Section 1: Product and Company Identification

Product Name: Terroxy® Resin Systems — Accelerated Grout Hardener

Product Use Description: Curing Agent, Epoxy

Company: Terrazzo & Marble Supply Companies
77 South Wheeling Road
Wheeling, Illinois 60090

Telephone: 847.353.8000
Emergency Telephone: 800.424.9300 - USA
01.703.527.3887 - International

Section 2: Hazards Identification

Classification of the mixture:
- Skin corrosion – Category 1B
- Skin sensitization – Category 1
- Serious eye damage – Category 1
- Reproductive toxicity – Category 2
- Acute toxicity – Category 4

Classification according to Regulation (EC) No 1272/2008

GHS Label elements:

Hazard Pictogram:

Signal Word: Warning

Hazard Statements:
- H302 Harmful if swallowed
- H314 Causes severe skin burns and eye damage
- H332 Harmful if inhaled
- H335 May cause respiratory irritation

Precautionary Statements:
- P261 Avoid breathing mist/vapors/spray
- P264 Wash hands and skin contact areas 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/eye/face protection
- P301, P330, P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P301, P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you fell unwell
- P303, P353, P361 IF ON SKIN: Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
- P305, P351, P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing
- P310: Immediately call a POISON CENTER or doctor/physician
- P333, P313 If skin irritation or rash occurs: Get medical advice/attention
- P362 Take off contaminated clothing and wash before reuse P391 Collect spillage
- P301 Dispose of content/container through a waste management company authorized by the local government

Other hazards not classified: None Known
Section 3: Composition / Information on Ingredients

This product is a mixture.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS#</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Aminoethylpiperazine</td>
<td>140-31-8</td>
<td>35 - 45%</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td>25154-52-3</td>
<td>25 - 35%</td>
</tr>
<tr>
<td>Triethylenetetranine</td>
<td>112-24-3</td>
<td>25 - 30%</td>
</tr>
</tbody>
</table>

N/E - Not Established
ALL ingredients are registered on TSCA.
The remaining components are trade secret.

Section 4: First Aid Measures

General advice: Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Eye contact: Flush eyes with plenty of water for at least 15 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Skin contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Initiate and maintain gentle and continuous irrigation until the patient receives medical care. Cover wound with sterile dressing. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim’s head to the side.

Inhalation: Move to fresh air.

Section 5: Fire Fighting Measures

Suitable extinguishing media: Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical
Dry sand
Limestone powder

Specific hazards: May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces obnoxious and toxic fumes.

Special protective equipment for fire-fighters: Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear for fire-fighters: self contained breathing apparatus for fire fighting if necessary.

Further information: Do not allow run-off from fire fighting to enter drains or water courses.
OSHA Flammability Class: Combustible Class III B
Section 6: Accidental Release Measures

Personal precautions: Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental precautions: Construct a dike to prevent spreading.

Methods for cleaning up: Approach suspected leak areas with caution. Contact Terrazzo and Marble Response Center for advice. Place in appropriate chemical waste container.

Additional advice: If possible, stop flow of product. Avoid contact. Allow only personnel wearing goggles, neoprene or rubber gloves and protective clothing to clean up spill. In confined areas a full face respirator is recommended.

Section 7: Handling and Storage

Handling: Avoid contact with eyes. Avoid contact with skin and eyes. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do not eat, drink or smoke.

Storage: Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not remove labels from empty containers. If mixtures of Part B - CA and Part B - CA are allowed to remain in the mixing container past the pot life deadline, heat and a strong reaction will result.

Technical Measures /Precautions: Do not store in reactive metal containers.

Section 8: Exposure Controls / Personal Protection

Personal Protective Equipment:

Respiratory Protection: Not required for properly ventilated areas. If vapor or mist is generated and the occupational exposure limit is exceeded, use appropriate NIOSH/MSHA approved self contained breathing equipment or a full face respirator. Respirators should be selected by and used following requirements found in OSHA’s respirator standards (29 CFR 1910.134).

Ventilation: Mechanical ventilation required if TLV is expected to be exceeded in confined areas.

Hand Protection: Recommend wearing disposable latex or nitrile gloves when mixing to protect against incidental contact. If continuous contact is expected, recommend butyl rubber gloves be worn.

Eye Protection: Wear safety glasses with side shields or safety goggles when handling this product. Additionally, wear a face shield when the possibility of splashing liquid exists. Do not wear contact lens. Have an eye wash station available.

Skin and Body Protection: Prevent contact with this product. Long sleeve shirts and trouser without cuffs and/or apron is recommended if splashing liquids exists. Other protective equipment may be needed depending on condition use.

