



jb martin

MATERIAL SAFETY DATA SHEET

SECTION I: PRODUCT IDENTIFICATION

Product Name:	7.4 oz/yd ² carbon fabric TC-07-N
Weaver:	<i>jb martin ltée</i> 445 St-Jacques Québec, Canada J3B 2M1 Tel.: (450) 346-6853
Raw material:	Grafil, Inc. 5900, 88th Street Sacramento, CA 95828 USA
Emergency Telephone:	(916) 386-1733
General Telephone:	(916) 386-1733
Facsimile Number:	(916) 383-7668
Raw material:	Toray Carbon Fibers America Inc 2030 Highway 20 PO Box 248 Decatur, AL 35601 USA Tel.: (256) 260-2626
	Soficar S.A. (Société des Fibres de Carbone) S.A. 3, Avenue du Chemin de Presies 94410 Saint-Maurice Cedex, France Tel.: 1-48-85-65-12

SECTION II: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS RN	Exposure limits¹	% by Weight
Carbon Fiber	7440-44-0	not established ²	≥ 99%
Epoxy resin	not applicable	not established	0,4%

¹ There are no established OSHA PELs or ACGIH TLVs for these ingredients in the form in which they are present.

² At this time neither OSHA nor ACGIH has established any air contaminant limits specific to carbon fibers. OSHA has an established standard for particulate not otherwise regulated (nuisance dust) set at 5 mg/m³ (respirable fraction) and 15 mg/m³ (total dust). ACGIH has established an exposure value of 10 mg/m³ (total dust) for particules not other wise classified.

SECTION III: HAZARDS IDENTIFICATION

Emergency Overview

-NONE-

This product is not expected to present an immediate concern for emergency response personnel

Potential Health Effects

Skin: This product may cause slight irritation of the skin. Mechanical irritation may arise from the carbon fiber abrading or becoming imbedded into the skin. Chemical irritation may occur from exposure to sizing present on the fibers.

Eye: Fragments of this product may cause mechanical irritation of the eye. Chemical irritation may occur from exposure to sizing present on the fibers.

Inhalation: Inhalation exposure to respirable fibers of this products is not expected to occur under normal industrial use. However, under very limited circumstances, exposure to respirable fibers of this product can occur and result in irritation of the respiratory tract.

Ingestion: No hazard is expected during normal industrial use. Ingestion is not a likely route of exposure for this product.

Chronic effects/Carcinogenicity: None of the ingredients in this product are listed as carcinogens or potential carcinogens by OSHA, NTP, or IARC. Under very limited circumstances, exposure to respirable fibers of this product can occur and result in irritation to respiratory tract; prolonged exposure may cause more adverse effects.

Signs and symptoms of exposure: Slight irritation of the affected area.

SECTION IV: FIRST AID MEASURES

Eyes: If fibers get into the eyes, flush eyes with water for 15 minutes. Get medical attention.

Skin: Wash fibers off running water with soap. If fibers are imbedded in the skin, remove fibers with tweezers. Get medical attention if irritation develops or persists.

Inhalation: If there is inhalation exposure to the fibers of this product, remove source of exposure and move victim to fresh air. Get medical attention if irritation develops.

SECTION V: FIRE FIGHTING MEASURES

Flammable properties: Not expected to burn. However, under high heat (>750°F), this product may react with oxygen to give off carbon oxides and other decomposition products.

Flash point: Not applicable.

Flammable limits (UFL/LFL): Not applicable

Extinguishing media: This material is not expected to burn in a fire. If this product is present in a fire, fight fire based on the presence of materials that are flammable.

Fire fighting instructions: As in any fire, wear a self-contained breathing apparatus with pressure demand (MSHA/NIOSH approved or equivalent) and full protective gear.

Other information: Do not incinerate. This product is not expected to burn, however, incineration of carbon fibers can generate airborne fibers that can cause electrical malfunction.

See Section XIII – Disposal considerations.

SECTION VI: ACCIDENTAL RELEASE MEASURES

Collect, sweep up, or vacuum spilled material and either reuse or dispose of properly. Chopped or milled carbon fibers may be slippery if spilled posing an accident risk.

SECTION VII: HANDLING AND STORAGE

Store in a cool dry place. Wash hands with soap and water after handling the product.

SECTION VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering control: No special ventilation requirements. Good general ventilation should exist as part of any sound industrial hygiene program.

Exposure guidelines: Neither OSHA nor ACGIH has established any air contaminant limits specific to carbon fibers. OSHA has established standard for particulates not otherwise regulated (nuisance dust) set at 5 mg/m³ (respirable fraction) and 15 mg/m³ (total dust). ACGIH has established an exposure value of 10 mg/m³ (total dust) for particulates not otherwise classified.

Respiratory protection: Normal use and processing of this product are not expected to generate dust. Respirable fibers of this product can, under limited circumstances, be generated in which case NIOSH-approved HEPA respiratory protection should be used to prevent exposure.

Eye protection: Eye protection should be worn when handling or processing carbon fibers in any form.

Protective gloves: Latex gloves should be worn when handling this product. Wash hands with soap and water after handling the product.

Skin protection: No special precautions are needed.

SECTION IX: PHYSICAL PROPERTIES

Appearance: Black continuous, chopped, or milled fibers

Physical state: Solid

Odor: None

Vapor pressure: Not applicable

Melting point: Not applicable

Specific gravity: 1,75 – 1,85

Solubility in water: Insoluble

SECTION X: STABILITY AND REACTIVITY INFORMATION

Stability: Stable

Conditions to avoid: None

Incompatibility with other materials: Do not expose to strong oxidizing agents (e.g., fluorine). Carbon fiber can react violently with such oxidizing agents.

Hazardous decomposition products: Not expected under normal conditions of use and processing. At temperature above 250°F, thermal decomposition of the sizing may begin to occur resulting in the release of small amounts of NO_x, CO, organic compounds, and other hazardous substances.

Hazardous polymerization: Will not occur

SECTION XI: TOXICOLOGICAL INFORMATION

No toxicological information exists on this product. Limited toxicological information does, however, exist on the components of this product. Please contact the company (Grafil) for more information concerning these individual components.

SECTION XII: ECOLOGICAL INFORMATION

No ecological information exists on this product.

SECTION XIII: DISPOSAL INFORMATION

The waste material of this product is not expected to be hazardous. Landfill waste material. Do not incinerate carbon fibers since airborne fibers may cause electrical malfunctions. Any disposal practices must be in compliance with federal state, and local laws and regulations. Contact local or state environmental agencies for specific requirements.

SECTION XIV: TRANSPORT INFORMATION

This product is not regulated as dangerous or hazardous goods according to the regulations of DOT, IMO, or IATA. Therefore, no hazard label, hazard class, or UN number is applicable to this product.

SECTION XV: REGULATORY INFORMATION

Regulatory status on this product: All product ingredients are either on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory or are not required to be. This product and its impurities may trigger other specific reporting, record keeping, and testing requirements under EPCRA/SARA III, CAA, RCRA, SDWA, CERCLA, and CWA.

EPCRA section 313 information: This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

California Prop. 65 status: This product contains no chemicals known to the State of California to cause cancer or reproductive toxicity.

Regulatory information disclaimer: The information given here in section XV – Regulatory information is intended to be as complete as possible. It is the user’s responsibility, however, to determine and comply with all applicable laws and regulations under federal, state, and local requirements in the use of this product.

SECTION XVI: OTHER INFORMATION

None.

The technical department