

Product name:	Glass Mineral Wool Insulation (Yellow)	Page:	1/15
Revision Date:	2016-02-24	Print date:	2016-02-24
Product No.:	MA_DP_107	SDS-ID:	CA-EN/1.2

1. IDENTIFICATION

Product identifier

Product name: Glass Mineral Wool Insulation (Yellow)

Synonyms, trade names Alley-K™ Pipe Insulation*, Alley-K™ ASJ Pipe Insulation*, Alley-Wrap™, AK-110™, Alley-Wrap™ FSK, AK Board™, AK Board™ FSK, FDM, AK Blanket™, AK Flex™, Unfaced Metal Building Insulation, Alley-Kat Air Duct Board™, High Temperature Blanket, High Temperature Batt, High Temperature HD Blanket, High Temperature Panel, High Temperature Board
(*See section 2, 8, 10)

Revision: Date: 2016-02-24

Recommended use and restrictions on use

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 safety data sheet

Head Office Manson Insulation Products Ltd.
4805 Lapiniere Blvd, Suite 3000
Brossard, QC
J4Z 0G2
Tel: 800 626 7661
sds@knaufinsulation.com
www.imanson.com

Region: Canada

Emergency telephone number

Emergency telephone: 24hr: Chemtrec Tel: 800 424 9300

2. HAZARDS IDENTIFICATION

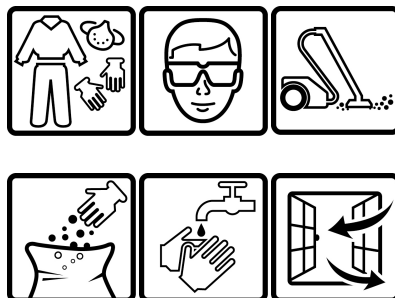
Classification of the hazardous product

Classification according to WHMIS 2015: 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

The following sentences and pictograms are printed on packaging: The mechanical effect of fibers in contact with skin may cause temporary itching.



www.knaufinsulation.com/comfort-and-handling

Other hazards

None

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.

* 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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

<u>%:</u>	<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>Hazard classification:</u>	<u>Notes:</u>
83-97	-	Biosoluble glass mineral wool	-	(1), (2), (3)
3-17	-	Thermo set, inert polymer based on cured phenol formaldehyde resin	-	
<0.1	50-00-0.	Formaldehyde	-	-

Notes:

- (1) Specific chemical identity and/or exact percent concentration is withheld as trade secret.
- (2) Man made vitreous (silicate) fibers with random orientation with alkaline oxide and alkali earth oxide (Na₂O+K₂O+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.
- (3) All Knauf Insulation products covered by this SDS are independently certified by EUCEB to be manufactured using biosoluble glass formulations.

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.

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 (Yellow)
Revision Date: 2016-02-24
Product No.: MA_DP_107

Page: 4/15
Print date: 2016-02-24
SDS-ID: CA-EN/1.2

5. FIRE-FIGHTING MEASURES

Extinguishing media

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

Specific hazards arising from the hazardous product

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 fire-fighters

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

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 items

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

Product name: Glass Mineral Wool Insulation (Yellow)
Revision Date: 2016-02-24
Product No.: MA_DP_107

Page: 5/15
Print date: 2016-02-24
SDS-ID: CA-EN/1.2

7. HANDLING AND STORAGE

Precautions for safe handling

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

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 (Yellow)
 Revision Date: 2016-02-24
 Product No.: MA_DP_107

Page: 6/15
 Print date: 2016-02-24
 SDS-ID: CA-EN/1.2

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Canada

Occupational exposure limits:

<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>	<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
-	Glass wool fibers	-	1 fiber/ml	8h	A3; ACGIH2015	New Brunswick
-	Glass wool fibers	-	1 f/cc	8h	-	Saskatchewan
-	Glass wool fibers	-	3 f/cc	15min	-	
-	Glass wool fibers	-	1 f/cc	8h	-	Nunavut
-	Glass wool fibers	-	3 f/cc	15min	-	
-	Glass wool fibers	-	1 fiber/ml	TWA	A3	Newfoundland -Labrador
-	Glass wool fibers	-	1 fiber/ml	TWA	A3	Manitoba
-	Glass wool fibers	-	1 fiber/ml	TWA	A3	Nova Scotia
-	Glass wool fibers	-	1 fiber/ml	TWA	A3	Prince Edward Island
-	Mineral Wool Fibres, respirable	-	10 mg/m3	8h	-	Yukon
-	Glass wool fibers	-	1 f/cc	8h	-	NWT
-	Glass wool fibers	-	3 f/cc	15min	-	
-	Glass wool fibers	-	2 fibres/cm3	TWA	-	Quebec
-	Glass wool fibers	-	1 f/cc	TWA	Ont	Ontario
-	Glass wool fibers	-	1 f/cc	TWA	-	BC
-	Glass wool fibers	-	1 f/cc	TWA	-	Alberta
-	Particulates not otherwise regulated (PNOR), total dust	-	10 mg/m3	TWA	-	Quebec
-	Particulates not otherwise regulated (PNOR), total dust	-	10 mg/m3	TWA	3	Alberta
-	Particulates not otherwise regulated (PNOR), respirable fraction	-	3 mg/m3	TWA	3	Alberta

Notes:

(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

Product name:	Glass Mineral Wool Insulation (Yellow)	Page:	7/15
Revision Date:	2016-02-24	Print date:	2016-02-24
Product No.:	MA_DP_107	SDS-ID:	CA-EN/1.2

Exposure controls

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

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

Respiratory equipment: In dusty environments, use suitable respiratory protection.

