

**Section 1 Identification**

**Product identifiers**

Product name: Miapoxy 100 Resin

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

Identified uses: Epoxy constituent

**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

**24 Hour emergency telephone number: CHEMTREC (800) 424-9300**

HMIS	
H	2
F	1
R	0
PPE Sec. 8	

**Section 2 Hazards Identification**

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

Skin Corrosion/Irritation, Category 2  
 Serious Eye Damage/Eye Irritation, Category 2A  
 Skin Sensitization, Category 1  
 Acute Aquatic Toxicity, Category 2  
 Chronic Aquatic Toxicity, Category 2

**GHS Label elements, including precautionary statements**



**Signal word** Warning

**Hazard statements**

Causes serious eye irritation.  
 Causes skin irritation.  
 May cause an allergic skin reaction.  
 Toxic to aquatic life with long lasting effect.

**Precautionary statements**

**Prevention**

Avoid breathing dust/fume/gas/mist/vapour/spray.  
 Wash skin thoroughly after handling  
 Keep container tightly closed when not in use.  
 Avoid release to the environment.  
 Wear protective gloves/eye protection/face protection.  
 Do not eat, drink or smoke when using this product.

**Response**

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.  
 If eye irritation persists: Get medical advice/attention.

**Section 2 Hazards Identification** continued

**Storage**

Store in a well-ventilated place. Keep cool.

**Disposal**

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

**Hazards not otherwise classified (HNOC) or not covered by GHS**

None known

**Section 3 Composition/Information on Ingredients**

Ingredient Name	CAS Number	Concentration (%)
Bisphenol A Diglycidyl Ether Resin	1675-54-3	70-90
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	68609-97-2	10-20
4-tert-Butylphenyl glycidyl ether	3101-60-8	5-10

Both 25068-38-6 and 1675-54-3 can be used to describe the epoxy resin which is produced through the reaction of bisphenol A and epichlorohydrin

**Section 4 First-Aid Measures**

**If inhaled**

Move person into fresh air. Get medical attention if symptoms occur.

**In case of skin contact**

Wash off with soap and plenty of water. Get medical attention if skin irritation persists.

**In case of eye contact**

Immediately flush eyes with water for at least 15 minutes. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

**If swallowed**

Keep respiratory tract clear. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Provided the patient is conscious, wash out mouth with water. Get medical attention if symptoms appear.

**Most important symptoms and effects, both acute and delayed**

None known

**Notes to physician**

Treat symptomatically

**Section 5 Fire-Fighting Measures**

**Extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not use high volume water jet

**Hazardous combustion products**

Carbon dioxide, carbon monoxide and halogenated compounds.

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

Do not allow run-off from firefighting to enter drains or water courses.

Collect contaminated fire extinguishing water separately and dispose of in accordance with local regulations.

**Section 6 Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

For personal protection see section 8.

**Environmental precautions**

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

**Methods and materials for containment and cleaning up**

Contain and collect spillage with non-combustible absorbent material such as sand, earth, and vermiculite. Sweep up and place in suitable containers for disposal.  
Keep in suitable, closed containers for disposal.

**Section 7 Handling and Storage**

**Precautions for safe handling**

Do not breathe fumes or vapor. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers.

**Section 8 Exposure Controls/Personal Protection**

**Components with workplace control parameters**

Contains no substance with occupational exposure limit values.

**Exposure controls**

**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**

Wear safety goggles. Wear face-shield and protective suit for abnormal processing problems.

**Skin protection**

**Hand Protection**

The suitability for a specific workplace should be discussed with the producers of the protective gloves. Contaminated gloves should be replaced.

**Body Protection**

Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**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, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

**Section 8 Exposure Controls/Personal Protection continued**

**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.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Clear liquid
<b>Odor</b>	Slight epoxy-like
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting point</b>	No data available
<b>VOC Content</b>	No data available
<b>Initial boiling point &amp; boiling range</b>	No data available
<b>Flash point(estimated, closed cup)</b>	>93.33°C (>199.99°F)
<b>Evaporation rate</b>	<1
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/lower flammability</b>	No data available
<b>Vapor pressure</b>	<1.3 hPa (68°F)
<b>Vapor density</b>	No data available
<b>Relative density</b>	1.15
<b>Density</b>	1.1 g/cm <sup>3</sup>
<b>Water solubility</b>	Negligible
<b>Coefficient: n-octanol/ water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Viscosity, dynamic</b>	750 mPa (68°F)
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available

**Section 10 Stability and Reactivity**

**Reactivity**

No dangerous reaction known under conditions of normal use.

