

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: KNAUF INSULATION BLOWING INSULATION

Product/Trade Name: Fiber glass, fiber glass wool product

Product Description: Fiber glass insulation

Chemical Name: Mixture

CAS Number: None assigned

Einecs: None assigned

Molecular Formula: No data available

COMPANY IDENTIFICATION

Knauf Insulation, Inc.

One Knauf Drive

Shelbyville, Indiana 46176, USA

Web Address: www.knaufinsulation.us

CONTACT INFORMATION

Technical Information: (800) 825-4434 - 8 a.m.–5 p.m. (EST-USA)

Emergency: (800) 424-9300 - **Emergency Telephone:** Chemtrec

Emergency: (703) 527-3887 - **Outside of the U.S.:** Chemtrec

Preparation Date: 11/1/2017

Last revision Date: 11/1/2017

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

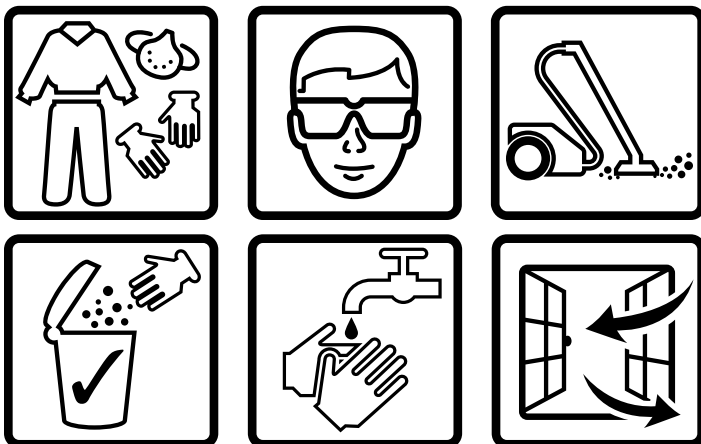
This product may cause temporary irritation to the upper respiratory system, eyes, and skin. Avoid inhalation, skin and eye contact as temporary irritation may occur. Wear appropriate personal protective equipment as described in Section 8.

GHS

Temporary eye, skin, and respiratory irritation may occur. Avoid breathing dust, fume, gas, mist, vapors and/or spray. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Wear protective gloves.

GHS: Skin irritation - Category 3; Eye irritation - Category 2b

The following sentences and pictograms are printed on packaging:



www.knaufinsulation.com/comfort-and-handling

NFPA/HMIS RATINGS

Degree of Hazard	
0	Minimal (Insignificant)
1	Slight
2	Moderate
3	Serious (High)
4	Severe (Extreme)
*	Chronic Health Effect(s)

HEALTH FIRE REACTIVITY

NFPA Rating: 1 0 0

HMIS Rating: 1 * 0 0

Physical Form: Solid

Color: No data available

Odor: No odor

Hazards: Mild/slight irritant, mechanical irritant

Route of Entry: Inhalation, skin/dermal, eye/ocular

Medical Conditions Aggravated by Exposure: Pre-existing conditions which may be aggravated by mechanical irritants upon inhalation or skin contact.

POTENTIAL HEALTH EFFECTS:

INHALATION

Acute (Immediate): Temporary irritation of nose and throat may occur.

Chronic (Delayed): Use of these products has not been shown to cause cancer in humans. Fiber glass wool is a possible cancer hazard. Fiber glass wool has caused cancer in animals but has not produced cancer by inhalation.

SKIN

Acute (Immediate): Temporary irritation of the skin may occur in some individuals.

Chronic (Delayed): No data available

EYE

Acute (Immediate): Temporary irritation or redness may occur.

Chronic (Delayed): No data available

INGESTION

Acute (Immediate): Ingestion of this product unlikely.

Chronic (Delayed): No data available

Mutagenic Effects: None

Carcinogenic Effects: This product contains glass wool insulation fibers. Following a thorough review of all the medical-scientific data available at a meeting in October 2001, the IARC panel lowered the classification for glass wool insulation fibers from a Group 2B classification ("possibly carcinogenic to humans") to a Group 3 classification ("not classifiable as to carcinogenicity to humans"). IARC said that there is "no evidence of increased risks of lung cancer or of mesothelioma from occupational exposures during manufacturing of these materials, and inadequate evidence over all of any cancer risk."

