SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: Bonstone 404NS Epoxy Part A

MANUFACTURER
Bonstone Materials Corporation
707 Swan Drive
Mukwonago, WI 53149

Emergency Contact: Mike Beckmann
Emergency Phone: 262-363-9877
E-Mail: info@bonstone.com

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS
Health:
Skin Irritation, Category 2
Skin Sensitization, Category 1

GHS LABEL

Environment Exclamation mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H412: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:
P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P264: Wash hands thoroughly after handling.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P273: Avoid release to the environment.

Response:
P337+P313: If eye irritation persists: Get medical advice/attention.
P370+P378: In case of fire: Use CO2, powder, or water spray for extinction.
P302+P352: IF ON SKIN: Wash with plenty of water/...
P391: Collect spillage.
P362: Take off contaminated clothing.
P363: Wash contaminated clothing before reuse.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

Storage:
P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:
P501: Dispose of contents/container in accordance with all local/regional/national/international regulations.

POTENTIAL HEALTH EFFECTS

EYES: Moderately irritating to the eyes.
SKIN: Causes skin irritation. Allergic reactions are possible.
INGESTION: This material may be harmful or fatal if swallowed.
SENSITIZATION: May cause skin sensitization, an allergic reaction which becomes evident on exposure to this material.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A/epichlorohydrin Resin</td>
<td>Trade secret</td>
<td>25068-38-6</td>
</tr>
<tr>
<td>1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane</td>
<td>Trade secret</td>
<td>17557-23-2</td>
</tr>
<tr>
<td>Silica, Amorphous, Fumed</td>
<td>Trade secret</td>
<td>112945-52-5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

EYES: Flush eye with water for 15 minutes. Get medical attention.
SKIN: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.
INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.
INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

FIRE FIGHTING PROCEDURES: Use alcohol foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material. Firefighters and others who may be exposed to products of combustion should wear full firefighting turnout gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use.

FIRE FIGHTING EQUIPMENT: Firefighters and others who may be exposed to products of combustion should
wear full firefighting turnout gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use.

6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Absorb the liquid and scrub the area with detergent and water.
**RELEASE NOTES:** Notify authorities if any exposures to the general public or environment occurs or is likely to occur.
**SPECIAL PROTECTIVE EQUIPMENT:** Remove contaminated clothing and wash before reuse.
**COMMENTS:** If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Clean-up personnel must be equipped with self-contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.

7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Avoid contact with eyes, skin, and clothing.
**HANDLING:** Wash hands before eating and wash before reuse.
**STORAGE:** Store in a tightly closed container.
**COMMENTS:** Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE GUIDELINES**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EXPOSURE LIMITS</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Amorphous, Fumed</td>
<td>TWA</td>
<td>[1] 10 mg/m³</td>
</tr>
</tbody>
</table>

**Footnotes:**
1. (Total dust, containing less than 1% quartz)

**ENGINEERING CONTROLS:** Use only in a well ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**EYES AND FACE:** For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

**RESPIRATORY:** A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**WORK HYGIENIC PRACTICES:** Provide readily accessible eyewash stations and safety showers. Wash at the end of each work shift and before eating, smoking, or using the toilet.

**OTHER USE PRECAUTIONS:** Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

**COMMENTS:** Avoid breathing any (dust, vapor, mist, gas) that may be generated when grinding cured material.

9. PHYSICAL AND CHEMICAL PROPERTIES
<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Flash Point (°C)</th>
<th>Boiling Point (°C)</th>
<th>Freezing Point (°C)</th>
<th>Solubility in Water</th>
<th>Specific Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A/epichlorohydrin Resin</td>
<td>480</td>
<td></td>
<td></td>
<td>Negligible</td>
<td>1.17</td>
</tr>
<tr>
<td>Silica, Amorphous, Fumed</td>
<td></td>
<td>2230</td>
<td>1600</td>
<td>Negligible</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**PHYSICAL STATE:** Liquid  
**APPEARANCE:** Light colored liquid.  
**PERCENT VOLATILE:** 0  
**FLAMMABLE LIMITS:** 0 to 0  
**VAPOR PRESSURE:** 34.667  
**VAPOR DENSITY:** 34.667  
**BOILING POINT:** to (500°F)  
**SOLUBILITY IN WATER:** Negligible  
**SPECIFIC GRAVITY:** 1.178  
**(VOC):** 104.000 = 0 (no VOC's)

