skin with flowing warm water. May use hydrocortisone cream if irritation or rash persists.
<b>Eye contact:</b>	Flush eyes with saline solution or clear water for 15 minutes.
<b>Notes to Doctor:</b>	This product can be a mechanical irritant to the skin, but is not known to produce any chronic health effects. Treatment should be directed toward the source of irritation with symptomatic treatment as necessary. Any other symptoms and signs of ill-health are likely to be due to other causes.

---

## SECTION 5. FIRE-FIGHTING MEASURES

---

**Flamibility:** Non Flammable, will not burn.

**Hazards from combustion of products:** Non flammable. Guardian Fibreglass Insulation is non-flammable, but the plastic wrapping, resin binder, and some facings (e.g. vinyl tissue) may decompose, smoulder or burn in a fire or when heated above 300°C.

**Suitable extinguishing media:** Water or common fire extinguishers may be used.

**Extinguishing media which shall not be used for safety reasons:** Not relevant.

**Precautions for fire fighters and special protective equipment:** Insulation is non-flammable; packaging materials may burn and may release toxic chemicals in incomplete combustion. In large fire of packaged material, protect against release of chemicals from plastic packaging. Remain upwind and notify those downwind of hazard. Wear full protective equipment including self contained breathing apparatus (SCBA) when combating fire.

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

---

Release of this material should not cause unusual hazards. Use normal clean up procedures. Avoid dust-generating means of clean-up(eg, normal clean up procedures such as wet sweeping or vacuuming):. Dispose of scrap material according to federal or local authority regulations. This material is not regulated under hazardous waste regulations.

---

## SECTION 7. HANDLING AND STORAGE

---

Avoid dust-generative means of cutting or clean up. Provide good ventilation. Store in original packaging away from sources or ignition. Keep material dry and protect against moisture. No incompatibilities. (eg PPE requirements for handling of the product are set out in section 8 below).

---

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

---

---

### Exposure Standards

---

**National Occupational Exposure Standard (NES) Safe Work Australia SWA (formerly ASCC / NOHSC):** No exposure standard allocated for this product. which may be regarded as nuisance dust but for airborne respirable fibres 0.5 f/ml time-weighted average (TWA) standard is recommended and a standard of 2.0 mg/cubic metre time-weighted average (TWA) for non-respirable fibres (inspirable dusts). ASCC standards provide that all exposures should be kept as low as practicable. Total dust (of any type, or particle size): 10 mg/m3 TWA.

**Other limit values:** Sweden - 1 fibre / cm<sup>3</sup> (also U.S. voluntary standard).

---

### Engineering controls

---

Provide good ventilation, maintain air concentrations below exposure standards or use local exhaust ventilation. Avoid dust-generating means of cutting/clean up. 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.

---

### Personal Protective Equipment (PPE)

---

**Respiratory protection:** Use an approved particulate respirator conforming to Australian and New Zealand Standards AS/NZS 1715 and 1716 when handling, particularly if air contaminants exceed allowable levels or if working in a dusty or enclosed environment. 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.

**Eye protection:** Wear ventilated non-fogging dust resistant goggles conforming to Australian Standard AS 1336.

**Skin protection:** Loose-fitting long sleeves and pants are recommended, a cap or hat, and standard duty gloves conforming to Australian Standard AS 2161. Wash clothes separately.

**Environmental exposure controls:** Clean up loose insulation and packaging materials and dispose of in normal waste containers. Check local laws for any special disposal requirements.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

---

<b>Appearance:</b>	A matt of yellow fibrous material resembling wool. It is supplied in different shapes and sizes, packaged in plastic. Various facings may be applied to meet specific purposes.
<b>Odour:</b>	Slight amine odour, then odourless.
<b>pH:</b>	Not Applicable.
<b>Vapour Pressure</b>	Not Applicable.
<b>Vapour Density:</b>	Not Applicable.
<b>Boiling Point / range:</b>	Not Applicable.
<b>Melting Point:</b>	>704°C
<b>Solubility in Water:</b>	Insoluble.
<b>Specific Gravity (H<sub>2</sub>O = 1):</b>	Variable
<b>Flash Point:</b>	Not Applicable
<b>Upper/Lower Flammable Limit (LEL/UEL):</b>	Not Applicable
<b>Ignition Temperature:</b>	Not Applicable
<b>Decomposition Temperature:</b>	>300°C
<b>Volatile organic compounds (VOC) content:</b>	Very low; <1%

---

## SECTION 10. STABILITY AND REACTIVITY

---

### Chemical Stability

Stable. The cured resin is stable and will remain intact for the life of the product under normal atmospheric conditions.

