

Section 1 Chemical Product and Company Identification

Product Name

Freeman 805 Aluminum-Filled Epoxy Casting System, Part A (Resin)

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

Epoxy constituent. For Industrial Use Only.

Details of the supplier of the safety data sheet

Freeman Manufacturing & Supply Company

1101 Moore Road, Avon, OH 44011

Telephone: (440) 934-1902

Email: contactus@freemansupply.com

24 Hour Emergency Telephone Number

CHEMTREC: (800) 424-9300

Section 2 Hazards Identification

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

Eye Irritation, Category 2A

Skin Irritation, Category 2

Skin Sensitization, Category 1

Acute Toxicity, Oral, Category 4

Specific Target Organ Toxicity (Single Exposure) (Respiratory Tract), Category 3

GHS Label elements, including precautionary statements



Warning

Hazard Statements

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

Harmful if swallowed.

Precautionary Statements

Prevention: Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Avoid breathing dust, fume, gas, mist, vapors, or spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection/clothing. Do not allow contaminated work clothing to leave the workplace.

Response: If swallowed: Rinse mouth. Call poison center or doctor if you feel unwell. **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 in eyes:** Rinse continuously with water for at least 15 minutes. Remove contact lenses, if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention. **If inhaled:** Remove person to fresh air and get medical attention if ill or concerned.

Storage: Store in a well-ventilated place. Store locked up. Keep container tightly closed when not in use.

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

Freeman 805 Part A (Resin)

Section 3 Composition/Information on Ingredients

Mixture

Chemical Name	CAS Number
Epoxy Resin	25068-38-6
Epoxy Diluent	17557-23-2
Aluminum	7429-90-5
Barium Sulfate	7727-43-7

There are no additional ingredients present which within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4 First Aid Measures

Description of first aid measures

If inhaled: Move person into fresh air. If you feel unwell, get medical attention.

In case of skin contact: Immediately wash off with soap and plenty of water.

Remove contaminated clothing and wash before reuse. Get medical attention if irritation/rash occur.

In case of eye contact: Flush eyes with water for at least 15 minutes. Remove contact lenses if easy to do and continue rinsing. Get medical attention if irritation develops.

If swallowed: Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel.

Get medical help if you feel unwell.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5 Fire Fighting Measures

Suitable extinguishing media

Use water for or fine spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Foam or alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams or proteins may function but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.

Unsuitable extinguishing media

Direct heavy water stream may spread fire.

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, or halogenated compounds.

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Special protective equipment for fire-fighters

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Freeman 805 Part A (Resin)

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

Methods and materials for containment and cleaning up

Move containers from spill area. Absorb with an inert dry material until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Place in an appropriate waste disposal container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/ international regulations. For larger spills, dispose of via a licensed waste disposal contractor. Remove residual with soap and hot water. Solvents are not recommended for clean-up unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed.

Section 7 Handling and Storage

Precautions for safe handling

For industrial/occupational use only. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (e.g. chlorine, chromic acid etc.)

Conditions for safe storage

For safe storage, store at or below 72°F (22°C). Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store locked up.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

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. If ventilation is not adequate, use respiratory protection equipment.

Personal protective equipment

Eye/face protection: Use safety glasses equipped with side shields. Use chemical goggles if there is a risk of splashing.

Hand Protection: The glove material must be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given. Contaminated gloves should be replaced.

Body Protection: Prevent skin contact when handling material.

Respiratory Protection: The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, use a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter.

Safety Stations

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General Hygienic Practices

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

Freeman 805 Part A (Resin)

Section 9 Physical and Chemical Properties

Appearance	Gray liquid	Vapor Pressure at 72 °F	<1 mm Hg
Odor	Mild	Vapor Density (air = 1)	No data available
Odor Threshold	No data available	Specific Gravity	1.64
pH	No data available	Relative Density at 72 °F	13.64 lb./gal.
Melting Point	No data available	Water Solubility	Slight
Boiling Point	>400°F	Coefficient: n-octanol/ water	No data available
Flash Point	>300°F	Auto-ignition temperature	No data available
Evaporation Rate	No data available	Viscosity	No data available
Flammability (solid, gas)	No data available	Percent Solids	100%
Upper/lower flammability	No data available	VOC	0 g/L

Section 10 Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Hazardous reactions: Under normal conditions of storage and use, hazardous reactions should not occur.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should be produced.

