



MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Therm – L – Lite FM

Manufacturer:

Federal-Mogul Corporation
26555 Northwestern Highway
Southfield, MI 48033

MSDS# BH-078

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

International: 001-352-323-3500

Non-Emerg #: 248-354-9844

SECTION 2: COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Therm-L-Lite FM is a lightweight, aluminized foam sleeving used to protect components in high temperature areas. An aluminized heat seal film is laminated to a tubular extruded foam substrate to provide an excellent barrier to radiant heat, and insulator to keep internal components cool.

Constructed of PVC nitrile (high density, closed cell foam) with a double metallized polyester film, Therm-L-Lite FM products provide radiant heat protection to temperatures of 700°F and are available in both 6mm and 9mm wall thicknesses.

The smooth outer surface of Therm-L-Lite FM provides component protection from extreme radiated heat as well as abrasion. While designed to protect hoses and pipes from the effects of radiant heat, Therm-L-Lite FM also provides superior fluid resistance. Therm-L-Lite FM is ideal for refrigerant and in air conditioning systems.

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
PVC/NBR Elastomeric Foam	None Established	92	None Established	None Established
Aluminum Film	None Established	8	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:

Inhalation of dust may cause moderate respiratory irritation.

Skin:

Dust may cause skin irritation.

Eye:

Dust particles may cause irritation due to mechanical action.

Ingestion:

No adverse effects are anticipated by this route of exposure.

Carcinogenicity:

	COMPONENT NTP IARC OSHA
PVC/NBR Elastomeric Foam	No No No
Aluminum Film	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:	Flush with water for 15 minutes. If irritation persists, seek medical attention.
Skin Contact:	Wash thoroughly with soap and water. If irritation persists, seek medical attention.
Ingestion:	Not a probable route of entry. Seek medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Material is self-extinguishing.

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

Extinguishing Media: Use media suitable for surrounding fire. Water, CO₂, dry chemical, foam.

Unusual Fire and Explosion Hazards: None

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Practice good housekeeping procedures since material can cause a slipping hazard on wet or waxed floors.

SECTION 7: HANDLING AND STORAGE

Avoid storage in confined areas where temperatures may exceed 105°F.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Protection: Local exhaust ventilation is recommended if airborne dust, fumes or vapors exist in confined areas.

Respiratory Protection: 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: If skin irritation occurs, gloves and other protective garments may be worn.

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:	N/A	Vapor Density (air = 1):	N/A
pH:	N/A	% Volatile:	N/A
Specific Gravity:	N/A	Evaporation Rate:	N/A
Water Solubility:	Insoluble	Form, Color and Odor:	Tubular, aluminum, negligible 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:	Upon combustion, hydrogen chloride, hydrogen cyanide and other hazardous gases may be present.

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 by these modes of transportation
Hazard Class:	None
Identification Number:	None
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
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	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
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
NIOSH:	National Institute for Occupational Safety and Health

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