Exposure Limit:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Aminoethylpiperazine</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Triethylenetetramine</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>
Section 9: Physical and Chemical Properties

- **Form:** Liquid
- **Color:** Amber
- **Odor:** Slight Ammonia odor.
- **Relative density:** 0.96 - 0.98 (H2O = 1)
- **Vapor pressure:** 3.90 mmHg at 70°F (21°C)
- **Density:** 59.19 lb/ft³ (0.95 g/cm³) at 70°F (21°C)
- **Boiling point/Range:** > 300°F (148°C)
- **Flash point:** 200.0°F (93°C)
- **Solubility in Water:** Partial
- **Evaporation Rate:** N/A
- **Vapor Density:** Not Established

Section 10: Reactivity Data

- **Stability:** Stable under normal conditions.
- **Conditions to Avoid:** Contact with acids such as Hydrochloric or Sulfuric.
- **Materials to Avoid:** Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Sodium hypochlorite. Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Reactive metals (e.g. sodium, calcium, zinc etc.). Nitrous acid and other nitrosating agents. Materials reactive with hydroxyl compounds. Oxidizing agents.

- **Hazardous Decomposition Products:** Nitric acid. Ammonia. Nitrogen oxides (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO2). Aldehydes. Flammable hydrocarbon fragments (e.g., acetylene). When exposed to fire, oxides of Carbon and Nitrogen will be generated.

- **Hazardous Polymerization:** Will not occur.
Section 11: Toxicological Information

Ingestion: No data available on the product itself.

**Ingestion - Components**
- **Nonylphenol:** LD50: 580 mg/kg  
  Species: Rat
- **Polyetherdiamine:** LD50: 2,880 mg/kg  
  Species: Rat
- **Aliphatic Amines:** LD50: 1,200 mg/kg  
  Species: Rat

Inhalation: No data available on the product itself.

**Skin:** No data available on the product itself.

**Skin - Components**
- **Nonylphenol:** LD50: 2,033 mg/kg  
  Species: Rabbit
- **Polyetherdiamine:** LD50: 2,980 mg/kg  
  Species: Rabbit

**Acute dermal irritation/corrosion:** Corrosive to the skin of a rabbit.

**Chronic Health Hazard**
This product or a component may be mutagenic, the data is inconclusive.

Section 12: Ecological Information

**Ecotoxicity effects**
Aquatic toxicity: No data available.

**Toxicity to fish - Components:**
- Phenol: LC50 (96 h) : 0.128 mg/l  
  Species : Fathead Minnow (Pimephales Promelas).

**Toxicity to daphnia - Components:**
- Phenol: EC50 (48 h) : 0.0848 mg/l  
  Species : Daphnia
- Phenol: EC50 (48 h) : 0.19 mg/l  
  Species : Daphnia

**Toxicity to other organisms:**
No data available.

**Persistence and degradability**

**Mobility:** No data available.

**Bioaccumulation:** No data available.

**Bioaccumulation - Components:**
- Phenol: Moderate bioaccumulation potential.

Section 13: Disposal Considerations

**Waste from residues / unused products:** Dispose in an approved incinerator or an approved landMatrix. Contact supplier if guidance is required.

**Contaminated packaging:** Dispose of container and unused contents in accordance with federal, state, and local requirements.
Section 14: Transport Information

**DOT**

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S., (N-AMINOETHYLPIPERAZINE/NONYLPHENOL)
Class: 8
UN/ID No.: UN2735
Packing group: III
NAERG No.: 153

**IATA**

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S., (N-AMINOETHYLPIPERAZINE/NONYLPHENOL)
Class: 8
UN/ID No.: UN2735
Packing group: III

**IMDG**

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S., (N-AMINOETHYLPIPERAZINE/NONYLPHENOL)
Class: 8
UN/ID No.: UN2735
Packing group: III

**TDG**

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S., (N-AMINOETHYLPIPERAZINE/NONYLPHENOL)
Class: 8
UN/ID No.: UN2735
Packing group: III

Section 15: Regulatory Information


<table>
<thead>
<tr>
<th>Country</th>
<th>Regulatory List</th>
<th>Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>TSCA</td>
<td>Included on Inventory</td>
</tr>
<tr>
<td>EU</td>
<td>EINECS</td>
<td>Included on EINECS inventory or polymer substance, monomers included on EINECS inventory are no longer polymer.</td>
</tr>
<tr>
<td>Canada</td>
<td>DSL</td>
<td>Included on Inventory</td>
</tr>
<tr>
<td>Australia</td>
<td>AICS</td>
<td>Included on Inventory</td>
</tr>
<tr>
<td>Japan</td>
<td>ENCS</td>
<td>Included on Inventory</td>
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<tr>
<td>South Korea</td>
<td>ECL</td>
<td>Included on Inventory</td>
</tr>
<tr>
<td>China</td>
<td>SEPA</td>
<td>Included on Inventory</td>
</tr>
<tr>
<td>Philippines</td>
<td>PICCS</td>
<td>Included on Inventory</td>
</tr>
</tbody>
</table>

EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification:
Acute Health Hazard

EPA SARA Title III Section 313 (40 CFR 372) Component(s) above ‘de minimus’ level:
None.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65):
This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

WHMIS Hazard Classification:
Toxic Material Causing Other Toxic Effects, Corrosive Material
Section 16: Other Information

HMIS Rating

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>3</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Physical hazard</td>
<td>C</td>
</tr>
</tbody>
</table>

Prepared by Terrazzo & Marble Supply Companies.

Data and recommendations presented herein are based upon ours and other researchers and are believed to be accurate. The products discussed are distributed without warranty (expressed or implied) and the customer shall make his own determination of suitability for his particular purpose.