Section 1 – Chemical Product and Company Identification

1.1 Product identifier:
Product Name: SM 2004 Part A
Product Code: SM2004A
Effective Date: 10/16/2015
Revision Date: -

1.2 Recommended use and restrictions on use:
Product Use: Epoxy Resin
Restrictions: Not available

1.3 Name, address, and telephone number of the chemical manufacturer:
GS Polymers, Inc.
3687-B Grapevine Street
Mira Loma, CA 91752
(951) 360-0607

1.4 Emergency telephone number:
24 Hr. Emergency CHEMTREC # 1-800-424-9300

Section 2 – Hazards Identification

2.1 Classification according to 29 CFR §1910.1200 (d):

Classification:
- Skin corrosion/irritation - Category 2
- Eye damage/irritation - Category 2A
- Skin sensitization - Category 1
- Germ cell mutagenicity - Category 2
- Carcinogenicity - Category 2
- Toxic to reproduction - Category 1B
- Specific target organ toxicity - single exposure - Category 1 (Thymus)
- Specific target organ toxicity - single exposure - Category 3 (Respiratory tract)
- Hazardous to the aquatic environment - chronic - Category 3

2.2 Label elements according to 29 CFR §1910.1200 (f):

Hazard Symbols:

Signal Words: Danger

Hazard Statements:
- Causes skin irritation.
- Causes serious eye irritation.
- May cause an allergic skin reaction.
Suspected of causing genetic defects.
Suspected of causing cancer.
May damage fertility or the unborn child
Causes damage to organs. (Thymus)
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.

Precautionary Statements:

Prevention: Obtain special instructions before use. 
Do not handle until all safety precautions have been read and understood. 
Do not eat, drink or smoke when using this product. 
Do not breathe dust/fume/gas/mist/vapors/spray. 
Use only outdoors or in a well-ventilated area. 
Wear protective gloves/protective clothing/eye protection/face protection. 
Wash exposed areas thoroughly after handling. 
Contaminated work clothing must not be allowed out of the workplace. 
Avoid release to the environment.

Response: If exposed or concerned: Get medical advice/attention. 
If on skin: Wash with plenty of soap and water. 
If skin irritation or rash occurs: Get medical advice/attention. 
Take off contaminated clothing and wash it before reuse. 
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 
If eye irritation persists: Get medical advice/attention. 
If inhaled: Remove person to fresh air and keep comfortable for breathing. 
Call a poison center/doctor if you feel unwell.

Storage: Store locked up. 
Store in a well-ventilated place. Keep container tightly closed.

Disposal: Dispose of contents in accordance with all local, regional, national and international regulations.

2.3 Hazards not otherwise classified in the classification process: None

2.4 Ingredients (Present at ≥ 1%) of unknown toxicity: None

2.5 Supplemental Information: If product is in liquid or cured (solid) form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.
Section 3 – Composition/Information on Ingredients

3.1.1 Hazardous ingredients(s)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS NO.</th>
<th>% (by wt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)</td>
<td>25068-38-6</td>
<td>&lt; 50.0 %</td>
</tr>
<tr>
<td>Dibutyltin oxide</td>
<td>818-08-6</td>
<td>0.5 – 1.5 %</td>
</tr>
<tr>
<td>Di(2-ethylhexyl) phthalate</td>
<td>117-81-7</td>
<td>0.5 – 1.5 %</td>
</tr>
</tbody>
</table>

3.1.2 Non-hazardous ingredient(s)
Remaining components are non-hazardous and/or present at amounts below reportable limits.

3.2 Trade secrets (if applicable):
* Designates a specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4 – First Aid Measures

4.1 Description of first aid measures

Eyes: Immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of entire eye surface and lids with water. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

Skin: Remove contaminated clothing. Wipe off excess material from exposed area. Flush exposed area with water. Wash area with soap and water. Continue to rinse for at least 10 minutes. If skin irritation or rash occurs, get medical attention. Do not reuse clothing until clean. Contaminated leather articles including shoes cannot be cleaned and should be discarded.

Inhalation: Move victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if victim feels unwell. If victim is unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie belt or waistband.

