

MATERIAL SAFETY DATA SHEET

This MSDS complies with 29 CFR 1910.1200

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT All styles of woven fabric containing PAN based carbon and fiberglass or tracers
FINISH Greige, loom state, unfinished
DESCRIPTION Woven textile fabric

SECTION 2 - HAZARDOUS INGREDIENTS

CHEMICAL OR COMMON NAME	MAX. % BY WEIGHT	UN#	CAS#	TLV (SOURCE)	PEL (SOURCE)
Fibrous glass (textile grade)	75				
Respirable fibrous glass dust	not known*	not assigned	not assigned	10 mg/m ³ (ACGIH)	5 mg/m ³ (OSHA)
Carbon fiber (textile grade)	95	not assigned	7440-44-0	not listed	not listed
Respirable fibrous carbon dust	not known*	not assigned	not assigned	5mg/m ³ (ACGIH) (inhalable)	5 mg/m ³ (OSHA) (respirable)

*AMOUNT WILL BE DEPENDENT UPON METHOD OF HANDLING

SECTION 3 - OTHER INGREDIENTS

ITEMS LISTED IN THIS SECTION ARE EITHER CHEMICALLY OR PHYSICALLY BONDED TO THE FIBROUS GLASS TEXTILE AND ARE DEEMED NON-HAZARDOUS IN THE STATE SUPPLIED.

CHEMICAL AND COMMON NAME	MAX. % BY WEIGHT
Starches, polyvinyl alcohol, lubricants and humectants (i.e. normal textile sizing)	3.5
Uncured epoxy resin	2.0

Note: May contain glass or aramid [poly (terephthalochloride/p-phenylenediamine)] tracer yarns or selvage markers.

SECTION 4 - PHYSICAL DATA

Specific Gravity: Approx. range 2.0 to 2.5
APPEARANCE/PHYSICAL STATE: Black and white; solid

SOLUBILITY IN WATER: Negligible

ODOR: No distinctive odor

SECTION 5 - FIRE HAZARD DATA

FLASH POINT: Not applicable

FLAMMABLE LIMITS: Not applicable

EXTINGUISHING MEDIA: Water, dry powder, or foam (needed for packaging only).

SPECIAL FIRE FIGHTING PROCEDURE: In any sustained fire, wear self-contained breathing apparatus.

UNUSUAL FIRE HAZARDS: In a sustained fire, combustible decomposition products may be released. These products include carbon dioxide, carbon monoxide and low molecular weight hydrocarbons **

SECTION 6 - REACTIVITY DATA

STABILITY: Stable

CONDITIONS/MATERIALS TO AVOID: Note: Carbon fibers, dust, and fibrous particles are electrically conductive and can cause shorting in electrical equipment. Explosive shorting of high voltage systems is possible.

HAZARDOUS DECOMPOSITION PRODUCTS: None generated under normal storage or handling conditions.

SECTION 7 - HEALTH HAZARD DATA

POTENTIAL ROUTES OF ENTRY: Inhalation, skin contact

EFFECTS OF OVEREXPOSURE: Direct skin contact with fibrous glass or its dust may cause mechanical irritation and transitory dermatitis. Breathing of fibers or dust may cause mechanical irritation of the mouth, nose, and throat.

EMERGENCY AND FIRST AID PROCEDURE:

Inhalation: Move to fresh air area.

Ingestion: Not likely to occur through normal use, should ingestion occur seek medical attention.

Eyes: Flush with flowing water for 15 minutes - seek medical attention

Skin: Flush with ample cool water followed by washing with mild soap to remove accumulated fibers.

CARCINOGEN: Not listed under IARC, NTP, or OSHA. Current known industry studies have shown fibrous carbon to be a non-carcinogen.

SECTION 8 - SPECIAL PROTECTION REQUIRED

Exposure to fibrous glass may cause mechanical irritation to the skin, eyes, nose and throat. Typically such irritation occurs to newly exposed individuals, and usually diminishes after several days of exposure.

RESPIRATORY: If airborne dust or fibers exceed the TLV or if upper respiratory irritation occurs, use a respirator designed for nuisance type dusts.

VENTILATION: Normal area ventilation is sufficient in most cases to keep dust and fiber levels below the TLV or PEL.

SKIN: Barrier creams, gloves, and long sleeve loose fitting clothing may be required for certain workers who have sensitive skin or contact dermatitis. Work clothing should be laundered separately from other clothing before reuse.

EYE: None required for normal use, but suggested as a good safety practice whenever use of the product releases fibrous carbon or aramid fibers or dust.

OTHER: Observe good personal hygiene.

SECTION 9 - CONTAINMENT AND DISPOSAL

CONTAINMENT AND CLEAN UP: Dust or loose fibers can be vacuumed or swept with the aid of a dust suppressant.

DISPOSAL: Do not incinerate. Waste material should be bagged or containerized, sealed and dispose according to local, state, and federal laws. This material is not regulated under RCRA hazardous waste regulations.

SECTION 10 - SPECIAL PRECAUTIONS

SHIPPING: Not regulated by DOT; not classified by TDG

STORAGE: Store in dry area.

HANDLING: Carbon fibers, dust and fibrous particles are electrically conductive and can cause shorting in electrical equipment. Explosive shorting of high voltage systems is possible.

SECTION 11 - REGULATORY INFORMATION

EPA, RCRA 40 CFR, Part 261, 1990: Non-hazardous

CERCLA: Not listed

SARA TITLE III: Exempt by definition

PA RIGHT-TO-KNOW: Less than reportable quantity

TSCA INVENTORY: Exempt per section 8(a), 710.2(f), and 704.5(a)

CA PROPOSITION 65: Insignificant trace quantity

MA RIGHT-TO-KNOW: Less than reportable quantity

NJ RIGHT-TO-KNOW: Less than reportable quantity

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Technical/Emergency Information: (336) 545-0011

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