MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: PE700910 (101M), PE700912 (112M), PE700913 (113M), PE700914 (116M), PE700915 (124M), PE700917 (128M), PE700920 (135M), PE700922 (143M), PE700923 (148M)

Other means of identification: None

Recommended use: Aluminum Based Metallic Colourants 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: 514-321-5540
Fax number: 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 2)
- Acute Toxicity, Oral (Category 4)
- Specific target organ toxicity - single exposure (Category 3 - central nervous system)
- Specific target organ toxicity - single exposure (Category 3 - respiratory irritant)
- 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
H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
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. P270 Do not eat, drink or smoke when using this product. 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. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P301 + P312 IF SWALLOWED: Call a POISON Center/doctor;…if you feel unwell. P330 Rinse mouth. 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.”
MATERIAL SAFETY DATA SHEET

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin</td>
<td>25068-38-6</td>
<td>50 - 80 %</td>
</tr>
<tr>
<td>alkyl glycidyl ether</td>
<td>68609-97-2</td>
<td>1 - 10 %</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>100-51-6</td>
<td>1 - 10 %</td>
</tr>
<tr>
<td>Aluminum flake</td>
<td>7429-90-5</td>
<td>10 - 15 %</td>
</tr>
<tr>
<td>Petroleum distillates</td>
<td>64742-48-9</td>
<td>1 - 5 %</td>
</tr>
<tr>
<td>Naphtha solvent, light aromatic</td>
<td>64742-95-6</td>
<td>1 - 5 %</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 (CO₂)
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.
MATERIAL SAFETY DATA SHEET

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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

<table>
<thead>
<tr>
<th>CAS</th>
<th>For Workers: Acute - systemic effects</th>
<th>For Consumers: Acute - systemic effects</th>
<th>For Workers: Long-term - systemic effects</th>
<th>For Consumers: Long-term - systemic effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m³</td>
<td>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m³</td>
<td>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m³</td>
<td>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m³</td>
</tr>
<tr>
<td>68609-97-2</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
</tr>
<tr>
<td>100-51-6</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td>No exposure limits noted for the ingredient(s)</td>
</tr>
<tr>
<td>7429-90-5</td>
<td>NIOSH 10 mg/m³ TWA (total dust) ; 5 mg/m³ TWA (respirable dust)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-48-9</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-95-6</td>
<td>No exposure limits noted for the ingredient(s)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
MATERIAL SAFETY DATA SHEET

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical State/ Appearance/ Color:</th>
<th>Vapour Pressure:</th>
<th>Odour:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paste/Various Colors</td>
<td>Vapour Density:</td>
<td>Odorless to mild</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Relative Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Solubility:</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>Vapour Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point/range</td>
<td>Auto-ignition temperature:</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Decomposition temperature:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Viscosity:</td>
<td>Paste</td>
</tr>
<tr>
<td>Flammability (solids and gases):</td>
<td>VOC:</td>
<td>119 g/l</td>
</tr>
<tr>
<td>Upper and lower flammability/explosive limits</td>
<td>Other:</td>
<td>None known</td>
</tr>
</tbody>
</table>

SECTION 10. STABILITY AND REACTIVITY

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

Chemical Stability: This product is stable under normal conditions.

Possibility of hazardous reactions: This product will polymerize if mixed with an 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, 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; LD₅₀ & LC₅₀):
CAS 25068-38-6  LD₅₀, Oral - Rat >15000 mg/kg
LD₅₀, Dermal - Rabbit 23000 mg/kg
CAS 68609-97-2  LD₅₀, Oral - Rat 17100 mg/kg
LD₅₀, Dermal - Rabbit >4.5 mL/kg
CAS 100-51-6  LD₅₀, Oral - Rat 1360 mg/kg
CAS 7429-90-5  No data available
CAS 64742-48-9  LD₅₀, Oral >15000 mg/kg
LD₅₀, Dermal >3160 mg/kg
CAS 64742-95-6  LD₅₀, Oral >3000 mg/kg
LD₅₀, Dermal >3160 mg/kg
MATERIAL SAFETY DATA SHEET

SECTION 12. ECOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 25068-38-6</td>
<td>LC₅₀ Oncorhynchus mykiss (rainbow trout)</td>
<td>2 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>EC₅₀ Daphnia magna (Water flea)</td>
<td>1.8 mg/l - 48 h</td>
</tr>
<tr>
<td>CAS 68609-97-2</td>
<td>LC₅₀ Fish</td>
<td>&gt; 1800 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Fish</td>
<td>&gt; 5000 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>EC₅₀ Invertebrates</td>
<td>6.07-7.2 mg/l - 48 h</td>
</tr>
<tr>
<td>CAS 100-51-6</td>
<td>LC₅₀ Pimephales promelas (fathead minnow)</td>
<td>460 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Lepomis macrochirus (bluegill)</td>
<td>10 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Menidia peninsulae (silverside minnow)</td>
<td>32 mg/l - 96 h</td>
</tr>
<tr>
<td>CAS 7429-90-5</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>CAS 64742-48-9</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>CAS 64742-95-6</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

