



GHS SAFETY DATA SHEET (SDS)

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Part #30 – ¼" Chopped Glass Fibers

FIBRE GLAST DEVELOPMENTS CORP.
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**FOR CHEMICAL EMERGENCY
CALL (801) 629-0667 24 HRS.**

GENERAL OR GENERIC ID: Fiberglass Continuous Filament for use with Standard Composite Manufacturing

SECTION 2 – HAZARDS IDENTIFICATION

Regulatory Status	: his product is not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200. Continuous Filament Glass Fiber (CFGF) Products are Articles which meet the definition of 29 CFR 1910.1200 (b)(6)(v) (a manufactured item other than a fluid or a particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has an end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g. minute or trace amounts of a hazardous chemical (as determined in paragraph (d) of this section), and does not pose a physical hazard or health risk to employees) are not regulated by OSHA HazCom Standard
Other Information	: As manufactured continuous filament glass fibers are non-respirable. May cause temporary skin and mucous membranes itching due to mechanical abrasion effect of fibers. Under normal conditions of use, these products may release dust and non-respirable fibers (Particulates Not Otherwise Regulated). Under severe process conditions (e.g. shredding, crushing), these products may release very small amount of respirable particulate, some of which may be fiber-like in terms of l/d ratio (so-called "shards"). See Section 8 for Exposure Limit Data

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

CFGF products are made of glass which is given a specific shape (filament) and dimension (filament diameter). A surface treatment (sizing) is applied to the filaments which are gathered to form a strand. The strand is further processed into a specific product design according to the downstream use of the article. The sizing is a mixture of chemicals, i.e. coupling agent, film former and polymeric resin/emulsion. The sizing is usually below 3%.

SECTION 4 – FIRST AID MEASURES

Description of first Aid Measures

Eye Contact	: Do not rub or scratch eyes. Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. If eye irritation persists, get medical attention/advice.
Skin Contact	: 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. DO NOT rub or scratch the affected area. Use a wash clothe to help remove fibers and dust. 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.
Inhalation	: Move victim to fresh air. If symptoms persist, call a physician.
Ingestion	: Rinse mouth with water and drink water to remove fibers from the throat. If symptoms persist, call a physician.

SECTION 5 - FIRE FIGHTING MEASURES

Flammable Properties	: Continuous Filament Glass Fiber products are non flammable, are incombustible and do not support combustion. Only the organic part is combustible and could release small quantities of undetermined hazardous substances in case of major and prolonged heat or fire.
Suitable Extinguishing Media	: Use CO2, dry chemical or foam. Water spray or fog.
Protective Equipment and precautions for fire fighting	: As in any fire, wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions	: Avoid contact with eyes and skin. Avoid creating dust. Use personal protections recommended in Section 8.
Methods for Cleaning Up	: Avoid dry sweeping. Avoid creating dust. Take up mechanically, placing in appropriate containers for disposal. Pick up and transfer to properly labeled

containers. Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and fiber contamination. After cleaning, flush away traces with water.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling	: Prevent and/or minimize dust formation. Wear appropriate personal protective equipment in case of direct contact with the product.
Storage Containers	: Keep product in packaging until use to minimize potential dust generation.
Incompatible Materials	: None known

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

As manufactured continuous filament glass fibers are non-respirable. May cause temporary skin and mucous membranes itching due to mechanical abrasion effect of fibers. Under normal conditions of use, these products may release dust and non-respirable fibers (Particulates Not Otherwise Regulated). Under severe process conditions (e.g. shredding, crushing), these products may release very small amount of respirable particulate, some of which may be fiber-like in terms of l/d ratio (so-called "shards"). You may find here below some occupational exposure limits for Respirable dust, Total dust and Respirable Fibre.

