

Product Ref: (DsC18-0913) Issue No: 02-1019

Embedment Fleece

1. SECTION 1: IDENTIFICATION

1.1. Product identifier

Product name: Embedment Fleece

1.2. Relevant Identified Uses

Uses:

Reinforcement

2. SECTION 2: HAZARDS

2.1. Classification

Composition	This product is not classified as hazardous according to European Directive 67/548/EEC and 99/45/EC and their latest amendments.
Health hazards:	Mechanical irritation (itching) Exposure to airborne dusts and fibres (inhalation)

3. SECTION 3: COMPOSITION INFORMATION

3.1. Composition

Continuous filament glass fibre (CFGF) products are articles in the meaning of REACH (1907/2006/ER).

Contains:

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 and polymeric resin/emulsion. The sizing content is usually below 3%.

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

4. SECTION 4: FIRST AID MEASURES

4.1. 4.1 First Aid Measures

Skin contact:	In case of irritation wash off immediately with soap and cold water. DO NOT use warm water because this will open up the pores of the skin, which will cause further penetration of the fibres. DO NOT rub or scratch affected areas. Remove contaminated clothing. If skin irritation persists, seek medical advice.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub or scratch eyes. If eye irritation persists, consult a specialist.
Inhalation:	In case of upper respiratory tract irritation move to fresh air. If symptoms persist, seek medical advice.

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5. SECTION 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.

5.1. Extinguishing Medium

- Water
- Dry Chemical
- Foam
- Carbon Dioxide (CO2)

5.2. Advice for Fire-fighters

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

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions

Avoid contact with the skin and the eyes.

6.2. Environmental Precautions

Prevent further leakage or spillage if safe to do so.

6.3. Containment and Cleaning Up

Clean-up procedures:

Pick up and transfer to properly labelled containers. Avoid dry sweeping. Shovel the major part of spilled material into a container. Use an industrial vacuum cleaner with a high efficiency filter to clean up dust and residual spilled material. After vacuum cleaning, flush away with water.

7. SECTION 7: HANDLING AND STORAGE

7.1. Handling Precautions

Wear appropriate personal protective equipment in case of direct contact with the product. Prevent and/or minimize dust formation.

7.2. Safe Storage

Storage conditions:

Keep product in its packaging until use to minimize potential dust generation.

8. SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Control Parameters

Continuous filament glass fibres are not respirable, however certain mechanical processes might generate airborne dust or fibre). The occupational exposure limits mentioned below are applicable to airborne fibre exposure and/or to dust exposure.

Exposure limit(s):

NOTE: The user of CFGF products has to comply with the national regulation in term of health worker protection.

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Respirable Dust	Total Dust	Respirable Fibre
5 mg/m ³	10mg/m ³	2 fibres/ml

8.2. Exposure Controls

Engineering measures:	Provide local exhaust and/or general ventilation system to maintain low exposure levels. Dust collection systems must be used in transferring operations, cutting or machining or other dust generating processes. Vacuum or wet clean-up methods should be used.
PPE:	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 Protection - Protective gloves, long sleeved shirt and long trousers.
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 pant tucks. Remove and wash contaminated clothing before re-use.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Basic Properties

State:	Solid
Colour:	White or off-white
Solubility in water:	Insoluble
Softening Point:	≥ 800°C
Melting Point:	N/A
Density (molten glass):	2.6 (water = 1)

10. SECTION 10: STABILITY AND REACTIVITY

10.1. Chemical Stability

Stable under normal conditions

10.2. Hazardous Reactions

Hazardous reaction does not occur

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Acute Toxicity

Not relevant



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11.2. 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 directive 67/548/EC on hazardous substances. Continuous filament glass fibres do not require a classification as an irritant (Xi) under the European directive 97/69/EC.

11.3. Long Term Health Effects

Continuous filament glass fibres are not respirable according to the World Health Organization (WHO) definition. Respirable fibres have a diameter (d) smaller than $3\mu m$, a length (l) larger than $5\mu m$ and an l/d-ratio larger than or equal to 3. Fibres with diameters greater than 3 microns, which is the case for continuous filament glass fibre, do not reach the lower respiratory tract and, therefore have no possibility of causing 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 fibres which are of the same diameter as the original fibre with a shorter length and a small amount of dust.

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 - 1000 below existing applicable limits.

Continuous filament glass fibres are not carcinogenic.

12. SECTION 12: ECOLOGICAL INFORMATION

No specific data are available for this product. This material is not expected to cause harm to animals, plants or fish.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment

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

14. SECTION 14: TRANSPORT INFORMATION

IMDG/IM, RID, ADR, ICAO, IATA, DOT, TDG, MEX

15. SECTION 15: REGULATORY INFORMATION

This product is not hazardous according to European Directive 99/45/EC, 67/548/EEC and their latest amendment.

According to E.U. Directives the continuous filament glass fibres in these products are not classified as carcinogenic. Continuous filament glass fibres are not within the scope of Directive 67/548/EEC per amendment 97/69/EC 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 fibre glass 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 fibre glass as a confirmed, probable or even possible cancer causing material.

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16. LEGAL DISCLAIMER

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product. The information contained in this data sheet does not constitute an assessment of workplace risk as required by current legislation. Whilst every care is taken to see that the information is correct and up to date, it is not intended to form part of any contract or give rise to any collateral liability, which is hereby specifically excluded.

This document is only a guide.

Langley Waterproofing Systems Ltd reserves the right to change the composition and fixing recommendations of products as a result of the evolution of knowledge and technology.

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