



**SAFETY DATA SHEET (SDS)**

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** ECTR A  
**Other means of identification:** None  
**Recommended use:** Epoxy Resin  
**Manufactured by:** CTM Adhesives Inc.  
8320 Grenache  
Montréal, Québec  
Canada H1J 1C5  
**E-mail Address :** www.ctmadhesives.com  
**Prepared by:** The Health, Safety and Environmental Department of CTM Adhesives  
**Telephone number of preparer:** 1-514-321-5540  
**Fax number:** 1-514-321-5570

**Emergency Telephone Number:**

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

**SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification of hazardous product**

- Skin Sensitization (Category 1B)
- Skin Corrosion/irritation (Category 2)
- Serious eye damage/irritation (Category 2A)
- Acute Toxicity, Oral (Category 5)
- Hazardous to the aquatic environment - acute (Category 2)
- Hazardous to the aquatic environment - chronic (Category 2)

**GHS Label Elements**

**Hazard Pictograms/symbols**



**Signal Word:** WARNING

**Hazard and Precautionary Statements:**

- H303** May be harmful if swallowed
- H315** Causes skin irritation
- H317** May cause an allergic skin reaction
- H319** Causes serious eye irritation
- H401** Toxic to aquatic life
- H411** Toxic to aquatic life with long lasting effects

**P261** Avoid breathing dust/fume/gas/mist/vapours/spray. **P264** Wash with plenty of water and soap thoroughly after handling. **P272** Contaminated work clothing should not be allowed out of the workplace. **P280** Wear protective gloves/eye protection. **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. **P337 + P313** If eye irritation persists: Get medical advice/attention. **P302 + P352** **IF ON SKIN:** Wash with plenty of water. **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention. **P312** **IF SWALLOWED:** Call a POISON Center/doctor/...if you feel unwell. **P362 + P364** Take off contaminated clothing and wash before reuse. **P273** Avoid release to the environment. **P391** Collect spillage. **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. See information supplied by the manufacture."

**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

| <u>Chemical Name</u>                                       | <u>CAS Number</u> | <u>Concentration (%)</u> |
|--|-------------------|--------------------------|
| Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin | 25085-99-8        | 60 - 100 %               |
| alkyl glycidyl ether                                       | 68609-97-2        | 1 - 10 %                 |
| benzyl alcohol   | 100-51-6          | 1 - 10 %                 |



## SAFETY DATA SHEET (SDS)

### SECTION 4. FIRST AID MEASURES

|                            |  |
|----------------------------|--|
| <b><u>Ingestion</u></b>    | IF SWALLOWED: Call a POISON Center/doctor/...if you feel unwell.   |
| <b><u>Skin Contact</u></b> | IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.  |
| <b><u>Eye Contact</u></b>  | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention |

#### **Most important symptoms and effects (acute and delayed)**

Prolonged or repeated contact may cause skin irritation with local redness. May cause eye irritation. Corneal injury is unlikely. Has caused allergic skin reactions in humans.

#### **Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

#### **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 (CO<sub>2</sub>)

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

**Specific hazards arising from the hazardous product:** During fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

**Special protective equipment and precautions for fire-fighting:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing. Avoid contact with this material during fire-fighting operations. If contact is likely, change to full chemical resistant fire-fighting clothing with self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions, protective equipment and emergency procedures**

Isolate area. Keep unnecessary and unprotected personnel away. Wear appropriate protective equipment and clothing during clean-up. 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**

Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid use of electric band heaters. Avoid release to the environment. Observe good industrial hygiene practices.

#### **Conditions for safe storage, including any incompatibilities**

Store in cool and dry, under well-ventilated conditions. Store away from incompatible materials (see Section 10 of the SDS). Keep container closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.



**SAFETY DATA SHEET (SDS)**

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

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

Exposure limits:

|                |  |
|----------------|--|
| CAS 25085-99-8 | For Workers: Acute - systemic effects<br>Dermal 8.330 mg/kg bw/day    Inhalation 12.25 mg/m <sup>3</sup><br>For Consumers: Acute - systemic effects<br>Dermal 3.571 mg/kg bw/day    Inhalation 0.75 mg/m <sup>3</sup><br>For Workers: Long-term - systemic effects<br>Dermal 8.330 mg/kg bw/day    Inhalation 12.25 mg/m <sup>3</sup><br>For Consumers: Long-term - systemic effects<br>Dermal 3.571 mg/kg bw/day    Inhalation 0.75 mg/m <sup>3</sup> |
| CAS 68609-97-2 | No exposure limits noted for the ingredient(s)   |
| CAS 100-51-6   | No exposure limits noted for the ingredient(s)   |

**Engineering Controls**

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.

**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**

**Information on basic physical and chemical properties**

|  |                           |   |                 |
|--|---------------------------|---|-----------------|
| <b>Physical State/ Appearance/ Color:</b>            | Transparent liquid, Clear | <b>Vapour Pressure:</b>                       | Not available   |
| <b>Odour:</b>  | Odorless to mild          | <b>Vapour Density:</b>                        | Not available   |
| <b>Odour threshold:</b>                              | Not available             | <b>Relative Density:</b>                      | 1.122 (g/ml)    |
| <b>pH:</b>   | Not available             | <b>Solubility:</b>                            | Partial         |
| <b>Melting/freezing point:</b>                       | Not available             | <b>Partition coefficient-n-octanol/water:</b> | Not available   |
| <b>Initial boiling point/range:</b>                  | Not available             | <b>Auto-ignition temperature:</b>             | Not available   |
| <b>Flash point (closed cup):</b>                     | > 93 °C                   | <b>Decomposition temperature:</b>             | Not available   |
| <b>Evaporation rate:</b>                             | Not available             | <b>Viscosity:</b>                             | 1200 - 1400 cps |
| <b>Flammability (solids and gases):</b>              | Not available             | <b>VOC:</b>                                   | 45 g/L          |
| <b>Upper and lower flammability/explosive limits</b> | Not available             | <b>Other:</b>                                 | None known      |

**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 amine. Considerable heat can evolve.

**Conditions to Avoid:** Avoid temperatures exceeding the flash point. Avoid unintended contact with amines.

**Incompatible materials:** Strong oxidizers, strong alkalis, strong mineral acids, amines.

**Hazardous decomposition products:** Unknown.

**SECTION 11. TOXICOLOGICAL INFORMATION**

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

May be harmful if swallowed. May cause skin irritation. May cause an allergic skin reaction. May cause eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics:**

High airborne concentrations of vapors may cause irritation of the respiratory tract and mucous membranes. Symptoms may include stinging, itching, tearing, redness, swelling, and blurred vision.

