Revision date Revision : Supersedes version of 5/30/2024 3.1 5/6/2024



SAFETY DATA SHEET

Fiberglass with ECOSE® Technology

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

SECTION 1: Identification	
Product identifier	
Product name	Fiberglass with ECOSE® Technology
Product number	KI_DP_101
Other means of identification	None.
Trade name	EcoBatt® (UnfacedandFaced) Building Insulation, EcoBatt® QuietTherm® (Unfaced and Faced) Building Insulation, Acoustical/IB Board, Acoustical Smooth Board, Air Duct Board (Atmosphere™), KB Blanket, Black Acoustical Board, Black Diffuser Board, Condensation Control Blanket, Duct Liner (Atmosphere™), Duct Wrap Faced and Unfaced (Atmosphere™), Earthwool® 1000° Pipe Insulation*, ET Batt*, ET HD Blanket, ET Blanket*, ET Board*, ET Panel*, Equipment Liner M, Everbilt (Unfaced and Faced) Building Insulation, Fabrication Board*, Flexible Duct Material, Guardian (Unfaced and Faced) Building Insulation, Hullboard*, Earthwool Insulation Board (Faced and Unfaced)*, KF_110*, KFR/ET Range Insulation*, KNSeries*, Manufactured Housing Duct Board, Manufactured Housing Insulation, Metal Building Insulation,Metal Building Cavity Insulation, Metal Building Filler Insulation, Earthwool Pipe & Tank Insulation*, Atmosphere Rigid Plenum Liner, Sill Sealer, Wall & Ceiling Liner M, Guardian by Knauf Insulation, Inner Safe™ Batt, EcoBatt® IRD, EcoRoll® Insulation, Basement Blanket Insulation, Performance + Duct Wrap (faced and unfaced), Performance + Duct Liner, Performance + Air Duct Board, Performance + Rigid Plenum Liner, Performance + Black Diffuser Board
Recommended use of the chemica	l and restrictions on use
Identified Uses	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 safet	y data sheet
Supplier	Knauf Insulation Inc.
	One Knauf Drive Shelbyville IN 46176-1496 Tel: 800 825 4434
	www.knaufnorthamerica.com sds@knaufinsulation.com
Region	United States, Central & South America
Emergency telephone number	
Emergency phone number	24hrs: Chemtrec Tel: 800 424 9300

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SECTION 2: Hazards 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

<u>Label elements</u> Hazard statements	Not classified
Contains	None.
Hazard pictograms	None.
Signal word	None.
Precautionary statements	None.
Supplemental label information	None.

The following sentences and pictograms apply to this product:



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.
Most important symptoms/effects	Contact with skin, eyes and upper respiratory system may cause mechanical irritation.
	Biosoluble Fiberglass is classified as a nuisance dust by OSHA.
Persistent Bioaccumulative Toxic	Not relevant
* Heat-up precautions	For product with binder: When heated for the first time above 400°F, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system.
	see section(s) : 8 & 10

SECTION 3: Composition/in Mixtures	formation on ingredients
Biosoluble Fiberglass	(1)(2)
CAS number	82 - 100%
Classification	Not classified
Ingredient comments	(1) 650-016-00-2 – Man made vitreous (silicate) fibres 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 as carcinogenic.
	(2) All Knauf Insulation products covered by this SDS are independently certified by EUCEB t be manufactured using biosoluble glass formulations and thus exempt from labeling under NTP or California Prop 65 requirements.

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CAS number

Classification

Not classified

Full text of R-phrases: see section 16

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

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.
Note to physician :	No specific measures.
Inhalation	Remove from exposure. Rinse the throat and clear dust from airways.
Ingestion	Most important symptoms/effects
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 eff	ects, both acute and delayed
General information	Mechanical irritation of the skin, eyes and upper respiratory system.
	Biosoluble Fiberglass is classified as a nuisance dust by OSHA.
Indication of any 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 measures.
SECTION 5: Fire-fighting measures	5
Extinguishing media	
Suitable extinguishing media	Water, foam, carbon dioxide (CO2), and dry powder.
Unsuitable extinguishing media	None.
Special hazards arising from the su	<u>ubstance or mixture</u>
<u>Special hazards arising from the su</u> General information	ubstance 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.
	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
General information Advice for firefighters General information SECTION 6: Accidental release mea	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.
General information Advice for firefighters General information SECTION 6: Accidental release mea	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.

