

SAFETY DATA SHEET

Canusa Liquid Epoxy Type E-HB - Base

Section 1. Identification

Product identifier : Canusa Liquid Epoxy Type E-HB - Base
Product code : Not available.
Other means of identification : Canusa-CPS Liquid Epoxy Type E-HB - Base, Liquid Epoxy Type E-HB - Base

Relevant identified uses of the substance or mixture and uses advised against

| Identified uses | |
|--|---|
| Industrial application of coatings and inks by other than spraying | |
| Uses advised against | Reason |
| Consumer | Product is not intended for consumer use. |

Supplier's details : SFL Canusa Canada Ltd., 455 West Airport Road, Huntsville, ON, P1H 1Y7, Canada, Tel.: (+1) 705-789-1787
Seal For Life India Private Ltd., Plot17, GIDC Savli, Vadodara, Gujarat, Baroda, India - 391775, Tel.: +91 266 726 4721
SFL Canusa Middle East Pipeline Products Trading and Services LLC, Address: Plot # 37-WR43, Sector no.: ICAD III, Musaffah South, Abu Dhabi, United Arab Emirates, Tel: +971 2 204 9800
Seal For Life Industries, 10010 Cypress Creek Parkway Houston, TX 77070, USA, Tel.: +1 713-999-5090

Distributor / Importer :

Emergency telephone number (with hours of operation) : +1 705-789-1787 (CA: 8:00 - 17:00)
+91 266 726 4721 (IN: 08:00 - 17:00)
+971 2 204 9800 (UAE: 08:00 - 17:00)
+1 713-999-5090 (US: 8:00-17:00)

For emergencies only, call CHEMTREC (24 hours): In USA / Canada 1-800-424-9300; Outside USA +1 703-741-5970

Section 2. Hazard identification

Classification of the substance or mixture : SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Avoid breathing vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Section 2. Hazard identification

- Response** : Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. 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 or attention.
- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Canusa-CPS Liquid Epoxy Type E-HB - Base, Liquid Epoxy Type E-HB - Base

| Ingredient name | Synonyms | % (w/w) | CAS number |
|---|--|-----------|------------|
| Phenol, polymer with formaldehyde, glycidyl ether | Phenol, polymer with formaldehyde, oxiranylmethyl ether; phenol-formaldehyde polymer glycidyl ether; Etherification products of glycidyl group of (polymer of formaldehyde / phenol); Glycidyl ether modification products with epichlorohydrin or 2-methylepichlorohydrin of {polycondensation products of [(polycondensation products of phenol / formaldehyde) or alkyl(C1-9) phenol] / formaldehyde}; Etherification products of oxiran-2-ylmethyl group of (polymer of formaldehyde / phenol); Phenol polymer with formaldehyde, glycidyl ether; GLYCIDYL EPOXY NOVALAC RESIN; PHENOL, NOVOLAC TYPE EPOXY RESIN; POLYMER OF EPICHLOROHYDRIN AND PHENOL-FORMALDEHYDE; POLYMER, PHENOL FORMALDEHYDE WITH GLYCIDYL ETHER; Phenol,polymer with formaldehyde glycidyl ether | ≥30 - ≤60 | 28064-14-4 |
| 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane | Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis-; 2,2'-[(2,2-Dimethyl-1,3-propanediyl)bis(oxymethylene)]; Neopentyl glycol diglycidyl ether; 2,2'-[(2,2-dimethylpropane-1,3-diyl)bis(oxymethanediyl)]dioxirane; 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bisoxirane; 2,2'-[(2,2-dimethylpropane-1,3-diyl)bis(oxymethylene)]dioxirane; Propane, 1,3-bis(2,3-epoxypropoxy)-2,2-dimethyl-; Oxirane, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(oxymethylene)]bis-; 2,2'-[(2,2-Dimethyl-1,3 propanediyl)bis(oxymethylene)]bisoxirane; 2,2'-[(2,2-Dimethyl-1,3-propanediyl)bis(oxymethylene)]bis[oxirane]; 2,2'-[(| ≥5 - ≤10 | 17557-23-2 |

Section 3. Composition/information on ingredients

| | | | |
|----------------------------------|--|-----------|------------|
| | (2,2-Dimethylprop-1,3-diyl)dioxy dimethyl}dioxirane | | |
| Epichlorhydrin-bisphenol A resin | epoxy resin; 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane; Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane; Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane; phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane; oxirane, (chloromethyl)-, polymer with 4,4'-(1-methylethylidene)bis [phenol]; Bisphenol A, epichlorhydrin polymer; Epichlorhydrin, bisphenol A resin; poly{(4,4'-propane-2,2-diyl)diphenol)-co-[2-(chloromethyl)oxirane]}; BADGE; DGEBA; diglycidyl ether of bisphenol A; bisphenol A diglycidyl ether resin; (bisphenol A)-epichloridrin copolymer; poly[4,4'-(1-methylethylidene)bisphenol-co-(chloromethyl)oxirane] | ≥0.1 - ≤1 | 25068-38-6 |

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First-aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment 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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : 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

- Small spill** : 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. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. 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.
- Advice on general occupational hygiene** : 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. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

- Hand protection** : 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. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

- Body protection** : 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.

