PRODUCT: Part #38 – 1/32” Milled Glass Fibers

FIBRE GLAST DEVELOPMENTS CORP. 
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FOR CHEMICAL EMERGENCY CALL (800) 424-9300 24 HRS.

CHEMICAL NAME OR COMPOSITION: Fibrous Glass (composition consisting principally of oxides of silicon, calcium, aluminum, magnesium, and boron fused in an amorphous vitreous state.)

RECOMMENDED USE: Filler for use with Standard Composite Manufacturing

GHS CLASSIFICATION

This product is not classified using GHS criteria, or by OSHA or EU legislation.

GHS Label Element

Hazard pictograms : N/A
Signal word : N/A
Hazard statements : N/A
Precautionary statements : N/A

Primary Route(s) of Exposure: Inhalation, lungs, skin and eye.

Potential Acute Health Effects:
Inhalation: Dusts and fibers from this product may cause mechanical irritation of nose/throat/respiratory tract. 
Skin Contact: Dusts and fibers from this product may cause temporary mechanical irritation to the skin.
Eye Contact: Dusts and fibers from this product may cause temporary mechanical irritation to the eyes.
Ingestion: Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.
Medical Conditions Aggravated by Exposure: Chronic respiratory or skin conditions may temporarily worsen from exposure to this product.
Chronic Conditions: See Section 11 for additional information.
HMIS and NFPA Hazard Ratings:

<table>
<thead>
<tr>
<th>Category</th>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-17-3</td>
<td>Man Made Glass Fiber</td>
<td>&gt;99.12 %</td>
</tr>
<tr>
<td>None Assigned</td>
<td>Sizing</td>
<td>=/&lt; 0.8 %</td>
</tr>
</tbody>
</table>

Chemical Name or composition: Fibrous glass (composition consisting principally of oxides of silicon, calcium, aluminum, magnesium and boron fused in an amorphous vitreous state)

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.

SECTION 4 – FIRST AID MEASURES

Inhalation: If inhaled, move the affected person to fresh air. If irritation persists get medical attention.

Skin Contact: For skin contact, wash with mild soap and cold water.

Never use compressed air to remove fibers from the skin. 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.

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 partial or complete intestinal obstruction does not occur. Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention if irritation persists.
SECTION 5 – FIRE-FIGHTING MEASURES

Flash Point: None  
Upper Flammability Limit: None  
Flammability Classification: Non-flammable

Extinguishing Media: Dry chemical, foam, carbon dioxide, and water fog.

Unusual Fire & Explosion Hazards: None known.

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

Hazardous Combustion Products: Primary combustion products are carbon monoxide, hydrogen, carbon dioxide, ammonia and water. Other undetermined compounds could be released in small quantities.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Containment Procedures: This material will settle out of air. If concentrated on land, it can then 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 water 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. Do not use compressed air for cleaning.


Special Procedures: None.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures: 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 Guidelines:
A: General Product Information   Follow all applicable exposure limits.
B: Exposure Limits
   Fiber Glass (crushed/shredded continuous filament) (65997-17-3)

<table>
<thead>
<tr>
<th>CAS #</th>
<th>OSHA PEL 8 Hr TWA</th>
<th>ACGIH TLV (8-hr TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-17-3</td>
<td>15 mg/m³</td>
<td>5 mg/M³</td>
</tr>
<tr>
<td>Non Respirable fiber and particulate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respirable particulate</td>
<td>5 mg/m³</td>
<td>None Established</td>
</tr>
</tbody>
</table>

Ventilation: There is a possibility of high particulate exposure levels when working with this product. At minimum, local exhaust and/or general dilution ventilation should be provided as necessary to maintain exposures below regulatory and recommended limits. Dust collection systems must be used in transferring operations, cutting or machining or other dust generating processes because of anticipated dust levels. Vacuum or wet-cleanup methods should be used.

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 must be worn when using this material. Because of the possibility of high particulate levels occurring with this product, it may be necessary to use a half face respirator with P100 or HEPA filters during operations such as maintenance, clean up, or transferring. This decision should be made on a case-by-case basis depending on total exposures. Use respiratory protection in accordance with your company’s respiratory protection program, local regulations and OSHA regulations under 29 CFR 1910.1314.

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

Where direct contact or handling causes airborne product, the use of gloves and coveralls is recommended.

Eyes/Face Protective Equipment: Wear safety glasses, goggles or face shield.
SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White to grey powder</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Ph</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>(mmg)hg@20c:</td>
<td>Air = 1</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific Gravity H2O=1:</td>
<td>2.55-2.58</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; 800 C</td>
</tr>
<tr>
<td>(n-Butyl Acetate = 1:</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>&lt; .04 %</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

SECTION 10 – STABILITY AND REACTIVITY

Stability: This is a stable material.

Conditions to Avoid: None known.

Incompatible Materials: None known.

Hazardous Decomposition Products: None, except in fire. See section 5 for combustion products statement.

Hazardous Polymerization: Will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Effects:
General Product Information: Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. People with pre-existing respiratory conditions, may experience difficulty breathing, congestion and chest tight ness.

Carcinogenicity:
Fiber Glass Continuous Filament: The International Agency for Research on Cancer (IARC) in June 1987, categorized fiberglass 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 fiberglass continuous filament as a possible, probable, or confirmed cancer causing material. This conclusion was confirmed by IARC in October 2001.

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/c 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. Persistent Respirable glass fibers are suspected to cause cancer NIOSH defines "Respirable fibers" as greater than 5 microns in length and less than 3 microns in diameter with an aspect ratio of> 5:1(length-to-width ratio).

**Component Carcinogenicity**

**Fiber Glass (crushed/shredded continuous filament) (65997-17-3)**

ACGIH:  A4 – Not classifiable as a human carcinogen.  IARC:  Group 3 
"not classifiable as to its carcinogenicity to humans" June 1987 meeting

**SECTION 12 – ECOLOGICAL INFORMATION**

N/A:  This product is not anticipated to harm animals, plants or fish.

**SECTION 13 – DISPOSAL CONSIDERATIONS**

EPA Waste Number & Descriptions:

General Product Information: Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

Component Waste Numbers: No EPA Waste Numbers are applicable for this product’s components.

Disposal Instructions: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
SECTION 14 – TRANSPORT INFORMATION

US DOT Information

Shipping Name: Not regulated for transport.
Hazard Class: None
UN/NA #: None
Packing Group: None
Required Label(s): None

TDG Information

Shipping Name: Not regulated for transport.
Hazard Class: None
UN/NA #: None
Packing Group: None
Required Label(s): None

Additional Transportation Regulations:
No additional information available.

SECTION 15 – REGULATORY INFORMATION

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.

SARA 311/312
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

C: Clean Air Act
The following components appear on the Clean Air Act-1990 Hazardous Air Pollutants List:
None

State Regulations:

A: General Product Information
No additional information available

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

<table>
<thead>
<tr>
<th>Fiberglass (as continuous filament)</th>
<th>CAS # 65997-17-3 CA</th>
<th>FL</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

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

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**SECTION 16 – OTHER INFORMATION**

Reasonable care has been taken in the preparation of this information, 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. Final determination of the suitability of the material for the use contemplated is the sole responsibility of the user. No warranty is expressed or implied, and the manufacturer’s sole responsibility shall be to replace such quantity of the material proven to be defective.

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.