According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 07.25.2018

Clear Epoxy Resin - Part A

SECTION 1: Identification

Product identifier

Product name: Clear Epoxy Resin - Part A

Product code: 50101, 50112, 50114, 50114H, 50132, 50240, 50240H, 8212



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Recommended use of the product and restriction on use

Relevant identified uses: Adhesive Part A

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

United States

J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482

903-885-7696 info@jbweld.com

Emergency telephone number:

United States

InfoTrac

Transportation Emergencies (24 hour): 800-535-5053

Poison Control Centers (24 hour): medical emergencies 800-222-1222

SECTION 2: Hazard(s) identification

GHS classification:

Skin irritation, category 2 Eye irritation, category 2A Skin sensitization, category 1

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

Precautionary statements:

P264 Wash skin and eyes thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

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Clear Epoxy Resin - Part A

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P332+P313 If skin irritation occurs: Get medical advice/attention

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists get medical advice/attention

P363 Wash contaminated clothing before reuse

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention

P501 Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 3101-60-8	P-tert-butylphenyl 1-(2,3-epoxy)propyl ether	<5
CAS number: 25068-38-6	Epoxy Resin	<98

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR \$1910.1200).

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

Take off all contaminated clothing

Gently blot or brush away excess product

Wash with plenty of lukewarm, gently flowing water

Get medical advice if skin irritation occurs or you feel unwell

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open

Remove contact lenses, if present and easy to do so

Continue rinsing for 15-20 minutes

Get medical advice if eye irritation persists

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Clear Epoxy Resin - Part A

After swallowing:

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

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Clear Epoxy Resin - Part A

Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

No occupational exposure limits noted for the ingredient(s).

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear liquid
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
рН	Not determined or not available.

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Clear Epoxy Resin - Part A

Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	135°C (275°F)
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	1.15 g/cm ³
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment:

Causes skin irritation

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Clear Epoxy Resin - Part A

Product data: No data available. Substance data:

Name	Result
Epoxy Resin	Causes skin irritation.
P-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Causes skin irritation

Serious eye damage/irritation

Assessment:

Causes serious eye irritation

Product data: No data available. Substance data:

Name	Result
Epoxy Resin	Causes serious eye irritation.
P-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Causes serious eye damage

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction

Product data: No data available. Substance data:

Name	Result
Epoxy Resin	May cause an allergic skin reaction.
P-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Result : May cause sensitisation by skin contact.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

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Clear Epoxy Resin - Part A

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Epoxy Resin	EC50 - Scenedesmus capricornutum - 9 mg/L - 48 h

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to

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Clear Epoxy Resin - Part A

applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not Regulated
UN proper shipping name	Not Regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN 3082	
Environmentally hazardous substance, liquid, N.O.S. (Phenol, 4, (1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, tert-butylphenyl 1-(2,3-epoxy)propyl ether)		
UN transport hazard class(es)	9	
Packing group	III	
Environmental hazards	Marine Pollutant	
Special precautions for user	None	
EmS number	F-A, S-F	
Stowage category	A	
Excepted quantities	E1	
Limited quantity	5L	

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 3082	
UN proper shipping name	Environmentally hazardous substance, liquid, N.O.S. (Phenol, 4,4'- (1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran, Ptert-butylphenyl 1-(2,3-epoxy)propyl ether)	
UN transport hazard class(es)	9	
Packing group	III	
Environmental hazards	Marine Pollutant	
Special precautions for user	None	
ERG code	9L	
Excepted quantities	E1	
Passenger and cargo	450L	
Cargo aircraft only	450L	
Limited quantity	30 Kg G	

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Clear Epoxy Resin - Part A

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		
Bulk Name	None	
Ship type	None	
Pollution category	None	

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

25068-38-6	Epoxy Resin	Listed
3101-60-8	P-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

25068-38-6	F - 7	Not Listed
3101-60-8		Not Listed

CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

25068-38-6	Epoxy Resin	Not Listed
3101-60-8	P-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Not Listed

New Jersey Right to Know:

, ,		
25068-38-6	Epoxy Resin	Not Listed
3101-60-8	P-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Not Listed

New York Right to Know:

25068-38-6	F - 7	Not Listed
3101-60-8		Not Listed

Pennsylvania Right to Know:

