

# SAFETY DATA SHEET Glass Mineral Wool Insulation (Yellow)

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

#### 1. Identification

Product identifier

Product name Glass Mineral Wool Insulation (Yellow)

Product number MA\_DP\_107

Synonyms; trade names Alley-K™Pipe Insulation\*, Alley-K™ASJ Pipe Insulation\*, Alley-Wrap™, AK- 110™, Alley-

Wrap<sup>™</sup>FSK, AK Board<sup>™</sup>, AK Board<sup>™</sup>FSK, FDM, AK Blanket<sup>™</sup>, AK Flex<sup>™</sup>, Unfaced Metal Building Insulation, Alley-Kat Air Duct Board<sup>™</sup>, High Temperature Blanket, High Temperature Batt, High Temperature Board (\*See

section 2, 8, 10)

**Revision date:** 10/22/2020

Recommended use of the chemical and restrictions on use

Application 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: United States, Central & South America

Emergency telephone number

**Emergency telephone** 24hrs: Chemtrec Tel: 800 424 9300

#### 2. Hazard(s) identification

#### Classification of the substance or mixture

OSHA Regulatory Status This product is regulated as a nuisance dust under OSHA criteria.

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 None.

information

#### The following sentences and pictograms apply to this product:

The mechanical effect of fibres 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 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. See section 8 & 10

#### 3. Composition/information on ingredients

#### **Mixtures**

### Biosoluble glass mineral wool

83 - 97%

CAS number: -

Ingredient notes:(1)(2)

#### Classification

Not Classified

## Thermo set, inert polymer based on cured phenol formaldehyde resin

3 - 17%

CAS number: —

#### Classification

Not Classified

Formaldehyde <0.1%

CAS number: 50-00-0

#### Classification

Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 2 - H330 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350

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

#### Ingredient notes

STOT SE 3 - H335

- (1) 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.
- (2) All Knauf Insulation products covered by this SDS are independently certified by EUCEB to be manufactured using biosoluble glass fibers formulations and thus the glass wool fibers are exempt from labelling under NTP or California Prop 65 requirements.

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

#### 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 by OSHA.

#### Indication of 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 (CO2), and dry powder.

#### Special hazards arising from the substance or mixture

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.

#### 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** 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 dust potential exceeds PEL/TLV.

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 uses(s)

Specific end use(s) Thermal and/or acoustic insulation for use in technical applications, industrial applications and

in building construction.

#### 8. Exposure controls/Personal protection

#### Control parameters

#### Occupational exposure limits

#### Biosoluble glass mineral wool

Long-term exposure limit (8-hour TWA): ACGIH, (Notes: (A3)) 1 f/cc Glass wool fibers Long-term exposure limit (8-hour TWA): NIOSH 5 mg/m³ Mineral wool fiber, total particulate

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ Particulates not otherwise regulated (PNOR), respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ Particulates not otherwise regulated (PNOR), total dust

#### Formaldehyde

Ceiling exposure limit: ACGIH 0.3 ppm 0.37 mg/m3

A2, DSens, RSens

Long-term exposure limit (8-hour TWA): OSHA 0.75 ppm Short-term exposure limit (15-minute): OSHA 2 ppm

ACGIH = American Conference of Governmental Industrial Hygienists.

A2 = Suspected Human Carcinogen.

OSHA = Occupational Safety and Health Administration.

DSens = Dermal sensitizer. RSens = Respiratory sensitizer.

NIOSH = The National Institute for Occupational Safety and Health.

#### Ingredient comments

(A3) - Fibers longer than 5  $\mu$ m; diameter less than 3  $\mu$ m; aspect ratio greater than 5:1 as determined by the membrane filter method at 400-450X magnification (4-mm objective) phase contrast illumination.

Biosoluble glass mineral wool - See section 3. Ca = Potential occupational carcinogen

CT = Ceiling time.

DSens = Dermal sensitizer. RSens = Respiratory sensitizer. A2 = Suspected Human Carcinogen.

Formaldehyde (CAS: 50-00-0)

Immediate danger to life 20 ppm 20 ppm and health

#### **Exposure controls**

Appropriate engineering

controls

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.

**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.

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.

#### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance Solid.

Rolls. Panel. Loose fiber.

Color Yellow.

Odor Not relevant.

Odor 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.

Vapor pressureNot relevant.Vapor densityNot relevant.

**Relative density** 7 - 96 kg/m<sup>3</sup>

**Solubility(ies)** Generally chemically inert and slightly soluble in water.

Partition coefficientNot relevant.Auto-ignition temperatureNot relevant.Decomposition TemperatureNot relevant.

Viscosity Not relevant.

Explosive properties Not relevant.

Oxidizing properties Not relevant.

Nominal diameter of fibers. 3 - 8µm

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 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.

#### 11. Toxicological information

#### Information on toxicological effects

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) No data were identified for the product as a whole. Data are for constituents:

Biosoluble glass mineral wool - Not applicable.

Thermo set, inert polymer based on cured phenol formaldehyde resins. - Not applicable.

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) No data were identified for the product as a whole. Data are for constituents:

Biosoluble glass mineral wool - Not applicable.

Thermo set, inert polymer based on cured phenol formaldehyde resins. - Not applicable.

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) No data were identified for the product as a whole. Data are for constituents:

Biosoluble glass mineral wool - Not applicable.

Thermo set, inert polymer based on cured phenol formaldehyde resins. - 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  $\mu m$  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

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

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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 by OSHA.

#### 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 based on cured phenol formaldehyde

resins; 3 - 17%

Bioaccumulative potential

Bio-Accumulative 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 the local office of the USEPA, 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, DOT).

#### **UN Number**

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** 

No.

Special precautions for user

Not applicable.

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

#### 15. Regulatory information

**Regulatory Status**This product is regulated as a nuisance dust under OSHA criteria.

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.

#### **US Federal Regulations**

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

Not regulated.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Not regulated.

SARA 313 Emission Reporting

Not listed.

SARA (311/312) Hazard Categories

Not regulated.

**US State Regulations** 

California Proposition 65 Carcinogens and Reproductive Toxins



WARNING

This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Formaldehyde

Carcinogen.

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## Glass Mineral Wool Insulation (Yellow)

#### **Inventories**

#### **US-TSCA**

All the ingredients are listed or exempt.

#### 16. Other information

Abbreviations and acronyms

CAS: Chemical Abstracts Service.

used in the safety data sheet

IARC: International Agency for Research on Cancer.

IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods.

NIOSH: The National Institute for Occupational Safety and Health.

OSHA: Occupational Safety and Health Administration. PBT: Persistent, Bioaccumulative and Toxic substance.

PEL: Permissible Exposure Limit.

SARA: Superfund Amendments and Reauthorization Act.

TLV: Threshold Limit Value.

TSCA: Toxic Substances Control Act.

USEPA: United States Environmental Protection Agency.

vPvB: Very Persistent and Very Bioaccumulative.

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 11/12/2018 Revision date 10/22/2020

Revision 2.3

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Hazard statements in full H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H335 May cause respiratory irritation. H341 Suspected of causing genetic defects.

H350 May cause cancer.

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/)

This Safety Data Sheet / Product Data Sheet does not constitute a workplace assessment. Information contained in this document represents the state of our knowledge regarding this product as of the date of issue of the document. Attention of users is drawn to possible risks taken when the product is used for other applications than the

ones it has been designed for.