According to Canadian Hazardous Products Regulations and WHMIS 2015

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### Clear Epoxy Resin - Part A

#### **SECTION 1: Identification**

#### Product identifier

Product name: Clear Epoxy Resin - Part A

**Product code:** 50101CAN, 50112CAN, 50114CAN, 50114HCAN, 50132CAN, 50240CAN,

50240CAN, 50240HCAN



### Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable. Uses advised against: Not determined or not applicable.

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

### Manufacturer or supplier details

### Manufacturer:

## **North America**

J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482 903-885-7696 info@jbweld.com

### **Emergency telephone number:**

#### **North America**

InfoTrac 353-323-3500

# **SECTION 2: Hazard 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:**

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

P264 Wash skin and eyes thoroughly after handling.

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

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



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### Clear Epoxy Resin - Part A

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

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

P362+P364 Take off contaminated clothing and wash it 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

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	1-5
CAS number: 25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	>80

#### **Additional Information:**

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with the Canadian Hazardous Products Regulation and WHMIS 2015.

# SECTION 4: First-aid measures

#### **Description of first-aid measures**

#### **General notes:**

Not determined or not available.

### 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

According to Canadian Hazardous Products Regulations and WHMIS 2015

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### Clear Epoxy Resin - Part A

#### After ingestion:

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 available.

#### **Delayed symptoms and effects:**

Not determined or not available.

#### Immediate medical attention and special treatment

#### **Specific treatment:**

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

## **SECTION 5: Fire-fighting 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:

According to Canadian Hazardous Products Regulations and WHMIS 2015

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### Clear Epoxy Resin - Part A

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.

### 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**

According to Canadian Hazardous Products Regulations and WHMIS 2015

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# Clear Epoxy Resin - Part A

# Information on basic physical and chemical properties

Appearance (physical state, color):	Clear liquid
Odor:	Not determined or not available.
Odor threshold:	Not determined or not available.
pH-value:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.
Boiling point/range:	Not determined or not available.
Flash point:	135°C (275°F)
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	1.15 g/cm <sup>3</sup>
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.

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Clear Epoxy Resin - Part A

# 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

Product data: No data available. Substance data:

Name	Result
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	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
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	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
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	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.

According to Canadian Hazardous Products Regulations and WHMIS 2015

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### Clear Epoxy Resin - Part A

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)

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:

According to Canadian Hazardous Products Regulations and WHMIS 2015

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# Clear Epoxy Resin - Part A

Name	Result
Phenol, 4,4'-(1- methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	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 applicable regulatory entities

### **SECTION 14: Transport information**

# **Canadian Transportation of Dangerous Goods (TDG)**

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	In accordance with Section 1.45.1 (SOR/2008-34) of the TDG Regulations, this product is not regulated as a marine pollutant as it is transported solely on land by road vehicle or railway vehicle
Special precautions for user	None
Additional Information	Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material as it is transported in sizes of ≤5 L and the packagings meet the general provisions of Section 1.17 (SOR/2008-34) of the TDG Regulations.

### **International Maritime Dangerous Goods (IMDG)**

UN number	Not regulated
	. 101.050.000

According to Canadian Hazardous Products Regulations and WHMIS 2015

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# Clear Epoxy Resin - Part A

UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	This material is shipped in quantities of less than 5 L and as such does not need to be marked as an Environmentally Hazardous Substance.
Special precautions for user	None
Additional Information	This product is not regulated as a dangerous good as it is transported in sizes of ≤5 L and the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Additionally, this product transported solely on land by road vehicle or railway vehicle.

# 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	This material is shipped in quantities of less than 5 L and as such does not need to be marked as an Environmentally Hazardous Substance.
Special precautions for user	None
Additional Information	This product is not regulated as a dangerous good as it is transported in sizes of ≤5 L and the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. Additionally, this product transported solely on land by road vehicle or railway vehicle.

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

# **Canada regulations**

# Domestic substances list (DSL):

	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
3101-60-8	P-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Listed

Non-domestic substances list (NDSL): None of the ingredients are listed.

# SECTION 16: Other information

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Clear Epoxy Resin - Part A

Abbreviations and Acronyms: None

#### Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. 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.

Initial preparation date: 07.25.2018

**End of Safety Data Sheet** 

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**Revision date: 04.20.2020** 

### Clear Epoxy Hardener - Part B

#### **SECTION 1: Identification**

#### **Product identifier**

Product name: Clear Epoxy Hardener - Part B

Product code: 50112CAN, 50112HCAN, 50114CAN, 50114HCAN, 50132CAN,

50240CAN, 50240HCAN



#### Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable. Uses advised against: Not determined or not applicable.

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

#### Manufacturer or supplier details

#### Manufacturer:

#### **North America**

J-B Weld Company, LLC 400 CMH Road Sulphur Springs, TX 75482 903-885-7696 info@jbweld.com

#### **Emergency telephone number:**

#### **North America**

InfoTrac 1-800-535-5053 (24 hour)

### **SECTION 2: Hazard 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.

According to Canadian Hazardous Products Regulations and WHMIS 2015

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#### Clear Epoxy Hardener - Part B

P264 Wash skin thoroughly after handling.

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

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

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

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+P364 Take off contaminated clothing and wash it 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 Store in a well ventilated place.

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	Triethylenetetramine	1-5
CAS number: 100-51-6	Benzyl Alcohol	1-5
CAS number: 72244-98-5	Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether	>80
CAS number: 140-31-8	1-Piperazineethanamine	1-5
CAS number: 25620-58-0	1,6-Hexanediamine, C,C,C-trimethyl-	1-5
CAS number: 39423-51-3	Propylidynetrimethanol, propoxylated, reaction products with ammonia	1-5
CAS number: 3033-62-3	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	0.1-1
CAS number: 919-30-2	3-aminopropyltriethoxysilane	0.5-1.5

#### **Additional Information:**

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with the Canadian Hazardous Products Regulation and WHMIS 2015.

