

APPLY.CARBON sa

Z.A. Lanveur F-56440 LANGUIDIC tel +33 2 97 65 10 89 fax +33 2 97 65 11 20

MATERIAL SAFETY DATA SHEET**1 / 4****1 – PRODUCT AND COMPANY IDENTIFICATION**

name of product	Short Carbon Fibres (milled, cut or chopped carbon fibres, following customer requirement)
name of manufacturer adress	APPLY.CARBON sa ZA Lanveur F-56440 LANGUIDIC FRANCE
telephone number	+33 2 97 65 10 89
fax number	+33 2 97 65 11 20

2 – COMPOSITION / COMPONENT INFORMATION

substance	YES
standard or generic chemical name	carbon fibre
CAS number (US TSCA Nr)	n° 7440-44-0
components which may be dangerous	carbon fibre > 90% – sizing products as partially cured epoxide or polyester resins < 2%.

3 – IDENTIFICATION OF RISKS

main product risks	electricity conducting material – may break up into fine particles
*health risks	*finely dispersed fibre may irritate skin, eyes and mucous membrane – no case of disease reported.
*environmental risks	*known as a non-polluting product, but which may cause electrical short-circuits when dispersed.
specific risks	N.A.

4 – FIRST AID

measures to take in case of:	
*accidental inhalation	*move the victim to fresh air – call a doctor
*contact with skin	*wash the affected area with soap and water
*contact with eyes	*remove contact lenses if any – rinse eyes with plenty of water for at least 15 minutes – call a doctor
*ingestion	*call a doctor

5 – MESURES IN CASE OF FIRE

suitable extinguishing methods	all methods
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MATERIAL SAFETY DATA SHEET (continued) 2 / 4**6 – MEASURES TO TAKE IN CASE OF ACCIDENTAL DISPERSION**

individual precautions	N.A.
environmental precautions	avoid worsening the dispersion
cleaning methods	aspiration via suitable methods due to the risk of fibre dispersion – staff responsible for the task are advised to wear work attire and a dust mask.

7 – HANDLING AND STORAGE**handling**

*technical measures

*material to be handled with care – do not cut the carbon fibre unnecessarily – electrical conducting material; do not allow contact with electric current sources.

*handling precautions
the

*avoid the dispersion of loose fibres – handle

fibre in well ventilated premises (the ventilation devices should have a filter to avoid discharging loose fibres into open air) where there are not electrical appliances or said appliances are protected in sealed or pressurised cases. insulating varnish may be applied to electronic boards and electrical terminals.

*advice for use and incompatibility
with other material

*avoid friction which may create loose and flying debris

storage

*technical measures

*N.A.

*recommended storage conditions

*storage conditions do not increase the risk of danger, but it is recommended to store the products in a clean and dry place, away from dust, in its original packaging

*distance from incompatible
material

*N.A.

*recommended packaging
material

*any non-abrasive material which avoids friction between bags

8 – EXPOSURE CONTROL / INDIVIDUAL PROTECTION

technical measures to reduce exposure

if dust is created and ventilation is inadequate, it is advised to wear a dust mask, eye protection, gloves and clean and dry work attire

individual protection

*respiratory

*dust mask

*hands

*adequate protective gloves (surgical or cotton type)

*eyes

*protectives goggles

*skin and body

*a protective cream for the skin may be useful

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MATERIAL SAFETY DATA SHEET (continued) 3 / 4**9 – PHYSICAL AND CHEMICAL PROPERTIES**

physical state	solid
form	filament
colour	black or charcoal grey
odour	odourless
pH – concentration	N.A.
specific temperature at which physical state changes	N.A.
decomposition temperature	N.A.
inflammation point	N.A.
self-combusting point	N.A.
explosiveness characteristics	N.A.
steam pressure	N.A.
volumic mass (monofilament)	1.6 to 2.g/cm ³
bulk density (short fibres)	200 to 1200 g/dm ³ following that cut, chopped or milled fibres; following lengths and sizing
type	
solubility and solvents used	insoluble fibre – sizing agent soluble in chlorinated solvents, acetone, DMF
coefficient of n-octanol/water ratio	not established
radioactivity	N.A.

10 – STABILITY AND REACTIVITY

product stability	stable
possible dangerous reactions in certain conditions	not identified
possible dangerous decomposition products (other than CO, CO ₂ , H ₂ O)	none

11 – TOXICOLOGICAL INFORMATION

acute toxicity	product presumed non toxic
local effects	possible irritation of mucous membrane

12 – ECOLOGICAL INFORMATION

possible effects, behaviour and evolution of the product with respect to the environment	no known effects – non-polluting, stable product
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13 – CONSIDERATIONS CONCERNING DISPOSAL

recommended disposal methods	dispose of in a suitable place according to national and local regulations; do not incinerate; incineration may cause carbon fibre particles to be dispersed into the air which may damage electrical equipment.
traitement of waste and residue	idem
traitement of soiled packaging	N.A.

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MATERIAL SAFETY DATA SHEET (continued) 4 / 4**14 – INFORMATION REGARDING TRANSPORTATION**

codes and classifications of international regulations N.A.
specific transport conditions N.A.

15 – REGULATIONS INFORMATION

warnings related to danger and safety N.A.

16 – MISCELLANEOUS, NON-LISTED INFORMATIONS

We believe that the information contained in this safety data sheet is correct to the best to our knowledge. However, the information contained in this sheet is not exhaustive. This safety data sheet does not anticipate all the circumstances in which the product may be used, nor all the physical and mantal characteristics of each individual responsible for its transportation or transformation. It is the duty of the user to test and use this product safely, in accordance with the laws and regulations in force. Unless otherwise stated in writing, we accept no responsibility for complaints or damage caused related to the use of this product. For all additional information, please contact the Quality Assurance Department of Apply.Carbon.

**Apply.Carbon transforms the carbon fibres only by cutting, chopping or milling, at very various lengths, to meet the very large needs of its customers;
Apply.Carbon sometimes also mixes different carbon fibres for special applications or special customers requirements;
All the informations given in this Material Safety Data Sheet are excerpt from these of its carbon fibres suppliers which are :
TORAY-SOFICAR, TOHO-TENAX, BP-AMOCO, HEXCEL(HERCULES), etc....**