



MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: NORTHERN WHITE BLOWING WOOL

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

CERTAINTEED CORPORATION
P.O. Box 860
Valley Forge, PA 19482
United States

WEB ADDRESS: www.certainteed.com

Phone Numbers

Technical Information: (610) 341-7000 - 9 AM – 5 PM (Eastern Time – USA)

*Emergency: (800) 424-9300 - EMERGENCY TELEPHONE: CHEMTREC
Emergency: (703) 527-3887 - OUTSIDE OF THE U.S. CHEMTREC*

PREPARATION DATE: 3/17/2008
LAST REVISION DATE: 9/15/2009

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

NFPA/HMIS RATINGS:

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>Degree of Hazard</u>
NFPA RATING:	1	0	0	0 - Minimal (Insignificant) 1 - Slight 2 - Moderate 3 - Serious (High) 4 - Severe (Extreme)
HMIS RATING:	1*	0	0	* - Chronic Health Effect(s)

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: NA
 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 N 95 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:

Exposure	Respirator (or equivalent)
Less than 10 times exposure guideline	1/2 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

EYE/FACE PROTECTION: Safety glasses with side shields should be worn at a minimum. In dusty environments chemical goggles should be worn

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:

US 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: No data available		ODOR THRESHOLD: NDA	
BOILING POINT:	NDA	VAPOR PRESSURE:	NDA
MELTING POINT/FREEZING POINT:	> 1200 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: 3/17/2008

LAST REVISION DATE: 9/14/2009

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.certainteed.com.

MSDS HISTORY:

MSDS REVISION SUMMARY:

Date	MSDS No.	Changes
9/15/2009	CT-10139	<ul style="list-style-type: none"> • MSDS format change (new ANSI Z400.2004 & GHS v .2007 format) • Section 2 – GHS (v. 2007) Classifications

This is the end of MSDS # CT10139

Fiber Glass Blowing Wool

Version 1.3

Revision Date 03/01/2016

Print Date 03/01/2016

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Trade name : Attic Protector®, Climate Pro®, JM Spider®, Climate Pro® SXG, Climate Pro® MH, Spider® Plus, Aclear Blow, Sonoglass®, Monoglass®

Manufacturer or supplier's details

Company : Johns Manville
Address : P.O. Box 5108
Denver, CO USA 80127
Telephone : +1 303-978-2000 8:00AM-5:00PM M-F
Emergency telephone number : 1-800-424-9300 (Chemtrec, in English)
Prepared by : productsafety@jm.com

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

Non-hazardous according to 29 CFR 1910.1200, when used as intended.

Relevant ingredients

Chemical Name	CAS-No.	Concentration (%)
Non-biopersistent (biosoluble) glass fibers	Not Assigned	100 %

SECTION 4. FIRST AID MEASURES

General advice : Get medical attention if symptoms occur.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Take off all contaminated clothing immediately.
If on skin, rinse well with water.
Get medical attention if irritation develops and persists.

In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at

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- least 15 minutes.
 If eye irritation persists, consult a specialist.
- If swallowed : If symptoms persist, call a physician.
 Rinse mouth with water to remove dust or fibers and drink plenty of water to help reduce irritation.
- Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid dust formation.
- Methods and materials for containment and cleaning up : Take up mechanically.
 Pick up and arrange disposal without creating dust.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
- Conditions for safe storage : Keep in a dry, cool place.
- Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Glass fibers shown to be	Not Assigned		1 fibre/cm ³	ACGIH

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biosoluble				
Nuisance dust	Not Assigned	TWA (Total particulate)	15 mg/m ³	OSHA
		TWA (Respirable fraction)	5 mg/m ³	OSHA

As a member of the North American Insulation Manufacturers Association (NAIMA), JM subscribes to the NAIMA Product Stewardship Program (NPSP). Under the NPSP, JM recommends that exposures be limited to the voluntary concentration of 1 f/cc TWA. The NPSP also includes work practice and respiratory protection recommendations. For more information, see NAIMA's Health and Safety Reference Library (website: <http://insulationinstitute.org/tools-resources/resource-library/health-safety/>) to find the Product Stewardship Program Pocket Folder (N052) and other Fact Sheets.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
 When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses

