

CASTING EPOXY

1. Identification

| Product identifier: | CASTING EPOXY |
|-----------------------------|--|
| Product code: | Part A |
| Supplier Name: | SamaN |
| | 660 Rue du Filtre |
| | Victoriaville, Québec |
| | G6T 0T6 |
| Telephone: | 819 751-2350 |
| | |
| Emergency telephone number: | 819-751-2350 |
| Available hours: | 8h-17h Monday to Friday |
| | |
| Recommended use: | As a 2-component epoxy system for casting (2: 1 mix ratio) |
| Restrictions on use: | For interior use only |
| | |

2. Hazard identification

Signal word:

WARNING

Product classification:



Germ cell mutagenicity-Category 2. Skin sensitization-Category 1. Skin irritation-Category 2. Serious eye irritation-Category 2A.

Hazard statement(s): Suspected of causing genetic defects. May cause an allergic skin reaction. Causes skin and serious eye irritation.

Precautionary statement(s)

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing mist, vapours, and spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing, eye and face protection. Wash hands thoroughly after handling and any other part of the body that may have been exposed to the product.



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Response: IF exposed or concerned: Get medical advice. IF ON SKIN: Wash with plenty of water. If skin irritation or a rash occurs: Get medical advice. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice. Take off contaminated clothing and wash it before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local, regional, national and/or international regulations in force.

Other hazards: Moderately toxic by intraperitoneal route.

See toxicological information, section 11

3. Composition/Information on ingredients

| No | CAS No | Common name and synonyms | Concentration % (w/w) |
|----|------------|---------------------------------------|-----------------------|
| 1 | 25068-38-6 | Epichlorhydrin, bisphenol A copolymer | 65.00 - 85.00 |
| 2 | 2210-79-9 | o-Cresol glycidyl ether | 10.00 - 30.00 |

The actual concentration range is withheld as a trade secret.



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4. First-aid measures

If swallowed, irritation, any type of overexposure or symptoms of overexposure occur during use of the product or persists after use, immediately contact a POISON CENTER, an EMERGENCY ROOM or a PHYSICIAN; ensure that the product safety data sheet is available.

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation: Move exposed person to fresh air. Keep this person warm and lying down. Loosen tight clothing such as a collar, tie, belt or waistband. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Symptoms: The worker may develop cutaneous hypersensitivity. This product is irritating to skin, eyes, respiratory and digestive tracts. The severity of symptoms can vary depending on the exposure conditions (contact time, product concentration, etc.).

Effects (acute or delayed): May cause skin sensitization. Possible erythema of the skin. This product is a serious irritant that may cause reversible damages to the cornea.

Immediate medical attention and special treatment: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.



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5. Fire-fighting measures

Suitable extinguishing media: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media: Jets of water can facilitate the spread of fire.

Specific hazards arising from the hazardous product: No specific hazard.

Hazardous combustion products: Carbon monoxide and dioxide. Nitrogen oxides.

Special protective equipment and precautions for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Protective equipment and emergency procedures: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosionproof equipment. Dispose of via a licensed waste disposal contractor.



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7. Handling and storage

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Incompatibility: Strong acids and bases as well as strong oxidizing agent. Amines.

8. Exposure controls/Personal protection

| No | CAS No | Common name and synonyms | IDHL mg/m3 | TWA mg/m3 | STEL mg/m3 | CEIL mg/m3 |
|----|------------|---------------------------------------|---------------|---------------|---------------|---------------|
| 1 | 25068-38-6 | Epichlorhydrin, bisphenol A copolymer | Not available | Not available | Not available | Not available |
| 2 | 2210-79-9 | o-Cresol glycidyl ether | Not available | Not available | Not available | Not available |

IDHL: Immediately Dangerous to Life or Health Concentrations

TWA : Time Weighted Average

STEL: Short -Term Exposure Limit

CEIL: Ceiling Limit

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the



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lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eyes: DO NOT WEAR CONTACT LENSES Wear anti-splash safety goggles.

Hands: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.

Respiratory: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Others: Wear protective clothing with long sleeves and appropriate safety shoes at all times.

