

MATERIAL SAFETY DATA SHEET

MSDS NO. 0504B

CHEMTREC EMERGENCY TELEPHONE NO. (800) 424-9300

EFFECTIVE DATE: 01/01/06

TOHO TENAX AMERICA, INC.
121 Cardiff Valley Road, Rockwood, TN 37854 USA

PYROMEX® FIBER

I. PRODUCT DESCRIPTION

Pyromex® fiber is an oxidized polyacrylonitrile (PAN) fiber. It is a textile fiber which does not melt or char and will not support combustion in air.

DOT Hazard Classification: Not regulated.

Freight Classification: Yarn, synthetic fibers NOI.

CAS Number: 68908-35-0.

All chemical components are listed in the EPA's TSCA Inventory.

II. HAZARDOUS INGREDIENTS

None, according to the definition of hazardous material in 29 CFR 1910.1200 (OSHA).

When Pyromex® fibers are processed nuisance dust may be generated which can cause eye, skin, or respiratory irritation.

III. PHYSICAL AND CHEMICAL CHARACTERISTICS (TYPICAL VALUES)

Product Form: Crimped staple, spun yarn, tow.

Filament Diameter: 9-15 microns.

Appearance and Odor: Odorless black fiber.

Typical Density: 1.4 g/cm³

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IV. PHYSICAL HAZARDS

Unusual Fire Hazard: Although Pyromex® fiber does not burn, exposure to temperatures above 570°F (300°C) can produce Hydrogen Cyanide, a toxic gas. Off-gas volume depends upon temperature, duration of exposure and fiber volume.

Special Fire Fighting Procedures: Use self-contained breathing apparatus and complete protective equipment to protect against hazardous decomposition products. Spray Pyromex® fibers with water to keep them below the decomposition temperature.

Electrical Hazards: Pyromex® fibers are not carbonized and therefore are not electrically conductive as shipped. Exposure of the fibers to temperatures above 570° may cause carbonization of the fibers and render them electrically conductive.

V. REACTIVITY DATA

Stability: Stable

Hazardous Decomposition Products: Hydrogen Cyanide (HCN)

Hazardous Polymerization: Will not occur.

Materials to avoid: None known.

VI. HEALTH HAZARDS

Exposure Limits:

OSHA PEL: 15 mg/m³ (total) Particles not otherwise regulated Exposure (PNOR); 5 mg/m³ (respirable).

ACGIH TLV: 10 mg/m³ (inhalable) Particles not otherwise specified (PNOS); 3 mg/m³ (respirable).

Ingestion (swallowing): Chemically inert; no known hazard.

Inhalation (breathing): Dust may produce mechanical irritation to the mucous membranes of the nose, throat and upper respiratory tract.

Skin Contact: Mechanical irritation accompanied by itching or dermatitis may occur from exposure to broken filaments or loose particles of carbon fibers.

Eye Contact: Particulate matter may cause eye irritation.

First Aid & Emergency Procedures: If product irritates skin, wash area with mild soap and water. If particles get in eyes, flush with plenty of water for several minutes. If skin, eye or respiratory irritation persists, seek medical attention promptly.

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VII. SPILL OR LEAK PROCEDURES

Use filtered vacuum cleaner with grounded electrical cord, or wet sweeping methods, to collect loose material; avoid circulating airborne fibrous particles during cleanup operations.

WASTE DISPOSAL METHODS

Do not incinerate. Waste material should be bagged or containerized, sealed and disposed of in an approved landfill in accordance with federal, state and local regulations. Product as shipped is not considered a hazardous waste under current RCRA regulations.

VIII. SPECIAL PROTECTION INFORMATION

Respiratory Production: When dust concentration exceeds recommended TLV of 10 mg/m³ (total dust) or 5 mg/m³ (respirable dust) wear NIOSH approved particulate respirator.

Local Exhaust: Recommended when appropriate to control employee exposure, especially at points where fragmentation or particulate generation may occur.

Mechanical (General) Ventilation: May not be adequate as the sole means of controlling dust or lint.

Protective Gloves: Wear gloves when handling.

Eye Protection: Wear safety goggles if dust or lint is present.

Other Protective Measures: Apply barrier cream or wear long sleeved shirt to prevent fibrous matter from contacting exposed skin. Wash work clothing frequently. Wash exposed skin areas before eating and at end of work day. Use good housekeeping practices to keep work area free of dust and fibers.

IX. SPECIAL PRECAUTIONS

Store Pyromex® fiber products in original containers. Avoid conditions that may generate dust or lint.

As with all industrial products, selection of specific personal protective equipment (e.g., gloves, disposable, clothing, respirators) and general control (e.g., local exhaust ventilation) depends upon the type of operation and exposure potential. To avoid ingestion incidental to handling, food and tobacco should not be present in the work area. Wash skin contact areas with soap and water after handling.

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To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy or completeness of such information. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible long-term adverse effects. To the extent that any hazards may have been mentioned in the publication, we neither suggest nor guarantee that such hazards are the only ones which exist. Final determination of the suitability of any information or product for the use contemplated by any user, the manner of that use and whether there is any infringement of any patents is the sole responsibility of the user. We recommend that anyone intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy himself as to such suitability and that he can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the manufacturers' or suppliers' current instruction for handling each material they use.

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