



# V2 190 UC Carbon Fabric Safety Data Sheet

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Structurewrap™ V2 190 UC  
**Other names:** Multiaxial fabric, stitched fabric, non-crimp fabric, knitted fabric  
**Synonyms:** Structurewrap, light weight glass  
**Recommended use:** For use in composite or other industrial applications as a reinforcement in combination with other materials.  
**Restrictions of Use:** None  
**Manufacturer's Name:** V2 Composites, Inc.  
**Address:** 770 Lee Road 191 Auburn, Alabama 36830  
**Telephone:** 334-502-3000  
**Emergency phone number:** 334-502-3000  
**Facsimile:** 334-502-3088  
**Website:** [www.v2composites.com](http://www.v2composites.com)

## SECTION 2 - HAZARDS IDENTIFICATION

**OSHA/HCS status:** While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture:** Not classified.

**GHS label elements**

**Signal word:** No signal word.

**Hazard Statements:** H315, H319

**Precautionary Statement:** Possible irritant to the skin, eyes, and respiratory tract when processed due to nuisance dust generation. Fiber is electrically conductive.

**Physical/Chemical Hazards:** See Section 10 for additional information. In the supplied form the product is not explosive however, the processing and buildup of fine dust can lead to a risk of dust explosion. Warning: processing may create combustible dust concentrations in the air.

**Environmental hazards:** No specific hazards known.

**Other hazards:** None



## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical Name:** Carbon Fiber(derived from polyacrylonitrile)  
Polyester Veil  
Polyester Yarn (POY, Polyethylene Terephthalate Partially Oriented)  
Sizing (Organic Surface Binder)

**Common Name and Synonyms:** Carbon Fiber: carbon fabric, carbon mat, multiaxial, stitched, non-crimp, knitted fabric  
Polyester Veil: Nonwoven  
Polyester Yarn: V-Lock  
Sizing: Binder

**Mixtures:**

Ingredient Name	% by Volume	CAS number
Carbon Fiber	80-100%	7440-44-0
Polyester Veil	0-25%	25038-59-9
Polyester Yarn	0-5%	25038-59-9
Sizing	0-5%	Not available



# V2 190 UC Carbon Fabric Safety Data Sheet

---

## SECTION 4 - FIRST AID MEASURES

---

### Relevant routes of exposure

- Inhalation:** Remove from area to fresh air. If symptoms persist, contact a poison control center, emergency room, or a physician for treatment information.
- Eye Contact:** Remove contact lens and pour a gentle stream of warm water through the affected area for 15 minutes. Do not rub or scratch eyes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may be necessary.
- Skin Contact:** Remove contaminated clothing and shoes. Run cold water over the affected areas for 15 minutes with mild soap, Do not use warm water. DO NOT rub or scratch affected area. If irritation persists or glass fiber becomes embedded, seek medical attention.
- Ingestion:** Gently wipe or rinse the inside of the mouth with water. Sips of water can be given. Never give anything by mouth to an unconscious person. Contact a poison control center, emergency room, or physician for treatment information.
- Recommendations to doctor:** Treat symptomatically

---

## SECTION 5 - FIRE FIGHTING MEASURES

---

- Suitable Extinguishing Media:** Dry powder
- Unsuitable Extinguishing Media:** Full water jet
- Specific Hazards from the chemical during a fire:** Carbon monoxide, nitrogen oxides
- Special protective actions for fire-fighters:** Do not inhale combustion gases. Use self-contained breathing apparatus (SCBA).
- Additional information:** Fire residues and contaminated firefighting water must be disposed of in accordance with local regulations.