**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** No data available;



**SAFETY DATA SHEET (SDS)**

**Specific Target Organ Toxicity — Single Exposure** – No data available; **Specific Target Organ Toxicity - Repeated Exposure** – No data available; **Aspiration Hazard** – 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 25085-99-8 LD<sub>50</sub>, Oral - Rat >15000 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit 23000 mg/kg
- CAS 68609-97-2 LD<sub>50</sub>, Oral - Rat 17100 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit >4.5 mL/kg
- CAS 100-51-6 LD<sub>50</sub>, Oral - Rat 1360 mg/kg

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity ( aquatic and terrestrial information):**

Hazardous to the aquatic environment

| Product        | Species  | Result               |
|----------------|--|----------------------|
| CAS 25085-99-8 | LC <sub>50</sub> Oncorhynchus mykiss (rainbow trout)     | 2 mg/l -96 h         |
|                | EC <sub>50</sub> Daphnia magna (Water flea)              | 1.8 mg/l - 48 h      |
| CAS 68609-97-2 | LC <sub>50</sub> Fish                                    | > 1800 mg/l - 96 h   |
|                | LC <sub>50</sub> Fish                                    | > 5000 mg/l - 96 h   |
| CAS 100-51-6   | EC <sub>50</sub> Invertebrates                           | 6.07-7.2 mg/l - 48 h |
|                | LC <sub>50</sub> Pimephales promelas (fathead minnow)    | 460 mg/l - 96 h      |
|                | LC <sub>50</sub> Lepomis macrochirus (bluegill)          | 10 mg/l - 96 h       |
|                | LC <sub>50</sub> Menidia peninsulae ( silverside minnow) | 32 mg/l - 96 h       |

**Persistence and degradability:** Not enough data available.

**Bioaccumulative potential:** Bioconcentration potential is moderate.

**Mobility in soil:** Low potential for mobility in soil.

**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:**

UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin); CLASS 9; PG III

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):**

UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin); CLASS 9; PG III

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

UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin); CLASS 9; PG III

**Special Precautions (transport/conveyance):** May also be shipped as a LIMITED QUANTITY in accordance with TDG.

**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



**SAFETY DATA SHEET (SDS)**

**SECTION 16. OTHER INFORMATION**

**Date of latest revision of the safety data sheet:** 4 April 2017

**Disclaimer:**

**NOTICE TO READER:**

CTM Adhesives Inc. expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, CTM Adhesives makes no representations as to its accuracy or sufficiency. Conditions of use are beyond CTM Adhesives' control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

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



**SAFETY DATA SHEET (SDS)**

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** ECTR B  
**Other means of identification:** None  
**Recommended use:** Epoxy Hardener  
**Manufactured by:** CTM Adhesives Inc.  
 8320 Grenache  
 Montréal, Québec  
 Canada H1J 1C5  
**E-mail Address :** www.ctmadhesives.com  
**Prepared by:** The Health, Safety and Environmental Department of CTM Adhesives  
**Telephone number of preparer:** 1-514-321-5540  
**Fax number:** 1-514-321-5570  
**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. **P304** + **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**

| <u>Chemical Name</u>     | <u>CAS Number</u> | <u>Concentration (%)</u> |
|--------------------------|-------------------|--------------------------|
| epoxy adduct             | Proprietary       | 10 - 30 %                |
| isophorone diamine       | 2855-13-2         | 10 - 30 %                |
| benzyl alcohol           | 100-51-6          | 1 - 10 %                 |
| 4-nonylphenol, branched  | 84852-15-3        | 10 - 30 %                |
| polyoxypropylene diamine | 9046-10-0         | 20 - 40 %                |



## SAFETY DATA SHEET (SDS)

### SECTION 4. FIRST AID MEASURES

|                            |   |
|----------------------------|---|
| <b><u>Inhalation</u></b>   | IF INHALED: Remove person to fresh air and keep comfortable for breathing.  |
| <b><u>Ingestion</u></b>    | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  |
| <b><u>Skin Contact</u></b> | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.   |
| <b><u>Eye Contact</u></b>  | 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. |

#### **Most important symptoms and effects (acute and delayed)**

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 (CO<sub>2</sub>)

**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).



## SAFETY DATA SHEET (SDS)

### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Exposure limits:

|                 |  |
|-----------------|--|
| CAS Proprietary | No exposure limits noted for the ingredient(s) |
| CAS 2855-13-2   | No exposure limits noted for the ingredient(s) |
| CAS 100-51-6    | No exposure limits noted for the ingredient(s) |
| CAS 84852-15-3  | No exposure limits noted for the ingredient(s) |
| CAS 9046-10-0   | No exposure limits noted for the ingredient(s) |

#### 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

#### Information on basic physical and chemical properties

|  |                           |   |               |
|--|---------------------------|---|---------------|
| <b>Physical State/ Appearance/ Color:</b>            | Transparent liquid, Clear | <b>Vapour Pressure:</b>                       | Not available |
| <b>Odour:</b>  | Slight amine odour        | <b>Vapour Density:</b>                        | Not available |
| <b>Odour threshold:</b>                              | Not available             | <b>Relative Density:</b>                      | 0.956 (g/ml)  |
| <b>pH:</b>   | Not available             | <b>Solubility:</b>                            | Partial       |
| <b>Melting/freezing point:</b>                       | Not available             | <b>Partition coefficient-n-octanol/water:</b> | Not available |
| <b>Initial boiling point/range:</b>                  | Not available             | <b>Auto-ignition temperature:</b>             | Not available |
| <b>Flash point (closed cup):</b>                     | > 93 °C                   | <b>Decomposition temperature:</b>             | Not available |
| <b>Evaporation rate:</b>                             | Not available             | <b>Viscosity:</b>                             | 200-400 cps   |
| <b>Flammability (solids and gases):</b>              | Not available             | <b>VOC:</b>                                   | 224 g/L       |
| <b>Upper and lower flammability/explosive limits</b> | Not available             | <b>Other:</b>                                 | None known    |

### 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.

#### 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**





**SAFETY DATA SHEET (SDS)**

**Toxicity - Repeated Exposure** – No data available; **Aspiration Hazard** – Possible; **Health Hazards Not Otherwise Classified** – No data available.

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

|                 |   |
|-----------------|---|
| CAS Proprietary | No data available   |
| CAS 2855-13-2   | LD <sub>50</sub> , Oral - Rat 1030 mg/kg  |
| CAS 100-51-6    | LD <sub>50</sub> , Oral - Rat 1360 mg/kg  |
| CAS 84852-15-3  | LD <sub>50</sub> , Oral- Rat - 1300 mg/kg<br>LD <sub>50</sub> , Dermal- Rabbit - 3160 mg/kg   |
| CAS 9046-10-0   | LD <sub>50</sub> , Oral- Rat - 2885.3 mg/kg<br>LD <sub>50</sub> , Inhalation - Rat - 8h > 0.74 mg/l<br>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.

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

**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):**

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.



PRODUCT IDENTIFIER - ECTR A&B  
DATE & VERSION - 4 April 2017 Version 1.1

## SAFETY DATA SHEET (SDS)

Safety/health/environmental outside regulations specifics: None

### SECTION 16. OTHER INFORMATION

Date of latest revision of the safety data sheet: 4 April 2017

Disclaimer:

#### NOTICE TO READER:

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



**SAFETY DATA SHEET (SDS)**

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** BASE 101-500, BASE 124-500, BASE 128-500, BASE 148-500, BASE 135-500, BASE 116-500, BASE 112-500, BASE 143-500, BASE 113-500, BASE 152-500

**Other means of identification:** None

**Recommended use:** Aluminum Based Metallic Colorants for Epoxy Resin

**Manufactured by:** CTM Adhesives Inc.  
8320 Grenache  
Montréal, Québec  
Canada H1J 1C5

**E-mail Address :** www.ctmadhesives.com

**Prepared by:** The Health, Safety and Environmental Department of CTM Adhesives

**Telephone number of preparer:** 1-514-321-5540

**Fax number:** 1-514-321-5570

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

**SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification of hazardous product**

- Flammable liquids (Category 4)
- Skin Sensitization (Category 1B)
- Skin Corrosion/irritation (Category 2)
- Serious eye damage/irritation (Category 2A)
- Hazardous to the aquatic environment - acute (Category 2)
- Hazardous to the aquatic environment - chronic (Category 2)

**GHS Label Elements**

**Hazard Pictograms/symbols**



**Signal Word:** WARNING

**Hazard and Precautionary Statements:**

- H227** Combustible liquid
- H315** Causes skin irritation
- H317** May cause an allergic skin reaction
- H319** Causes serious eye irritation
- H401** Toxic to aquatic life
- H411** Toxic to aquatic life with long lasting effects

**P210** Keep away from heat, hot surfaces, sparks, open flame and other ignition sources. No smoking. **P261** Avoid breathing dust/fume/gas/mist/vapours/spray. **P264** Wash with plenty of water and soap thoroughly after handling. **P272** Contaminated work clothing should not be allowed out of the workplace. **P280** Wear protective gloves/eye protection. **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. **P337 + P313** If eye irritation persists: Get medical advice/attention. **P302 + P352 IF ON SKIN:** Wash with plenty of water. **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention. **P312 IF SWALLOWED:** Call a POISON Center/doctor/...if you feel unwell. **P362 + P364** Take off contaminated clothing and wash before reuse. **P370 +P378** In case of fire: Use water fog, foam, dry chemical powder, or carbon dioxide (CO<sub>2</sub>) to extinguish. **P273** Avoid release to the environment. **P391** Collect spillage. **P403** Store in a well-ventilated place. **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. See information supplied by the manufacture."

