



MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: Roundit EMI FMJ

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 Sleaving

Contact Person:

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

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Textile Sleaving

Color: Light gray

Odor: Odorless

WARNING!

May cause allergic skin reaction.

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: May cause allergic skin reaction. Workers allergic to nickel may develop eczema or rashes.

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

Chronic Health Effects: Nickel contact may cause sensitization and dermatitis. The solid material can burn if strongly heated. In case of inhalation of fumes from heated product: Suspect cancer hazard - may cause cancer. Chronic inhalation of metallic oxide dust/fume may cause metal fume fever.

Target Organ(s): | Skin |

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

OSHA Regulatory Status: This product is 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*
†Copper	7440-50-8	80 - 90%
†Nickel	7440-02-0	1 - 5%

* 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. If involved in a fire: Move injured person into fresh air and keep person calm under observation. Get medical attention immediately.

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

Skin Contact: Rinse immediately with plenty of water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

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: During fire, gases hazardous to health may be formed.

Hazardous Combustion Products: Metallic fumes

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

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin. 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. Avoid contact with skin. 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
Copper (Dust and mist.)	US. ACGIH TLV	TWA	1 mg/m ³	as Cu
Copper (Fume.)	US. ACGIH TLV	TWA	0.2 mg/m ³	
Copper	US. NIOSH Guide	IDLH	100 mg/m ³	
Copper (Fume.)	US. OSHA Z-1 PEL	TWA	0.1 mg/m ³	as Cu
Copper (Dust and mist.)	US. OSHA Z-1 PEL	TWA	1 mg/m ³	as Cu
Nickel (Inhalable fraction.)	US. ACGIH TLV	TWA	1.5 mg/m ³	as Ni
Nickel	US. NIOSH Guide	IDLH	10 mg/m ³	as Ni
Nickel	US. OSHA Z-1 PEL	TWA	1 mg/m ³	as Ni

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.

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

Eye Protection: No special precautions.

Hand Protection: Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

Skin Protection: No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

Hygiene Measures: Wash hands after contact.

9	PHYSICAL AND CHEMICAL PROPERTIES
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Color: Light gray

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: No data available.

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: Insoluble
Solubility (Other): No data available.
Partition Coefficient (n-Octanol/water): No data available.
Autoignition Temperature: No data available.
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:	Metallic fumes
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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
Nickel	2B	Listed	Not Listed	A5

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: May cause allergic skin reaction. Workers allergic to nickel may develop eczema or rashes.

Chronic Toxicity: The solid material can burn if strongly heated. In case of inhalation of fumes from heated product: Suspect cancer hazard - may cause cancer. Chronic inhalation of metallic oxide dust/fume may cause metal fume fever.

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: D2A, D2B

Mexican Dangerous Statement: This product is dangerous according to Mexican regulations.

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): For metals, the stated Reportable Quantity (RQ) applies to particles smaller than 100 micrometers.

Chemical Name	RQ
Copper	5000 lbs
Nickel	100 lbs

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
Nickel	7440-02-0	10000 lbs	25000 lbs
Copper	7440-50-8	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): Nickel

Massachusetts Right-To-Know List: Copper; Nickel

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

Minnesota Hazardous Substances List: Copper; Nickel

New Jersey Right-To-Know List: Copper; Nickel

Pennsylvania Right-To-Know List: Copper; Nickel

Rhode Island Right-To-Know List: Copper; Nickel

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OTHER INFORMATION**HAZARD RATINGS**

	Health Hazard	Fire Hazard	Instability	Special Hazard
NFPA	2	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	2*	0	0	B

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe * - Chronic Health Effect

Personal Protection codes: B - Safety Glasses, Gloves

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

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SDS No.: Roundit EMI FMJ _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.