



MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: ReflectShield 1488

Manufacturer Name:

Federal-Mogul World Headquarters
26555 Northwestern Highway
Southfield, Michigan 48033
USA

Emergency Telephone:

24hr EP (INFOTRAC): 1-800-535-5053
International: (001) 352-323-3500

Non-emergency Telephone:

1-248-354-9844

Intended Use: Textile Sleeving

Contact Person:

MSDS Request (voicemail) 1-248-354-9844

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Textile Sleeving

Color: Aluminum and black

Odor: Odorless

Under normal conditions of processing and use, exposure to the chemical constituents in this product is unlikely. Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.

Potential Health Effects

Inhalation: Not relevant, due to the form of the product.

Eye Contact: No adverse effects due to eye contact are expected.

Skin Contact: No adverse effects due to skin contact are expected.

Ingestion: Not relevant, due to the form of the product.

Chronic Health Effects: Not relevant, due to the form of the product.

Potential Physical / Chemical Effects: This product is not flammable. Will burn if involved in a fire.

OSHA Regulatory Status: This product is not hazardous according to OSHA 29CFR 1910.1200.

Environment: The product is not expected to be hazardous to the environment.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration*
†Glass fiber	65997-17-3	34 - 38%
†Aluminum Foil	Proprietary	3 - 3.4%
†Poly (p-phenylenediamine terephthalamide)	26125-61-1	0.6 - 1%

* All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

† This chemical is hazardous according to OSHA/WHMIS criteria.

4 FIRST AID MEASURES

Inhalation: No specific first aid measures noted.

Eye Contact: No specific first aid measures noted. However, immediately flush with plenty of water for at least 15 minutes.

Skin Contact: No adverse effects due to skin contact.

Ingestion: No adverse effects due to ingestion are expected.

5 FIRE-FIGHTING MEASURES

Extinguishing Media: This product is not flammable. Will burn if involved in a fire. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media: None.

Special Fire Fighting Procedures: Use standard firefighting procedures and consider the hazards of other involved materials.

Unusual Fire & Explosion Hazards: Material is above its flash point in molten state. Flammable vapors can accumulate before the material reaches its melting point.

Hazardous Combustion Products: Aluminum oxides, Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides

Protective Measures: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes. See Section 8 of the MSDS for Personal Protective Equipment.

Spill Cleanup Methods: Collect and dispose of spillage as indicated in section 13 of the MSDS.

Environmental Precautions: No specific precautions.

7	HANDLING AND STORAGE
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Handling: Normal handling and use of this product should not generate dust or fumes. Observe good industrial hygiene practices.

Storage: Store in closed original container in a dry place.

8	EXPOSURE CONTROLS / PERSONAL PROTECTION
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Exposure Limits:

Chemical Name	Source	Type	Exposure Limits	Notes
Aluminum Foil (Respirable fraction.)	US. ACGIH TLV	TWA	1 mg/m ³	as Al
Aluminum Foil (Total dust.)	US. OSHA Z-1 PEL	TWA	5 mg/m ³	as Al
Aluminum Foil (Respirable fraction.)	US. OSHA Z-1 PEL	TWA	15 mg/m ³	as Al
Glass fiber (Inhalable fraction.)	US. ACGIH TLV	TWA	5 mg/m ³	
Glass fiber	US. NIOSH Guide	IDLH	-	

Consult Canadian Provincial Regulations and/or Mexican Regulations on exposure limits, if applicable.

Engineering Controls: Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes. No special control measures are required for the normal handling and dispensing of this medication.

Respiratory Protection: No protection is ordinarily required under normal conditions of use and with adequate ventilation.

Eye Protection: No special precautions.

Hand Protection: It is a good industrial hygiene practice to minimize skin contact.

Skin Protection: No skin protection is ordinarily required under normal conditions of use.

Hygiene Measures: Wash hands after contact.

9	PHYSICAL AND CHEMICAL PROPERTIES
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Color: Aluminum and black

Odor: Odorless

Odor Threshold: No data available.

Physical State: Textile Sleeving

pH: Not applicable

Melting Point: No data available.

Freezing Point: No data available.

Boiling Point: Not applicable.

Flash Point: Not applicable.

Evaporation Rate: No data available.

Flammability Limit - Upper (%): Not applicable.

Flammability Limit - Lower (%): Not applicable.

Vapor Pressure: Not applicable.

Vapor Density (Air=1): Not applicable.

Specific Gravity: Not applicable.
Solubility in Water: Not applicable.
Solubility (Other): No data available.
Partition Coefficient (n-Octanol/water): No data available.
Autoignition Temperature: Not applicable.
Decomposition Temperature: No data available.
Volatile Organic Compounds (VOC): Not applicable.
Viscosity: Not applicable.
Explosive Properties: No data available

10	STABILITY AND REACTIVITY
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Stability: Stable under normal temperature conditions and recommended use.