---

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

---

- Personal Precautions:** Use personal protection equipment recommended in Section 8.
- Environmental Precautions:** No special precautions are needed in case of a release or spill.
- Containment:** This material will settle out of the air. Prevent from spreading by covering.
- Methods for clean up:** Use an industrial vacuum cleaner with a high efficiency filter to clean up dust. 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

---

- Handling:** Avoid dust formation, do not breathe dust and wear personal protective equipment.
- Advice on general hygiene:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Requirements for storage rooms:** No special measures necessary.
- Advice on storage compatibility:** Do not store together with oxidizing agents.
- Storage:** Store at or below 50 degrees Celsius (77°F) and relative humidity less than 85% for optimum performance. Electrical equipment, enclosures and circuits in or near areas where carbon fibers are used should be protected against infiltration or contact with airborne particles or filaments. Carbon fiber is electrically conductive and may cause an electrical short.



# V2 190 UC Carbon Fabric Safety Data Sheet

---

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

---

- Engineering Controls:** Use local exhaust or general room/dilution ventilation sufficient to control dust. Proper routine housekeeping should be instituted to ensure dust does not accumulate on surfaces.
- Respiratory Protection:** Breathing apparatus in the event of high concentrations, filter N95.  
Short term: filter apparatus, filter N95
- Hand Protection:** Butyl Rubber, >120 min (EN 374)
- Eye Protection:** Standard safety glasses with side shields.
- Skin Protection:** Mechanical irritation accompanied by itching or dermal effects may occur from exposure to material. Protective clothing such as loose fitting long sleeved shirts that covers base of neck, long pants and gloves made of impervious materials to cover skin areas and prevent irritation. Skin irritation is known to occur at pressure points, such as around neck, wrist, or waist and between fingers.
- Hygiene Measures:** Wash hands before and after breaks. Wear clean, body-covering clothing. Good personal hygiene and the use of barrier creams, caps, protective gloves, cotton coveralls or long sleeved loose fitting clothing will maximize comfort. Vacuum equipment may be used to remove fibers from clothes. Work clothing should be laundered separately from other clothing before reuse.

---

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

---

<b>Physical State:</b>	Solid Fiber
<b>Appearance/Color:</b>	Black
<b>Odor:</b>	Odorless
<b>Odor Threshold:</b>	NA
<b>Vapor Pressure:</b>	NA
<b>Vapor Density:</b>	NA
<b>pH:</b>	NA
<b>Relative Density:</b>	1.76-1.86(carbon density)
<b>Solubility (wt.% in water):</b>	Insoluble
<b>Melting Point:</b>	3500 deg C
<b>Boiling Point:</b>	NA
<b>Flash Point:</b>	NA
<b>Evaporation Rate:</b>	NA
<b>Flammability:</b>	NA
<b>Explosive limits:</b>	NA
<b>Partition coefficient: n-octanol/water</b>	NA
<b>Auto Ignition Temp:</b>	NA
<b>Decomposition Temp:</b>	>650 deg C in air, preparation > 290 deg C
<b>Viscosity:</b>	NA
<b>Volume % Volatile:</b>	none
<b>Percent Solid:</b>	100
<b>Electrically Conductive:</b>	Yes

---



# V2 190 UC Carbon Fabric Safety Data Sheet

---

## SECTION 10 - STABILITY AND REACTIVITY

---

<b>Reactivity:</b>	Stable under proper handling conditions. Avoid reactions with strong oxidizing agents.
<b>Conditions to avoid:</b>	Accumulation of fine dust may entail the risk of a dust explosion in the presence of air. The fine dust from a carbon fiber compound or composite that is cut or formed can create additional dust explosion risk depending on the resin or compounding agent. A process hazard analysis is recommended to determine what, if any, risks are present.
<b>Incompatible materials:</b>	None known.
<b>Hazardous Decomposition Products:</b>	No hazardous decomposition products will be formed during normal usage of carbon fiber. Complete or partial combustion of the surface coating on "sized" carbon fiber may generate COx, NOx, and/or other trace chemicals.