Reproductive Effects: None

Other Health Effects: Warning: To avoid danger of suffocation, do not place the plastic bag within reach of babies and children.

See Section 12 for Ecological Information

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Name CAS % (weight)

UN,EINICS OSHA PEL/TWA ACGIH TLV/TWA NIOSH REL

Fibrous glass 65997-17-3 98% TO 99% 266-046-0

1f/cc (continuous filament glass fibers)

1f/cc (respirable fibers) 5 mg/m³ (total dust)

Dedusting Oil (Fiber Lubricant)

NDA 0.5% to 1% NDA NDA NDA NDA

Acetic acid ethenyl ester – Ethenol polymer

25213-24-5 0.001% to 0.006% NDA NDA NDA NDA

Cyclosiloxanes,

di-Me 69430-24-6 0.001% TO 0.002% NDA NDA NDA NDA

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product may be regulated, have exposure limits or other information identified as the following: Fibrous Glass in Canada, these products are considered Hazardous under the Workplace Hazardous Materials Information System (WHMIS). According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered Hazardous.

See Section 11 for Toxicological Information

SECTION 4: FIRST AID MEASURES

Inhalation: Remove to fresh air, apply artificial respiration and/or oxygen if necessary and get medical attention.

Skin: Wash exposed skin with soap and water. If irritation develops or persists, seek medical attention.

Eye: Do not rub or scratch your eyes. If irritation persists get medical attention. In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes.

Ingestion: Consult a physician if unusual reaction is noted. Product is not intended nor is it likely to be ingested or eaten.

Notes to Physician: Skin irritation responds well to mild hydrocortisone cream.

See Section 2 for Potential Health Effects

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Use any media suitable for the surrounding fires.

Unsuitable Extinguishing Media: No data available

Firefighting Procedures: fire fighters should avoid inhaling any combustion products. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing

Unusual Fire and Explosion Hazards: If burned, the facings and packaging on these products could release toxic fumes as described below. The binder and facings in a fire situation may emit toxic fumes and smoke containing carbon dioxide, carbon monoxide, sulfur dioxide and other potentially toxic volatile organic compounds.

Hazardous Combustion Products: Facings may decompose and release carbon monoxide, carbon dioxide, hydrogen chloride, chlorine gas, antimony and traces of arsenic, oxides of arsenic and oxides of nitrogen.

Flash Point: N/A

Flash point test type: N/A

EXPLOSION LIMITS

Upper: N/A Lower: N/A

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin and eyes during clean-up.

Emergency Procedures: Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed. Ventilate the contaminated area.

Containment/Clean-up Measures: Containment of this material should not be necessary. Remove sources of ignition. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Avoid the generation of dusts during clean-up.

SECTION 7: HANDLING AND STORAGE

Handling: Do not breathe dust from this material. Keep this product from heat, sparks, or open flame. Use this product with adequate ventilation. Always wash work clothes separately from other clothing. Wipe out the washer or sink to prevent loose glass fibers from getting on other clothing. Wash thoroughly after handling. Use personal protective equipment as described in Section 8.

Storage: store in a dry place and under cover to protect product.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION (PPE)

Respiratory Protection: A properly fitted NIOSH approved N95 series disposable dust respirator such as a 3m brand #8210, #8511, #8233 or equivalent, in high humidity environments should be used when: high dust levels are encountered; the level of glass fibers in the air exceeds the occupational exposure limits; or if irritation occurs.

Respirators: Wear NIOSH-certified respirators when handling and applying fiber glass insulation products in accordance with established exposure guidelines:

Eye/Face Protection: Safety glasses with side shields should be worn at a minimum. In dusty environments chemical goggles should be worn. Exposure respirator (or equivalent)

Less than 10 times exposure guideline ½ mask N95 or higher, such as 3m brand #8210, #8511 or #8233.

