

SAFE USE INSTRUCTION SHEET

Applicable to Continuous Filament Glass Fibre Products

**CHOPPED STRANDS • CHOPPED STRANDS MAT • ROVINGS •
CONTINUOUS FILAMENT MAT • MILLED FIBRE**

INTRODUCTION

The European Regulation (ER) No. 1907/2006 (REACH) on Chemicals, enforced on June 1st, 2007 requires Safety Data Sheet (SDS) only for hazardous substances and preparations. Our continuous filament glass fibre products (CFGF) are considered as articles under REACH and therefore, SDS requirement is not applicable.

The U.S. Government's Occupational Safety and Health Administration (OSHA) recognizes that articles are exempted from the SDS requirement as described in the Hazard Communication Standard 29 CFR 1910.1200, provided these articles do not meet the OSHA's definition of hazardous material. Our CFGF products are not hazardous according to this definition and therefore, SDS requirement is not applicable.

3B will however continue to communicate the appropriate information to its customers, necessary for a safe handling and use of continuous filament glass fibre products, through this Safe Use Instructions Sheet (SUIS).

1. PRODUCT AND COMPANY IDENTIFICATION

Generic product name	Continuous filament glass fibre products
Common names	Dry/Wet Chopped Strand, Chopped Strand Mat, Direct Roving, Choppable Roving, Continuous Filament Mat, Milled Fibre
Recommended use	Plastic reinforcement, acoustic insulation
Manufacturer details - Legal entity	3B-Fibreglass SRL Route de Maestricht 67 B-4651 Battice, Belgium +32 87 692 406
Regulatory EHS contact	3B-Fibreglass - Science & Technology Rue de Charneux, 59 B-4651 Battice, Belgium regulatory@3b-fibreglass.com

2. HAZARDS IDENTIFICATION

With regard to its composition, this product is not classified as hazardous according to the European Regulation (CE) 1272/2008.

This section identifies the potential hazards related to the article, i.e. its shape, its dimensions and other physical characteristics.

- Mechanical irritation (itching)
- Risk of stinging: presence of glass shards
- Exposure to airborne dust and fibres (inhalation)

For further details, see section 11.

3. COMPOSITION

Continuous filament glass fibre (CFGF) products are considered as articles under REACH (1907/2006/ER).

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, polymeric resin/emulsion. The sizing content is usually below 1.5%.

For CFM products, a binder is applied in a secondary step to form the mat. The binder (mixture of polymeric resin) content is usually below 10% of the product weight.

4. FIRST AID MEASURES

Eye contact

- Rinse immediately and thoroughly with water, including under the eyelid, for at least 15 minutes.
- Do not rub or scratch the eyes.
- If eye irritation persists, consult a specialist.

Skin contact

In case of irritation:

- Wash off immediately with soap and cold water.
- DO NOT use warm water: it would open up the pores of the skin and cause further penetration of the fibres.
- Do not rub or scratch the irritated areas.
- Take off contaminated clothes.
- If skin irritation persists, consult a specialist.

In case of stinging:

- Remove the glass shard carefully to avoid breaking it in the skin or the joints.
- Disinfect the entry point.
- If the shard is broken inside the skin, consult a specialist.

Inhalation

In case of irritation of the upper respiratory system and trachea:

- Move the victim to fresh air.
- If respiratory irritation persists, consult a specialist.

5. FIRE-FIGHTING MEASURES

CFGF products are not flammable, are incombustible and do not support combustion.

Suitable extinguishing media

- Water spray
- Dry chemical
- Foam
- Carbon dioxide (CO₂)

Protective equipment for firefighters

Wear self-contained breathing apparatus (SCBA) and full fire fighting protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid contact with eyes and/or skin.

Cleaning methods

- Pick up and transfer to properly labelled containers.
- Avoid dry sweeping.
- Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and residual spilled fibres.
- After vacuuming, flush away with water.

7. HANDLING AND STORAGE

Handling

- Wear appropriate personal protective equipment in case of direct contact with the product (see section 8).
- Avoid and/or minimise dust formation.

Storage

It is recommended to store CFGF products indoor at room temperature and at a relative humidity of 50% ± 15%. Keep them in their initial packaging until use to minimize potential dust formation. In case a packaging unit is only partly used, it should be immediately re-sealed.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Continuous Filament Glass Fibres are not respirable, however some mechanical processes might generate airborne dust or fibre (see section 11). The occupational exposure limits mentioned below are applicable to airborne fibre exposure and/or to dust exposure.

Exposure limits

NOTE:

The user of CFGF products must comply with the national regulation in terms of Health & Safety. You will find below some occupational exposure limit values for some European countries and ACGIH.

	Respirable dust	Total dust	Respirable fibre
ACGIH	3mg/m ³	10 mg/m ³	1 fibre/ml
Austria	6 mg/m ³ (fine)		0.5 fibre/ml
Belgium	5 mg/m ³	10 mg/m ³	1 fibre/ml
Denmark	5 mg/m ³	10 mg/m ³	1 fibre/ml
Finland		10 mg/m ³	1 fibre/ml
France		10 mg/m ³	1 fibre/ml
Germany	3 mg/m ³	4 mg/m ³	0.25 fibre/ml
Ireland	5 mg/m ³		2 fibres/ml
Italy	3 mg/m ³	10 mg/m ³	1 fibre/ml
Netherlands	5 mg/m ³	10 mg/m ³	1 fibre/ml
Norway	5 mg/m ³	10 mg/m ³	1 fibre/ml
Portugal		4 mg/m ³	1 fibre/ml
Spain	3 mg/m ³	10 mg/m ³	1 fibre/ml
United Kingdom	5 mg/m ³	10 mg/m ³	2 fibres/ml

Occupational exposure control: **Engineering control**

Provide local exhaust and/or general ventilation system to maintain low exposure levels. Dust collection system must be used in transferring, cutting or machining operations or other dust generating processes. Vacuum or wet clean-up methods should be used.

