1. Product and Company Identification

**Product Code:** 488-CLEAR&OP  
**Product Name:** 488 Polyaspartic Coating - Part A (Clear/Clear OP)  
**Trade Name:** 488 Polyaspartic Coating - Part A (Clear/Clear OP)

**Manufacturer Information**

**Company Name:** Epoxy Systems, Inc.  
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

**Intended Use:** Industrial floor coatings.

2. Hazards Identification

**GHS Classification**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Placard</th>
<th>Key word</th>
<th>GHS hazard phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Skin Corrosion/Irritation</td>
<td>Exclamation point</td>
<td>Warning</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>2B</td>
<td>Serious Eye Damage/Eye Irritation</td>
<td>None</td>
<td>Warning</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>1B</td>
<td>Skin Sensitization</td>
<td>Exclamation point</td>
<td>Warning</td>
<td>May cause an allergic skin reaction</td>
</tr>
</tbody>
</table>

**GHS Hazard Phrases**


**GHS Precaution Phrases**

P281 - Use personal protective equipment as required.  
P262 - Do not get in eyes, on skin, or on clothing.  
P280 - Wear protective gloves/protective clothing/eye protection.  
P261 - Avoid breathing mist/vapors.  
P273 - Avoid release to the environment.

**GHS Response Phrases**

P302+352 - IF ON SKIN: Wash with plenty of soap and water. P362 - Take off contaminated clothing. P332+313 - If skin irritation occurs, get medical advice/attention.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P337+313 - If eye irritation persists, get medical advice/attention.  

**GHS Storage and Disposal Phrases**

P403+235 - Store in cool/well-ventilated place. P404 - Store in a closed container.
Potential Health Effects (Acute and Chronic)

Causes skin and eye 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. Aspartic acid, N,N’-(methylene-di-4,1-cyclohexanediyl)bis-, tetraethyl ester</td>
<td>136210-30-5</td>
<td>60 - 70 %</td>
</tr>
<tr>
<td>2. Secondary Diamines</td>
<td>NA</td>
<td>15 - 25 %</td>
</tr>
<tr>
<td>3. Propanol, 1(or 2)-(2-methoxymethyleneoxy)-, acetate</td>
<td>88917-22-0</td>
<td>10 - 20 %</td>
</tr>
<tr>
<td>4. Diethyl fumarate</td>
<td>623-91-6</td>
<td>1.0 - 5.0 %</td>
</tr>
<tr>
<td>5. 1,3,3-Trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene)amino]cyclohexanemethylamine</td>
<td>54914-37-3</td>
<td>1.0 - 5.0 %</td>
</tr>
<tr>
<td>6. Siloxanes and silicones, di-me, reaction products with silica</td>
<td>67762-90-7</td>
<td>1.0 - 5.0 %</td>
</tr>
<tr>
<td>7. Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite,</td>
<td>1318-02-1</td>
<td>0 - 5.0 %</td>
</tr>
</tbody>
</table>

### 4. First Aid Measures

Emergency and First Aid Procedures

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use first aid treatment according to the nature of the injury.

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
Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

Signs and Symptoms Of Exposure
Moderate irritation effect.

5. Fire Fighting Measures

<table>
<thead>
<tr>
<th>Flash Pt:</th>
<th>Method Used:</th>
<th>Explosive Limits:</th>
<th>Autoignition Pt:</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 200.00 °C</td>
<td>Pensky-Marten Closed Cup</td>
<td>LEL: NE</td>
<td>UEL: NE</td>
</tr>
</tbody>
</table>

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
In a fire, product may produce the following: Carbon monoxide, Carbon dioxide, and Amines.

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
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 TLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester</td>
<td>136210-30-5</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>
### Hazardous Components (Chemical Name)

<table>
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<tr>
<th>Hazardous Component</th>
<th>CAS #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>2. Secondary Diamines</td>
<td>NA</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>3. Propanol, 1(or 2)-(2-methoxymethyloxy)-, acetate</td>
<td>88917-22-0</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>4. Diethyl fumarate</td>
<td>623-91-6</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>5. 1,3,3-Trimethyl-N-(2-methylpropyldene)-5-[(2- methylpropyldene)amino]cyclohexanemethylamine</td>
<td>54914-37-3</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
<tr>
<td>6. Siloxanes and silicones, di-me, reaction products with silica</td>
<td>67762-90-7</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>
| 7. Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite, 

### 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.

## 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical States</td>
<td>[ ] Gas    [ X ] Liquid [ ] Solid</td>
</tr>
<tr>
<td>Melting Point</td>
<td>NE</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>NE</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>NE</td>
</tr>
<tr>
<td>Autoignition Pt</td>
<td>No data.</td>
</tr>
<tr>
<td>Flash Pt:</td>
<td>&gt; 200.00 C</td>
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<tr>
<td>Method Used:</td>
<td>Pensky-Marten Closed Cup</td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>LEL: NE  UEL: NE</td>
</tr>
<tr>
<td>Specific Gravity (Water = 1):</td>
<td>1.067</td>
</tr>
<tr>
<td>Density:</td>
<td>8.9 LB/GL</td>
</tr>
</tbody>
</table>
1. Aspartic acid, N,N’-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester: 136210-30-5
   CAS #: 136210-30-5, NTP: n.a., IARC: n.a., ACGIH: n.a., OSHA: n.a.

2. Secondary Diamines: NA
   CAS #: n.a., NTP: n.a., IARC: n.a., ACGIH: n.a., OSHA: n.a.

3. Propanol, 1(or 2)-(2-methoxymethylethoxy)-, acetate: 88917-22-0
   CAS #: 88917-22-0, NTP: n.a., IARC: n.a., ACGIH: n.a., OSHA: n.a.

4. Diethyl fumarate: 623-91-6
   CAS #: 623-91-6, NTP: n.a., IARC: n.a., ACGIH: n.a., OSHA: n.a.

5. 1,3,3-Trimethyl-N-(2-methylpropyldene)-5-[(2-methylpropyldene)amino]cyclohexanemethylamine: 54914-37-3
   CAS #: 54914-37-3, NTP: n.a., IARC: n.a., ACGIH: n.a., OSHA: n.a.

6. Siloxanes and silicones, di-me, reaction products with silica: 67762-90-7
   CAS #: 67762-90-7, NTP: n.a., IARC: n.a., ACGIH: n.a., OSHA: n.a.

7. Zeolites other than erionite (clinoptilolite, phillipsite, mordenite, non-fibrous Japanese zeolite): 1318-02-1
   CAS #: 1318-02-1, NTP: n.a., IARC: 3, ACGIH: n.a., OSHA: n.a.
12. Ecological Information

General Ecological Information
Avoid release to the environment.

Results of PBT and vPvB assessment
No data available.

Persistence and Degradability
No data available.

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
Not Regulated.

AIR TRANSPORT (ICAO/IATA)
ICAO/IATA Shipping Name
Not Regulated.

MARINE TRANSPORT (IMDG/IMO)
IMDG/IMO Shipping Name
Not Regulated.

Marine Pollutant:
No

15. Regulatory Information

US EPA SARA Title III

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Sec.302 (EHS)</th>
<th>Sec.304 RQ</th>
<th>Sec.313 (TRI)</th>
<th>Sec.110</th>
</tr>
</thead>
<tbody>
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<td>No</td>
</tr>
</tbody>
</table>

Regulatory Information
SARA Section 311/312: Acute Health Hazard.
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

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Revision Date: 10/26/2015