

Plas-Fil Polyester Repair Material

Section 1 Identification

Product identifiers

Product name: Plas-Fil Polyester Repair Material

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Polyester repair material

Details of the supplier of the safety data sheet

Freeman Manufacturing and Supply Company
 1101 Moore Road, Avon, OH 44011
 Phone (440) 934-1902
 FAX (440) 934-7200

HMIS	
H	3
F	2
R	1
PPE	
Sec. 8	

24 Hour Emergency Phone Number: (800) 424-9300

Section 2 Hazards Identification

GHS classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

- Flammable Liquids, Category 3
- Skin Corrosion/Irritation, Category 2
- Serious Eye Damage/Irritation, Category 2
- Carcinogenicity, Category 1B
- Reproductive Toxicity, Category 2
- Specific Target Organ Toxicity (Repeated Exposure), Category 1

Hazard pictograms:



Signal word: Danger

Hazard statements

- Flammable liquid and vapor
- Causes skin irritation
- Causes serious eye irritation
- May cause cancer
- Suspected of damaging fertility or the unborn child
- Causes damage to organs (hearing organs) through prolonged or repeated exposure.

Precautionary statements

Prevention

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- Keep container tightly closed when not in use.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools. Take precautionary measures against static discharge.
- Do not breathe fumes or vapors. Use only in a well-ventilated area.

Plas-Fil Polyester Repair Material

Section 2 Hazards Identification continued

Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Avoid release to the environment.

Response

If on skin: Immediately remove all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

If inhaled: Remove person to fresh air and call doctor/physician if not feeling well.

If in eyes: Rinse continuously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. If eye irritation persists: Get medical advice/attention.

If ingested: Do not induce vomiting. Get medical advice/attention.

Storage

Store in a well-ventilated place. Keep container cool and tightly closed.

Disposal

Dispose of contents and container to an appropriate waste site in accordance with local and national regulations.

Other hazards

None known

Unknown Acute Toxicity

0% of the mixture consists of ingredients of unknown toxicity.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
Styrene	100-42-5	10-25
N,N-Dimethylaniline	121-69-7	0.3-1

Section 4 First Aid Measures

Inhalation: Remove source(s) of contamination and move victim to fresh air. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact physician if you feel unwell.

Eye Contact: Flush eyes with plenty of water. If irritation persists, seek medical attention.

Skin Contact: In case of skin contact, wash thoroughly with soap and water. If irritation persists, get medical assistance.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately

Section 5 Fire-Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

Do not use strong water jet

Specific hazards arising from the chemical

Burning produces heavy smoke. Fire may produce irritating and/or toxic gases.

In the event of fire and/or explosion do not breathe fumes.

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Section 5 Fire-Fighting Measures continued

Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use water spray to cool fire-exposed surfaces and to protect personnel. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors or mists. Remove all sources of ignition. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Take precautionary measures against static discharges. For personal protection see section 8.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

Section 7 Handling and Storage

Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Do not breathe fumes or vapor. Use only in well-ventilated areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

Conditions for safe storage

Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep tightly closed in a dry and cool place.

Incompatible materials

Strong bases. Strong oxidizing agents. Acids. Alkali.

Plas-Fil Polyester Repair Material

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Component	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
Styrene	50 ppm	100 ppm	20 ppm	40 ppm
N,N-Dimethylaniline	5 ppm	10 ppm	5 ppm	10 ppm

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. An eye wash station and safety shower should be located near the workstation.

Personal protective equipment

Eye/face protection

With product at ambient temperatures, use safety glasses equipped with side shields.

Hand Protection

With product at ambient temperatures, wear any liquid-tight gloves such as butyl rubber, neoprene or PVC. Contaminated gloves should be replaced.

Body Protection

Prevent skin contact when handling material

Respiratory Protection

If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

General Hygienic Practices

Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling. Remove contaminated clothing promptly and clean thoroughly before reuse.

Section 9 Physical and Chemical Properties

Appearance	Grey paste/gel
Odor	Aromatic/styrene
Odor threshold	No data available
pH	Not applicable
Melting point/Freezing point	No data available
Initial boiling point/boiling range	No data available
Flash point	104°F (40°C)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability	No data available
Vapor pressure	No data available
Vapor density	No data available
Density (lb. per gallon)	9.39
Specific gravity	1.13
Solubility	No data available
Coefficient: n-octanol/ water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
% Volatile (estimated)	19

Plas-Fil Polyester Repair Material

Section 10 Stability and Reactivity

Reactivity: No data available
Chemical stability: These products are stable under recommended storage conditions
Possibility of hazardous reactions: None
Conditions to avoid: Heat, sparks, open flames
Incompatible materials: Bases, Strong oxidizing agents, Acids, Alkali
Hazardous decomposition products: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Hydrocarbons