**Chemical stability**

Stable under recommended storage conditions

**Possibility of hazardous reactions**

None known

**Conditions to avoid**

None known

**Incompatible materials**

None known

**Hazardous decomposition products**

Carbon monoxide, carbon dioxide, and halogenated compounds

**Section 11 Toxicological Information**

**Information on toxicological effects**

<b>Acute oral toxicity</b>	No data available on the product itself
<b>Acute inhalation toxicity</b>	No data available on the product itself
<b>Acute dermal toxicity</b>	No data available on the product itself
<b>Skin corrosion/irritation</b>	Irritating to skin
<b>Serious eye damage/eye irritation</b>	Mild eye irritant
<b>Respiratory or skin sensitization</b>	May cause skin sensitization
<b>Germ cell mutagenicity</b>	No data available on product
<b>Carcinogenicity</b>	
<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP</b>	Talc, Known to be a human carcinogen by NTP. is identified as a known or anticipated carcinogen.
<b>OSHA</b>	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.
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity</b>	
- single exposure	No data available
<b>Specific target organ toxicity</b>	
- repeated exposure	No data available

**Section 12 Ecological Information**

<b>Toxicity</b>	Harmful to aquatic life
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT &amp; vPvB assessment</b>	No data available

**Section 13 Disposal Considerations**

The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of contents/ container to an approved waste disposal plant. Do not re-use empty containers.

**Section 14 Transport Information**

**DOT: Shipping Name:** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy Resin)  
**Hazard Class:** 9  
**ID No.:** UN 3082  
**Packing Group:** III  
**Label:** Class 9  
**ERG Code:** 171  
**Marine pollutant:** yes (Bisphenol A Epoxy Resin)

**Section 14 Transport Information**

**IATA Shipping Name:** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy Resin)  
**Hazard Class:** 9  
**ID No.:** UN 3082  
**Packing Group:** III  
**Label:** Miscellaneous  
**Packing instruction (cargo aircraft):** 964  
**Packing instruction (Passenger aircraft):** 964

**IMDG: Shipping Name:** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy Resin)  
**Hazard Class:** 9  
**ID No.:** UN 3082  
**Packing Group:** III  
**Label:** 9  
**EmS Code:** F-A, S-F  
**Marine pollutant:** yes

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**Section 15 Regulatory Information**

**US Federal Regulations**

**SARA 311/312 Hazards:** Skin corrosion or irritation, Serious eye damage or eye irritation  
Respiratory or skin sensitization

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

**U.S. Clean Air Act Section 112:** This product does not contain any hazardous air pollutants (HAP).

**US State Regulations**

**California Proposition 65:** ⚠️ **WARNING:** This product can expose you to chemicals including 4,4'-isopropylidenediphenol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**US Toxic Substance Control Act (TSCA)**

**TSCA Inventory Status:** On the inventory, or in compliance with the inventory.

**TSCA - 5(a) Significant New Use Rule List of Chemicals:** No substances are subject to a Significant New Use Rule.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt D):** No substances are subject to TSCA 12(b) export notification requirements.

**Inventories**

**DSL:** This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.

**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: Mia 95 Hardener

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

Identified uses: Hardener

**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

**24 Hour emergency telephone number: CHEMTREC (800) 424-9300**

HMIS	
H	3
F	1
R	0
PPE	
Sec. 8	

**Section 2 Hazards Identification**

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

Acute toxicity (Dermal), Category 4  
 Skin Corrosion/Irritation, Category 2  
 Serious Eye Damage/Eye Irritation, Category 1  
 Skin Sensitization, Category 1  
 Acute Aquatic Toxicity, Category 2  
 Chronic Aquatic Toxicity, Category 2

**GHS Label elements, including precautionary statements**



**Signal word**

Danger

**Hazard statements**

Causes serious eye damage.  
 Harmful in contact with skin  
 Causes skin irritation.  
 May cause an allergic skin reaction.  
 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

Avoid breathing dust/fume/gas/mist/vapour/spray.  
 Wash skin thoroughly after handling  
 Avoid release to the environment.  
 Wear protective gloves/eye protection/face protection.