Personal Protective Equipment: **Respiratory protection**

In situation where concentrations are above exposure limits, appropriate dust masks must be worn (FFP1 or FFP2 depending on the actual airborne concentration).

Eye/Face protection

Safety glasses with side shields.

Skin/Body protection

- Appropriate protective gloves.
- Long sleeved shirts and long pants.

General hygiene considerations

- Wash hands before breaks and immediately after handling the product.
- Avoid contact with skin, eyes and clothing.
- Avoid getting dust into boots and gloves through wrist bands and pants tucks.
- Remove and wash gloves, including in the inside, and contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White
Physical state	Solid
Softening point	>800°C
Melting point	Non applicable
Density (molten glass)	2.65 (water = 1)
Water solubility	Insoluble

10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions.
Hazardous decomposition products	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	Hazardous reaction does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: not relevant

Local effects:

Dusts and fibres may cause mechanical irritation to eyes and skin. The irritation disappears when the exposure ceases. Mechanical irritation is not considered as a health hazard in the meaning of European Regulation (CE) 1272/2008. Continuous filament glass fibres do not require a classification as an irritant under the European Regulation (CE) 1272/2008.

Inhalation may cause coughing or sneezing and nose or throat irritation. High exposure may cause difficult breathing, congestion and chest tightness.

Long-term effects:

Continuous filament glass fibres are not respirable according to the World Health Organization (WHO) definition. Respirable fibres have a diameter (d) smaller than 3µm, a length (l) larger than 5µm and a l/d ratio larger than or equal to 3. Fibres with a diameter greater than 3µm, which is the case for our continuous filament glass fibres, do not reach the lower respiratory tract and therefore do not cause serious pulmonary disease.

Continuous filament glass fibres do not possess cleavage planes, which would allow them to split length-wise into fibres with smaller diameters. Rather they break across the fibre, resulting in small dust formation or in fibres, with the same diameter but a shorter length than the original fibre.

Microscopic examination of dust from highly chopped and pulverised glass demonstrated the presence of small amounts of respirable dust particles. Among these respirable particles, some were fibre-like in terms of l/d ratio (so-called "shards"). It can be clearly observed however that they are not regular shaped fibres but irregular shaped particles with fibre-like dimensions. To the best of our knowledge, the exposure levels of these fibre-like dust particles measured at our manufacturing plants are of the order of magnitude between 50 to 1000 below existing applicable limits.

Continuous filament glass fibres are not carcinogenic. (See section 15)

12. ECOTOXICOLOGICAL INFORMATION

No specific data are available for this product. This material is not expected to cause harm to the environment.

13. DISPOSAL CONSIDERATIONS

Continuous filament glass fibre waste is a non hazardous waste. European Waste Code number is 101103.

14. TRANSPORT INFORMATION

IMDG/IMO	NOT REGULATED
RID	NOT REGULATED
ADR	NOT REGULATED
IATA	NOT REGULATED

15. REGULATORY INFORMATION

This product is not hazardous according to the European Regulation (CE) 1272/2008.

Information on non carcinogenicity:

Continuous filament glass fibres are not classified as carcinogenic according to European Regulation (CE) 1272/2008, since they are not "fibres with random orientation".

In June 1987 and further confirmed in October 2001, the International Agency for Research on Cancer (IARC) categorised continuous filament glass fibres as "unclassifiable as to carcinogenicity in humans" (Group 3).

The TLV/TWA exposure limit of 5mg/m³ for the inhaled dust was applied to the continuous filament glass fibres in order to prevent mechanical irritation of the upper respiratory system.

National chemicals inventories:

Continuous filament glass fibre products are articles under the chemicals inventories listed below and consequently are exempt from listing on these inventories:

- The European Inventory of Existing Chemical Substances: EINECS/ELINCS,
- The US EPA Toxic Substance Control Act: TSCA,
- The Canadian Chemical Registration Regulations: NDSL/DSL,
- The Japanese Chemical Substances Control Law under METI: CSCL,
- The Australian Inventory of Chemical Substances: AICS,
- The Philippine Inventory of Chemicals and Chemical Substances: PICCS,
- The Korean Existing Chemicals List: (K)ECL,
- The Chinese List on New Chemical Substances.

It must be noted that for our CFGF products that are manufactured in Europe (specifically Belgium and Norway), each chemical ingredient used in our manufacturing process is REACH compliant.

16. OTHER INFORMATION

A special care has been taken when writing up the information contained in this SUI. The manufacturer does not give any trading warranty. The manufacturer will not bear the responsibility for a non appropriate use of the product or a misinterpretation of the information mentioned in this document.

Contact:

Science & Technology
rue de Charneux, 59
B-4651 Battice – Belgium
regulatory@3b-fibreglass.com