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
MATERIAL SAFETY DATA SHEET

SECTION 16. OTHER INFORMATION

Date of latest revision of the safety data sheet: June 7, 2016

Disclaimer:

NOTICE TO READER:

Passeport Élite 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, Passeport Élite makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Passeport Élite 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.***
MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: PE700911 (106M), PE700916 (125M), PE700918 (129M), PE700919 (130M), PE700921 (138M)
Other means of identification: None
Recommended use: Copper Based Metallic Colourants 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: 514-321-5540
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GHS Classification of hazardous product
Skin Sensitization (Category 1B)
Skin Corrosion/irritation (Category 2)
Serious eye damage/irritation (Category 2)
Acute Toxicity, Oral (Category 4)
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:
H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H401 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. P270 Do not eat, drink or smoke when using this product. 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. P305 + P352 IF IN SKIN: Wash with plenty of water. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P301 + P312 IF SWALLOWED: Call a POISON Center/doctor/…if you feel unwell. P330 Rinse mouth. 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

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<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
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<tbody>
<tr>
<td>Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin</td>
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<td>50 - 80 %</td>
</tr>
<tr>
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</tr>
<tr>
<td>benzyl alcohol</td>
<td>100-51-6</td>
<td>1 - 10 %</td>
</tr>
<tr>
<td>Copper, elemental</td>
<td>7440-50-8</td>
<td>10 - 15 %</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

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

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 (CO₂)

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.

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

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

<table>
<thead>
<tr>
<th>CAS</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>For Workers: Acute - systemic effects</td>
</tr>
<tr>
<td></td>
<td>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m³</td>
</tr>
<tr>
<td></td>
<td>For Consumers: Acute - systemic effects</td>
</tr>
<tr>
<td></td>
<td>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m³</td>
</tr>
<tr>
<td></td>
<td>For Workers: Long-term - systemic effects</td>
</tr>
<tr>
<td></td>
<td>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m³</td>
</tr>
<tr>
<td></td>
<td>For Consumers: Long-term - systemic effects</td>
</tr>
<tr>
<td></td>
<td>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m³</td>
</tr>
<tr>
<td>68609-97-2</td>
<td>No exposure limits noted for the ingredient(s)</td>
</tr>
<tr>
<td>100-51-6</td>
<td>No exposure limits noted for the ingredient(s)</td>
</tr>
<tr>
<td>7440-50-8</td>
<td>No exposure limits noted for the ingredient(s)</td>
</tr>
</tbody>
</table>

**Engineerings 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**

<table>
<thead>
<tr>
<th>Physical State/ Appearance/ Color:</th>
<th>Vapour Pressure:</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour:</td>
<td>Vapour Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Relative Density:</td>
<td>Varies depending on color</td>
</tr>
<tr>
<td>pH:</td>
<td>Solubility:</td>
<td>Partial</td>
</tr>
<tr>
<td>Melting/freezing point:</td>
<td>Partition coefficient-n-octanol/water:</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point/range:</td>
<td>Auto-ignition temperature:</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Decomposition temperature:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Viscosity:</td>
<td>Paste</td>
</tr>
<tr>
<td>Flammability (solids and gases):</td>
<td>VOC:</td>
<td>≤ 40g/l</td>
</tr>
<tr>
<td>Upper and lower flammability/explosive limits</td>
<td>Other:</td>
<td>None known</td>
</tr>
</tbody>
</table>
MATERIAL SAFETY DATA SHEET

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- 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; LD₅₀ & LC₅₀):

<table>
<thead>
<tr>
<th>CAS</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>LD₅₀, Oral - Rat 15000 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD₅₀, Dermal - Rabbit 23000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>68609-97-2</td>
<td>LD₅₀, Oral - Rat 17100 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD₅₀, Dermal - Rabbit &gt;4.5 mL/kg</td>
<td></td>
</tr>
<tr>
<td>100-51-6</td>
<td>LD₅₀, Oral - Rat 1360 mg/kg</td>
<td></td>
</tr>
<tr>
<td>7440-50-8</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 12. ECOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 25068-38-6</td>
<td>LC₅₀ Onchorhynchus mykiss (rainbow trout)</td>
<td>2 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>EC₅₀ Daphnia magna (Water flea)</td>
<td>1.8 mg/l - 48 h</td>
</tr>
<tr>
<td>CAS 68609-97-2</td>
<td>LC₅₀ Fish</td>
<td>&gt; 1800 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Fish</td>
<td>&gt; 5000 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>EC₅₀ Invertebrates</td>
<td>6.07-7.2 mg/l - 48 h</td>
</tr>
<tr>
<td>CAS 100-51-6</td>
<td>LC₅₀ Pimephales promelas (fathead minnow)</td>
<td>460 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Lepomis macrochirus (bluegill)</td>
<td>10 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Menidia peninsulae (silverside minnow)</td>
<td>32 mg/l - 96 h</td>
</tr>
<tr>
<td>CAS 7440-50-8</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

