1 - PRODUCT AND COMPANY IDENTIFICATION

Product name	**Milled Carbon Fibre** *milled, cut or chopped carbon fibers*
Relevant uses	rubber belts, thermosetting composites, textile yarns, paints, non-wovens, ablatives and friction materials
Uses advised against	None
Company name Address	Easy Composites Ltd Unit 39, Park Hall Business Village Longton, Stoke on Trent Staffordshire ST3 5XA United Kingdom
Telephone number Email	+44 (0) 1782 454499 sales@easycomposites.com

2 - HAZARDS IDENTIFICATION

Main product risks	**Electricity conducting material**. Airborne fibers can short circuit electrical equipment. The build-up of fine dust can lead to a risk of explosion. **Our carbon fibers are NOT ATEX, NOT hazardous.**
Human health risks	Fine dust may irritate skin, eyes and mucous membranes. No case of disease reported.
Environmental risks	Known as a non-polluting product, but which **may cause electrical short circuits** when dispersed.
Specific risks	None
Supplemental hazard risks	Contains traces of Bisphenol-A-(Epichlorhydrin) and Epoxy resin that may produce an allergic reaction : EUH 208.

*This product is an **ARTICLE** that is not classified as dangerous according to the decree of 07/12/2009, or regulations (EC) n°1272/2008 (CLP), 67/548/EEC and 1999/45/EC.*

3 - COMPOSITION / COMPONENT INFORMATION

Substance/mixture	≥ 92% of carbon (in graphite form)
Standard or chemical name	Carbon fiber on basis polyacrylonitrile (Carbon)
CAS number	**7440-44-0**
EINECS/ELINCS number	Polymer (231-153-3)
GHS/CLP or hazard symbols	**Not applicable**
R-phrase	Not applicable
Substances of Very High Concern (SVHC)	None or below 0.1%
CMR	None or below 0.1%
Other components	Sizing (Epoxy or polyether resins) ≤ 1.8 %

4 – FIRST AID MEASURES

General advice	Dust may be irritating. Change clothing.
Eye contact	Rinse thoroughly with plenty of water for at least 15 min and seek medical advice.
Skin contact	Wash thoroughly with water and soap.
Inhalation	Remove subject to fresh air. Seek medical attention if symptoms persist.
Ingestion	Rinse mouth and drink water. No medical treatment required.

5 – FIRE-FIGHTING MEASURES

Suitable extinguishing media	All usual extinguishing products appropriate for the surrounding fire are allowed. Avoid full water jet.
Specific hazards	Not flammable or combustible under normal uses. Risk of formation of toxic pyrolysis products (CO).
Special protective equipment for firefighters	Wear full-face, self-contained breathing apparatus to avoid inhalation of fumes or decomposition products.
Specific methods	None

6 – ACCIDENTAL RELEASE MEASURES

Individual precautions	Use an individual protection equipment.
Environmental precautions	Avoid worsening the dispersion. Prevent entry into waterways, sewers, basements or confined areas.
Cleaning methods	Avoid dust formation. Clean up with sweep or vacuum.

7 – HANDLING AND STORAGE

Handling precautions	Dust can form an explosive mixture with air. Keep away from sources of ignition – **no smoking**. Avoid the dispersion of discharging loose fibres into open air. Wash thoroughly after handling. **No electrical appliances** or protect them in sealed or pressurised cases. Insulating varnish may be applied to electronic boards and electrical terminals.
Technical measures	**Electrical conducting material** – do not cut the carbon fibre unnecessarily.

DO NOT ALLOW CONTACT WITH ELECTRIC CURRENT SOURCES.

Storage	Store in a cool (<50°C), dry and well-ventilated area.

