

### SAFETY DATA SHEET

## Glass Blowing Mineral Wool Insulation with Adhesive for Spray Application

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

1. Identification	
Product identifier	
Product name	Glass Blowing Mineral Wool Insulation with Adhesive for Spray Application
Product number	KI_DP_112
Synonyms; trade names	JetSpray™ Thermal, AssureR®, StableR®
Revision date:	02/22/2017
Recommended use of the che	emical 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 s	afety data sheet
Supplier	
	Knauf Insulation, Inc.
	One Knauf Drive
	Shelbyville
	IN 46176-1496
	www.knaufinsulation.us
	sds@knaufinsulation.com Tel: 800 825 4434
	1 el. 600 625 4454
Region:	United States, Central & South America
Emergency telephone numbe	<u>r</u>
Emergency telephone	24hrs: Chemtrec Tel: 800 424 9300

2. Hazard(s) identification		
Classification of the substance	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 information	None.	

### The following sentences and pictograms are printed on packaging:

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 by OSHA.

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3. Composition/information on ingredients	
Mixtures	
Biosoluble glass mineral wool	93 - 95%
CAS number: —	
Ingredient notes:(1)(2)	
Classification	
Not Classified	
Powdered Adhesive	<5%
CAS number: —	
Classification	
Not Classified	
Dedusting Oil	<1%
CAS number: —	
Classification	
Not Classified	
Fiber lubricant	<1%
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<sub>2</sub>O+K<sub>2</sub>O+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 and thus exempt from labeling 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 measur	es
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 medic	al 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 t	he 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 measure	98
Personal precautions, protect	ive 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 cont	ainment 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, in	cluding 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/ccGlass wool fibersLong-term exposure limit (8-hour TWA):NIOSH 5 mg/m³Mineral wool fiber, total particulateLong-term exposure limit (8-hour TWA):OSHA 5 mg/m³Particulates not otherwise regulated (PNOR), respirable fractionLong-term exposure limit (8-hour TWA):OSHA 15 mg/m³Particulates not otherwise regulated (PNOR), total dustACGIH = American Conference of Governmental Industrial Hygienists.OSHA = Occupational Safety and Health Administration.

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.
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.

### 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Appearance	Solid. Glass mineral wool fibers in polyethylene bags
Color	White.
Odor	Not relevant.
Odor threshold	No data available.
рН	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 pressure	Not relevant.
Vapor density	Not relevant.
Relative density	≈ 161.4 kg/m³
Solubility(ies)	Generally chemically inert and insoluble in water.
Partition coefficient	Not relevant.
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not relevant.
Viscosity	Not relevant.
Explosive properties	Not relevant.
Oxidizing properties	Not relevant.
Devitrification temperature	1832°F
Softening temperature	1112°F
Nominal diameter of fibers.	2 - 5 µm
Length weight geometric mean diameter less 2 standard errors	< 6 µm
Orientation of fibers	Random
10. Stability and reactivity	
Reactivity	None.
Stability	Stable in normal conditions of use.
Possibility of hazardous reactions	None in normal conditions of use.
Conditions to avoid	None.
Materials to avoid	Hydrofluoric acid will react with and dissolve glass.
Hazardous decomposition products	None in normal conditions of use.
11. Toxicological information	
Information on toxicological ef	fects

Acute toxicity - oral

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Notes (oral LD₅₀)	No data were identified for the product as a whole. Data are for constituents:
	Biosoluble glass mineral wool - Not applicable.
	Powdered Adhesive - Not applicable.
	Dedusting Oil - Not applicable.
	Fiber Lubricant - Not applicable.

Acute toxicity - dermal

Notes (dermal LD∞) Acute toxicity - inhalation	No data were identified for the product as a whole. Data are for constituents: Biosoluble glass mineral wool - Not applicable. Powdered Adhesive - Not applicable. Dedusting Oil - Not applicable. Fiber Lubricant - Not applicable.
Notes (inhalation LC∞)	No data were identified for the product as a whole. Data are for constituents: Biosoluble glass mineral wool - Not applicable. Powdered Adhesive - Not applicable. Dedusting Oil - Not applicable. Fiber Lubricant - 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.
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 -	
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 - <7% Organic Content.
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 Number Not applicable.	
Not applicable.	
Not applicable.	
Not applicable. UN proper shipping name Not applicable.	ıired.
Not applicable. <u>UN proper shipping name</u> Not applicable. <u>Transport hazard class(es)</u>	uired.
Not applicable. <u>UN proper shipping name</u> Not applicable. <u>Transport hazard class(es)</u> No transport warning sign requ	<i>ı</i> ired.
Not applicable. <u>UN proper shipping name</u> Not applicable. <u>Transport hazard class(es)</u> No transport warning sign requ <u>Packing group</u>	Jired.
Not applicable. <u>UN proper shipping name</u> Not applicable. <u>Transport hazard class(es)</u> No transport warning sign requ <u>Packing group</u> Not applicable.	
Not applicable. UN proper shipping name Not applicable. Transport hazard class(es) No transport warning sign requ Packing group Not applicable. Environmental hazards Environmentally Hazardous Su	
Not applicable. <u>UN proper shipping name</u> Not applicable. <u>Transport hazard class(es)</u> No transport warning sign requ <u>Packing group</u> Not applicable. <u>Environmental hazards</u> <u>Environmentally Hazardous Su</u> No.	

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, 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.

### **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 This product is exempt from labeling requirements under this Act.

#### Inventories

US - TSCA All the ingredients are listed or exempt.

16. Other information	
Abbreviations and acronyms used in the safety data sheet	CAS: Chemical Abstracts Service. 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 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.kna	ufinsulation.com
EVCEB D	
Revision comments	1 [USA]
Revision date	2/22/2017
Revision	2.1
Supersedes date	9/28/2016
SDS No.	4615
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.