9. Physical and chemical properties

Physical state: Liquid Colour: Colorless Odour: Odorless Odour threshold: Not applicable pH: Not applicable Melting/Freezing point: - 20 °C (32 °F) Initial boiling point/boiling range: Not available Flash point: Not applicable Lower flammable/explosive limit: Not applicable Upper flammable/explosive limit: Not applicable Auto-ignition temperature: Not applicable Evaporation rate: Not available Vapour pressure: Not available Vapour density: > 1 (air=1) Specific gravity: 1,140 kg/L at 20 °C (water = 1) Solubility in water: Insoluble Partition coefficient - n-octanol/water: Not applicable Decomposition temperature: Not available Kinematic viscosity: Not available



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10. Stability and reactivity

Reactivity: Stable under recommended conditions of storage and handling.

Chemical stability: The product is chemically stable under normal conditions of use.

Possibility of hazardous reactions: No dangerous or polymerization reactions will occur under normal conditions of use.

Conditions to avoid: Keep away from incompatible products.

Incompatible materials: None known.

Hazardous decomposition products: Carbon monoxide and dioxide. Nitrogen oxides.

11. Toxicological information

| No | CAS No | Common name and synonyms | (1) LD | (2) LD | (3) LD | (4) LC | (5) LC | (6) LC |
|----|------------|-----------------------------|--------|--------|--------|------------|---------|------------|
| | | | oral | skin | skin | gases | vapours | dusts-mist |
| 1 | 25068-38-6 | Epichlorhydrin, bisphenol A | 11400 | > 5000 | > 5000 | Not | > 20.00 | > 5.00 |
| | | copolymer | | | | applicable | | |
| | | | | 5000 | 5000 | N1-1 | 00.00 | |
| 2 | 2210-79-9 | o-Cresol glycidyl ether | > 5000 | > 5000 | > 5000 | Not | > 20.00 | > 5.00 |

(1) LD₅₀ oral mg/kg

(2) LD₅₀ skin mg/kg

(3) LD₅₀ skin mg/kg

- (4) LC_{50} inhalation ppmV 4h gases
- (5) LC₅₀ inhalation mg/l 4h vapours
- (6) LC₅₀ inhalation mg/l 4h dusts-mist

Routes of exposure: This product is absorbed through the respiratory tract, skin and gastrointestinal tract.

Symptoms: The worker may develop cutaneous hypersensitivity. This product is irritating to skin, eyes, respiratory and digestive tracts. The severity of symptoms can vary depending on the exposure conditions (contact time, product concentration, etc.).

Delayed and immediate effects: May cause skin sensitization. Possible erythema of the skin. This product is a serious irritant that may cause reversible damages to the cornea.



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| No | CAS No | Common name and synonyms | IARC | ACGIH | Mutagenicity | Effect on |
|----|------------|---------------------------------------|---------------|---------------|--------------------|-------------------|
| | | | | | | reproduction |
| 1 | 25068-38-6 | Epichlorhydrin, bisphenol A copolymer | Not available | Not available | The data do not | Not available. |
| | | | | | allow for an | |
| | | | | | adequate | |
| | | | | | assessment of | |
| | | | | | mutagenic effects. | |
| 2 | 2210-79-9 | o-Cresol glycidyl ether | Not available | Not available | Mutagenic effects | No effects shown. |
| | | | | | shown in animals. | |

Cancer classification under IARC (International Agency for Research on Cancer)

Group 1: carcinogenic to humans.

Group 2A: probably carcinogenic to humans.

Group 2B: possibly carcinogenic to humans.

Group 3: not classifiable as to its carcinogenicity to humans.

Group 4: probably not carcinogenic to humans.

Cancer classification under ACGIH (American Conference of Governmental Industrial Hygienists)

Group A1: confirmed human carcinogen.

Group A2: suspected human carcinogen.

Group A3: confirmed animal carcinogen with unknown relevance to humans.

Group A4: not classifiable as a human carcinogen.

Group A5: not suspected as a human carcinogen.



