SAFETY DATA SHEET

Product number: YGF-9110

Continuous glass fiber products are articles under EU regulation (REACH&CLP), US regulation (TSCA) and Japanese Regulations (Industrial Safety and Health Law, Pollutant Release and Transfer Register) and therefore, no SDS is legally required. GFA decides to continue to provide our customers SDS for assuring the safe handling and use of continuous glass fiber products. This SDS was revised in accordance with GHS.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : GLASS FIBER

Kinds of product : Continuous Glass Fiber product

Manufacturer :

Company name : SUNDAY PAINT Co., Ltd

Address : 6-l-124 Nishi Kujou, Konohana- ku, Osaka 554-0012

Charge section : Mayor of customer service

Phone number : 06-6466-6700

Fax number : 06-6466-2751

Product use : For general

Date of issue : October 14, 2009

Date of prepared : May 14, 2013

2. HAZARDS IDENTIFICATION

GHS classification

Skin corrosion / irritation : Category 2
Serious eye damage /irritation : Category 2B
Specific target organ systemic toxicity (single exposure) : Category 3

(Respiratory tract irritation)

*Other hazards are neither applicable nor available.

GHS label elements

Continuous glass fiber products are articles and no MSDS is legally required. Therefore pictogram is not printed on our product label.

Signal word

Alert

Hazard statement

- Skin stimulativeness.
- Eye stimulativeness.
- Irritating to respiratory tract.

Precautionary statements

Prevention

- 1 Contact with fibers may cause temporary irritation or itch on skin, eyes, throat or nose.
 - Wear long- sleeved, loose-fitting clothing with gloves, eyes protection and a respirator.
 - Wash exposed areas with soap and warm water and gargle after handling.
 - Minimize released fibers by putting waste fibers in plastic bags, etc. immediately after cutting or chopping.
 - Wash work clothes separately from other clothing.
 - Seek medical attention in case of prolonged irritation or itch.
- 2 Most of sizing agents or surface treatment agents coated on fibers are flammable. Fibers in fuzz or cotton-like forms are especially easy to catch fire.
 - When chopping or cutting glass fibers, grinding materials including glass fibers, or handling glass powder, milled fibers, or glass flakes, use local exhaust ventilation if necessary to maintain airborne levels to below established limits.
 - Remove fuzz or cotton-like forms from the ventilation ducts and the working space.
 - Clean or vacuum the dust before using a grinding or welding machine.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient		
morement	•	
mgreatene	•	

Ingredient name	CAS no	%	ISHL(JPN)c hemicals requiring listednotifi cation	and Deleterious Substances - ENCS(JPN)	Pollutant Release and Transfer Registers (PRTR)
Alumina borosilicate glass	65997-17-3	>=95	_	_	
Surface treating agent	_	<5	_	_	

Poisonous

4. FIRST AID MEASURES

Inhalation

Gargle with clean water about ten times. Also, blow your nose gently. Seek medical attention If you feel some itching or irritation in the nose and/or throat.

Skin contact

■ Do not rub or scratch the affected areas. Rubbing or scratching may cause harsh itching or irritation. Rinse with running water first and then wash with warm water and soap. Bathing is an effective way to remove glass fiber. Seek medical attention If you feel some itching or irritation on your skin.

Eye contact

■ Do not rub your eyes to prevent irritation and injury to cornea. Flush the eye with clean water for at least 15 minutes. Remove Contact lenses immediately, if present and easy to do. Continue flushing. Seek medical attention if irritation persists.

Ingestion

■ Wash mouth with water thoroughly. Seek medical attention if necessary.

5. FIRE-FIGHTING MEASURES

Extinguishing media : including water, carbon dioxide gas, foam, dry chemicals and powder

Suitable extinguishing method : Use any of the ordinary fire extinguishing methods.

Other information

Glass fiber itself is not combustible. But the binders or surface treating agents on glass fiber are generally combustible and give off little hazardous by-products other than carbon monoxide, carbon dioxide and water on combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

■ If necessary, wear a safety mask, safety gloves or safety goggles.

Environmental precautions

■ No special environmental precautions required.

Methods and materials for containment and cleaning up

If spilled on the floor, clean quietly so that dust particles will not be dispersed and put into a container or bag. For disposal, treat it same as general industrial waste.

7. HANDLING AND STORAGE

Handling

Avoid inhalation or contact with the eye or skin. If necessary, use gloves, safety glasses (preferably goggles) and dust mask (approved by the government authorities: replaceable/one-way).
 Glass fiber is readily charged with static electricity. Static electricity can damage electronic components and cause explosions and fires. Take measures to prevent the build up of electrostatic charge.

Storage

■ Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Management density

■ "Regulation on Prevention of Hazards Due to Dust" of Japan; 3.0mg/m3

permission density

- Japan Society for Occupational Health (2012);2mg/m3 (respirable dust: recommendation),
 8mg/m3 (Total dust: recommendation)
- OSHA; 15mg/m3 TWA (total dust), 5mg/m3 TWA (respirable dust)
- ACGIH; 1 fiber/cm3 TWA (respirable fraction)

Equipment measures

■ Install localized ventilation units in workplaces where dusts are generated by cutting, grinding and so on, and powder products such as milled fibers are handled. If ventilation units can't be installed for some reasons, be sure to wear a dust mask (approved by the government) during work. It is also preferable to provide facilities for washing the face and the body, gargling, changing and washing clothes.

Protective gear

■ Use the following protective gear as necessary in view of the conditions in the workplace environment.

