

MATERIAL SAFETY DATA SHEET

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SECTION I – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

IDENTITY: (As used on label and list)

**FLEXFRAM™ 605 NS
PART B**

May be used to comply with OSHA's Hazard Communication Standard 29 CFR 1910.1200. Standard must be consulted for specific requirements.

Manufacturer's Name/Address/Phone #:

**FIBER MATERIALS, INC.
5 MORIN STREET
BIDDEFORD, ME 04005-4497
(207) 282-5911 MON-FRI 8:00-5:00**

Emergency Telephone #: INFOTRAC (800) 535-5053

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SECTION II – HAZARDOUS INGREDIENTS

**Hazardous Components:
(Spec. Chemical Identity;
Common Name(s)):**

	CAS #:	OSHA PEL:	ACGIH TLV:	Other Limits Recommended:	% Optional:
Silica, Amorphous	7631-86-9	20 MPPCF <u>80 MG/M³</u> % SiO ₂	10 MPPCF 5 MPPCF (respirable)	N/A	2.0%
Epoxy Resin (Bisphenol A/Epichlorohydrin)	25068-38-6	N/A	N/A	N/A	48%

SECTION III – PHYSICAL/AND CHEMICAL PROPERTIES

Boiling Point:	600°F	Specific Gravity (H₂O=1):	1.706
Vapor Pressure (MM Hg.):	.01@70°F	Melting Point:	N/D
Vapor Density: (Air = 1)	9	Evaporation Rate: (Butyl Acetate=1)	N/D
Solubility in Water:	Negligible	Appearance and odor:	Viscous liquid; mild aromatic odor.

SECTION IV – FIRE/FIRE FIGHTING MEASURES

Flash Point (Method Used): 315°F CoC

Flammable Limits: N/A

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UEL: N/A LEL: N/A

Extinguishing Media: Water spray, CO₂, or dry chemical.

Special Fire Fighting Procedures: For large fires, use water spray, fog, or foam. Dike water run-off. Prevent entry into sewers or natural waters. Wear full protective equipment.

Unusual Fire and Explosion Hazards: Toxic fumes will be evolved if unmixed material is involved in a fire. Wear self-contained breathing apparatus.

SECTION V – FIRST AID

Emergency and First Aid Procedures: Remove to fresh air. Get medical help.

Eyes: Flush thoroughly with water for 15 minutes.

Skin: Wash with soap and water.

Ingestion: Induce vomiting and call physician immediately.

SECTION VI – STABILITY AND REACTIVITY

Stability: Material is stable.

Incompatibility (Materials to Avoid): Strong oxidizing agents, strong acids, chlorinated organic compounds.

Hazardous Decomposition or By-Products: CO₂, Aldehydes, Acids, NO₂, and SO₂.

Material Polymerization: **May Occur:** **Will not Occur:** X

Conditions to Avoid: Reacts with considerable heat with aliphatic amines.

SECTION VII – HANDLING AND STORAGE

Precautions to be Taken in Handling and Storing: Store in tight, sturdy containers. Handle in accordance with hazard potential.

Other Precautions: Remove contaminated clothing and protective gear. Decontaminate. Destroy leather articles, including shoes that cannot be decontaminated. ANSI classification 2. Removal of cured material should be accomplished with NIOSH approved respirators.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Type): NIOSH approved respirator with organic vapor cartridge.

Ventilation:

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General Mechanical: Recommended

Local: Should be provided in mixing and application areas.

Special: Removal of cured material should be accomplished with NIOSH approved dust respirator.

Protective Gloves: Rubber gloves are required to prevent skin contact.

Eye Protection: Goggles or Face Shield.

Other Protective Clothing or Equipment: Are necessary to prevent body contact.

Work/Hygienic Practices: Avoid smoking, eating and drinking in the work area.