	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
<u>Methods and material for containn</u> Methods for cleaning up	<u>nent and cleaning up</u> Vacuum cleaner or dampen down with water spray prior to brushing up.
Reference to other sections	For personal protection, see section 8. For waste disposal, see section 13.
SECTION 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, includ Storage precautions	ing 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.
<u>Specific end use(s)</u> Specific end use(s)	Thermal and/or acoustic insulation for use in :technical applications, industrial applications and in building construction.
SECTION 8: Exposure controls/per	sonal protection
SECTION 8: Exposure controls/per Control parameters	sonal protection
	sonal protection Biosoluble Fiberglass
Control parameters Occupational exposure limits Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA):	
Control parameters Occupational exposure limits Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA):	Biosoluble Fiberglass ACGIH, (Notes: (A3)) 1 f/cc Glass wool fibers NIOSH 5 mg/m ³ Mineral wool fiber, total particulate OSHA 5 mg/m ³ Particulates not otherwise regulated (PNOR), respirable fraction OSHA 15 mg/m ³ Particulates not otherwise regulated (PNOR), total dust nental Industrial Hygienists. Administration.
Control parameters Occupational exposure limits Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): ACGIH = American Conference of Governr OSHA = Occupational Safety and Health A NIOSH = The National Institute for Occup	Biosoluble Fiberglass ACGIH, (Notes: (A3)) 1 f/cc Glass wool fibers NIOSH 5 mg/m ³ Mineral wool fiber, total particulate OSHA 5 mg/m ³ Particulates not otherwise regulated (PNOR), respirable fraction OSHA 15 mg/m ³ Particulates not otherwise regulated (PNOR), total dust nental Industrial Hygienists. Administration.
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Control parameters Occupational exposure limits Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): ACGIH = American Conference of Governr OSHA = Occupational Safety and Health A NIOSH = The National Institute for Occup Exposure limit values have been esta	Biosoluble Fiberglass ACGIH, (Notes: (A3)) 1 f/cc Glass wool fibers NIOSH 5 mg/m³ Mineral wool fiber, total particulate OSHA 5 mg/m³ Particulates not otherwise regulated (PNOR), respirable fraction OSHA 15 mg/m³ Particulates not otherwise regulated (PNOR), total dust nental Industrial Hygienists. Administration. ational Safety and Health. blished by many authorities. Check on limit values that apply in your local situation (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. Biosoluble Fiberglass - see section(s) : 3.
Control parameters Occupational exposure limits Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): Long-term exposure limit (8-hour TWA): ACGIH = American Conference of Governr OSHA = Occupational Safety and Health A NIOSH = The National Institute for Occup Exposure limit values have been esta Ingredient comments Exposure controls/personal proteet	Biosoluble Fiberglass ACGIH, (Notes: (A3)) 1 f/cc Glass wool fibers NIOSH 5 mg/m³ Mineral wool fiber, total particulate DSHA 5 mg/m³ Particulates not otherwise regulated (PNOR), respirable fraction DSHA 15 mg/m³ Particulates not otherwise regulated (PNOR), total dust nental Industrial Hygienists. Administration. ational Safety and Health. blished by many authorities. Check on limit values that apply in your local situation (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. Biosoluble Fiberglass - see section(s) : 3. Ction 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

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Hygiene measures	After contact with the product, rinse skin in cold water to reduce potential effects of mechanical itching.
Respiratory protection Environmental exposure controls	In dusty environments, use suitable respiratory protection. Not relevant
* Heat-up precautions	For product with binder: When heated for the first time above 400°F, 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. Provide adequate ventilation. In confined spaces or where ventilation is not possible, occupants should wear appropriate self-contained breathing apparatus.

SECTION 9: Physical and chemical properties

Information on basic physical and Appearance	chemical properties Solid. Rolls. Panel. Loose fibre.
Color	Brown
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
Vapour density	Not relevant
Relative density	7 - 96 kg/m³
Solubility	Generally chemically inert and slightly soluble in water.
Auto-ignition temperature	Not relevant
Decomposition temperature	Not relevant
Viscosity	Not relevant
Explosive properties	Not relevant
Oxidizing properties	Not relevant
Other information	
Devitrification temperature	Not relevant
Softening temperature	Not relevant
Nominal diameter of fibres	3 - 8 µm



Random

Orientation of fibres

SECTION 10: Stability and reactivity	
Reactivity	None.
Chemical stability	Binder will decompose above 200°C (400°F).
Possibility of hazardous reactions	None under normal use
Conditions to avoid	Heating above 200 °C (400°F).
Incompatible materials	Hydrofluoric acid will react with and dissolve glass.

