

# SAFETY DATA SHEET



WEICON HT 111 Epoxy Resin

## Section 1. Identification

**Product identifier** : WEICON HT 111 Epoxy Resin  
**Product code** : 102601  
**Other means of identification** : Not available.  
**Product type** : Liquid.  
**Color** : Gray.

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

#### **Identified uses**

Epoxy resins

#### **Uses advised against**

Not applicable.

**Supplier's details** : WEICON GmbH & Co. KG  
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48157 Münster, Germany  
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email: info@weicon.de,  
URL: www.weicon.de

**e-mail address of person responsible for this SDS** : msds@weicon.de

#### National contact

WEICON Canada Inc.  
20 Steckle Place, Unit 20  
Kitchener, Ontario N2E 2C3, CA  
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Telephone: +1-519-896-5252  
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**Emergency telephone number (with hours of operation)** : +1 866 928 0789 (24h - Toll free)  
TRANSPORT EMERGENCY CONTACT :+1 866 928 0789 ((24h - Toll free)

## Section 2. Hazard identification

**Classification of the substance or mixture** : SKIN IRRITATION - Category 2  
EYE IRRITATION - Category 2A  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

#### GHS label elements

##### **Hazard pictograms**



**Signal word** : Danger

## Section 2. Hazard identification

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hazard statements</b>        | : H315 - Causes skin irritation.<br>H317 - May cause an allergic skin reaction.<br>H319 - Causes serious eye irritation.<br>H351 - Suspected of causing cancer.<br>H372 - Causes damage to organs through prolonged or repeated exposure.                                                                                                                                                                                                                                                                                               |
| <b>Precautionary statements</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Prevention</b>               | : P201 - Obtain special instructions before use.<br>P202 - Do not handle until all safety precautions have been read and understood.<br>P260 - Do not breathe vapor.<br>P264 - Wash hands thoroughly after handling.<br>P270 - Do not eat, drink or smoke when using this product.<br>P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.                                                                                                                                       |
| <b>Response</b>                 | : P308 + P313 - IF exposed or concerned: Get medical advice or attention.<br>P362 + P364 - Take off contaminated clothing and wash it before reuse.<br>P302 + P352 - IF ON SKIN: Wash with plenty of water.<br>P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.<br>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P337 + P313 - If eye irritation persists: Get medical advice or attention. |
| <b>Storage</b>                  | : P405 - Store locked up.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Disposal</b>                 | : P501 - Dispose of waste according to applicable legislation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Section 3. Composition/information on ingredients

|                                      |                  |
|--------------------------------------|------------------|
| <b>Substance/mixture</b>             | : Mixture        |
| <b>Other means of identification</b> | : Not available. |

| Ingredient name                                                                      | Synonyms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | % (w/w)   | Identifiers        |  |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------|--|
| reaction product: bisphenol-A-(epichlorohydrin); epoxy resin                         | reaction product: bisphenol-A-(epichlorohydrin); epoxy 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, epichlorohydrin polymer; Epichlorohydrin, bisphenol A resin; poly{(4,4'-propane-2,2-diylidiphenol)-co-[2-(chloromethyl)oxirane]}; BADGE; DGEBA; diglycidyl ether of bis-phenol A; bisphenol A diglycidyl ether resin; (bisphenol A)-epichloridrin copolymer | ≥15 - ≤40 | CAS:<br>25068-38-6 |  |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol | Formaldehyde, polymer with 2-(chloromethyl)oxirane and phenol; Formaldehyde, polymer with (chloromethyl)oxirane and phenol; Phenol, formaldehyde, (chloromethyl)oxirane polymer; epichlorohydrin-phenolformaldehyde resin; Phenolic epoxy resin F-44; Polymer of 2-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ≥10 - ≤30 | CAS:<br>9003-36-5  |  |

### Section 3. Composition/information on ingredients

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                |             |                   |  |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------|--|
| Nickel | (chloromethyl)oxirane / 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}; Formaldehyde polymer with (chloromethyl)oxirane and phenol; POLYMER, FORMALDEHYDE WITH (CHLOROMETHYL)OXIRANE AND PHENOL; Epichlorohydrin-bisphenol F resin | ≥0.5 - ≤1.5 | CAS:<br>7440-02-0 |  |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------|--|

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 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. 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.

#### 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

## Section 4. First-aid measures

- 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".

## Section 6. Accidental release measures

**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. Absorb with an inert 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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.

