SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: CHEM 100-OP B
Other means of identification: None
Recommended use: Epoxy Hardener for orange peel
Manufactured by: CHEMTEC
913 Michelin
Laval, Quebec
Canada H7L-5B6
E-mail Address: info@epoxychemtec.com
Prepared by: CHEMTEC
Telephone number of preparer: 1-450-629-1717

Emergency Telephone Number:
24-Hour Emergency Telephone Number Canada (CANUTEC): (613) 996-6666

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification of hazardous product
Acute Toxicity, Oral (Category 4)
Acute Toxicity, Dermal (Category 5)
Skin Sensitization (Category 1A)
Skin Corrosion/irritation (Category 1B)
Serious eye damage/irritation (Category 1)
Reproductive toxicity (Category 2)
Hazardous to the aquatic environment - acute (Category 1)
Hazardous to the aquatic environment - chronic (Category 1)

GHS Label Elements: Hazard Pictograms/symbols

Signal Word: DANGER

Hazard and Precautionary Statements:
H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H314 Causes severe skin burns and eye damage
H361 Suspected of damaging fertility or the unborn child
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust or mist. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P272 Contaminated work clothing should not be allowed out of the workplace. P270 Do not eat, drink or smoke when using this product. P264 Wash with plenty of water and soap thoroughly after handling. P308 + P313 IF exposed or concerned: Get medical advice/attention. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [shower]. P310 Immediately call a POISON CENTER or doctor/physician. P330 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/doctor/…if you feel unwell. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P362 + P364 Take off contaminated clothing and wash before reuse. P391 Collect spillage. P405 Store locked up. P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other Hazards Known: None known

GHS Special Labeling: EUH205 - “Contains epoxy constituents. May produce a skin allergy.”

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>epoxy adduct</td>
<td>Proprietary</td>
<td>10 - 30 %</td>
</tr>
<tr>
<td>isophorone diamine</td>
<td>2855-13-2</td>
<td>10 - 30 %</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>100-51-6</td>
<td>1 - 10 %</td>
</tr>
</tbody>
</table>

Page 1 of 5
SECTION 4. FIRST AID MEASURES

**Inhalation**
IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Ingestion**
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**Skin Contact**
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

**Eye Contact**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

**Burning pain and severe corrosive skin damage.** Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**Indication of any immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**General Information**
IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure the medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media**
Suitable extinguishing media: In case of fire: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂)

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the hazardous product:** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for fire-fighting:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental Precautions**
Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

SECTION 7. HANDLING AND STORAGE

**Precautions for safe handling**
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or mist. Do not get in eyes, on skin, or on clothing. Do not get this material in contact with eyes. DO not taste or swallow. When using, do not eat,
drink or smoke. Provide adequate ventilation. Should be handled in closed systems, if possible. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Store locked up. Store in original tightly closed container. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Control Parameters (biological limit values or exposure limit values and source of those values)**

<table>
<thead>
<tr>
<th>Exposure limits</th>
<th>CAS Proprietary</th>
<th>CAS 2855-13-2</th>
<th>CAS 100-51-6</th>
<th>CAS 84852-15-3</th>
<th>CAS 9046-10-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
</tr>
</tbody>
</table>

**Engineering Controls**

Provide good local exhaust ventilation to control vapour/mist. Eye wash facilities and emergency showers must be available when handling this product.

**Personal Protective Equipment**

Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator. Wear appropriate chemical resistant protective gloves. Wear tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists. Wear appropriate protective clothing. When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eyewash fountains and safety showers are recommended in the work area.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Physical State/ Appearance/ Color:</th>
<th>Vapour Pressure:</th>
<th>Odour:</th>
<th>Vapour Density:</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paste, Opaque color</td>
<td></td>
<td>Slight amine odour</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Odour threshold:</td>
<td></td>
<td>Not available</td>
<td>Relative Density:</td>
<td>1.023 (g/ml)</td>
</tr>
<tr>
<td>pH:</td>
<td></td>
<td>Not available</td>
<td>Solubility:</td>
<td>Partial</td>
</tr>
<tr>
<td>Melting/freezing point:</td>
<td></td>
<td>Not available</td>
<td>Partition coefficient-n-octanol/water:</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point/range:</td>
<td></td>
<td>Not available</td>
<td>Auto-ignition temperature:</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point (closed cup):</td>
<td></td>
<td>&gt; 93 °C</td>
<td>Decomposition temperature:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td></td>
<td>Not available</td>
<td>Viscosity:</td>
<td>275,000-300,000 cps</td>
</tr>
<tr>
<td>Flammability (solids and gases):</td>
<td></td>
<td>Not available</td>
<td>VOC:</td>
<td>200.5 g/L</td>
</tr>
<tr>
<td>Upper and lower flammability/explosive limits</td>
<td>Not available</td>
<td>Other:</td>
<td>None known</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 10. STABILITY AND REACTIVITY**

**Reactivity:** This product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical Stability:** This product is stable under normal conditions.

**Possibility of hazardous reactions:** This product will polymerize if mixed with an epoxy resin. Considerable heat can evolve.

