



GHS SAFETY DATA SHEET (SDS)

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: PART #1069 - 5.7oz Graphite 3K 2 x 2 Twill Weave

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

RECOMMENDED USE: Standard Composite Manufacturing

SECTION 2 – HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA Regulatory Status	: This Product is Not Hazardous under the OSHA Hazard Communication Standard.
Physical Hazards	: Combustible Dust – USH01
Health Hazards	: Not Classified
Environmental Hazards	: Not Classified
Physicochemical	: Physical: Carbon fiber contained in some products is electrically conductive.

Label elements

Signal Word	: Warning
Hazard Statements	: USH01 May form combustible dust concentrations in air

Other hazards

Warning! This may cause mild, temporary mechanical eye and skin irritation. Vapor or fumes evolved during use and/or heating or curing the product may cause respiratory tract and eye irritation. Dust or particulates from machining, grinding or sawing the cured product may cause skin, eye and upper respiratory tract irritation, allergic skin reaction and possible sensitization.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Composition comments : Carbon fiber can be with or without size. Graphite (carbon) synthetic fibers, filament diameter > 4um:, >97% w/w, Size:, <3% w/w

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

Inhalation : With any sign of respiratory distress, affected persons should be taken into fresh air, and made to rest while medical attention is sought.

Ingestion : Immediately rinse the mouth repeatedly with water, if swallowing has occurred, do not induce vomiting. If requested, give affected person sips of water. Seek medical attention immediately. If vomiting does occur do not allow the affected person to inhale their vomit. Do not give anything by mouth to an unconscious person.

Skin Contact : In case of contact with the product or the cured product dust or particulate, immediately wash skin with mild soap and water. Use a washcloth to help remove the fibres. To avoid further irritation, do not rub or scratch irritated areas. Rubbing or scratching may force fibres into the skin. Get medical attention immediately if the irritation persists.

Eye Contact : In case of contact with the product or the cured product dust or particulate, immediately flush eyes with large amounts of water for at least 15 minutes, keeping the eyelids open. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

General information : Filaments are mechanical irritants and may induce temporary mouth, nose and throat irritation. Skin or eye contact may cause itching and temporary irritation. Ingestion may cause temporary mechanical irritation of the digestive tract. Pre-existing conditions such as respiratory or skin disorders may be aggravated by exposure to the product or dust/particulate generated from machining/grinding of the cured product.

SECTION 5 – FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media : Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media : Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

- Specific hazards** : Carbon fibers contained in some products are electrically conductive and if released during combustion may present a hazard to unprotected electrical apparatus.
- Hazardous combustion products** : Above 650°C, if incomplete combustion occurs and depending on air supply and temperature, there may be release of carbon monoxide and dioxide and products of low molecular weight.

Advice for firefighters

- Special protective equipment for firefighters** : Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Personal precautions** : Avoid contact with skin, eyes or clothing.

Environmental precautions

- Environmental precautions** : Due to the physical nature of this product, environmental release to drains and water courses is not possible.

Methods and material for containment and cleaning up

- Methods for cleaning up** : Clean up material and put into a suitable container and dispose of properly (See Section 13).

- Reference to other sections** : For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling

- Usage precautions** : Handling: Avoid direct contact with product. Avoid inhalation of dust/fumes generated during processing operations. Dust produced from handling and machining product will contain fibrous material. Avoid inhalation and provide positive dust extraction and collection from cutting zone. Protect against fire and explosion by avoiding dust formation and ignition sources when machining cured product. Dust from products containing carbon fibre is electrically conductive.

Conditions for safe storage, including any incompatibilities

- Storage precautions** : Keep container tightly closed and dry.

Specific end use(s)

- Specific end use(s)** : As this product is an article, this section is not applicable.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls

Protective equipment



Appropriate engineering Controls

: Provide adequate ventilation

Eye/face protection

: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection

: It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex)

Other skin and body protection

: Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

: Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

: Wear a suitable dust mask.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

: Black colored fiber

Color

: Black.

Odor

: No characteristic odor.

Odor threshold

: It is not relevant as there is not toxic effect.

pH

: Not relevant due to the physical form of this product.

Melting point

: Carbon fiber 6512 F / 3600 C°

Initial boiling point and range

: Not relevant due to the physical form of this product.