**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

| <u>Chemical Name</u>                                       | <u>CAS Number</u> | <u>Concentration (%)</u> |
|--|-------------------|--------------------------|
| Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin | 25085-99-8        | 50 - 80 %                |
| alkyl glycidyl ether                                       | 68609-97-2        | 1 - 10 %                 |
| benzyl alcohol   | 100-51-6          | 1 - 10 %                 |
| Aluminum flake   | 7429-90-5         | 10 - 15 %                |
| Petroleum distillates                                      | 64742-48-9        | 1 - 5 %                  |
| Naphtha solvent, light aromatic                            | 64742-95-6        | 1 - 5 %                  |



## SAFETY DATA SHEET (SDS)

### SECTION 4. FIRST AID MEASURES

|                            |   |
|----------------------------|---|
| <b><u>Ingestion</u></b>    | IF SWALLOWED: Rinse mouth. Call a POISON Center/doctor/...if you feel unwell.   |
| <b><u>Skin Contact</u></b> | IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.   |
| <b><u>Eye Contact</u></b>  | 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. |

#### **Most important symptoms and effects (acute and delayed)**

Prolonged or repeated contact may cause skin irritation with local redness. May cause eye irritation. Corneal injury is unlikely. Has caused allergic skin reactions in humans.

#### **Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

#### **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 (CO<sub>2</sub>)

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

**Specific hazards arising from the hazardous product:** During fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

**Special protective equipment and precautions for fire-fighting:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing. Avoid contact with this material during fire-fighting operations. If contact is likely, change to full chemical resistant fire-fighting clothing with self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions, protective equipment and emergency procedures**

Isolate area. Keep unnecessary and unprotected personnel away. Wear appropriate protective equipment and clothing during clean-up. 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**

Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid use of electric band heaters. Avoid release to the environment. Observe good industrial hygiene practices.

#### **Conditions for safe storage, including any incompatibilities**

Keep away from heat, sparks and open flames. Store in cool and dry, under well-ventilated conditions. Store away from incompatible materials (see Section 10 of the SDS). Keep container closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.



**SAFETY DATA SHEET (SDS)**

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

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

Exposure limits:

|                |  |
|----------------|--|
| CAS 25085-99-8 | For Workers: Acute - systemic effects<br>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m <sup>3</sup><br>For Consumers: Acute - systemic effects<br>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m <sup>3</sup><br>For Workers: Long-term - systemic effects<br>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m <sup>3</sup><br>For Consumers: Long-term - systemic effects<br>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m <sup>3</sup> |
| CAS 68609-97-2 | No exposure limits noted for the ingredient(s)   |
| CAS 100-51-6   | No exposure limits noted for the ingredient(s)   |
| CAS 7429-90-5  | NIOSH 10 mg/m <sup>3</sup> TWA (total dust) ; 5 mg/m <sup>3</sup> TWA (respirable dust)  |
| CAS 64742-48-9 | No exposure limits noted for the ingredient(s)   |
| CAS 64742-95-6 | No exposure limits noted for the ingredient(s)   |

**Engineering Controls**

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.

**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**

**Information on basic physical and chemical properties**

|  |                       |   |  |
|--|-----------------------|---|--|
| <b>Physical State/ Appearance/ Color:</b>            | Liquid/Various Colors | <b>Vapour Pressure:</b>                       | Not available                          |
| <b>Odour:</b>  | Odorless to mild      | <b>Vapour Density:</b>                        | Not available                          |
| <b>Odour threshold:</b>                              | Not available         | <b>Relative Density:</b>                      | Varies depending on color              |
| <b>pH:</b>   | Not available         | <b>Solubility:</b>                            | Negligible in water, reacts with water |
| <b>Melting/freezing point:</b>                       | Not available         | <b>Partition coefficient-n-octanol/water:</b> | Not available                          |
| <b>Initial boiling point/range:</b>                  | Not available         | <b>Auto-ignition temperature:</b>             | Not available                          |
| <b>Flash point (closed cup):</b>                     | > 60°C                | <b>Decomposition temperature:</b>             | Not available                          |
| <b>Evaporation rate:</b>                             | Not available         | <b>Viscosity:</b>                             | Paste                                  |
| <b>Flammability (solids and gases):</b>              | Not available         | <b>VOC:</b>                                   | 119 g/l                                |
| <b>Upper and lower flammability/explosive limits</b> | Not available         | <b>Other:</b>                                 | None known                             |

**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 amine. Considerable heat can evolve.

**Conditions to Avoid:** Avoid temperatures exceeding the flash point. Avoid unintended contact with amines. When aluminum reacts with water, acids, alkalis, oxidizers, material oxides or halogen compounds, hydrogen gas will be generated.

**Incompatible materials:** Water, strong oxidizers, strong alkalis, strong mineral acids, amines.

**Hazardous decomposition products:** Unknown.

**SECTION 11. TOXICOLOGICAL INFORMATION**

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

May be harmful if swallowed. May cause skin irritation. May cause an allergic skin reaction. May cause eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics:**

High airborne concentrations of vapors may cause irritation of the respiratory tract and mucous membranes. Symptoms may include stinging.



**SAFETY DATA SHEET (SDS)**

itching, tearing, redness, swelling, and blurred vision.

**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** No data available; **Specific Target Organ Toxicity — Single Exposure** – No data available; **Specific Target Organ Toxicity - Repeated Exposure** – No data available; **Aspiration Hazard** – 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 25085-99-8 LD<sub>50</sub>, Oral - Rat >15000 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit 23000 mg/kg
- CAS 68609-97-2 LD<sub>50</sub>, Oral - Rat 17100 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit >4.5 mL/kg
- CAS 100-51-6 LD<sub>50</sub>, Oral - Rat 1360 mg/kg
- CAS 7429-90-5 No data available
- CAS 64742-48-9 LD<sub>50</sub>, Oral >15000 mg/kg  
LD<sub>50</sub>, Dermal >3160 mg/kg
- CAS 64742-95-6 LD<sub>50</sub>, Oral >3000 mg/kg  
LD<sub>50</sub>, Dermal >3160 mg/kg

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity ( aquatic and terrestrial information):**

Hazardous to the aquatic environment

| Product        | Species  | Result               |
|----------------|--|----------------------|
| CAS 25085-99-8 | LC <sub>50</sub> Oncorhynchus mykiss (rainbow trout)     | 2 mg/l -96 h         |
|                | EC <sub>50</sub> Daphnia magna (Water flea)              | 1.8 mg/l - 48 h      |
| CAS 68609-97-2 | LC <sub>50</sub> Fish                                    | > 1800 mg/l - 96 h   |
|                | LC <sub>50</sub> Fish                                    | > 5000 mg/l - 96 h   |
|                | EC <sub>50</sub> Invertebrates                           | 6.07-7.2 mg/l - 48 h |
| CAS 100-51-6   | LC <sub>50</sub> Pimephales promelas (fathead minnow)    | 460 mg/l - 96 h      |
|                | LC <sub>50</sub> Lepomis macrochirus (bluegill)          | 10 mg/l - 96 h       |
|                | LC <sub>50</sub> Menidia peninsulae ( silverside minnow) | 32 mg/l - 96 h       |
| CAS 7429-90-5  | No data available  |                      |
| CAS 64742-48-9 | No data available  |                      |
| CAS 64742-95-6 | No data available  |                      |

**Persistence and degradability:** Not enough data available.

**Bioaccumulative potential:** Bioconcentration potential is moderate.

**Mobility in soil:** Low potential for mobility in soil.

**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:**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

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

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**Special Precautions (transport/conveyance):** May also be shipped as a LIMITED QUANTITY in accordance with TDG.

