MATERIAL SAFETY DATA SHEET

In accordance with regulation (EC) 1907/2006 (REACH)

Carbon fibre fabrics, carbon yarns, carbon chopped fibres, carbon chopped strand mats, carbon combimats & multiaxial fabrics, carbon fabric tapes, carbon spread tow fabrics

Version 01, 12-4-2014

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1 Commercial name: products from carbon fibres: HS carbon, HM carbon, IM carbon
Products: carbon fibre fabrics, carbon yarns, carbon chopped fibres, carbon chopped strand mats, carbon combimats, multiaxial fabrics, carbon fabric tapes, carbon spread tow fabrics

1.2 Use of the substance or preparation:
- as reinforcement for plastics
- for laminates and multi-layer composites production

1.3 Identification of the company:

Company: *Compositesplaza B.V.*
Address: *Horstlandenpark 2A*
5709 MB Helmond
The Netherlands
0031-492-769099
Mail/Internet: *info@compositesplaza.com; www.compositesplaza.com*

2. HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

PHYSICAL AND CHEMICAL HAZARDS
Carbon fibre is electrically conductive and may cause short circuits in electrical installations

HUMAN HEALTH
Carbon fibre with a filament diameter >4 µm is not considered respirable. World Health Organisation defines a respirable fibre as a fibre with a diameter (d) <3 µm, a length (l) >5 µm and an l/d-ratio ≥ 3.
Carbon fibre is not considered a dangerous substance according to Directive 67/548/EC or Regulation (EC) No. 1272/2008 (CLP).
Filaments are mechanical irritants and may induce temporary mouth, nose and throat irritation.
Skin or eye contact may cause itching and temporary irritation.
Ingestion may cause temporary mechanical irritation of the digestive tract.

Pre-existing conditions such as respiratory or skin disorders may be aggravated by exposure to the product or dust/particulate generated from machining/grinding of the cured product.

3. COMPOSITION/INFORMATION ON COMPONENTS

COMPOSITION COMMENTS
Graphite (carbon) synthetic fibres. Filament diameter > 4 µm. >98% w/w

Carbon fibre can be with or without a size

4. FIRST AID MEASURES

INHALATION
With any sign of respiratory distress, affected persons should be taken into fresh air, and made to rest while medical attention is sought

INGESTION
DO NOT induce vomiting. Get medical attention immediately.

SKIN CONTACT
In case of contact with the product or the cured product dust or particulate, immediately wash skin with mild soap and water. Use a washcloth to help remove the fibres. To avoid further irritation, do not rub or scratch irritated areas. Rubbing or scratching may force fibres into the skin. Get medical attention immediately if the irritation persists.

EYE CONTACT
In case of contact with the product or the cured product dust or particulate, immediately flush eyes with large amounts of water for at least 15 minutes, keeping the eyelids open. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
Use: Water spray, dry powder or carbon dioxide.

SPECIFIC HAZARDS
Above 650ºC, if incomplete combustion occurs and depending on air supply and temperature, there may be release of carbon monoxide and dioxide and products of low molecular weight.

Carbon fibres are electrically conductive and if released during combustion may present a hazard to unprotected electrical apparatus.

PROTECTIVE MEASURES IN FIRE
Avoid exposure through use of a self-contained, positive-pressure breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear protective clothing as described in Section 8 of this safety data sheet.

SPILL CLEAN UP METHODS
Clean affected area, and dispose of product and cleaning materials in accordance with local regulations. See paragraph 13.
Carbon Fibre is electrically conductive and may cause short-circuits in electrical installations

7. HANDLING AND STORAGE

USAGE PRECAUTIONS
Avoid direct contact with product.
Avoid inhalation of filaments or dust/particulates generated during processing operations.
Where possible, provide dust extraction and collection from handling zones.

STORAGE PRECAUTIONS
Store in closed original container in a dry place. Keep away from food, drink and animal feeding stuffs.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

RESPIRATORY EQUIPMENT
Ensure good general ventilation. For comfort, an approved dust mask can be worn where fibre or particulates are present.

EYE PROTECTION
Wear approved safety spectacles, goggles or facemask when working product by hand or machining with power tools.

SKIN PROTECTION
Avoid skin contact by wearing gloves.
Ensure forearms are protected by use of gloves with long gauntlet, disposable sleeves or long sleeve overalls.
Irritation often appears at pressure points such as wrists, waist, neck and between fingers.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Textile surface made of woven filament yarn
ODOUR	Odourless

PHYS. DATA COMMENTS	Explosive Limits: not classified as explosive but dust or airborne filaments could induce explosion in high voltage equipments by short circuit.
SOLUBILITY	Insoluble in water
MELTING POINT (ºC)	~ 3500ºC
DECOMPOSITION TEMP.	650ºC (air) (ºC)

10. STABILITY AND REACTIVITY

STABILITY
Stable under normal temperature conditions and recommended use.

HAZARDOUS POLYMERISATION
Will not occur under proper conditions of use. Rapid heating of the product in bulk may produce an uncontrolled exothermic reaction that may char and decompose the size, generating unidentified gases and vapors that may be toxic. Avoid inhalation.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous decomposition products: The products of combustion and decomposition depend on other materials present in the fire and the actual conditions of the fire. Burning will decompose the size, if present, to release carbon, nitrogen, phenols, aldehydes, acrolein, carboxylic acid, traces of incompletely burned carbon products and other unidentified gases and vapours that may be toxic.

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION
Carbon fibre with a filament diameter >4µm is not considered respirable. World Health Organisation defines a respirable fibre as a fibre with a diameter (d) <3 µm, a length (l) >5 µm and an l/d-ratio ≥ 3.
Carbon fibre is not considered a dangerous substance according to Directive 67/548/EC or Regulation (EC) No. 1272/2008 (CLP).
There is no evidence that carbon fibres are mutagenic, genotoxic or carcinogenic.

INHALATION
Filaments and dust/particulates from machining cured product may cause mechanical irritation to the upper respiratory tract. Pre-existing respiratory disorders may be aggravated.

INGESTION
May cause temporary mechanical irritation of the digestive tract.

SKIN CONTACT
May cause mechanical irritation. Pre-existing skin disorders may be aggravated.

EYE CONTACT
May cause mechanical irritation

12. ECOLOGICAL ASPECT

There are no data on the ecotoxicity of this product.

13. CONSIDERATION ON DISPOSAL

GENERAL INFORMATION
Dispose of in accordance with local regulations

14. TRANSPORT REGULATIONS

GENERAL This product is not dangerous to transport.
The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

15. INFORMATION ON REGULATIONS

RISK PHRASES NC Not classified.

SAFETY PHRASES NC Not classified.

EU DIRECTIVES
Carbon fibre is not considered a dangerous substance according to Directive 67/548/EC or Regulation (EC) No. 1272/2008 (CLP).

16. OTHER INFORMATION

GENERAL INFORMATION
This product is an article as defined by TSCA and is not required to be listed in the US, EPA, TSCA Inventory.
This product and its components are considered an Article with no intentional release in accordance with EC No. 1907/2006, REACh Regulation