MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Flexguard 2120, 2125, 2130

Manufacturer:
Federal-Mogul Corporation
26555 Northwestern Highway
Southfield, MI 48033

MSDS# BH-036

24hr Emerg # (Infotrac): 1-800-535-5053
International: 001-352-323-3500
Non-Emerg #: 248-354-9844

SECTION 2: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Each of the above Flexguard products are highly flexible, expandable, lightweight and rugged oversleeves. They are easy to apply and one size generally fits many applications. It has an open weave design that permits drainage and prevents condensation. Flexguard 2120 provides mechanical protection for hoses, wire harnesses and other critical components requiring maximum abrasion protection. Featuring a dual monofilament construction of nylon monofilament guard strands and polyester support strands. Flexguard 2125 is similar to 2120 but has an open weave design which reduces material costs and permits increased drainage. Flexguard 2130 has similar features to 2120 and 2125 but provides more improved abrasion resistance because of a tighter wave as well as high temperature resistance.

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.

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
Polyamid 6.6	32131-17-2	40-50	None Established	None Established
Polyethylene Terephthalate (PET)	25038-59-9	50-55	None Established	None Established
Black Pigment	None Established	1-5	None Established	None Established
Non-Hazardous Iodine Compound	None Established	<1	None Established	None Established
Non-Hazardous Copper Compound	None Established	<1	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 (continued)

Inhalation:

Dust created from abrasion or vapors created from heating may cause respiratory irritation.

Skin:
Molten material can cause thermal burns.

Eye:
Dust particles may cause irritation or corneal injury.

Ingestion:
Not a probable route of entry.

Carcinogenicity:

COMPONENT NTP IARC OSHA
Polyamid 6.6
No No No
Polyethylene Terephthalate (PET)
No No No
Black Pigment
No No No
Non-Hazardous Iodine Compound
No No No
Non-Hazardous Copper Compound
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. Seek medical attention.

Eye Contact: Rinse thoroughly with ample amounts of water. Seek medical attention.

Skin Contact: Wash thoroughly with soap and water. If molten material falls on skin, do not attempt to remove the material from the skin; cool immediately with water. Seek medical attention.

Ingestion: Not a probable route of entry. Seek medical attention.

SECTION 5: FIRE FIGHTING MEASURES

This product is inherently flame resistant, but may ignite at temperatures exceeding 600°C in an oxygen-enriched atmoshere.

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: Toxic vapors can be emitted in fire conditions.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Scrap monofilament may present a slipping hazard. If dust is generated during machining, abrading or riveting, remove 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. Do not heat to greater than 200°C for prolonged periods of time. Avoid breathing fumes at elevated temperatures. If dust is generated while shipping product, remove dust by vacuuming or wet-mopping and place in an air-tight polyethylene bag. 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: Use local exhaust when heated to greater than 200°C. Reduce caprolactam vapor to below 1ppm with efficient ventilation. 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. Wear cloth gloves when handling monofilaments to prevent cuts.

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:	200°C	**Vapor Density (air = 1):**	N/A
pH:	N/A	**% Volatile:**	N/A
Specific Gravity:	1.14 –1.38 g/cc	**Evaporation Rate:**	N/A
Water Solubility:	Insoluble	**Form, Color, and Odor:**	Solid, black, odorless

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable at normal temperatures and storage conditions.
Incompatibility (Materials/Conditions to Avoid):	Oxidizing agents, acids, and bases.
Hazardous Polymerization:	Will not polymerize.
Decomposition Products:	Thermal decomposition will start at temperatures greater than 200°C producing such by-products as carbon monoxide, hydrogen cyanide, ammonia, carbon dioxide and trace amounts of esters, alcohols, acids, and acetaldehyde. Caprolactam is released when heating to temperatures greater than 200°C.

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

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: 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)
<:	Less than
N/A:	Not Applicable
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
NIOSH:	National Institute of Occupational Safety and Health
HEPA:	High-efficiency particulate air

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