**Response**

If swallowed: Rinse mouth. Do not induce vomiting.  
 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.  
 If eye irritation persists: Get medical advice/attention.  
 If inhaled: Remove person to fresh air. Get medical advice/attention.



**Section 2 Hazards Identification** continued

**Storage**

Store in a well-ventilated place. Keep cool.

**Disposal**

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

**Hazards not otherwise classified (HNOC) or not covered by GHS**

None known

**Section 3 Composition/Information on Ingredients**

Ingredient Name	CAS Number	Concentration (%)
Triethylenetetramine, propoxylated	26950-63-0	50-70
Triethylenetetramine	112-24-3	30-50

**Section 4 First-Aid Measures**

**If inhaled**

Move person into fresh air. If symptoms occur, seek medical attention.

**In case of skin contact**

Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Take victim immediately to hospital. If on skin, rinse well with water. If on clothes, remove clothes.

**In case of eye contact**

Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

**If swallowed**

Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

**Most important symptoms and effects, both acute and delayed**

None known

**Note to physiciaian**

Treat symptomatically

**Section 5 Fire-Fighting Measures**

**Extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not use high volume water jet

**Hazardous combustion products**

Carbon dioxide, carbon monoxide and halogenated compounds.

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

Do not allow run-off from firefighting to enter drains or water courses.

Collect contaminated fire extinguishing water separately and dispose of in accordance with local regulations.

**Section 6 Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

For personal protection see section 8.

**Environmental precautions**

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

**Methods and materials for containment and cleaning up**

Contain and collect spillage with non-combustible absorbent material such as sand, earth, and vermiculite. Sweep up and place in suitable containers for disposal.  
Keep in suitable, closed containers for disposal.

**Section 7 Handling and Storage**

**Precautions for safe handling**

Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes. For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
To avoid spills during handling keep bottle on a metal tray.  
Dispose of rinse water in accordance with local and national regulations.  
Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Observe label precautions. Keep in properly labelled containers.

**Section 8 Exposure Controls/Personal Protection**

**Components with workplace control parameters**

Contains no substance with occupational exposure limit values.

**Exposure controls**

**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**

Wear safety goggles. Wear face-shield and protective suit for abnormal processing problems.

**Skin protection**

**Hand Protection**

The suitability for a specific workplace should be discussed with the producers of the protective gloves. Contaminated gloves should be replaced.

**Body Protection**

Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**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, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.

**Section 8 Exposure Controls/Personal Protection continued**

**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.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Amber liquid
<b>Odor</b>	Amine-like
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting point</b>	No data available
<b>VOC Content</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point (closed cup)</b>	>148°C (>300°F)
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/lower flammability</b>	No data available
<b>Vapor pressure</b>	<1.3 hPa (21°C)
<b>Vapor density</b>	No data available
<b>Relative density</b>	1.02
<b>Water solubility</b>	Slightly soluble
<b>Coefficient: n-octanol/ water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available
<b>% Volatile</b>	No data available

**Section 10 Stability and Reactivity**

**Reactivity**

No dangerous reactions known under conditions of normal use.

**Chemical stability**

Stable under recommended storage conditions

**Possibility of hazardous reactions**

None known

**Conditions to avoid**

None known

**Incompatible materials**

None known

**Hazardous decomposition products**

Carbon monoxide, carbon dioxide, and nitrogen oxides

**Section 11 Toxicological Information**

**Information on toxicological effects**

<b>Acute oral toxicity</b>	2,729 mg/kg (estimate)
<b>Acute inhalation toxicity</b>	No data available on the product itself
<b>Acute dermal toxicity</b>	1,950 mg/kg (estimate)
<b>Skin corrosion/irritation</b>	Irritating to skin
<b>Serious eye damage/eye irritation</b>	May cause eye irritation
<b>Respiratory or skin sensitization</b>	Causes sensitization by skin contact
<b>Germ cell mutagenicity</b>	No data available on product
<b>Carcinogenicity</b>	
<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.
<b>NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.
<b>OSHA</b>	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.
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity</b>	
- single exposure	No data available
<b>Specific target organ toxicity</b>	
- repeated exposure	No data available
<b>Aspiration hazard</b>	No data available

**Section 12 Ecological Information**

<b>Toxicity</b>	Harmful to aquatic life
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT &amp; vPvB assessment</b>	No data available

**Section 13 Disposal Considerations**

The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of contents/ container to an approved waste disposal plant. Do not re-use empty containers.

