1. Product and Company Identification

**Product Code:** 224A  
**Product Name:** 224 Tile Grout - Part A  
**Trade Name:** 224 Tile Grout - Part A

**Manufacturer Information**

**Company Name:** Epoxy Systems, Inc.  
20774 W Pennsylvania Ave.  
Dunnellon, Florida 34421

**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**

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical</th>
<th>PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

**GHS Hazard Phrases**

- Skin Corrosion/Irritation, Category 2: Exclamation point Warning Causes skin irritation
- Serious Eye Damage/Eye Irritation, Category 2B: none Warning Causes eye irritation
- Skin Sensitization, Category 1B: Exclamation point Warning May cause an allergic skin reaction
- Aquatic Toxicity (Acute), Category 2: none Poison Toxic to aquatic life
- Aquatic Toxicity (Chronic), Category 2: Pollution Poison Toxic to aquatic life with long lasting effects

**GHS Hazard Phrases**

- H315 - Causes skin irritation.
- H320 - Causes eye irritation.
- H317 - May cause an allergic skin reaction.
- H401 - Toxic to aquatic life.
- H411 - Toxic to aquatic life with long lasting effects.

**GHS Precaution Phrases**

- P202 - Do not handle until all safety precautions have been read and understood.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P261 - Avoid breathing dust/mist/vapors/spray.
- P262 - Do not get in eyes, on skin, or on clothing.
- P362+364 - Take off contaminated clothing and wash it before reuse.
- 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 format
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:  > 200.00 C  Method Used: Pensky-Marten Closed Cup
Explosive Limits:  LEL: NE  UEL: NE
Autoignition Pt:  No data available.

Fire Fighting Instructions
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

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.  Store in a closed container.

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
May cause sensitization by skin contact. 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>3. 2-Propanol, 1-Methoxy-</td>
<td>107-98-2</td>
<td>No data.</td>
<td>TLV: 100 ppm</td>
<td>No data.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL: 150 ppm</td>
<td></td>
</tr>
<tr>
<td>5. 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>6. C.I. Pigment Yellow 42</td>
<td>51274-00-1</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>7. 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>
</tbody>
</table>
Hazardous Components (Chemical Name) | CAS # | OSHA PEL | ACGIH TWA | Other Limits
--- | --- | --- | --- | ---
8. Titanium dioxide | 13463-67-7 | PEL: 15 (dust) mg/m³ | TLV: 10 mg/m³ | No data.

**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/Hygiene/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.

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### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical States:</th>
<th>[ ] Gas</th>
<th>[X] 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; 200.00 °C</td>
<td>Method Used: Pensky-Marten Closed Cup</td>
<td></td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL: NE</td>
<td>UEL: NE</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>~ 1.127 - 1.151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Density:</td>
<td>~ 9.4 - 9.6 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>
<tr>
<td>Solubility Notes</td>
<td>Practically insoluble.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent Volatile:</td>
<td>0.0 % by volume.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
VOC / Volume: NP
HAP / Volume: NP
Saturated Vapor Concentration: NE

Appearance and Odor
  Epoxy odor.
  Appearance: Liquid. (various pigmented colors)

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, Phenolics.

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

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
  May cause sensitization by skin contact. May cause redness, rash on skin.

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bisphenol-a based epoxy resin</td>
<td>25068-38-6</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>2. Oxirane, [(2-Methylphenoxy)methyl]-</td>
<td>2210-79-9</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>3. 2-Propanol, 1-Methoxy-</td>
<td>107-98-2</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>4. (+)-Propylene carbonate, Anhydrous</td>
<td>108-32-7</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>5. Iron oxide (Fe2O3)</td>
<td>1309-37-1</td>
<td>n.a.</td>
<td>3</td>
<td>A4</td>
<td>n.a.</td>
</tr>
<tr>
<td>6. C.I. Pigment Yellow 42</td>
<td>51274-00-1</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>8. Titanium dioxide</td>
<td>13463-67-7</td>
<td>n.a.</td>
<td>2B</td>
<td>A4</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

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
Incinerate 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)
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)
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
Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin) MARINE POLLUTANT.

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.
SAFETY DATA SHEET
224 Tile Grout - Part A

offering the product for transport.

<table>
<thead>
<tr>
<th>UN Number:</th>
<th>3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class:</td>
<td>9 - CLASS 9</td>
</tr>
<tr>
<td>Packing Group:</td>
<td>III</td>
</tr>
<tr>
<td>IMDG MFAG Number:</td>
<td>FA,SF</td>
</tr>
<tr>
<td>Marine Pollutant:</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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: 04/14/2015