**Environmental hazards (IMDG or other):** Marine Pollutant



## SAFETY DATA SHEET (SDS)

**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:** 4 April 2017

**Disclaimer:**

#### **NOTICE TO READER:**

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

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** BASE 155-500, BASE 156-500  
**Other means of identification:** None  
**Recommended use:** Chameleon Colorants for Epoxy Resin  
**Manufactured by:** CTM Adhesives Inc.  
8320 Grenache  
Montréal, Québec  
Canada H1J 1C5  
**E-mail Address :** www.ctmadhesives.com  
**Prepared by:** The Health, Safety and Environmental Department of CTM Adhesives  
**Telephone number of preparer:** 1-514-321-5540  
**Fax number:** 1-514-321-5570

**Emergency Telephone Number:**

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

### SECTION 2. HAZARDS IDENTIFICATION

#### **GHS Classification of hazardous product**

Skin Sensitization (Category 1B)  
Skin Corrosion/irritation (Category 2)  
Serious eye damage/irritation (Category 2A)  
Acute Toxicity, Oral (Category 5)  
Hazardous to the aquatic environment - acute (Category 2)  
Hazardous to the aquatic environment - chronic (Category 2)

#### **GHS Label Elements**

**Hazard Pictograms/symbols**



**Signal Word:** WARNING

#### **Hazard and Precautionary Statements:**

**H303** May be harmful if swallowed



## SAFETY DATA SHEET (SDS)

**H315** Causes skin irritation  
**H317** May cause an allergic skin reaction  
**H319** Causes serious eye irritation  
**H401** Toxic to aquatic life  
**H411** Toxic to aquatic life with long lasting effects  
**P261** Avoid breathing dust/fume/gas/mist/vapours/spray. **P264** Wash with plenty of water and soap thoroughly after handling. **P272** Contaminated work clothing should not be allowed out of the workplace. **P280** Wear protective gloves/eye protection. **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. **P337 + P313** If eye irritation persists: Get medical advice/attention. **P302 + P352** **IF ON SKIN:** Wash with plenty of water. **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention. **P312** **IF SWALLOWED:** Call a POISON Center/doctor/...if you feel unwell. **P362 + P364** Take off contaminated clothing and wash before reuse. **P273** Avoid release to the environment. **P391** Collect spillage. **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. See information supplied by the manufacture."

### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Chemical Name</u>                                       | <u>CAS Number</u> | <u>Concentration (%)</u> |
|--|-------------------|--------------------------|
| Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin | 25085-99-8        | 35 - 70 %                |
| alkyl glycidyl ether                                       | 68609-97-2        | 1 - 10 %                 |
| benzyl alcohol   | 100-51-6          | 1 - 10 %                 |

### SECTION 4. FIRST AID MEASURES

**Ingestion** IF SWALLOWED: Rinse mouth. Call a POISON Center/doctor/...if you feel unwell.  
**Skin Contact** IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.  
**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.

**Most important symptoms and effects (acute and delayed)**

Prolonged or repeated contact may cause skin irritation with local redness. May cause eye irritation. Corneal injury is unlikely. Has caused allergic skin reactions in humans.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**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 (CO<sub>2</sub>)

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

**Specific hazards arising from the hazardous product:** During fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

**Special protective equipment and precautions for fire-fighting:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing. Avoid contact with this material during fire-fighting operations. If contact is likely, change to full chemical resistant fire-fighting clothing with self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Isolate area. Keep unnecessary and unprotected personnel away. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained. For personal protection, see section 8 of





**SAFETY DATA SHEET (SDS)**

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**

Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid use of electric band heaters. Avoid release to the environment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store in cool and dry, under well-ventilated conditions. Store away from incompatible materials (see Section 10 of the SDS). Keep container closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

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

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

Exposure limits:

|                |   |
|----------------|---|
| CAS 25085-99-8 | For Workers: Acute - systemic effects                           |
|                | Dermal 8.330 mg/kg bw/day    Inhalation 12.25 mg/m <sup>3</sup> |
|                | For Consumers: Acute - systemic effects                         |
|                | Dermal 3.571 mg/kg bw/day    Inhalation 0.75 mg/m <sup>3</sup>  |
|                | For Workers: Long-term - systemic effects                       |
|                | Dermal 8.330 mg/kg bw/day    Inhalation 12.25 mg/m <sup>3</sup> |
|                | For Consumers: Long-term - systemic effects                     |
|                | Dermal 3.571 mg/kg bw/day    Inhalation 0.75 mg/m <sup>3</sup>  |
| CAS 68609-97-2 | No exposure limits noted for the ingredient(s)                  |
| CAS 100-51-6   | No exposure limits noted for the ingredient(s)                  |

**Engineering Controls**

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.

**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**

**Information on basic physical and chemical properties**

|   |                        |   |                           |
|---|------------------------|---|---------------------------|
| <b>Physical State/ Appearance/ Color:</b> | Liquid, Various Colors | <b>Vapour Pressure:</b>                       | Not available             |
| <b>Odour:</b>                             | Odorless to mild       | <b>Vapour Density:</b>                        | Not available             |
| <b>Odour threshold:</b>                   | Not available          | <b>Relative Density:</b>                      | Varies depending on color |
| <b>pH:</b>                                | Not available          | <b>Solubility:</b>                            | Partial                   |
| <b>Melting/freezing point:</b>            | Not available          | <b>Partition coefficient-n-octanol/water:</b> | Not available             |
| <b>Initial boiling point/range:</b>       | Not available          | <b>Auto-ignition temperature:</b>             | Not available             |
| <b>Flash point (closed cup)</b>           | > 93 °C                | <b>Decomposition temperature:</b>             | Not available             |



**SAFETY DATA SHEET (SDS)**

|  |               |                   |            |
|--|---------------|-------------------|------------|
| <b>Evaporation rate:</b>                             | Not available | <b>Viscosity:</b> | Paste      |
| <b>Flammability (solids and gases):</b>              | Not available | <b>VOC:</b>       | ≤ 40 g/L   |
| <b>Upper and lower flammability/explosive limits</b> | Not available | <b>Other:</b>     | None known |

**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 amine. Considerable heat can evolve.  
**Conditions to Avoid:** Avoid temperatures exceeding the flash point. Avoid unintended contact with amines.  
**Incompatible materials:** Strong oxidizers, strong alkalis, strong mineral acids, amines.  
**Hazardous decomposition products:** Unknown.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Likely routes of exposure (inhalation, ingestion, skin and eye contact):**  
 May be harmful if swallowed. May cause skin irritation. May cause an allergic skin reaction. May cause eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics:**  
 High airborne concentrations of vapors may cause irritation of the respiratory tract and mucous membranes. Symptoms may include stinging, itching, tearing, redness, swelling, and blurred vision.

