

Section 1 Identification

Product identifiers

Product name: Freeman 605 White Epoxy Laminating Resin – Part A (Resin)

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

Identified uses: General-purpose epoxy laminating resin of two-part system.
For industrial / professional use only.

Details of the supplier of the safety data sheet

Freeman Manufacturing & Supply Company
1101 Moore Road, Avon, OH 44011-4043 USA
Telephone: +1 (440) 934-1902
Email: contactus@freemansupply.com

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

Section 2 Hazards Identification

GHS classification in accordance with 29 CFR 1910.1200 (OSHA Hazard Communication Standard)

Skin Irritation, Category 2
Eye Irritation, Category 2
Skin Sensitization, Category 1
Germ Cell Mutagenicity, Category 2
Aquatic Toxicity, (Acute), Category 2
Aquatic Toxicity, (Chronic), Category 2

Label elements



Warning

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting

Precautionary statements

Prevention: P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust, fume, gas, mist, vapors, spray.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves, eye protection, and face protection.
Response: P302+352 IF ON SKIN: Wash with plenty of soap and water.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313 IF exposed or concerned: Get medical advice or attention.
P333+313 If skin irritation or a rash occurs: Get medical advice or attention.
P337+313 If eye irritation persists: Get medical advice or attention.
P362+364 Take off contaminated clothing and wash it before reuse. P391 Collect spillage.

Section 2 Hazards Identification

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents or container in accordance with local and national regulations.

Other hazards

This product contains no endocrine disrupting chemicals.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Weight Concentration (%)	GHS Classification
Diglycidyl ether of bisphenol A	25068-38-6	45 - 70	Eye damage / irritation, category 2; H319 Skin corrosion/irritation category 2; H315 Skin sensitizer category 1; H317 Aquatic toxicity (chronic), category 2; H411
Calcium carbonate	471-34-1	10 - 30	Not Classified
Magnesium silicate talc	14807-96-6	7 - 13	Not Classified
Diluent	Proprietary	7 - 13	Skin corrosion/irritation category 2; H315 Skin sensitizer category 1; H317
Epoxy	Proprietary	3 - 7	Skin corrosion/irritation category 2; H315 Eye damage / irritation, category 2; H319 Skin sensitizer category 1; H317 Aquatic toxicity (chronic), category 2; H411
Proprietary White	Proprietary	1 - 5	Skin corrosion/irritation category 2; H315 Skin sensitizer category 1; H317 Germ cell mutagenicity, category 2; H341 Aquatic toxicity (acute), category 2; H401 Aquatic toxicity (chronic), category 2; H411
Chlorite (mg al silicate)	1318-59-8	0.5 - 1.5	Eye damage / irritation, category 2; H319
Diluent	Proprietary	0.1 - 1.0	Germ cell mutagenicity, category 2; H341 Skin corrosion/irritation category 2; H315 Skin sensitizer category 1; H317 Aquatic toxicity (chronic), category 2; H411
Crystalline Silica - Quartz	14808-60-7	0.1 - 1.0	(non-respirable) Not Classified

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

General: In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention.
Give nothing by mouth.

Section 4 First Aid Measures

Eyes: Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion: If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed
Reproductive or genetic defect hazard. Treat symptomatically. See section 2 for further details.
Eyes: Causes serious eye irritation.
Skin: May cause an allergic skin reaction. Causes skin irritation.

Section 5 Fire-Fighting Measures

Extinguishing media
Suitable: Use alcohol resistant foam, dry chemical, carbon dioxide, powder, or water spray
Unsuitable: Do not use water jet

Hazardous combustion products
Carbon monoxide, carbon dioxide, aldehydes, and various compounds from incomplete combustion.

Advice for firefighters
Avoid breathing dust, fume, gas, mist, vapors, spray. As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking. At higher temperature vapors can cause pressure buildup in sealed containers. Use water to cool containers exposed to fire. Self-contained respirator equipment and full protective clothing required when smoke or fumes are generated. Electrical grounding not recommended. ERG Guide Number: 171

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment (see section 8).
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet.
Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions
Do not allow product to enter sewers, surface or ground water.

