

**Applicable to Continuous Filament Glass Fibre Products**

- CHOPPED STRANDS**
- CHOPPED STRANDS MAT**
- ROVINGS**
- CONTINUOUS FILAMENT MAT**
- MILLED FIBRE**
- BULK 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 "may" be 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 this definition and therefore, SDS requirement is not applicable.

Binani 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.

**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, Texturized Yarn, Continuous Filament Mat, Milled Fibre, Bulk Fibre                          |
| Recommended Use                    | Plastic reinforcement, acoustic insulation   |
| Manufacturer details – Headquarter | 3B-Fibreglass SPRL<br>Route de Maestricht 67<br>B-4651 Battice, Belgium  |
| Regulatory EHS Contact             | 3B-Fibreglass - Science & Technology<br>rue de Charneux, 59<br>4651, Battice - Belgium<br><a href="mailto:Regulatory@3b-fibreglass.com">Regulatory@3b-fibreglass.com</a> |

**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% and in some very specific case up to 7%.

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.**

Only the sizing and/or binder are combustible and could release small quantities of hazardous gas in case of major and prolonged heat or fire.

**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**
- Keep product in its initial packaging until use to minimize potential dust formation.

## 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 below mentioned are applicable to airborne fibre exposure and/or to dust exposure.

**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**  
**Skin/Body protection**

- Safety glasses with side-shields.
- 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.

**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          | <b>3mg/m<sup>3</sup></b>         | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| Austria        | <b>6 mg/m<sup>3</sup> (fine)</b> |                            | <b>0.5 fibre/ml</b>  |
| Belgium        | <b>5 mg/m<sup>3</sup></b>        | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| Denmark        | <b>5 mg/m<sup>3</sup></b>        | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| Finland        |                                  | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| France         |                                  | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| Germany        | <b>3 mg/m<sup>3</sup></b>        | <b>4 mg/m<sup>3</sup></b>  | <b>0.25 fibre/ml</b> |
| Ireland        | <b>5 mg/m<sup>3</sup></b>        |                            | <b>2 fibres/ml</b>   |
| Italy          | <b>3 mg/m<sup>3</sup></b>        | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| Netherlands    | <b>5 mg/m<sup>3</sup></b>        | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| Norway         | <b>5 mg/m<sup>3</sup></b>        | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| Portugal       |                                  | <b>4 mg/m<sup>3</sup></b>  | <b>1 fibre/ml</b>    |
| Spain          | <b>3 mg/m<sup>3</sup></b>        | <b>10 mg/m<sup>3</sup></b> | <b>1 fibre/ml</b>    |
| United Kingdom | <b>5 mg/m<sup>3</sup></b>        | <b>10 mg/m<sup>3</sup></b> | <b>2 fibres/ml</b>   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                  |  |
|----------------------------------|--|
| <b>Appearance</b>                | White  |
| <b>Physical state</b>            | Solid  |
| <b>Softening point</b>           | >800°C   |
| <b>Melting point</b>             | Non applicable                                   |
| <b>Decomposition temperature</b> | Sizing and mat binder start decomposing at 200°C |
| <b>Density (molten glass)</b>    | 2.65 (water = 1)                                 |
| <b>Water solubility</b>          | Insoluble  |

## 10. STABILITY AND REACTIVITY

|   |   |
|---|---|
| <b>Chemical stability</b>                 | Stable under normal conditions.                                   |
| <b>Hazardous decomposition products</b>   | See section 5 for hazardous decomposition products during a fire. |
| <b>Possibility of hazardous reactions</b> | 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".

The International Agency for Research on Cancer (IARC) in June, 1987, and in October, 2001, categorized continuous filament glass fibres 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 fibres as a confirmed, probable or even possible cancer causing material.

The TLV/TWA exposure limit of 5mg/m<sup>3</sup> 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, et
- 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 listed on the European Chemicals Inventory (EINECS).

## 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.