**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** No data available; **Specific Target Organ Toxicity — Single Exposure** – No data available; **Specific Target Organ Toxicity - Repeated Exposure** – No data available; **Aspiration Hazard** – 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 25085-99-8 LD<sub>50</sub>, Oral - Rat >15000 mg/kg  
 LD<sub>50</sub>, Dermal - Rabbit 23000 mg/kg  
 CAS 68609-97-2 LD<sub>50</sub>, Oral - Rat 17100 mg/kg  
 LD<sub>50</sub>, Dermal - Rabbit >4.5 mL/kg  
 CAS 100-51-6 LD<sub>50</sub>, Oral - Rat 1360 mg/kg

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity ( aquatic and terrestrial information):**  
 Hazardous to the aquatic environment

| Product        | Species  | Result               |
|----------------|--|----------------------|
| CAS 25085-99-8 | LC <sub>50</sub> Oncorhynchus mykiss (rainbow trout)     | 2 mg/l -96 h         |
|                | EC <sub>50</sub> Daphnia magna (Water flea)              | 1.8 mg/l - 48 h      |
| CAS 68609-97-2 | LC <sub>50</sub> Fish                                    | > 1800 mg/l - 96 h   |
|                | LC <sub>50</sub> Fish                                    | > 5000 mg/l - 96 h   |
|                | EC <sub>50</sub> Invertebrates                           | 6.07-7.2 mg/l - 48 h |
| CAS 100-51-6   | LC <sub>50</sub> Pimephales promelas (fathead minnow)    | 460 mg/l - 96 h      |
|                | LC <sub>50</sub> Lepomis macrochirus (bluegill)          | 10 mg/l - 96 h       |
|                | LC <sub>50</sub> Menidia peninsulae ( silverside minnow) | 32 mg/l - 96 h       |

**Persistence and degradability:** Not enough data available.  
**Bioaccumulative potential:** Bioconcentration potential is moderate.  
**Mobility in soil:** Low potential for mobility in soil.  
**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**



## SAFETY DATA SHEET (SDS)

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations:**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

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

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**Special Precautions (transport/conveyance):** May also be shipped as a LIMITED QUANTITY in accordance with TDG.

**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:** 4 April 2017

**Disclaimer:**

**NOTICE TO READER:**

CTM Adhesives Inc. expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, CTM Adhesives makes no representations as to its accuracy or sufficiency. Conditions of use are beyond CTM Adhesives' control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

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

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

|  |   |
|--|---|
| <b><u>Product Identifier:</u></b>            | BASE 106-500, BASE 129-500, BASE 130-500                                  |
| <b><u>Other means of identification:</u></b> | None  |
| <b><u>Recommended use:</u></b>               | Copper Based Metallic Colorants for Epoxy Resin                           |
| <b><u>Manufactured by:</u></b>               | CTM Adhesives Inc.<br>8320 Grenache<br>Montréal, Québec<br>Canada H1J 1C5 |
| <b><u>E-mail Address :</u></b>               | www.ctmadhesives.com  |
| <b><u>Prepared by:</u></b>                   | The Health, Safety and Environmental Department of CTM Adhesives          |
| <b><u>Telephone number of preparer:</u></b>  | 1-514-321-5540  |
| <b><u>Fax number:</u></b>                    | 1-514-321-5570  |

**Emergency Telephone Number:**

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

### SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification of hazardous product**



**SAFETY DATA SHEET (SDS)**

- Skin Sensitization (Category 1B)
- Skin Corrosion/irritation (Category 2)
- Serious eye damage/irritation (Category 2A)
- Acute Toxicity, Oral (Category 5)
- Hazardous to the aquatic environment - acute (Category 2)
- Hazardous to the aquatic environment - chronic (Category 2)

**GHS Label Elements**

**Hazard Pictograms/symbols**



**Signal Word:** WARNING

**Hazard and Precautionary Statements:**

- H303** May be harmful if swallowed
- H315** Causes skin irritation
- H317** May cause an allergic skin reaction
- H319** Causes serious eye irritation
- H401** Toxic to aquatic life
- H411** Toxic to aquatic life with long lasting effects

**P261** Avoid breathing dust/fume/gas/mist/vapours/spray. **P264** Wash with plenty of water and soap thoroughly after handling. **P272** Contaminated work clothing should not be allowed out of the workplace. **P280** Wear protective gloves/eye protection. **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. **P337 + P313** If eye irritation persists: Get medical advice/attention. **P302 + P352** **IF ON SKIN:** Wash with plenty of water. **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention. **P312** **IF SWALLOWED:** Call a POISON Center/doctor/...if you feel unwell. **P362 + P364** Take off contaminated clothing and wash before reuse. **P273** Avoid release to the environment. **P391** Collect spillage. **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. See information supplied by the manufacture."

**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

| <u>Chemical Name</u>                                       | <u>CAS Number</u> | <u>Concentration (%)</u> |
|--|-------------------|--------------------------|
| Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin | 25085-99-8        | 50 - 80 %                |
| alkyl glycidyl ether                                       | 68609-97-2        | 1 - 10 %                 |
| benzyl alcohol   | 100-51-6          | 1 - 10 %                 |
| Copper, elemental  | 7440-50-8         | 10 - 15 %                |

**SECTION 4. FIRST AID MEASURES**

- Ingestion** IF SWALLOWED: Rinse mouth. Call a POISON Center/doctor/...if you feel unwell.
- Skin Contact** IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
- 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.

**Most important symptoms and effects (acute and delayed)**

Prolonged or repeated contact may cause skin irritation with local redness. May cause eye irritation. Corneal injury is unlikely. Has caused allergic skin reactions in humans.

**Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

**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.



## SAFETY DATA SHEET (SDS)

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

**Suitable extinguishing media:** In case of fire: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>)

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

**Specific hazards arising from the hazardous product:** During fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

**Special protective equipment and precautions for fire-fighting:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing. Avoid contact with this material during fire-fighting operations. If contact is likely, change to full chemical resistant fire-fighting clothing with self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Isolate area. Keep unnecessary and unprotected personnel away. Wear appropriate protective equipment and clothing during clean-up. 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

Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid use of electric band heaters. Avoid release to the environment. Observe good industrial hygiene practices.

#### Conditions for safe storage, including any incompatibilities

Store in cool and dry, under well-ventilated conditions. Store away from incompatible materials (see Section 10 of the SDS). Keep container closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Exposure limits:

|                |   |
|----------------|---|
| CAS 25085-99-8 | For Workers: Acute - systemic effects<br>Dermal 8.330 mg/kg bw/day    Inhalation 12.25 mg/m <sup>3</sup>      |
|                | For Consumers: Acute - systemic effects<br>Dermal 3.571 mg/kg bw/day    Inhalation 0.75 mg/m <sup>3</sup>     |
|                | For Workers: Long-term - systemic effects<br>Dermal 8.330 mg/kg bw/day    Inhalation 12.25 mg/m <sup>3</sup>  |
|                | For Consumers: Long-term - systemic effects<br>Dermal 3.571 mg/kg bw/day    Inhalation 0.75 mg/m <sup>3</sup> |
| CAS 68609-97-2 | No exposure limits noted for the ingredient(s)  |
| CAS 100-51-6   | No exposure limits noted for the ingredient(s)  |
| CAS 7440-50-8  | No exposure limits noted for the ingredient(s)  |

#### Engineering Controls

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.