Dangerous reactions: In normal storage hazardous reaction will not occur, reacts with amines.

Incompatible materials: Keep away from strong oxidizing agents. Avoid contact with Acids, Bases, or unintended contact with amines.

Reactivity: Not available.

Conditions to avoid: Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe this precaution may result in excessive heat build-up causing exotherm.

Section 11 Toxicological Information

Inhalation:	May cause respiratory tract irritation. Adverse symptoms may include respiratory tract irritation/coughing.
Skin contact:	This product may cause irritation to the skin. May cause an allergic skin reaction.
Eye contact:	Adverse symptoms may include irritation, redness or rash. This product may cause serious eye irritation. Adverse symptoms may include pain, irritation, watering or redness.
Ingestion:	Irritating to mouth, throat and stomach. Adverse symptoms: No specific data.
Germ cell mutagenicity:	No data available
Carcinogenicity:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
Reproductive toxicity:	Not expected to be a hazard
Specific target organ toxicity	
- Single exposure:	No data available
- Repeated exposure:	No data available

Section 12 Ecological Information

Toxicity	No data available
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

Freeman 805 Part A (Resin)

Section 13 Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers retain some product residue. Avoid spilled material and/or runoff with contact in soil, waterways, drains and sewers.

Section 14 Transport Information

DOT/IMDG/IATA: Not Regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Section 15 Regulatory Information

Inventories

United States TSCA: All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

U.S. Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 Title III (SARA Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312: See Section 2

SARA Section 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

U.S. State Regulations

Pennsylvania Worker and Community Right-To-Know Act: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

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.

Date of Previous Revision: December 1, 2015

Section 1 Chemical Product and Company Identification

Product Name

Freeman 805 Aluminum-Filled Epoxy Casting System, Part B (Hardener)

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

Epoxy constituent. For Industrial Use Only.

Details of the supplier of the safety data sheet

Freeman Manufacturing & Supply Company

1101 Moore Road, Avon, OH 44011

Telephone: (440) 934-1902

Email: contactus@freemansupply.com

24 Hour Emergency Telephone Number

CHEMTREC: (800) 424-9300

Section 2 Hazards Identification

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

Eye Irritation, Category 2A

Skin Irritation, Category 2

Skin Sensitization, Category 1

Acute Toxicity, Oral, Category 4

Specific Target Organ Toxicity (Single Exposure) (Respiratory Tract), Category 3

GHS Label elements, including precautionary statements



Warning

Hazard Statements

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause respiratory irritation.

Harmful if swallowed.

Precautionary Statements

Prevention: Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Avoid breathing dust, fume, gas, mist, vapors, or spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection/clothing. Do not allow contaminated work clothing to leave the workplace.

Response: If swallowed: Rinse mouth. Call poison center or doctor if you feel unwell. 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 in eyes: Rinse continuously with water for at least 15 minutes. Remove contact lenses, if present and easy to do and continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and get medical attention if ill or concerned.

Storage: Store in a well-ventilated place. Store locked up. Keep container tightly closed when not in use.

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

Freeman 805 Part B (Hardener)

Section 3 Composition/Information on Ingredients

Mixture

Chemical Name	CAS Number	Composition %
Safety Adducted Modified Polyamine Epoxy Curing Agent	68610-56-0	90-100

There are no additional ingredients present which within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4 First Aid Measures

Description of first aid measures

If inhaled: Move person into fresh air. If you feel unwell, get medical attention.

In case of skin contact: Immediately wash off with soap and plenty of water.

Remove contaminated clothing and wash before reuse. Get medical attention if irritation/rash occur.

