

**TMFC 7500 & 7544****1 - IDENTIFICATION OF THE PREPARATION AND THE COMPANY/BUSINESS****Identification of the substance or preparation**Name of product: **TMFC 7500 & 7544****Use of the substance / preparation**

resin Article: Fabric Made from Glass Fibers used as a reinforcement of various systems

**Company / undertaking identification**

Company name: AIRTECH EUROPE Sarl

Street/POB No.: Z.I. Haneboesch

State/city/postal code: L-4562 DIFFERDANGE

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**Emergency telephone** +352-582282-1 (8.00am – 5.00pm CET)**2 - HAZARDS IDENTIFICATION****Eyes:** May cause eye irritation when dust is generated or through direct contact.**Inhalation:** Mechanical irritation of respiratory tract may occur if dust is inhaled.**Skin:** Prolonged contact with fibrous glass or its dust may cause mild irritation and itching.**Ingestion:** Ingestion may cause temporary irritation of the digestive tract.**3 – COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical and Common Name	Max % by weight	CAS#	TLV (Source)
Fibrous Glass	99.94	65997-17-3	Not listed
Respirable fibrous glass dust	Not known	Not assigned	5mg/m <sup>3</sup> (ACGIH)

**4 - FIRST AID MEASURES****Skin contact:** Take off all contaminated clothing immediately. Flush with ample cool water followed by washing with mild soap to remove accumulated fibers. Do not rub or scratch irritated areas. Rubbing or scratching may force the fibers into the skin**Inhalation:** Not a probable route of exposure. In case of accidental inhalation of fumes from overheating or combustion, move to fresh air. Consult a physician after significant exposure.**Eye contact:** Flush with flowing water for 15 minutes. Consult a physician if necessary.**Ingestion:** Not a probable route of exposure.**5 - FIRE-FIGHTING MEASURES****Suitable extinguishing media:** Water, carbon dioxide, foam, dry chemical.**Special protective equipment/instructions:** Normal firefighting procedures should be followed to avoid inhalation of smoke and gases. Firefighters should wear full protective clothing including self contained breathing apparatus.

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### 6 - MEASURES TO BE TAKEN IN THE EVENT OF ACCIDENTAL SPILLAGE

**Environmental precautions:** Do not allow to enter ground water, sewage or drains.

**Methods for clean-up:** Wear suitable protective equipment. Vacuum or sweep up fibers, taking care not to generate airborne fibers. Collect and store into containers for disposal.

### 7 - HANDLING AND STORAGE

**Handling:** Good industrial practice in housekeeping should be followed. Avoid contact with skin and eyes. Wash hands after handling and before eating.

**Storage:** Store in a cool dry place.

### 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

**Exposure limit values:** In the case that fibreglass dust is generated during mechanical processing, it is recommended to observe following limits for dust.

TWA (Great Britain): 10 mg/m<sup>3</sup> (inhalable dust)

TWA (Great Britain): 4 mg/m<sup>3</sup> (respirable dust)

MAK (Germany – TRGS 900): 500000 fibers/m<sup>3</sup>

OSHA PEL: 15 mg/m<sup>3</sup> (Total nuisance dust)

OSHA PEL : 5 mg/m<sup>3</sup> (Respirable nuisance dust)

**Exposure controls:** Ensure adequate ventilation, especially in confined areas where dust generation is expected.

**Occupational exposure controls:**

Respiratory protection: None required under normal conditions of use. In case of overheating or combustion, use an approved respirator.

Skin protection: None normally required. Wear gloves, if potential exists for skin irritation from contact with particles.

Eye protection: Wear safety glasses or masks to minimize eye contact during cutting operations. Emergency eye wash stations should be available as required.

Hygiene measures: Wash hands before handling food and at the end of work.

