



MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: BH – Thermo jacket C MSDS# BH-047	Manufacturer: Federal Mogul Corporation 26555 Northwestern Highway Southfield, MI 48033 24hr Emerg # (Infotrac): 1-800-535-5053 International: 001-352-323-3500 Non-Emerg #: 248-354-9844
--	---

SECTION 2: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

BH Thermo jacket C provides excellent long-term heat protection for hoses, wire harnesses and cables. Thermo jacket is an uncoated, unsaturated braided sleeving made of Nextel ceramic fibers. The sleeve retains strength and flexibility at continuous temperatures up to 2,200°F and offers short-term protection to 2,600°F.

Although several of the ingredients used to formulate this product may be hazardous in the raw state, the manufacturing process results in a solid, infusible form, binding and otherwise, rendering the product inert. The constituents identified below may be present in quantities greater than 1% (0.1% for carcinogens) and may be released from the product by overheating, burning, machining, abrasion, or riveting.

This information provides the minimum criteria for safe usage and handling of this product. Companies using this product should develop their own occupational health program to protect employees from injury or adverse health effects.

Ingredient	CAS No.	% Weight	OSHA PEL	ACGIH TLV
Aluminoborosilicate Fibers	12788-79-3	99	None Established	None Established

NE: None Established – (Manufacturer has set a standard of 0.2 fppcc)

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Shipped material is not considered hazardous, but operations (e.g., overheating, burning, machining, abrading, or riveting) that can create airborne dust should be avoided.

POTENTIAL HEALTH EFFECTS

Inhalation: Dust from abnormal abrasion or vapors from heating >149°C can cause irritation.

Skin: May cause irritation.

Eye: Dust particles may cause irritation or corneal injury due to mechanical action.

Ingestion: Not a probable route of entry.

Carcinogenicity:

	COMPONENT
	NTP
	IARC
	OSHA
Aluminoborosilicate Fibers	No
	No
	No

Symptoms and Effects of Exposure to Selected Individual Components

ALUMINOBOROSILCATE FIBERS

Acute – May cause irritation to skin, eyes, nose, or throat. May cause shin rash, conjunctivitis, coughing, and sneezing.

Other – Ingestion of the product may produce irritation of the gastrointestinal tissues with symptoms such as vomiting, blood in feces, and abdominal tenderness.

SECTION 4: FIRST AID MEASURES

Inhalation:	Move to fresh air. If irritation persists, seek medical attention.
Eye Contact:	Flush with water for 15 minutes to remove particle. If irritation persists, seek medical attention.
Skin Contact:	Wash thoroughly with soap and water. Avoid scratching irritated areas. If fiber becomes embedded, seek medical attention.
Ingestion:	Seek medical help.

SECTION 5: FIRE FIGHTING MEASURES

This product is inherently flame resistant.

Flashpoint: N/A **LEL:** N/A **UEL:** N/A **Autoignition Temperature:** N/A

Extinguishing Media: Use media suitable for surrounding fire.

Unusual Fire and Explosion Hazards: None known

Special Fire-Fighting Procedure: Wear self-contained breathing apparatus when extinguishing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

If dust is generated during machining, abrading or riveting, remove the dust by vacuuming or wet-mopping and place in an air-tight polyethylene bag. Vacuums should be equipped with HEPA filters. Do not use compressed air to blow dust from surfaces.

SECTION 7: HANDLING AND STORAGE

Shipping and storage may result in accumulation of dust in shipping containers. If dust is generated while shipping product, remove dust by vacuuming/wet-mopping. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust from surfaces.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Protection: Any operation which may produce dust, including machining, grinding, riveting, or abrading this product, should be adequately exhausted to prevent inhalation of dust.

Respiratory Protection: Use a NIOSH-approved respirator if there is a potential for exposure to exceed potential PELs or TLVs. (See 29 CFR 1910.134, OSHA Respiratory Protection Standard.)

Skin Protection: If skin irritation occurs, gloves and other protective garments may be worn. Wear gloves when excessive cutting of this material exists.

Eyes: Wear safety glasses or goggles, as necessary, if dust exposure is possible.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	N/A	Vapor Pressure:	N/A
Melting Point:	>1,800°C	Vapor Density (air = 1):	N/A
pH:	N/A	% Volatile:	N/A
Specific Gravity:	2.7 g/cc	Evaporation Rate:	N/A
Water Solubility:	Insoluble	Form, Color and Odor:	Solid, natural and odorless

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions.

Incompatibility (Materials/Conditions to Avoid): None known

Hazardous Polymerization: Will not polymerize

Decomposition Products: Thermal decomposition may produce such by-products as carbon monoxide and trace amounts of hydrogen cyanide, acrylonitrile and dimethyl foramide.

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation: Refer to Section 3

Skin: Refer to Section 3

Eye: Refer to Section 3

Ingestion: Refer to Section 3

Acute: None known

Chronic: None known

SECTION 12: ECOLOGICAL INFORMATION

Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Federal and state law regulates disposal of scrap material or dust as solid waste; disposal must be in accordance with federal and state laws. Contact local regulatory agencies for guidance.

SECTION 14: TRANSPORTATION INFORMATION

Proper Shipping Name: Not regulated

Hazard Class: None

Identification Number: None

Packing Group: N/A

Shipping Label: None

Additional Marking Requirement: None

SECTION 15: REGULATORY INFORMATION

U.S. TSCA: No chemicals used in the manufacture of this product are listed on the U.S. Toxic Substances Control Act (TSCA) Inventory

California Proposition 65: This product does not contain ingredients known to the State of California to cause cancer, birth defects or other reproductive effects.

**SARA Title III –
Section 313 Supplier Notification:** This product does not contain chemicals subject to SARA Title III/CERCLA “reportable quantities” (RQs) and/or “threshold planning quantities” (TPQs) and/or are classified as “Toxic Chemicals” under the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 40 CFR 372:

RCRA Hazardous Waste Code: Not Available

CERCLA Hazardous Substances: Not Available

OSHA: Not Available

WHMIS Classification: Not Available

SECTION 16: OTHER INFORMATION

Abbreviations:

CAS No.:	Chemical Abstract Services Number
OSHA PEL:	U.S. Occupational Safety and Health Administration Permissible Exposure Limit
ACGIH TLV:	American Conference of Governmental Industrial Hygienists Threshold Limit Value (2004)
N/A:	Not Applicable
fpcc	Fibers per cubic centimeter
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
NIOSH:	National Institute of Occupational Safety and Health
HEPA:	High-efficiency particulate air

The information and recommendations stated above are taken from sources believed to be accurate as of the date of this revision. Federal-Mogul makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability, including direct, incidental or consequential damages for any reliance thereof.

This MSDS should not be used as a complete or accurate summary of the content of this product. For specific information on brand names, manufacturers, or quantities, please refer to product specification documents, wherever available.