



MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: ReflecTube 1590

Manufacturer:

Federal-Mogul Corporation
26555 Northwestern Highway
Southfield, MI 48033

MSDS# BH-145

24hr Emerg # (Infotrac): 1-800-535-5053

International: 001-352-323-3500

Non-Emerg #: 248-354-9844

SECTION 2: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Bentley-Harris ReflecTube 1590 is a reflective convolute product designed to provide thermal protection for components in radiant heat environments. Composed of a high temperature nylon 4,6-polymer base substrate and highly reflective coating, it provides protection for wires, cables, and hoses in applications that have heat source temperatures as high as 538°C. ReflecTube 1590 is also extremely resistant to automotive fluids and may be classed as insulative against 12-volt battery currents.

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) that may be released from the product by such operations as overheating, burning, machining, abrading, 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
Stanyl 4,6 Nylon	None Established	98	None Established	None Established
Metallizing Primer & Topcoat	None Established	<2	None Established	None Established

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: Airborne particulate matter and vapor may cause respiratory irritation.

Skin: Hot material can cause thermal burns.

Eye: Airborne particles or vapor may cause irritation or corneal injury.

Ingestion: Not a probable route of entry.

POTENTIAL HEALTH EFFECTS (continued)**Carcinogenicity:**

	COMPONENT
	NTP
	IARC
	OSHA
Stanyl 4,6 Nylon	No No No
Metallizing Topcoat & Primer	No No No

Symptoms and Effects of Exposure to Selected Individual Components**Exposure Hazards:** None known**SECTION 4: FIRST AID MEASURES**

Inhalation:	Move to fresh air. If irritation persists, seek medical attention.
Eye Contact:	Rinse thoroughly with ample amounts of water. If irritation persists, seek medical attention.
Skin Contact:	Do not remove the hot material from skin. Rinse with cool water. If irritation persists, seek medical attention.
Ingestion:	Not a probable route of entry.

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:** Hazardous decomposition products may be generated in fire conditions.**Special Fire-Fighting Procedure:** Wear self-contained breathing apparatus when extinguishing a fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Product may present a slipping hazard. If dust is generated, remove the dust by vacuuming or wet-mopping. Vacuums used for this purpose should be equipped with HEPA filters. Do not use compressed air to blow dust from surfaces.

SECTION 7: HANDLING AND STORAGE

Store in a cool dry place. If dust is generated during shipping, remove the dust from the container by vacuuming or 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 applicable 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.

Eyes: Wear safety glasses or goggles, as necessary, if there is potential for dust exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	N/A	Vapor Pressure:	N/A
Melting Point:	>1,000°F	Vapor Density (air = 1):	N/A
pH:	N/A	% Volatile:	N/A
Specific Gravity:	1.38	Evaporation Rate:	N/A
Water Solubility:	Insoluble	Form, Color, and Odor:	Solid, various, no odor

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions.

Incompatibility (Materials/Conditions to Avoid): Strong acids and oxidizing agents

Hazardous Polymerization: Will not polymerize

Decomposition Products: Thermal decomposition will start at temperatures greater than 300°C, producing such by-products as carbon monoxide, carbon dioxide, hydrogen cyanide, ammonia, and oxides of nitrogen.

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: N/A
Identification Number: N/A
Packing Group: N/A
Shipping Label: None
Additional Marking Requirement: None

SECTION 15: REGULATORY INFORMATION

U.S. TSCA: All 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: PELs have not been established for ingredients or the product.

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
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
HEPA:	High efficiency particulate air
NIOSH:	National Institute of Occupational Safety and Health

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