Methods and materials for containment and cleaning up
Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.
Contain and absorb spillage with non-combustible materials e.g. sand, earth, and/or vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

Section 7 Handling and Storage

Precautions for safe handling
Ensure good ventilation at the workplace. Handle containers carefully to prevent damage and spillage.
See section 2 for further details.

Conditions for safe storage, including any incompatibilities
Do not freeze. Store between 60°F and 100°F. Keep containers tightly closed in a cool, well-ventilated area away from heat and incompatible materials.
Incompatible materials: Strong acids, strong bases. Amines and mercaptans may initiate possible hazardous polymerization.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Ingredient	Source	Value
Calcium carbonate	OSHA	TWA 10 mg/m3(total) TWA 5 mg/m3(resp)
	ACGIH	TWA 2.5 mg/m3(as F)
	NIOSH	TWA 10 mg/m3(total) TWA 5 mg/m3(resp)
Magnesium silicate talc	OSHA	20 mppcf (less than 1% crystalline silica):
	ACGIH	2 mg/m3(E,R) crystalline silica < 1%, Respirable
	NIOSH	TWA 2 mg/m3(resp)
Crystalline Silica - Quartz	OSHA	250"
	ACGIH	0.025 mg/m3(R) Respirable fraction
	NIOSH	0.05 mg/m3TWA (respirable)

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved using local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Personal protective equipment

Eye/face protection: Wear safety glasses with side shields to protect the eyes.

An eye wash station is suggested as a good workplace practice.

Skin protection: Avoid skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Respiratory protection: If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

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

Appearance	Opaque white liquid
Odor	Characteristic
Odor threshold	No data available
pH	No data available
Melting point	No data available
Boiling point	No data available
Flash point (closed cup)	250°F (121°C)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability	No data available
Vapor pressure at 72°F	No data available
Vapor density	No data available
Specific gravity	No data available
Solubility	No data available
Coefficient: n-octanol/ water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Approximately 6,000 cP at 25°C
VOC Concentration	0%

Section 10 Stability and Reactivity

Reactivity

Hazardous polymerization may occur if product is not handled as per instructions.

Chemical stability

This product requires another product to react at room temperature. Mix and use product in accordance with directions for safety. Excessive heat and fume generation can occur if improperly handled. Not sensitive to mechanical impact.

Possibility of hazardous reactions

No available information

Conditions to avoid

Avoid high temperatures and contact with incompatible material

Incompatible materials

Strong acids, strong bases. Amines and mercaptans may initiate possible hazardous polymerization.

Hazardous decomposition products

Carbon monoxide, carbon dioxide, aldehydes, and various compounds from incomplete combustion.

Section 11 Toxicological Information

Acute toxicity

Based on the properties of the epoxy constituents and considering toxicological data on similar preparations this preparation may be an irritant and a skin and respiratory sensitizer. Low molecular weight epoxy constituents are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and sensitization, possibly with cross-sensitization to other epoxies. Skin contact with the preparation and exposure to spray mist and vapor should be avoided.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg
Diglycidyl ether of bisphenol A - (25068-38-6)	> 5,000.00, Rat - Category: NA	20,000.00, Rabbit - Category: NA
Calcium carbonate - (471-34-1)	>2,000.00, Rat - Category: 5	>2,000.00, Rat - Category: 5
Magnesium silicate talc - (14807-96-6)	> 5,000.00, Rat - Category: NA	No data available.
Diluent - (Proprietary)	> 5,000.00, Rabbit - Category: NA	2,201.00, Rabbit - Category: 5
Crystalline Silica - Quartz (non-respirable) - (14808-60-7)	No data available.	100,000.00 - Category:NA