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

SECTION 16. OTHER INFORMATION

Date of latest revision of the safety data sheet: June 7, 2016

Disclaimer:

NOTICE TO READER:

Passeport Élite 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, Passeport Élite makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Passeport Élite 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: PE700924 (154M)
Other means of identification: None
Recommended use: Pearlescent Colourant 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: 514-321-5540
Fax number: 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 2)
Acute Toxicity, Oral (Category 4)
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:
H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H401 Toxic to aquatic life with long lasting effects
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. P270 Do not eat, drink or smoke when using this product. 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 INHALED: Remove person to fresh air and keep comfortable for breathing. P301 + P312 IF SWALLOWED: Call a POISON Center/doctor/…if you feel unwell. P303 Rinse mouth. 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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A-(epichlorohydrin) epoxy resin</td>
<td>25068-38-6</td>
<td>35 - 70 %</td>
</tr>
<tr>
<td>alkyl glycidyl ether</td>
<td>68609-97-2</td>
<td>1 - 10 %</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>100-51-6</td>
<td>1 - 10 %</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

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

**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 (CO₂)

**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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Exposure limits:

<table>
<thead>
<tr>
<th>CAS</th>
<th>For Workers: Acute - systemic effects</th>
<th>For Consumers: Acute - systemic effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m³</td>
<td>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m³</td>
</tr>
<tr>
<td>68609-97-2</td>
<td>Dermal 8.330 mg/kg bw/day Inhalation 12.25 mg/m³</td>
<td>Dermal 3.571 mg/kg bw/day Inhalation 0.75 mg/m³</td>
</tr>
</tbody>
</table>

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 face shield if splashing hazard exists. Use 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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent liquid, Clear</td>
<td>Not available</td>
<td>Odorless to mild</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>&gt; 93.3 ºC</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Not available</td>
<td>Paste</td>
<td>Varies depending on color</td>
<td>Partial</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
<td>≤ 40g/l</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 10. STABILITY AND REACTIVITY

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

Chemical Stability: This product is stable under normal conditions.

Possibility of hazardous reactions: This product will polymerize if mixed with an 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 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_{50} & LC_{50}):

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 25068-38-6</td>
<td>LC_{50} Oncorhynchus mykiss (rainbow trout)</td>
<td>2 mg/l -96 h</td>
</tr>
<tr>
<td></td>
<td>EC_{50} Daphnia magna (Water flea)</td>
<td>1.8 mg/l - 48 h</td>
</tr>
<tr>
<td>CAS 68609-97-2</td>
<td>LC_{50} Fish</td>
<td>&gt; 1800 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC_{50} Fish</td>
<td>&gt; 5000 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>EC_{50} Invertebrates</td>
<td>6.07-7.2 mg/l - 48 h</td>
</tr>
<tr>
<td>CAS 100-51-6</td>
<td>LC_{50} Pimephales promelas (fathead minnow)</td>
<td>460 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC_{50} Lepomis macrochirus (bluegill)</td>
<td>10 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>LC_{50} Menidia peninsulæ (silverside minnow)</td>
<td>32 mg/l - 96 h</td>
</tr>
</tbody>
</table>

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 12. ECOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>LC_{50} Menidia peninsulæ (silverside minnow)</td>
<td>32 mg/l - 96 h</td>
</tr>
</tbody>
</table>

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
MATERIAL SAFETY DATA SHEET

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: June 7, 2016

Disclaimer:

NOTICE TO READER:

Passeport Élite 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, Passeport Élite makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Passeport Élite 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:

Standard colours: PE700930 (248), PE700931 (305), PE700932 (306), PE700933 (331), PE700934 (353), PE700935 (360), PE700936 (365), PE700937 (375), PE700938 (376), PE700939 (431), PE700940 (433), PE700941 (433SW), PE700942 (437), PE700943 (446), PE700944 (454), PE700945 (459), PE700946 (460), PE700947 (517), PE700948 (521), PE700949 (524), PE700950 (530), PE700951 (663), PE700952 (885), PE700953 (933), PE700954 (939), PE700955 (952), PE700956 (999), PE700960 (316), PE700961 (317), PE700962 (330), PE700963 (453), PE700964 (523), PE700965 (915)