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : Liquid. [Viscous liquid.]
- Color** : Gray.
- Odor** : Faint Oily
- Odor threshold** : Not available.

Section 9. Physical and chemical properties and safety characteristics

| | |
|--|---|
| pH | : Not applicable. |
| Melting point/freezing point | : -5°C (23°F) |
| Boiling point, initial boiling point, and boiling range | : Not available. |
| Flash point | : Closed cup: >93.3°C (>199.9°F) |
| Flammability | : Not available. |
| Lower and upper explosion limit/flammability limit | : Not available. |
| Vapor pressure | : Not applicable. |
| Relative vapor density | : Not available. |
| Relative density | : 1.57 |
| Solubility in water | : Not available. |
| Miscible with water | : No. |
| Partition coefficient: n-octanol/water | : Not applicable. |
| Auto-ignition temperature | : Not applicable. |
| Decomposition temperature | : Not available. |
| Viscosity | : Kinematic: >86000 mm ² /s (>86000 cSt) |

Particle characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

| | |
|---|--|
| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : No specific data. |
| Incompatible materials | : No specific data. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|-------------|-----------------------|-------------|----------|
| 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane | LD50 Oral | Rat | 4500 mg/kg | - |
| Epichlorhydrin-bisphenol A resin | LD50 Dermal | Rat - Male, Female | >2000 mg/kg | - |
| | LD50 Oral | Rat - Female | >2000 mg/kg | - |

Irritation/Corrosion

Section 11. Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|----------------------------------|--------------------------|---------|-------|-----------------|-------------|
| Epichlorhydrin-bisphenol A resin | Eyes - Mild irritant | Rabbit | - | 100 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 uL | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 2 mg | - |

Sensitization

| Product/ingredient name | Route of exposure | Species | Result |
|----------------------------------|-------------------|---------|-------------|
| Epichlorhydrin-bisphenol A resin | skin | Mouse | Sensitizing |

Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|----------------------------------|------|--|----------|
| Epichlorhydrin-bisphenol A resin | - | Experiment: In vitro Subject: Bacteria | Positive |
| | - | Experiment: In vitro Subject: Mammalian-Animal Cell: Somatic | Positive |
| | - | Experiment: In vivo Subject: Mammalian-Animal Cell: Germ | Negative |

Carcinogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|----------------------------------|------------------------|--------------------|-----------|--------------------------|
| Epichlorhydrin-bisphenol A resin | Negative - Dermal - TC | Mouse - Female | 0.1 mg/kg | 2 years; 3 days per week |
| | Negative - Dermal - TC | Rat - Female | 1 mg/kg | 2 years; 5 days per week |
| | Negative - Oral - TC | Rat - Male, Female | 15 mg/kg | 2 years; 7 days per week |

Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species | Dose | Exposure |
|----------------------------------|-------------------|-----------|-------------------|--------------------|------|----------|
| Epichlorhydrin-bisphenol A resin | Negative | Negative | Negative | Rat - Male, Female | Oral | - |

Teratogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|----------------------------------|-------------------|-----------------|------|----------|
| Epichlorhydrin-bisphenol A resin | Negative - Dermal | Rabbit - Female | - | - |
| | Negative - Oral | Rabbit - Female | - | - |
| | Negative - Oral | Rat - Female | - | - |

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Section 11. Toxicological information

| | |
|---------------------|--|
| Eye contact | : Causes serious eye irritation. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : Causes skin irritation. May cause an allergic skin reaction. |
| Ingestion | : No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|---------------------|--|
| Eye contact | : Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: irritation redness |
| Ingestion | : No specific data. |

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

| | |
|------------------------------------|------------------|
| Potential immediate effects | : Not available. |
| Potential delayed effects | : Not available. |

Long term exposure

| | |
|------------------------------------|------------------|
| Potential immediate effects | : Not available. |
| Potential delayed effects | : Not available. |

