

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	1/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING			
Product identifier			
Product name:	Glass Mineral Wool Insulation (Brown)		
Synonyms, trade names:	Akousti-Liner™, Akousti-Liner R™, Unfaced Metal Building Insulation R-25, Alley Wrap B™, Akousti-Shield™, Akousti-Board Black™ (* See section 2, 8, 10)		
Revision:	Date: 2015-12-08		
Relevant identified uses of the	e substance or mixture and uses advised against		
Identified use(s):	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 s	afety data sheet		
Head Office	Manson Insulation Products Ltd One Knauf Drive IN 46176-1 Shelbyville Tel: 800 825 4434 sds@knaufinsulation.com www.imanson.com		
Region:	United States, Central & South America's		
Emergency telephone number			
Emergency telephone:	24hr: Chemtrec Tel: 800 424 9300		

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	2/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) : The product is not classified.

Label elements

Contains: None. Hazard pictogram: None. Signal word: None. Hazard statements: None. Precautionary statements: - Prevention: None. - Response: None. - Storage: None. - Disposal None. Supplemental label information: None.

<u>The following sentences and</u> The mechanical effect of fibers in contact with skin may cause temporary itching. <u>pictograms are printed on</u>

<u>packaging:</u>







www.knaufinsulation.com/comfort-and-handling

Other hazards

None.

Hazard summary Hazard summary 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 by OSHA.

* Heat-Up Precautions: When heated to temperatures above 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. - 8 & 10

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	3/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

<u>%:</u>	CAS-No.:	Chemical name:	<u>Hazard</u> classification:	<u>Notes:</u>
87-100	-	Biosoluble glass mineral wool	-	(1), (2), (3)
0-13	-	Thermo set, inert polymer bonding agent derived from plant starches	-	(1)
Notes:		 Specific chemical identity and/or exact percentrade secret. Man made vitreous (silicate) fibers with randand alkali earth oxide (Na2O+K2O+CaO+MgO) by weight meeting the requirements of Note Q of therefore not classified carcinogenicity. All Knauf Insulation products covered by this by EUCEB to be manufactured using biosoluble exempt from labeling under NTP or California F 	dom orientation wi +BaO) content gre of regulation n° 12 s SDS are indeper e glass formulatior	th alkaline oxide eater than 18% 72/2008 and ndently certified ns and thus

SECTION 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:	None specific.
Inhalation:	Remove from exposure. Rinse the throat and clear dust from airways.
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.
Ingestion:	Drink plenty of water if accidentally ingested.

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

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

Medical attention/treatments: None specific.

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	4/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Water, foam, carbon dioxide (CO2), and dry powder.

Special hazards arising from the substance or mixture

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

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

SECTION 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.
Emergency procedures:	Use personal protection recommended in Section 8 of the SDS.

Environmental precautions

Not relevant.

Methods and material for containment and cleaning up

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

Reference to other sections

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

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	5/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Assure proper respiratory protection if dust potential exceeds PEL/TLV.

Conditions for safe storage, including any incompatibilities

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)

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

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	6/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

United States, Central South America's

Occupational exposure limits:

<u>CAS-</u> <u>No.:</u>	Chemical name:	<u>As:</u>	Exposure limits:	<u>Type:</u>	Notes:	References:
-	Glass wool fibers	-	1 fiber/ml	TWA	A3	ACGIH
-	Mineral wool fiber, total particulate	-	5 mg/m3	TWA	-	NIOSH
-	Particulates not otherwise regulated (PNOR), respirable fraction	-	5 mg/m3	TWA	-	OSHA
-	Particulates not otherwise regulated (PNOR), total dust	-	15 mg/m3	TWA	-	OSHA
Notes:		than 5:1 as detern magnification (4-m	er than 5 μm; diameter les nined by the membrane fil nm objective) phase contra s mineral wool - See sectio	ter metho ast illumir	d at 400-	
<u>Exposu</u>	re controls					
<u>Engine</u>	ering measures:	Maintain sufficient mechanical or natural ventilation to assure fiber concentrations remain below PEL/TLV Use local exhaust if necessary. Power equipment should be equipped with properly designed dust collection devices.			ecessary. Power	
<u>Eye pro</u>	tection:		oggles when working with r in dusty environments.	mineral v	vool insul	ation above
<u>Skin pro</u>	otection:	Minimize direct co	ontact with skin in order to	prevent i	mechanic	al itching.
<u>Respira</u>	tory equipment:	In dusty environm	ients, use suitable respira	tory prote	ection.	
<u>Hygiene</u>	e measures:	After contact with effects of mechan	the product, rinse skin in ical itching.	cold wate	er to redu	ce potential
<u>Therma</u>	<u>l hazards:</u>	Not relevant.				
<u>* Heat-I</u>	<u>Jp Precautions:</u>	components and concentrations, m release is depend the temperature a spaces or where	emperatures above 400°F binder decomposition pro- lay irritate eyes and the re- lant upon the thickness of upplied Adequate ventilation ventilation is not possible, eathing apparatus.	ducts can spiratory the insula on should	occur wł system. ation, bin be provi	nich, in high The duration of der content and ded. In confined