25068-38-6	F - 7	Not Listed
3101-60-8		Not Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

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Clear Epoxy Resin - Part A

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-0-0 HMIS: 2-0-0

Initial preparation date: 07.25.2018

End of Safety Data Sheet

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Initial preparation date: 07.25.2018

Revision date: 04.20.2020

Clear Epoxy Hardener - Part B

SECTION 1: Identification

Product identifier

Product name: Clear Epoxy Hardener - Part B

Product code: 50112, 50112H, 50114, 50114H, 50132, 50240, 50240H, 8212

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Recommended use of the product and restriction on use

Relevant identified uses: Adhesive Part B

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

United States

J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482

903-885-7696 info@jbweld.com

Emergency telephone number:

United States

InfoTrac

Transportation Emergencies (24 hour): 1-800-535-5053

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 4 Skin sensitization, category 1 Eye irritation, category 2A Skin irritation, category 2

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H227 Combustible liquid.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash skin thoroughly after handling.

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Clear Epoxy Hardener - Part B

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P272 Contaminated work clothing must not be allowed out of the workplace.

P370+P378 In case of fire: Use agents recommended in section 5 for extinction.

P321 Specific treatment (see supplemental first aid instructions on this label).

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P362 Take off contaminated clothing and wash before reuse

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists get medical advice/attention

P403+P235 Store in a well ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 112-24-3	Amine # 1	<5
CAS number: 100-51-6	Liquid additive # 1	<2
CAS number: 72244-98-5	Curing Agent	<90
CAS number: 140-31-8	Amine # 2	<5
CAS number: 25620-58-0	Amine # 3	<5
CAS number: 39423-51-3	Amine # 4	<5
CAS number: 3033-62-3	Amine # 5	<1
CAS number: 919-30-2	Liquid additive # 2	<2

Additional Information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR \$1910.1200).

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention

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Clear Epoxy Hardener - Part B

After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention

After eye contact:

Rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Skin contact may result in redness, pain, burning and inflammation

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing Dermal exposure may cause an allergic skin reaction. Symptoms may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis

Product is flammable. Exposure to sources of ignition may cause physical injury

Delayed symptoms and effects:

Effects are dependent on exposure (dose, concentration, contact time)

Immediate medical attention and special treatment

Specific treatment:

Skin/eye burns require immediate treatment

Notes for the doctor:

Treat symptomatically

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Shut off sources of ignition

Carbon monoxide and carbon dioxide may form upon combustion

Heating causes a rise in pressure, risk of bursting and combustion

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Clear Epoxy Hardener - Part B

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Use spark-proof tools and explosion-proof equipment

Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

Take precautionary measures against electrostatic discharges.

Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
WEEL	Liquid additive # 1	100-51-6	WEEL TWA 10.0 ppm
	Amine # 1	112-24-3	WEEL TWA 1.0 ppm
ACGIH	Amine # 5	3033-62-3	ACGIH TLV TWA 0.05 ppm
	Amine # 5	3033-62-3	ACGIH TLV STEL 0.15 ppm

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

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Clear Epoxy Hardener - Part B

Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear liquid
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	67°C (153°F)
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	1.127 g/cm ³
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.

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Clear Epoxy Hardener - Part B

Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Liquid additive #1	inhalation	LC50 Rat: 4.178 mg/L (4 hr)
	oral	LD50 Rabbit: 1,040 mg/kg
Amine # 4	oral	LD50 - Rat - 550 mg/kg
	dermal	LD50 - Rat - > 1,000 mg/kg
Amine # 5	oral	LD50 - Rat - 571 mg/kg
	inhalation	LC50 - Rat - 4.0 mg/L - 4 h (aerosol)
	dermal	LD50 - Rabbit - 750 mg/kg
Liquid additive #2	oral	LD50 Rat: 1780 mg/kg
2-piperazin-1-ylethylamine	dermal	LD50 Rabbit: 867 mg/kg
	oral	LD50 - Rat: 1470 mg/kg

Skin corrosion/irritation

Assessment:

Causes skin irritation

Product data:

Skin testing was performed per the OECD 435 methods using the Corrositex testing process, indicating the product is non-corrosive to skin.