Flash point

: Not relevant due to the physical form of this product.

Evaporation rate

: Not relevant due to the physical form of this product.

Evaporation factor

: Not relevant due to the physical form of this product.

Flammability (solid, gas)

: May form combustible dust concentrations in air.

Vapour pressure

: Not relevant due to the physical form of this product.

Vapour density	: Not relevant due to the physical form of this product.
Relative density	: Not relevant due to the physical form of this product.
Solubility(ies)	: Not relevant due to the physical form of this product.
Auto-ignition temperature	: Not relevant due to the physical form of this product.
Explosive properties	: Not classified as explosive but dust or airborne filaments could induce explosion in high voltage equipments by short circuit.
Oxidizing properties	: Does not meet the criteria for classification as oxidizing.

SECTION 10 – STABILITY AND REACTIVITY

Stability	: Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	: Will not occur under normal conditions of use.
Materials to avoid	: Strong oxidizing agents.
Hazardous decomposition products	: The products of combustion and decomposition depend on other materials present in the fire and the actual conditions of the fire. Burning will produce carbon and nitrogen oxides and other unidentified gases and vapors that may be toxic. Avoid inhalation.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological effects	: Continuous filament of carbon fiber with a filament diameter > 4um are not considered respirable. World Health Organization defines a respirable fiber as a fiber with a diameter (d) <3um, a length (l) > 5um and l/d ratio >=3
Other health effects	: The components present in this material at concentrations equal to or greater than 0.1% are not listed or regulated by IARC, NTP, OSHA or ACGIH as a carcinogen.
Inhalation	: May cause irritation to the upper respiratory tract. Vapor or fumes generated from exposing this product to elevated temperatures may cause irritation to the respiratory tract. Dust or particulate from machining, grinding or sawing the cured product may cause irritation to the upper respiratory tract.
Ingestion	: None expected under normal conditions of use. Ingestion is not an expected route of industrial exposure.
Skin Contact	: Contact may cause mechanical irritation, skin redness, itching and drying of the skin. Prolonged or repeated contact may cause allergic skin reaction, dermatitis and possible sensitization.

Eye Contact : May cause mechanical irritation. Vapor or fumes generated from exposing the product to elevated temperatures may cause irritation. Dust or particulate from the product or from machining, grinding or sawing the product may cause mechanical irritation.

Medical Considerations ; Preexisting eye, skin or respiratory disorders may be aggravated by contact and/or exposure to the product, the vapor or fumes generated from heating the product or to the dust or particulate from machining, grinding or sawing the cured product.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity : No ecological data has been determined on the total product.

Toxicity
Toxicity : Not regarded as dangerous for the environment.

Persistence and degradability
Persistence and degradability : Not relevant due to the physical form of this product.

Bioaccumulative potential
Bio-Accumulative Potential : Not relevant due to the physical form of this product.

Mobility in soil
Mobility : Not relevant, due to the form of the product.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste treatment methods

General information : Materials for disposal should be placed in appropriate sealed containers to avoid potential human and environmental exposure. It is the responsibility of the generator to comply with all federal, state, provincial and local laws and regulations. We recommend that you contact an appropriate waste disposal contractor and environmental agency for relevant laws and regulations. Under the U.S., Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification and to assure proper disposal.

Disposal methods : Dispose of waste and residues in accordance with local authority requirements. For products containing carbon fiber, it is possible to recycle the carbon component.

SECTION 14 – TRANSPORT INFORMATION

General : This Product is not dangerous to transport.

UN Number

This product is not dangerous to transport.

UN proper shipping name

This product is not dangerous to transport.

Transport hazard class(es)

This product is not dangerous to transport.

Packing group

This product is not dangerous to transport.

Environmental hazards

Environmentally Hazardous Substance

This product is not dangerous to transport.

SECTION 15 – REGULATORY INFORMATION

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities.

Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Not listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

Not listed.

Sara 313 Emission Reporting

Not listed

RCRA

: RCRA information: Currently, the product is not listed in the federal hazardous waste regulation 40 CFR, Part 261.33, paragraphs E or (F), i.e. chemical products that are considered hazardous if they become waste. State or local hazardous waste regulations may also apply if they are different from the federal regulation.

SECTION 16 – OTHER INFORMATION

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