Safety colours: PE700960 (316), PE700961 (317), PE700962 (330), PE700963 (453), PE700964 (523), PE700965 (915)

Other means of identification: None

Recommended use: Standard Colourants & Safety Colourants 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: 514-321-5540
Fax number: 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 2)
Acute Toxicity, Oral (Category 4)
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:

H302 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. P270 Do not eat, drink or smoke when using this product. 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. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P301 + P312 IF SWALLOWED: Call a POISON Center/doctor/...if you feel unwell. P330 Rinse mouth. 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 manufacturer.”
MATERIAL SAFETY DATA SHEET

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin</td>
<td>25068-38-6</td>
<td>35 - 70 %</td>
</tr>
<tr>
<td>alkyl glycidyl ether</td>
<td>68609-97-2</td>
<td>1 - 10 %</td>
</tr>
<tr>
<td>benzyl alcohol</td>
<td>100-51-6</td>
<td>1 - 10 %</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

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

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 (CO₂)

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.
MATERIAL SAFETY DATA SHEET

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.

**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.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Exposure Limits:

<table>
<thead>
<tr>
<th>CAS</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For Workers: Acute - systemic effects</td>
</tr>
<tr>
<td></td>
<td>Dermal 8.330 mg/kg bw/day  Inhalation 12.25 mg/m³</td>
</tr>
<tr>
<td></td>
<td>For Consumers: Acute - systemic effects</td>
</tr>
<tr>
<td></td>
<td>Dermal 3.571 mg/kg bw/day  Inhalation 0.75 mg/m³</td>
</tr>
<tr>
<td></td>
<td>For Workers: Long-term - systemic effects</td>
</tr>
<tr>
<td></td>
<td>Dermal 8.330 mg/kg bw/day  Inhalation 12.25 mg/m³</td>
</tr>
<tr>
<td></td>
<td>For Consumers: Long-term - systemic effects</td>
</tr>
<tr>
<td></td>
<td>Dermal 3.571 mg/kg bw/day  Inhalation 0.75 mg/m³</td>
</tr>
<tr>
<td>CAS 68609-97-2</td>
<td>No exposure limits noted for the ingredient(s)</td>
</tr>
<tr>
<td>CAS 100-51-6</td>
<td>No exposure limits noted for the ingredient(s)</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
<th>Physical State/ Appearance/ Color:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transparent liquid, Clear</td>
</tr>
<tr>
<td>Vapour Pressure:</td>
<td>Not available</td>
</tr>
<tr>
<td>Odour:</td>
<td>Odorless to mild</td>
</tr>
<tr>
<td>Vapour Density:</td>
<td>Not available</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>Varies depending on color</td>
</tr>
<tr>
<td>pH:</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Partial</td>
</tr>
<tr>
<td>Melting/freezing point:</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water:</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point/range:</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt; 93.3 °C</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Paste</td>
</tr>
<tr>
<td>Flammability (solids and gases):</td>
<td>Not available</td>
</tr>
<tr>
<td>VOC:</td>
<td>≤ 40g/l</td>
</tr>
<tr>
<td>Upper and lower flammability/explosive limits:</td>
<td>Not available</td>
</tr>
<tr>
<td>Other:</td>
<td>None known</td>
</tr>
</tbody>
</table>
SECTION 10. STABILITY AND REACTIVITY

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

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

**Possibility of hazardous reactions:** This product will polymerize if mixed with an 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; LD₅₀ & LC₅₀):**

<table>
<thead>
<tr>
<th>CAS</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>Oncorhynchus mykiss (rainbow trout)</td>
<td>2 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>Daphnia magna (Water flea)</td>
<td>1.8 mg/l - 96 h</td>
</tr>
<tr>
<td>68609-97-2</td>
<td>Fish</td>
<td>&gt; 1800 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>Daphnia magna (Water flea)</td>
<td>&gt; 5000 mg/l - 96 h</td>
</tr>
<tr>
<td>100-51-6</td>
<td>Invertebrates</td>
<td>6.07-7.2 mg/l - 48 h</td>
</tr>
<tr>
<td></td>
<td>Pimephales promelas (fathead minnow)</td>
<td>460 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>Lepomis macrochirus (bluegill)</td>
<td>10 mg/l - 96 h</td>
</tr>
<tr>
<td></td>
<td>Menidia peninsulae (silverside minnow)</td>
<td>32 mg/l - 96 h</td>
</tr>
</tbody>
</table>

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

**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 12. ECOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Result</th>
</tr>
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<tbody>
<tr>
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<td>32 mg/l - 96 h</td>
</tr>
</tbody>
</table>

**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

SECTION 16. OTHER INFORMATION

Date of latest revision of the safety data sheet: June 7, 2016

Disclaimer:

NOTICE TO READER:

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