Carcinogen data

Ingredient	Source	Value
Magnesium silicate talc - (14807-96-6)	OSHA NTP IARC ACGIH	Regulated Carcinogen: No; Known: No; Suspected: No; Group 2a A4
Crystalline silica - Quartz (14808-60-7)	OSHA NTP IARC ACGIH	Regulated Carcinogen: No; Known: No; Suspected: No; Not classified A2

Section 11 Toxicological Information

Information on toxicological effects

Acute oral toxicity	Not applicable
Acute inhalation toxicity	Not applicable
Acute dermal toxicity	Not applicable
Skin corrosion/irritation	Causes skin irritation
Serious eye damage/eye irritation	Causes serious eye irritation
Respiratory sensitization	Not applicable
Skin sensitization	May cause an allergic skin reaction
Germ cell mutagenicity	Suspected of causing genetic defects
Carcinogenicity	Not expected to be a hazard
Reproductive toxicity	Not expected to be a hazard
Specific target organ toxicity - single exposure	None expected to be a hazard
Specific target organ toxicity - repeated exposure	None expected to be a hazard
Aspiration hazard	Not applicable

Section 12 Ecological Information

Ecotoxicity

Toxic to aquatic life with long lasting effects

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Diglycidyl ether of bisphenol A - (25068-38-6)	3.10, Pimephales promelas	1.40, Daphnia magna	No data available.
Calcium carbonate - (471-34-1)	101.00, Oncorhynchus mykiss	101.00, Daphnia magna	No data available.
Magnesium silicate talc - (14807-96-6)	110,000.00, Fishes species	36,812.36, Daphnid species	7,202.70, Green algae
Epoxy - (Proprietary)	9.00, Oncorhynchus mykiss	9.00, Daphnia magna	No data available.
Diluent - (Proprietary)	6.50, Danio rerio	16.00, Daphnia magna	5.10, Pseudokirchnerella subcapitata

Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT & vPvB assessment	This product contains no PBT/vPvB chemicals.

Section 13 Disposal Considerations

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

Section 14 Transport Information

DOT: Not regulated for packages under 5L (1.3 gallons) or 5.0 kg (11 lb.)
UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
IMDG: Not regulated for packages under 5L (1.3 gallons) or 5.0 kg (11 lb.)
IATA: Not regulated for packages under 5L (1.3 gallons) or 5.0 kg (11 lb.)
Marine Pollutant: Yes (Diglycidyl ether of bisphenol A)

Section 15 Regulatory Information

US Federal Regulations

TSCA: All ingredients listed or are exempt from listing on the Toxic Substance Control Act Inventory
CERCLA/SARA 302 EHS: No reportable components
CERCAL/SARA 313: No reportable components

US State Regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): No California Proposition 65 listed chemicals are known to be present.

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 release: December 1, 2015
Date of previous revision: August 28, 2024
Current revision date: September 12, 2024

Section 1 Identification

Product identifiers

Product name: Freeman 605-15 Laminating Resin Hardener - Part B (Hardener)

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

Identified uses: Catalyst of general-purpose epoxy laminating resin of two-part system.
For industrial/professional use only.

Details of the supplier of the safety data sheet

Freeman Manufacturing & Supply Company
1101 Moore Road, Avon, OH 44011-4043 USA
Telephone: +1 (440) 934-1902
Email: contactus@freemansupply.com

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

Section 2 Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA Hazard Communication Standard)

Acute toxicity(oral), Category 4
Acute toxicity(dermal), Category 4
Skin corrosion/irritation, Category 1B
Serious eye damage / eye irritation, Category 1
Skin sensitizer, Category 1
Reproductive toxicity, Category 1B
Aquatic toxicity (acute), Category 2
Aquatic toxicity (chronic), Category 1

Label elements



Danger

Hazard statements

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H360 May damage fertility.
H401 Toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects,

Precautionary statements

Prevention: P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust, fume, mist, vapors or spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection, face protection.

Section 2 Hazards Identification

Response: P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.

P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308+313 IF exposed or concerned: Get medical advice or attention.

P310 Immediately call a POISON CENTER, doctor or physician.

