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: Identification

- Product identifier used on the label: **MiniFIBERS Carbon**
- Product codes beginning with: CASTD, CAREC and others
- Any other common names or synonyms by which the substance is known: Milled Carbon Fiber, Recycled Carbon Fiber
- Name, address, phone number of the manufacturer, importer, or other responsible party, and emergency phone number:
  MiniFIBERS, Inc. 2923 Boones Creek Road Johnson City, TN 37615 USA +1(423)282-4242
- Recommended use of the chemical (e.g., a brief description of what it actually does, such as flame retardant): **Varies**
- Any restrictions on use (including recommendations given by the supplier): **None known**

Section 2: Hazard(s) Identification

- The hazard classification of the chemical (e.g., flammable liquid, category): **Not applicable**
- Signal word: **Not applicable**
- Hazard statement(s): **Not applicable**
- Pictograms (the pictograms or hazard symbols may be presented as graphical reproductions of the symbols in black and white or be a description of the name of the symbol (e.g., skull and crossbones, flame)): **Not applicable**
- Precautionary statement(s): **Not applicable**
- Description of any hazards not otherwise classified: **None known**
- For a mixture that contains an ingredient(s) with unknown toxicity, a statement describing how much (percentage) of the mixture consists of ingredient(s) with unknown acute toxicity. Please note that this is a total percentage of the mixture and not tied to the individual ingredient(s): **Not applicable**

Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Main component chemical names:</th>
<th>Common names and synonyms:</th>
<th>Chemical Abstracts Service (CAS) number and other unique identifiers:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>Carbon Fiber, Milled Carbon</td>
<td>308063-67-4 or 7440-44-0</td>
</tr>
</tbody>
</table>

- Impurities and stabilizing additives which are classified and which contribute to the classification of the chemical: **None**
- The chemical name and concentration (i.e., exact percentage) of all ingredients which are classified as health hazards and are present above their cut-off/concentration limits or present a health risk below the cut-off/concentration limits: **None**

Section 4: First-Aid Measures

- Necessary first-aid instructions by relevant routes of exposure
  - **Inhalation:** In the case of respiratory irritation, move to fresh air; consult a physician if symptoms persist.
  - **Skin contact:** Immediately wash off with soap and cold water; remove contaminated clothing; consult a physician if symptoms persist.
  - **Eye contact:** Remove contact lenses if present, and immediately flush eyes with cold water for several minutes to remove particles; consult a physician if symptoms persist.
  - **Ingestion:** Seek medical attention. If patient is fully conscious, rinse out mouth and give plenty of water to drink; induce the patient to vomit of his own accord. Never give anything by mouth to an unconscious person.
- Description of the most important symptoms or effects, and any symptoms that are acute or delayed
  - **Inhalation:** May cause respiratory irritation.
  - **Skin contact:** Not expected to be an irritant, but may cause skin irritation in some individuals.
  - **Eye contact:** May cause eye irritation.
  - **Ingestion:** Unknown
- Recommendations for immediate medical care and special treatment needed, when necessary: **Not applicable**
### Section 5: Fire-Fighting Measures

- **In environments with high voltage equipment, there is a risk of explosion due to short circuits.**
- Recommendations of suitable extinguishing equipment, and information about extinguishing equipment that is not appropriate for a particular situation: **Water spray, foam, dry chemicals, CO2.**
- Advice on specific hazards that develop from the chemical during the fire, such as any hazardous combustion products created when the chemical burns: **May include, but are not limited to, CO, CO2, and toxic pyrolysis products.**
- Recommendations on special protective equipment or precautions for firefighters: **Firefighters should wear full protective clothing. Firefighters should be equipped with positive pressure self-contained breathing apparatus (SCBA) when fighting all indoor fires and any significant outdoor fires.**

### Section 6: Accidental Release Measures

- **In environments with high voltage equipment, there is a risk of explosion due to short circuits.**
- Use of personal precautions (such as removal of ignition sources or providing sufficient ventilation) and protective equipment to prevent the contamination of skin, eyes, and clothing: **A dust mask, goggles and gloves are recommended to prevent possible irritation from airborne fibers.**
- Emergency procedures, including instructions for evacuations, consulting experts when needed, and appropriate protective clothing: **Not applicable**
- Methods and materials used for containment (e.g., covering the drains and capping procedures): **Avoid dispersal of spilled material and contact with soil, waterways, drains, and sewers.**
- Cleanup procedures (e.g., appropriate techniques for neutralization, decontamination, cleaning or vacuuming; adsorbent materials; and/or equipment required for containment/clean up): **Do not use air jets; use a vacuum. If sweeping is necessary, use a dust suppressant. Prepare for disposal as described in Section 13.**

