# SAFETY DATA SHEET

## HARDIE™ FIRE INSULATION

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ISSUED by: James Hardie Australia Pty Limited

## Section 1 - Identification

**Product Identifier**
HARDIE™ FIRE INSULATION

**Company Name**
James Hardie Australia Pty Limited

**Address**
Level 17/60 Castlereagh St, Sydney
NSW 2000 Australia

**Telephone/Fax Number**
Telephone: 13 11 03

**Emergency Phone Number**
1800 638 556

**Recommended use of the chemical and restrictions on use**
Used as acoustic, thermal and fire insulation with Hardie™ Smart fire rated wall systems.

## Section 2 - Hazard(s) Identification

**GHS classification of the substance/mixture**
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Carcinogenicity: Category 2

**Signal Word (s)**
WARNING

**Hazard Statement (s)**
H351 Suspected of causing cancer.

**Pictogram (s)**
Health hazard

**Precautionary Statement – Prevention**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280(w) Wear protective gloves/protective clothing/eye protection/face protection/respiratory protection.

**Precautionary Statement – Response**
P308+P313 IF exposed or concerned: Get medical advice/attention.

**Precautionary Statement – Disposal**
P501 Dispose of contents/container to an approved waste disposal plant.

**Other Information**
Traces of formaldehyde may be released upon decomposition. Formaldehyde is irritating to the eyes, nose, throat and is a dermal sensitiser. Prolonged or repeated skin contact may lead to allergic contact dermatitis and sensitisation in some individuals.

## Section 3 - Composition and Information on Ingredients

**Ingredients**

| Name | CAS | Proportion |
|---|---|---|
| Glass, oxide, chemicals | 65997-17-3 | 95-99 % |
| Urea, polymer with formaldehyde and phenol | 25104-55-6 | 1-5 % |

**Information on Composition**
Mixture

**Preparation Description**
Mineral wool insulation

**Other Information**
Glass, oxide, chemicals:
Contains mineral wool and slags.

Urea, polymer with formaldehyde and phenol:
Contains < 0.02% formaldehyde. Traces of formaldehyde may be released upon decomposition.

## Section 4 - First Aid Measures

**First Aid Measures**
Get medical advice/attention if you feel unwell.

**Inhalation**
If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

**Ingestion**
Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

**Skin**
Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

**Eye**
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

**First Aid Facilities**
Eyewash and normal washroom facilities.

**Advice to Doctor**
Treat symptomatically.

**Other Information**
For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (131 126)

## Section 5 - Firefighting Measures

**Suitable Extinguishing Media**
Use appropriate fire extinguisher for surrounding environment.

**Unsuitable Extinguishing Media**
Water jet

**Hazards from Combustion Products**
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including formaldehyde, carbon monoxide, carbon dioxide and oxides of nitrogen.

**Specific hazards arising from the chemical**
This product is non combustible.

**Decomposition Temperature**
Not available

**Precautions in connection with Fire**
Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

## Section 6 - Accidental Release Measures

**Emergency Procedures**
Increase ventilation. Evacuate all unprotected personnel. Avoid inhalation of dust, and skin or eye contact. Wear sufficient respiratory protection and full protective clothing to prevent exposure. Sweep up material avoiding dust generation or dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container. Wash surfaces well with soap and water. Do not allow product to enter drains, waterways or sewers. Seal all wastes in labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

## Section 7 - Handling and Storage

**Precautions for Safe Handling**
Avoid inhalation of dust, and skin or eye contact. Wear appropriate personal protective equipment and clothing to prevent exposure. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of dust in the work atmosphere. Maintain high standards of personal hygiene i.e. washing hands prior to eating, drinking, smoking or using toilet facilities.
Avoid exposure. Do not handle until all safety precautions have been read and understood.

