

1. Product and Company Identification

Material name	Expando FR 9mil TW
Version #	01
Issue date	14-July-2014
Revision date	-
Supersedes date	-
CAS #	Mixture
Product use	Protective Sleeving.
Manufacturer information	
Manufacturer/Supplier	Federal-Mogul World Headquarters 26555 Northwestern Highway Southfield, Michigan 48033 USA
Contact person:	msds.request@federalmogul.com
Emergency Telephone:	24hr EP (INFOTRAC): 1-800-535-5053 International: (001) 352-323-3500

2. Hazards Identification

Physical state	Solid.
Appearance	Solid (Sleeve).
Emergency overview	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.
OSHA regulatory status	This product is not hazardous according to OSHA 29CFR 1910.1200.
Potential health effects	
Routes of exposure	Not relevant, due to the form of the product in its manufactured and shipped state.
Eyes	No adverse effects due to eye contact are expected.
Skin	No adverse effects due to skin contact are expected.
Inhalation	No adverse effects due to inhalation are expected.
Ingestion	Not relevant, due to the form of the product.
Chronic effects	Not relevant, due to the form of the product.
Signs and symptoms	Not relevant, due to the form of the product.
Potential environmental effects	Not relevant, due to the form of the product in its manufactured and shipped state.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Composition comments	This product does not generate dust when used as intended.
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4. First Aid Measures

First aid procedures	
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.
Inhalation	No specific first aid measures noted.
Ingestion	No adverse effects due to ingestion are expected.
Notes to physician	Treat symptomatically.
General advice	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties	This product is not flammable. May ignite at high temperature.
Extinguishing media	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None.
Protection of firefighters	
Specific hazards arising from the chemical	By heating and fire, toxic vapors/gases may be formed.
Protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Hazardous combustion products	Carbon monoxide and carbon dioxide.

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.
Environmental precautions	No special environmental precautions required.
Methods for containment	Collect and dispose of spillage as indicated in Section 13 of the MSDS.
Methods for cleaning up	No specific precautions.

7. Handling and Storage

Handling	Normal handling and use of this product should not generate dust or fumes. The intended use of this product does not include its milling, grinding or saw cutting. Observe good industrial hygiene practices.
Storage	Store in closed original container in a dry place. Store away from incompatible materials.

8. Exposure Controls / Personal Protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Engineering controls	Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.
Personal protective equipment	
Eye / face protection	No special precautions.
Skin protection	No skin protection is ordinarily required under normal conditions of use.
Respiratory protection	No protection is ordinarily required under normal conditions of use and with adequate ventilation.
Hand protection	No protection is ordinarily required under normal conditions of use. It is a good industrial hygiene practice to minimize skin contact.
General hygiene considerations	Wash hands after handling.

9. Physical & Chemical Properties

Appearance	Solid (Sleeve).
Physical state	Solid.
Form	Solid.
Color	Black with white tracer or white with black tracer.
Odor	Odorless.
Odor threshold	Not applicable.
pH	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Boiling point	Not applicable.

Melting point/Freezing point	482 °F (250 °C)
Solubility (water)	Insoluble in water.
Specific gravity	Not applicable.
Flash point	698.0 °F (370.0 °C)
Flammability limits in air, upper, % by volume	Not applicable.
Flammability limits in air, lower, % by volume	Not applicable.
Auto-ignition temperature	932 °F (500 °C)
Viscosity	Not applicable.
Bulk density	830 kg/m3
Other data	
Decomposition temperature	> 662 °F (> 350 °C)

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	None known.
Incompatible materials	None known.
Hazardous decomposition products	Thermal decomposition of this product can generate carbon monoxide and carbon dioxide.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Sensitization	Not a skin sensitizer.
Acute effects	Used as intended, this product is not expected to generate potentially hazardous quantities of dust or fumes.
Chronic effects	Not relevant, due to the form of the product.
Carcinogenicity	Not relevant, due to the form of the product.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Mutagenicity	Not relevant, due to the form of the product.
Reproductive effects	Not relevant, due to the form of the product.
Symptoms and target organs	Not relevant, due to the form of the product.
Further information	Not relevant, due to the form of the product.

12. Ecological Information

Ecotoxicity	Not relevant, due to the form of the product in its manufactured and shipped state.
Environmental effects	Not relevant, due to the form of the product in its manufactured and shipped state.
Aquatic toxicity	Not classified.
Persistence and degradability	Not relevant.
Bioaccumulation / accumulation	Not relevant.
Mobility in environmental media	Not relevant, due to the form of the product.
Other adverse effects	Not relevant.

13. Disposal Considerations

Disposal instructions	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.
Waste from residues / unused products	Dispose of waste and residues in accordance with local authority requirements.
Contaminated packaging	Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

TDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations This product is not hazardous according to OSHA 29CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15) Not controlled

Canadian 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 status Non-controlled

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 0
Flammability: 0
Physical hazard: 0

NFPA ratings**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.

Prepared by

Federal-Mogul World Headquarters