1. Product and Company Identification

**Product Code:** 24A (pigmented) / 28A (clear)

**Product Name:** 24 Part A (Pigmented) Mortar / 28 Part A (Clear) Mortar

**Trade Name:** 24 Part A (Pigmented) Mortar / 28 Part A (clear) Mortar

**Manufacturer Information**

- **Company Name:** Epoxy Systems, Inc.
- **Address:** 20774 W Pennsylvania Ave.
  Dunnellon, FL 34431
- **Phone Number:** +1 (352) 489-1666
- **Emergency Contact:** PERS (USA) (800) 633-8253
- **Alternate Emergency Contact:** PERS (International) +1 (801) 629-0667

2. Hazards Identification

**GHS Classification**

- Skin Corrosion/Irritation, Category 2
- Serious Eye Damage/Eye Irritation, Category 2B
- Aquatic Toxicity (Chronic), Category 2

**GHS Hazard Phrases**

- H315+320 - Causes skin and eye irritation.
- H317 - May cause an allergic skin reaction.
- H335 - May cause respiratory irritation.
- H411 - Toxic to aquatic life with long lasting effects.

**GHS Precaution Phrases**

- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P262 - Do not get in eyes, on skin, or on clothing.
- P260 - Do not breathe dust/mist/vapors/spray.
- P273 - Avoid release to the environment.

**GHS Response Phrases**

- P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin irritation occurs, get medical advice/attention. P362 - Take off contaminated clothing.
- P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation persists, get medical advice/attention.
- P304+341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. P314 - Get medical attention/advice if you feel unwell.
- P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P311 - Call a POISON CENTER or doctor/physician.

**GHS Storage and Disposal Phrases**

- P501 - Dispose of contents/container to local, state, and federal authority requirements.

**Potential Health Effects (Acute and Chronic)**

May cause eye irritation. May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.
Inhalation
May cause respiratory irritation.

Skin Contact
Causes skin irritation.

Eye Contact
Causes eye irritation.

Ingestion
May be harmful if swallowed.

Recommended Exposure Limits
Not established.

Medical Conditions Generally Aggravated By Exposure
Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

OSHA Regulatory Status:
This material is classified as hazardous under OSHA regulations.

### 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bisphenol-a based epoxy resin</td>
<td>25068-38-6</td>
<td>70 - 90 %</td>
</tr>
<tr>
<td>2. 2,4-Pentanediol, 2-Methyl-</td>
<td>107-41-5</td>
<td>10 - 20 %</td>
</tr>
<tr>
<td>3. Phenol, 4-nonyl-, branched</td>
<td>84852-15-3</td>
<td>1.0 - 8.0 %</td>
</tr>
<tr>
<td>4. Oxirane, Mono.((C12-14-alkyloxy)methyl). derivs.</td>
<td>68609-97-2</td>
<td>1.0 - 10 %</td>
</tr>
<tr>
<td>5. Titanium dioxide</td>
<td>13463-67-7</td>
<td>0 - 25 %</td>
</tr>
<tr>
<td>6. Carbon black</td>
<td>1333-86-4</td>
<td>0 - 10 %</td>
</tr>
<tr>
<td>7. Iron oxide (Fe2O3)</td>
<td>1309-37-1</td>
<td>0 - 10 %</td>
</tr>
<tr>
<td>8. C.I. Pigment Yellow 42</td>
<td>51274-00-1</td>
<td>0 - 10 %</td>
</tr>
<tr>
<td>9. Silica, amorphous treated</td>
<td>112945-52-5</td>
<td>0.10 - 3.0 %</td>
</tr>
</tbody>
</table>

### 4. First Aid Measures

Emergency and First Aid Procedures

In Case of Inhalation
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If experiencing respiratory symptoms: Get medical attention immediately.

In Case of Skin Contact
In case of contact, immediately wash skin with soap and copious amounts of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops or persists.

In Case of Eye Contact
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

In Case of Ingestion
If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Do not induce vomiting. For further assistance, contact your local Poison Control Center.