**Conditions for safe storage, including any incompatibilities**
Store in a cool, dry, well-ventilated area, out of direct sunlight and moisture. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

## Section 8 - Exposure Controls and Personal Protection

**Occupational exposure limit values**

| Substance | Regulations | Exposure Duration | Exposure Limit | Units | Notes |
|---|---|---|---|---|---|
| Refractory Ceramic Fibres (RCF) (h), Special Purpose Glass Fibres(i)<br><br>and High Biopersistence MMVF(l) | Safe Work Australia | TWA | 2 | mg/m3 | (inhalable dust), 0.5 f/ml (respirable) |
| Glass wool, rock (stone) wool, slag wool and continuous glass filament](i)(k) and Low Biopersistence MMVF(m) | Safe Work Australia | TWA | 2 | mg/m3 | (inhalable dust) |

**Biological Monitoring**
No biological limits allocated.

**Control Banding**
Not available

**Other Exposure Information**
Exposure standards for decomposition products:
Formaldehyde [50-00-0]
TWA: 1 ppm, 1.2 mg/m³
STEL: 2 ppm, 2.5 mg/m³
Note: Sen
TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
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.
'Sen' Notice: The substance may cause sensitization by skin contact or by inhalation.
Source: Safe Work Australia

**Engineering Controls**
Use with good general ventilation. If dusts are produced, local exhaust ventilation should be used. If the engineering controls are not sufficient to maintain concentrations of particulates below the exposure standards, suitable respiratory protection must be worn.

**Respiratory Protection**
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/ particulate filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.
Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

**Eye and Face Protection**
Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/ face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations.
Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

**Hand Protection**
Wear gloves of impervious material such as latex or butyl rubber. (Recommended Materials: Thickness > 0.11 mm, Breakthrough time 480 mins (approximate)) Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.
Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

**Thermal Hazards**
No further relevant information available.

**Body Protection**
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

## Section 9 - Physical and Chemical Properties

| Properties | Description | Properties | Description |
|---|---|---|---|
| **Form** | Solid | **Appearance** | Solid |
| **Colour** | Not available | **Odour** | Odourless |
| **Melting Point** | > 1000 °C | **Boiling Point** | Not available |
| **Decomposition Temperature** | Not available | **Solubility in Water** | Insoluble |
| **Specific Gravity** | Not available | **pH** | Not available |
| **Vapour Pressure** | Not available | **Relative Vapour Density (Air=1)** | Not available |
| **Evaporation Rate** | Not available | **Odour Threshold** | Not available |
| **Viscosity** | Refer to Section 9: Kinematic Viscosity and Dynamic Viscosity | **Volatile Component** | Not available |
| **Partition Coefficient: n-octanol/water (log value)** | Not available | **Flash Point** | Not available |
| **Flammability** | Not flammable | **Auto-Ignition Temperature** | Not available |
| **Explosion Limit - Upper** | Not available | **Explosion Limit - Lower** | Not available |
| **Explosion Properties** | Product is not explosive | **Oxidising Properties** | Not available |
| **Kinematic Viscosity** | Not applicable | **Dynamic Viscosity** | Not applicable |
| **Particle Characteristics** | Not available | | |

## Section 10 - Stability and Reactivity

**Reactivity**
Refer to Section 10: Possibility of hazardous reactions

**Chemical Stability**
Stable under normal conditions of storage and handling.

**Possibility of hazardous reactions**
Reacts with incompatible materials.
Increased levels of formaldehyde in air can occur if resin is heated to temperatures where it decomposes or when in contact with high humidity levels.

**Conditions to Avoid**
Heat, open flames and other sources of ignition. Extremes of temperature and direct sunlight.

**Incompatible Materials**
Strong acids, hydrofluoric acid.

**Hazardous Decomposition Products**
Thermal decomposition may result in the release of toxic and/or irritating fumes including: formaldehyde, oxides of nitrogen, carbon monoxide and carbon dioxide.

