



## GHS Safety Data Sheet (SDS)

This product is an Article rather than a Chemical. Furthermore, this product does not meet the hazard criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200) or of the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Therefore, this product is exempt from GHS labeling and SDS classification criteria. The provision of this SDS is optional and is for informational purposes only.

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Product:** Carbon Fiber, in various forms, incl. milled or chopped (recycled)

**Carbon Fiber Recycling**

161 Giles Industrial Dr.

Tazewell, TN 37879

**EMERGENCY PHONE NUMBER:**

(203) 790-7849

**Recommended Use:** Chopped or milled carbon fiber may be used in thermoplastic, thermoset, paper, adhesives, cement, asphalt, polymers, and other industrial applications.

### Section 2 – HAZARD IDENTIFICATION

**Product Overview:** In supplied form the product is not hazardous. When handled and processed can cause skin, eye and respiratory tract irritation.

**Classification according to regulation (EC) No 1272/2008 [CLP]:** Not classified

**Classification according to Regulation 67/548/EEC or 1999/45/EC:** Hazard symbols – None. R-phrases – None. This product does not require a hazard warning label, in accordance with OSHA HazCom and EC-directives.

**Labeling according to regulation 67/548/EEC or 1994/45/EC:** Hazard symbols – None. R-phrases – None. S-phrases – None. Special labeling – Not applicable.

**Physio-chemical hazards:** see Section 10 for additional information. In the supplied form the product is not explosive at all. However, the processing and buildup of fine dust can lead to a risk of dust explosions.

**Health hazards:** see Section 11.

**Environmental hazards:** see Section 12.

**Other hazards:** This product and its dusts are electrically conductive.

Carbon Fibers (recycled)

**print Date:** 03/15/2023

### Section 3 - COMPOSITION AND INFORMATION ON INGREDIENTS

**Composition:**

Name	CAS #	EC #	% by Weight	OSHA PEL	SARA
Carbon Fiber (PAN-based)	308063-67-4	N/A	95% - 100%	N/A	No
or carbon	7440-44-0	251-153-3			
Sizing	proprietary		0% - 5%	N/A	No

### Section 4 - FIRST AID MEASURES

**General Information:** Not applicable.

**Inhalation:** If inhaled, remove to fresh air. Seek medical attention if breathing becomes difficult.

**Skin contact:** Wash affected areas thoroughly with soap and water.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes.

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. If conscious and alert, rinse mouth and drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person.

### Section 5 - FIRE-FIGHTING MEASURES

**Flammability of the Product:** Non-flammable.

**Auto-Ignition temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** CO, CO<sub>2</sub>.

**Special Hazards in Presence of Various Substances:** Airborne fibers are electrically conductive.

**Fire Fighting Media and Instructions:** Normal fire-fighting media and instructions.

### Section 6 - ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Not applicable.

**Environmental precautions:** Not applicable.

**Methods and materials for containment and cleaning up:** Take up mechanically or with vacuum. Do not use air jets.

### Section 7 - HANDLING AND STORAGE

**Precautions for safe handling:** No special measures necessary if used correctly.

**Storage:** Do not store together with oxidizing agents. Avoid the buildup of dust.

**Advice on protection against fire and explosion:** Dust may form an explosive mixture with air when processed. Keep away from sources of ignition. Airborne particles should be controlled to minimize electrical shorts.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational exposure limits:** OSHA and ACGIH (USA) have not established air contamination for carbon fibers. Fiber dust should be considered a nuisance dust. OSHA has an established standard for particulates not otherwise regulated set at 5mg/m<sup>3</sup> (respirable fraction) and 15mg/m<sup>3</sup> (total dust). ACGIH has established an exposure value of 3mg/m<sup>3</sup> (respirable fraction) and 10mg/m<sup>3</sup> (total). NHFPC (PRC) has an established standard for carbon fiber's particulates not otherwise regulated set at 6mg/m<sup>3</sup> ESTL (total dust) and 3mg/m<sup>3</sup> TWA (total dust).

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Personal dust respirators if high degree of fiber fly is experienced. Gloves and disposable protective garments to eliminate possible skin irritation. Consider taping at the wrist and ankles. Consider barrier skin cream.

**Thermal hazards:** Not applicable.

**Exposure controls:** See Section 6 & 7.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>State:</b>	Solid.	<b>Form:</b>	Fine Fiber
<b>Color:</b>	Black	<b>Electrically conductive:</b>	Yes
<b>Boiling Point:</b>	Not applicable	<b>pH (1% soln/water):</b>	Not applicable
<b>Flash Point:</b>	Not applicable	<b>Melting Point:</b>	3,500°C
<b>Critical Temperature:</b>	Not applicable	<b>Specific Gravity:</b>	1.8 (Water = 1)
<b>Vapor Pressure:</b>	Not applicable	<b>Viscosity:</b>	Not applicable
<b>Volatility:</b>	Not applicable	<b>Vapor Density:</b>	Not applicable
<b>Water/Oil Dist. Coeff.:</b>	Not applicable	<b>Odor Threshold:</b>	Not applicable
<b>Solubility in water:</b>	Insoluble	<b>Ionicity (in Water):</b>	Not applicable
<b>Decomposition temp (in air):</b>	650°C	<b>Flammability:</b>	Non-flammable
<b>Dispersion Properties:</b>	Not applicable	<b>Odor:</b>	Odorless

## Section 10 - STABILITY AND REACTIVITY

**Reactivity:** Product can react with strong oxidizing agents. Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

**Chemical Stability:** The product is stable.

**Hazardous decomposition products:** No hazardous decomposition products will be formed during normal usage of carbon fiber. Products of combustion are CO, CO<sub>2</sub> and possibly other trace chemicals.

**Section 11 - TOXICOLOGICAL INFORMATION**

**Routes of Entry:** Inhalation, Contact with airborne fibers or fiber dust, ingestion.

**Aspiration hazard:** Not an inhalation hazard. Filament diameter >3 micron (non-respirable IARC)

**Skin corrosion/irritation:** Mechanical skin irritation.

**Toxicity to Animals:** Not available.

**Chronic Effects on Humans:** Not available.

**Other Toxic Effects on Humans:** Not available.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**Special Remarks on other Toxic Effects on Humans:** Not available.

**Section 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:** Not available.

**Persistence and degradability:** Not available.

**BOD5 and COD:** Not available.

**Bioaccumulative potential:** Not available.

**Products of Biodegradation:** Not available.

**Toxicity of the Products of Biodegradation:** Not available.

**Section 13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations. Disposing via septic or sewage system is not recommended.

**Recycling:** The recovery of carbon fibers is almost always possible and recycling is strongly encouraged.

**Section 14 - TRANSPORT INFORMATION**

**DOT Classification:** Not hazardous.

**Commodity:** Carbon Fibers.

**IMDG Classification:** Not classified as "Dangerous Goods".

**IATA Classification:** Not classified as "Dangerous Goods".

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

**Section 15 - REGULATORY INFORMATION**

**TSCA Status:** Exempt – satisfies "article" definition under 40 CFR 704.3

**WHMIS (Canada):** Not controlled under WHMIS (Canada).

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**Europe:** Not classified as “dangerous”.

<b>Section 16 - OTHER INFORMATION</b>
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