P312 Call a POISON CENTER, doctor or physician if you feel unwell.

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P333+313 If skin irritation or a rash occurs: Get medical advice or attention.

P362+364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents and container to an appropriate waste site in accordance with local and national regulations.

Other hazards

This product contains no endocrine disrupting chemicals.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Weight Concentration (%)	GHS Classification
Amine	Proprietary	30 - 60	Acute toxicity(dermal), category 4; H312 Acute toxicity(oral), category 4; H302 Skin corrosion/irritation, category 1B; H314 Skin sensitizer, category 1; H317
Amine	Proprietary	30 - 60	Acute toxicity(dermal), category 4; H312 Acute toxicity(oral), category 4; H302 Skin corrosion/irritation, category 1B; H314 Skin sensitizer, category 1; H317 Aquatic toxicity (chronic), category 3; H412
4,4-isopropylidene diphenol < Bisphenol A >	80-05-7	10 - 30	Specific target organ toxicity, Specific exposure, category 3; H335 Serious eye damage / eye irritation, category 1; H318 Skin sensitizer, category 1; H317 Reproductive toxicity, category 1B; H360 Aquatic toxicity (acute), category 1; H400 Aquatic toxicity (chronic), category 1; H410
Nonylphenol	25154-52-3	3 - 7	Reproductive toxicity, category 2; H361 Acute toxicity(oral), category 4; H302 Skin corrosion/irritation, category 1B; H314 Aquatic toxicity (acute), category 1; H400 Aquatic toxicity (chronic), category 1; H410

Section 3 Composition/Information on Ingredients

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

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes: Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion: If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed
 Treat symptomatically. See section 2 for further details.
 Eyes: Causes serious eye irritation.
 Skin: Harmful in contact with skin. May cause an allergic skin reaction.
 Causes severe skin burns and eye damage.
 Ingestion: Harmful if swallowed.

Section 5 Fire-Fighting Measures

Extinguishing media
 Suitable: Use alcohol resistant foam, dry chemical, carbon dioxide, powder, or water spray
 Unsuitable: Do not use water jet

Hazardous combustion products
 No hazardous decomposition data available.

Advice for firefighters
 As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking. ERG Guide Number: 154

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
 Put on appropriate personal protective equipment (see section 8).
 Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet.
 Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions
 Do not allow product to enter sewers, surface or ground water.

Methods and materials for containment and cleaning up
 Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.
 Contain and absorb spillage with non-combustible materials e.g. sand, earth, and/or vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

Section 7 Handling and Storage

Precautions for safe handling

Ensure good ventilation at the workplace. Handle containers carefully to prevent damage and spillage. See section 2 for further details.

Conditions for safe storage, including any incompatibilities

Do not freeze. Store between 60°F and 100°F. Keep containers tightly closed in a cool, well-ventilated area away from heat and incompatible materials.
 Incompatible materials: None known

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

Ingredient	Source	Value
Amine	OSHA	No Established Limit
	ACGIH	TWA: 1 ppm
	NIOSH	TWA 1 ppm (4 mg/m3) [skin]

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Personal protective equipment

Eye/face protection: Wear safety glasses with side shields to protect the eyes.

An eye wash station is suggested as a good workplace practice.

Skin protection: Avoid skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Respiratory protection: If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

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

Appearance	Amber liquid
Odor	Distinct
Odor Threshold	No data available
pH	No data available
Melting point	No data available
Boiling point	No data available
Flash point (closed cup)	250°F (121°C)
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability	No data available
Vapor pressure at 72°F	No data available
Vapor density	No data available

Section 9 Physical and Chemical Properties

Specific gravity	No data available
Solubility	No data available
Coefficient: n-octanol/ water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Approximately 3,400 cP at 25°C
VOC Concentration	0%

