SAFETY DATA SHEET
HexTow Carbon or Fiberglass Fiber BR102 Sized

1. Identification

Product identifier
Product name HexTow Carbon or Fiberglass Fiber BR102 Sized
Product number 20884US-2

Recommended use of the chemical and restrictions on use
Application Continuous filament fabric of woven carbon, glass and polyester fibre yarns.

Details of the supplier of the safety data sheet
Supplier Hexcel Composites
6700 West 5400 South
West Valley City
UT 84118-7678
USA
Tel: ++801 252 3400
Tel: ++800 987 0658

Contact Person 11711 Dublin Blvd, Dublin, California, USA. ++925 551 4900

Emergency telephone number
Emergency telephone To be used only for advice on chemical emergencies, spillages, fires or First Aid:
For emergencies in US/Canada: CHEMTREC – 800 424 9300
For emergencies in rest of the world: CARECHEM24 - +44 (0) 1235 239 670

2. Hazard(s) identification

Classification of the substance or mixture
Physical hazards Combustible Dust - USH01
Health hazards Not Classified
Environmental hazards Not Classified

Physicochemical Physical: Carbon fiber contained in some products is electrically conductive.

Label elements
Signal word Warning
Hazard statements USH01 May form combustible dust concentrations in air

Other hazards
Warning! This may cause mild, temporary mechanical eye and skin irritation. Vapor or fumes evolved during use and/or heating or curing the product may cause respiratory tract and eye irritation. Dust or particulates from machining, grinding or sawing the cured product may cause skin, eye and upper respiratory tract irritation, allergic skin reaction and possible sensitization. Warning! Dust generated from machining, grinding or sanding the product may be combustible and could result in fire and/or explosion should the necessary dust concentration in air and ignition source be present.

3. Composition/information on ingredients
HexTow Carbon or Fiberglass Fiber BR102 Sized

Mixtures
Composition comments
Carbon fiber can be with or without size. Graphite (carbon) synthetic fibers, filament diameter > 4 μm; > 97% w/w; Size; < 3% w/w

4. First-aid measures
Description of first aid measures
Inhalation
With any sign of respiratory distress, affected persons should be taken into fresh air, and made to rest while medical attention is sought.

Ingestion
Immediately rinse the mouth repeatedly with water, if swallowing has occurred, do not induce vomiting. If requested, give affected person sips of water. Seek medical attention immediately. If vomiting does occur do not allow the affected person to inhale their vomit. Do not give anything by mouth to an unconscious person.

Skin Contact
In case of contact with the product or the cured product dust or particulate, immediately wash skin with mild soap and water. Use a washcloth to help remove the fibres. To avoid further irritation, do not rub or scratch irritated areas. Rubbing or scratching may force fibres into the skin. Get medical attention immediately if the irritation persists.

Eye contact
In case of contact with the product or the cured product dust or particulate, immediately flush eyes with large amounts of water for at least 15 minutes, keeping the eyelids open. Get medical attention immediately.

5. Fire-fighting measures
Extinguishing media
Suitable extinguishing media
Extinguish with foam, carbon dioxide, dry powder or water fog.

Special hazards arising from the substance or mixture
Specific hazards
Carbon fibers contained in some products are electrically conductive and if released during combustion may present a hazard to unprotected electrical apparatus.

Advice for firefighters
Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures
Personal precautions
Avoid contact with skin, eyes or clothing.

Methods and material for containment and cleaning up
Methods for cleaning up
Clean up material and put into a suitable container and dispose of properly (See Section 13).

7. Handling and storage
Precautions for safe handling
Usage precautions
Storage: Keep container tightly closed and dry.

8. Exposure Controls/personal protection
Exposure controls
HexTow Carbon or Fiberglass Fiber BR102 Sized

Protective equipment

Appropriate engineering controls
Provide adequate ventilation.

Eye/face protection
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection
It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC), Rubber (natural, latex).

