

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 20.02.2022

Revision date: 09.05.2022

SECTION 1: Identification

Product identifier

Product name: Nerpa Polymers Casting Epoxy Part A

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 details

Nerpa Polymers Inc.
112-2845 23 St NE
Calgary, AB, Canada
<https://www.nerpa.ca>
info@nerpa.ca

Emergency telephone number:

+1 (866) 730-6592

SECTION 2: Hazard identification

GHS classification:

Skin sensitization, category 1

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H317 May cause an allergic skin reaction

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

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

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

P321 Specific treatment (No specific treatment)

P363 Wash contaminated clothing before reuse

P501 Dispose of contents/container in accordance with local/regional/national/international regulation

Hazards not otherwise classified:

None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	40-60
CAS number: 9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	10-30
CAS number 68609-97-2	C12-C14 alkyl glycidyl ether	10-20
CAS number 16096-31-4	Oxirane, 2,2'-[1,6-hexanediylbis(oxymethylene)]bis-	0-10

Additional information:

None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

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:

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Rinse eyes with plenty of water for several 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:

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

Delayed symptoms and effects:

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

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Water mist/fog, carbon dioxide, dry chemical or alcohol-resistant foam.

Specific hazards during fire-fighting:

Thermal decomposition may produce irritating/toxic fumes/gases.

Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire-exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and

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According to Canadian Hazardous Products Regulations and WHMIS 2015 clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place it in suitable containers for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to other sections:

For personal protective equipment, see Section 8. For disposal, see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep the container tightly sealed. Store away from incompatible materials (See Section 10).

SECTION 8: Exposure controls/personal protection

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:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

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Skin and body protection: Chemical-resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved

and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	Clear Liquid
Odor:	none
pH value:	6-7
Melting/Freezing point:	N/A
Boiling point/range:	>180°C
Flash point:	>110°C
Evaporation rate:	N/A
Flammability (solid, gaseous):	N/A
Explosion limit upper:	N/A
Explosion limit lower:	N/A
Vapor pressure:	<0.5mm Hg (25°C), 1mm Hg (180°C)
Vapor density:	N/A
Density:	1.10
Relative density:	N/A

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Solubilities:	N/A
Partition coefficient (n-octanol/water):	N/A
Auto/Self-ignition temperature:	N/A
Decomposition temperature:	N/A
Dynamic viscosity:	200-250cP (25°C)
Explosive properties:	Will not explode
Oxidizing properties:	Not oxidizing

SECTION 10: Stability and reactivity

Reactivity:

Not reactive under recommended handling and storage conditions.

Chemical stability:

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:

Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to avoid:

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible materials:

None known.

Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with	oral	LD50 Rat: >2000mg/kg

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2-(chloromethyl)oxirane		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	oral	LD50 Rat: >2000mg/kg

Skin corrosion/irritation

Assessment:

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

Product data: No data available.

Substance data:

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	Causes skin irritation.
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Causes skin irritation.

Serious eye damage/irritation

Assessment:

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

Product data:

No data available.

Substance data:

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	Causes serious eye irritation.
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Causes eye irritation.
C12-C14 alkyl glycidyl ether	Causes eye irritation.
Oxirane, 2,2'-[1,6-hexanediy]bis(oxymethylene)]bis-	Causes eye irritation.

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction.

Product data:

No data available.

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Substance data:

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	May cause an allergic skin reaction.
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	May cause an allergic skin reaction.
C12-C14 alkyl glycidyl ether	May cause an allergic skin reaction.
Oxirane, 2,2'-[1,6-hexanediylbis(oxymethylene)]bis-	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):

Name	Classification
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	Not Applicable
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Not Applicable
C12-C14 alkyl glycidyl ether	Not Applicable
Oxirane, 2,2'-[1,6-hexanediylbis(oxymethylene)]bis-	Not Applicable

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.

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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.

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	Test	Result
Phenol, 4,4'-(1-methylethylidene)bis-,	EC50 Scenedesmus capricornutum:	9 mg/L (48 hr)

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polymer with 2-(chloromethyl)oxirane		
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	EC50 Daphnia magna:	1 mg/L (48 hr)

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

Substance data:

Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	No biodegradation observed. However, significant hydrolysis occurred eliminating 82% of reactive groups over 28 days.

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.

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

Contaminated packages:

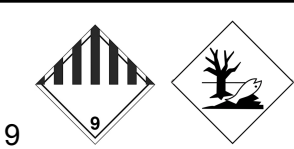
Not determined or not applicable.

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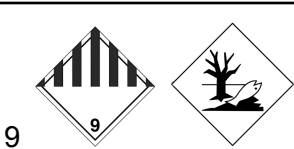
According to Canadian Hazardous Products Regulations and WHMIS 2015

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	3082
UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl ether of bisphenol A)
UN transport hazard class(es)	 9
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)



UN number	3082
UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl ether of bisphenol A)
UN transport hazard class(es)	 9
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

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

UN number	3082
UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Diglycidyl ether of bisphenol A)

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According to Canadian Hazardous Products Regulations and WHMIS 2015

UN transport hazard class(es)	  9
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

SECTION 15: Regulatory information

Canada regulations Domestic substances list (DSL):

All ingredients are listed or exempt.

SECTION 16: Other information

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 the information available. The information given is designed only as 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.

END OF SAFETY DATA SHEET