**Conditions to Avoid:** Avoid temperatures exceeding the flash point. Epoxy resins under uncontrolled conditions.

**Incompatible materials:** Strong oxidizing agents and acids.

**Hazardous decomposition products:** Unknown.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Likely routes of exposure (inhalation, ingestion, skin and eye contact):**

May be harmful if inhaled. Harmful if swallowed. May be harmful in contact with skin. May cause an allergic skin reaction. Causes severe skin burns. Causes serious eye damage.
**SAFETY DATA SHEET (SDS)**

**PRODUCT IDENTIFIER** – CHEM 100-OP B  
**DATE & VERSION** - 20 December 2018 Version 01

**Symptoms related to the physical, chemical and toxicological characteristics:**
Contains ingredients which are extremely destructive to tissues of the mucous membranes and upper respiratory tract, eyes, and skin. Burning pain and severe corrosive skin damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing, shortness of breath, headaches, and nausea.

**Delayed and immediate effects (chronic effects from short- term and long-term exposure):**

**Skin Sensitization** – Sensitization after skin contact possible; **Respiratory Sensitization** – No data available; **Germ Cell Mutagenicity** – No data available; **Carcinogenicity** – No ingredient listed by IARC, ACGIH, NTP or OSHA **Reproductive Toxicity** – Suspected of damaging fertility or the unborn child; **Specific Target Organ Toxicity** — **Single Exposure** – No data available; **Specific Target Organ Toxicity - Repeated Exposure** – No data available; **Health Hazards Not Otherwise Classified** – No data available.

**Numerical measures of toxicity (ATE; LD<sub>50</sub> & LC<sub>50</sub>):**

| CAS Proprietary | LD<sub>50</sub>, Oral - Rat 1030 mg/kg |  |
| CAS 2855-13-2  | LD<sub>50</sub>, Oral - Rat 1360 mg/kg |  |
| CAS 100-51-6   | LD<sub>50</sub>, Dermal-Rabbit 3160 mg/kg |  |
| CAS 84852-15-3 | LD<sub>50</sub>, Oral - Rat - 1300 mg/kg |  |
| CAS 9046-10-0  | LD<sub>50</sub>, Oral - 2885.3 mg/kg |  |
|               | LD<sub>50</sub>, Inhalation - Rat - 8h & 0.74 mg/l |  |
|               | LD<sub>50</sub>, Dermal - Rabbit - 2980 mg/kg |  |

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity (aquatic and terrestrial information):**
Very toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS Proprietary</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>CAS 2855-13-2</td>
<td>LC&lt;sub&gt;50&lt;/sub&gt;, Leuciscus idus (ide)</td>
<td>110 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>EC&lt;sub&gt;50&lt;/sub&gt;, Daphnia magna</td>
<td>23 mg/l - 48 h</td>
</tr>
<tr>
<td></td>
<td>EC&lt;sub&gt;10&lt;/sub&gt;, Chaetogammarus marinus</td>
<td>388 mg/l - 48 h</td>
</tr>
<tr>
<td>CAS 100-51-6</td>
<td>LC&lt;sub&gt;50&lt;/sub&gt;, Pimephales promelas (fathead minnow)</td>
<td>460 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC&lt;sub&gt;50&lt;/sub&gt;, Lepomis macrochirus (bluegill)</td>
<td>10 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC&lt;sub&gt;50&lt;/sub&gt;, Menidia peninsulae (silverside minnow)</td>
<td>32 mg/l - 96 h</td>
</tr>
<tr>
<td>CAS 84852-15-3</td>
<td>LC&lt;sub&gt;50&lt;/sub&gt;, Lepomis macrochirus (bluegill)</td>
<td>0.1351 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC&lt;sub&gt;50&lt;/sub&gt;, Pimephales promelas (fathead minnow)</td>
<td>0.1383 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC&lt;sub&gt;50&lt;/sub&gt;, Pleurobranchus americanus (winter flounder)</td>
<td>0.017 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>EC&lt;sub&gt;50&lt;/sub&gt;, Mulinia lateralis (Clam)</td>
<td>0.0379 mg/l - 48 h</td>
</tr>
<tr>
<td>CAS 9046-10-0</td>
<td>LC&lt;sub&gt;50&lt;/sub&gt;, Oncorhynchus mykiss (rainbow trout)</td>
<td>15 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>EC&lt;sub&gt;10&lt;/sub&gt;, Daphnia</td>
<td>80 mg/l - 48 h</td>
</tr>
</tbody>
</table>

**Persistence and degradability:** Not readily biodegradable.  
**Bioaccumulative potential:** No data available.  
**Mobility in soil:** Adsorption to solid soil phase is possible for some ingredients but not enough data is available for the mixture.  
**Other adverse effects:** No data available.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Information on safe handling for disposal/methods of disposal/contaminated packaging:** Dispose of contents/container into safe container in accordance with local, regional or national regulations.

**SECTION 14. TRANSPORT INFORMATION**

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations:**
UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (isophorone diamine, 4-nonylphenol, branched); CLASS 8; PG III

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):**
UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (isophorone diamine, 4-nonylphenol, branched); CLASS 8; PG III

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air):**
SAFETY DATA SHEET (SDS)

UN3267; CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (isophorone diamine, 4-nonylphenol, branched); CLASS 8; PG III

Special Precautions (transport/conveyance): None

Environmental hazards (IMDG or other): Marine Pollutant

Bulk transport (usually more than 450L in capacity): Possible.

SECTION 15. REGULATORY INFORMATION

Safety/health Canadian regulations specifics: Refer to section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).

Environmental Canadian regulations specifics: Refer to section 3 for ingredient(s) of the DSL.

Safety/health/environmental outside regulations specifics: None

SECTION 16. OTHER INFORMATION

Date of latest revision of the safety data sheet: 20 December 2018

Disclaimer:

NOTICE TO READER:

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***END OF S.D.S.***