Skin and body protection : Long sleeved clothing

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid

Colour : No data available

Odour : slight

Odour Threshold : No data available

pH : Not applicable

Melting point/range : Not applicable

: Not applicable

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : No data available

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

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Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Relative density	: No data available
Density	: Not applicable
Solubility(ies)	
Water solubility	: Not applicable
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: Not applicable
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	: No data available

SECTION 11. TOXICOLOGICAL INFORMATION

IARC	Group 3: Not classifiable as to its carcinogenicity to humans Glass fibers shown to be biosoluble
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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Further information**Product:**

Remarks: Temporary mechanical abrasion (itching) of skin, eyes and respiratory tract may occur upon exposure to fibers or dust during handling of this product and cannot occur unless there is direct contact.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

Additional ecological information : Due to the properties of the product, a hazard to the environment may not be expected.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Disposal of residual product : In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION**International transport regulations**

These products are not classified as dangerous goods according to international transport regulations.

SECTION 15. REGULATORY INFORMATION**TSCA list****EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL.

SECTION 16. OTHER INFORMATION**Further information**

Revision Date : 03/01/2016

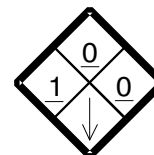
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Knauf Insulation GmbH

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	e

HMIS RATING

MATERIAL SAFETY DATA SHEET



NFPA RATING

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product: Knauf Unbonded Blowing Wool

MSDS Number: 1005

Trade Designations: Jet Stream Ultra, Jet Stream[®] 73.3, EcoFill Wx, Manufactured Housing Blowing Insulation, Jet Stream[®] MAX, Perimeter Plus[™]

Revision: 10

Manufacturer: Knauf Insulation GmbH

Date Issued: June 10, 2011

Address: One Knauf Drive
Shelbyville, IN 46176-1496

Product Stewardship Support Line: 317-398-4434, x8212
24 hr Emergency (Chemtrec) Phone: 800-424-9300

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	%	TLV	PEL
Fibrous Glass	65997-17-3	98-99	1 fiber/cc	1 fiber /cc
Non-hazardous de-dusting oil		1-2	None	None

Key: TLV = ACGIH, 8 hr. time weighted average (TWA); PEL = OSHA permissible exposure limit.

TLV and PEL limits are for respirable fibers length <5um, diameter >3um, aspect ratio <5:1 (NIOSH 7400B Method)

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview: The 2002 Monograph issued by the International Agency for Research on Cancer (IARC) removed fiber glass wool from its' list of possible carcinogens (Group 2B). It is now classified as Group 3, not classifiable as to human carcinogenicity.

OSHA and other U.S. government agencies require that a warning label be placed on this product. This warning identifies a possible hazard while not identifying the degree of risk. OSHA regulations do not require respiratory protection as long as the exposure to fiber glass wool does not exceed 1 fiber/cubic centimeter (f/cc) TWA (8 hour time weighted average). Fiber Glass wool exposure in the home, commercial buildings, and manufacturing facilities are generally found to be less than 1 f/cc. Installers of blowing wool in an enclosed space such as an attic may experience respirable fiber exposures higher than 1 f/cc. Installers and fabricators should be aware of their exposure levels and take appropriate actions if needed per recommended work practices. Knauf **STRONGLY** recommends following all safe work practices while working with and/or installing fiber glass wool products.

HMIS Rating: **Health:** 1 **Fire:** 0 **Reactivity:** 0 **Protection:** E

Primary Routes of Entry: Via respirable fibers to the lungs and respiratory system and airborne fibers to the skin and eyes.

Primary Target Organs: Lungs, respiratory system, skin and eyes.

SECTION III - HAZARDS IDENTIFICATION

Potential Health Effects:

Acute: Mechanical irritation of the skin, eyes and upper respiratory system.

Chronic: A 1987 epidemiological study of more than sixteen thousand U.S. man-made vitreous fiber manufacturing workers has shown no statistically significant increased risks of malignant or non malignant diseases. A 1990 update of this study reported a small, statistically significant increase in respiratory cancer among workers when compared with the populations in their communities. Confounding factors such as smoking, exposure to other hazardous materials, etc., are thought to be responsible for this small apparent increase. An expanded study is currently underway to investigate other possible contributing factors.

Skin Contact: There are confirmed reports of contact dermatitis.