**Section 14 Transport Information**

<b>DOT</b>	Not regulated as a dangerous goods
<b>IMDG</b>	Not regulated as a dangerous goods
<b>IATA</b>	Not regulated as a dangerous goods

**Section 15 Regulatory Information**

**US Federal Regulations**

**SARA 311/312 Hazards:** Acute toxicity (any route of exposure), Skin corrosion or irritation, Serious eye damage or eye irritation, Respiratory or skin sensitisation

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

**U.S. Clean Air Act Section 112:** This product does not contain any hazardous air pollutants (HAP).

**US State Regulations**

**California Proposition 65:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**US Toxic Substance Control Act (TSCA)**

**TSCA Inventory Status:** On the inventory, or in compliance with the inventory.

**TSCA - 5(a) Significant New Use Rule List of Chemicals:** No substances are subject to a Significant New Use Rule.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt D):** No substances are subject to TSCA 12(b) export notification requirements.

**Inventories**

**DSL:** This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.

**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: Mia 97 Hardener

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

Identified uses: Hardener

**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

**24 Hour emergency telephone number: CHEMTREC (800) 424-9300**

HMIS	
H	3
F	1
R	0
PPE	
Sec. 8	

**Section 2 Hazards Identification**

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

- Skin Corrosion/Irritation, Category 2
- Serious Eye Damage/Eye Irritation, Category 1
- Skin Sensitization, Category 1
- Reproductive Toxicity, Category 2
- Acute Aquatic Toxicity, Category 2
- Chronic Aquatic Toxicity, Category 2

**GHS Label elements, including precautionary statements**



**Signal word**      Danger

**Hazard statements**

- Causes skin irritation.
- May cause an allergic skin reaction.
- Causes serious eye damage.
- Suspected of damaging fertility or the unborn child.
- Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

- Avoid breathing dust/fume/gas/mist/vapor/spray.
- Wash skin thoroughly after handling
- Avoid release to the environment.
- Wear protective gloves/eye protection/face protection.

**Response**

- If swallowed: Rinse mouth. Do not induce vomiting.
- 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.
- If eye irritation persists: Get medical advice/attention.
- If inhaled: Remove person to fresh air. Get medical advice/attention.

**Section 2 Hazards Identification** continued

**Storage**

Store in a well-ventilated place. Keep cool.

**Disposal**

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

**Hazards not otherwise classified (HNOC) or not covered by GHS**

None known

**Section 3 Composition/Information on Ingredients**

Ingredient Name	CAS Number	Concentration (%)
Triethylenetetramine, propoxylated	26950-63-0	50-70
Triethylenetetramine	112-24-3	30-50
Salicylic acid	69-72-7	10-20
Phenil, 4-nonyl-,branched	84852-15-3	0.25-1

**Section 4 First-Aid Measures**

**If inhaled**

Move person into fresh air. If symptoms occur, seek medical attention.

**In case of skin contact**

Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. Take victim immediately to hospital. If on skin, rinse well with water. If on clothes, remove clothes.

**In case of eye contact**

Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

**If swallowed**

Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

**Most important symptoms and effects, both acute and delayed**

None known

**Note to physician**

Treat symptomatically

**Section 5 Fire-Fighting Measures**

**Extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not use high volume water jet

**Hazardous combustion products**

Carbon dioxide, carbon monoxide and halogenated compounds.

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary. Do not allow run-off from firefighting to enter drains or water courses. Collect contaminated fire extinguishing water separately and dispose of in accordance with local regulations.



**Section 6 Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

For personal protection see section 8.

**Environmental precautions**

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

**Methods and materials for containment and cleaning up**

Contain and collect spillage with non-combustible absorbent material such as sand, earth, and vermiculite. Sweep up and place in suitable containers for disposal. Keep in suitable, closed containers for disposal.

**Section 7 Handling and Storage**

**Precautions for safe handling**

Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. To avoid spills during handling keep bottle on a metal tray. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

**Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Keep in properly labelled containers.

**Section 8 Exposure Controls/Personal Protection**

**Components with workplace control parameters**

Contains no substance with occupational exposure limit values.

**Exposure controls**

**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**

Wear safety goggles. Wear face-shield and protective suit for abnormal processing problems.

