



PRODUCT IDENTIFICATION

Product Name: **TC-06-P**
5.07 oz/yd² - 192 g/m²

Product composition: **100% carbon fabric**

Weaver: ***jb martin ltd***
445 St-Jacques
Québec, Canada
J3B 2M1
Tel.: (450) 346-6853

Raw material: **Toho Tenax America Inc.**
121 Cardiff Valley Road
Rockwood, TN 37854
USA

Emergency Telephone: **(800) 424-9300**
General Telephone: **(865) 354-5555**

The production of TC-06-P fabric has not in any way altered the physical state of the raw materials used to make this product, please see the enclosed MSDS from the supplier of the raw material.

MATERIAL SAFETY DATA SHEET

MSDS NO. 0503 Rev G

CHEMTREC EMERGENCY TELEPHONE NO. (800) 424-9300 EFFECTIVE DATE: September 10, 2010

TOHO TENAX AMERICA, INC.

121 Cardiff Valley Road, Rockwood, TN 37854 USA

TENAX® CONTINUOUS, CHOPPED OR PELLETIZED CARBON FIBERS

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

Product: Tenax®-A continuous, chopped or pelletized carbon fibers with sizing (surface finish)

Registration number: not applicable

Use: none specified

Identified use: none specified

Method of operation: See product information.

Company:

Toho Tenax America, Inc.

121 Cardiff Valley Road

Rockwood, TN 37854

Phone: (865) 354-4120

Fax: (865) 354-8409

Homepage: www.tohotenaxamerica.com

Contacts:

Jason Carling – Global R&D Manager jcarling@tohotenax-us.com

Mark Klemmer – ES&H Manager mklemmmer@tohotenax-us.com

2. HAZARDS IDENTIFICATION

Physical / Chemical Hazards: See Section 10.

In the supplied form the product is not explosive at all, however the build-up of fine dust can lead to a risk of dust explosions.

Human health dangers: See Section 11.

Environmental hazards: No specific hazards known.

Other hazards: None

Hazard symbols: None

R-phrases: None

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS: 7440-44-0 Carbon Fiber (derived from polyacrylonitrile) > 95%
Trade Secret Sizing Chemistry 0 - 5%

Comment on component parts: No dangerous components.

4. FIRST AID MEASURES

General information: not applicable

Inhalation: Ensure supply of fresh air.

Skin contact: Supply with medical care. Consult a doctor if skin irritation persists.

Eye contact: In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

Ingestion: Supply with medical care.

Rinse out mouth and give plenty of water to drink.

Induce the patient to vomit of his own accord only if fully conscious.

Advice to doctor: treat symptomatically

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: foam, dry powder, water spray jet, carbon dioxide

Extinguishing media that must not be used: full water jet

Special exposure hazards arising from the substance or preparation itself or combustion products: carbon monoxide (CO) Nitrogen oxides (NO_x).

Special protective equipment for firefighters:

Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus.

Additional information:

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: not applicable

Environmental precautions: not applicable

Methods for cleaning up: Take up mechanically.

Dispose of absorbed material in accordance within the regulations.

7. HANDLING AND STORAGE

Advice on safe handling: No special measures necessary if used correctly.

Advice on protection against fire and explosion: Dust can form an explosive mixture with air. Keep away from sources of ignition - refrain from smoking.

Requirements for storage rooms and vessels: No special measures necessary.

Advice on storage compatibility: Do not store together with oxidizing agents.

Further information on storage conditions: store in a dry place, recommended storage temperature: < 50 °C, relative humidity: < 85 %

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Additional advice on system design: Ensure adequate ventilation on workstation.

Respiratory protection: Breathing apparatus in the event of high concentrations. short term: filter apparatus, filter N95

Hand protection: butyl rubber, > 120 min (EN 374)

Eye protection: safety glasses

Skin protection: Mechanical irritation accompanied by itching or dermal effects may occur from exposure to material. Clean room type clothing that consists of a light weight, well ventilated, fabric may prevent the transfer of dust. Consider taping at the wrist and ankle areas to control contact with exposed areas. A PPE hazard analysis should be conducted based on the user processes.