Chemical Name	ACCGIH TLV	OSHA PEL	NIOSH REL
Continuous filament glass fiber, non-respirable -	TWA: 1 fiber/cm ³ respirable fibers: length >5 µm, diameter less than 3 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	-	-

OSHA PEL: TWA for Inert or Nuisance Dust are: 5 mg/m³ (Respirable fraction and 15 mg/m³ (Total dust)

Engineering Controls	: Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits local exhaust ventilation should be provided at areas of cutting, milling or other similar processing to remove airborne dust and fibers.
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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	: If exposure limits are exceeded, wear appropriate respiratory protections (e.g.: FFP2 or N95 or KN95) to be chosen according to the actual airborne exposure level and in accordance with applicable local regulations.
General Hygiene Considerations	: Wash hands before breaks and immediately after handling products. Remove and wash contaminated clothing before re-use.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Appearance:	Continuous filament glass fibers, with filament diameter larger than 6 microns
Odor:	Odorless
Color:	White, or, off-white
Water solubility:	Insoluble in water
Softening point:	>800°C; >1500°F (glass)
Density:	2.6 (glass)
Explosive properties:	Not an explosive

SECTION 10 – STABILITY AND REACTIVITY

Stability : Stable under normal conditions.

Possibility of Hazardous Reactions : None under normal conditions

Hazardous Decomposition Products : None under normal use conditions. Small quantities of undetermined hazardous decomposition products may be released in case of heat or exposure during a fire.

SECTION 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 the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Inhalation may cause coughing, nose and throat irritation and sneezing. High exposures may cause difficult breathing, congestion and chest tightness Continuous filament glass fibers are not respirable according to the World Health Organization (WHO) definition. Respirable fibers have a diameter (d) smaller than 3µm, a length (l) larger than 5µm and a l/d-ratio larger than or equal to 3. Fibers with diameters greater than 3 microns, which is the case for continuous filament glass fiber, do not reach the lower respiratory tract and, therefore have no possibility of causing serious pulmonary disease. Continuous filament glass fibers do not possess cleavage

planes which would allow them to split length-wise into fibers with smaller diameters, rather they break across the fiber, resulting in fibers which are of the same diameter as the original fiber with a shorter length and a small amount of dust. Microscopic examination of dust from highly chopped and pulverized glass demonstrated the presence of small amounts of respirable dust particles. Among these respirable particles, some were fiber-like in terms of l/d ratio (so-called "shards"). It can be clearly observed however that they are not regular shaped fibers but irregular shaped particles with fiber-like dimensions. To the best of our knowledge, the exposure levels of these fiber-like dust particles measured at our manufacturing plants are of the order of magnitude between 50 to 1000 below existing applicable limits

**ACGIH (American Conference
Of Governmental Industrial
Hygienists)**

: Continuous filament glass fibers are classified as A4- Not Classifiable as a Human Carcinogen

**IARC (International Agency
For Research on Cancer)**

: The International Agency for Research on Cancer (IARC) in June, 1987, and in October, 2001 (see IARC Monographs on Evaluation of Carcinogenic risks to humans- Man-made Vitreous Fibers – Volume, 81), categorized continuous filament fiber glass 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 continuous filament glass fiber as a confirmed, probably or even possible cancer-causing material

**NTP (National Toxicology
Program)**

: Continuous filament glass fibers are not listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition)

**OSHA (Occupational Safety
And Health Administration
Of the US Department of Labor)**

: X - Present

**Classification according to
Regulations (EC) No. 1272/2008
[CLP]**

: Continuous filament glass fibers are not listed in the Table of harmonized classification entries in Annex VI to CLP Regulations. Mechanical abrasion is not considered as a health hazard in the meaning of European Regulations 1272/2008 (CLP).

SECTION 12 - ECOLOGICAL INFORMATION

This product is not expected to be hazardous to the environment

SECTION 13 – DISPOSAL CONSIDERATIONS

Continuous filament glass fiber waste is non hazardous waste Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14 – TRANSPORT INFORMATION

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

SECTION 15 – REGULATORY INFORMATION

International Inventories : Continuous filament glass fiber products are articles. Articles are exempted from registration or listing under chemical inventories like TSCA (USA), DSL/NDSL (CAN), REACH (EU), ENCS (JP), IECSC (CN), KECL (KR), PICCS (PH), AICS (AUS), TCSI (Taiwan)

California Proposition 65 : This product is not regulated under California Proposition 65

SECTION 16 – OTHER INFORMATION

Revision Date
November 3, 2022

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.