Potential chronic health effects

| Product/ingredient name | Result | Species | Dose | Exposure |
|----------------------------------|--------------------------|-----------------------|----------|----------|
| Epichlorhydrin-bisphenol A resin | Sub-chronic NOAEL Dermal | Rat - Male, Female | 10 mg/kg | - |
| | Sub-chronic NOAEL Oral | Rat - Male, Female | 50 mg/kg | - |

| | |
|------------------------------|---|
| General | : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| Carcinogenicity | : No known significant effects or critical hazards. |
| Mutagenicity | : No known significant effects or critical hazards. |
| Reproductive toxicity | : No known significant effects or critical hazards. |

Numerical measures of toxicity

Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| Canusa Liquid Epoxy Type E-HB - Base | 14555.8 | N/A | N/A | N/A | N/A |
| 1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane | 4500 | N/A | N/A | N/A | N/A |
| Epichlorhydrin-bisphenol A resin | 2500 | 2500 | N/A | N/A | N/A |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|----------------------------------|-----------------------------------|----------------|----------|
| Epichlorhydrin-bisphenol A resin | Acute EC50 11 mg/l Fresh water | Aquatic plants | 72 hours |
| | Acute EC50 1.8 mg/l Fresh water | Daphnia | 48 hours |
| | Acute LC50 2 mg/l | Fish | 96 hours |
| | Acute NOEC 4.2 mg/l Fresh water | Aquatic plants | 72 hours |
| | Chronic NOEC 0.3 mg/l Fresh water | Daphnia | 21 hours |

Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|----------------------------------|---|-----------------------------|------|------------------|
| Epichlorhydrin-bisphenol A resin | OECD 301F 301F Ready Biodegradability - Manometric Respirometry Test | 5 % - Not readily - 28 days | - | Activated sludge |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|----------------------------------|---|------------|------------------|
| Epichlorhydrin-bisphenol A resin | Fresh water 4.83 days, pH 4, 25°C (OECD Test Guideline 111) Fresh water 7.1 days, pH 9, 25°C (OECD Test Guideline 111) Fresh water 3.58 days, pH 7, 25°C (OECD Test Guideline 111) | - | Not readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|----------------------------------|--------------------|-----|-----------|
| Epichlorhydrin-bisphenol A resin | 2.64 to 3.78 | 31 | low |

Mobility in soil

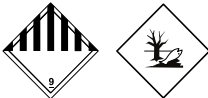
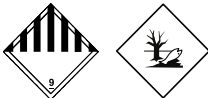
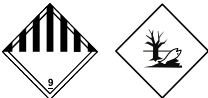
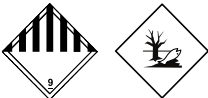
Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | TDG Classification | DOT Classification | IMDG | IATA |
|----------------------------|---|--|---|---|
| UN number | UN3082 | UN3082 | UN3082 | UN3082 |
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin) | Environmentally hazardous substance, liquid, n.o.s. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin) | Environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin) |
| Transport hazard class(es) | 9  | 9  | 9  | 9  |
| Packing group | III | III | III | III |
| Environmental hazards | Yes. | Yes. | Yes. | Yes. |

Additional information

TDG Classification

: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark). Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.

Explosive Limit and Limited Quantity Index 5

Special provisions 16, 99

DOT Classification

: 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 when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.

Limited quantity Yes.

Packaging instruction Exceptions: 155. Non-bulk: 203. Bulk: 241.

Special provisions 8, 146, 173, 335, IB3, T4, TP1, TP29

IMDG

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided 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.

Emergency schedules F-A, S-F

Special provisions 274, 335, 969

IATA

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

Quantity limitation Passenger and Cargo Aircraft: 450 L. Packaging instructions: 964. Cargo Aircraft Only: 450 L. Packaging instructions: 964. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y964.

Special provisions A97, A158, A197, A215

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

| | |
|--------------------------------|--|
| Australia | : Not determined. |
| Canada | : All components are listed or exempted. |
| China | : All components are listed or exempted. |
| Eurasian Economic Union | : Russian Federation inventory : Not determined. |
| Japan | : Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined. |
| New Zealand | : All components are listed or exempted. |
| Philippines | : Not determined. |
| Republic of Korea | : All components are listed or exempted. |
| Taiwan | : All components are listed or exempted. |
| Thailand | : Not determined. |
| Turkey | : Not determined. |
| United States | : Not determined. |
| Viet Nam | : All components are listed or exempted. |

Section 16. Other information

History

Date of printing : 5/12/2023

Date of issue/Date of revision : 5/12/2023

Date of previous issue : 5/12/2023

Version : 2

Key to abbreviations

: ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 HPR = Hazardous Products Regulations
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 N/A = Not available
 SGG = Segregation Group
 UN = United Nations

Section 16. Other information

Procedure used to derive the classification

| Classification | Justification |
|---|--|
| SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 | Calculation method Calculation method Calculation method |

References : Not available.

✔ Indicates information that has changed from previously issued version.

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