---

## SECTION 11 - TOXICOLOGICAL INFORMATION

---

<b>Acute oral toxicity:</b>	Not determined
<b>Acute dermal toxicity:</b>	Irritant
<b>Acute inhalation toxicity:</b>	Irritant
<b>Irritation/Corrosion:</b>	
Skin:	Mechanical skin irritation
Eyes:	Not determined
<b>Sensitization:</b>	Not determined
<b>Sub-acute toxicity:</b>	Not determined
<b>Chronic toxicity:</b>	Not determined
<b>Mutagenicity:</b>	Not determined
<b>Carcinogenicity:</b>	Not determined
<b>Reproductive toxicity:</b>	Not determined
<b>Experiences made in practice:</b>	Fiber abrasion can cause mechanical skin irritation.

---

## SECTION 12 - ECOLOGICAL INFORMATION

---

<b>Toxicity:</b>	Not available
<b>Behavior in environment compartments:</b>	Not determined
<b>Behavior in sewage plant:</b>	Not available
<b>Bacteria Toxicity:</b>	Not available
<b>Biological degradability:</b>	Not available
<b>COD:</b>	Not determined
<b>BOD 5:</b>	Not determined
<b>AOX advice:</b>	No dangerous components
<b>Soil/water partition coefficient(Koc):</b>	Not available

---



# V2 190 UC Carbon Fabric Safety Data Sheet

---

## SECTION 13 - DISPOSABLE CONSIDERATIONS

---

**Disposal Method:** The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Product:** For recycling, consult manufacturer and/or waste disposal centers.

**EU Waste Number:** 160306, 061399

**Contaminated packaging:** Packaging that cannot be cleaned should be disposed of similar to product. Uncontaminated packaging may be taken for recycling.

**EU Waste Number:** 150101, 150102

---

## SECTION 14 - TRANSPORT REGULATIONS

---

**Classification according to DOT:** Non Hazardous

**Classification according to DOT:** Not classified as "Dangerous Goods"

**Classification according to DOT:** Not classified as "Dangerous Goods"

---

## SECTION 15 - REGULATORY INFORMATION

---

### UNITED STATES

**SARA Title III:** Section 302/304 Extremely Hazardous Substance: None  
Section 311 Hazardous Categorization: None  
Section 313 Toxic Chemicals: None  
All components are listed or exempted.

**USA TSCA:**

**CERCLA Section 102(a) Hazardous Substance:** None

**RCRA Information:** Currently, the product is not listed in federal hazardous waste regulations 40 CFR, Part 261.33 paragraphs (e) or (f), i.e. chemical products that are considered hazardous if they become wastes. 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.

**Ozone Depletion Information:** This product does not contain or is not manufactured with ozone depleting substances as identified in Title VI, Clean Air Act "Stratospheric Ozone Protection" and the regulations set forth in 40 CFR, Part 82.

**Exposure Risk:** Not determined

**Chemical Safety Report:** Not determined

**Labeling:** All chemicals in this product are included on the TSCA Inventory

**Hazard Symbols:** None

**R-phrases:** R36/37/38 - Irritation to eyes, respiratory system and skin

**S-phrases:** S36/37/38 - Wear suitable protective clothing such as gloves, eye and face protection for nuisance dust and skin abrasion protection.

**Special labeling:** None

**Authorization, TITLE VII:** N/A

**Restrictions:** None

**TITLE VIII:** N/A

**Transport Regulations:** IATADGR (2008)



# V2 190 UC Carbon Fabric Safety Data Sheet

---

## SECTION 16 - OTHER INFORMATION

---

**VOC (1999/13/CE):**

N/A

**Customs Tariff:**

Not determined

**European Union (2002/95/EC) RoHS/RoHS2:**

These products do not contain any of the chemicals listed in the RoHS/RoHS2 regulations.

**The customer is responsible for determining the PPE code for this material.**

**SDS ISSUE DATE:**

5/21/2015

**SDS VERSION NUMBER:**

1

**SDS FORMAT:**

(HCS)(29 CFR 1910.1200(g))

**SDS REVISION NOTES:**

**SDS AUTHOR:**

DLM/ACM

**Disclaimer:** V2 Composites does not manufacture the components in the product. Component safety data sheets are available upon request. The SDS originates from the component SDS. Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.