### Section 7: Handling and Storage

- Keep away from sources of ignition. Dust can form an explosive mixture with air. Take precautionary measures against static charges. Due to the electric conductivity of the fibers, electrical devices and switches must be shielded. In the case of dust formation, there is a risk of explosion due to short circuits of high voltage equipment.
- Precautions for safe handling, including recommendations for handling incompatible chemicals, minimizing the release of the chemical into the environment, and providing advice on general hygiene practices (e.g., eating, drinking, and smoking in work areas is prohibited): **Provide good ventilation of work area. Keep the workplace and surroundings clean; immediately wipe up fiber spills to prevent development of dust. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Maintain good housekeeping methods to prevent dust accumulations. To prevent fibers from becoming airborne, do not use air jets.**
- Recommendations on the conditions for safe storage, including any incompatibilities. Provide advice on specific storage requirements (e.g., ventilation requirements): **Do not store together with oxidizing agents. Keep away from food and beverages. Keep container tightly closed and dry. Containers which are opened must be carefully closed and kept upright to prevent leakage. Avoid overstacking to prevent collapse or breakage of the packages.**

### Section 8: Exposure Controls/Personal Protection

- OSHA Permissible Exposure Limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available: **Fiber dust should be considered a nuisance dust, i.e. particulates (not otherwise classified).**
  - ACGIH Threshold Limit Value: 10 mg/ m³ total dust; 3 mg/ m³ respirable dust
  - OSHA Permissible Exposure Limit: 15 mg/ m³ total dust; 5 mg/ m³ respirable dust
- Appropriate engineering controls (e.g., use local exhaust ventilation, or use only in an enclosed system): **Local exhaust ventilation may be used to reduce exposure to airborne fibers or fiber dust.**
- Recommendations for personal protective measures to prevent illness or injury from exposure to chemicals, such as personal protective equipment (PPE) (e.g., appropriate types of eye, face, skin or respiratory protection needed based on hazards and potential exposure): **If workplace exposure limits are exceeded, approved respiratory protection must be worn. In the case of dust formation where workplace threshold values are not specified, take appropriate measures for breathing protection. At minimum, a dust mask, goggles and gloves are recommended to prevent possible irritation**
from airborne fibers. Use of a barrier skin cream and protective clothing is also recommended.

- Any special requirements for PPE, protective clothing or respirators (e.g., type of glove material, such as PVC or nitrile rubber gloves; and breakthrough time of the glove material):
  - **Respiratory protection:** Short term: Filter apparatus, Filter P2.
  - **Eye protection:** Safety glasses with side protection shield (EN 166).
  - **Hand protection:** In the event of skin contact with the product, sufficient protection is given wearing suitable protective gloves checked according to EN 374. Appropriate material: butyl rubber.

### Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color, etc.)</td>
<td>Black or gray fibers</td>
</tr>
<tr>
<td>Odor</td>
<td>No significant odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Appr. 3500°C under inert gas</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non-flammable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.8 g/cm³</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not soluble in water</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt;650°C in air</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Section 10: Stability and Reactivity

**Reactivity**

- Description of the specific test data for the chemical(s). This data can be for a class or family of the chemical if such data adequately represent the anticipated hazard of the chemical(s), where available: **Not available**

**Chemical stability**

- Indication of whether the chemical is stable or unstable under normal ambient temperature and conditions while in storage and being handled: **Stable**
- Description of any stabilizers that may be needed to maintain chemical stability: **Not applicable**
- Indication of any safety issues that may arise should the product change in physical appearance: **None known**

**Other**

- Indication of the possibility of hazardous reactions, including a statement whether the chemical will react or polymerize, which could release excess pressure or heat, or create other hazardous conditions. Also, a description of the conditions under which hazardous reactions may occur: **None known**
- List of all conditions that should be avoided (e.g., static discharge, shock, vibrations, or environmental conditions that may lead to hazardous conditions): **Keep away from sources of ignition. Take precautionary measures against static charges. Due to the electric conductivity of the fibers, electrical devices and switches must be shielded. In the delivered form, the product is not capable of dust explosion; accumulation of fine dust may entail the risk of a dust explosion in the presence of air.**
- List of all classes of incompatible materials (e.g., classes of chemicals or specific substances) with which the chemical could react to produce a hazardous situation: **Strong oxidizing agents**
- List of any known or anticipated hazardous decomposition products that could be produced because of use, storage, or heating: **None known**
Section 11: Toxicological Information

- Information on the likely routes of exposure. The SDS should indicate if the information is unknown.
  - Inhalation: Possible inhalation of airborne fibers or fiber dust.
  - Ingestion: Unlikely to occur.
  - Skin absorption: Not known to occur.
  - Eye contact: Possible contact with airborne fibers or fiber dust.

