

**Safety Data Sheet**  
**Freeman 621 Epoxy Resin (Part A)**

**Section 1 Identification**

**Product Identifiers**

Freeman 621 Epoxy Resin (Part A)

**Relevant Identified Uses of the Substance or Mixture and Uses Advised Against**

Economical General Purpose Epoxy Laminating Resin. For Professional / Industrial Use Only.

**Details of the Supplier of the Safety Data Sheet**

Freeman Manufacturing & Supply Company  
1101 Moore Road Avon, OH 44011-4043 U.S.A.  
Telephone: +1 (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)**

Skin Irritation, Category 2  
Eye Irritation, Category 2A  
Skin Sensitizer, Category 1  
Specific Target Organ Toxicity – Single Exposure Category 3  
Hazardous to the Aquatic Environment Chronic Hazard, Category 2

**Label Elements**



Warning

**Hazard statements**

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P261 Avoid breathing fumes, vapors, mists or sprays.  
P264 Wash thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves, eye protection and face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P319 Get medical help if you feel unwell.  
P333+P317 If skin irritation or rash occurs: Get medical help.  
P337+P317 If eye irritation persists: Get medical help.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents and container in accordance with local, regional, and national regulations.

**Section 2 Hazards Identification**

**Supplemental Information**

This is one part of a two-part system. Read and understand the hazard information on curative before using.

**Section 3 Composition/Information on Ingredients**

Ingredient Name	CAS Number	Concentration (%)
Bisphenol A Epoxy Resin	25068-38-6	50-60
Alkyl Glycidyl Ether	68609-97-2	10-20

Other ingredients are not listed because they are either not hazardous or are below cut-off/concentration thresholds.

**Section 4 First-Aid Measures**

**Description of First Aid Measures**

**Eye Contact:** Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing.

Get medical attention if irritation develops or persists.

**Skin Contact:** Remove contaminated clothing. Wash contact area thoroughly with soap and water.

Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Discard clothing that cannot be decontaminated.

**Inhalation:** Remove person to fresh air. Get medical attention if symptoms develop or persist.

**Ingestion:** Do not induce vomiting unless instructed to do so by a medical professional.

Get medical attention if you feel unwell.

**Most Important Symptoms/Effects**

None known.

**Indication of Immediate Medical Attention/Special Treatment**

Not expected to be required.

**Section 5 Fire-Fighting Measures**

**Extinguishing Media**

Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or spread fire.

**Special Hazards**

Not classified as flammable or combustible. Product will burn under fire conditions. Combustion products include oxides of carbon, phenolics, aldehydes and other toxic organic compounds.

**Special Protective Equipment & Precautions for Fire-Fighters**

Wear positive pressure, self-contained breathing apparatus, and full-body protective clothing.

**Section 6 Accidental Release Measures**

**Personal Precautions, Protective Equipment, and Emergency Procedures**

Clear unnecessary, unprotected personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact and avoid breathing vapors. See Section 8 for recommendations on the use of personal protective equipment.

**Environmental Precautions**

Avoid releases to the environment.

### Section 6 Accidental Release Measures

#### Methods and Materials for Containment and Cleanup

Cover with an inert absorbent material and collect into an appropriate container for disposal.

### Section 7 Handling and Storage

#### Safe Handling

Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not eat, drink, or smoke in the work area. Keep container closed when not in use.

#### Safe Storage

Store indoors at temperatures below 120°F (49°C). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed. Store locked up.

### Section 8 Exposure Controls/Personal Protection

#### Occupational Exposure Limits

None established

#### Appropriate Engineering Controls

Use with adequate general or local exhaust ventilation to minimize exposure levels.

#### Personal Protective Equipment

**Respiratory Protection:** If needed, an approved respirator with organic vapor cartridges may be used. Respirator selection and use should be based on contaminant type, form, and concentration. For higher exposures or in an emergency, use a supplied-air respirator. Use respirators in accordance with OSHA's Respiratory Protection Standard (29 CFR 1910.134).

**Skin Protection:** Wear chemical resistant (impervious) gloves; PVC, neoprene, nitrile rubber, EVAL, butyl rubber. Wear chemical resistant protective clothing. Use good laboratory/workplace procedures including personal protective clothing: lab coat and protective gloves.

**Eye Protection:** Wear chemical safety glasses or goggles.

#### Other Protective Measures

An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good Industrial Hygiene practice.