**SAFETY DATA SHEET (SDS)**

**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**

**Information on basic physical and chemical properties**

|  |                        |   |                           |
|--|------------------------|---|---------------------------|
| <b>Physical State/ Appearance/ Color:</b>            | Liquid, Various colors | <b>Vapour Pressure:</b>                       | Not available             |
| <b>Odour:</b>  | Odorless to mild       | <b>Vapour Density:</b>                        | Not available             |
| <b>Odour threshold:</b>                              | Not available          | <b>Relative Density:</b>                      | Varies depending on color |
| <b>pH:</b>   | Not available          | <b>Solubility:</b>                            | Partial                   |
| <b>Melting/freezing point:</b>                       | Not available          | <b>Partition coefficient-n-octanol/water:</b> | Not available             |
| <b>Initial boiling point/range:</b>                  | Not available          | <b>Auto-ignition temperature:</b>             | Not available             |
| <b>Flash point (closed cup)</b>                      | > 93 °C                | <b>Decomposition temperature:</b>             | Not available             |
| <b>Evaporation rate:</b>                             | Not available          | <b>Viscosity:</b>                             | Paste                     |
| <b>Flammability (solids and gases):</b>              | Not available          | <b>VOC:</b>                                   | ≤ 40g/L                   |
| <b>Upper and lower flammability/explosive limits</b> | Not available          | <b>Other:</b>                                 | None known                |

**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 amine. Considerable heat can evolve.

**Conditions to Avoid:** Avoid temperatures exceeding the flash point. Avoid unintended contact with amines.

**Incompatible materials:** Strong oxidizers, strong alkalis, strong mineral acids, amines.

**Hazardous decomposition products:** Unknown.

**SECTION 11. TOXICOLOGICAL INFORMATION**

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

May be harmful if swallowed. May cause skin irritation. May cause an allergic skin reaction. May cause eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics:**

High airborne concentrations of vapors may cause irritation of the respiratory tract and mucous membranes. Symptoms may include stinging, itching, tearing, redness, swelling, and blurred vision.

**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** No data available; **Specific Target Organ Toxicity – Single Exposure** – No data available; **Specific Target Organ Toxicity - Repeated Exposure** – No data available; **Aspiration Hazard** – 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 25085-99-8 LD<sub>50</sub>, Oral - Rat >15000 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit 23000 mg/kg  
CAS 68609-97-2 LD<sub>50</sub>, Oral - Rat 17100 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit >4.5 mL/kg  
CAS 100-51-6 LD<sub>50</sub>, Oral - Rat 1360 mg/kg  
CAS 7440-50-8 No data available

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity ( aquatic and terrestrial information):**

Hazardous to the aquatic environment

| Product        | Species  | Result       |
|----------------|--|--------------|
| CAS 25085-99-8 | LC <sub>50</sub> Oncorhynchus mykiss (rainbow trout) | 2 mg/l -96 h |



## SAFETY DATA SHEET (SDS)

|                |  |   |
|----------------|--|---|
| CAS 68609-97-2 | EC <sub>50</sub> Daphnia magna (Water flea)<br>LC <sub>50</sub> Fish<br>LC <sub>50</sub> Fish  | 1.8 mg/l - 48 h<br>> 1800 mg/l - 96 h<br>> 5000 mg/l - 96 h                 |
| CAS 100-51-6   | EC <sub>50</sub> Invertebrates<br>LC <sub>50</sub> Pimephales promelas (fathead minnow)<br>LC <sub>50</sub> Lepomis macrochirus (bluegill)<br>LC <sub>50</sub> Menidia peninsulae ( silverside minnow) | 6.07-7.2 mg/l - 48 h<br>460 mg/l - 96 h<br>10 mg/l - 96 h<br>32 mg/l - 96 h |
| CAS 7440-50-8  | No data available  |   |

**Persistence and degradability:** Not enough data available.

**Bioaccumulative potential:** Bioconcentration potential is moderate.

**Mobility in soil:** Low potential for mobility in soil.

**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:**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

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

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**Special Precautions (transport/conveyance):** May also be shipped as a LIMITED QUANTITY in accordance with TDG.

**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:** 4 April 2017

**Disclaimer:**

#### **NOTICE TO READER:**

CTM Adhesives Inc. expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, CTM Adhesives makes no representations as to its accuracy or sufficiency. Conditions of use are beyond CTM Adhesives' control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

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



**SAFETY DATA SHEET (SDS)**

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier:** BASE 151-500, BASE 153-500  
**Other means of identification:** None  
**Recommended use:** Mica Based Pearlescent Colorants for Epoxy Resin  
**Manufactured by:** CTM Adhesives Inc.  
8320 Grenache  
Montréal, Québec  
Canada H1J 1C5  
**E-mail Address :** www.ctmadhesives.com  
**Prepared by:** The Health, Safety and Environmental Department of CTM Adhesives  
**Telephone number of preparer:** 1-514-321-5540  
**Fax number:** 1-514-321-5570

**Emergency Telephone Number:**

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

**SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification of hazardous product**

Skin Sensitization (Category 1B)  
Skin Corrosion/irritation (Category 2)  
Serious eye damage/irritation (Category 2A)  
Acute Toxicity, Oral (Category 5)  
Hazardous to the aquatic environment - acute (Category 2)  
Hazardous to the aquatic environment - chronic (Category 2)

**GHS Label Elements**

**Hazard Pictograms/symbols**



**Signal Word:** WARNING

**Hazard and Precautionary Statements:**

**H303** May be harmful if swallowed  
**H315** Causes skin irritation  
**H317** May cause an allergic skin reaction  
**H319** Causes serious eye irritation  
**H401** Toxic to aquatic life  
**H411** Toxic to aquatic life with long lasting effects

**P261** Avoid breathing dust/fume/gas/mist/vapours/spray. **P264** Wash with plenty of water and soap thoroughly after handling. **P272** Contaminated work clothing should not be allowed out of the workplace. **P280** Wear protective gloves/eye protection. **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. **P337 + P313** If eye irritation persists: Get medical advice/attention. **P302 + P352** **IF ON SKIN:** Wash with plenty of water. **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention. **P312** **IF SWALLOWED:** Call a POISON Center/doctor/...if you feel unwell. **P362 + P364** Take off contaminated clothing and wash before reuse. **P273** Avoid release to the environment. **P391** Collect spillage. **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. See information supplied by the manufacture."

**SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**

| <u>Chemical Name</u>                                       | <u>CAS Number</u> | <u>Concentration (%)</u> |
|--|-------------------|--------------------------|
| Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin | 25085-99-8        | 35 - 70 %                |
| alkyl glycidyl ether                                       | 68609-97-2        | 1 - 10 %                 |
| benzyl alcohol   | 100-51-6          | 1 - 10 %                 |
| mica   | 12001-26-2        | 5 - 15%                  |





## SAFETY DATA SHEET (SDS)

### SECTION 4. FIRST AID MEASURES

|                            |   |
|----------------------------|---|
| <b><u>Ingestion</u></b>    | IF SWALLOWED: Rinse mouth. Call a POISON Center/doctor/...if you feel unwell.   |
| <b><u>Skin Contact</u></b> | IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.   |
| <b><u>Eye Contact</u></b>  | 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. |

#### **Most important symptoms and effects (acute and delayed)**

Prolonged or repeated contact may cause skin irritation with local redness. May cause eye irritation. Corneal injury is unlikely. Has caused allergic skin reactions in humans.