Ingestion: Wash mouth out with water. If victim is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep victim’s head low so that vomit does not enter the lungs. Call Poison Center or get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed:
No data available

4.3 Indication of any immediate medical attention and special treatment needed:
No data available

Section 5 – Fire-Fighting Measures

5.1 Suitable extinguishing media:
Use dry chemical, CO₂, water spray (fog) or foam.

5.2 Specific hazards arising from the product:
If heated, a pressure increase will occur and the container may burst.
5.3 Special protective equipment and precautions for fire-fighters:
Use standard fire-fighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:
No action should be taken involving any personal risk or by personnel without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.2 Methods and materials for containment and cleaning up:
Small spill: Stop leak if it is possible to do without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of waste with a licensed waste disposal contractor.
Large spill: Stop leak if it is possible to do without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7 – Handling and Storage

7.1 Precautions for safe handling:
Put on appropriate personal protective equipment (see section 8 of SDS). Individuals with a history of skin sensitization should not be employed in any process in which this product is used. Do not get in eyes, on skin or on clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material. Keep container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities:
Optimal storage temperature: 72F – 100F.

Avoid prolonged storage temperatures above 38C/100F. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Section 8 – Exposure Controls/Personal Protection

8.1 Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS NO.</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)</td>
<td>25068-38-6</td>
<td>Not Established</td>
</tr>
<tr>
<td>Dibutyltin oxide</td>
<td>818-08-6</td>
<td>TWA 0.1 mg/m³</td>
</tr>
<tr>
<td>Di(2-ethylhexyl) phthalate</td>
<td>117-81-7</td>
<td>TWA 5 mg/m³</td>
</tr>
</tbody>
</table>

8.2 Engineering Controls:

Ventilation: Good general mechanical ventilation and local exhaust.

8.3 Personal Protective Equipment:

Eye Protection: Wear splash resistant safety goggles.
Skin Protection: Wear impervious gloves and other clothing to prevent contact.
Respirators: Organic vapor respirator if adequate ventilation is not present. (National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors recommended.)
Hygienic Practices: Wash hands before eating, smoking or using toilet facilities. Do not smoke in any chemical handling and storage areas. Food or beverages should not be consumed near where this product is stored. Remove and wash contaminated clothing before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

8.4 Additional Precautions

Where cutting or grinding of the cured material is to occur, use adequate ventilation and dust controls. To minimize exposure, employees should wear respirator approved for silica dust. Do not breathe dust. Do not rely on your sight to determine if dust is in the air. Use good housekeeping to avoid accumulation of dust in the work area. See also American Society for Testing and Materials (ASTM) Standard Practice E1132-99a, “Standard Practice for Health Requirements Relating to Occupational Exposure to respirable Crystalline Silica”.

Section 9 – Physical and Chemical Properties

- Appearance: Viscous liquid
- Color: Tan - Brown
- Odor: Not Established
- Odor Threshold: Not Established
- pH: Not Established
- Melting Point/Freezing Point: Not Established
- Boiling Point: Not Established
- Flash Point: >200°F (>93.33°C)
- Evaporation Rate: Not Established
- Upper/Lower flammability or explosive limits: Not Established
- Vapor Pressure: Not Established
- Vapor Density: Not Established
- Relative Density: Specific Gravity: 1.50
- Bulk Density (lbs/gal): 12.52
- Solubility: Slightly Soluble
- Partition Coefficient; n-octanol/water: Not Established
- Auto-ignition temperature: Not Established
- Viscosity: < 10,000 cps
Section 10 – Stability and Reactivity

10.1 Reactivity: Stable under normal conditions.

10.2 Chemical Stability: Product is stable.

10.3 Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid: Extremes of temperature and direct sunlight.

10.5 Incompatible Materials: Reactive or incompatible with the following materials: aliphatic amines, strong oxidizing agents, strong acids.