8 - EXPOSURE CONTROLS / INDIVIDUAL PROTECTION

Engineering measures	Ensure adequate ventilation on workstation to avoid dust accumulation.
Control parameters	See local regulations. VME for total dust: 10 mg/m³. Long-term exposure for carbon fibers: 0.5 mg/m³ or 0.5 RFP/ml (respirable fiber-shaped particles).
Personal protective equipment:	
Respiratory protection	Use appropriate certified breathing apparatus in the event of high concentrations (poor ventilation, fine dust production). Filter apparatus FFP2 or FFP3.
Skin/hand protection	Gloves and protective clothing. Avoid skin contact.
Eye protection	Safety glasses with side shields or face protection.
Hygiene measures	Wash face and hands before eating, drinking or smoking and do it in separate areas. Use barrier skin cream or baby cleaning milk to wash hands and face.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	solid
Form	short fiber (filament)
Colour	black or charcoal grey
Odour	none
pH	not applicable
Boiling point	not applicable
Melting point	> 2760 °C or 5000 °F
Vapour pressure/ Vapour density	not applicable
Specific gravity (filament)	1.6 to 2.0 g/cm³
Bulk density (short fibers)	0.1 to 0.5 kg/dm³ depending on whether the fiber is cut, chopped or milled ; depending on its length and the sizing type.
Flash point	no information available
Viscosity	no information available
Flammability	not applicable
Autoignition temperature	not applicable
Oxidizing properties	none
Decomposition temperature	> 650°C in air, > 290°C in preparation

Solubility in water and solvents used	insoluble fibre - sizing agent soluble in chlorinated solvents, acetone, DMF
Partition coefficient (n-octanol/water)	no information available

10 - STABILITY AND REACTIVITY

Stability	Stable.
Conditions to avoid	See section 7. **Avoid contact with heat, flame, spark**.
Hazardous reactions	Reactions with strong oxidizing agents. Risk of dust explosion if accumulation of fine dust in the air.
Hazardous decomposition products	Oxides of carbon (CO, COx).

11 - TOXICOLOGICAL INFORMATION

Acute toxicity	Product presumed **non toxic**.
Local effects	Carbon fibers and dust may cause mechanical irritation of the eyes, skin, nose and throat. The filament is not breathable (IARC). None carbon fibers with diameter below 3.5 µm (≥ 7 µm) and length below 80 µm, therefore they are not considered as "respirable fiber-shaped particles" (RFP ≤ 3.5 µm diameter).

12 - ECOLOGICAL INFORMATION

Ecotoxicity	This material is not classified as dangerous for the environment. Ecological data are not available.
Persistence and degradability	Non-polluting, stable product.
Mobility in soil	No information available.
Bioaccumulation	No information available.
PBT/vPvB	These products are not classified as PBT or vPvB.

13 - DISPOSAL CONSIDERATIONS

Waste disposal	Dispose of wastes in a suitable place according to local regulations - do not incinerate. Incineration may cause carbon fibre particles to be dispersed into the air which may damage electrical equipment.

Treatment of contaminated packaging	Packaging that cannot be cleaned should be disposed of as for product.

14 – TRANSPORT INFORMATION

Carbon products are **not classified as hazardous** in terms of national and international transport regulations – **no specific transport label** required (not ADR). **Not CLP-classified nor GHS classified.**

15 – REGULATORY INFORMATION

These products are not submitted to regulations (EC) n°1272/2008 (CLP), 67/548/EEC, nor n°1999/45/EC. This MSDS has been established in accordance with REACH regulations (EC) N°1907/2006 and N°453/2010. All our products don't contain substances of very high concern (SVHC, REACH: EC 1907/2006 & 453/2010) or substances submitted to authorization (ANNEX XIV, REACH) or substances in current GADSL.

These products comply with **TSCA** (USA), **DSL/NDSL** (Canada), **EINECS/ELINCS** (Europe), **IECSC** (China), **ENCS** (Japan), **KECL** (Korea) and **AICS** (Australia) regulations.

16 – OTHER INFORMATION

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 mental characteristics of each individual responsible for its transport 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 Easy Composites Ltd.

Apply Carbon transforms the carbon fibers 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 fibers for specific applications or customers requirements.