### Conditions to avoid

None.

### Incompatible Materials

No reported incompatibilities, however resin binders may be attacked by acidic, alkaline or solvent based substances.

### Hazardous decomposition products

None for mineral wool. Chemicals in packaging materials that do not present a health hazard under normal conditions may be released during a fire. Toxic fumes and gases that may result from incomplete combustion include carbon monoxide, hydrogen chloride, and low-level cyanides. In case of over-exposure, remove to fresh air. If breathing is difficult, administer oxygen and consult a physician.

### Hazardous Reactions

None known

## SECTION 11. TOXICOLOGICAL INFORMATION

### Health Effects

- Swallowed:** Unlikely under normal conditions of use, but would result in irritation of the lips, mouth and stomach.
- Eye:** Mechanical irritant, if it gets into the eyes may cause eye discomfort resulting in watering and redness.
- Skin:** Handling Guardian Fibreglass Insulation may irritate the skin resulting in itching and occasionally a red rash. The rash is not allergic and usually disappears quickly.
- Inhaled:** The dust may cause discomfort of the nose, throat and respiratory tract, especially in those 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 gases (CO<sup>2</sup>, formaldehyde, amines) from the resin bonding which are irritating to the eyes, nose and throat during initial heat-up. In confined or poorly ventilated areas, use air supplied respirators during the first heat-up cycle.

### Other information on health effects

Following a thorough review of all medical data available, the International Agency for Research on Cancer (IARC) has classified glass wool insulation as Group #3, "not classifiable as to carcinogenicity to humans". IARC has stated there is "no evidence of increased risks of lung cancer or mesothelioma...from occupational exposures during the manufacture of these materials, and inadequate evidence overall of any cancer risk."

"In 2003 the Australian Union Code of practice was modified to include the IARC revised classification of glasswool and rockwool Insulation. This IARC classification applies to all glass wool and rockwool insulation products whether bio-soluble formulation or not." (*Occupational Health & Safety Profile ICANZ*)

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Neither the raw materials nor the finished product contain any ozone depleting chemicals. This product is not classified as a hazardous air pollutant.

**Persistence and degradability:** Material dissolves very slowly in environment. Binder-coated glasswool is hydrophobic; therefore, no adverse environmental effects would be expected if this product were accidentally released in the water or soil.

## SECTION 13. DISPOSAL CONSIDERATIONS

Place in sealed, appropriately labelled plastic bags and dispose of or in accordance with local authority guidelines. Clean area with micro equipped vacuum or wet sweep. Any waste material should be cleaned up and disposed of in accordance with local authority guidelines. Use protective equipment as described in Section 8 when handling uncontained material.

Special precautions for landfill and incineration. Local authorities will usually advise of any handling arrangements at their disposal sites.

## SECTION 14. TRANSPORT INFORMATION

<b>Transport Requirements:</b>	Guardian Fibreglass Insulation is not regulated as a Dangerous Good. No special transport requirements are necessary.		
<b>UN Number:</b>	None allocated	<b>ADG Class/Subsidiary Risk:</b>	None allocated
<b>Packing Group:</b>	None allocated	<b>HAZCHEM Code:</b>	None allocated

---

**SECTION 15. REGULATORY INFORMATION**

---

**Poisons Schedule:** No Poisons Schedule Number allocated.

---

**SECTION 16. OTHER INFORMATION**

---

**Training advice:** Follow manufacturer's warning labels and instructions.

**Recommended restrictions on use:** Follow manufacturer's instructions/warning labels on packaging.

**Reference Documents:**

- Poisons Information Centre 13 11 26 (Australia Wide)
- National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC: 2011(2003)], April 2003.

**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/NZS 2161 Occupational protective gloves.

**Date:** October 2009

**DISCLAIMER**

This Safety Data Sheet does not constitute a workplace risk assessment. The information provided in this MSDS is accurate to the best of Guardian Building Products' knowledge and is provided in good faith. No warranty is given with respect to its accuracy and/or reliability. The information relates only to the particular product and not to the product when used in combination with any other materials. It is the user's responsibility to take proper precautions when using this product and ensure its own compliance with applicable local, state and federal laws and regulations.

End of MSDS