10.6 Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

10.7 Other Hazards: Reacts with considerable heat release with some curing agents.

Section 11 – Toxicological Information

11.1 Information on the likely routes of exposure: Not Available

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

<table>
<thead>
<tr>
<th>Route</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Contact</td>
<td>Pain or irritation, watering, redness</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Respiratory tract irritation, coughing</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Irritation, redness</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No specific data</td>
</tr>
</tbody>
</table>

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure:

**Short term exposure:**

<table>
<thead>
<tr>
<th>Route</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Contact</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Causes skin irritation. May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Irritating to mouth, throat and stomach.</td>
</tr>
</tbody>
</table>

**Long term exposure:** Not Available

**Chronic effects:** Not Available

11.4 Numerical Measure of toxicity (Acute toxicity estimates)

ATE US (oral) 2600 mg/kg body wt

Acute Toxicity Data:
Epoxy Resin (Diglycidyl Ether of Bis-Phenol A)
LD50 Oral Rat 11,400 mg/kg
11.5 Carcinogenicity:
Not Available

Section 12 – Ecological Information

12.1 Ecotoxicity:
- Di(2-ethylhexyl) phthalate
  - LC50 Fish 1 > 0.16 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
  - EC50 Daphnia 1 > 0.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
  - LC 50 Fish 2 > 0.200 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
  - EC50 Daphnia 2 9.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)
  - NOEC chronic crustacea 0.158 (Exposure time: 21d - Species: Daphnia magna)
- Dibutyltin oxide
  - EC50 Daphnia 1 2 mg/l (Exposure time: 48 h, Species: Daphnia Magna)

12.2 Persistence and Degradability: Not Available
- Di(2-ethylhexyl) phthalate
  - BCF fish 1 l - 29.7
  - Log Pow 5.03

12.3 Bioaccumulative Potential: Not Available

12.4 Mobility in Soil: Not Available

12.5 Other Adverse Effects: Not Available

Section 13 – Disposal Considerations

13.1 Information on waste and methods of disposal
Dispose of contents in accordance with all local, regional, national and international regulations.

Section 14 – Transportation Information

14.1 Transportation information
- Land Transportation (DOT):
  - Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Dibutyl Tin Oxide)
  - Hazard Class: 9
  - Identification Number: UN 3082
  - Packing group: III
  - Marine Pollutant: Yes

- Sea Transportation (IMDG):
  - Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Dibutyl Tin Oxide)
Hazard Class: 9
Identification Number: UN 3082
Packing group: III
Marine Pollutant: Yes

Air Transportation (IATA):
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Dibutyl Tin Oxide)
Hazard Class: 9
Identification Number: UN 3082
Packing group: III
Marine Pollutant: Yes

14.2 Transportation in bulk according to Annex II of Marpol 73/78 and the IBC Code:
This product is not intended to be transported in bulk containers.

14.3 Special precautions for transportation:
No data available

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations specific for the product in question.
This regulatory information is not intended to be comprehensive. Other regulations may apply to this material.
To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency. GS Polymers, Inc. does not undertake to furnish advice on regulatory matters.

United States Federal Regulations:
US EPA CERCLA Hazardous Substances (40 CFR 302):
Not Evaluated

SARA Section 311/312 Hazard Categories:
Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):
Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III
Section 313 Toxic Chemicals (40 CRF 372.65) – Supplier Notification Required:
None above de minimis concentration

State Right-To-Know Information:
For details of your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:
Not Evaluated

California Prop. 65: This product contains the chemicals listed below, which the State of California has found to cause cancer, birth defects or reproductive harm.
Di(2-ethylene) phthalate (cancer, reproduction)
Oxirane, 2-(phenoxymethyl)- (cancer)
Ethylbenzene (cancer)
Benzene 71-43-2 (cancer, reproduction)
Toluene 108-88-3 (reproduction)
Crystalline silica (quartz) (cancer)
Section 16 – Other Information

16.1 Date of preparation or last revision:

Company: GS Polymers, Inc.
Rev Date: 10/16/2015
Rev By: BN

Reason for Change:
This revision updates SDS formatting according to OSHA Hazard Communications Standard (HCS) promulgated on March 20, 2012.

