



GHS SAFETY DATA SHEET (SDS)

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Part #30 – ¼" Chopped Glass Fibers

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

TELEPHONE: (937) 833-5200
FAX: (937) 833-6555
**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

GHS CLASSIFICATION

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

GHS Label Element

Hazard pictograms	: N/A
Signal word	: N/A
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	: N/A
Supplemental label element	: Emits toxic fumes when heated.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Article (Fiber Glass Continuous Filament)

Product name: Fiber glass, continuous Filament

Other means of identification: Product Family: Product Name: Chopped Strand: CHOPVANTAGE®, CHOPVANTAGE® HP, DELTA CHOP®, Chopped Strands for Nonwovens Direct Draw: HYBON®, TUFROV®, INNOFIBER® NTY, LFT4000, LFT9000 Yarn: FiberGlass Yarn, L.E.X.® Yarn, TEXO® Yarn, INNOFIBER® DCS Mat: Chopped Strand Mat, MATVANTAGE® II Roving: Roving for Continuous Laminating, Roving for Pultrusion/Filament Winding, Roving for SMC, HYBON® Roving for Spray Up, HYBON® Woven Roving, PREFORMANCE™ ROVING INNOFIBER®: CR, HP, LD, TS, XM Insulation: TEXO® HTM Mat Recycled Products: Chop/Open ESM, Chop/Open Plastic Reinforcement, Chop/Open 10 micron, Chop/Open 900, Reject Roving, Reject Chopped Strand

Ingredient Name:

Glass, oxide, chemicals—95% (CAS No. 65997-17-3)
Organic Surface Binder/Sizing—5% (CAS No. N/A)

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4 – FIRST AID MEASURES

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Eye Contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. If irritation persists, seek medical attention.

Skin Contact : Remove contaminated clothing and shoes. Gently wash with plenty of soap and water. If irritation persists, seek medical attention. If glass fiber becomes embedded, get medical attention.

Inhalation : None known.
Ingestion : Not likely route of exposure.

Most important symptoms/effects, acute and delayed:

Eye contact : Dusts from this product may cause temporary mechanical irritation.

Inhalation : Dusts from this product may cause mechanical irritation of the nose, throat, and respiratory tract.

Skin contact : Dusts from this product may cause temporary mechanical irritation.

Ingestion : Although ingestion of this product is not likely to occur in industrial applications, accidental ingestion may cause illness or irritation of the mouth and gastrointestinal tract.

Overexposure signs/symptoms : No specific data for eye contact/inhalation/skin contact/ingestion.

Indication of immediate medical attention and special treatment needed, if necessary:

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatment : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known

Specific hazards arising from the chemical: No specific fire or explosion hazard. Material is not an electrical conductor and may accumulate static charge.

Hazardous thermal decomposition products: Fiberglass will not burn, but smoking of the product may occur at approximately 400 - 500 °F (approximately 200 - 260 °C) due to decomposition of the surface binder. Surface binders may decompose in a fire situation and release carbon monoxide, carbon dioxide and water. Additionally, there are many chemicals that can evolve during any partial decomposition of chemical products. The amounts or identities cannot be predicted and can differ in each situation.

Special protective actions for firefighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for firefighters: Fiberglass itself will not support combustion, but in a sustained fire, proper protection against products of combustion from the fuel and sizing/binder must be worn.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: No special protection is necessary.

For emergency responders: No special protection is necessary.

Environmental precautions: Fiberglass is generally considered to be an inert solid waste. No special precautions are needed in case of a release or spill.

Methods and materials for containment and cleaning up:

Small spill: Vacuum or sweep up material and place in a designated, labeled waste container.

Large spill: Vacuum or sweep up material and place in a designated, labeled waste container.