SECTION IX – HEALTH HAZARDS IDENTIFICATION, INCLUDING EMERGENCY OVERVIEW

Route(s) of Entry:	Inhalation	X	Skin	X	Ingestion	X
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Health Hazards (Acute and Chronic): Removal of cured material by grinding may result in suspending Silica dust, carbon fibers, and nuisance dusts in the air. **Inhalation of epoxy:** May be irritating, however, resin is not volatile and generally does not present serious hazard by inhalation.

IARC has recently reviewed the animal, human and other relevant experimental data on Silica in order to critically evaluate and classify the Cancer causing potential. Based on its review, IARC classified Crystalline Silica as a group 2A carcinogen. By definition a group 2A is probably carcinogenic to humans. For Crystalline Silica, IARC's 2A classification was based on limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

The OSHA permissible exposure limit (PEL) for Cristobalite is 0.05 mg/m³ (resp.). The ACGIH threshold limit value (TLV) for Cristobalite is 0.05 mg/m³ (resp.) (ACGIH 1988-89). Particular care should be taken when working with "used" material to minimize generation of dust. Use NIOSH or MSHA approved equipment when airborne exposure limits may be exceeded, especially in confined areas with inadequate ventilation or in other areas. Acceptable respirators recommended for given airborne Cristobalite concentrations are:

Concentration

Respirator Type

Up to 10 times the PEL
10 to 100 times the PEL
> 100 times the PEL

Half-face cartridge respirator with high efficiency filters.
Full-face cartridge respirator with high efficiency filters.
Full-face positive pressure supplied air respirator.

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Carcinogenicity: NTP and OSHA Regulated: N/A IARC (see below)

The pulmonary tumor causing potential of refractory ceramic fibers in animals is unclear. Two inhalation studies suggest a low order potential in inducing pulmonary tumors in animals, while other inhalation and intratracheal injection studies conclude that ceramic fibers are not tumorigenic in animals. The International Agency of Research on Cancer (IARC) has recently reviewed the animal, human and other relevant experimental data on man made mineral fibers in order to critically evaluate and classify the cancer causing potential of these materials. Based on its review, IARC classified fibrous glass wool, mineral wool (both rock wool and slag wool) and ceramic fiber as group 2B carcinogens. By definition, a group 2B agent is possibly carcinogenic to humans. For refractory ceramic fibers, IARC's 2B classification was based on sufficient evidence of carcinogenicity in experimental animals in the absence of human epidemiologic data.

Further animal and man health studies are planned. Pending the results of these studies, strict adherence to recommended safe work practices described elsewhere in this data sheet is advised.

Signs and Symptoms of Exposure: Primary irritation of skin on prolonged contact. Irritating to the eyes.

Medical Conditions Generally Aggravated by Exposure: Allergies and/or other respiratory conditions.

SECTION X – ACCIDENTAL RELEASE MEASURES

Dike. Wear approved respiratory protection and other protective equipment as necessary to prevent skin and eye contact. If warm, remove liquid by pumping into salvage drums. If cool and non-pumpable, remove by shoveling and scraping into salvage drums. Soak up residue and small spills with absorbent material such as clay and put into tight container. Guard against fire hazards if solvents are used.

SECTION XI – TOXICOLOGICAL INFORMATION

This section will be updated as reviews are completed.

SECTION XII – ECOLOGICAL INFORMATION

This section will be updated as reviews are completed.

SECTION XIII – DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in a landfill in accordance with local, state and federal regulations.

SECTION XIV – TRANSPORT INFORMATION

DOT Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION.

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SECTION XV – REGULATORY INFORMATION

This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

<u>Chemical Name</u>	<u>CAS Number</u>	<u>% by Weight</u>
Bisphenol A/Epichlorohydrin	25068-38-6	48.0

As per 29 CFR 1910.1200, any copying and redistribution of this MSDS shall include copying and redistribution of this notice.

SECTION XVI – OTHER INFORMATION

The above information is believed to be accurate and represents the best information currently available to us. However, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their own particular purposes. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The data in this MSDS relates only to the specific material designated and does not relate to use in combination with any other material or process.