

SAFETY DATA SHEET

Material Name: Continuous Filament Mat

Section 1: Product and Company Information

GHS product Identifier

Product Name(s):

All Continuous Filament Mat Products

Other means of identification

Synonyms:

CFM, JW, N700, N701, N702, N720, N721, N751, N754, N758, N760, N761, N764, N767, N786, N863, S, SF, S200

Recommended use and restrictions

Recommended use

Input in the production of glass reinforcement products.

Restrictions

No information available.

Supplier's details

Supplier information:

Superior Composites Company LLC.
294 Industrial Park Rd.
Vanceburg, KY 41179
Telephone: 1-606-796-6789
(8am to 5pm ET, weekdays)

Emergency phone numbers:

Emergency Contacts: 1-606-796-6789

Health and Technical Contacts:

1-606-796-6789 (8am to 5pm ET, weekdays)

Section 2: Hazards Identification

Classification

This product is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

GHS label elements, including precautionary statements

Emergency Overview: No unusual conditions are expected from this product.

Skin Irritation – Fiberglass may cause temporary skin irritation. Individuals should wear long sleeves, gloves and eye protection when handling material, Cleanse skin with soap and cold water after handling. Wash work clothes separately and rinse washer.

Dust Irritation – A disposable mask designed for nuisance type dusts can be used when handling material in order to prevent irritation to the nose or throat due to dust or airborne particles.

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Section 3: Composition Information

Common Name	CAS No.	Wt. %
Fiber Glass (non respirable)*1	65997-17-3	84- 96%
Organic Surface Binder	NA	4-16%

"A-type chemical composition*" Glass Fibers; Lead and Boron free; 18-30 micron average fiber diameter. Organic Surface Binder (Thermoset Polyester) 4%-16% (typical content). As manufactured, continuous filament glass fibers are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards. See Section 8 of Material Safety Data Sheet for exposure limit data.

*A glass is composed primarily of oxides of silicon, sodium, calcium and aluminum, fused in an amorphous vitreous state.

"The product covered in this SDS is an article and therefore is exempt from listing on the national chemical inventories in particular on the US EPA Toxic Substances Control Act (TSCA)."

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: glass wool fiber, fibrous glass and nuisance particulates.

Component Information/Information on Non-Hazardous Components

No additional information available.

Section 4: First Aid Measures

Description of first aid measures

Inhalation:

Move person to fresh air. Seek medical attention if irritation persists.

Skin Contact:

For skin contact, wash with mild soap and cold water. Do not wash with warm water because this will open up the pores of the skin, which will cause further penetration of the fibers. Use a washcloth to help remove fibers. To avoid further irritation, do not rub or scratch affected areas. Rubbing or scratching may force fibers into skin. If irritation persists get medical attention.

Eye Contact:

Immediately flush eyes with plenty of running water for at least 15 minutes. If irritation persists get medical attention.

Ingestion:

Ingestion of this material is unlikely. If it does occur, gently wipe or rinse mouth with water. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Contact poison control center, emergency room or physician for treatment.

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Section 5: Fire Fighting Measures

Suitable extinguishing media

Water fog, foam, carbon dioxide (CO₂) or dry chemical. Use extinguishers appropriate for the surrounding area, paying close attention to electrical equipment or dissimilar combustibles stored in adjacent areas.

Specific hazards arising from material

Hazardous decomposition will not occur. Primary byproducts of combustion are CO, CO₂ Carbon particulate and glass fibers. Other undetermined compounds could be released in small quantities.

Special protective equipment

Use self-contained breathing apparatus (SCBA) and full bunker turnout gear in a sustained fire.

Additional information

Flash point:	None	Flash point method:	Not determined
Upper flammability limit:	None	Lower flammability limit:	None
Flammability class:	Non-flammable	Vapor density (Air=1):	N/A
Unusual fire and Explosion hazards	None known		

Section 6: Accidental Release Measures

Containment procedures

This material will settle out of air. If concentrated on land, it can be scooped up for disposal as non-hazardous waste. This material will sink and disperse along the bottom of waterways and ponds. It cannot easily be removed after it is waterborne; however, the material is non-hazardous in water.

Clean-up procedures

Scoop up material and put into a suitable container for disposal as a non-hazardous waste.

Response procedures

Isolate area. Keep personnel away.

Section 7: Handling and Storage

Precautions for safe handling

Keep product in its packaging, as long as practicable to minimize potential dust generation. Keep work areas clean. Avoid unnecessary handling of scrap materials. Wear PPE as described in Section 8.

