Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Revision date: 06.02.2021

FlowCast Part A

SECTION 1: Identification

Product identifier

Product name: FlowCast Part A

Product code: EPFLR10

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:	**Supplier:**
Canada	**United States**
EcoPoxy Inc	EcoPoxy USA, Inc
Box 220	7003 114th Ave. N.
Morris, Manitoba R0G1K0	Largo, Florida 33773
855-326-7699	1-855-326-7699
info@ecopoxy.com	info@ecopoxy.com
http:www.ecopoxy.com	http://www.ecopoxy.com

Emergency telephone number:

United States

ChemTel Inc (US)

+1 800 255 3924 (24)

SECTION 2: Hazard(s) identification

GHS classification:

Skin irritation, category 2

Eye irritation, category 2A

Skin sensitization, category 1

Germ cell mutagenicity, category 2

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

H341 Suspected of causing genetic defects

Precautionary statements:

P264 Wash skin 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 must not be allowed out of the workplace
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P321 Specific treatment (see supplemental first aid instruction on this label)
P302+P352 IF ON SKIN: Wash with plenty of water/soap
P362 Take off contaminated clothing and wash it before reuse
P333+P313 If skin irritation or 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
P308+P313 IF exposed or concerned: Get medical advice/attention
P405 Store locked up
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: 25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	40-60
CAS number: 9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	25-35
CAS number: 68609-97-2	Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	10-20
CAS number: 2210-79-9	2,3-epoxypropyl o-tolyl ether	1-8

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:
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.

Delayed symptoms and effects:

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

Exposure may cause genetic defects. Effects are dependent on exposure (dose, concentration, contact time).

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

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

Unsuitable extinguishing media:

Do not use water jet.

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-face piece 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 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 in suitable container 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 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 container tightly sealed. Store away from incompatible materials (See Section 10).

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:

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).

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	Clear, slightly viscous liquid
Odor	Slight
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	Not Available
Initial boiling point/range	Not Available
Flash point (closed cup)	> 113°C Closed Cup
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper flammability/explosive limit	Not Available
Lower flammability/explosive limit	Not Available
Vapor pressure	Not Available
Vapor density	Not Available
Density	1.11 g/l
Relative density	Not Available
Solubilities	Slighly soluble in water
Partition coefficient (n-octanol/water)	Not Available
Auto/Self-ignition temperature	Not Available
Decomposition temperature	Not Available
Dynamic viscosity	250-350 cP @ 23°C
Kinematic viscosity	Not Available
Explosive properties	Will not explode
Oxidizing properties	Not oxidizing

Other information

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
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	oral	LC50 Rat: 17,000 mg/kg
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	oral	LD50 Rat: >2000 mg/kg
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	oral	LD50 Rat: >2000 mg/kg
2,3-epoxypropyl o-tolyl ether	oral	LD50 Rat: 5000 mg/kg
	inhalation	LC50 Rat: 6090 mg/m³ (4 Hour)

Skin corrosion/irritation

Assessment:

Causes skin irritation.

Product data:

No data available.

Substance data:

Name	Result
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Causes skin irritation.
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Causes skin irritation.
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Cases skin irritation.
2,3-epoxypropyl o-tolyl 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.

Name	Result
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Causes serious eye irritation.

Respiratory or skin sensitization

Assessment:

May cause an allergic skin reaction.

Product data:

No data available.

Substance data:

Name	Result
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	May cause an allergic skin reaction.
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	May cause an allergic skin reaction.
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	May cause an allergic skin reaction.
2,3-epoxypropyl o-tolyl ether	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
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Not Applicable
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Not Applicable
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Not Applicable
2,3-epoxypropyl o-tolyl ether	Not Applicable

National Toxicology Program (NTP):

Name	Classification
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Not Applicable
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	Not Applicable

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Name	Classification
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Not Applicable
2,3-epoxypropyl o-tolyl ether	Not Applicable

OSHA Carcinogens: Not applicable

Germ cell mutagenicity

Assessment:

Suspected of causing genetic defects.

Product data:

No data available.

Substance data:

Name	Result
2,3-epoxypropyl o-tolyl ether	Suspecting 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.

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 Daphnia magna: 1 mg/L (48 hours)
	EC50 Scenedesmus capricornutum: 9 mg/L (48 hours)

Chronic (long-term) toxicity

Assessment:

Toxic to aquatic life with long lasting effects.

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Readily biodegradable in water (87% degradation after 28 days).
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxiran	No biodegradation observed. However, significant hydrolysis occurred eliminating 82 % over 28 days.
2,3-epoxypropyl o-tolyl ether	Under test conditions no biodegradation observed

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
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
Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Immobile (log Koc: >5.63)

Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Substance is not PBT.
2,3-epoxypropyl o-tolyl ether	The substance is not PBT.

vPvB assessment:

Oxirane, 2-((C12-14-alkyloxy)methyl) derivs.	Substance is not vPvB.
2,3-epoxypropyl o-tolyl ether	The substance is not vPvB.

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

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

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

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA): All ingredients are listed-active or exempt.

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: None of the ingredients are listed.
New Jersey Right to Know: None of the ingredients are listed.
New York Right to Know: None of the ingredients are listed.
Pennsylvania Right to Know: None of the ingredients are 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: 0-0-0
HMIS: 0-0-0
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End of Safety Data Sheet