

Section 1. Identification

Product Name: FCB-033 Carbon Fabric
Supplier: CSNRI | 621 Lockhaven Drive. Houston, TX 77073 | +1 281.590.8491
Emergency Phone Number: 800.424.9300 (CHEMTREC)
+1 703.741.5970 (Outside the US)
Product Description: Carbon Fiber Fabric
Product Use: Reinforcement for pipe repair
Chemical Name or Synonym: N/A

Section 2. Hazards identification

Classification of the substance or mixture: Not Classified

Label Elements: None

Hazard Statements:

USH01 – Combustible dust

H335 – May cause respiratory irritation (Inhalation)

Signal Word: Warning

Precautionary Statements:

P304+P340 –IF INHALED Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Emergency Overview: No Known Hazards

Section 3. Composition/ Information on Ingredients

Substances: N/A

Mixture:

Chemical Name	CAS-No	Weight %
Carbon fiber	7440-44-0	97 – 100

Section 4. First Aid Measures**First Aid Measures for Accidental:**

Inhalation: Dust irritates the respiratory system and may cause coughing and difficulties in breathing. If respiratory problems, artificial respiration/oxygen.

Skin Contact: If skin irritation or an allergic skin reaction develops, get medical attention.

Eye Contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Ingestion: Give large quantities of water and induce vomiting. Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed: No data available.

Indication of immediate medical attention and special treatment needed: No data available.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Water spray, fog, CO₂, dry chemical, or alcohol resistant foam.

Unsuitable Extinguishing Media: No data available.

Special Fire Fighting Procedures: Wear complete firefighting gear and self-contained breathing apparatus to protect against potential harmful and/or irritating fumes. Use water to keep fire exposed containers cool. Do not use high volume water jet on the fire as this may spread the area of the fire.

Special Protective Equipment for Fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Specific Hazards Arising from the substance or mixture: No data available.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental Precautions: Material should not be released into the environment. Prevent product from entering drains.

Methods and Materials for Containment and Cleaning Up: Sweep or gather up material and place in proper container for disposal or recovery. Use vacuuming or wet sweeping methods instead of dry sweeping.

Section 7. Handling and Storage

Precautions for safe handling: Avoid direct contact with product. Avoid inhalation of dust/fumes generated during processing operations. Dust produced from handling and machining product will contain fibrous material. Avoid inhalation and provide positive dust extraction and collection from cutting zone. Protect against fire and explosion by avoiding dust formation and ignition sources when machining cured product. Dust from products containing carbon fibre is electrically conductive.

Conditions for safe storage including any incompatibilities: Avoid exposing to heat and contact with strong oxidizing substances. Store in a cool place but keep from freezing. Keep container tightly closed and dry.

Section 8. Exposure Controls / Personal Protection

Control Parameters (Exposure Limits): No available exposure limits for this material.

Appropriate Engineering Control: Minimize dust generation and accumulation. Ventilate as needed to control airborne dust. Use explosion – proof ventilation equipment if airborne dust levels are high. Use explosion-proof ventilation equipment.

Personal Protective Equipment:

Respiratory Protection: Avoid breathing dust. In case of inadequate ventilation, use respiratory protection.

Eye / Face Protection: Wear safety glasses.

Skin Protection: Wear necessary working or chemical gloves as needed.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Additional protective measures: None

Section 9. Physical and Chemical Properties

Physical State:	Solid
Colour:	Black
Odor:	Odorless
Melting Point/ Freezing Point:	3,600 °C (6,512 °F)
Boiling point:	No data available
Flammability (solid, gas):	No data available
Lower and Upper Explosion limits/ Flammability Limits:	None
Flash Point:	None
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
pH:	No data available
Kinematic Viscosity:	No data available
Solubility:	Insoluble in water
Evaporation rate (ether=1):	No data available
Flammability Limits in Air:	May form combustible dust concentrations in air
Solubility in other solvents:	No data available
Partition coefficient (n-octanol/water):	No data available
Vapour Pressure:	No data available
Density and/or Relative Density:	1.6 – 2.0
Relative Vapour Density:	No data available
Explosive properties:	Not classified as explosive but dust or airborne filaments could induce explosion in high voltage equipment by short circuit.
Oxidizing properties:	Oxidized by strong oxidizer.
Specific Gravity:	No data available
Particle Characteristics:	No data available

Section 10. Stability and Reactivity

Reactivity: Material is stable under normal conditions

Chemical Stability: Material is stable under normal conditions

Possibility of Hazardous reactions: Contact with strong oxidizer or acid liberates poisonous and flammable gas.

Conditions to Avoid: Avoid contact with oxidizing agents. Avoid dust formation. Avoid dust close to ignition sources. Dust clouds may be explosive under certain conditions.

Incompatible Materials / Chemicals: 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.

Section 11. Toxicological Information**Information in the likely route of exposure:**

Continuous filament of carbon fiber with a filament diameter > 4µm are not considered respirable. World Health Organization defines a respirable fiber as a fiber with a diameter (d) < 3µm, a length (l) > 5µm and l/d ratio >= 3

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 consideration: 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.

Symptoms related to the physical, chemical and toxicological characteristics:

Target organs: No data available

Mutagenicity: No data available

Carcinogenicity: No silicosis case has been reported on inhalation test with mouse.

Teratogenicity: No data available

Over-exposure signs / symptoms: No data available

Delayed and immediate effects and also chronic effects from short and long-term exposure:

Short term exposure: No data available.

Long term exposure: No data available

Respiratory and/or Skin Sensitization No data available

Numerical measures of toxicity: No data available

Delayed and immediate effects and also chronic effects from short and long-term exposure: There are no known health effects from the long-term use or contact, with non-respirable continuous filament fibers.

Section 12. Ecological Information

Ecotoxicity Effects: No ecological data has been determined on the total product. Not regarded as dangerous for the environment.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility in soil: No information available

Results of PBT and vPvB assessment: No information available

Section 13. Disposal Considerations

Waste treatment methods: 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.

Uncleaned packaging: Uncleaned empty containers should be disposed of in the same manner as the contents.

Section 14. Transport Information



This Product is not dangerous to transport.

DOT: Not Regulated

IATA: Not Regulated

IMDG: Not Regulated

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities: Not listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA): Not listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities: Not listed.

SARA 313 Emission Reporting: Not listed

RCRA Information: Currently, the product is not listed in the federal hazardous waste regulation 40 CFR, Part 261.33, paragraphs (E) or (F), ie. 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.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins: This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Inventories

US – TSCA: This product is an article as defined by TSCA and is not required to be listed in the TSCA inventory.

Section 16. Other Information

Key Legend Information:

N/A – Not Applicable

CAS - Chemical Abstract Service

SARA - Superfund Amendments and Reauthorization Act

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