### Section 9 Physical and Chemical Properties

<b>Appearance</b>	Viscous white liquid
<b>Odor</b>	Strong
<b>Odor Threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting/Freezing Point</b>	No data available
<b>Boiling Point</b>	No data available
<b>Flash Point</b>	>201°F (>94°C)
<b>Evaporation Rate</b>	No data available
<b>Flammability Limits</b>	No data available
<b>Vapor Pressure</b>	<1 mm Hg at 20°C
<b>Vapor Density</b>	Heavier than air
<b>Relative Density</b>	1.59 at 25°C
<b>Solubility</b>	Nil to slightly soluble in water
<b>Coefficient: n-Octanol/Water</b>	No data available
<b>Auto-Ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available

**Freeman 621 Epoxy Resin (Part A)**
**Section 9 Physical and Chemical Properties**

<b>Volatile Organic Compounds</b>	<0.01%
<b>VOC Content</b>	<0.16 g/L
<b>Viscosity</b>	8,500 cP at 25°C

**Section 10 Stability and Reactivity**

**Reactivity:** Not normally reactive.

**Chemical Stability:** Stable under recommended conditions.

**Possibility of Hazardous Reactions:** Masses of  $\geq 1$  lb. (0.5 kg) plus aliphatic amine will cause irreversible polymerization with considerable heat build-up. Material will polymerize with sodium hydroxide.

**Conditions to Avoid:** Avoid excessive heat.

**Incompatible Materials:** Avoid contact with strong acids, bases, oxidizing agents, and amines.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, and oxides of nitrogen.

**Section 11 Toxicological Information**
**Acute Toxicity Values**

Chemical Name	LC <sub>50</sub> Inhalation (Rat)	LD <sub>50</sub> Oral (Rat)	LD <sub>50</sub> Dermal (Rabbit)
Bisphenol A Epoxy Resin	Not available	>2000 mg/kg	>2000 mg/kg
Alkyl Glycidyl Ether	Not available	17100 mg/kg	>4.5 mL/kg

**Acute Health Effects**

**Eye Contact:** Causes serious eye irritation.

**Skin Contact:** Causes skin irritation. May cause allergic skin reaction.

**Inhalation:** May cause respiratory irritation.

**Ingestion:** No data available.

**Chronic Health Effects**

**Respiratory Sensitization:** Components are not classified as respiratory sensitizers.

**Skin Sensitization:** May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Components are not classified as mutagens.

**Carcinogenicity:** Components are not classified as carcinogens.

**Reproductive Toxicity:** Components are not classified as reproductive toxins.

**Specific Target Organ Toxicity, Single Exposure:** May cause respiratory irritation, drowsiness or dizziness.

**Specific Target Organ Toxicity, Repeated Exposure:** No data available.

**Aspiration Hazard:** No data available.

**Section 12 Ecological Information**
**Ecotoxicity**

Chemical Name	LC <sub>50</sub> 96 hrs. (Fish)	EC <sub>50</sub> 24 hrs. (Daphnia)	IC <sub>50</sub> 96 hrs. (Bacteria)
Bisphenol A Epoxy Resin	2.4 mg/L	3.6 mg/L	>100 mg/L

### Section 12 Ecological Information

#### Persistence and Degradability

Chemical Name	OECD Derived from OECD 301F (Biodegradation Test) – 28 Days
Bisphenol A Epoxy Resin	5% (not readily biodegradable)
Alkyl Glycidyl Ether	Not readily biodegradable

#### Bioaccumulative Potential

Chemical Name	Log Pow	BCF	Potential
Bisphenol A Epoxy Resin	3.242	31	Low
Alkyl Glycidyl Ether	3.77	No data available	No data available

#### Mobility in Soil

Chemical Name	Soil/Water Partition Coefficient (K <sub>oc</sub> )
Bisphenol A Epoxy Resin	445

### Section 13 Disposal Considerations

Dispose according to local, state, and federal regulations. Do not dump in drains or sewers.

### Section 14 Transport Information

#### DOT

UN3082, Environmentally hazardous substance, liquid, n.o.s (epoxy resin), 9, III  
Non-bulk Packaging (<882lb or <119gal) not regulated transport by truck.

#### IATA/IMDG

UN3082, Environmentally hazardous substance, liquid, n.o.s (epoxy resin), 9, III, MARINE POLLUTANT  
Excepted for IATA and IMDG regulations if shipped in quantities of 5L (1.32 gal) or less  
(See IATA SP A197 and IMDG 2.10.2.7)

### Section 15 Regulatory Information

#### US Federal Regulations


**CERCLA 103 Reportable Quantity:** This product is not subject to reporting under CERCLA.  
Some states have more stringent reporting requirements.