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	7/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:	Solid.
Form:	Rolls., loose fiber, Panel.
<u>Color:</u>	Brown.
<u>Odor:</u>	Not relevant.
Odor threshold:	Not relevant.
<u>pH:</u>	Not relevant.
Melting point / freezing point:	Not relevant.
Initial boiling point and boiling range:	Not relevant.
Flash point:	Not relevant.
Auto Ignition Temperature (ºF)	Not relevant.
Flammability (solid, gas):	Not relevant.
Flammability limit - lower (%):	Not relevant.
Flammability limit - upper (%):	Not relevant.
Vapor pressure:	Not relevant.
Vapor density:	Not relevant.
Evaporation rate:	Not relevant.
Relative density:	7 - 96 kg/m³
Partition coefficient (n- octanol/water):	Not relevant.
<u>Solubility:</u>	Generally chemically inert and insoluble in water.
Decomposition temperature (°F):	Not relevant.
Viscosity:	Not relevant.
_	
Other data:	Nominal diameter of fibers 3 - 8µm
	Length weight geometric mean diameter less 2 standard errors: < 6 μm

Orientation of fibers: Random

Product name: Revision Date: P/N-no.: Glass Mineral Wool Insulation (Brown) 2015-12-08 MA_DP_101
 Page:
 8/13

 Print date:
 2015-12-08

 SDS-ID:
 US-EN/1.4

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None.

Chemical stability

Binder will decompose above 400ºF

Possibility of hazardous reactions

None.

Conditions to avoid

Heating above 400°F

Incompatible materials

Hydrofluoric acid will react with and dissolve glass.

Hazardous decomposition products

None in normal conditions of use.

<u>* Heat-Up Precautions:</u> When heated to temperatures above 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.

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	9/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Ingestion: Non-hazardous when ingested. Inhalation: Mechanical irritation to upper respiratory tract. Mechanical irritation to skin. Skin contact: Eve contact: Mechanical irritation to eyes. Symptoms: Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble glass mineral wool is classified as a nuisance dust by OSHA.

Information on toxicological effects: Acute toxicity: No data were identified for the product as a whole. Data are for constituents:

Product name: Biosoluble glass mineral wool Result - LD50 Species - N/A. Dose - N/A. Exposure - N/A.

Product name: Thermo set, inert polymer bonding agent derived from plant starches. Result - LD50 Species - N/A. Dose - N/A. Exposure - N/A.

Serious eye damage/irritation: Skin Corrosion/Irritation: Germ cell mutagenicity:

May cause mechanical irritation to eyes. May cause mechanical irritation to skin. Respiratory or skin sensitization: No data were identified for this product or its constituents. No data were identified for this product or its constituents.

Results from a biopersistence test by intratracheal instillation has shown that Carcinogenicity: 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 as a carcinogen by OSHA, IARC or NTP.

Reproductive Toxicity: No data were identified for this product or its constituents. **Developmental Effects:** No data were identified for this product or its constituents. STOT - Single exposure: No data were identified for this product or its constituents. STOT - Repeated exposure: No data were identified for this product or its constituents. Aspiration hazard: Not relevant.

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	10/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

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

Persistence and degradability

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

Bioaccumulative potential

Will not bio-accumulate.

Mobility in soil

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

Results of PBT and vPvB assessment

Not relevant.

Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues:	Dispose of in accordance with all applicable regulations.
Contaminated packaging:	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 the local office of the USEPA, your local public health department or the local landfill regulators.

Product name: Revision Date: P/N-no.: Glass Mineral Wool Insulation (Brown) 2015-12-08 MA_DP_101
 Page:
 11/13

 Print date:
 2015-12-08

 SDS-ID:
 US-EN/1.4

SECTION 14: TRANSPORT INFORMATION

<u>UN number</u>

Not regulated.

UN proper shipping name

Not regulated.

Transport hazard class(es)

Not regulated.

Packing group

Not regulated.

Environmental hazards

Not regulated.

Special precautions for user

Not regulated.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not regulated.

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	12/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

OSHA Status: This product is regulated as a nuisance dust under OSHA criteria. Classified as not hazardous.

TSCA listed: All components of this product are listed or exempt from listing on the TSCA inventory.

CERCLA Reportable Quantity: Not regulated.

SARA Title III: Section 302 Extremely Hazardous: Not regulated. Section 311/312 Hazard Categories: Not regulated. Section 313 Toxic Chemicals: Not listed.

California Safe Drinking Water and Toxic Enforcement Act (Prop. 65): This product is exempt from labeling requirements under this Act.

In accordance with industry practice, Knauf 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.

Product name:	Glass Mineral Wool Insulation (Brown)	Page:	13/13
Revision Date:	2015-12-08	Print date:	2015-12-08
P/N-no.:	MA_DP_101	SDS-ID:	US-EN/1.4

SECTION 16: OTHER INFORMATION

Label in accordance with OSHA HCS (2012): This product is not classified as hazardous.

Abbreviations and acronyms used in the safety data sheet:

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS:	Chemical Abstract Service
CFR:	Code of Federal Regulations
EUCEB:	European Certification Board for Mineral Wool Products
IARC:	International Agency for Research on Cancer
NIOSH:	National Institute of Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration (United States)
PEL:	Permissible Exposure Limit
PBT:	Persistent, Bioaccumulative and Toxic
SARA:	Superfund Amendments and Reauthorization Act
SDS:	Safety Data Sheet
STEL:	Short Term Exposure Limit
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act
TWA:	Time Weighted Average
USEPA:	United States Environmental Protection Agency
IBC:	Individual Bulk Container
IBC:	Individual Bulk Container
MARPOL:	International Convention for the Prevention of Pollution from Ships

All products manufactured by Knauf 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



Additional information:

Change to Sections: 1, 16 New document format Date: 2015-12-08 Date of previous revisions: 2015-10-23, 2015-10-13, 2015-08-20, 2015-05-22

Moreover, in 2001, the IARC, reclassified glass mineral wool fibers from Group 2B (possibly carcinogenic) to «not classifiable as to their carcinogenicity to humans (Group 3)». (See Monograph Vol 81, http://monographs.iarc.fr/).

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.