Respiratory protection

■ Dust mask (approved by the government authorities: replaceable /one-way)

Hand protection

■ Gloves such as leather which don't allow glass fiber to pierce

Eye protection

■ Safety glasses (goggle type)

Skin and body protection

■ Loose-fitting top garment with long sleeves and collar (tightened cuffs) and long pants (tightened at the ankles).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : White glass fiber aggregate, solid

Odor : none

Melting point : (Softening point) approx. 84(°C Specific Gravity (25°C) : Approx. 2.6 (bare glass)

Solubility (in water) : Insoluble

10. STABILITY AND REACTIVITY

stability

■ Stable at normal condition

11. TOXICOLOGICAL INFORMATION

Acute toxicity

■ Not available.

Skin corrosion property stimulativeness

■ Category 2. Severe pruritus and irritation incurred from exposure to mechanical stimulus while on the job.

These mechanical stimuli were momentary and were related to fibers 5um or greater. Furthermore,
dermatitis incurred from exposure to mechanical stimulus while on the job. No abnormalities have been
confirmed with a patch test for human skin using 4-13um diameter continuous glass fibers (with no surface treated).

Critical damage and stimulativeness to eye

■ Category 2B. Mechanical stimuli from exposure while on the job have been confirmed.

This mechanical stimulus is momentary, and is related to fibers of 5um or greater. (ACGIH (2001)), ATSDR (2004)).

Respiratory organs sensitization or skin sensitization

■ Not available.

Generative cell mutagenicity

■ Not available.

Carcinogenicity

■ Not applicable. The International Agency for Research on Cancer (IARC) classes glass fiber into category 3 (Not classification exists with regard to its carcinogenicity in humans.).

Reproductive toxicity

■ Not available.

Specified target organ-general toxicity - single exposure

■ Category 3. Temporary respiratory tract irritation has been confirmed while exposed on the job, but disappears when exposure is removed.

Specified target organ general toxicity - repetitive exposure

■ Not available. There is no possibility of inhalation of continuous glass fibers. It has also been reported that no significant adverse affects with regard to one's health have been confirmed through epidemiological studies conducted with laborers.

Aspiration respiratory organs hazard

■ Not available

12. ECOLOGICAL INFORMATION

Biotoxicity : No data.

Persistence/degradability : No data available. Bioaccumulation : No data available.

Mobility in soil : No information available.

Harmfulness to ozone layer : No data.

13. DISPOSAL CONSIDERATION

For disposal, handle in the same manner as general industrial wastes. Also follow all other concerned laws, bylaws and legal regulations.

14. TRANSPORT INFORMATION

■ Not classified as hazardous in the meaning of transport regulation. No correspondence to UN classification and UN number.

15. REGULATORY INFORMATION

Continuous glass fiber is not classified as a "Dangerous Substance" or "Dangerous Preparation" according to EU-Directives 67/548/EEC, 1999/45/EC and amendments.

Continuous glass fiber complies with all other national or local regulations regarding the use, transport, recycling, reuse, or disposal.

Glass fiber is considered an article and is exempted from requirements of TSCA, REACH, EINECS, DSL, AICS, KECL and so on.

16. OTHER INFORMATION

1)Literature references

- Recommendation on maximum allowable concentration (2012) Journal of Japan Society for Occupational Health, Vol. 54, 2012.
- Monographs on the Evaluation of the Carcinogenic Risks to Humans, Vol. 81 (2002), "Man-made Vitreous Fibers" International Agency for Research on Cancer (IARC).
- ACGIH(2001)
- ATSDR(2004)
- "Industrial Continuous Glass Fiber Patch Tests for Human Skin" (Test Report Commissioned by the Japan Hair Science Association Incorporated (Hair Science Research Bulletin No. 22044(3), February 7, 2011))
- 2) Glass is not a chemical substance registered under the following Japanese laws.
 - Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances.
 - Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management
- 3) We have the following domestic laws and bylaws related to occupational safety and health.
 - "Regulation on Prevention of Hazards Due to Dust" lay down in the provisions of the Enforcement Ordinance of the "Industrial Safety and Health Law".

Existing registration of chemical substances in the major countries

·Registration, Evaluation, Authorization and Restriction of Chemicals (REACH regulation in the EU)

EINECS No. Not applicable

CAS No. Not applicable

· European Inventory of Existing Commercial Chemical Substances

EINECS No. 266-046-0 CAS No. 65997-17-3

Registered names: Glass, oxide, chemicals

•Inventory of Toxic Substances Control Act (TSCA) in the US

CAS No. 65997-17-3

Registered names: Glass, oxide, chemicals

·Current chemical substances registration in China

CAS No. 65997-17-3

Registered names: Glass, oxide, chemicals

Domestic Substance List in Canada

CAS No. 65997-17-3

Registered names: Glass, oxide, chemicals

· Australian Inventory of Chemical Substances in Australia

CAS No. 65997-17-3

Registered names: Glass, oxide, chemicals
•Korean Existing Chemicals List in Korea

CAS No. 65997-17-3

Korean Existing Chemicals Inventory KE-17630

Registered names: Glass, oxide

This MSDS was revised in accordance with GHS. The information in this MSDS has been prepared on the basis of the materials, information and data that are currently available and may be updated or corrected based on new findings. Moreover, cautions apply to normal handling. In the event of special handling take safety measures appropriate for the applications and the methods. The information in this SDS is solely intended for providing information and does not constitute any guaranteed values.