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Clear Epoxy Hardener - Part B

Substance data:

Name	Result
Amine # 3	Causes skin burns
Amine # 1	Causes severe skin burns and eye damage.
Amine # 5	Corrosive to the skin.
Liquid additive #2	Causes severe skin burns and eye damage.
Amine # 2	Causes severe skin burns and eye damage.

Serious eye damage/irritation

Assessment:

Causes serious eye irritation

Product data:
No data available.
Substance data:

Name	Result
Amine # 4	Corrosive to the eyes.
Amine # 5	Corrosive effect on the eyes.

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction

Product data: No data available. Substance data:

Name	Result
Curing Agent	May cause an allergic skin reaction.
Amine # 3	Sensitization possible through skin contact.
Amine # 1	May cause an allergic skin reaction.
Amine # 2	May cause an allergic skin reaction.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result	
Amine # 1	LC50 - Daphnia magna (Water flea) - 33.9 mg/L - 48 h	
Amine # 4	EC50 - Pseudokirchnerella subcapitata - 4.4 mg/L - 72 h	
2-piperazin-1-ylethylamine	LC50 Fathead Minnows (Pimephales promelas): 2190 mg/l (96 h)	
	EC50 Daphnia magna: 58 mg/L (48 hr)	

Chronic (long-term) toxicity

Assessment: Harmful to aquatic life with long lasting effects.

Product data: No data available.

Substance data:

Name	Result
Curing Agent	NOEC - Daphnia magna (Water flea) - 3.5 mg/L - 21 d

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

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Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	NA 1993
UN proper shipping name	Combustible liquid, n.o.s.
UN transport hazard class(es)	Comb liq
Packing group	III
Environmental hazards	None
Special precautions for user	None
Additional Information	This material is not subject to the Hazardous Materials Regulations as it is a combustible liquid shipped in a non-bulk packaging, therefore meeting the criteria specified in 49 CFR $173.150(f)(2)$.

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

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SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

72244-98-5	Curing Agent	Listed
100-51-6	Liquid additive # 1	Listed
140-31-8	Amine # 2	Listed
25620-58-0	Amine # 3	Listed
112-24-3	Amine # 1	Listed
39423-51-3	Amine # 4	Listed
3033-62-3	Amine # 5	Listed
919-30-2	Liquid additive # 2	Listed

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 extremely hazardous substances: None of the ingredients are listed.

SARA Section 313 toxic chemicals: None of the ingredients are listed.

CERCLA: None of the ingredients are listed.

RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know:

72244-98-5	Curing Agent	Not Listed
100-51-6	Liquid additive # 1	Listed
140-31-8	Amine # 2	Listed
25620-58-0	Amine # 3	Not Listed
112-24-3	Amine # 1	Listed
39423-51-3	Amine # 4	Not Listed
3033-62-3	Amine # 5	Not Listed
919-30-2	Liquid additive # 2	Not Listed

New Jersey Right to Know:

72244-98-5	Curing Agent	Not Listed
100-51-6	Liquid additive # 1	Not Listed
140-31-8	Amine # 2	Listed
25620-58-0	Amine # 3	Listed
112-24-3	Amine # 1	Listed
39423-51-3	Amine # 4	Not Listed
3033-62-3	Amine # 5	Listed
919-30-2	Liquid additive # 2	Not Listed

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New York Right to Know:

72244-98-5	Curing Agent	Not Listed
100-51-6	Liquid additive # 1	Not Listed
140-31-8	Amine # 2	Listed
25620-58-0	Amine # 3	Listed
112-24-3	Amine # 1	Listed
39423-51-3	Amine # 4	Not Listed
3033-62-3	Amine # 5	Not Listed
919-30-2	Liquid additive # 2	Not Listed

Pennsylvania Right to Know:

72244-98-5	Curing Agent	Not Listed
100-51-6	Liquid additive # 1	Listed
140-31-8	Amine # 2	Listed
25620-58-0	Amine # 3	Not Listed
112-24-3	Amine # 1	Listed
39423-51-3	Amine # 4	Not Listed
3033-62-3	Amine # 5	Not Listed
919-30-2	Liquid additive # 2	Not Listed

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-1-0 **HMIS:** 2-1-0

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End of Safety Data Sheet