Section 11 Toxicological Information

Information on toxicological effects

Acute oral toxicity	LD50 (Rat) 28,330 mg/kg (calculated)
Acute inhalation toxicity	LC50 (Rat) 7.9 mg/L, 4 hours (calculated)
Acute dermal toxicity	LD50 (Rat) 84,989 mg/kg (calculated)
Skin corrosion/irritation	Causes skin irritation
Serious eye damage/eye irritation	Causes serious eye irritation
Respiratory or skin sensitization	May cause sensitization
Germ cell mutagenicity	No data available
Carcinogenicity	
IARC:	Group 2B: Possibly carcinogenic to humans (Styrene)
NTP:	Reasonably Anticipated to be a Human Carcinogen (Styrene).
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity	Suspected of damaging fertility or the unborn child
Specific target organ toxicity	
- single exposure	Possible respiratory tract irritation
Specific target organ toxicity	
- repeated exposure	A study of long term effects of workers exposed to styrene levels in the range of 25-35 ppm, 8 hour TWA, indicated a possible mild hearing loss.
Aspiration hazard	May be fatal if swallowed or enters airways

Section 12 Ecological Information

Ecotoxicity	Toxic to aquatic life with long lasting effects.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT & vPvB assessment	No data available
Other Adverse Effects	No data available

Section 13 Disposal Considerations

Use safety containers for disposal. Contact a licensed contractor for detailed recommendations. Follow applicable Federal, State, and local regulations.

Section 14 Transport Information

DOT: Shipping Name: Resin solution
Hazard Class: COMBUSTIBLE LIQUID
ID No.: UN 1866
Packing Group: III

IATA: Shipping Name: Resin solution
Hazard Class: 3
ID No.: UN 1866
Packing Group: III


IMDG: Shipping Name: Resin solution
Hazard Class: 3
ID No.: UN 1866
Packing Group: III

Section 15 Regulatory Information

US Federal Regulations

TSCA Inventory Status: All ingredients listed on the Toxic Substance Control Act Inventory
SARA 311/312: Acute Health Hazard, Chronic Health Hazard, Fire Hazard, Reactive Hazard
SARA 313 Toxic Chemicals (40 CFR 372.65): Styrene 100-42-5, CERCLA RQ – 1000 lb.

US State Regulations

California Proposition 65:  WARNING: This product can expose you to chemicals including styrene, which is known to the State of California to cause cancer.
For more information, go to www.P65Warnings.ca.gov.
U.S. State Right-to-Know Regulations: Styrene CAS 100-42-5, Magnesium carbonate CAS 546-93-0, Limestone CAS 1317-65-3, N,N-Dimethylaniline CAS 121-69-7

Section 16 Other Information

Disclaimer

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

Section 1 Identification

Product identifiers

Product name: Cream Hardener Red

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Paint-related material for industrial use only

Details of the supplier of the safety data sheet

Freeman Manufacturing and Supply Company
 1101 Moore Road, Avon, OH 44011
 Phone (440) 934-1902
 FAX (440) 934-7200

HMIS	
H	2
F	1
R	1
PPE	
Sec. 8	

24 Hour Emergency Phone Number: (800) 424-9300

Section 2 Hazards Identification

GHS classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

Serious eye damage/eye irritant, Category 2
 Skin Sensitization, Category 1
 Organic peroxides, Type E

Hazard pictograms:



Signal word: Warning

Hazard statements

Heating may cause a fire
 Causes serious eye irritation
 May cause an allergic skin reaction

Precautionary statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling.
 Avoid breathing dust/fume/gas/mist/vapors/spray.
 Contaminated work clothing should not be allowed out of the workplace.
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Keep/Store away from clothing/ combustible materials.
 Keep only in original container.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Do not eat, drink or smoke when using this product.

Response

Get medical advice/attention if you feel unwell.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Section 2 Hazards Identification continued

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
 IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
 IF SWALLOWED: Do NOT induce vomiting.
 Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

Store in a well-ventilated place. Keep cool. Protect from sunlight. Store away from other materials.

Disposal

Dispose of contents/containers in accordance with local regulations.

Hazards Not Otherwise Classified (HNOC)

No information available.

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Concentration (%)
Dibenzoyl peroxide	94-36-0	25 - 50
Benzoic acid, C9-11-branched alkyl esters	131298-44-7	10 - 25
Zinc stearate	557-05-1	3 - 5

Section 4 First Aid Measures

General advice

Get medical advice/attention if you feel unwell.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation

Call a POISON CENTER or doctor if you feel unwell.

Ingestion

Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

No specific data.

Notes to physician: Symptomatic treatment and supportive therapy as indicated.

Section 5 Fire-Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

Do not use strong water jet

Section 5 Fire-Fighting Measures continued

Specific hazards arising from the chemical

Burning produces heavy smoke. Fire may produce irritating and/or toxic gases. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by skin contact.

Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use water spray to cool fire-exposed surfaces and to protect personnel. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid breathing vapors or mists. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Dam up. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Take up mechanically, placing in appropriate containers for disposal. Contain and collect spillage with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Section 7 Handling and Storage

Precautions for safe handling

Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Use only with adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials

Strong oxidizing agents. Acids.

Section 8 Exposure Controls/Personal Protection

Component(s) with workplace control parameters

Component	OSHA		ACGIH	
	PEL	STEL	TWA	STEL
Dibenzoyl peroxide	5 mg/m ³	None established	5 mg/m ³	None established

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits. An eye wash station and safety shower should be located near the workstation.

Personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Hand Protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical / chemical damage and poor maintenance. Wear protective gloves.

Body Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory Protection

If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

General Hygienic Practices

Avoid contamination of food, beverages, or smoking materials. Wash thoroughly after handling. Remove contaminated clothing promptly and clean thoroughly before reuse.

Section 9 Physical and Chemical Properties

Appearance	Red paste/solid
Odor	Mild
Odor threshold	No data available
pH	Not applicable
Melting Point/Freezing Point	No data available
Initial boiling point/boiling range	No data available
Flash Point	201°F (94°C)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability	No data available
Vapor pressure	No data available
Vapor density	No data available

Section 9 Physical and Chemical Properties continued

Density (lb. per US gallon)	10
Specific gravity	1.20
Solubility	No data available
Coefficient: n-octanol/ water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
% Volatile	No data available

Section 10 Stability and Reactivity

Reactivity
 No information available

Chemical stability
 Stable under recommended storage conditions

Possibility of hazardous reactions
 None under normal processing

Conditions to avoid
 Heat, flames and sparks

Incompatible materials
 Strong oxidizing agents, acids

Hazardous decomposition products
 Carbon monoxide, carbon dioxide, oxides of sulfur

Section 11 Toxicological Information

Information on likely routes of exposure

Eye contact Causes serious eye irritation

Skin Contact May cause an allergic skin reaction

Ingestion No data available

Inhalation No data available

Information on toxicological effects

Acute toxicity: No data available

Skin corrosion/irritation: May cause irritation

Serious eye damage/eye irritation: Causes serious eye irritation

Skin sensitization: May cause an allergic skin reaction

Respiratory sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Specific target organ toxicity (single exposure): No data available

Specific target organ toxicity (repeated exposure): No data available

Aspiration hazard: No data available

Section 12 Ecological Information

Ecotoxicity

Environmental precautions	Prevent product from entering drains.
Marine pollutant	This material meets the definition of a marine pollutant

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT & vPvB assessment

No data available

Section 13 Disposal Considerations

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal. Empty containers must be scrapped or reconditioned.

Section 14 Transport Information

DOT: Shipping Name: Organic peroxide type E, solid (Dibenzoyl peroxide)
 Hazard Class: 5.2
 ID No.: UN 3108
 Packing Group: II

IATA: Shipping Name: Organic peroxide type E, solid (Dibenzoyl peroxide)
 Hazard Class: 5.2
 ID No.: UN 3108
 Packing Group: II

IMDG: Shipping Name: Organic peroxide type E, solid (Dibenzoyl peroxide)
 Hazard Class: 5.2
 ID No.: UN 3108
 Packing Group: II

The supplier may apply one of the following exceptions: Combustible Liquid (49 CFR 173.150(f)); Consumer Commodity (49 CFR 173.150(c), ICAO/IATA SP A112); Limited Quantity (49 CFR 173.150(b), ICAO Part 3 Chapter 4, IATA 2.7, IMDG Chapter 3.4); Viscous Liquid (49 CFR 173.121(b), IMDG 2.3.2.2, IATA 3.3.3.1.1, ICAO 3.2.2, ADR 2.2.3.1.5); Does Not Sustain Combustion (49 CFR 173.120(a), IATA 3.3.1.3, ICAO 3.1.3, IMDG 2.3.1.3, ADR 2.2.3.1.1 Note 1); or others as allowed under hazardous materials/dangerous goods regulations.

Section 15 Regulatory Information

US Federal Regulations

TSCA Inventory Status: All ingredients listed on the Toxic Substance Control Act Inventory
 CERCLA/SARA 311/312: Acute Health Hazard, Chronic Health Hazard, Reactive Hazard
 CERCAL/SARA 313: Dibenzoyl peroxide, CAS 94-36-0, 25-50%,
 Zinc stearate, CAS 557-05-1, 3-5%

Section 15 Regulatory Information continued

US State Regulations

California Proposition 65

This product is not known to contain any chemicals known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

U.S. State Right-to-Know Regulations

Dibenzoyl peroxide CAS 94-36-0, Benzoic acid, C9-11-branched alkyl esters CAS 131298-44-7, Zinc stearate CAS 557-05-1, Calcium sulfate CAS 7778-18-9

Section 16 Other Information

Disclaimer

The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict of liability arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.