### 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Greenish-white fabric
Odor:	None
pH:	Not applicable
Solubility in water:	Insoluble.
Flash point:	Not applicable
Auto-ignition temperature (ASTM D 1929):	Not applicable
Specific gravity:	Approx. 2.5

### 10 – STABILITY AND REACTIVITY

**Conditions to avoid:** None known.

**Materials to avoid:** Strong oxidizing agents.

**Hazardous decomposition products:** In case of thermal decomposition, during overheating or combustion, toxic gases or fumes may be evolved: carbon monoxide, carbon dioxide and other toxic combustion by-products.

**Additional information:** The product is stable at the handling and storage conditions recommended per § 7 of the safety data sheet and under normal processing conditions.

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### 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Not relevant

LOCALIZED EFFECTS: possible temporary irritations.

This irritation is of purely mechanical and temporary nature. It disappears when exposure is ended. It can affect the skin, the eyes and the upper respiratory tracts. In Europe, mechanical irritation is not considered to be a health hazard within the terms of European directives 67/548/EEC for hazardous products. This is confirmed by the fact that EC Directive 97/69/EC for mineral fibers does not stipulate the need to use an Xi (irritant) label nor classification for continuous glass fibers.

#### LONG TERM TOXICITY & CARCINOGENIC RISKS

None of the following official organizations have attributed any risks of cancer during the production and use of continuous glass fibers:

During its congress in June, 1987, World Health Organization (WHO) through the IARC (International Agency of Research on Cancer) examined all laboratory studies using animals and epidemiological studies carried out on continuous glass fibers. The conclusion was that glass filaments are not classified as to their carcinogenicity. They belong to the Group 3 of IARC. This classification has been confirmed by the IARC Working Group during his meeting in October 2001.

The International Labor Office (ILO) and the CSIP (Chemical Safety International Program) came to the same conclusions in a congress held in 1987.

European Commission Directive 97/69/EC dated 5/12/97, the 23<sup>rd</sup> amendment to Directive 67/548/EEC which concerns classification, packing and labeling of hazardous substances did not think it is necessary to include glass fibers as having carcinogenic risks.

MUTAGENIC RISKS, TERATOGENIC RISKS, RISKS FOR REPRODUCTION: continuous glass fibers have no known risks.

### 12 - ECOLOGICAL INFORMATION

#### Ecotoxicity:

Water hazard class: 1 = mild water pollutant

#### Persistence and degradability:

Product is not biodegradable.

#### Additional ecological information:

Do not allow to enter ground water, sewage or drains.

### 13 - DISPOSAL CONSIDERATIONS

Where possible, recycling is preferred to landfill or incineration. Landfill or incineration must be done in compliance with local regulations.

**Product:** European waste key numbers: 101103 = waste glass-based fibrous materials

**Contaminated packaging:** Waste key number 150101 – Paper and cardboard packaging.

Waste key number 150102 – Plastic packaging.

### 14 - TRANSPORT INFORMATION

Not classified as hazardous under transport regulations (ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport).

### 15 - REGULATORY INFORMATION

This preparation was classified in compliance with the directive known as <All preparations> 88/379/EEC and its adaptations.

<b>16 - OTHER INFORMATION</b>
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This bulletin cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this material. The information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations but all statements or suggestions are made without warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

**TMGC 6000, 6001 & 6003****1 - IDENTIFICATION OF THE PREPARATION AND THE COMPANY/BUSINESS****Identification of the substance or preparation**Name of product: **TMGC 6000, 6001 and 6003****Use of the substance / preparation**

Article: Fabric Made from Carbon Fibers for reinforcement of various resin systems

**Company / undertaking identification**

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**Emergency telephone** +352-582282-1 (8.00am – 5.00pm CET)**2 - HAZARDS IDENTIFICATION****Inhalation:** Inhaling fumes generated at elevated temperatures or dusts may cause respiratory irritation.**Skin contact:** May cause mechanical dermatitis and irritation.**Skin absorption:** No evidence of adverse effects from available information.**Ingestion:** No harmful effects expected from available information.**Eye contact:** Direct contact will cause mechanical irritation.**3 – COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Chemical Name</u>	<u>Formula</u>	<u>CAS Number</u>
Carbon	Carbon	7440-44-0