- Description of the delayed, immediate, or chronic effects from short- and long-term exposure: Delayed or immediate effects may include respiratory irritation, skin irritation, or eye irritation. No chronic effects from short-term exposure are known to occur. Effects from long-term exposure are unknown.

- The numerical measures of toxicity: No data available.

- Description of the symptoms. This description includes the symptoms associated with exposure to the chemical including symptoms from the lowest to the most severe exposure:
  - Inhalation: Symptoms of respiratory irritation may include coughing, sneezing, or itching of the nasal passages.
  - Ingestion: Ingestion of fibers may cause stomach distress.
  - Skin contact: Symptoms of skin irritation may include itching or redness of the skin.
  - Eye contact: Symptoms of eye irritation may include itching, watering, or redness of the eyes.

- Indication of whether the chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA:
  - NTP: Not listed
  - IARC: Not listed

Section 12: Ecological Information (non-mandatory)

- Data from toxicity tests performed on aquatic and/or terrestrial organisms, where available (e.g., acute or chronic aquatic toxicity data for fish, algae, crustaceans, and other plants; toxicity data on birds, bees, plants): Not available

- Whether there is a potential for the chemical to persist and degrade in the environment either through biodegradation or other processes, such as oxidation or hydrolysis: Unknown

- Results of tests of bioaccumulation potential, making reference to the octanol-water partition coefficient (Kow) and the bioconcentration factor (BCF), where available: Not available

- The potential for a substance to move from the soil to the groundwater (indicate results from adsorption studies or leaching studies): Not available

- Other adverse effects (e.g., environmental fate, ozone layer depletion potential, photochemical ozone creation potential, endocrine disrupting potential, and/or global warming potential): Unknown

Section 13: Disposal Considerations (non-mandatory)

- Description of appropriate disposal containers to use: Standard disposal containers are acceptable.

- Recommendations of appropriate disposal methods to employ: Residuals must be removed from corrugated packaging and completely disposed of in accordance with governmental regulations for waste removal.

- Description of the physical and chemical properties that may affect disposal activities: None known

- Language discouraging sewage disposal: Disposable via septic or sewage systems is not recommended.

- Any special precautions for landfills or incineration activities: None known

- Recycling of completely emptied and cleaned corrugated packaging is encouraged where possible. Other packaging should be disposed of with product.

Section 14: Transport Information (non-mandatory)

- UN number (i.e., four-figure identification number of the substance): None

- UN proper shipping name: Not applicable

- Transport hazard class(es): None known

- Packing group number, if applicable, based on the degree of hazard: Not applicable

- Environmental hazards (e.g., identify if it is a marine pollutant according to the International Maritime Dangerous Goods Code (IMDG Code)): None known

- Guidance on transport in bulk (according to Annex II of MARPOL 73/78 and the International Code for the Construction and
Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code)): **Not applicable**
- Any special precautions which an employee should be aware of or needs to comply with, in connection with transport or conveyance either within or outside their premises (indicate when information is not available): **None known**
- Commodity: **Carbon Fibers**
- HTS Tariff Code Number: **2803.00.00.50**
- NMFC Item Number: **68310 Sub 9**

### Section 15: Regulatory Information (non-mandatory)

- Any national and/or regional regulatory information of the chemical or mixtures (including any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission regulations)
- Canada DSL/NDSL: **Carbon is included on the Canadian Domestic Substance List.**
- Canada WHMIS: **Not a controlled product.**
- Europe: **Not classified as dangerous.**
- REACH Registration Number: **Carbon fiber is an article and does not require REACH registration.**
- State of California Proposition 65: **Does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.**
- UN: **Does not appear on the Dangerous Goods List.**
- United States EPA: **Not regulated.**
- United States OSHA: **Not hazardous.**

### Section 16: Other Information

"MSDSs that represent non-hazardous chemicals are not covered by the HCS. Paragraph 29 CFR 1910.1200(g)(8) of the standard requires that ‘the employer shall maintain in the workplace copies of the required MSDSs for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their workarea(s).’ OSHA does not require nor encourage employers to maintain MSDSs for non-hazardous chemicals.”  ([https://www.osha.gov/html/faq-hazcom.html](https://www.osha.gov/html/faq-hazcom.html))

**While the provision of this SDS is optional, it contains valuable information about the safe handling and proper use of this product and should be retained.**