



## GHS SAFETY DATA SHEET (SDS)

### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT:** Part #251 Continuous Strand Mat

FIBRE GLAST DEVELOPMENTS CORP.  
385 CARR DRIVE  
BROOKVILLE, OH 45309

TELEPHONE: (937) 833-5200  
FAX: (937) 833-6555  
**FOR CHEMICAL EMERGENCY  
CALL (800) 424-9300 24 HRS.**

### SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

#### **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**

**Appearance:** White / off white

**Physical State:** Solid

**Odor:** None

### SECTION 3 – HAZARDS IDENTIFICATION

Common Name	CAS No.	Wt. %
Fibre Glass (non respirable) *1	65997-17-3	85 - 100
Size	NA	0 - 15%

**Note: \*1** – 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.

#### **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.

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## SECTION 4 – FIRST AID MEASURES

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### 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, watch the person for several days to make sure that intestinal blockage does not occur.
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## SECTION 5 – FIRE-FIGHTING MEASURES

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### Suitable extinguishing media

Water fog, foam, carbon dioxide (CO<sub>2</sub>) or dry chemical.

### Specific hazards arising from material

Primary combustion products are carbon monoxide, hydrogen, carbon dioxide and water. 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		

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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### 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**

No special procedures.

**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Limits**

**Fiber Glass Continuous Filament (65997-17-3)**

<b>Ingredient</b>	<b>OSHA PEL (8-hr TWA)</b>	<b>ACGIH TLV (8-hr TWA)</b>
Non-respirable fibers and particulate	15 mg/m <sup>3</sup> (total dust) (a)	5 mg/m <sup>3</sup> (inhalable fraction)
Respirable particulate	5 mg/m <sup>3</sup> (respirable dust)	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 production 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 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, goggles or face shield.

**SECTION 9 – PHYSICAL & 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

<b>Solubility (H<sub>2</sub>O):</b>	N/A
<b>Specific Gravity (Water=1)</b>	2.6
<b>Freezing Point:</b>	N/A
<b>Evaporation Rate (n-Butyl Acetate=1):</b>	N/A
<b>Viscosity:</b>	N/A
<b>VOC:</b>	<0.4%
<b>Melting (Softening) Point:</b>	>800°C
<b>Partition Coefficient:</b>	N/A
<b>Auto Ignition Temperature:</b>	N/A

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## SECTION 10 –STABILITY & REACTIVITY

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### **Chemical stability**

This is a stable material.

### **Hazardous reactions**

None known.

### **Conditions to avoid**

None known.

### **Incompatible Materials**

None known

### **Hazardous Decomposition Products**

Sizing or binders may decompose in a fire. See Section 5 of SDS for information on hazardous combustion products.

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## SECTION 11 – TOXICOLOGICAL INFORMATION

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### **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.

### **Symptoms related to the physical, chemical and toxicological characteristics**

Symptoms: May cause temporary irritation to the affected area.

### **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/m<sup>3</sup> was adopted for non-respirable 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 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 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 human carcinogen.

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

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## **SECTION 12 - ECOLOGICAL INFORMATION**

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

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## **SECTION 13 - DISPOSAL CONSIDERATIONS**

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#### **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.

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## SECTION 14 - TRANSPORT INFORMATION

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### 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

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### 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 – 19901 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 "Dangerous Substance" or a "Dangerous Preparations: under the EU Directive 88/379/EEC.

**1. Classification and Labeling (EEC)**

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

**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.

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**SECTION 16 – OTHER INFORMATION**

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**HMIS and NFPA 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.

The information accumulated herein is believed to be accurate but is not warranted to be, whether originating with **Fibre Glast Developments Corporation** or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.