Section 10 Stability and Reactivity

Reactivity

Hazardous polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

No available information

Conditions to avoid

Avoid high temperatures

Incompatible materials

No available information

Hazardous decomposition products

No available information

Section 11 Toxicological Information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg
Amine - (Proprietary)	1,080.00, Rat - Category: 4	1,090.00, Rabbit - Category: 4
Amine - (Proprietary)	500.00, Point Estimate - Category: 4	1,100.00, Point Estimate - Category: 4
4,4-isopropylidene diphenol < Bisphenol A > - (80-05-7)	5,000.00, Rat - Category: 5	3,000.00, Rabbit - Category: 5
Nonyl phenol - (25154-52-3)	580.00, Rat - Category: 4	>2,000.00, Rabbit -Category: 5

Information on toxicological effects

Acute oral toxicity	Harmful if swallowed
Acute inhalation toxicity	Not applicable
Acute dermal toxicity	Harmful in contact with skin
Skin corrosion/irritation	Causes skin irritation
Serious eye damage/eye irritation	Causes severe skin burns and eye damage.
Respiratory sensitization	Not applicable
Skin sensitization	May cause an allergic skin reaction

Section 11 Toxicological Information

Germ cell mutagenicity	Not Applicable
Carcinogenicity	No ingredient is identified as an established or suspect carcinogen (OSHA, NTP, IARC, ACGIH)
Reproductive toxicity	May damage fertility.
Specific target organ toxicity - single exposure	None expected to be a hazard
Specific target organ toxicity - repeated exposure	None expected to be a hazard
Aspiration hazard	Not applicable

Section 12 Ecological Information

Ecotoxicity Very toxic to aquatic life with long lasting effects

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
Amine - (Proprietary)	1,014.00, Poecilia reticulata	53.50, Daphnia magna	345.60, Pseudokirchneriella subcapitata
Amine - (Proprietary)	100.00, Oncorhynchus mykiss	32.00, Daphnia magna	495.00, Pseudokirchneriella subcapitata
4,4-isopropylidene diphenol < Bisphenol A > - (80-05-7)	4.60, Pimephales promelas	7.75, Daphnia magna	2.73, Pseudokirchneriella subcapitata
Nonyl phenol - (25154-52-3)	0.14, Pimephales promelas	0.10, Daphnia magna	1.30, Scenedesmus subspicatus

Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT & vPvB assessment	This product contains no PBT/vPvB chemicals.

Section 13 Disposal Considerations

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

Section 14 Transport Information

DOT: UN1760, Corrosive liquids, n.o.s., 8, III
IMDG: UN1760, Corrosive liquids, n.o.s. (Amines), 8, III
IATA: UN1760, Corrosive liquids, n.o.s. (Amines), 8, III
Marine Pollutant: Yes (4,4-isopropylidene diphenol < Bisphenol A >)

Section 15 Regulatory Information

Under States TSCA Inventory (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.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) 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.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

⚠️ **WARNING:** This product can expose you to chemicals including 4,4-isopropylidene diphenol < Bisphenol A >, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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 release: December 1, 2015

Date of previous revision: August 28, 2024

Current revision date: September 12, 2024

Section 1 Identification

Product identifiers

Product name: Freeman 605-45 Laminating Resin Hardener – Part B (Hardener)

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

Identified uses: Catalyst of general-purpose epoxy laminating resin of two-part system.

For industrial/professional use only.

Details of the supplier of the safety data sheet

Freeman Manufacturing & Supply Company

1101 Moore Road, Avon, OH 44011-4043 USA

Telephone: +1 (440) 934-1902

Email: contactus@freemansupply.com

24 Hour Emergency Phone Number

CHEMTREC (800) 424-9300

Section 2 Hazards Identification

GHS Classification in accordance with 29 CFR 1910.1200 (OSHA Hazard Communication Standard)

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 irritation), Category 3

Label elements



Warning

Hazard statements

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes skin sensitization.

H302 Harmful if swallowed.

Precautionary statements

Prevention: Do not eat, drink or smoke when using this product.

Use only in a well-ventilated area.

Keep container tightly closed when not in use.

Wear protective gloves/eye protection/face protection.

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.

Storage: Store locked up.