16.2 Additional information:

HMIS Ratings:
Health: 2*
Flammability: 1
Physical Hazard: 0

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of GS Polymers’ product safety program. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency. GS Polymers, Inc. does not undertake to furnish advice on such matters.
Section 1 – Chemical Product and Company Identification

1.1 **Product identifier:**
Product Name: SM 2004 Part B
Product Code: SM2004B
Effective Date: 10/16/2015
Revision Date: -

1.2 **Recommended use and restrictions on use:**
Product Use: Component of epoxy polymer system
Restrictions: Not available

1.3 **Name, address, and telephone number of the chemical manufacturer:**
GS Polymers, Inc.
3687-B Grapevine Street
Mira Loma, CA 91752
(951) 360-0607

1.4 **Emergency telephone number:**
24 Hr. Emergency CHEMTREC # 1-800-424-9300

Section 2 – Hazards Identification

2.1 **Classification according to 29 CFR §1910.1200 (d):**

Classification:
- Skin corrosion/irritation - Category 1B
- Eye damage/irritation - Category 1
- Respiratory sensitization - Category 1
- Skin sensitization - Category 1
- Specific target organ toxicity - single exposure - Category 2 (Nervous system, Eyes)

2.2 **Label elements according to 29 CFR §1910.1200 (f):**

**Hazard Symbols:**

**Signal Words:** Danger

**Hazard Statements:**
- Causes severe skin burns and eye damage.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.
- May cause damage to the nervous system (optic nerve) by eye contact or ingestion.

Precautionary Statements:
Prevention:
Do not breathe vapors or mists.
Do not eat, drink or smoke when using this product.
Wear respiratory protection.
Wear protective gloves/protective clothing/eye protection/face protection.
Wear eye protection/face protection.
Wash exposed areas thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

Response:
If exposed or concerned: Call a poison center/doctor.
If swallowed: Rinse mouth. Do NOT induce vomiting.
Immediately call a poison center/doctor.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with soap and water/shower.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Immediately call a poison center/doctor.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center or doctor.
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a poison center/doctor.

Storage:
Store locked up.

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

2.3 Hazards not otherwise classified in the classification process:
None

2.4 Ingredients (Present at ≥ 1%) of unknown toxicity:
None

2.5 Supplemental Information:
If product is in liquid or cured (solid) form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

Section 3 – Composition/Information on Ingredients

3.1.1 Hazardous ingredients(s)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS NO.</th>
<th>% (by wt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary mineral filler</td>
<td>*</td>
<td>&lt; 10.0 %</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>&lt; 10.0 %</td>
</tr>
<tr>
<td>Organosilane</td>
<td>*</td>
<td>&lt; 1.0 %</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>&lt; 0.5 %</td>
</tr>
</tbody>
</table>
### Impurities

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS NO.</th>
<th>% (by wt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica (quartz) †</td>
<td>14808-60-7</td>
<td>&lt; 0.2%</td>
</tr>
</tbody>
</table>

† Component is hazardous if present as a respirable dust. See Section 2.5 and Section 8.4

#### 3.1.2 Non-hazardous ingredient(s)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS NO.</th>
<th>% (by wt.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silyl terminated polyether</td>
<td>*</td>
<td>25.0 - 50.0 %</td>
</tr>
</tbody>
</table>

Remaining components are non-hazardous and/or present at amounts below reportable limits.

#### 3.2 Trade secrets (if applicable):

* Designates a specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

---

**Section 4 – First Aid Measures**

#### 4.1 Description of first aid measures

**Eyes:** Immediately flush eyes for at least 15 minutes with running water. Hold eyelids apart to ensure rinsing of entire eye surface and lids with water. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

**Skin:** Remove contaminated clothing. Wipe off excess material from exposed area. Flush exposed area with water. Wash area with soap and water. Continue to rinse for at least 15 minutes. If skin irritation or rash occurs, get medical attention. Do not reuse clothing until clean. Contaminated leather articles including shoes cannot be cleaned and should be discarded.

**Inhalation:** Move victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if victim feels unwell. If victim is unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie belt or waistband.

**Ingestion:** Wash mouth out with water. If victim is conscious, give small quantities of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep victim’s head low so that vomit does not enter the lungs. Call Poison Center or get medical attention immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed:

No data available

#### 4.3 Indication of any immediate medical attention and special treatment needed:

No data available

---

**Section 5 – Fire-Fighting Measures**

#### 5.1 Suitable extinguishing media:

Use dry chemical, CO₂, water spray (fog) or foam.

#### 5.2 Specific hazards arising from the product:

If heated, a pressure increase will occur and the container may burst. Carbon oxides. Nitrogen oxides (NOₓ). Aldehydes. Various polymer compounds. Contact with water will release small amounts of flammable methanol.
5.3 Special protective equipment and precautions for fire-fighters:
Use standard fire-fighting procedures and consider the hazards of other involved materials. Move container from fire area if it can be done without risk. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture.