## 10. STABILITY AND REACTIVITY

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.  
**STABILITY:** Stable.  
**CONDITIONS TO AVOID:** Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and strong mineral and organic bases---especially primary and secondary aliphatic amines. Reaction with some curing agents may produce considerable heat. Runaway cure actions may char and decompose the resin system, generating unidentified fumes and vapors which may be toxic.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** The byproducts expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water. The thermal decomposition products of epoxy resins therefore should be treated as potentially hazardous substances, and appropriate precautions should be taken.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD$_{50}$ (rat)</th>
<th>DERMAL LD$_{50}$ (rabbit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A/epichlorohydrin Resin</td>
<td>11.4 g/kg (rat)</td>
<td>&gt; 20 ml/kg (rabbit)</td>
</tr>
<tr>
<td>1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane</td>
<td>8870 mg/kg (rat)</td>
<td>2150 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Silica, Amorphous, Fumed</td>
<td>3160 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

### CARCINOGENICITY

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>IARC Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica, Amorphous, Fumed</td>
<td>Group 3</td>
</tr>
</tbody>
</table>

**Notes:** A two-year dermal study in mice produced skin tumors at greater than 1.87 mg neopentylglycoldiglycidylether per mouse per week. (Holland, 1981).  
**COMMENTS:** Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type
are not anticipated to cause any significant adverse effects. Results of immunogenicity tests in animals have been negative. Has been shown to be negative in some in-vitro immunogenicity tests and positive in others.

12. ECOLOGICAL INFORMATION

COMMENTS: No information.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Recover, reclaim or recycle when practical. Dispose of in accordance with federal, state and local regulations. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements be be more restrictive or otherwise different from federal laws and regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

OTHER SHIPPING INFORMATION: Not regulated by DOT

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: Not considered a SARA 313 "Toxic Chemical".

TSCA (TOXIC SUBSTANCE CONTROL ACT)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisphenol A/epichlorohydrin Resin</td>
<td>25068-38-6</td>
</tr>
</tbody>
</table>

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

STATES WITH SPECIAL REQUIREMENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane</td>
<td>NJ: New Jersey Right-to-Know: The following is required compositional information: Chemical Name: OXIRANE, 2-2'-(2,2-DIMETHYL-1,3-PROPANEDIYL)BIS(OXYMETHYLENE))BIS-CAS Number: 17557-23-2 PA: Pennsylvania Right-to-Know: The following is required compositional information: Chemical Name: OXIRANE, 2-2'-(2,2-DIMETHYL-1,3-PROPANEDIYL)BIS(OXYMETHYLENE))BIS-CAS Number: 17557-23-2 Comment: Not on Pennsylvania Hazardous Substance List</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane</td>
<td>Trade secret</td>
<td>Cancer</td>
</tr>
</tbody>
</table>

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This product and/or all of it's components is/are listed on the TSCA Inventory.

16. OTHER INFORMATION

REASON FOR ISSUE: New MSDS format
REVISION SUMMARY: This SDS replaces the 05/07/2015 SDS. Revised: Section 1: PRODUCT CODE, REASON FOR ISSUE.

MANUFACTURER DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or any process, unless specified in the text.
1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT CODE: Bonstone 404NS (Non Sag Gel) Curing Agent, Part B

MANUFACTURER
Bonstone Materials Corporation
707 Swan Drive
Mukwonago, WI 53149

Emergency Contact: Mike Beckmann
Emergency Phone: 262-363-9877
E-Mail: info@bonstone.com

24 HR. EMERGENCY TELEPHONE NUMBERS
Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:
- Acute Toxicity (Oral), Category 4
- Acute Toxicity (Inhalation), Category 4
- Acute Toxicity (Dermal), Category 4
- Eye Irritation, Category 1
- Skin Corrosion, Category 1B
- Skin Irritation, Category 1B
- Serious Eye Damage, Category 1
- Skin Sensitization, Category 1B
- Reproductive Toxicity, Category 2

Environmental:
- Chronic Hazards to the Aquatic Environment, Category 3
- Acute Hazards to the Aquatic Environment, Category 2

GHS LABEL

Corrosion  Health hazard  Exclamation mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H361: Suspected of damaging fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H401: Toxic to aquatic life.
H412: Harmful to aquatic life with long lasting effects.
H302 + H312 + H332: Harmful if swallowed, in contact with skin or if inhaled.
H315 + H320: Causes skin and eye irritation.
H332: Harmful if inhaled.

