SAFETY DATA SHEET

Glass Mineral Wool Insulation (Brown)

According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR)

1. Identification

Product identifier

Product name Glass Mineral Wool Insulation (Brown)

Product number MA_DP_101

Synonyms; Common Names Akousti-Liner™, Akousti-Liner R™, Alley Wrap B™, Akousti-Shield™, Akousti-Board Black™, AK Board™, High Temperature Board, High Temperature Blanket, High Temperature Panel, High Temperature Batt, High Temperature HD Blanket, Alley K™ Pipe Insulation (*See section 2, 8, 10)

Revision date: 10/22/2020

Recommended use of the chemical and restrictions on use

Restriction on use Thermal and/or acoustic insulation for use in technical applications, industrial applications and in building construction.

Uses advised against None known.

Details of the supplier of the safety data sheet

Supplier Manson Insulation Products Ltd
One Knauf Drive
IN 46176-1 Shelbyville
800 825 4434
sds@knaufinsulation.com
www.imanson.com

Region: Canada

Emergency telephone number

Emergency telephone 24hrs: Chemtrec Tel: 800 424 9300

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2. Hazard identification

Classification of the substance or mixture

WHMIS Regulatory Status Non-controlled product.

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

Label elements

Hazard statements NC Not Classified

Contains None.

Hazard pictogram None.

Signal word None.

Precautionary statements None.

Supplemental label information None.

The following sentences and pictograms apply to this product:
The mechanical effect of fibers in contact with skin may cause temporary itching.

http://www.knaufinsulation.com/comfort-and-handling

Other hazards

Physical Hazards None.

Health Hazards Mechanical irritation of the skin, eyes and upper respiratory system.

Environmental Hazards None.

Main symptoms Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble glass mineral wool is classified as a nuisance dust.

***Heat-Up Precautions** When heated to temperatures above 200°C (400°F) for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. See section 8 & 10

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3. Composition/information on ingredients

Mixtures

Biosoluble glass mineral wool	**87 - 100%**
CAS number: —	
Ingredient notes:(1)(2)	
Classification	
Not Classified	
Thermo set, inert polymer bonding agent derived from plant starches	**0 - 13%**
CAS number: —	
Classification	
Not Classified	

The full text for all hazard statements is displayed in Section 16.

Ingredient notes

(1) Man made vitreous (silicate) fibers with random orientation with alkaline oxide and alkali earth oxide ($Na_2O+K_2O+CaO+MgO+BaO$) content greater than 18% by weight meeting the requirements of Note Q of regulation n° 1272/2008 and therefore not classified carcinogenicity.
(2) All Knauf Insulation products covered by this SDS are independently certified by EUCEB to be manufactured using biosoluble glass formulations.

Specific chemical identity and/or exact percent concentration is withheld as trade secret.

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4. First-aid measures

Description of first aid measures

General information Show this Safety Data Sheet to the medical professional in attendance. If symptoms occur, follow first aid measures as appropriate.

Notes to Physician: No specific recommendations.

Inhalation Remove from exposure. Rinse the throat and clear dust from airways.

Ingestion Drink plenty of water if accidentally ingested.

Skin contact If mechanical irritation occurs, remove contaminated clothing and wash skin gently with cold water and soap.

Eye contact Rinse abundantly with water for at least 15 minutes.

Most important symptoms and effects, both acute and delayed

General information Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble glass mineral wool is classified as a nuisance dust.

Indication of any immediate medical attention and special treatment needed

General information If any adverse reaction or discomfort continues from any of the above exposures, seek professional medical advice.

Specific treatments No specific recommendations.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Water, foam, carbon dioxide (CO_2), and dry powder.

Specific hazards arising from the hazardous product

General information Products do not pose a fire hazard in use; however, some packaging materials or facings may be combustible. Products of combustion from product and packaging - carbon dioxide, carbon monoxide and some trace gases such as ammonia, nitrogen oxides and volatile organic substances.

Advice for firefighters

General information In large fires in poorly ventilated areas involving packaging materials respiratory protection / breathing apparatus may be required.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Minimize direct contact with skin in order to prevent mechanical itching. In dusty environments, use suitable respiratory protection such as 3M 8210, N95 or equivalent. Use glasses or goggles when working with mineral wool insulation above shoulder height or in dusty environments. Where possible, use natural ventilation during installation in order to minimize dust levels.

After contact with the product, rinse skin in cold water to reduce potential effects of mechanical itching. Dispose of surplus product in accordance with local regulations.

Use personal protection recommended in Section 8 of the SDS.

Environmental precautions

Environmental precautions

Not relevant.

Methods and material for containment and cleaning up

Methods for cleaning up

In dusty environments, use vacuum equipment where possible to minimize dust levels.