#### **SECTION 4: First-aid measures**

# **Description of first-aid measures**

#### General notes:

Not determined or not available.

According to Canadian Hazardous Products Regulations and WHMIS 2015

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#### Clear Epoxy Hardener - Part B

#### 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

#### 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 ingestion:

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: Fire-fighting 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

According to Canadian Hazardous Products Regulations and WHMIS 2015

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#### Clear Epoxy Hardener - Part B

#### 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

#### **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
Canada	Triethylenetetramine	112-24-3	Ontario: 8-hour TWA 3.0 mg/m³ (0.5 ppm)

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#### Clear Epoxy Hardener - Part B

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Alberta OELs - 8-Hour TWA Exposure Limit: 0.3 mg/m³ (0.5 ppm)
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Alberta OELs - 15-minute STEL: 0.9 mg/m³ (0.15 ppm)
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	British Columbia OELs - 8-Hour TWA Exposure Value: 0.05 ppm
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	British Columbia: 15-minute STEL: 0.15 ppm
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Manitoba OELs - 8-Hour Exposure Limit (TLV-TWA): 0.05 ppm
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Manitoba OELs - 15-minute STEL: 0.15 ppm
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Ontario OELs - 8-Hour TWA Exposure Value (TWA): 0.05 ppm
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Ontario OELs - 15-minute STEL (STEL): 0.15 ppm
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Saskatchewan OELs - 8 hour average contamination limit: 0.05 ppm
	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	3033-62-3	Saskatchewan OELs - 15 minute average contamination limit: 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.

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.

According to Canadian Hazardous Products Regulations and WHMIS 2015

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### Clear Epoxy Hardener - Part B

# 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 (physical state, color):	Clear liquid
Odor:	Not determined or not available.
Odor threshold:	Not determined or not available.
pH-value:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.
Boiling point/range:	Not determined or not available.
Flash point:	67°C (153°F)
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Not determined or not available.
Explosion limit lower:	Not determined or not available.
Vapor pressure:	Not determined or not available.
Vapor density:	Not determined or not available.
Density:	1.127 g/cm <sup>3</sup>
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.

According to Canadian Hazardous Products Regulations and WHMIS 2015

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# Clear Epoxy Hardener - Part B

### 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
Benzyl Alcohol	inhalation	LC50 Rat: 4.178 mg/L (4 hr)
	oral	LD50 Rabbit: 1,040 mg/kg
Propylidynetrimethanol,	oral	LD50 - Rat - 550 mg/kg
propoxylated, reaction products with ammonia	dermal	LD50 - Rat - > 1,000 mg/kg
N,N,N',N'-tetramethyl-2,2'-	oral	LD50 - Rat - 571 mg/kg
oxybis(ethylamine)	inhalation	LC50 - Rat - 4.0 mg/L - 4 h (aerosol)
	dermal	LD50 - Rabbit - 750 mg/kg
3-aminopropyltriethoxysilane	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.

### Substance data:

Name	Result
1,6-Hexanediamine, C,C,C-trimethyl-	Causes skin burns
Triethylenetetramine	Causes severe skin burns and eye damage.
N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	Corrosive to the skin.
3-aminopropyltriethoxysilane	Causes severe skin burns and eye damage.
1-Piperazineethanamine	Causes severe skin burns and eye damage.

# Serious eye damage/irritation

#### **Assessment:**

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Causes serious eye irritation

Product data: No data available. Substance data:

Name	Result
Propylidynetrimethanol, propoxylated, reaction products with ammonia	Corrosive to the eyes.
N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	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
Poly(oxy(methyl-1,2- ethanediyl)), alpha-hydro- omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3- propanediol (4:1), 2-hydroxy-3- mercaptopropyl ether	May cause an allergic skin reaction.
1,6-Hexanediamine, C,C,C-trimethyl-	Sensitization possible through skin contact.
Triethylenetetramine	May cause an allergic skin reaction.
1-Piperazineethanamine	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.

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### Clear Epoxy Hardener - Part B

### 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
Triethylenetetramine	LC50 - Daphnia magna (Water flea) - 33.9 mg/L - 48 h
Propylidynetrimethanol, propoxylated, reaction products with ammonia	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
Poly(oxy(methyl-1,2- ethanediyl)), alpha-hydro- omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3- propanediol (4:1), 2-hydroxy-3- mercaptopropyl ether	NOEC - Daphnia magna (Water flea) - 3.5 mg/L - 21 d

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## **Clear Epoxy Hardener - Part B**

# 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 applicable regulatory entities

### SECTION 14: Transport information

### Canadian Transportation of Dangerous Goods (TDG)

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	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

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### Clear Epoxy Hardener - Part B

### **SECTION 15: Regulatory information**

### Canada regulations

#### Domestic substances list (DSL):

72244-98-5	Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether	Listed	
100-51-6	Benzyl Alcohol	Listed	
140-31-8	1-Piperazineethanamine	Listed	
25620-58-0	1,6-Hexanediamine, C,C,C-trimethyl-	Listed	
112-24-3	Triethylenetetramine	Listed	
39423-51-3	Propylidynetrimethanol, propoxylated, reaction products with ammoni	a Listed	
3033-62-3	N,N,N',N'-tetramethyl-2,2'-oxybis(ethylamine)	Listed	
919-30-2	3-aminopropyltriethoxysilane	Listed	

Non-domestic substances list (NDSL): None of the ingredients are listed.

### **SECTION 16: Other information**

### Abbreviations and Acronyms: None

#### Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. 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.

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**End of Safety Data Sheet**