## 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. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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. Store locked up. 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

| Ingredient name | Exposure limits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nickel          | <p><b>CA Saskatchewan Provincial (Canada, 4/2021)</b><br/>           STEL 15 minutes: 3 mg/m<sup>3</sup>. Form: inhalable fraction.<br/>           TWA 8 hours: 1.5 mg/m<sup>3</sup>. Form: inhalable fraction.</p> <p><b>CA British Columbia Provincial (Canada, 3/2025) [nickel - insoluble inorganic compounds]</b> Carc 1A, Carc 1.<br/>           TWA 8 hours: 0.05 mg/m<sup>3</sup> (as Ni).</p> <p><b>CA British Columbia Provincial (Canada, 3/2025) [nickel - elemental, soluble]</b></p> |

## Section 8. Exposure controls/personal protection

**inorganic compounds]** Carc 1, Carc 2B.  
TWA 8 hours: 0.05 mg/m<sup>3</sup> (as Ni).  
**CA Ontario Provincial (Canada, 6/2019)**  
TWA 8 hours: 1 mg/m<sup>3</sup>. Form: inhalable particulate matter.  
**CA Quebec Provincial (Canada, 2/2024)**  
**[nickel and inorganic compounds - metal]**  
TWAEV 8 hours: 1.5 mg/m<sup>3</sup>. Form: inhalable aerosol fraction.  
**CA Alberta Provincial (Canada, 3/2023)**  
OEL 8 hours: 1.5 mg/m<sup>3</sup>.

### Biological exposure indices

No exposure indices known.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- 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. Recommended : 1 - 4 hours (breakthrough time): Protective gloves made of nitrile rubber (material thickness of 0,4 mm); EN 374-5 Cat. III ; 4 - 8 hours (breakthrough time): Protective gloves made of Viton®/ butyl rubber (material thickness of 0,7 mm); EN388 Cat.II / EN374 Cat.III / EN374-2
- 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. Recommended : organic vapor (Type AX) and particulate filter

## Section 9. Physical and chemical properties

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

### Appearance

|                                                                 |                               |
|-----------------------------------------------------------------|-------------------------------|
| <b>Physical state</b>                                           | : Liquid.                     |
| <b>Color</b>                                                    | : Gray.                       |
| <b>Odor</b>                                                     | : Characteristic.             |
| <b>Odor threshold</b>                                           | : Not available.              |
| <b>pH</b>                                                       | : Not applicable.             |
| <b>Melting point/freezing point</b>                             | : Not available.              |
| <b>Boiling point or initial boiling point and boiling range</b> | : Not available.              |
| <b>Flash point</b>                                              | : Closed cup: >100°C (>212°F) |
| <b>Evaporation rate</b>                                         | : Not available.              |
| <b>Flammability</b>                                             | : Not available.              |
| <b>Lower and upper explosion limit/flammability limit</b>       | : Not available.              |
| <b>Vapor pressure</b>                                           | :                             |

| Ingredient name                                                                      | Vapor Pressure at 20°C |       |        | Vapor pressure at 50°C |     |        |
|--------------------------------------------------------------------------------------|------------------------|-------|--------|------------------------|-----|--------|
|                                                                                      | mm Hg                  | kPa   | Method | mm Hg                  | kPa | Method |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol | 0.62                   | 0.083 | EU A.4 |                        |     |        |
| reaction product: bisphenol-A-(epichlorohydrin); epoxy resin                         | <0                     | <0    | EU A.4 |                        |     |        |

|                                               |                                                                                                                                          |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Relative vapor density</b>                 | : Not available.                                                                                                                         |
| <b>Relative density</b>                       | : Not available.                                                                                                                         |
| <b>Density</b>                                | : 2.2 to 2.3 g/cm <sup>3</sup> [20°C (68°F)]                                                                                             |
| <b>Solubility in water</b>                    | : Not available.                                                                                                                         |
| <b>Miscible with water</b>                    | : No.                                                                                                                                    |
| <b>Partition coefficient: n-octanol/water</b> | : Not applicable.                                                                                                                        |
| <b>Auto-ignition temperature</b>              | : Not applicable.                                                                                                                        |
| <b>Decomposition temperature</b>              | : Not available.                                                                                                                         |
| <b>Viscosity</b>                              | : Dynamic (room temperature): Not available.<br>Kinematic (room temperature): Not available.<br>Kinematic (40°C (104°F)): Not available. |

### Particle characteristics

|                             |                   |
|-----------------------------|-------------------|
| <b>Median particle size</b> | : Not applicable. |
|-----------------------------|-------------------|

## Section 10. Stability and reactivity

|                                           |                                                                                              |
|-------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients. |
| <b>Chemical stability</b>                 | : The product is stable.                                                                     |
| <b>Possibility of hazardous reactions</b> | : Under normal conditions of storage and use, hazardous reactions will not occur.            |
| <b>Conditions to avoid</b>                | : No specific data.                                                                          |



## Section 10. Stability and reactivity

**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

Not available.

**Conclusion/Summary [Product]** : Not available.

#### Skin corrosion/irritation

##### **Product/ingredient name**

Nickel

##### **Result**

**Human - Skin - Severe irritant**

Duration of treatment/exposure: 48 hours

Amount/concentration applied: 5 pph

**Conclusion/Summary [Product]** : Not available.

#### Serious eye damage/eye irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

#### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

#### Respiratory or skin sensitization

Not available.