Eye Contact: A mechanical irritant which can cause moderate to severe eye irritation.

Ingestion: Non-hazardous when ingested. Potentially a mild Irritant to the GI tract if excessive quantity is ingested.

Medical Conditions Aggravated by Exposure: Pre-existing chronic upper respiratory and lung diseases such as, but not limited to, bronchitis, emphysema and asthma. Skin disease such as dermatitis

Carcinogenicity: While no longer listed as a possible carcinogen by IARC, respirable glass wool fibers are classified by NTP as Group IIB,(reasonably anticipated to be a human carcinogen). Fiber glass wool is classified as a nuisance dust by OSHA.

SECTION IV - FIRST AID MEASURES

Inhalation: Remove to fresh air. Drink water to clear throat and blow nose to evacuate dust. If coughing and irritation develop, call a physician.

Eye Contact: Flush with large amounts of water until irritation subsides, as least 15 minutes. See a physician if irritation persists.

Skin Contact: Normal good personal hygiene practices. Wash with mild soap and warm water after each exposure.

Ingestion: Emergency procedures not normally required. May be a temporary irritant to the GI system.

SECTION V - FIREFIGHTING MEASURES

NFPA Rating: **Health:** 1 **Fire:** 0 **Reactivity:** 0 **Other:** 0

Extinguishing Method: Use water, foam, dry chemical or carbon dioxide.

Special Firefighting Procedures: Wear self contained breathing apparatus and protective clothing. Dense smoke may limit visibility in enclosed areas.

Fire or explosion Hazards: None

SECTION VI - ACCIDENTAL RELEASE MEASURES

Clean-up Procedures: Pick up or shovel material into waste container taking care to minimize dust and fiber generation. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant.

Personal Precautions: If dusty conditions exist, wear a face mask approved for use with dusts such as 3M 8210, N95 or equivalent.

Environmental Precautions: This product is not regulated under RCRA Hazardous Waste Regulations. May be disposed in landfill. Comply with federal, state and local regulations.

SECTION VII - HANDLING AND STORAGE

Storage Requirements: Store in dry area. Keep area clean. Vacuum clean dust. Use a dust suppressant if sweeping is necessary.

Special Sensitivity or Incompatibility: Hydrofluoric acid will react with and dissolve glass.

Handling Precautions: Assure proper respiratory protection if dust potential exceeds PEL/TLV.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Respiratory Protection: Applicators and/or sprayers must wear a face mask approved for use with dusts such as 3M 8210, N95 or equivalent to protect against respirable glass wool fibers. For other activities, when over PEL/TLV wear an approved face mask such as 3M 8210, N95 or equivalent, . Concentrations of fibers that exceed the recommendations of the mask manufacturer will need a higher level of respiratory protection, such as a half mask respirator with appropriate dust filters.

Eye Protection: Wear safety glasses with side shields, goggles or face shield when handling, installing or fabricating to protect eyes against dust and fibers.

Skin Protection (clothing): Long-sleeved, loose fitting clothes and head covering are recommended. Wash work clothes separately from other clothing, towels and linens to prevent fiber migration. Rinse washer thoroughly.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: White fibrous product.

Melting Point: >1300°F

Specific Gravity: Variable

Solubility in Water: Insoluble

Pure/Mixture: Mixture

SECTION X - REACTIVITY

Stability: This is a stable, non-reactive product.

Hazardous Decomposition Products: Thermal decomposition of the resin may include carbon dioxide, carbon monoxide, and traces of carbon particulate.

SECTION XI - TOXICOLOGICAL/ECOLOGICAL INFORMATION**LD₅₀:** N/Av**LC₅₀:** N/Av**Toxicological Hazards:** See the Emergency overview on page 1, Section II.**Ecological Hazards:** No data exists for this product**Teratogenicity, Mutagenicity, other Reproductive Effects:** None known**SECTION XII - DISPOSAL CONSIDERATIONS**

Waste Disposal Method: 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 XIII - TRANSPORTATION INFORMATION**US DOT Shipping Name:** Not regulated**DOT Label:** None**UN/NA Number:** None**SECTION XIV - REGULATORY INFORMATION****OSHA Status:** This product is considered hazardous under OSHA criteria.**TSCA/CEPA Status:** All components of this product are included in the TSCA and CEPA Chemical Inventories.**CERCLA Reportable Quantity:** N/Av**SARA Title III:**

Section 302 Extremely Hazardous: This product contains no extremely hazardous substances as defined and listed in section #302.