Reference to other sections

Reference to other sections

For personal protection, see Section 8. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions

Assure proper respiratory protection if potential dust exposure exceeds occupational exposure limits.

Conditions for safe storage, including any incompatibilities

Storage precautions

To ensure optimum product performance; when packaging is removed or opened; products should be stored inside or covered to protect them from ingress of rain water or snow. Storage arrangements should ensure stability of stacked products and use on a first in first out basis (FIFO) is recommended.

Specific end use(s)

Specific end use(s)

Thermal and/or acoustic insulation for use in technical applications, industrial applications and in building construction.

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8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

Biosoluble glass mineral wool

Long-term exposure limit (8-hour TWA): New Brunswick (Notes: (A3), ACGIH 2015) 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Saskatchewan 1 f/cc Glass wool fibers
Short-term exposure limit (15-minute): Saskatchewan 3 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Nunavut 1 f/cc Glass wool fibers
Short-term exposure limit (15-minute): Nunavut 3 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Newfoundland-Labrador (Note: (A3)) 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Manitoba (Note: (A3)) 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Nova Scotia (Note: (A3)) 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Prince Edward Island (Note: (A3)) 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Yukon 10 mg/m³ Mineral wool fibers, respirable
Long-term exposure limit (8-hour TWA): NWT 1 f/cc Glass wool fibers
Short-term exposure limit (15-minute): NWT 3 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Quebec 2 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Alberta 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): BC 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Ontario (Note: Ont) 1 f/cc Glass wool fibers
Long-term exposure limit (8-hour TWA): Alberta (Note: (3)) 10 mg/m³ Particulates not otherwise regulated (PNOR), total dust
Long-term exposure limit (8-hour TWA): Alberta (Note: (3)) 3 mg/m³ Particulates not otherwise regulated (PNOR), respirable fraction
Long-term exposure limit (8-hour TWA): Quebec 10 mg/m³ Particulates not otherwise regulated (PNOR), total dust

Ingredient comments

(A3) - Fibers longer than 5 µm; diameter less than 3 µm; aspect ratio greater than 5:1 as determined by the membrane filter method at 400-450X magnification (4-mm objective) phase contrast illumination.
ACGIH Carcinogen List.
Ont: Listed in Table 1 of Ontario Regulation 490/09.
(3) - Based on irritation effects. Adjustment to compensate for unusual work schedules is not required.
Biosoluble glass mineral wool - see section 3

Exposure controls

Appropriate engineering controls

Maintain sufficient mechanical or natural ventilation to assure fiber concentrations remain below occupational exposure limits. Use local exhaust if necessary. Power equipment should be equipped with properly designed dust collection devices.

Eye/face protection

Use glasses or goggles when working with mineral wool insulation above shoulder height or in dusty environments.

Other skin and body protection

Minimize direct contact with skin in order to prevent mechanical itching.

Hygiene measures

After contact with the product, rinse skin in cold water to reduce potential effects of mechanical itching.

Respiratory protection

In dusty environments, use suitable respiratory protection.

Thermal hazards

Not relevant.

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*** Heat-Up Precautions:**	When heated to temperatures above 200°C (400°F) for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. The duration of release is dependant upon the thickness of the insulation, binder content and the temperature applied. Adequate ventilation should be provided. In confined spaces or where ventilation is not possible, occupants should wear appropriate self-contained breathing apparatus.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Solid. Rolls. Panel. Loose fiber.
Colour	Brown.
Odour	Not relevant.
Odour threshold	No data available.
pH	Not relevant.
Melting point	Not relevant.
Initial boiling point and range	Not relevant.
Flash point	Not relevant.
Evaporation rate	Not relevant.
Flammability (solid, gas)	Not relevant.
Upper/lower flammability or explosive limits	Not relevant.
Vapour pressure	Not relevant.
Vapour density	Not relevant.
Relative density	7 - 96 kg/m³
Solubility(ies)	Generally chemically inert and slightly soluble in water.
Partition coefficient	Not relevant.
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not relevant.
Viscosity	Not relevant.
Explosive properties	Not relevant.
Oxidising properties	Not relevant.
Nominal diameter of fibers.	3 - 8 µm
Length weight geometric mean diameter less 2 standard errors	< 6 µm
Orientation of fibers	Random

10. Stability and reactivity

Reactivity	None.