#### **Skin**

**Conclusion/Summary [Product]** : Not available.

#### **Respiratory**

**Conclusion/Summary [Product]** : Not available.

#### Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

#### Carcinogenicity

Not available.

**Conclusion/Summary [Product]** : Not available.



## Section 11. Toxicological information

### Classification

| Product/ingredient name | IARC | NTP                                              | ACGIH |
|-------------------------|------|--------------------------------------------------|-------|
| Nickel                  | 2B   | Reasonably anticipated to be a human carcinogen. | A5    |

### Reproductive toxicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Result                                                          |
|-------------------------|-----------------------------------------------------------------|
| nickel                  | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

Not available.

### Potential acute health effects

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

### Symptoms related to the physical, chemical and toxicological characteristics

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

## Section 11. Toxicological information

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**Conclusion/Summary [Product]** : Not available.

- General** : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

N/A

## Section 12. Ecological information

### Toxicity

#### Product/ingredient name

Nickel

#### Result

##### **Acute - EC50 - Fresh water**

Aquatic plants - Duckweed - *Lemna minor*  
450 µg/l [4 days]  
Effect: Growth

##### **Acute - LC50 - Fresh water**

Fish - Indian catfish - *Heteropneustes fossilis*  
47.5 ng/l [96 hours]  
Effect: Mortality

##### **Chronic - NOEC - Marine water**

Algae - Dinoflagellate - *Glenodinium halli*  
100 mg/l [72 hours]  
Effect: Population

##### **Chronic - NOEC - Fresh water**

Fish - common carp - *Cyprinus carpio*  
Age: 13 months; Size: 10.5 cm; Weight: 27.8 g  
3.5 µg/l [4 weeks]  
Effect: Accumulation

##### **Acute - LC50 - Fresh water**

US EPA, OECD  
Crustaceans - Water flea - *Ceriodaphnia dubia* - Juvenile (Fledgling, Hatchling, Weanling)  
Age: 2 to 8 hours  
34.6 µg/l [48 hours]  
Effect: Mortality

##### **Chronic - EC10**

OECD  
Daphnia - Water flea - *Daphnia magna* - Neonate  
Age: <24 hours  
6.9 µg/l [21 days]  
Effect: Reproduction

## Section 12. Ecological information

**Conclusion/Summary [Product]** : Not available.

### Persistence and degradability

Not available.

**Conclusion/Summary [Product]** : Not available.

### Bioaccumulative potential

| Product/ingredient name                                                              | LogP <sub>ow</sub> | BCF | Potential |
|--------------------------------------------------------------------------------------|--------------------|-----|-----------|
| reaction product: bisphenol-A-(epichlorohydrin); epoxy resin                         | 2.64 to 3.78       | 31  | Low       |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol | 2.7                | -   | Low       |

### Mobility in soil

**Soil/Water partition coefficient** : 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                                                                                                                                                                                                     |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UN number</b>               | UN3082                                                                                                                                                                                                   | UN3082                                              | UN3082                                                                                                                                                                                                   | UN3082                                                                                                                                                                                                   |
| <b>UN proper shipping name</b> | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorohydrin); epoxy resin, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol) | Environmentally hazardous substance, liquid, n.o.s. | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorohydrin); epoxy resin, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol) | Environmentally hazardous substance, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorohydrin); epoxy resin, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol) |

## Section 14. Transport information

|                            |       |       |       |       |
|----------------------------|-------|-------|-------|-------|
| Transport hazard class(es) | 9<br> | 9<br> | 9<br> | 9<br> |
| 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 in package sizes less than the product reportable quantity, unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg.

**Reportable quantity** 9523.8 lbs / 4323.8 kg [507.66 gal / 1921.7 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**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

**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** : The following components are listed: nickel (and its compounds)

**CEPA Toxic substances** : None of the components are listed.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

## Section 15. Regulatory information

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

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

## Section 16. Other information

### History

|                                       |             |
|---------------------------------------|-------------|
| <b>Date of printing</b>               | : 2/2/2026  |
| <b>Date of issue/Date of revision</b> | : 1/29/2026 |
| <b>Date of previous issue</b>         | : 11/4/2025 |
| <b>Version</b>                        | : 1.6       |

### Key to abbreviations

|                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| : ATE = Acute Toxicity Estimate                                                                                                                         |
| : BCF = Bioconcentration Factor                                                                                                                         |
| : DOT = Department of Transportation                                                                                                                    |
| : 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                                                                                                         |
| : IMO = International Maritime Organization                                                                                                             |
| : 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                                                                                                                               |
| : TDG = Transportation of Dangerous Goods                                                                                                               |
| : UN = United Nations                                                                                                                                   |

### Procedure used to derive the classification

## Section 16. Other information

| Classification                                                                                                                                                                                     | Justification                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| SKIN IRRITATION - Category 2<br>EYE IRRITATION - Category 2A<br>SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 | Calculation method<br>Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

**References** : Not available.

Indicates information that has changed from previously issued version.

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