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

Environmental Exposure Controls: Not relevant

*** 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. 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 (Yellow)
Revision Date: 2016-02-24
Product No.: MA_DP_107

Page: 8/15
Print date: 2016-02-24
SDS-ID: CA-EN/1.2

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: Solid

Form: Rolls, loose fiber, Panel

Colour: Yellow

Odour: Not relevant

Odour threshold: Not relevant

pH: Not relevant

Melting point / freezing point: Not relevant

Initial boiling point and boiling range: Not relevant

Flash point: Not relevant

Auto Ignition Temperature (°F): Not relevant

Flammability (solid, gas): Not relevant

Flammability limit - lower (%): Not relevant

Flammability limit - upper (%): Not relevant

Vapour pressure: Not relevant

Vapour density: Not relevant

Evaporation rate: Not relevant

Relative density: 7 - 96 kg/m³

Partition coefficient (n-octanol/water): Not relevant

Solubility: 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: Glass Mineral Wool Insulation (Yellow)
Revision Date: 2016-02-24
Product No.: MA_DP_107

Page: 9/15
Print date: 2016-02-24
SDS-ID: CA-EN/1.2

10. STABILITY AND REACTIVITY

Reactivity

None

Chemical stability

Binder will decompose above 400°F

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.

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.

Product name: Glass Mineral Wool Insulation (Yellow)
Revision Date: 2016-02-24
Product No.: MA_DP_107

Page: 10/15
Print date: 2016-02-24
SDS-ID: CA-EN/1.2

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Ingestion: Non-hazardous when ingested.
Inhalation: Mechanical irritation to upper respiratory tract.
Skin contact: Mechanical irritation to skin.
Eye 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.

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 based on cured phenol formaldehyde resins
Result - LD50
Species - N/A.
Dose - N/A.
Exposure - N/A.

Serious eye damage/irritation: May cause mechanical irritation to eyes.
Skin Corrosion/Irritation: May cause mechanical irritation to skin.
Respiratory or skin sensitization: No data were identified for this product or its constituents.

Germ cell mutagenicity: No data were identified for this product or its constituents.

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: 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 (Yellow)	Page:	11/15
Revision Date:	2016-02-24	Print date:	2016-02-24
Product No.:	MA_DP_107	SDS-ID:	CA-EN/1.2

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Persistence and degradability

Inert inorganic product with Thermo set, inert polymer based on cured phenol formaldehyde resins; 3-17%

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.

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 your local public health department or the local landfill regulators.

Product name: Glass Mineral Wool Insulation (Yellow)
Revision Date: 2016-02-24
Product No.: MA_DP_107

Page: 12/15
Print date: 2016-02-24
SDS-ID: CA-EN/1.2

14. TRANSPORT INFORMATION

UN number

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 (Yellow)
Revision Date: 2016-02-24
Product No.: MA_DP_107

Page: 13/15
Print date: 2016-02-24
SDS-ID: CA-EN/1.2

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific to the product

WHMIS 2015: Non-controlled product.

Domestic Substance List (DSL): All components listed or exempt.

Non-Domestic Substances List (NDSL): All components listed or exempt.

National Pollutant Release Inventory: All components listed or exempt.

CEPA -Priority Substances List: All components listed or exempt.

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 (Yellow)	Page:	14/15
Revision Date:	2016-02-24	Print date:	2016-02-24
Product No.:	MA_DP_107	SDS-ID:	CA-EN/1.2

16. OTHER INFORMATION

Label in accordance with WHMIS 2015: 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
MARPOL: International Convention for the Prevention of Pollution from Ships
CAS: Chemical Abstract Service
EC50/90: Effective Concentration (median / 90th percentile)
EUCEB: European Certification Board for Mineral Wool Products
IARC: International Agency for Research on Cancer
IDLH: Immediately Dangerous to Life and Health
LC50/90: Lethal Concentration (median / 90th percentile)
NOEC: No Observed Effect Concentration
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
PBT: Persistent, Bioaccumulative and Toxic
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System
DSL: Domestic Substance List
NDSL: Non-Domestic Substances List
CEPA: Canadian Environmental Protection Act

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: 8
New document format Date: 2016-02-24
Date of previous revisions: 2015-08-11, 2015-08-07

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/>).

Product name:	Glass Mineral Wool Insulation (Yellow)	Page:	15/15
Revision Date:	2016-02-24	Print date:	2016-02-24
Product No.:	MA_DP_107	SDS-ID:	CA-EN/1.2

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.