In case of eye contact: Flush eyes with water for at least 15 minutes. Remove contact lenses if easy to do and continue rinsing. Get medical attention if irritation develops.

If swallowed: Rinse mouth. Do not induce vomiting unless directed to do so by medical personnel. Get medical help if you feel unwell.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Section 5 Fire Fighting Measures

Suitable extinguishing media

Use water for or fine spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Foam or alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams or proteins may function but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.

Unsuitable extinguishing media

Direct heavy water stream may spread fire.

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide, carbon monoxide, or halogenated compounds.

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Special protective equipment for fire-fighters

Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Freeman 805 Part B (Hardener)

Section 6 Accidental Release Measures

Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

Methods and materials for containment and cleaning up

Move containers from spill area. Absorb with an inert dry material until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Place in an appropriate waste disposal container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/ international regulations. For larger spills, dispose of via a licensed waste disposal contractor. Remove residual with soap and hot water. Solvents are not recommended for clean-up unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed.

Section 7 Handling and Storage

Precautions for safe handling

For industrial/occupational use only. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (e.g. chlorine, chromic acid etc.)

Conditions for safe storage

For safe storage, store at or below 72°F (22°C). Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store locked up.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

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. If ventilation is not adequate, use respiratory protection equipment.

Personal protective equipment

Eye/face protection: Use safety glasses equipped with side shields. Use chemical goggles if there is a risk of splashing.

Hand Protection: The glove material must be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given. Contaminated gloves should be replaced.

Body Protection: Prevent skin contact when handling material.

Respiratory Protection: The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, use a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter.

Safety Stations

Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General Hygienic Practices

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

Freeman 805 Part B (Hardener)

Section 9 Physical and Chemical Properties

Appearance	Amber liquid	Vapor Pressure at 72 °F	<1 mm Hg
Odor	Mild	Vapor Density (air = 1)	No data available
Odor Threshold	No data available	Specific Gravity	1.01 ± 0.05
pH	No data available	Relative Density at 72 °F	8.40 lb./gal.
Melting Point	No data available	Water Solubility	Slight
Boiling Point	>500°F	Coefficient: n-octanol/ water	No data available
Flash Point	265°F	Auto-ignition temperature	No data available
Evaporation Rate	No data available	Viscosity	2,000 cP
Flammability (solid, gas)	No data available	% Solids	100%
Upper/lower flammability	No data available	VOC	0 g/L

Section 10 Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Hazardous reactions: Under normal conditions of storage and use, hazardous reactions should not occur.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should be produced.

Dangerous reactions: In normal storage hazardous reaction will not occur, reacts with amines.

Incompatible materials: Keep away from strong oxidizing agents. Avoid contact with Acids, Bases, or unintended contact with amines.

Reactivity: Not available.

Conditions to avoid: Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe this precaution may result in excessive heat build-up causing exotherm.

Section 11 Toxicological Information

Inhalation:	May cause respiratory tract irritation. Adverse symptoms may include respiratory tract irritation/coughing.
Skin contact:	This product may cause irritation to the skin. May cause an allergic skin reaction.
Eye contact:	Adverse symptoms may include irritation, redness or rash This product may cause serious eye irritation. Adverse symptoms may include pain, irritation, watering or redness.
Ingestion:	Irritating to mouth, throat and stomach. Adverse symptoms: No specific data.
Sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen.
Reproductive toxicity:	Not expected to be a hazard
Specific target organ toxicity	
- Single exposure:	No data available
- Repeated exposure:	No data available

Section 12 Ecological Information

Toxicity	No data available
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

Freeman 805 Part B (Hardener)

Section 13 Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers retain some product residue. Avoid spilled material and/or runoff with contact in soil, waterways, drains and sewers.

Section 14 Transport Information

DOT/IMDG/IATA: Not Regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

Section 15 Regulatory Information

Inventories

United States TSCA: All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

U.S. Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 Title III (SARA Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312: See Section 2

SARA Section 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

U.S. State Regulations

Pennsylvania Worker and Community Right-To-Know Act: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

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.

Date of Previous Revision: December 1, 2015