Signs and Symptoms Of Exposure
May cause skin, eye, and respiratory irritation. May cause allergic skin reaction.

### 5. Fire Fighting Measures

Flash Pt:  
> 140.00 C  Method Used: Pensky-Marten Closed Cup

Explosive Limits:  
LEL: NE  UEL: NE
Autoignition Pt: No data available.

Fire Fighting Instructions
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Flammable Properties and Hazards
Product is not considered a fire hazard. Closed containers may rupture (due to build up in pressure) when exposed to extreme heat.

Hazardous Combustion Products
Hazardous decomposition products formed under fire conditions. Carbon dioxide, Carbon monoxide.

Suitable Extinguishing Media
Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media
Do not use a direct water stream, which may spread fire.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled
PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.
Absorb with sand or vermiculite and place in closed containers for disposal. Ventilate the area.

Protective Precautions, Protective Equipment and Emergency Procedures
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Where splashing is possible, full chemically resistant protective clothing, and boots are required.

Environmental Precautions
Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and Storage

Hazard Label Information:
Avoid contact with skin and eyes. Do not get on skin and clothing. Avoid inhalation of vapor or mist.

Precautions To Be Taken in Handling
Provide adequate ventilation. Do not breathe vapor. Do not get in eyes, on skin or on clothing.

Precautions To Be Taken in Storing
Keep container tightly closed in a dry and well-ventilated place.

Other Precautions
Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TWA</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bisphenol-a based epoxy resin</td>
<td>25068-38-6</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>2. 2,4-Pentanediol, 2-Methyl-</td>
<td>107-41-5</td>
<td>No data.</td>
<td>TLV: 25 ppm</td>
<td>No data.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CEIL: 121 mg/m3</td>
<td>No data.</td>
</tr>
<tr>
<td>3. Phenol, 4-nonyl-, branched</td>
<td>84852-15-3</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>5. Titanium dioxide</td>
<td>13463-67-7</td>
<td>PEL: 15 (dust) mg/m3</td>
<td>TLV: 10 mg/m3</td>
<td>No data.</td>
</tr>
<tr>
<td>6. Carbon black</td>
<td>1333-86-4</td>
<td>PEL: 3.5 mg/m3</td>
<td>TLV: 3.5 mg/m3</td>
<td>No data.</td>
</tr>
<tr>
<td>7. Iron oxide (Fe2O3)</td>
<td>1309-37-1</td>
<td>PEL: 10 mg/m3</td>
<td>TLV: 5 mg/m3 (dust &amp; fume)</td>
<td>No data.</td>
</tr>
<tr>
<td>8. C.I. Pigment Yellow 42</td>
<td>51274-00-1</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

Protective Equipment Summary - Hazard Label Information:
Neoprene gloves Safety glasses, or goggles Impervious clothing Chemical resistant boots
Respiratory Equipment (Specify Type)

Normally when good engineering controls are used, no respiratory protection is needed. However, if cured product is abraded by sanding or grinding use a NIOSH approved air-purifying respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. A 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.

Eye Protection

Safety glasses, or goggles.

Protective Gloves

Nitrile rubber and Neoprene are recommended.

Other Protective Clothing

Where splashing is possible, full chemically resistant protective clothing, safety glasses or face shield and boots are required.

Engineering Controls (Ventilation etc.)

Good general ventilation should be sufficient to control airborne levels. Safety shower and eye bath.

Work/Hygienic/Maintenance Practices

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

Environmental Exposure Controls

Avoid runoff into storm sewers and ditches which lead to waterways. May be hazardous to the environment if released in large quantities.

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>Gas</th>
<th>Liquid</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point:</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition Pt:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>&gt; 140.00°C Method Used: Pensky-Marten Closed Cup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL: NE UEL: NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>~ 1.09 - 1.139</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density:</td>
<td>~ 9.1 - 9.5 LB/GL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure (vs. Air or mm Hg):</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density (vs. Air = 1):</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>NE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>No data.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Solubility Notes**

Practically insoluble.