Hazardous decomposition products

None under normal use

For product with binder: When heated for the first time above 400°F, 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. Provide adequate ventilation. In confined spaces or where ventilation is not possible, occupants should wear appropriate self-contained breathing apparatus.

SECTION 11: Toxicological informa	ation
Information on toxicological effects	
Acute toxicity (oral) - LD50 oral	No data were identified for the product as a whole. Data are for constituents: Biosoluble Fiberglass – Not applicable. Thermo set, inert polymer bonding agent derived from plant starches. – Not applicable.
Acute toxicity (dermal) - LD50 dermal	No data were identified for the product as a whole. Data are for constituents: Biosoluble Fiberglass – Not applicable. Thermo set, inert polymer bonding agent derived from plant starches. – Not applicable.
Acute toxicity (inhalation) - LC50 Inhalation	No data were identified for the product as a whole. Data are for constituents: Biosoluble Fiberglass – Not applicable. Thermo set, inert polymer bonding agent derived from plant starches. – Not applicable.
Skin corrosion/irritation	May cause mechanical irritation to skin
Serious eye damage/irritation	May cause mechanical irritation to eyes.
Respiratory sensitization	No data were identified for this product or its constituents.
Skin sensitization	No data were identified for this product or its constituents.
Germ cell mutagenicity Carcinogenicity	No data were identified for this product or its constituents. SWA / WES requirements exempt biopersistant fibres as defined by notes. Results from a biopersistence test in line with the notes has shown that fibres in this product longer than 20 µm have a weighted half-life less than 40 days and meet the "Nota Q" requirements, thus this product is not classified as a carcinogen. None of the components of this product Reproductive toxicity are listed as a carcinogen.

Reproductive toxicity Reproductive toxicity - Fertility

No data were identified for this product or its constituents.

Developmental toxicity	No data were identified for this product or its constituents.
Specific target organ toxicity - single exposure	No data were identified for this product or its constituents.
Specific target organ toxicity - repeated exposure	No data were identified for this product or its constituents.
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.
Most important symptoms/effects	Contact with skin, eyes and upper respiratory system may cause mechanical irritation. Biosoluble Fiberglass is classified as a nuisance dust by OSHA.

SECTION 12: Ecological information		
General toxicity		
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 - 18%		
Bioaccumulative potential		
Bioaccumulative potential	No bioaccumulation potential	
partition coefficient	Not relevant	
Mobility in soil	Not considered mobile. Less than 1% leachable organic carbon if landfilled.	
Results of PBT and vPvB assessment		
Not relevant		
Endocrine disrupting properties		
Not relevant		
Other adverse effects	None known.	
SECTION 13: Disposal considerati	ions	
13.1. Waste treatment methods		
General information	Dispose of in accordance with regulations and procedures in force in country of use or disposal.	
	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.

SECTION 14: Transport information		
General information	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).	
UN number	Not applicable	
UN proper shipping name	Not applicable	
Transport hazard class(es)	No transport warning sign required.	
Packing group	Not applicable	
Environmental hazards		



Environmentally hazardous substance/marine pollutant	None.
Special precautions for user	Not applicable

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

Not applicable

SECTION 15: Regulatory in	formation
Regulatory status	This product is regulated as a nuisance dust under OSHA criteria.
	In accordance with industry practice and voluntary commitments, Knauf Insulation has decided to continue to provide its customers with the appropriate information for the purpose of assuring safe handling and use of fiberglass 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 Section 311/312 Hazard Classes : Not regulated.

US State regulations

California Proposition 65 On-product Warning : This product is exempt from labeling requirements under this Act.

SECTION 16: Other information		
General information	All products manufactured by Knauf Insulation are made of non-classified fibers and are certified by EUCEB.	
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.knaufnorthamerica.com	
Revision comments	§1	
Revision date	5/30/2024	
Supersedes version of	5/6/2024	
Revision :	3.1	
SDS number	KI_DP_101	

SDS number Other information

In 2001, the International Agency for Research on Cancer (IARC) reclassified mineral wool fibres and fiberglass 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.

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