#### **Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

#### **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 (CO<sub>2</sub>)

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

**Specific hazards arising from the hazardous product:** During fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

**Special protective equipment and precautions for fire-fighting:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing. Avoid contact with this material during fire-fighting operations. If contact is likely, change to full chemical resistant fire-fighting clothing with self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions, protective equipment and emergency procedures**

Isolate area. Keep unnecessary and unprotected personnel away. Wear appropriate protective equipment and clothing during clean-up. 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**

Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid use of electric band heaters. Avoid release to the environment. Observe good industrial hygiene practices.

#### **Conditions for safe storage, including any incompatibilities**

Store in cool and dry, under well-ventilated conditions. Store away from incompatible materials (see Section 10 of the SDS). Keep container closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.



## SAFETY DATA SHEET (SDS)

### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Exposure limits:

|                |   |
|----------------|---|
| CAS 25085-99-8 | For Workers: Acute - systemic effects<br>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m <sup>3</sup><br>For Consumers: Acute - systemic effects<br>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m <sup>3</sup>         |
|                | For Workers: Long-term - systemic effects<br>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m <sup>3</sup><br>For Consumers: Long-term - systemic effects<br>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m <sup>3</sup> |
| CAS 68609-97-2 | No exposure limits noted for the ingredient(s)  |
| CAS 100-51-6   | No exposure limits noted for the ingredient(s)  |
| CAS 12001-26-2 | No exposure limits noted for the ingredient(s)  |

#### Engineering Controls

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.

#### 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

#### Information on basic physical and chemical properties

|  |                        |   |                           |
|--|------------------------|---|---------------------------|
| <b>Physical State/ Appearance/ Color:</b>            | Liquid, Various Colors | <b>Vapour Pressure:</b>                       | Not available             |
| <b>Odour:</b>  | Odorless to mild       | <b>Vapour Density:</b>                        | Not available             |
| <b>Odour threshold:</b>                              | Not available          | <b>Relative Density:</b>                      | Varies depending on color |
| <b>pH:</b>   | Not available          | <b>Solubility:</b>                            | Partial                   |
| <b>Melting/freezing point:</b>                       | Not available          | <b>Partition coefficient-n-octanol/water:</b> | Not available             |
| <b>Initial boiling point/range:</b>                  | Not available          | <b>Auto-ignition temperature:</b>             | Not available             |
| <b>Flash point (closed cup):</b>                     | > 93 °C                | <b>Decomposition temperature:</b>             | Not available             |
| <b>Evaporation rate:</b>                             | Not available          | <b>Viscosity:</b>                             | Paste                     |
| <b>Flammability (solids and gases):</b>              | Not available          | <b>VOC:</b>                                   | ≤ 40g/L                   |
| <b>Upper and lower flammability/explosive limits</b> | Not available          | <b>Other:</b>                                 | None known                |

### 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 amine. Considerable heat can evolve.

**Conditions to Avoid:** Avoid temperatures exceeding the flash point. Avoid unintended contact with amines.

**Incompatible materials:** Strong oxidizers, strong alkalis, strong mineral acids, amines.

**Hazardous decomposition products:** Unknown.

### SECTION 11. TOXICOLOGICAL INFORMATION

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

May be harmful if swallowed. May cause skin irritation. May cause an allergic skin reaction. May cause eye irritation.

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

High airborne concentrations of vapors may cause irritation of the respiratory tract and mucous membranes. Symptoms may include stinging, itching, tearing, redness, swelling, and blurred vision.

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



## SAFETY DATA SHEET (SDS)

**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** No data available; **Specific Target Organ Toxicity – Single Exposure** – No data available; **Specific Target Organ Toxicity - Repeated Exposure** – No data available; **Aspiration Hazard** – 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 25085-99-8 LD<sub>50</sub>, Oral - Rat >15000 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit 23000 mg/kg  
CAS 68609-97-2 LD<sub>50</sub>, Oral - Rat 17100 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit >4.5 mL/kg  
CAS 100-51-6 LD<sub>50</sub>, Oral - Rat 1360 mg/kg  
CAS 12001-26-1 No information

## SECTION 12. ECOLOGICAL INFORMATION

### **Ecotoxicity ( aquatic and terrestrial information):**

Hazardous to the aquatic environment

| Product        | Species  | Result               |
|----------------|--|----------------------|
| CAS 25085-99-8 | LC <sub>50</sub> Oncorhynchus mykiss (rainbow trout)     | 2 mg/l -96 h         |
|                | EC <sub>50</sub> Daphnia magna (Water flea)              | 1.8 mg/l - 48 h      |
| CAS 68609-97-2 | LC <sub>50</sub> Fish                                    | > 1800 mg/l - 96 h   |
|                | LC <sub>50</sub> Fish                                    | > 5000 mg/l - 96 h   |
|                | EC <sub>50</sub> Invertebrates                           | 6.07-7.2 mg/l - 48 h |
| CAS 100-51-6   | LC <sub>50</sub> Pimephales promelas (fathead minnow)    | 460 mg/l - 96 h      |
|                | LC <sub>50</sub> Lepomis macrochirus (bluegill)          | 10 mg/l - 96 h       |
|                | LC <sub>50</sub> Menidia peninsulae ( silverside minnow) | 32 mg/l - 96 h       |
| CAS 12001-26-2 | No information   |                      |

**Persistence and degradability:** Not enough data available.

**Bioaccumulative potential:** Bioconcentration potential is moderate.

**Mobility in soil:** Low potential for mobility in soil.

**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:**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

### **UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

### **UN Number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air):**

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**Special Precautions (transport/conveyance):** May also be shipped as a LIMITED QUANTITY in accordance with TDG.

**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



## SAFETY DATA SHEET (SDS)

### SECTION 16. OTHER INFORMATION

**Date of latest revision of the safety data sheet:** 4 April 2017

**Disclaimer:**

**NOTICE TO READER:**

CTM Adhesives Inc. expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, CTM Adhesives makes no representations as to its accuracy or sufficiency. Conditions of use are beyond CTM Adhesives' control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

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

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** BASE 149-500, BASE 150-500, BASE 154/300-500  
**Other means of identification:** None  
**Recommended use:** Pearlescent Colorants for Epoxy Resin  
**Manufactured by:** CTM Adhesives Inc.  
8320 Grenache  
Montréal, Québec  
Canada H1J 1C5  
**E-mail Address :** www.ctmadhesives.com  
**Prepared by:** The Health, Safety and Environmental Department of CTM Adhesives  
**Telephone number of preparer:** 1-514-321-5540  
**Fax number:** 1-514-321-5570

**Emergency Telephone Number:**

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

### SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification of hazardous product**

Skin Sensitization (Category 1B)  
Skin Corrosion/irritation (Category 2)  
Serious eye damage/irritation (Category 2A)  
Acute Toxicity, Oral (Category 5)  
Hazardous to the aquatic environment - acute (Category 2)  
Hazardous to the aquatic environment - chronic (Category 2)

**GHS Label Elements**

**Hazard Pictograms/symbols**



**Signal Word:** WARNING

**Hazard and Precautionary Statements:**

**H303** May be harmful if swallowed  
**H315** Causes skin irritation  
**H317** May cause an allergic skin reaction  
**H319** Causes serious eye irritation  
**H401** Toxic to aquatic life  
**H411** Toxic to aquatic life with long lasting effects  
**P261** Avoid breathing dust/fume/gas/mist/vapours/spray. **P264** Wash with plenty of water and soap thoroughly after handling. **P272** Contaminated work clothing should not be allowed out of the workplace. **P280** Wear protective gloves/eye protection. **P305 + P351 + P338**



## SAFETY DATA SHEET (SDS)

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. **P337 + P313** If eye irritation persists: Get medical advice/attention. **P302 + P352 IF ON SKIN:** Wash with plenty of water. **P333 + P313** If skin irritation or rash occurs: Get medical advice/attention. **P312 IF SWALLOWED:** Call a POISON Center/doctor/...if you feel unwell. **P362 + P364** Take off contaminated clothing and wash before reuse. **P273** Avoid release to the environment. **P391** Collect spillage. **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. See information supplied by the manufacture."

### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Chemical Name</u>                                       | <u>CAS Number</u> | <u>Concentration (%)</u> |
|--|-------------------|--------------------------|
| Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin | 25085-99-8        | 35 - 70 %                |
| alkyl glycidyl ether                                       | 68609-97-2        | 1 - 10 %                 |
| benzyl alcohol   | 100-51-6          | 1 - 10 %                 |

### SECTION 4. FIRST AID MEASURES

**Ingestion** IF SWALLOWED: Rinse mouth. Call a POISON Center/doctor/...if you feel unwell.  
**Skin Contact** IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.  
**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.

#### **Most important symptoms and effects (acute and delayed)**

Prolonged or repeated contact may cause skin irritation with local redness. May cause eye irritation. Corneal injury is unlikely. Has caused allergic skin reactions in humans.

#### **Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically.

#### **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 (CO<sub>2</sub>)

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

**Specific hazards arising from the hazardous product:** During fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

**Special protective equipment and precautions for fire-fighting:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing. Avoid contact with this material during fire-fighting operations. If contact is likely, change to full chemical resistant fire-fighting clothing with self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions, protective equipment and emergency procedures**

Isolate area. Keep unnecessary and unprotected personnel away. Wear appropriate protective equipment and clothing during clean-up. 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,



**SAFETY DATA SHEET (SDS)**

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**

Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid use of electric band heaters. Avoid release to the environment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store in cool and dry, under well-ventilated conditions. Store away from incompatible materials (see Section 10 of the SDS). Keep container closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

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

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

Exposure limits:

|                |   |
|----------------|---|
| CAS 25085-99-8 | For Workers: Acute - systemic effects<br>Dermal 8.330 mg/kg bw/day    Inhalation 12.25 mg/m <sup>3</sup>      |
|                | For Consumers: Acute - systemic effects<br>Dermal 3.571 mg/kg bw/day    Inhalation 0.75 mg/m <sup>3</sup>     |
|                | For Workers: Long-term - systemic effects<br>Dermal 8.330 mg/kg bw/day    Inhalation 12.25 mg/m <sup>3</sup>  |
|                | For Consumers: Long-term - systemic effects<br>Dermal 3.571 mg/kg bw/day    Inhalation 0.75 mg/m <sup>3</sup> |
| CAS 68609-97-2 | No exposure limits noted for the ingredient(s)  |
| CAS 100-51-6   | No exposure limits noted for the ingredient(s)  |

**Engineering Controls**

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.

**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**

**Information on basic physical and chemical properties**

|  |                        |   |                           |
|--|------------------------|---|---------------------------|
| <b>Physical State/ Appearance/ Color:</b>            | Liquid, Various colors | <b>Vapour Pressure:</b>                       | Not available             |
| <b>Odour:</b>  | Odorless to mild       | <b>Vapour Density:</b>                        | Not available             |
| <b>Odour threshold:</b>                              | Not available          | <b>Relative Density:</b>                      | Varies depending on color |
| <b>pH:</b>   | Not available          | <b>Solubility:</b>                            | Partial                   |
| <b>Melting/freezing point:</b>                       | Not available          | <b>Partition coefficient-n-octanol/water:</b> | Not available             |
| <b>Initial boiling point/range:</b>                  | Not available          | <b>Auto-ignition temperature:</b>             | Not available             |
| <b>Flash point (closed cup):</b>                     | > 93 °C                | <b>Decomposition temperature:</b>             | Not available             |
| <b>Evaporation rate:</b>                             | Not available          | <b>Viscosity:</b>                             | Paste                     |
| <b>Flammability (solids and gases):</b>              | Not available          | <b>VOC:</b>                                   | ≤ 40g/L                   |
| <b>Upper and lower flammability/explosive limits</b> | Not available          | <b>Other:</b>                                 | None known                |

**SECTION 10. STABILITY AND REACTIVITY**



**SAFETY DATA SHEET (SDS)**

**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 amine. Considerable heat can evolve.  
**Conditions to Avoid:** Avoid temperatures exceeding the flash point. Avoid unintended contact with amines.  
**Incompatible materials:** Strong oxidizers, strong alkalis, strong mineral acids, amines.  
**Hazardous decomposition products:** Unknown.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Likely routes of exposure (inhalation, ingestion, skin and eye contact):**  
May be harmful if swallowed. May cause skin irritation. May cause an allergic skin reaction. May cause eye irritation.

**Symptoms related to the physical, chemical and toxicological characteristics:**  
High airborne concentrations of vapors may cause irritation of the respiratory tract and mucous membranes. Symptoms may include stinging, itching, tearing, redness, swelling, and blurred vision.

**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** No data available; **Specific Target Organ Toxicity — Single Exposure** – No data available; **Specific Target Organ Toxicity - Repeated Exposure** – No data available; **Aspiration Hazard** – 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 25085-99-8 LD<sub>50</sub>, Oral - Rat >15000 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit 23000 mg/kg  
CAS 68609-97-2 LD<sub>50</sub>, Oral - Rat 17100 mg/kg  
LD<sub>50</sub>, Dermal - Rabbit >4.5 mL/kg  
CAS 100-51-6 LD<sub>50</sub>, Oral - Rat 1360 mg/kg

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity ( aquatic and terrestrial information):**  
Hazardous to the aquatic environment

| Product        | Species  | Result               |
|----------------|--|----------------------|
| CAS 25085-99-8 | LC <sub>50</sub> Oncorhynchus mykiss (rainbow trout)     | 2 mg/l -96 h         |
|                | EC <sub>50</sub> Daphnia magna (Water flea)              | 1.8 mg/l - 48 h      |
| CAS 68609-97-2 | LC <sub>50</sub> Fish                                    | > 1800 mg/l - 96 h   |
|                | LC <sub>50</sub> Fish                                    | > 5000 mg/l - 96 h   |
| CAS 100-51-6   | EC <sub>50</sub> Invertebrates                           | 6.07-7.2 mg/l - 48 h |
|                | LC <sub>50</sub> Pimephales promelas (fathead minnow)    | 460 mg/l - 96 h      |
|                | LC <sub>50</sub> Lepomis macrochirus (bluegill)          | 10 mg/l - 96 h       |
|                | LC <sub>50</sub> Menidia peninsulae ( silverside minnow) | 32 mg/l - 96 h       |

**Persistence and degradability:** Not enough data available.  
**Bioaccumulative potential:** Bioconcentration potential is moderate.  
**Mobility in soil:** Low potential for mobility in soil.  
**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:**  
UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**UN Number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime):**  
UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)



PRODUCT IDENTIFIER - ECTR A&B  
DATE & VERSION - 4 April 2017 Version 1.1

## SAFETY DATA SHEET (SDS)

resin)

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

UN3082; CLASS 9; PG III; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( bisphenol-A-(epichlorhydrin) epoxy resin)

**Special Precautions (transport/conveyance):** May also be shipped as a LIMITED QUANTITY in accordance with TDG.

**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:** 4 April 2017

**Disclaimer:**

**NOTICE TO READER:**

CTM Adhesives Inc. expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, CTM Adhesives makes no representations as to its accuracy or sufficiency. Conditions of use are beyond CTM Adhesives' control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

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