General protective measures: Avoid contact with eyes. Do not inhale dust.

Hygiene measures: Wash hands before breaks and after work. Use barrier skin cream.

Delimitation and monitoring of the environmental exposition: not determined

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: fiber

Color: black

Odor: odorless

pH-value [1%]: not applicable

pH-value: not applicable

Boiling point [°C]: not applicable

Flash point [°C]: not applicable

Flammability [°C]: not applicable

Lower explosion limit: not applicable

Upper explosion limit: not applicable

Oxidizing properties: no

Vapour pressure [kPa]: not applicable

Density at 20°C [g/ml]: 1.7 – 1.90 (carbon density)

Bulk density [kg/m³]: not applicable

Solubility in water: insoluble

Partition coefficient [n-octanol/water]: not applicable

Viscosity: not applicable

Relative vapor density determined in air: not applicable

Evaporation speed: not applicable

Melting point: ca. 3500 °C

Autoignition temperature: not applicable

Decomposition temperature: begins to oxidize at temperatures > 240 °C in a standard air environment

Electrically Conductivity: yes

10. STABILITY AND REACTIVITY

Hazardous reactions:

Reactions with strong oxidizing agents. Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

Hazardous decomposition products:

No hazardous decomposition products will be formed during normal useage of carbon fiber. Complete or partial combustion of the surface coating on "sized" carbon fiber may generate CO_x, NO_x, and / or other trace chemicals.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity: not determined

Acute dermal toxicity: not determined

Acute inhalational toxicity: not determined

Irritant effect on eye: not determined

Irritant effect on skin: not determined

Sensitization: not determined

Subacute toxicity: not determined

Chronic toxicity: not determined

Mutagenicity: not determined

Reproduction toxicity: not determined

Carcinogenicity: not determined

Experiences made in practice: Fiber abrasion can cause mechanical skin irritation.

12. ECOLOGICAL INFORMATION

Fish toxicity: not applicable

Daphnia toxicity: not applicable

Behavior in environment compartments: not determined

Behavior in sewage plant: not applicable

Bacteria toxicity: not determined

Biological degradability: not applicable

COD: not determined

BOD 5: not determined

AOX-advice: No dangerous components.

General information: Ecological data are not available.

13. DISPOSAL CONSIDERATIONS

Product:

For recycling, consult manufacturer.

For recycling, consult waste disposal centers.

Contaminated packaging:

Packaging that cannot be cleaned should be disposed of as for product.

Uncontaminated packaging may be taken for recycling.

14. TRANSPORT INFORMATION

Classification according to DOT: non- hazardous

- **Classification Code:**

- **Label:**

- **ADR Limited Quantities:**

Classification according to IMDG: not classified as "Dangerous Goods" - -

- **EMS:**

- **Label:**

- **IMDG Limited Quantities:**

Classification according to IATA: not classified as "Dangerous Goods"

- **Label:**

15. REGULATORY INFORMATION

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: none

S-phrases: none

Special labeling:

Authorization, TITLE VII: not applicable

Restrictions, TITLE VIII: not applicable

TRANSPORT REGULATIONS: IATA-DGR (2008).

16. OTHER INFORMATION

Observe employment restrictions for people: no

VOC (1999/13/CE): not applicable



Disclaimer:

The information given by this document is based on the best knowledge at the date shown. It is given in good faith.

Furthermore, users attention is drawn to the possible risks run when the product is used for any purpose other than the one for which it was designed.

This MSDS do not exempt users from knowing and applying the rules regulating their activities. Users assume full responsibility for applying the appropriate safety measures when the product is used.

The specifications mentioned in this MSDS are only those of the manufacturers of the raw materials and no further testing was performed by JB Martin.

The technical department