Section 311/312 Hazard Categories: Reportable as a hazardous substance. Check with your Local Emergency Planning Committee for reportable quantities.

Section 313 Toxic Chemicals: This product does not contain substances which are reportable under Section 313.

California Safe Drinking Water and toxic Enforcement Act (Prop. 65): Warning. This product contains the following substance known to the state to cause cancer: Glasswool, airborne particles of respirable size.

Canada (WHMIS): This product is a class D2A controlled product under Canadian WHMIS regulations.

SECTION XV - APPROVALS**Reason for Issue:** Added Jet Stream MAX**Approval Date:** June 10, 2011**Prepared by:** B. Gardner**Supersedes Date:** October 11, 2010**SECTION XVI - DISCLAIMER**

As of the date of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state laws. However, no warranty or representation of law or fact, with respect to such information, is intended or given.



CANADIAN SAFE USE INSTRUCTION SHEET

Creation Date 25-Jun-2007

Revision Date 22-Jun-2018

Version 2

0. GENERAL INFORMATION

This Safe Use Instruction Sheet is the document provided by Owens Corning to communicate recommended safe handling and use instructions for manufactured articles not regulated by the Canada Hazardous Products Regulation SOR/2015-17 (WHMIS 2015)

1. IDENTIFICATION

Product Name	BLOWN-IN INSULATION		
Synonyms	AttiCat® Expanding Blown-In Insulation System, PROPINK® FIBERGLAS® Blown Insulation, PROPINK® Wall Insulation System, PROPINK® Complete Blown-In Wall System, INSPECT-R® Density Gauge, FIBERGLAS SUPER-PINK-R® Blowing Wool		
Product Code	OCIS00048		
Recommended Use	Insulation		
Supplier Address	Owens Corning Canada LP 3450 McNicoll Ave Scarborough, Ontario M1V 1Z5	Manufacturer Address	Owens Corning Insulating Systems, LLC One Owens Corning Parkway Toledo, Ohio 43659
Company Phone Number	1-800-GET-PINK or 1-800-438-7465		
24 Hour Emergency Phone Number	Chemtrec 1-800-424-9300 or 1-703-741-5970 CCN17393		
Emergency Telephone	1-419-248-5330 (after 5 pm ET and weekends)		
E-mail address	safetydatasheet@owenscorning.com		
Company Website	http://owenscorning.com/		

2. HAZARDS IDENTIFICATION

Regulatory Status	<ul style="list-style-type: none">• This product is considered an article per the Canadian Hazardous Products Regulation SOR/2015-17• Manufactured articles which meet the definition of the Canadian Hazardous Products Act (any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product) are not regulated by the Canadian Hazardous Products Regulation SOR/2015-17
Other Information	May cause temporary skin and mucous membranes itching due to the mechanical abrasion effect of fibers

3. COMPOSITION/INFORMATION ON INGREDIENTS

Comments	The product contains no substances which at their given concentration, are considered to
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be hazardous to health

4. FIRST AID MEASURES

Description of First Aid Measures

- | | |
|---------------------|---|
| Eye contact | <ul style="list-style-type: none">• DO NOT rub or scratch eyes• Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes• If eye irritation persists: Get medical advice/attention |
| Skin contact | <ul style="list-style-type: none">• Wash off immediately with soap and plenty of cold water• DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of fibers and dust• Use a wash cloth to help remove fibers and dust• DO NOT rub or scratch affected area• Remove contaminated clothing and shoes• If fibers are seen penetrating from the skin, the fibers can be removed by applying and removing adhesive tape so that the fibers adhere to the tape and are pulled out of the skin• If skin irritation persists, call a physician• Never use compressed air to remove fibers from skin |
| Inhalation | <ul style="list-style-type: none">• Remove to fresh air• If symptoms persist, call a physician |
| Ingestion | <ul style="list-style-type: none">• Accidental ingestion of this material is unlikely• Rinse mouth with water and drink water to remove fibers from the throat• If this does occur watch person for several days to make sure intestinal blockage does not occur• If symptoms persist, call a physician |