Storage procedures

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For optimum performance store in area at or below 25 degrees C with relative humidity less than 65%.

Section 8: Exposure Controls and Personal Protection

Exposure limits

Fiber Glass Continuous Filament (65997-17-3)

Ingredient	OSHA PEL (8-hr TWA)	ACGIH TLV (8-hr TWA)
Non-respirable fibers and particulate	15 mg/m ³ (total dust)(a)	5 mg/m ³ (inhalable fraction)
Respirable particulate	5 mg/m ³ (respirable dust)(b)	None
Respirable particulate with fiber like dimensions (glass shards)	None Established	None Established

Engineering measures

Ventilation: General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits.

Individual protection measures, such as personal protective equipment

Respiratory Protection: A properly fitted NIOSH approved N 95 series disposable dust respirator such as the 3M model 8210 (model 8271 in high humidity environments) or equivalent 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.

Skin Protection: Normal work clothing (long sleeved shirts and long pants) is recommended. Use impervious gloves. Skin irritation is known to occur chiefly at pressure points such as around neck, wrists, waist, and between fingers.

Eye/Face Protection Equipment: Wear safety glasses with side shields, goggles or face shield.

OTHER PROTECTIVE EQUIPMENT: None required. Barrier creams can be of help to ultra-sensitive individuals. It is recommended to wash work clothing separate from other laundry. Rinse washer at end of cycle.

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Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance:	White / off white
Odor:	None
Physical State:	Solid
PH:	N/A
Vapor pressure (mm Hg @ 20° C):	N/A
Vapor Density (Air = 1):	N/A
Boiling Point:	N/A
Solubility (H ₂ O):	Insoluble
Specific Gravity (Water =1):	2.5 2.6
Freezing Point:	N/A
Evaporation Rate (n-Butyl Acetate=1):	N/A
Viscosity:	N/A
VOC:	<0.4%
Melting (Softening) Point:	>650° C
Partition Coefficient	N/A
Auto Ignition Temperature	N/A

Section 10: Stability and Reactivity

Chemical stability

This is a stable material.

Hazardous reactions

None known.

Conditions to avoid

None known

Incompatible Materials

None known

Hazardous Decomposition Products

Fiberglass alone will not burn. But smoking of the sizings or binders may occur in temperature environments exceeding 205 degrees C. These same ingredients will release carbon monoxide and carbon dioxide in a sustained fire situation. See Section 5 of SDS for information on hazardous combustion products.

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Section 11: Toxicological Information

Information on likely routes of exposure

Inhalation	May cause coughing, nose and throat irritation, and sneezing. People with pre-existing respiratory conditions may experience difficulty breathing, congestion and chest tightness.
Eye contact	May cause temporary eye irritation.
Skin contact	May cause temporary irritation to the affected area.
Ingestion	May cause irritation of the throat, stomach and gastrointestinal tract. Not an expected route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	May cause temporary irritation to the affected area.
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Delayed and immediate effects and chronic effects from short and long term exposure

Fiber Glass Continuous Filament: The International Agency for Research on Cancer (IARC) in June, 1987, categorized fiber glass continuous filament as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify fiber glass continuous filament as a possible, probable, or confirmed cancer causing material.

The American Conference of Governmental Industrial Hygienists (ACGIH) A4 classification, not classifiable as a human carcinogen, for respirable continuous filament glass fibers is based on inadequate data in terms of its carcinogenicity in humans and/or animals.

For respirable continuous filament glass fibers, a TLV-TWA of 1 fiber/cc was adopted to protect workers against mechanical irritation. The TLV-TWA of 5 mg/m³ was adopted for nonrespirable glass filament fiber, measured as inhalable dust, to prevent mechanical irritation of the upper respiratory tract.

Note: There are no known chronic health effects connected with long-term use or contact with these products.

Products that are chopped, crushed or severely mechanically processed during manufacture or use may contain a very small amount of respirable glass fiber-like fragments. NIOSH defines "respirable fibers" as greater than 5 microns in length and less than 3 microns in diameter with an aspect ratio of $\geq 5:1$ (length-to-width ratio).

Chronic Study in Animals

A laboratory test was conducted with a different product (special application glass fiber) with comparable composition and durability. Test animals breathing very high concentrations of respirable fibers on a long-term basis developed fibrosis, lung cancer and mesothelioma.