**Hazardous Polymerization**
Will not occur.

## Section 11 - Toxicological Information

**Toxicology Information**
Toxicity data for material given below.

**Acute Toxicity - Oral**

Acute Toxicity Estimate: > 2000 mg/kg

Urea, polymer with formaldehyde and phenol
LD50 (rat): > 5000 mg/kg

**Acute Toxicity - Dermal**
Acute Toxicity Estimate: > 2000 mg/kg

Urea, polymer with formaldehyde and phenol
LD50 (rat): > 2000 mg/kg

**Acute Toxicity - Inhalation**
Acute Toxicity Estimate (dust/mist): > 5 mg/l/4h

**Ingestion**
Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

**Inhalation**
Inhalation of dusts may irritate the respiratory system. Chronic exposure to this material may aggravate existing respiratory disorders and lung disorders such as bronchitis, emphysema and asthma. Onset and progression are related to dust concentrations and duration of exposure.

**Skin**
Skin contact may cause mechanical irritation resulting in redness and itching.

**Eye**
Eye contact may cause mechanical irritation. May result in mild abrasion.

**Respiratory Sensitisation**
Not expected to be a respiratory sensitiser.

**Skin Sensitisation**
Not expected to be a skin sensitiser.

**Germ Cell Mutagenicity**
Not considered to be a mutagenic hazard.

**Carcinogenicity**
Suspected of causing cancer. Classified as a suspected human carcinogen.

**Reproductive Toxicity**
Not considered to be toxic to reproduction.

**STOT - Single Exposure**
Not expected to cause toxicity to a specific target organ.

**STOT - Repeated Exposure**
Not expected to cause toxicity to a specific target organ.

**Aspiration Hazard**
Not expected to be an aspiration hazard.

## Section 12 - Ecological Information

**Ecotoxicity**
No ecological data available for this material.

**Persistence and degradability**
Not available

**Mobility**
Not available

**Bioaccumulative Potential**
Not available

**Other Adverse Effects**
Not available

**Environmental Protection**
Prevent this material entering waterways, drains and sewers.

**Hazardous to the Ozone Layer**
This product is not expected to deplete the ozone layer.

## Section 13 - Disposal Considerations

**Disposal Considerations**
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.
To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

## Section 14 - Transport Information

**Transport Information**
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

**ADG U.N. Number**
None Allocated

**ADG Proper Shipping Name**
None Allocated

**ADG Transport Hazard Class**
None Allocated

**ADG Packing Group**
None Allocated

**Special Precautions for User**
Not available

**IATA UN Number**
None Allocated

**IATA Proper Shipping Name**
Not dangerous for conveyance under IATA code

**IATA Transport Hazard Class**
None Allocated

**IATA Packing Group**
None Allocated

**IMDG UN Number**
None Allocated

**IMDG Proper Shipping Name**
Not dangerous for conveyance under IMO/IMDG code

**IMDG Transport Hazard Class**
None Allocated

**IMDG Packing Group**
None Allocated

**IMDG Marine pollutant**
No

**Transport in Bulk**
Not available

## Section 15 - Regulatory Information

**Regulatory Information**
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.
Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Poisons Schedule**
Not Scheduled

**Montreal Protocol**
Not Listed

**Stockholm Convention**
Not Listed

**Rotterdam Convention**
Not Listed

**International Convention for the Prevention of Pollution from Ships (MARPOL)**
Not available

**Agricultural and Veterinary Chemicals Act 1994**
Not applicable

**Basel Convention**
Not available

## Section 16 - Any Other Relevant Information

**Date of Preparation**
SDS Created: December 2022

**Literature References**
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
Standard for the Uniform Scheduling of Medicines and Poisons.
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Code of Practice for Supply Diversion into Illicit Drug Manufacture.
National Code of Practice for Chemicals of Security Concern.
Agricultural Compounds and Veterinary Chemicals Act.
International Agency for Research on Cancer (IARC) Monographs.
Montreal Protocol on Substances that Deplete the Ozone Layer.
Stockholm Convention on Persistent Organic Pollutants (POPs).
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.
International Air Transport Association (IATA) Dangerous Goods Regulations.
International Maritime Dangerous Goods (IMDG) Code.
Workplace exposure standards for airborne contaminants.
Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).
Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).
Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

**Contact Person/Point**
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## END OF SDS