

## MATERIAL SAFETY DATA SHEET

### SECTION 1            CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME OR NUMBER: **CARBON TEXTILE PRODUCTS, RAYON BASED,  
CCA CARBON CLOTH AND CFA CARBON FIBER**

Carbon Fiber Textile; Nominal Continuous Filament Diameter: 9 microns

MANUFACTURER: HITCO Carbon Composites, Inc.

ADDRESS: 1600 W. 135th Street, Gardena, CA 90249

GENERAL ASSISTANCE: (310) 527-0700

24-HOUR EMERGENCY ASSISTANCE: CHEMTREC Assist: (800) 424-9300

DATE OF PREPARATION OR LAST CHANGE:    April 27, 2006

### SECTION 2            COMPOSITION/INFORMATION ON INGREDIENTS

<u>CHEMICAL/ COMMON NAME</u>	<u>C.A.S. NUMBER</u>	<u>% BY WEIGHT</u>	<u>EXPOSURE GUIDELINES</u>
Carbon	7440-44-0	95-100	Supplier recommended exposure limit: 3.0 fibers per cubic centimeter. PEL    10 mg/m <sup>3</sup> (Total dust) 5 mg/m <sup>3</sup> (Respiratory fraction) TLV    10 mg/m <sup>3</sup> (Nuisance dust)

### SECTION 3            HEALTH HAZARD IDENTIFICATION

#### PRIMARY ROUTES OF ENTRY

EYE:                            Dust or particles from machining or grinding may cause mechanical irritation.

SKIN:                            Abrasive action of the dust or fibers may cause irritation.

INGESTION:                    Not a normal route of exposure. However, ingestion in sufficient quantities may cause gastrointestinal tract irritation.

INHALATION:                 Not a normal route of exposure. However, inhalation of airborne dust and particles may cause transient irritation of the upper respiratory tract. Effects may include coughing, nasal congestion, or sore throat.

CARCINOGEN  
LISTINGS:                    NA

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### **SECTION 4            FIRST AID MEASURES**

#### EMERGENCY/FIRST AID PROCEDURES

- EYE:** Flush eyes with large amounts of water for 15 minutes. Eyelids should be held away from the eyeballs to ensure thorough rinsing. Seek medical attention if irritation persists.
- SKIN:** Wash gently with soap and water to remove dust and fibers.
- INGESTION:** Drink extra water to assist natural elimination. Seek medical attention if gastrointestinal irritation persists or other symptoms such as nausea, vomiting, or abdominal pain occur.
- INHALATION:** Move to fresh air. Drink water to clear throat and blow nose to remove fibers. Get medical attention if necessary.

### **SECTION 5            FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Use extinguishing agent suitable for type of surrounding fire.

**SPECIAL FIRE FIGHTING INSTRUCTIONS:** None

**FLASH POINT:** NA

**FLAMMABILITY LIMITS:** NA

**LOWER EXPLOSIVE LIMIT:** NA                      **UPPER EXPLOSIVE LIMIT:** NA

**AUTO IGNITION TEMPERATURE:** Unknown

### **SECTION 6            ACCIDENTAL RELEASE MEASURES**

#### ACTION TO TAKE FOR SPILLS/LEAKS

NA

#### NOTIFICATION INFORMATION

There are no specific reporting requirements for release of this material as supplied under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendment and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements for the release of this material at the local, regional or state level.

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### **SECTION 7            HANDLING AND STORAGE**

#### HANDLING AND STORAGE PROCEDURES

Protect electrical equipment from airborne contamination. Carbon fibers are electrically conductive and may cause short circuits resulting in damage to or malfunctioning of electrical equipment.

### **SECTION 8            EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### ENGINEERING CONTROLS/WORK PRACTICES

##### VENTILATION:

Control airborne concentrations below the exposure guidelines specified by the Occupational Safety and Health Administration (OSHA) or other local, state, and federal regulations.

#### PERSONAL PROTECTIVE EQUIPMENT/PROTECTIVE MEASURES

RESPIRATORY PROTECTION: Respiratory protection is not normally necessary.

PROTECTIVE CLOTHING: Protective clothing is not normally necessary.

EYE PROTECTION: Eye protection is not normally necessary.

### **SECTION 9            PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE: Solid

COLOR: Black

SPECIFIC GRAVITY (water=1): 1.40 - 1.90

VAPOR PRESSURE: NA

VAPOR DENSITY (air=1): NA

MELTING POINT: NA

BOILING POINT: NA

EVAPORATION RATE (water=1): NA

% VOLATILE BY VOLUME: NA

NA = Not Applicable  
ND = Not Determined

MSDS – CCA CARBON CLOTH AND CFA CARBON FIBER

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SOLUBILITY IN WATER: NA

pH: NA

### **SECTION 10 STABILITY AND REACTIVITY**

STABILITY: Stable

INCOMPATIBILITY: Strong oxidizer

HAZARDOUS DECOMPOSITION PRODUCTS:

Thermal decomposition may be hazardous and may produce carbon monoxide and carbon dioxide.

HAZARDOUS POLYMERIZATION: Will not occur.

### **SECTION 11 DISPOSAL CONSIDERATION**

#### WASTE DISPOSAL METHOD

The transportation, storage, treatment, and disposal of this waste material must be conducted in compliance with all applicable Federal, state, and local regulations.

### **SECTION 12 TRANSPORTATION INFORMATION**

#### DOT INFORMATION

HAZARD CLASS: NA

PROPER SHIPPING NAME: NA

LABELS REQUIRED: NA

PLACARDS REQUIRED: NA

BILL OF LADING DESCRIPTION: Product Name

UN/NA CODE: NA

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### **SECTION 13 REGULATORY INFORMATION**

Carbon is listed on the Toxic Substances Control Act (TSCA) inventory. Carbon is listed on the Canadian Domestic Substances List (DSL).

### SARA TITLE III INFORMATION

This product is not classified under the hazard categories of the Superfund Amendments and Reauthorization Act (SARA) Section 311/312 (40 CFR 370).

### **SECTION 14 OTHER APPLICABLE INFORMATION**

#### INCINERATION:

Attempts to incinerate may cause fibers to become widely dispersed and result in failure of electrical equipment.

REVISION DATE: April 27, 2006

SUPERSEDES: December 31, 1990, January 5, 1996, November 11, 1997, January 26, 2000,  
May 6, 2003

NOTICE TO USERS: The information presented herein is based on data considered to be accurate as of the date of preparation of this Material Data Safety Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by vender for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.