About 23% of the rats (n=43) exposed to 1022 f/cc for 5 hrs/day, 7 days/week for 52 weeks developed lung tumors (adenoma and carcinoma). Five percent (5%) of the unexposed control group (n=38) developed lung tumors (adenoma and carcinoma).

Five percent (5%) of the rats in the exposed group developed mesothelioma and 12.5% developed advanced fibrosis. None of the rats in the unexposed control group developed mesothelioma and 0.6 % developed advance fibrosis.

A second group of rats was exposed to a similar concentration of asbestos (respirable amosite

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fibers) for 5 hours/day, 7 days a week for 52 weeks. 38% of the rats developed lung tumors (adenoma and carcinoma) and 5 % developed mesothelioma. 14.5 % developed advance fibrosis.

Importantly, this result, that is similar disease rates for the special application fiber and amosite asbestos, had been predicted in a 1996 scientific paper (Inhal. Tox. 8:323-343, 1996 ref). That paper specifically stated that in rats all fibers which were durable enough to remain in a rat lung for two (2) years or more, would produce the same disease rates if the exposures were the same. While the special application fiber is much less durable than asbestos, it is stable enough to remain in the rat lung for more than the two (2) year time period. The results of the current study are therefore not unexpected, and they do not indicate that similar disease rates would be seen in longer lived species or humans, exposed to these fibers.

Component Carcinogenicity

Fiber Glass Continuous Filament (65997-17-3)

ACGIH: A4 – Not classified as a human carcinogen.

IARC: Group 3 “not classifiable as to its carcinogenicity to humans” October 2001 meeting

Section 12: Ecological Information

No data available for this product. This material is not anticipated to harm animals, plants or fish.

Section 13: Disposal Considerations

Waste disposal methods

Material if discarded, is not expected to be a characteristic hazardous waste under RCRA. Dispose of waste material and packaging materials according to Local, State, Federal and Provincial Environmental Regulations.

Section 14: Transport Information

US DOT/TDG (Canada) Information

Shipping Name:	Not regulated for transport
Hazard Class:	None
UN/NA #:	None
Packing Group:	None
Required Labels:	None
Marine Pollutant:	None

Additional Transportation Regulations:

No additional information available.

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Section 15: Regulatory Information

US Federal Regulations:

A: General Product Information

No additional information available.

B: Component Analysis

No additional information available.

The following is provided to aid in the preparation of SARA 311 and 312 reports.

Acute Health Hazard:	Yes
Chronic Health Hazard:	No
Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactive Hazard:	No

C: Clean Air Act

There are no components that appear on the Clean Air Act – 1990 Hazardous Air Pollutants List:

State Regulations:

A: General Product Information

No additional information available.

B: Component Analysis - State

None

Other Regulations:

A: General Product Information

No additional information available.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Fiber Glass (Continuous Filament)	65997-17-3	Yes	Yes	266-046-0

C: Component Analysis – WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List: **None**

WHMIS Status: Not controlled

WHMIS Classification: None

D: Other Government Regulations

Continuous filament glass products are not classified as a “Dangerous Substance” or a “Dangerous Preparations” under the EU Directive 88/379/EEC.

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1. Classification and Labeling (EEC)

This product is not required to be labeled under Council Directives 88/379EEC, 67/548/EEC, Annex I, and 97/69/EC.

2. Certification statement for:

Directive 2002/95/EC for RoHS and Directive 2002/96/EC for WEEE
Based on our current glass analyses, HFP certifies that our fiberglass mats are well below the requirements of both of these Directives.

Section 16: Other Information

HMIS and NFPA Hazard Ratings:

Category	HMIS	NFPA
Acute Health	1	1
Flammability	0	0
Reactivity	0	0

NFPA Unusual Hazards: None.

HMIS Personal Protection: To be supplied by user depending upon use.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of the 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.

Revision Log

Effective Date	Revisions to Section:	Supersedes
09/06/06	Purchase of business from Hollinee Glass Fibers	11/14/04
01/18/08	Revised MSDS	09/06/06
04/17/15	Purchase of business from Superior Fibers, LLC.	01/18/08
05/27/15	Updated to GHS format.	ALL
09/07/16	Include N786 to other means of identification section	05/27/15
08/07/17	Include "The product covered in this MSDS is an article and therefore is exempt from listing on the national chemical inventories in particular on the US EPA Toxic Substances Control Act (TSCA)."	09/07/16