**4 - FIRST AID MEASURES****Skin contact:** Wash skin with water and soap. If molten material contacts skin, cool rapidly with cold water. Do not attempt to peel the product from skin. Obtain medical attention for thermal burns.**Inhalation:** Not a probable route of exposure. In case of accidental inhalation of fumes from overheating or combustion, move to fresh air. Consult a physician after significant exposure.**Eye contact:** Not a probable route of exposure.**Ingestion:** Not a probable route of exposure.**5 - FIRE-FIGHTING MEASURES****Suitable extinguishing media:** Water, carbon dioxide, foam, dry chemical.**Special protective equipment/instructions:** Normal firefighting procedures should be followed to avoid inhalation of smoke and gases. Firefighters should wear full protective clothing including self contained breathing apparatus.**6 - MEASURES TO BE TAKEN IN THE EVENT OF ACCIDENTAL SPILLAGE****Environmental precautions:** Do not allow to enter ground water, sewage or drains.**Methods for clean-up:** Wear suitable protective equipment. Vacuum or sweep up fibers, taking care not to generate airborne fibers. Collect and store into containers for disposal.

**TMGC 6000, 6001 & 6003****7 - HANDLING AND STORAGE**

**Handling:** Good industrial practice in housekeeping should be followed. Avoid contact with skin and eyes. Wash hands after handling and before eating.

**Storage:** Store in a cool dry place.

**8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION**

**Exposure limit values:** None known.

**Exposure controls:** Provide adequate room ventilation.

**Occupational exposure controls:**

Respiratory protection: If sufficient fibers or dusts are generated during use of the product, use an approved dust respirator.

Hand protection: Gloves may be required for certain workers who have sensitive skin or contact dermatitis.

Eye protection: Safety glasses are recommended.

Hygiene measures: Wash hands before handling food and at the end of work.

**9 - PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Black woven carbon fabric.
Odor:	None
pH:	Not applicable
Solubility in water:	Insoluble.
Flash point:	Not applicable
Auto-ignition temperature (ASTM D 1929):	Not determined
Specific gravity:	Approx. 1.7

**10 – STABILITY AND REACTIVITY**

**Conditions to avoid:** Heating above maximum recommended use temperature.

**Materials to avoid:** Strong oxidizing agents.

**Hazardous decomposition products:** In case of thermal decomposition, during overheating or combustion, toxic gases or fumes may be evolved: carbon monoxide, carbon dioxide and other toxic combustion by-products.

**Additional information:** The product is stable at the handling and storage conditions recommended per § 7 of the safety data sheet and under normal processing conditions.

**11 - TOXICOLOGICAL INFORMATION**

According to the best of our knowledge and to our experience, the product is not harmful to health provided that it is correctly handled and used according to the given recommendations.

**12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:** Water hazard class: 1 = mild water pollutant

**Persistence and degradability:** Product is not biodegradable. The insoluble part can be disposed of mechanically in suitable waste water cleaning plants.

**Additional ecological information:** Do not allow to enter ground water, sewage or drains.

## TMGC 6000, 6001 & 6003

### 13 - DISPOSAL CONSIDERATIONS

**Disposal recommendations:** Like most thermoplastics, the product can be recycled. Where possible, recycling is preferred to landfill or incineration. Disposal of the product and the packaging must be done in compliance with local, state and federal regulations.

### 14 - TRANSPORT INFORMATION

Not classified as a hazardous material with respect to transportation regulations (ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport).

### 15 - REGULATORY INFORMATION

This product was classified in compliance with the directives 88/379/EC and their adaptations. Not subject to labeling according to EC directives.

### 16 - OTHER INFORMATION

This bulletin cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this material. The information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations but all statements or suggestions are made without warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.