Disposal: Dispose of contents/container according to local, regional, national, and international regulations.

Section 3 Composition/Information on Ingredients

Ingredient Name	CAS Number	Weight Concentration (%)
Imidazole	0931-36-2	<75
Amino Ethanolamine	00111-41-1	<50
Safety Modified Polyamine Adduct	00112-24-3	>40
Safety Modified Polyamine Adduct	00111-40-0	>40

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

- General:** In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- Inhalation:** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
- Eyes:** Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
- Skin:** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
- Ingestion:** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Section 5 Fire-Fighting Measures

- Extinguishing media**
 Suitable: Use alcohol resistant foam, dry chemical, carbon dioxide, powder, or water spray
 Unsuitable: Do not use water jet
- Hazardous combustion products**
 May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gases. Oxides of carbon and nitrogen, and undetermined organics
- Advice for firefighters**
 As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

Section 6 Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures**
 Put on appropriate personal protective equipment (see section 8).
 Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.
- Environmental precautions**
 Do not allow product to enter sewers, surface or ground water.

Section 6 Accidental Release Measures

Methods and materials for containment and clean-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

Ensure good ventilation at the workplace. Handle containers carefully to prevent damage and spillage. See section 2 for further details.

Conditions for safe storage, including any incompatibilities

Store at or below 72°F (22°C). Keep containers tightly closed in a cool, well-ventilated area away from heat and incompatible materials. Avoid contact with oxidizing agents (e.g. Chlorine, chromic acid etc.). Store locked up.

Section 8 Exposure Controls/Personal Protection

Components with workplace control parameters

None

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 glasses with side shields to protect the eyes.

An eye wash station is suggested as a good workplace practice.

Skin protection: Avoid skin contact. Wear PVC or rubber gloves to keep skin contact to a minimum. Refer to the manufacturer's recommendations regarding the suitability of any gloves used.

Respiratory protection: If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

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

Appearance	Amber liquid
Odor	Slight
Odor threshold	No data available
pH	No data available
Melting point	No data available
Initial boiling point/boiling range	No data available
Flash point	121°C (>250°F)
Evaporation rate	No data available

Section 9 Physical and Chemical Properties

Flammability (solid, gas)	No data available
Upper/lower flammability	No data available
Vapor Pressure	No data available
Vapor density	No data available
Density at 72°F	8.50 lb./gal
Specific gravity	1.02
Solubility	Slightly miscible in water
Coefficient: n-octanol/ water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Danger of explosion	Not applicable
VOC Concentration	0%

Section 10 Stability and Reactivity

Reactivity

Hazardous polymerization will not occur.

Chemical stability

Stable under normal circumstances.

Possibility of hazardous reactions

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

Conditions to avoid

Avoid mixing resin with hardener unless you plan to use immediately. Failure to observe this precaution may result in excessive exotherm.

Incompatible materials

Strong oxidizing agents, strong Lewis or mineral acids, amines

Hazardous decomposition products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons and undetermined organics.

Section 11 Toxicological Information

Acute Toxicity

No data available on product

Information on toxicological effects

Acute Oral toxicity

Low toxicity.
May cause gastrointestinal irritation, nausea, vomiting and diarrhea

Acute Inhalation toxicity

May cause respiratory tract irritation

Acute Dermal toxicity

Low toxicity

Skin corrosion/irritation

Mild skin irritant, may cause an allergic skin reaction

Serious eye damage/eye irritation

Mild eye irritant. May cause irritation to the eyes

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No ingredient is identified as an established or suspect carcinogen (OSHA, NTP, IARC, ACGIH)

Reproductive toxicity

Not expected to be a hazard

Specific target organ toxicity

- single exposure	None expected
Specific target organ toxicity	
- repeated exposure	None expected

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
Results of PBT & vPvB assessment	No data available

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: Not Regulated
IATA: Not Regulated
IMDG: Not Regulated

Section 15 Regulatory Information

Under States TSCA Inventory (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.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) 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.

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.

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