PRECAUTIONARY STATEMENTS

Prevention:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P312: Call a POISON CENTER/doctor/...if you feel unwell.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P362+P364: Take off contaminated clothing and wash it before reuse.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with all local/regional/national/international regulations.

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Inhalation and skin contact are expected to be the primary routes of occupational exposure to benzyl alcohol. Vapors may cause respiratory tract irritation and a burning sensation. High vapor concentrations, ingestion and skin absorption may cause headache, sore throat, coughing, difficulty breathing, low blood pressure, fatigue, nausea, vomiting, diarrhea and abdominal pain. Severe cases may result in respiratory and muscular paralysis, convulsions, narcosis and death. Direct contact with liquid may cause eye and skin irritation, allergic skin reaction and anesthetic (numbing) effects. Mild to severe lung injury can occur if benzyl alcohol is drawn into lungs after swallowing or vomiting after swallowing.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive to the eyes and may cause severe damage including blindness.
SKIN: Causes skin burns, irritation and possible allergic reaction.
SKIN ABSORPTION: May be absorbed through the skin in harmful amounts.
INGESTION: Single dose oral toxicity is moderate. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause burns of mouth and throat.
INHALATION: Persons with asthmatic type conditions, chronic bronchitis or other respiratory diseases, or recurrent skin eczema or sensitization should be excluded from working with the product.
SENSITIZATION: May cause skin sensitization, an allergic reaction which becomes evident on exposure to this material.

3. COMPOSITION / INFORMATION ON INGREDIENTS
4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash or discard clothing and shoes before reuse.

INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

SIGN AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes eye irritation.

SKIN: Contact causes skin irritation.

INHALATION: Prolonged or excessive inhalation may cause respiratory tract irritation.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

FIRE FIGHTING PROCEDURES: Use alcohol foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material. Firefighters and others who may be exposed to products of combustion should wear full firefighting turnout gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use.

FIRE EXPLOSION: When burned, the following hazardous products of combustion can occur: irritating and/or toxic vapors. Avoid breathing fumes from fire-exposed material.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. After all visible traces, including ignitable vapors, have been removed thoroughly wet vacuum the area. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal.

GENERAL PROCEDURES: Contain spill with dike to prevent entry into sewers.

RELEASE NOTES: Notify authorities if any exposures to the general public or environment occurs or is likely to occur.

SPECIAL PROTECTIVE EQUIPMENT: Remove contaminated clothing and wash before reuse.

COMMENTS: If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Clean-up personnel must be equipped with self-contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.
GENERAL PROCEDURES: Use with adequate ventilation.
HANDLING: Wash hands before eating and wash before reuse.
STORAGE: Store in a tightly closed container.
COMMENTS: Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>Supplier OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
</tr>
<tr>
<td>Benzyl Alcohol</td>
<td>TWA</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[1]</td>
</tr>
<tr>
<td>Silica, Amorphous, Fumed</td>
<td>TWA</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[2]</td>
</tr>
</tbody>
</table>

Footnotes:
1. WEEL (US Workplace Environmental Exposure Levels)
2. (Total dust, containing less than 1% quartz)

ENGINEERING CONTROLS: Use only in a well ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

SKIN: Wash thoroughly after handling.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

WORK HYGIENIC PRACTICES: Provide readily accessible eyewash stations and safety showers. Wash at the end of each work shift and before eating, smoking, or using the toilet.

OTHER USE PRECAUTIONS: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

COMMENTS: Avoid breathing any (dust, vapor, mist, gas) that may be generated when grinding cured material.