Conditions to Avoid: No special precautions.

Incompatible Materials: No data available.

Hazardous Decomposition Products:

At Elevated Temperatures:	Aluminum oxides, Carbon Dioxide, Carbon Monoxide, Nitrogen Oxides
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Possibility of Hazardous Reactions: Will not occur.

11	TOXICOLOGICAL INFORMATION
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Specified Substance(s)

Acute Toxicity:

Test Results: No test data available for the ingredients.

Listed Carcinogens:

Chemical Name	IARC	NTP	OSHA	ACGIH
Glass fiber	Not Listed	Not Listed	Not Listed	A4
Poly (p-phenylenediamine terephthalamide)	3	Not Listed	Not Listed	Not Listed

IARC: 1 = Carcinogenic to Humans; 2A = Probably Carcinogenic to Humans; 2B = Possibly Carcinogenic to Humans; 3 = Not classifiable as to carcinogenicity to humans; 4 = Probably not carcinogenic to humans; Not listed = Not evaluated by IARC.

ACGIH: A1 = Confirmed Human Carcinogen; A2 = Suspected Human Carcinogen; A3 = Confirmed Animal Carcinogen; A4 = Not classifiable as a human carcinogen; A5 = Not suspected to be a human carcinogen; Not listed = Not evaluated by ACGIH.

Product Information

Acute Toxicity:

Test Results: No test data available for the product.

Other Acute: Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.

Chronic Toxicity: Not relevant, due to the form of the product.

12 ECOLOGICAL INFORMATION

Ecotoxicity: The product is not expected to be hazardous to the environment.

Mobility: Not relevant, due to the form of the product.

Persistence and Degradability: Not relevant.

Bioaccumulation Potential: Not relevant.

13 DISPOSAL CONSIDERATIONS

General Information: Dispose of waste and residues in accordance with local authority requirements.

Disposal Methods: Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

14 TRANSPORT INFORMATION

DOT Not regulated.

TDG Not regulated.

IATA Not regulated.

IMDG Not regulated.

15 REGULATORY INFORMATION

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS Classification: This is not a WHMIS controlled product.

Mexican Dangerous Statement: This product is not dangerous according to Mexican regulations.

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): Not regulated.

SARA Title III

Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A): Not regulated.

Section 311/312 (40 CFR 370):

☐ Acute (Immediate) ☐ Chronic (Delayed) ☐ Fire ☐ Reactive ☐ Pressure Generating

Section 313 Toxic Release Inventory (40 CFR 372):

Chemical Name	CAS-No.	Reporting threshold for other users	Reporting threshold for manufacturing and processing
Aluminum (Fume or dust)	Proprietary	10000 lbs	25000 lbs

For reporting purposes: the De Minimis Concentration for a toxic chemical in a mixture is 0.1% for carcinogens as defined in 29 CFR 1910.1200(d)(4) or 1% for others.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Not regulated.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Not regulated.

Drug Enforcement Act: Not regulated.

TSCA

TSCA Section 4(a) Final Test Rules & Testing Consent Orders: Not regulated.

TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E): Not regulated.

TSCA Section 5(e) PMN-Substance Consent Orders: Not regulated.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): Not regulated.

Massachusetts Right-To-Know List: Aluminum Foil; Glass fiber

Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)): Not regulated.

Minnesota Hazardous Substances List: Aluminum Foil; Glass fiber

New Jersey Right-To-Know List: Aluminum Foil; Glass fiber

Pennsylvania Right-To-Know List: Aluminum Foil; Glass fiber

Rhode Island Right-To-Know List: Glass fiber

16	OTHER INFORMATION
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HAZARD RATINGS

	Health Hazard	Fire Hazard	Instability	Special Hazard
NFPA	0	0	0	0

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Label colored diamond code: Blue - Health; Red - Flammability; Yellow - Instability; White - Special Hazards

	Health Hazard	Flammability	Physical Hazard	Personal Protection
HMIS	0	0	0	NONE

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

HMIS Label colored bar code: Blue - Health; Red - Flammability; Orange - Physical Hazards; White - Special

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Supersedes Date:

SDS No.: ReflectShield 1488 _NA

Disclaimer: The information provided on this data sheet was abstracted from supplier material safety data sheets and standard references in occupational health and toxicology. Federal-Mogul makes no representation or warranty with respect to the information obtained from such references. The information is however, as of the date provided, true and accurate to the best of Federal-Mogul's knowledge, and should be used to make an independent determination of the methods to safeguard workers and the environment.