Other skin and body protection
Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures
Wash hands after handling.

Respiratory protection
Wear a suitable dust mask.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance
Black colored fiber

Odor
No characteristic odor.

Odor threshold
Not relevant due to the physical form of this product.

pH
Not relevant due to the physical form of this product.

Melting point
Carbon fiber 6512 F / 3600 C, fiberglass 1292 F / 700 C°C

Initial boiling point and range
Not relevant due to the physical form of this product.

Flash point
Not relevant due to the physical form of this product.

Evaporation rate
Not relevant due to the physical form of this product.

Evaporation factor
Not relevant due to the physical form of this product.

Flammability (solid, gas)
May form combustible dust concentrations in air

Vapour pressure
Not relevant due to the physical form of this product.

Vapour density
Not relevant due to the physical form of this product.

Relative density
Not relevant due to the physical form of this product.

Solubility(ies)
Not relevant due to the physical form of this product.

Explosive properties
Not classified as explosive but dust or airborne filaments could induce explosion in high voltage equipments by short circuit.

Oxidising properties
Does not meet the criteria for classification as oxidizing.
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10. Stability and reactivity

Stability
Stable at normal ambient temperatures and when used as recommended.

Possibility of hazardous reactions
Will not occur under normal conditions of use.

Materials to avoid
Strong oxidizing agents.

Hazardous decomposition products
The products of combustion and decomposition depend on other materials present in the fire and the actual conditions of the fire. Burning will produce carbon and nitrogen oxides and other unidentified gases and vapors that may be toxic. Avoid inhalation.

11. Toxicological Information

Information on toxicological effects

Toxicological effects
There is no toxicological data for the final product.

Other health effects
The components present in this material at concentrations equal to or greater that 0.1% are not listed or regulated by IARC, NTP, OSHA or ACGIH as a carcinogen.

Inhalation
May cause irritation to the upper respiratory tract. Vapor or fumes generated from exposing this product to elevated temperatures may cause irritation to the respiratory tract. Dust or particulate from machining, grinding or sawing the cured product may cause irritation to the upper respiratory tract.

Ingestion
None expected under normal conditions of use. Ingestion is not an expected route of industrial exposure.

Skin Contact
Contact may cause mechanical irritation, skin redness, itching and drying of the skin. Prolonged or repeated contact may cause allergic skin reaction, dermatitis and possible sensitization.

Eye contact
May cause mechanical irritation. Vapor or fumes generated from exposing the product to elevated temperatures may cause irritation. Dust or particulate from the product or from machining, grinding or sawing the product may cause mechanical irritation.

Medical considerations
Preexisting eye, skin or respiratory disorders may be aggravated by contact and/or exposure to the product, the vapor or fumes generated from heating the product or to the dust or particulate from machining, grinding or sawing the cured product.
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12. Ecological Information

Ecotoxicity

No ecological data has been determined on the total product.

13. Disposal considerations

Waste treatment methods

General information

Materials for disposal should be placed in appropriate sealed containers to avoid potential human and environmental exposure. It is the responsibility of the generator to comply with all federal, state, provincial and local laws and regulations. We recommend that you contact an appropriate waste disposal contractor and environmental agency for relevant laws and regulations. Under the U.S., Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification and to assure proper disposal.

Disposal methods

For products containing carbon fiber, it is possible to recycle the carbon component.

14. Transport information

General

Not regulated.

15. Regulatory information

US Federal Regulations

RCRA

RCRA Information: Currently, the product is not listed in the federal hazardous waste regulation 40 CFR, Part 261.33, paragraphs (E) or (F), i.e. chemical products that are considered hazardous if they become waste. State or local hazardous waste regulations may also apply if they are different from the federal regulation. It is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification and to assure proper disposal.