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12. Ecological information

| No | CAS No | Common name and synonyms | % | Persistent | Bio-accumulation | Aquatic |
|----|------------|---------------------------------------|---------|------------|------------------|-------------|
| | | | | | | ecotoxicity |
| 1 | 25068-38-6 | Epichlorhydrin, bisphenol A copolymer | 65.00 - | Yes | No | Yes |
| | | | 85.00 | | | |
| 2 | 2210-79-9 | o-Cresol glycidyl ether | 10.00 - | No | No | No |
| | | | 30.00 | | | |

| No | CAS No | Common name and synonyms | % | Ecotoxicity for | Ecotoxicity for | Environnemental |
|----|------------|---------------------------------------|---------|------------------|------------------|-------------------|
| | | | | aquatic | aquatic | effects |
| | | | | organisims-Short | organisims-Long | |
| | | | | term | term | |
| 1 | 25068-38-6 | Epichlorhydrin, bisphenol A copolymer | 65.00 - | Not available. | Toxic to aquatic | No known |
| | | | 85.00 | | life with long | adverse effect to |
| | | | | | lasting effects. | the environment. |
| 2 | 2210-79-9 | o-Cresol glycidyl ether | 10.00 - | Not available. | Toxic to aquatic | No known |
| | | | 30.00 | | life with long | adverse effect to |
| | | | | | lasting effects. | the environment. |

13. Disposal considerations

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.



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14. Transport information

| | TDG | DOT | IMDG | ΙΑΤΑ |
|----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| UN number | 3082 | 3082 | 3082 | 3082 |
| Proper shipping name | ENVIRONMENTALLY | ENVIRONMENTALLY | ENVIRONMENTALLY | ENVIRONMENTALLY |
| | HAZARDOUS | HAZARDOUS | HAZARDOUS | HAZARDOUS |
| | SUBSTANCE, LIQUID, | SUBSTANCE, LIQUID, | SUBSTANCE, LIQUID, | SUBSTANCE, LIQUID, |
| | N.O.S. (o-Cresol glycidyl | N.O.S. (o-Cresol glycidyl | N.O.S. (o-Cresol glycidyl | N.O.S. (o-Cresol glycidyl |
| | ether) | ether) | ether) | ether) |
| Transport hazard class(es) | 9 | 9 | 9 | 9 |
| Packing group | | 111 | 111 | |

Other information

Marine pollutant: No

IMDG: Not applicable

Exemption for limited quantity: 5 L

In accordance with the Canadian Transport of Dangerous Goods regulations by Road, we use the 1.17 exemption when applicable. In accordance with 49 CFR article 172.315 for transportation by a mode other than air, we use the Limited quantities exemption when applicable.

Special precautions: Not applicable

Others exemptions: No other exemption.



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15. Regulatory information

Canada

| No | CAS No | Common name and synonyms | % | DSL | NDSL | NPRI |
|----|------------|---------------------------------------|---------|-----|------|------|
| 1 | 25068-38-6 | Epichlorhydrin, bisphenol A copolymer | 65.00 - | Х | | |
| | | | 85.00 | | | |
| 2 | 2210-79-9 | o-Cresol glycidyl ether | 10.00 - | Х | | Х |
| | | | 30.00 | | | |

United-States

| No | CAS No | Common name and synonyms | % | TSCA | PROP-65 | Right to Know |
|----|------------|---------------------------------------|---------|------|---------|---------------|
| 1 | 25068-38-6 | Epichlorhydrin, bisphenol A copolymer | 65.00 - | Х | | |
| | | | 85.00 | | | |
| 2 | 2210-79-9 | o-Cresol glycidyl ether | 10.00 - | Х | | |
| | | | 30.00 | | | |

The customer is responsible for determining the PPE (personal protection equipment) code for this material. The classification of the product and the SDS were developped in accordance with HPR and HazCom 2012.

16. Other information

Date: 2020-02-04 Version: 1

Notice to the reader: The manufacturer hereby declares that the information disclosed herein have been based on governmental sites and/or raw material suppliers'. The manufacturer has no control over the nature and content of such information. The manufacturer fully reproduces all the information it holds on the constituent of the product, at the time it is manufactured. The manufacturer does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. By this data sheet, the manufacturer hereby discloses all the potential dangers it has knowledge of and which might be related to the using or manipulation of the product in order to allow the proper care to be brought and use with regard to the product. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist and notification is hereby given to the user. Notice is hereby given that injury can derive therefrom if the foregoing is not respected. The manufacturer assumes no responsibility for personal and/or material damage, lost or injury of whichever nature caused or which may occur following the wrongful, inappropriate, negligent or abusive use or handling of the product or from not having read the herein contained information.