Reference to Other Sections:

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling:

Protective measures: Put on appropriate personal protective equipment (See Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including incompatibilities: Store in accordance with local regulations.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits for Synthetic Vitreous Fibers:

OSHA PEL (United States). TWA: 15 mg/m³ TWA: 5 mg/m³ Form: Respirable TWA: 15 mg/m³ Form: Total dust ACGIH TLV (United States). TWA: 1 f/cc Form: Continuous filament glass fibers TWA: 5 mg/m³, (Inhalable) Form: Continuous filament glass fibers TWA: 3 mg/m³ Form: Respirable TWA: 10 mg/m³ Form: Total dust ACGIH TLV (United States, 6/2013). TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction TWA: 1 f/cc 8 hours. Form: Respirable fibers: length greater than 5 µm; aspect ratio equal to or greater than 3:1 as determined by the membrane filter method at 400-450X magnification (4-mm objective) phase contrast illumination.

KEY TO ABBREVIATIONS

A = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists
C = Ceiling Limit
F = Fume
IPEL = Internal Permissible Exposure Limit
OSHA = Occupational Safety and Health Administration
R = Respirable
Z = OSHA 29CFR 1910.1200 Subpart Z – Toxic and Hazardous Substances

S = Potential skin adsorption
SR = Respiratory sensitization
SS = Skin sensitization
STEL = Short term Exposure limit values
TD = Total dust
TLV = Threshold Limit Value
TWA = Time Weighted Average

Consult local authorities for acceptable exposure limits.

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measure:

Hygiene measures: Good personal hygiene and the use of barrier creams, caps, protective gloves, cotton coveralls or long sleeved loose clothing will maximize comfort. Appropriate techniques should be used to remove potentially contaminated clothing. Work clothing should be laundered separately from other clothing before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes: Safety glasses with side shields.

Hands: Use gloves to protect against physical irritation or injury if required by handling conditions.

Respiratory: If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling the product.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid, white to yellowish
Odor:	Odorless
Odor threshold:	Not available
pH:	Not available
Boiling point:	Not available
Melting point:	Not available
Flash Point:	Closed cup: Not applicable. (Product does not sustain combustion.)
Auto ignition temperature:	Not available
Decomposition temperature:	Not available
Flammability (solid, gas):	Not available
Lower and upper explosive (flammable) limits:	Not available
Evaporation rate:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	2.65–2.7
Solubility:	Insoluble
Partition coefficient: n-octanol/water:	Not available
Viscosity:	Not applicable
Volatility:	0% (v/v), 0% (w/w)
% Solid (w/w):	100

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under recommended storage and handling conditions (see Section 7).

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in Sections 7 and 8.

Materials to avoid: None known.

Hazardous decomposition products: Fiberglass products may release small amounts of acetic acid and other organic materials at elevated temperatures.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity: Conclusion/Summary: No known significant effects or critical hazards.

Irritation/Corrosion Conclusion/Summary:

Skin: No known significant effects or critical hazards.

Eyes: No known significant effects or critical hazards.

Respiratory: No known significant effects or critical hazards.

Sensitization Conclusion/Summary:

Skin: No known significant effects or critical hazards.

Respiratory: No known significant effects or critical hazards.

Mutagenicity Conclusion/Summary: No known significant effects or critical hazards.

Carcinogenicity Conclusion/Summary: No known significant effects or critical hazards.

Classification for Glass, oxide, chemicals

OSHA – None

IARC – 3

NTP – None

(Carcinogen Classification code: IARC: 1, 2A, 2B, 3, 4; NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen; OSHA: +; Not listed/not regulated.)

Reproductive Conclusion/Summary: No known significant effects or critical hazards.

Teratogenicity Conclusion/Summary: No known significant effects or critical hazards.

Specific target organ toxicity (single exposure): Not available

Specific target organ toxicity (repeated exposure): Not available

Target organs: Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes.

Aspiration hazard: Not available

Information on likely routes of exposure:

Potential acute health effects

Eye contact: Dusts from this product may cause temporary mechanical irritation.

Inhalation: Dusts from this product may cause mechanical irritation to the nose, throat and respiratory tract.

Skin contact: Dusts from this product may cause temporary mechanical irritation.