Less than 50 times exposure guideline full face N100 or higher, such as 3m brand 6000 or 7000 series

Skin/Body Protection: Work clothing sufficient to prevent all skin contact should be worn, such as coveralls, long sleeves and cap.

General industrial hygiene considerations: use good industrial hygiene practices in handling this material. Availability of eye wash fountains are recommended.

Engineering Measures/Controls: Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces. Avoid spread of fiber glass dust.

LISTED EXPOSURE LIMITS

U.S. State California: None listed

United States - ACGIH: None listed

United States - OSHA: None listed

United States - NIOSH: None listed

Canada – British Columbia

- Fibrous Glass (65997-17-3): 1 fiber/cm³ TWA (fibers longer than 5 µm, with an aspect ratio of equal to/greater than 3:1) (related to glass wool fibers)

Canada – Manitoba

- Fibrous Glass (65997-17-3): 1 fiber/cm³ TWA (respirable fibers, length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450x magnification [4-mm objective], using phase-contrast illumination) (related to glass wool fibers)

Canada – New Brunswick

- Fibrous Glass (65997-17-3): 1 fibre/cm³ TWA (fibers longer than 5 µm with a diameter less than 3 µm, aspect ratio greater than 5:1) (related to glass wool fibers)

Canada – Northwest Territories

- Fibrous Glass (65997-17-3): 3 fibres/cm³ TWA (with a diameter <=3.5 µm and a length =>10 µm); 5 mg/m³ TWA (total mass) (related to mineral wool fiber)

Canada – Nova Scotia

- Fibrous Glass (65997-17-3): 1 fiber/cm³ TWA (respirable fibers, length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450x magnification [4-mm objective], using phase-contrast illumination) (related to glass wool fibers)

Canada – Nunavut

- Fibrous Glass (65997-17-3): 3 fibre/cm³ TWA (with a diameter <=3.5 µm and a length >=10 µm); 5 mg/m³ TWA (total mass) (related to mineral wool fiber)

Canada – Ontario

- Fibrous Glass (65997-17-3): 1 fibres/cm³ TWAEV (respirable, length>5 microns, aspect ratio>= 3.1) (related to glass wool fibers)

Canada – Quebec

- Fibrous Glass (65997-17-3): 2 fibres/cm³ TWAEV (respirable) (related to insulation wool fibers, glass wool)

Canada – Yukon

- Fibrous Glass (65997-17-3): 30 mppcf TWA; 10 mg/m³ TWA (respirable mass) (related to mineral wool fiber)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Solid

Appearance/Description: Resilient or solid structure containing glass fibers with no odor.

Color: NDA

Odor: Odorless

Taste: NDA

Odor Threshold: NDA

Boiling Point: NDA

Vapor Pressure: NDA

MELTING POINT/FREEZING

Point: > 1,200 f(> 648.89 c) **Vapor Density:** NDA

Specific Gravity: = 2.6 **Evaporation Rate:** NDA

Density: = 21.697 lbs/gal. **VOC (wt.):** NDA

Bulk Density: NDA **VOC (vol.):** NDA

Water Solubility: Insoluble **Volatiles (wt.):** NDA

Solvent Solubility: NDA **Volatiles (vol.):** < 1 %

Viscosity: NDA **Flash Point:** NDA

Half-life: NDA **Flash Point Test Type:** NDA

OCTANOL/WATER PARTITION

Coefficient: NDA

UEL: NDA

COEFFICIENT OF WATER/OIL

Distribution: NDA

LEL: NDA

Bioaccumulation Factor: NDA **Autoignition:** NDA

pH: NDA

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions. This material is not sensitive to mechanical impact or static discharge.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: Keep away from heat, ignition sources and incompatible materials.

Incompatible Materials: None expected

Hazardous Decomposition Products: Hazardous decomposition may occur generating toxic fumes/vapors, oxides of carbon (COx), oxides of nitrogen (NOx).

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Temporary irritation may be observed in the upper respiratory system, eyes, and skin. This product has not been tested as a separate entity. Therefore, the hazards must be evaluated on the basis of the individual ingredients, and those hazards must be assumed to be additive in the absence of complete information. The hazards described in this document have been evaluated on a threshold of 1.0% for all hazardous ingredients and 0.1% for all carcinogens.

