

Product Safety Data Sheet

1. Product and Company Identification

Product name: Alkali Resistant Glass Fiber Product

Manufacturer Information: Glass Fiber Div., Nippon Electric Glass Co., Ltd.
906 Ima, Notogawa, Kanzaki, Shiga, Japan 521-1295
Telephone: +81-748-42-2255
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2. Composition / Information on Ingredients

Single or Mixed Component Product Classification: Single component product including sizing agent

<u>Chemical name</u>	<u>Component</u>	<u>Content wt.%</u>	<u>CAS #</u>
Soda zirconia silicate glass fiber	Fiber Glass continuous Filament	98-100	65997-17-3
-	Sizing (Surface Coating)	0-2	Not Available

Component Related Regulatory Information: This product may be regulated, have exposure limits or other information identified as the following: Fibrous glass, Nuisance particulates, Glass filaments.

3. Hazardous Identification

Glass fiber is readily charged with static electricity. For example, static electricity is generated by roving or passing a glass fiber cloth through a guide or rubber roll.

Sparks from static electricity can cause fires. Also, it is thinkable of operators being shocked when coming in contact with static electricity and cause second disaster. Take measures to eliminate sparks or remove electrostatic charge such as ground.

Hazardous Effects on Human Health:

Contact with glass fiber products or airborne glass fiber can cause temporary itching and irritation in skin, eyes, throat, nose, etc.

4. First-aid Measures

Inhalation:

Gargle 10 times with clean water. Also, gently blow nose. If itching, irritation or other trouble persists in the nose or throat, get medical attention.

Skin Contact:

Do not rub or scratch! (If glass fibers puncture the skin, carefully remove without breaking using tweezers.)

First rinse in running water, then wash with soap and lukewarm water. Bathing is effective towards removing glass fibers.

Eye Contact:

Flush with clean water for at least 15 minutes. If irritation persists, get medical attention.

Ingestion:

Induce vomiting and rinse mouth with water. In the event of trouble such as being unable to vomit, get medical attention.

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5. Fire-fighting Measures

Flash point : Not applicable

Method Used: Not applicable

Upper Flammable Limit (UFL): Not applicable

Lower Flammable Limit (LFL): Not applicable

Flammability Classification: Not determined

Extinguishing Media:

Glass fiber fires can be put out with water, carbon dioxide, foam, dry chemical and powder. Nevertheless, select an extinguishing media suitable for surroundings (source of fire etc.).

Fire-fighting Instructions: Extinguish as with normal fires.

Other Information: Glass fiber in itself is incombustible, but sizing and surfacing used on top of the fiber are generally combustible.

6. Accidental Release Measures

Releases of this product to the land, water and air may require reporting to the proper authorities.

Refer to local and applicable national regulations.

Land Spill: scoop up material and put into a suitable container for disposal as a non-hazardous waste.

Water Spill: This material will sink and disperse along the bottom of waterways and ponds. It can not easily be removed after it is waterborne; however, the material is non-hazardous in water.

Air Release: This material will settle out the air. If concentrated on land, it can then be scooped up for disposal as a non-hazardous waste.

7. Handling and Storage

Handling: Prevent inhalation and contact with eyes and skin. Wear gloves, protective glasses (goggles are better) and dust mask (officially approved type: replaceable or throwaway type) as necessary.

Storage: Store the product indoors where not exposed to direct sunlight or high temperature or humidity. If inadequately stored, the binder and surfacing used with the fiber can deform to the point of losing its designated performance.

8. Exposure Control/Personal Protection

Equipment Measures: Install a localized ventilation system in places where cutting, polishing or performing work that generates dust, or handling milled fiber or glass powder. (If equipment measures cannot be implemented, wear a nationally certified dust mask when performing work.) It is also preferred to provide facilities for washing face and body, gargling, and changing and washing clothes.

Allowed Concentration: Glass fiber dust is classified as Group 3 dust. The allowed concentration is determined as follows.

*Inhalable dust 2 mg/m³ (Recommended) Japan Society for Occupational Health (2000)

*Total dust 8 mg/m³ (Recommended) Japan Society for Occupational Health (2000)

*TLV-TWA 5 mg/m³ ACGIH (1997)

Protective Gear: Use the following protective gear as indicated by the workplace environment.

Breathing apparatus: Dust mask (officially approved type: replaceable or throwaway type)

Protective glasses: Goggles

Protective gloves: Those which glass fiber cannot pierce such as leather gloves

Protective clothing: Upper torso: Comfortably-fitting with long sleeves and collar (with closed wrists).

Lower torso: Long pants with closed ankles

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9. Physical and Chemical Properties

Appearance: White/ Off-white/ Light yellow Melting (Softening) Point: Approx. 830°C
Odor Type: None Specific gravity(25°C): Approx. 2.7 (Clump)
pH: Not applicable Solubility in water: Nearly nil

10. Chemical Stability and Reactivity Information

Chemical Stability and Reactivity: Chemically stable and unreactive
Hazardous Substances Generated upon Decomposition: Glass fiber in itself is incombustible, but binders and surfacing used on top of the fiber are generally combustible. When burned, byproducts are estimated to include carbon dioxide and water.

11. Toxicological Information

Irritation: Dust from this product is a mechanical irritant, which means that it may cause temporary irritation or scratchiness of the throat, and/or itching of the eyes and skin.
Acute Toxicity (Including at 50% Lethal Dose): No information available
Chronic Toxicity: No information available
Carcinogenicity: Group 3 (not classifiable with respect to human carcinogenicity) as defined by the IARC

12. Ecological Information

No information on ecological effects available

13. Disposal Consideration

Disposal Instructions: Consult appropriate authorities before disposing waste material. Dispose, recycle or re-use waste material according to local and national requirements.

14. Transportation Information

Nothing in particular, however, for quality reasons, avoid wetting and rough handling so as to prevent the container from breaking.
US DOT Information: This product is not classified a hazardous material for transport.

15. Regulatory Information

TSCA: Continuous Glass Fiber carries no Chemical Abstracts Index name, CAS registry number or EPA code designation number.
Japan: Continuous Glass Fiber is exempt from Chemical Substances Control Law.
Classification and Labeling (EEC): Continuous Glass Fiber does not meet the classification for a “dangerous substance” according to 67/548/EEC.
Other Regulations: Comply with all other national or local regulations regarding the use, transport, recycling re-use, or disposal of this product.

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16. Other Information

1) Reference Documents

"Effects of Continuous Glass Fiber on Humans"

Glassfiber Association of Japan, March 1993.

"Manual on Continuous Glass Fiber Products"

Glassfiber Association of Japan, August 1996.

"Threshold Limit Values and Biological Exposure Indices 1997", ACGIH

"Occupational Safety and Health Series", No. 64 (1990), ILO (Translated edition)

2) The aforementioned information was compiled with data and materials available as of present and is subject to change pending the availability of new information. Also, instructions on handling apply to normal handling; in the event of special handling, take safety measures as indicated by use in advance. This information is provided as reference only and in no way does it makes any guarantees whether explicit or inexplicit.

Approved by	Masaaki Kobayashi
Created by	Yoshio Takeuchi

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