**Percent Volatile:**

0.0 % by volume.

**VOC / Volume:**

NP

**HAP / Volume:**

NP

**Saturated Vapor Concentration:**

NE

**Appearance and Odor**

Odor: Epoxy odor.
Appearance: Liquid.
10. Stability and Reactivity

Stability: Unstable [ ]  Stable [ X ]

Reactivity
Avoid: acids, alkalis, oxidizing agents.

Conditions To Avoid - Instability
Extreme temperatures.

Incompatibility - Materials To Avoid
Avoid strong acids, bases, and oxidizing agents.

Hazardous Decomposition Or Byproducts
Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide.

Possibility of Hazardous Polymerization:
Will occur [ ]  Will not occur [ X ]

Conditions To Avoid - Hazardous Reactions
Will not undergo hazardous polymerization in normal storage conditions.

11. Toxicological Information

Toxicological Information
May cause sensitization by skin contact.

Chronic Toxicological Effects
Skin sensitization.

Irritation or Corrosion
Skin Irritation. Irritating to eyes.

Symptoms related to Toxicological Characteristics
Skin Irritation. Slight Irritant to eyes.

Hazardous Components (Chemical Name)  CAS #  NTP  IARC  ACGIH  OSHA
1. Bisphenol-a based epoxy resin  25068-38-6  n.a.  n.a.  n.a.  n.a.
2. 2,4-Pentanediol, 2-Methyl-  107-41-5  No  No  No  No
3. Phenol, 4-nonyl-, branched  84852-15-3  n.a.  n.a.  n.a.  n.a.
5. Titanium dioxide  13463-67-7  n.a.  2B  A4  n.a.
7. Iron oxide (Fe2O3)  1309-37-1  n.a.  3  A4  n.a.
8. C.I. Pigment Yellow 42  51274-00-1  n.a.  n.a.  n.a.  n.a.

12. Ecological Information

General Ecological Information
Avoid release to the environment. May be hazardous to the environment if released in large quantities.

Results of PBT and vPvB assessment
No data available.

Persistence and Degradability
Not readily biodegradable.

Bioaccumulative Potential
No data available.

Mobility in Soil
not reported, unknown.
13. Disposal Considerations

Waste Disposal Method
Incorporate or dispose of unused material, residues and containers in a licensed facility in accordance with all applicable local, state and federal regulations. Do not discharge substance/product into sewage system.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name
- (Non-Bulk)
  Not Regulated.
- (Bulk)
  PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

DOT Hazard Class: 9
DOT Hazard Label: CLASS 9
UN/NA Number: UN3082
Packing Group: III
Precautionary Label
Avoid skin and eye contact. May cause eye and skin irritation. May cause skin sensitization. Wear protective equipment and clothing. Always read MSDS/SDS before use.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name
- (Non-Bulk)
  Not Regulated.
- (Bulk)
  PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

UN Number: 3082
Hazard Class: 9 - CLASS 9
Packing Group: III

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name
PROPER SHIPPING NAME: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, n.o.s. (EPOXY RESIN) MARINE POLLUTANT.

UN Number: 3082

Note: The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. Shipment compliance is the responsibility of the person offering the product for transport.
15. Regulatory Information

Regulatory Information

SARA 302 Extremely Hazardous Substances: None.

SARA Section 311/312: Acute Health Hazard.

SARA 313 Toxic Chemicals: None.

CERCLA Reportable Quantity: None.

16. Other Information

CA=CIRCA NA=NOT AVAILABLE NE=NOT ESTABLISHED NR=NOT REGULATED NP= NOT APPLICABLE PR=PROPRIETARY TS=TRADE SECRET ?=UNKNOWN.

Company Policy or Disclaimer

The information contained in this MSDS is taken from sources believed to be accurate as of the date hereof; however Epoxy Systems, Inc. makes no expressed or implied warranty in respect to the accuracy of the information or the suitability of the recommendations, and assumes no liabilities to any user thereof.

Revision Date: 10/12/2015