6.1 Personal precautions, protective equipment and emergency procedures:
No action should be taken involving any personal risk or by personnel without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.2 Methods and materials for containment and cleaning up:
Small spill: Stop leak if it is possible to do without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of waste with a licensed waste disposal contractor.
Large spill: Stop leak if it is possible to do without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

7.1 Precautions for safe handling:
Put on appropriate personal protective equipment (see section 8 of SDS). Individuals with a history of skin sensitization should not be employed in any process in which this product is used. Do not get in eyes, on skin or on clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material. Keep container tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities:
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8.1 Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS NO.</th>
<th>OSHA (ACGIH) TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silyl terminated polyether</td>
<td>*</td>
<td>Not Established</td>
</tr>
<tr>
<td>Proprietary mineral filler (respirable)</td>
<td>*</td>
<td>TWA 10 mg/m3</td>
</tr>
<tr>
<td>2,4,6-Tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>Not Established</td>
</tr>
</tbody>
</table>
8.2 Engineering Controls:

Ventilation: Good general mechanical ventilation and local exhaust.

8.3 Personal Protective Equipment:

Eye Protection: Wear splash resistant safety goggles.

Skin Protection: Wear impervious gloves and other clothing to prevent contact.

Respirators: Organic vapor respirator if adequate ventilation is not present. (National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors recommended.)

Hygienic Practices: Wash hands before eating, smoking or using toilet facilities. Do not smoke in any chemical handling and storage areas. Food or beverages should not be consumed near where this product is stored. Remove and wash contaminated clothing before reuse. Ensure that eyewash stations and safety showers are close to the workstation location.

8.4 Additional Precautions

Where cutting or grinding of the cured material is to occur, use adequate ventilation and dust controls. To minimize exposure, employees should wear respirator approved for silica dust. Do not breathe dust. Do not rely on your sight to determine if dust is in the air. Use good housekeeping to avoid accumulation of dust in the work area. See also American Society for Testing and Materials (ASTM) Standard Practice E1132-99a, "Standard Practice for Health Requirements Relating to Occupational Exposure to respirable Crystalline Silica".

Section 9 – Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Viscous Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight, Ether-like</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not Established</td>
</tr>
<tr>
<td>pH</td>
<td>Not Established</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not Established</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not Established</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;200°F (&gt;93.33°C)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Established</td>
</tr>
<tr>
<td>Upper/Lower flammability or explosive limits</td>
<td>Not Established</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Established</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Established</td>
</tr>
<tr>
<td>Relative Density</td>
<td>1.16</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.16</td>
</tr>
<tr>
<td>Bulk Density (lbs./gal)</td>
<td>9.71</td>
</tr>
<tr>
<td>Solubility</td>
<td>Slightly Soluble</td>
</tr>
<tr>
<td>Partition Coefficient; n-octanol/water</td>
<td>Not Established</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Established</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

Note: Physical data presented above are typical values and should not be construed as a specification.
Section 10 – Stability and Reactivity

10.1 Reactivity: Reacts with water
10.2 Chemical Stability: Stable under conditions of normal temperature and pressure. Contact with water will release small amounts of flammable methanol.

10.3 Possibility of Hazardous Reactions: Hazardous polymerization does not occur.
10.4 Conditions to Avoid: Heat, flames and sparks. Temperatures above 150 °C /300 °F. Incompatible materials.


10.7 Other Hazards: Reacts with heat release with some epoxy resins.

Section 11 – Toxicological Information

11.1 Information on the likely routes of exposure:
Eye contact, skin contact, inhalation, ingestion

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

| Acute Toxicity: | Not classified |
| Skin Corrosion/Irritation: | Causes severe skin burns |
| Serious Eye Damage/Irritation: | Causes serious eye damage |
| Respiratory or Skin Sensitization: | May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. |
| Germ Cell Mutagenicity: | Not classified |
| Carcinogenicity: | Not classified |
| Reproductive Toxicity: | Not classified |
| Specific Target Organ Toxicity (Single Exposure): | May cause damage to the nervous system by eye contact or ingestion. |
| Specific Target Organ Toxicity (Repeated Exposure): | Not classified |
| Aspiration Hazard: | Not classified |