Inventories

US - TSCA

This product is an article as defined by TSCA and is not required to be listed in the TSCA inventory.
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16. Other information

<table>
<thead>
<tr>
<th>Abbreviations and acronyms used in the safety data sheet</th>
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<tbody>
<tr>
<td>ACGIH American Conference of Industrial Hygienists</td>
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<td>ATE Acute Toxicity Estimate</td>
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<td>CAS# Chemical Abstracts Service Number</td>
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<td>CERCLA Comprehensive Environmental Response,</td>
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<td>Compensation, and Liability Act</td>
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<td>DOT Department of Transportation</td>
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<td>EmS Emergency Response Procedures for Ships Carrying</td>
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<td>Dangerous Goods</td>
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<td>EPA Environmental Protection Agency</td>
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<td>GHS Global Harmonized System</td>
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<td>HMIS Hazardous Materials Identification System</td>
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<tr>
<td>IATA International Air Transport Association</td>
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<tr>
<td>ICAO International Civil Aviation Organization</td>
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<tr>
<td>IMDG International Maritime Dangerous Goods</td>
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<tr>
<td>Kow Octanol-water partition coefficient</td>
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<tr>
<td>LC50 Lethal concentration to 50% of a test population</td>
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<tr>
<td>LD50 Lethal dose to 50% of a test population</td>
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<td>n.o.s. Not otherwise specified</td>
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<tr>
<td>OSHA Occupational Safety and Health Administration</td>
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<td>PBT Persistent, Bioaccumulative and Toxic substance</td>
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<td>PNEC Predicted No Effect Concentration</td>
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<td>PPE Personal Protection Equipment</td>
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<td>RCRA Resource Conservation and Recovery Act</td>
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<td>SADT Self-accelerating decomposition temperature</td>
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<td>SARA Superfund Admendments</td>
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<td>STOT Specific Target Organ Toxicity (STOT)</td>
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<td>RE Repeated Exposure TSCA Toxic Substance Control Act</td>
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<td>UN United Nations VOC Volatile Organic Compound WHMIS</td>
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<td>Workplace Hazardous Materials Information System</td>
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General information

When present in the product, airborne carbon fibers or dust may create electrical short-circuits which could result in damage to or malfunctioning of electrical equipment.

Issued by U.S.A. Product Safety Department

Revision date 5/1/2015

Revision 0

Hazard statements in full

USH01 May form combustible dust concentrations in air

ACA HMIS Health rating. Slight hazard. (1)

ACA HMIS Physical hazard rating. Normally stable. (0)

ACA HMIS Personal protection rating. F

ACA HMIS Flammability rating. Will not burn. (0)

Wherever such words or phrases as "hazardous," "toxic," "carcinogen," etc. appear herein, they are used as a defined or described under state employee right-to-know laws, Federal OSHA laws or the direct sources for these lawssuch as the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), etc. The use of such words or phrases should not be taken to mean that we deem or imply any substance or exposure to be toxic, hazardous or otherwise harmful. Any exposure can only be understood within the entire context of its occurrence, which includes such factors as the substance's characteristics as defined in the SDS, amount and duration of exposures, other chemicals present and preexistingindividual differences in response to the exposure. The data provided in this SDS is based on the information received from our raw material suppliers and other sources believed to be reliable. We are supplying you this data solely in compliance with the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200 and the Federal and State laws as described in Section 15: Regulatory Information. The information contained in this SDS is proprietary and confidential to HexcelCorporation. This SDS and the information in it are not to be used for purposes other than compliance with the Federal OSHA Hazard Communication Standard. If you have received this SDS from any other source than Hexcel Corporation or its authorized agent, the information contained in it may have been modified from the original document and it may not be the most current revision. Liability, if any, for use of this product is limited to the terms contained in our sale terms and conditions. We do not in any way warrant (expressed or implied, including any implied warranty for merchantability or fitness for a particular purpose) the data contained or the product described in this SDS. Additionally, we do not warrant that the product will not infringe any patent or other proprietary or property rights of others.