Carcinogenic Effects: This product contains glass wool insulation fibers. Following a thorough review of all the medical-scientific data available at a meeting in October 2001, the IARC panel lowered the classification for glass wool insulation fibers from a group 2B classification ("possibly carcinogenic to humans") to a group 3 classification ("not classifiable as to carcinogenicity to humans"). IARC said that there is "no evidence of increased risks of lung cancer or of mesothelioma from occupational exposures during manufacturing of these materials, and inadequate evidence over all of any cancer risk."

Component Carcinogenicity: Continuous filament fiber glass (encapsulated) or Fibrous glass (65997-17-3):

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans (related to Glass wool fibers)

NTP: Reasonably anticipated to be a Carcinogen (respirable size) (related to Glass wool) (Possible Select Carcinogen)

IARC: Monograph 81 [2002] (listed under Man-made mineral fibers), Monograph 43 [1988] (related to Insulation glass wool) (Group 3 (not classifiable))

SECTION 12: ECOLOGICAL INFORMATION

Product Information: Binder-coated fiber glass is hydrophobic. Therefore, no adverse environmental effects would be expected if this product were accidentally released in the water or soil. This material is not expected to be harmful to aquatic life.

Ecological Fate: No information available for the product.

Persistence/Degradability: No information available for the product.

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Dispose of waste material in an approved landfill in accordance with federal, state, and local regulations.

If you are unsure of the regulations, contact your Public Health Department, or the local office of the Environmental Protection Agency (EPA). See Section 7 for Handling Procedures; see Section 8 for Personal Protective Equipment recommendations.

SECTION 14: TRANSPORTATION INFORMATION

U.S. DOT 49 CFR 172.101

Shipping Name: Not classified as a hazardous material for transport

TDG - CANADA - TRANSPORT OF DANGEROUS GOODS

Shipping Name: Not classified as a dangerous good for transport

SECTION 15: REGULATORY INFORMATION

SARA HAZARD CLASSIFICATIONS

Acute Health: Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** No

US FEDERAL

General Product Information: Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are either exempt from listing (i.e. Polymers, hydrates) or are listed on the confidential inventory as declared by the supplier.

CERCLA: This material does not contain chemicals required to be identified under CERCLA (40 CFR 302.4).

STATE REGULATIONS

Component Analysis - State: The following components appear on one or more of the following state hazardous substances

Lists: Component CAS # CA MA MN NJ PA RI

Continuous filament fiber glass (encapsulated) or Fibrous glass (related to Mineral wool fiber) 65997-17-3 Yes Yes Yes No Yes Yes

California Safe Drinking Water and Toxics Enforcement Act (Proposition 65):

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING!

This product contains a chemical known to the state of California to cause cancer.

CANADIAN WHMIS INFORMATION

General Product Information

WHMIS: Class D - Poisonous and Infectious Materials - Division 2 - Subdivision A

COMPONENT ANALYSIS - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient:

Disclosure List: None

ADDITIONAL REGULATORY INFORMATION:

GENERAL PRODUCT INFORMATION

No information available for the product.

Component analysis – Inventory: Component CAS # TSCA DSL EINECS

Continuous filament fiber glass (encapsulated) or Fibrous glass

65997-17-3 Yes Yes Yes

Dedusting Oil (Fiber Lubricant) NDA Yes Yes No

Acetic acid ethenyl ester - Ethenol polymer 25213-24-5 Yes Yes no

Cyclosiloxanes, di-Me 69430-24-6 Yes Yes No

SECTION 16: OTHER INFORMATION

Preparation Date: 11/1/2017

Last revision Date: 11/1/2017

Disclaimer: Reasonable care has been taken in the preparation of this information, but the supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the material safety data sheet before handling product. For reference to the acronyms/definitions used in this msds please visit

www.knaufinsulation.us

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MSDS History:

MSDS Revision Summary:

THIS IS THE END OF MSDS

DATE MSDS NO. CHANGES

- MSDS format change (new ANSI Z400.2004 & GHS v. 2007 format)
- Section 2 – GHS (v. 2007) Classifications