



## MATERIAL SAFETY DATA SHEET

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

<p><b>Product Name:</b> Flexguard 2137</p> <p><b>MSDS#</b> BH-130</p>	<p><b>Manufacturer:</b> Federal Mogul Corporation 26555 Northwestern Highway Southfield, MI 48033</p> <p><b>24hr Emerg # (Infotrac):</b> 1-800-535-5053 <b>International:</b> 001-352-323-3500 <b>Non-Emerg #:</b> 248-354-9844</p>
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### SECTION 2: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Flexguard 2137 is a highly flexible, expandable sleeving designed to provide excellent abrasion protection in extreme temperature environments. The product is composed of dual monofilament construction, using two different diameters of modified polyester fiber. The larger diameter fibers act as guard strands for abrasion resistance. The smaller diameter fibers help provide the amount of flexibility, expansion and self-recovery inherent in the braid. It is an excellent candidate for oxygen sensors, critical hose and wiring assemblies used in environments as hot as 220°C.

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 overheating, burning, machining, abrading, or riveting.

The following 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
Polyethylene Naphthalate	25853-85-4	<99	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:** Not respirable in this form. Thermal processing fumes and vapors may cause nose and throat irritation.

**Skin:** Dust may cause irritation.

**Eye:** Dust may cause irritation.

**Ingestion:** Not a probable route of entry.

<b>POTENTIAL HEALTH EFFECTS (continued)</b>	
<b>Carcinogenicity:</b>	<b>COMPONENT</b> <b>NTP</b> <b>IARC</b> <b>OSHA</b>
Polyethylene Naphthalate	No No No
<b>Symptoms and Effects of Exposure to Selected Individual Components</b>	
None known.	

<b>SECTION 4: FIRST AID MEASURES</b>	
<b>Inhalation:</b>	Move to fresh air. Seek medical attention.
<b>Eye Contact:</b>	Rinse thoroughly with ample amounts of water for 15 minutes. Seek medical attention.
<b>Skin Contact:</b>	Wash thoroughly with soap and water. Seek medical attention.
<b>Ingestion:</b>	Seek medical attention.

<b>SECTION 5: FIRE FIGHTING MEASURES</b>			
<b>Flashpoint:</b> N/A	<b>LEL:</b> N/A	<b>UEL:</b> N/A	<b>Autoignition Temperature:</b> N/A
<b>Extinguishing Media:</b> Use media suitable for surrounding fire.			
<b>Unusual Fire and Explosion Hazards:</b> None known.			
<b>Special Fire Fighting Procedure:</b> Wear self-contained breathing apparatus when extinguishing. Hazardous decomposition products are generated in fire conditions.			

<b>SECTION 6: ACCIDENTAL RELEASE MEASURES</b>
Product may present a slipping hazard. Sweep up and dispose of according to all federal and state disposal procedures.

<b>SECTION 7: HANDLING AND STORAGE</b>
Remove dust by vacuuming or wet mopping. Do not use compressed air to blow dust from storage containers.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Ventilation Protection:** Any operation which may produce dust or thermal vapors, including cutting, machining, grinding, riveting, or abrading of this product, should be adequately exhausted with local ventilation to prevent inhalation of dust or fumes.

**Respiratory Protection:** Not required under normal processing conditions. If dusty conditions exist, use a NIOSH-approved respirator if there is a potential for exposure to dust, vapor, or fume exceeding PELs or TLVs. (See 29 CFR 1910.134, OSHA Respiratory Protection Standard).

**Skin Protection:** Gloves and arm protection should be worn to avoid thermal burns.

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

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	N/A	<b>Vapor Pressure:</b>	N/A
<b>Melting Point:</b>	255°C	<b>Vapor Density (air = 1):</b>	N/A
<b>pH:</b>	N/A	<b>% Volatile:</b>	N/A
<b>Specific Gravity:</b>	1.3 – 1.8 g/cc	<b>Evaporation Rate:</b>	N/A
<b>Water Solubility:</b>	Insoluble	<b>Form, Color and Odor:</b>	Solid, black and no specific odor

**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:** Avoid exposing to open flame and/or temperatures greater than 300° C for prolonged periods of time. At this temperature, thermal decomposition begins to occur producing such by-products as carbon monoxide, carbon dioxide, ethylene glycol, low molecular weight alcohols and aldehydes..

**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**

N/A

### 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

<b>Proper Shipping Name:</b>	Not regulated
<b>Hazard Class:</b>	None
<b>Identification Number:</b>	None
<b>Packing Group:</b>	N/A
<b>Shipping Label:</b>	None
<b>Additional Marking Requirement:</b>	None

### SECTION 15: REGULATORY INFORMATION

<b>U.S. TSCA:</b>	All chemicals used in the manufacture of this product are listed on the U.S. Toxic Substances Control Act (TSCA) Inventory
<b>California Proposition 65:</b>	This product does not contain ingredients known to the State of California to cause cancer, birth defects or other reproductive effects.
<b>SARA Title III – Section 313 Supplier Notification:</b>	This product does not contain the following 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
<b>RCRA Hazardous Waste Code:</b>	Not Available
<b>CERCLA Hazardous Substances:</b>	Not Available
<b>OSHA:</b>	Not Available
<b>WHMIS Classification:</b>	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

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