

# Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.16.2018

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## FlowCast Resin

### SECTION 1: Identification

#### Product identifier

**Product name:** FlowCast Resin

**Product code:** EPR369003

#### 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:**

**Canada**

EcoPoxy Inc

Box 220

Morris

Manitoba, R0G1K0, Canada

855-326-7699

info@ecopoxy.com

http://www.ecopoxy.com

**Supplier:**

**United States**

EcoPoxy USA, Inc.

7003 114th Ave. N.

Largo FL 33773

1-855-326-7699

info@ecopoxy.com

http://www.ecopoxy.com

#### Emergency telephone number:

**United States**

ChemTel Inc

+1 800 255 3924

**Canada**

ChemTel Inc

+1 813 248 0585

### SECTION 2: Hazard identification

#### GHS classification:

Skin sensitization, category 1

Acute toxicity (oral), category 4

Germ cell mutagenicity, category 2

#### Label elements

**Hazard pictograms:**



**Signal word:** Warning

#### Hazard statements:

H290 May be corrosive to metals.

H317 May cause an allergic skin reaction.

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H302 Harmful if swallowed.

H302+H312 Harmful if swallowed or in contact with skin.

H302+H332 Harmful if swallowed or if inhaled.

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H341 Suspected of causing genetic defects. (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

### Precautionary statements:

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

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

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

P234 Keep only in original packaging.

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

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

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

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

P362+P364 Take off contaminated clothing and wash it before reuse.

P390 Absorb spillage to prevent material damage

P330 Rinse mouth

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P308+P313 If exposed or concerned: Get medical advice/attention

P406 Store in corrosive resistant container with a resistant inner liner.

P405 Store locked up.

P501 Dispose of contents and container as instructed in Section 13.

**Hazards not otherwise classified:** None

## SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	10-20
CAS number: 25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	65-75
CAS number: 2210-79-9	2,3-epoxypropyl o-tolyl ether	10-15

**Additional Information:** None

## SECTION 4: First-aid measures

### Description of first-aid measures

#### General notes:

Not determined or not available.

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### 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

### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes  
If symptoms develop or persist, seek medical attention

### After ingestion:

Rinse mouth thoroughly  
Seek medical attention if irritation, discomfort, or vomiting persists  
Call a POISON CONTROL CENTER or seek medical attention if you feel unwell  
Do not induce vomiting  
Rinse mouth and then drink plenty of water

### 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  
May form corrosive mixtures with water

### 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:

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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, diatomaceous 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.

### 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 in corrosive resistant container with a resistant inner lining.

## 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.

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### 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

<b>Appearance (physical state, color):</b>	Clear Viscous Liquid
<b>Odor:</b>	None
<b>Odor threshold:</b>	Not Determined
<b>pH-value:</b>	6-8
<b>Melting/Freezing point:</b>	Not Determined
<b>Boiling point/range:</b>	>218°C
<b>Flash point:</b>	Pensky-Martens Closed Cup: 154 °C (ASTM D 93)
<b>Evaporation rate:</b>	Not Determined
<b>Flammability (solid, gaseous):</b>	Not Determined
<b>Explosion limit upper:</b>	Not Determined
<b>Explosion limit lower:</b>	Not Determined
<b>Vapor pressure:</b>	Not Determined
<b>Vapor density:</b>	Not Determined
<b>Density:</b>	1.13
<b>Relative density:</b>	Not Determined
<b>Solubilities:</b>	Not determined or not available.
<b>Partition coefficient (n-octanol/water):</b>	Not Determined
<b>Auto/Self-ignition temperature:</b>	Not Determined
<b>Decomposition temperature:</b>	Not Determined
<b>Dynamic viscosity:</b>	600-700 cP
<b>Kinematic viscosity:</b>	Not Determined
<b>Explosive properties</b>	Not Determined
<b>Oxidizing properties</b>	Not Determined

### Other information

## SECTION 10: Stability and reactivity

### Reactivity:

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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:

Harmful if swallowed

**Product data:** No data available.

#### Substance data:

Name	Route	Result
2,3-epoxypropyl o-tolyl ether	oral	LD50 Rat: 4000 mg/kg
	inhalation	LC50 Rat: 6090 mg/m <sup>3</sup> (4 h)
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	oral	LD50 Rat: 17,100 mg/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)oxiran	Irritating to the skin.
2,3-epoxypropyl o-tolyl ether	Causes skin irritation
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	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:

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Name	Result
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Irritating effect on the eyes.

### 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	Sensitization possible through skin contact.
2,3-epoxypropyl o-tolyl ether	May cause an allergic skin reaction.
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	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:**

Suspected of causing genetic defects

**Product data:**

No data available.

**Substance data:**

Name	Result
2,3-epoxypropyl o-tolyl ether	Suspected of causing genetic defects

### 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.

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### 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
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	EC50 - Scenedesmus capricornutum - 9 mg/L - 48 h
2,3-epoxypropyl o-tolyl ether	LC50 Oncorhynchus mykiss: 2.8 mg/L (96 h)
	EC50 Daphnia magna: 3.3 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:

Name	Result
2,3-epoxypropyl o-tolyl ether	EC50 Pseudokirchneriella subcapitata: 5.1 mg/L (72 h)

### Persistence and degradability

**Product data:** No data available.

### Substance data:

Name	Result
2,3-epoxypropyl o-tolyl ether	Not readily biodegradable (17% after 28 days).
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Readily biodegradable in water.

### Bioaccumulative potential

**Product data:** No data available.

### Substance data:



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Name	Result
2,3-epoxypropyl o-tolyl ether	Low probability to bioaccumulate.
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	BCF: 160 - 263 dimensionless (Not expected to bioaccumulate)

### Mobility in soil

**Product data:** No data available.

#### Substance data:

Name	Result
2,3-epoxypropyl o-tolyl ether	Low to moderate potential to absorb to soil.
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Immobile (log Koc: >5.63)

**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	3082
UN proper shipping name	Environmentally hazardous substances, liquid, (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, (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)

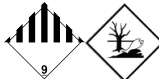
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## FlowCast Resin

UN number	3082
UN proper shipping name	Environmentally hazardous substances, liquid, (Diglycidyl ether of bisphenol A)
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):

25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Listed
2210-79-9	2,3-epoxypropyl o-tolyl ether	Listed
68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Listed

**Non-domestic substances list (NDSL):** Not determined.

## 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**