9. PHYSICAL AND CHEMICAL PROPERTIES
<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Flash Point (°C)</th>
<th>Boiling Point (°C)</th>
<th>Freezing Point (°C)</th>
<th>Solubility in Water</th>
<th>Specific Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-piperazin-1-ylethylamine</td>
<td></td>
<td></td>
<td></td>
<td>Soluble</td>
<td>0.987</td>
</tr>
<tr>
<td>3,6-diazaoctanethylenediamine</td>
<td>200</td>
<td></td>
<td></td>
<td>Slightly soluble</td>
<td>1.02</td>
</tr>
<tr>
<td>Benzyl Alcohol</td>
<td>220</td>
<td></td>
<td></td>
<td>Negligible</td>
<td>1.04</td>
</tr>
<tr>
<td>Silica, Amorphous, Fumed</td>
<td>2230</td>
<td>1600</td>
<td></td>
<td>Negligible</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**PHYSICAL STATE:** Liquid

**ODOR:** Amine

**APPEARANCE:** Light colored liquid.

**PERCENT VOLATILE:** 0

**FLAMMABLE LIMITS:** 0 to 0

**VAPOR PRESSURE:** 6.4

**VAPOR DENSITY:** 6.4

**BOILING POINT:** to (410°F)

**SOLUBILITY IN WATER:** Moderate

**SPECIFIC GRAVITY:** 1.064

**(VOC):** 45.500 = 0 (no VOC's)

### 10. STABILITY AND REACTIVITY

**HAZARDOUS POLYMERIZATION:** Will not occur under normal conditions.

**STABILITY:** Stable.

**CONDITIONS TO AVOID:** Extreme heat, exposure to active metal alloys and oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Nitrogen oxides, carbon dioxide, and carbon monoxide.

**INCOMPATIBLE MATERIALS:** Epoxy resins under uncontrolled conditions.

### 11. TOXICOLOGICAL INFORMATION

**ACUTE**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ORAL LD₅₀ (rat)</th>
<th>DERMAL LD₅₀ (rabbit)</th>
<th>INHALATION LC₅₀ (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-piperazin-1-ylethylamine</td>
<td>≥ 2150 mg/kg (rat)</td>
<td>≥ 866.8 mg/kg (rabbit)</td>
<td></td>
</tr>
<tr>
<td>3,6-diazaoctanethylenediamine</td>
<td>&gt; 1000 mg/kg</td>
<td>&gt; 1000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Benzyl Alcohol</td>
<td>1230 to 3100 (rat)</td>
<td>2000 mg/kg (rabbit)</td>
<td>1000 ppm (rat)</td>
</tr>
<tr>
<td>Silica, Amorphous, Fumed</td>
<td>3160 mg/kg (rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EYE EFFECTS:** May cause severe irritation with corneal injury, which may result in permanent impairment of vision, even blindness. Vapors may irritate eyes.

**SKIN EFFECTS:** May cause severe injury to skin following prolonged or repeated contact, and may cause skin sensitization or other allergic responses.

**CARCINOGENICITY**
**Chemical Name**

Silica, Amorphous, Fumed

**IARC Status**

Group 3

**GENERAL COMMENTS:** Slight to very low toxicity.

**12. ECOLOGICAL INFORMATION**

**COMMENTS:** No information.

**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHOD:** Recover, reclaim or recycle when practical. Dispose of in accordance with federal, state and local regulations. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

**14. TRANSPORT INFORMATION**

**COMMENTS:** Not regulated by DOT

**15. REGULATORY INFORMATION**

**UNITED STATES**

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** Immediate health hazard, delayed health hazard.

**313 REPORTABLE INGREDIENTS:** Not considered a SARA 313 "Toxic Chemical".

**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Wt.%</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4'-isopropylidenediphenol</td>
<td></td>
<td>Trade secret 80-05-7</td>
</tr>
</tbody>
</table>

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-piperazin-1-ylethylamine</td>
<td>140-31-8</td>
</tr>
<tr>
<td>Benzyl Alcohol</td>
<td>100-51-6</td>
</tr>
</tbody>
</table>

**TSCA STATUS:** This product and/or all of its components is/are listed on the TSCA Inventory.

**STATES WITH SPECIAL REQUIREMENTS**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzyl Alcohol</td>
<td>This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List: Benzyl Alcohol. This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List: Benzyl Alcohol.</td>
</tr>
</tbody>
</table>

**CANADA**

**WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):** This product and/or all of its components is/are listed on the TSCA Inventory.

**16. OTHER INFORMATION**

**REASON FOR ISSUE:** No product changes--this revision is strictly to update the MSDS current date.

**APPROVED BY:** Mike Beckmann  
**TITLE:** President
Date Revised: 05/07/2015

INFORMATION CONTACT: Mike Beckmann

REVISION SUMMARY: This SDS replaces the 07/07/2011 SDS. Revised: Section 2:

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