5. FIRE-FIGHTING MEASURES

- | | |
|--|---|
| Suitable extinguishing media | <ul style="list-style-type: none">• Use extinguishing measures that are appropriate to local circumstances and the surrounding environment |
| Protective equipment and precautions for firefighters | <ul style="list-style-type: none">• As in any fire, wear self-contained breathing apparatus (positive-pressure), MSHA/NIOSH (approved or equivalent) and full protective gear |

6. ACCIDENTAL RELEASE MEASURES

- | | |
|--------------------------------|--|
| Personal precautions | <ul style="list-style-type: none">• Avoid contact with eyes and skin |
| Methods for cleaning up | <ul style="list-style-type: none">• Use personal protective equipment as required• Avoid creating dust• Clean contaminated surface thoroughly• Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination• Avoid dry sweeping• Pick up and transfer to properly labeled containers |

7. HANDLING AND STORAGE

- | | |
|--------------------------------------|--|
| Precautions for safe handling | <ul style="list-style-type: none">• Prevent and/or minimize dust formation• Do not breathe dust• Wear appropriate personal protective equipment in case of direct contact with the product |
| Storage Conditions | <ul style="list-style-type: none">• Keep product in packaging until use to minimize potential dust generation• Product should be kept dry and undercover |

Incompatible materials • None known based on information supplied

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	Alberta	Ontario TWA	Quebec
Fiberglass wool 65997-17-3	TWA: 1 fiber/cm ³ 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 TWA: 5 mg/m ³ inhalable particulate matter	TWA: 5 mg/m ³ TWA: 1 fibre/cm ³	TWA: 1 fibre/cm ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³

Engineering Controls Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits
Dust collection system must be used in transferring operations, cutting or other dust generating processes, such as using power tools
Vacuum or wet clean-up methods should be used

Individual protection measures, such as personal protective equipment

- Eye/face protection** • Wear safety glasses with side shields (or goggles)
- Skin and body protection** • Wear protective gloves
• Wear long-sleeved shirt and long pants
- Respiratory protection** • When workers are facing airborne particulates/dust concentrations above the exposure limits, they must use an appropriate certified respirator
• A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended
- General Hygiene Considerations** • Wash hands before breaks and immediately after handling products
• Remove and wash contaminated clothing before re-use

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state Solid
Appearance Fibrous
Odor Organic
Color Pink
Water solubility Insoluble in water

10. STABILITY AND REACTIVITY

Possibility of Hazardous Reactions • None under normal processing
Hazardous Decomposition Products • None known based on information supplied

11. TOXICOLOGICAL INFORMATION

Product Information Dusts and fibers may cause temporary skin and mucous membranes itching due to mechanical abrasion effect of fibers. Mechanical abrasion is not considered as a health hazard in the meaning of Hazard Communication Standard (HCS 2012) OSHA Regulation.

Inhalation may cause coughing, nose and throat irritation and sneezing. High exposures may cause difficult breathing, congestion and chest tightness

IARC (International Agency for Research on Cancer)

In October 2001, the International Agency for Research on Cancer (IARC) classified fiber glass wool as Group 3, "not classifiable as to its carcinogenicity to humans". The 2001 decision was based on human studies and animal research that have not shown an association between inhalation exposure to dust from fiber glass wool and the development of respiratory disease

NTP (National Toxicology Program)

In June 2011, The National Toxicology Program (NTP) removed biosoluble glass wool fibers from its list of possible carcinogens used for home and building insulation

12. ECOLOGICAL INFORMATION

This product is not expected to be hazardous for the environment

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with applicable regional, national and local laws and regulations

14. TRANSPORT INFORMATION

This material is not subject to regulation as a hazardous material for shipping

15. REGULATORY INFORMATION**International Inventories**

This product is classified as an article. Articles are exempted from registration or listing under chemicals inventories like TSCA (USA), DSL/NDSL (CAN), REACH (EU), ENCS (JP), IECSC (CN), KECL (KR), PICCS (PH), AICS (AUS)

16. OTHER INFORMATION

Creation Date 25-Jun-2007
Revision Date 22-Jun-2018
Revision Note SDS sections updated 2, 3,

Disclaimer

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use

End of Safe Use Instruction Sheet