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Stability	Binder will decompose above 400°F
Possibility of hazardous reactions	None.
Conditions to avoid	Heating above 400°F
Materials to avoid	Hydrofluoric acid will react with and dissolve glass.
Hazardous decomposition products	None in normal conditions of use. When heated to temperatures above 200°C (400°F) for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system. The duration of release is dependant upon the thickness of the insulation, binder content and the temperature applied. Adequate ventilation should be provided. In confined spaces or where ventilation is not possible, occupants should wear appropriate self-contained breathing apparatus.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD_{50})	No data were identified for the product as a whole. Data are for constituents: Biosoluble glass mineral wool - Not applicable. Thermo set, inert polymer bonding agent derived from plant starches - Not applicable.

Acute toxicity - dermal

Notes (dermal LD_{50})	No data were identified for the product as a whole. Data are for constituents: Biosoluble glass mineral wool - Not applicable. Thermo set, inert polymer bonding agent derived from plant starches - Not applicable.

Acute toxicity - inhalation

Notes (inhalation LC_{50})	No data were identified for the product as a whole. Data are for constituents: Biosoluble glass mineral wool - Not applicable. Thermo set, inert polymer bonding agent derived from plant starches - Not applicable.

Skin corrosion/irritation

Skin corrosion/irritation	May cause mechanical irritation to skin.

Serious eye damage/irritation

Serious eye damage/irritation	May cause mechanical irritation to eyes.

Respiratory sensitization

Respiratory sensitization	No data were identified for this product or its constituents.

Skin sensitization

Skin sensitization	No data were identified for this product or its constituents.

Germ cell mutagenicity

Genotoxicity - in vitro	No data were identified for this product or its constituents.
Genotoxicity - in vivo	No data were identified for this product or its constituents.

Carcinogenicity

Carcinogenicity	Results from a biopersistence test by intratracheal instillation has shown that fibers in this product longer than 20 µm have a weighted half-life less than 40 days, thus this product is not classified as a carcinogen. None of the components of this product are listed by IARC as known or suspected carcinogens.

Reproductive toxicity

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Reproductive toxicity - fertility No data available for this product or its constituents.

Reproductive toxicity - development No data available for this product or its constituents.

Specific target organ toxicity - single exposure

STOT - single exposure No data were identified for this product or its constituents.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No data were identified for this product or its constituents.

Aspiration hazard

Aspiration hazard Not relevant.

Inhalation Mechanical irritation to upper respiratory tract.

Ingestion Non-hazardous when ingested.

Skin contact Mechanical irritation to skin.

Eye contact Mechanical irritation to eyes.

Medical symptoms Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble glass mineral wool is classified as a nuisance dust.

12. Ecological information

Toxicity This product is not ecotoxic to air, water or soil, by composition.

Persistence and degradability

Persistence and degradability Inert inorganic product with Thermo set, inert polymer bonding agent derived from plant starches; 0 - 13%

Bioaccumulative potential

Bioaccumulative potential Will not bioaccumulate.

Partition coefficient Not relevant.

Mobility in soil

Mobility Not considered mobile. Less than 1% leachable organic carbon if landfilled.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations

Waste treatment methods

General information Dispose of in accordance with all applicable regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Disposal methods This product is not regulated under RCRA Hazardous Waste Regulations. May be disposed in landfill. If unsure, contact your local public health department or the local landfill regulators.

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, TDG).

UN number

Glass Mineral Wool Insulation (Brown)

UN No. (International) Not applicable.

UN proper shipping name

Proper shipping name (International) Not applicable.

Transport hazard class(es)

Transport Labels (International) No transport warning sign required.

Packing group

Packing group (International) Not applicable.

Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

Regulatory Status Not classified according to WHMIS
In accordance with industry practice, Manson Insulation has decided to continue to provide its customers with the appropriate information for the purpose of assuring safe handling and use of mineral wool throughout the product life.

Inventories

Canada – DSL/NDSL
All the ingredients are listed or exempt.

CEPA - Priority Substances List All the ingredients are listed or exempt.

National Pollutant Release Inventory All the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms used in the safety data sheet
CAS: Chemical Abstracts Service.
CEPA: Canadian Environmental Protection Act.
DSL: Domestic Substances List.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
NDSL: Non-Domestic Substances List.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.
WHMIS: Workplace Hazardous Materials Information System.

Glass Mineral Wool Insulation (Brown)

General information All products manufactured by Manson Insulation are made of non-classified fibers and are certified by EUCEB. Products meeting EUCEB certification requirements can be recognised by the EUCEB logo printed on the packaging

Further information can be obtained from:

www.euceb.org www.imanson.com

Revision comments §2 [US]

Supersedes date 2018-05-30

Revision date 2020-10-22

Revision 2.2

SDS number 4616

Other information In 2001, the International Agency for Research on Cancer (IARC) reclassified glass mineral wool fibres from Group 2B (possibly carcinogenic) to Group 3 «agent which cannot be classified as for their carcinogenicity to humans». (See Monograph Vol 81, http://monographs.iarc.fr/)