**SARA TITLE III, Section 311/312:** See Section 2

**Section 313 Toxic Chemicals:** This product does not contain chemicals subject to SARA Title III Section 313 reporting requirements.

**Section 302 Extremely Hazardous Substances (TPQ):** None

#### US State Regulations

**California Proposition 65:**  **WARNING:** This product can expose you to chemicals including Epichlorhydrin, which is known to the State of California to cause cancer and/or reproductive harm. [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)  
Epichlorhydrin Safe Harbor Level (cancer): No Significant Risk Level (NSRL) = 9 µg/day

### Section 16 Other Information

#### Training Advice

All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

**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 initial issue: September 14, 2021

Date of previous revision: August 9, 2024

Current revision date: December 18, 2024

**Freeman 621 Epoxy Hardener (Part B)**

**Section 1 Identification**

**Product Identifiers**

Freeman 621 Epoxy Hardener (Part B)

**Relevant Identified Uses of the Substance or Mixture and Uses Advised Against**

Economical General Purpose Epoxy Laminating Hardener. For Professional / Industrial Use Only.

**Details of the Supplier of the Safety Data Sheet**

Freeman Manufacturing & Supply Company  
1101 Moore Road Avon, OH 44011-4043 U.S.A.  
Telephone: +1 (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)**

Skin Corrosion – Category 1B  
Serious Eye Damage – Category 1  
Skin Sensitization – Category 1

**Label Elements**



Danger

**Hazard Statements**

H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.

**Precautionary Statements**

P260 Do not breathe fumes, vapors, mists or sprays.  
P264 Wash thoroughly after handling.  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P280 Wear protective gloves, protective clothing, eye protection and face protection.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P302+P361+P354 IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P316 Get emergency medical help immediately.  
P317 Get medical help.  
P333+P317 If skin irritation or rash occurs: Get medical help.  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P363 Wash contaminated clothing before reuse.  
P405 Store locked up.  
P501 Dispose of contents and container in accordance with local, regional, and national regulations.

**Supplemental Information**

This is one part of a two-part system. Read and understand the hazard information on resin before using.

**Freeman Epoxy Hardener (Part B)**

**Section 3 Composition/Information on Ingredients**

Ingredient Name	CAS Number	Concentration (%)
Triethylenetetramine, propoxylated	26950-63-0	80-100

Other ingredients are not listed because they are either not hazardous or are below cut-off/concentration thresholds.

**Section 4 First-Aid Measures**

**Description of First Aid Measures**

**Eye Contact:** Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing. Get medical attention immediately.

**Skin Contact:** Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention immediately. Wash contaminated clothing before reuse. Discard clothing that cannot be decontaminated.

**Inhalation:** Remove person to fresh air. Get medical attention if symptoms develop or persist.

**Ingestion:** Do not induce vomiting unless instructed to do so by a medical professional. Get medical attention if you feel unwell.

**Most Important Symptoms/Effects**

Causes severe skin burns and eye damage.

**Indication of Immediate Medical Attention/Special Treatment**

Get immediate medical attention if in eyes or on skin.

**Section 5 Fire-Fighting Measures**

**Extinguishing Media**

Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or spread fire.

**Specific Hazards**

Not classified as flammable or combustible. Product will burn under fire conditions. Combustion products include oxides of carbon, phenolics, aldehydes and other toxic organic compounds.

**Special Protective Equipment & Precautions for Fire-Fighters**

Wear positive pressure, self-contained breathing apparatus, and full-body protective clothing.

**Section 6 Accidental Release Measures**

**Personal Precautions, Protective Equipment, and Emergency Procedures**

Clear unnecessary, unprotected personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact and avoid breathing vapors. See Section 8 for recommendations on the use of personal protective equipment.

**Environmental Precautions**

Avoid release to the environment.

**Methods and Materials for Containment and Cleanup**

Cover with an inert absorbent material and collect into an appropriate container for disposal.

**Section 7 Handling and Storage**

**Safe Handling**

Use with adequate ventilation. Do not breathe fumes, vapors, mists or sprays. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not eat, drink, or smoke in the work area. Keep container closed when not in use.



**Freeman Epoxy Hardener (Part B)**
**Section 7 Handling and Storage**
**Safe Storage**

Store indoors at temperatures below 120°F (49°C). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed. Store locked up.

**Section 8 Exposure Controls/Personal Protection**
**Occupational Exposure Limits**

None established

**Appropriate Engineering Controls**

Use with adequate general or local exhaust ventilation to minimize exposure levels.

