# SAFETY DATA SHEET

*in accordance with regulation (EC) N°1907/2006 – REACH*

## 1 – PRODUCT AND COMPANY IDENTIFICATION

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

## 2 – HAZARDS IDENTIFICATION

| | |
|---|---|
| Main product risks | **Electricity conducting material**. Airborne fibers can short circuit electrical equipment. **Our carbon fibers are NOT ATEX nor 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 | Could contain traces of epoxy resin that may produce an allergic reaction: EUH 208. |

*This product is an **ARTICLE** that is **NOT classified as hazardous** 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/Article | ≥ 94% of carbon fiber (in graphite form) |
| Standard or chemical name | Carbon fiber on basis polyacrylonitrile |
| CAS number | 7440-44-0 |
| EINECS/ELINCS number | Polymer (231-153-3) |
| **GHS/CLP or hazard symbols** | **Not classified** |
| R-phrase | Not applicable |
| Substances of Very High Concern (SVHC) | None or below 0.1% |
| CMR | None or below 0.1% |
| Other components | original sizing (epoxy or polyether resins traces) ≤ 1.8 % |

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## 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.<br>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 | Keep away from sources of ignition – **no smoking**. Avoid the dispersion of discharging loose fibres into open air. Wash thoroughly after handling.<br>**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.<br>**DO NOT ALLOW CONTACT WITH ELECTRIC CURRENT SOURCES.** |
| Storage | Store in a cool (<50°C), dry and well-ventilated area. |

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## 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.<br>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 |

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## 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.<br>In the supplied form our product is not explosive however the processing and buildup of fine dust can lead to a risk of dust explosion (accumulation of fine dust in a closed area). |
| Hazardous decomposition products | Oxides of carbon (CO, COx). |

## 11 – TOXICOLOGICAL INFORMATION

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|---|---|
| Acute toxicity | Product presumed **non toxic**. |
| Local effects | Carbon fibers and dust may cause mechanical irritation of the eyes, skin, nose and throat.<br>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.<br>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. |

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## 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 SDS 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), **REACH UK** (UK), **CH INV** (Switzerland), **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.