

1. Product and Company Identification

Material name ThermFlex 1210
Version # 01
Issue date 14-November-2013
Revision date -
Supersedes date -
CAS # Mixture
Product use Fiberglass Sleeve.
Manufacturer/Supplier Federal-Mogul World Headquarters
 26555 Northwestern Highway
 Southfield, Michigan 48033
 USA
 Contact Person: MSDS Request (voicemail) 1-248-354-9844

Emergency
 24hr EP (INFOTRAC): 1-800-535-5053
 International: (001) 352-323-3500
 Non-emergency Telephone: 1-248-354-9844

2. Hazards Identification

Physical state Solid.
Appearance Fiberglass 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

Components	CAS #	Percent
Fiberglass	65997-17-3	90-95
Carbon Black	1333-86-4	< 0.5

Composition comments This product does not generate dust when used as intended. Under normal processing conditions, carbon black is considered to be safe through encapsulation in the fiberglass sleeving.

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.
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 oxides.

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.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m ³	Inhalable fraction.
Fiberglass (CAS 65997-17-3)	TWA	1 fibers/cm ³	Fiber.
		5 mg/m ³	Inhalable fraction.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Carbon Black (CAS 1333-86-4)	PEL	3.5 mg/m ³

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m ³	
Fiberglass (CAS 65997-17-3)	TWA	0.2 fibers/cm ³	Fiber.
		5 mg/m ³	Total particulate.
		5 mg/m ³	Fiber, total

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable
Fiberglass (CAS 65997-17-3)	TWA	0.2 fibers/cm3	Fiber.
		5 mg/m3	Inhalable fibers.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Fiberglass (CAS 65997-17-3)	TWA	1 fibers/cm3	Fiber.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m3	
Fiberglass (CAS 65997-17-3)	TWA	1 fibers/ml	Respirable fibers.
		5 mg/m3	Inhalable

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3.5 mg/m3	
Fiberglass (CAS 65997-17-3)	TWA	1 fibres/cm3 (non-asbe 10 mg/m3	Fiber. Total dust.

Mexico. Occupational Exposure Limit Values

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	STEL	7 mg/m3	
	TWA	3.5 mg/m3	
Fiberglass (CAS 65997-17-3)	TWA	10 mg/m3	Dust.

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.

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.
General hygiene considerations	Wash hands after handling.

9. Physical & Chemical Properties

Appearance	Fiberglass Sleeve.
Physical state	Solid.
Form	Solid.
Color	Black.
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	2048 °F (1120 °C)
Solubility (water)	Insoluble in water.
Specific gravity	2.45
Flash point	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
Viscosity	Not applicable.
Other data	
Explosive properties	Not applicable.
Flammability (solid, gas)	Non flammable.
Oxidizing properties	Not applicable.

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	No special precautions.
Incompatible materials	Strong acids. Alkalies.
Hazardous decomposition products	Carbon dioxide. Carbon oxides.
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	Inhalation of black pigment dust may cause cancer, however due to the physical form of the product inhalation of dust is not relevant.

ACGIH Carcinogens

Carbon Black (CAS 1333-86-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Fiberglass (CAS 65997-17-3)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon Black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
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US NTP Report on Carcinogens: Anticipated carcinogen

Fiberglass (CAS 65997-17-3)	Reasonably Anticipated to be a Human Carcinogen.
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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	Under normal processing conditions, carbon black is considered to be safe through encapsulation in the textile sleeving.

12. Ecological Information

Ecotoxicity	Not relevant, due to the form of the product in its manufactured and shipped state.
Persistence and degradability	Not relevant.
Bioaccumulation / Accumulation	Not relevant.
Partition coefficient	Not applicable.

Mobility in environmental media Not relevant, due to the form of the product.

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

Section 302 extremely hazardous substance (40 CFR 355, Appendix A) No

SARA 311/312 Hazardous chemical No

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

Canadian regulations This product is not classified according to WHMIS classification criteria.

WHMIS status Non-controlled

Inventory status

Country(s) or region	Inventory name	On inventory (yes/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 WARNING: This product contains chemical(s) known to the State of California to cause cancer.

US - California Hazardous Substances (Director's): Listed substance

Carbon Black (CAS 1333-86-4) Listed.
Fiberglass (CAS 65997-17-3) Listed.

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

Carbon Black (CAS 1333-86-4) Listed.
Fiberglass (CAS 65997-17-3) Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Carbon Black (CAS 1333-86-4) Listed: February 21, 2003 Carcinogenic.
Fiberglass (CAS 65997-17-3) Listed: July 1, 1990 Carcinogenic.

US - New Jersey RTK - Substances: Listed substance

Carbon Black (CAS 1333-86-4) Listed.
Fiberglass (CAS 65997-17-3) Listed.

US. Massachusetts RTK - Substance List

Carbon Black (CAS 1333-86-4) Listed.
Fiberglass (CAS 65997-17-3) Listed.

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

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Carbon Black (CAS 1333-86-4) Listed.
Fiberglass (CAS 65997-17-3) Listed.

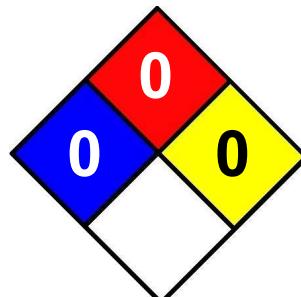
16. Other Information

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.