**Personal Protective Equipment**

**Respiratory Protection:** If needed, an approved respirator with organic vapor cartridges may be used. Respirator selection and use should be based on contaminant type, form, and concentration. For higher exposures or in an emergency, use a supplied-air respirator. Use respirators in accordance with OSHA's Respiratory Protection Standard (29 CFR 1910.134).

**Skin Protection:** Wear chemical resistant (impervious) gloves; PVC, neoprene, nitrile rubber, EVAL, butyl rubber. Wear chemical resistant protective clothing. Use good laboratory/workplace procedures including personal protective clothing: lab coat and protective gloves.

**Eye Protection:** Wear chemical safety glasses or goggles.

**Other Protective Measures**

An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good Industrial Hygiene practice.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Clear to colorless liquid
<b>Odor</b>	Amine-like
<b>Odor Threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting/Freezing Point</b>	No data available
<b>Boiling Point</b>	>392°F (>200°C)
<b>Flash Point</b>	347°F (175°C)
<b>Evaporation Rate</b>	No data available
<b>Flammability (Solid, Gas)</b>	No data available
<b>Flammability Limits</b>	No data available
<b>Vapor Density</b>	Heavier than air
<b>Vapor Pressure</b>	<1.0 mm Hg at 20°C
<b>Relative Density</b>	1.01 at 25°C
<b>Solubility</b>	Nil to slightly soluble in water
<b>Coefficient: n-Octanol/Water</b>	No data available
<b>Auto-Ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>VOC Content</b>	<0.16 g/L
<b>Volatile Organic Compounds</b>	<0.01%
<b>Viscosity</b>	290-450 cP at 25°C

**Freeman Epoxy Hardener (Part B)**

**Section 10 Stability and Reactivity**

**Reactivity:** Not normally reactive.

**Chemical Stability:** Stable under recommended conditions.

**Possibility of Hazardous Reactions:** Masses of  $\geq 1$  lb. (0.5 kg) plus aliphatic amine will cause irreversible polymerization with considerable heat build-up. Material will polymerize with sodium hydroxide.

**Conditions to Avoid:** Avoid excessive heat.

**Incompatible Materials:** Avoid contact with strong acids, bases, oxidizing agents, and amines.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, and oxides of nitrogen.

**Section 11 Toxicological Information**

**Acute Toxicity Values**

None established

**Acute Health Effects**

**Eye Contact:** Causes serious eye damage.

**Skin Contact:** Causes severe skin burns. May cause allergic skin reaction.

**Inhalation:** May cause mild respiratory irritation.

**Ingestion:** No data available.

**Chronic Health Effects**

**Respiratory Sensitization:** Components are not classified as respiratory sensitizers.

**Skin Sensitization:** May cause an allergic skin reaction.

**Germ Cell Mutagenicity:** Components are not classified as mutagens.

**Carcinogenicity:** Components are not classified as carcinogens.

**Reproductive Toxicity:** Components are not classified as reproductive toxins.

**Specific Target Organ Toxicity, Single Exposure:** May cause an allergic skin reaction.

**Specific Target Organ Toxicity, Repeated Exposure:** No data available

**Aspiration Hazard:** No data is available.

**Section 12 Ecological Information**

**Ecotoxicity:** No data available

**Persistence and Degradability:** No data available

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Section 13 Disposal Considerations**

Dispose according to local, state, and federal regulations. Do not dump in drains or sewers.

**Section 14 Transport Information**

**DOT**

UN2735, Amines, liquid, corrosive, n.o.s. (triethylenetetramine, triethylenetetramine, propoxylated), 8, II  
LTD QTY if shipped in quantities of 1L (0.30gal) or less.

**IATA/IMDG**

UN2735, Amines, liquid, corrosive, n.o.s. (triethylenetetramine, triethylenetetramine, propoxylated), 8, II

## Freeman Epoxy Hardener (Part B)

## Section 15 Regulatory Information

## US Federal Regulations

**CERCLA 103 Reportable Quantity:** This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements.

**SARA TITLE III, Section 311/312:** See Section 2

**Section 313 Toxic Chemicals:** This product does not contain chemicals subject to SARA Title III Section 313 reporting requirements.

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All components in this product are listed on TSCA.

## US State Regulations

**California Proposition 65:** This product does not contain chemicals known to the State of California to cause cancer and/or reproductive harm. [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Section 16 Other Information

## Training Advice

All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

## 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 initial issue: September 14, 2021

Date of previous revision: August 9, 2024

Current revision date: December 18, 2024