**Skin protection**

**Hand Protection**

The suitability for a specific workplace should be discussed with the producers of the protective gloves. Contaminated gloves should be replaced.

**Body Protection**

Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**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, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used.



**Section 8 Exposure Controls/Personal Protection continued**

**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.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Amber liquid
<b>Odor</b>	Slight amine-like
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting point</b>	No data available
<b>VOC Content</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point (open cup)</b>	>171°C (>340°F)
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/lower flammability</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Vapor density</b>	No data available
<b>Relative density</b>	1.02-10.6
<b>Water solubility</b>	Partly soluble
<b>Coefficient: n-octanol/ water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available
<b>% Volatile</b>	No data available

**Section 10 Stability and Reactivity**

**Reactivity**

No dangerous reactions known under conditions of normal use.

**Chemical stability**

Stable under recommended storage conditions

**Possibility of hazardous reactions**

None known

**Conditions to avoid**

None known

**Incompatible materials**

None known

**Hazardous decomposition products**

Carbon monoxide, carbon dioxide, and nitrogen oxides

**Section 11 Toxicological Information**

**Information on toxicological effects**

<b>Acute oral toxicity</b>	2,282 mg/kg (estimate)
<b>Acute inhalation toxicity</b>	No data available on the product itself
<b>Acute dermal toxicity</b>	2,192 mg/kg (estimate)
<b>Skin corrosion/irritation</b>	Severely irritating to skin
<b>Serious eye damage/eye irritation</b>	Causes eye irritation
<b>Respiratory or skin sensitization</b>	Causes sensitization by skin contact
<b>Germ cell mutagenicity</b>	No data available on product
<b>Carcinogenicity</b>	
<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.
<b>NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.
<b>OSHA</b>	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.
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity</b>	
- single exposure	No data available
<b>Specific target organ toxicity</b>	
- repeated exposure	No data available
<b>Aspiration hazard</b>	No data available

**Section 12 Ecological Information**

<b>Toxicity</b>	Harmful to aquatic life
<b>Persistence and degradability</b>	No data available
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT &amp; vPvB assessment</b>	No data available

**Section 13 Disposal Considerations**

The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of contents/ container to an approved waste disposal plant. Do not re-use empty containers.

**Section 14 Transport Information**

**DOT: Shipping Name:** Environmentally hazardous substance, liquid, n.o.s. (Triethylene Tetramine Propoxylated)  
**Hazard Class:** 9  
**ID No.:** UN 3082  
**Packing Group:** III  
**Label:** Class 9  
**ERG Code:** 171  
**Marine pollutant:** yes (Triethylene Tetramine Propoxylated)

**Section 14 Transport Information**

**Remarks:** Different package sizes may lead to a non-regulated classification. Shipment by ground under DOT is non-regulated; however it may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

**IATA Shipping Name:** Environmentally hazardous substance, liquid, n.o.s. (Triethylene Tetramine Propoxylated)

**Hazard Class:** 9

**ID No.:** UN 3082

**Packing Group:** III

**Label:** Miscellaneous

**Packing instruction (cargo aircraft):** 964

**Packing instruction (Passenger aircraft):** 964

**IMDG: Shipping Name:** Environmentally hazardous substance, liquid, n.o.s. (Triethylene Tetramine Propoxylated)

**Hazard Class:** 9

**ID No.:** UN 3082

**Packing Group:** III

**Label:** 9

**EmS Code:** F-A, S-F

**Marine pollutant:** yes

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**Section 15 Regulatory Information****US Federal Regulations**

**SARA 311/312 Hazards:** Serious eye damage or eye irritation, Respiratory or skin sensitization, Reproductive toxicity, Skin corrosion or irritation

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

**U.S. Clean Air Act Section 112:** This product does not contain any hazardous air pollutants (HAP).

**US State Regulations**

**California Proposition 65:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**US Toxic Substance Control Act (TSCA)**

**TSCA Inventory Status:** On the inventory, or in compliance with the inventory.

**TSCA - 5(a) Significant New Use Rule List of Chemicals:** This product is subject under TSCA 5(a) to Significant New Use Restrictions (SNUR). Phenol, 4-nonyl-, branched

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt D):** US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D) Phenol, 4-nonyl-, branched

**Inventories**

**DSL:** This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.

**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.