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure:

| Eye Contact: | Causes serious eye damage |
| Inhalation: | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin Contact: | Causes severe skin burns. May cause an allergic skin reaction. |
| Ingestion: | Expected to be harmful if swallowed |

Long term exposure: Not Available
Chronic effects: Not Available

Component Data: Information for Organo-silane (and Methanol);
Liquid or vapors can react with moisture in the eye to form methanol, an alcohol which can cause temporary or permanent blindness depending on exposure. Methanol: Human exposure to methanol may result in illness, systemic poisoning, blindness, optic nerve damage and perhaps death, after being ingested, absorbed through the skin or inhaled. Death due to cardiac or respiratory failure has been reported in some cases from consumption of as little as 30 mls.

11.4 Numerical Measure of toxicity (Acute toxicity estimates)
Not Available

11.5 Carcinogenicity:
The National Toxicology Program classifies respirable crystalline silica as "known to be a human carcinogen". The International Agency for Research on Cancer has determined that crystalline silica is carcinogenic to humans (Group 1 - carcinogenic to humans).

Section 12 – Ecological Information

12.1 Ecotoxicity: Not Available
12.2 Persistence and Degradability: Not Available
12.3 Bioaccumulative Potential: Not Available
12.4 Mobility in Soil: Not Available
12.5 Other Adverse Effects: Not Available

Section 13 – Disposal Considerations

13.1 Information on waste and methods of disposal
Dispose of contents in accordance with all local, regional, national and international regulations.

Section 14 – Transportation Information

14.1 Transportation information

Land Transportation (DOT):
Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (contains 2,4,6-Tris(dimethylaminomethyl)phenol)
Hazard Class: 8
Identification Number: UN 2375
Packing group: III
Marine Pollutant: No

Sea Transportation (IMDG):
Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (contains 2,4,6-Tris(dimethylaminomethyl)phenol)
Hazard Class: 8
Identification Number: UN 2375
Packing group: III
Marine Pollutant: No

Air Transportation (IATA):
Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (contains 2,4,6-Tris(dimethylaminomethyl)phenol)
14.2 **Transportation in bulk according to Annex II of Marpol 73/78 and the IBC Code:**
This product is not intended to be transported in bulk containers.

14.3 **Special precautions for transportation:**
No data available

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**Section 15 – Regulatory Information**

15.1 **Safety, health and environmental regulations specific for the product in question.**
This regulatory information is not intended to be comprehensive. Other regulations may apply to this material. To determine applicability or effects of any law or regulation with respect to the product, user should seek legal advice or consult with the appropriate government agency. GS Polymers, Inc. does not undertake to furnish advice on regulatory matters.

**United States Federal Regulations:**
- **US EPA CERCLA Hazardous Substances (40 CFR 302):** Not Evaluated
- **SARA Section 311/312 Hazard Categories:** Not Evaluated
- **US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**
  - Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): Not Evaluated
- **US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III**
  - Section 313 Toxic Chemicals (40 CRF 372.65) – Supplier Notification Required:
    - None above de minimis concentration

**State Right-To-Know Information:**
For details of your regulatory requirements you should contact the appropriate agency in your state.

**Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:**
Not Evaluated

**California Prop. 65:** This product contains the chemicals listed below, which the State of California has found to cause cancer, birth defects or reproductive harm.
- Methanol \(< 0.2 \%\) (reproduction)
- Crystalline silica (quartz) \(< 0.2 \%\) (cancer)

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**Section 16 – Other Information**

16.1 **Date of preparation or last revision:**

<table>
<thead>
<tr>
<th>Company</th>
<th>GS Polymers, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rev Date</td>
<td>6/25/2015</td>
</tr>
<tr>
<td>Rev By</td>
<td>BN</td>
</tr>
</tbody>
</table>
**Reason for Change:**
This revision updates SDS formatting according to OSHA Hazard Communications Standard (HCS) promulgated on March 20, 2012.

**16.2 Additional information:**

**HMIS Ratings:**
- Health: 3
- Flammability: 1
- Physical Hazard: 0

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of GS Polymers’ product safety program. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

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