Ingestion: Although ingestion of this product is not likely to occur in industrial applications, accidental ingestion may cause illness or irritation of the mouth and gastrointestinal tract.

Over exposure signs/symptoms:

Eye contact: No specific data

Inhalation: No specific data

Skin contact: No specific data

Ingestion: No specific data

Delayed and immediate effects and also chronic effects from short and long term exposure:

Conclusion/Summary:

There are no known health effects from the long term use or contact with non-respirable continuous filament fibers, which is the type of fiber glass that PPG produces. Non-respirable fibers cannot reach the deep lung because they have a diameter of greater than 3.5 micrometers. Fibers of this diameter cannot penetrate the narrow, bending passages of the human respiratory tract to reach the lower regions of the lung and thus, have no possibility of causing serious pulmonary damage. Instead, they deposit on the surfaces of the upper respiratory tract, nose, or pharynx. These fibers are then cleared through normal physiological mechanisms.

Animal Study: In 2000, the Institute of Occupational Medicine (IOM) in Scotland published the results of a long term inhalation study in animals exposed to fibers that were manufactured to be RESPIRABLE. Animals were exposed to a very high concentration of these RESPIRABLE fibers (1022 fibers/cc for 5 hours/day, 7/days/week for 52 weeks). Exposure to these microfibers resulted in the development of fibrosis, lung cancer and mesothelioma as a result of the fibers being able to reach the lower regions of the lung.

Chopped crushed or severely mechanically processed fiber glass may contain a very small amount of respirable fibers that could reach the deep lung. The measured airborne concentration of these respirable fibers in areas where severe processing of fiberglass occurred has been shown to be extremely low and well below the TLV. Repeated or prolonged exposure to respirable glass fibers may cause fibrosis, lung cancer and mesothelioma. PPG fiber glass in the form supplied does not contain respirable fibers.

Epidemiology Studies: Two major studies in the US (performed by the University of Pittsburgh) and Europe (performed by the International Agency for Research on Cancer) showed no increase in lung cancer or respiratory disease among people working in production facilities producing NONRESPIRABLE continuous filament fiberglass. An additional smaller study performed in Canada also did not show an association between exposure of workers to fiber glass and respiratory cancer.

Short term exposure:

Potential immediate effects: No known significant effects or critical hazards.

Potential delayed effects: No known significant effects or critical hazards.

Long term exposure:

Potential immediate effects: No known significant effects or critical hazards.

Potential delayed effects: No known significant effects or critical hazards.

Potential chronic health effects:

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

SECTION 12 - ECOLOGICAL INFORMATION

No available data.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste disposal: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental production and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national and local laws/regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Controls/Personal Protection for additional handling information and protection of employees. Section 6. Accidental release measures.

SECTION 14 – TRANSPORT INFORMATION

Not regulated by DOT, IMDG, or IATA. No environmental hazards. Marine pollutant substances do not apply.

Special precautions for user: Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15 – REGULATORY INFORMATION

United States inventory (TSCA 8b):	All components are listed or exempted.
Australia inventory (AICS):	All components are listed or exempted.
Canada inventory (DSL):	All components are listed or exempted.
China inventory (IECSC):	All components are listed or exempted.
Europe inventory (REACH):	Please contact your supplier for information on the inventory status of this material.
Japan Inventory (ENCS):	All components are listed or exempted.
Korea inventory (KECI):	All components are listed or exempted.
New Zealand (NZIoC):	All components are listed or exempted.
Philippines inventory (PICCS):	All components are listed or exempted.
United States	
SARA 302/304/SARA 304 RQ:	Not applicable/No products found
SARA 311/312:	Not applicable/No products found

SECTION 16 – OTHER INFORMATION

Revision Date
August 28, 2019

Hazardous Material Information System (USA)

Health: 1 Flammability: 0 Physical hazards: 0

(*) – Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risk. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully-implemented HMIS® program. HIMS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J.J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health: 1* Flammability: 0 Instability: 0

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.