1. **Chemical Product and Contact Information**

   **Product Name:** LC Epoxide Hardener

   **HAZ Part Numbers:**
   - 811-563-011
   - 811-563-021
   - 811-563-102
   - 811-563-104
   - 811-998-HAZ
   - 811-999-HAZ
   - 812-518-HAZ
   - 812-519-HAZ
   - 812-522-HAZ
   - 812-523-HAZ

   **LECO Corporation**
   - 811-563-110
   - 811-563-120
   - 812-522-HAZ
   - 812-523-HAZ

   **Chemtrec:**
   - 800-424-9300
   - 269-983-5531

   **Kit Numbers:**
   - 811-563-110
   - 811-563-120
   - 812-522-HAZ
   - 812-523-HAZ

2. **Composition/Information on Ingredients**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>OSHA TLV (mg/m³)</th>
<th>ACGIH PEL (mg/m³)</th>
<th>Typical % by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triethylenetetramine</td>
<td>112-24-3</td>
<td>(None established)</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

3. **Hazard Identification**

   **EMERGENCY OVERVIEW**

   No unusual fire or spill hazard. Moderate health risk by contact with skin or eyes, inhalation or ingestion. Light straw colored liquid with amine odor.

   **Potential Health Effects**

   **EYES:** Product can cause severe eye irritation, swelling and/or chemical burn. Contact lenses should not be worn when working with this material.

   **SKIN:** Skin contact may result in irritation or chemical burn.

   **INHALATION:** Vapor is irritating to the upper respiratory system and mucous membranes.

   **INGESTION:** Liquid causes damage to mucous membrane if swallowed.

   **MEDICAL CONDITIONS AGGRAVATED:** Unknown

   **CHRONIC OVEREXPOSURE:** Unknown.

   **ACUTE OVEREXPOSURE:** Not available.

   **CARCINOGENICITY:** None.
4. **First Aid Measures**

- **EYES:** Flush with generous amounts of water for at least 15 minutes. Get medical attention immediately.
- **SKIN:** Immediately wash skin with soap and water. Wash contaminated clothing before reuse.
- **INHALATION:** Remove victim to fresh air.
- **INGESTION:** If swallowed, do not induce vomiting. Give large amounts of water. Call a physician. Treatment based on judgment of the physician in response to reaction of the patient.

5. **Fire Fighting Measures**

- **FLAMMABLE PROPERTIES:** Non-flammable
  - Flash Point: 245° F. (118° C.) Method Used: PMCC.
  - Flammable Limits (% by Volume in Air):
    - Lower: Not established.
    - Upper: Not established.
- **AUTO-IGNITION TEMPERATURE:** Not available.
- **EXTINGUISHING MEDIA:** Water, fog, Carbon Dioxide, foam, or dry chemical.
- **FIREFIGHTING INSTRUCTIONS:** Do not enter confined fire space without full protective gear including a positive pressure, self-contained, NIOSH approved breathing apparatus. Cool fire exposed container with water to prevent pressure build-up and/or weakening of container structure.

6. **Accidental Release Measures**

- **SMALL/LARGE SPILL:** Use cautious judgment when cleaning spills. Small spills may be collected with absorbent material, such as clay or sand. Large spills should be diked and contained with absorbent materials. Flush area with water spray to remove residue. Dispose of flush legally.

7. **Handling and Storage**

- **HANDLING:** Container, even those that have been emptied, can contain product residue. Handle in accordance with good industrial practices. Avoid prolonged or repeated contact with skin. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before use.
- **STORAGE:** Store at ambient temperatures in well ventilated area. Avoid sparks, open flames and extreme heat. Store separately from amine curing agents. Protect container from physical damage.

8. **Exposure Controls/Personal Protection**

- **ENGINEERING CONTROLS:** Use only with adequate ventilation. Local exhaust is recommended. Mechanical exhaust can be used as a back up system.
- **RESPIRATORY PROTECTION:** Wear NIOSH approved respiratory protection where exposure limits are exceeded or in the absence of proper environmental control.
- **SKIN AND HAND PROTECTION:** Chemical resistant gloves such as PVA.
- **EYE AND FACE PROTECTION:** ANSI approved safety glasses with side shields or goggles.
- **OTHER PROTECTIVE EQUIPMENT:** Chemical resistant clothing as required to minimize skin contact.
9. Physical and Chemical Properties

APPEARANCE: Light straw colored liquid, amine odor.
BOILING POINT: 507°F (260°C)
FREEZE-MELT POINT: Not applicable.
VAPOR PRESSURE (mm): < 0.1mm Hg @20°C
VAPOR DENSITY (air = 1): > 1.0
SOLUBILITY IN WATER: Moderate.
SPECIFIC GRAVITY: 0.98
PERCENT SOLID by Weight: 100%
PERCENT VOLATILE by Volume: 100%
EVAPORATION RATE (Butyl Acetate = 1): <0.01.

10. Stability and Reactivity

CHEMICAL STABILITY: Stable.
CONDITIONS TO AVOID: Avoid high temperatures, open flames and unscheduled contact with curing agents. Avoid mixing resin and hardener in uncontrollable quantities.
INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and bases, secondary aliphatic amines and mercaptans.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, by products may include oxides of nitrogen when burned.
HAZARDOUS POLYMERIZATION: Will not occur.

11. Toxicological Information

Not available.

12. Ecological Information

Not available.

13. Disposal Consideration

Dispose of material per all federal, state and local regulations.

14. Transportation Information

USA DOT: Triethylenetetramine, 8 (Corrosive)UN 2259, PGII, IMDG Page No. 106.
Marine Pollutant: No

P/N: 811-563-011
15. Regulatory Information

U.S. FEDERAL REGULATIONS:
- TSCA STATUS: On Toxic Substance Control Inventory.
- CERCLA REPORTABLE QUANTITY: None.
- SARA TITLE III:
  - Section 302 Extremely Hazardous Substances: None.
  - Section 313 Toxic Chemicals: None.
- RCRA STATUS: Not regulated.

INTERNATIONAL REGULATIONS:
- CANADIAN WHMIS: D1B, D2B, E
- EINECS: All components of this product are on the European Inventory of Existing Commercial Chemical Substances.

16. Other Information

Hazard Index: (0 - 4, 4 = Extreme)
- Health: 3
- Fire: 1
- Reactivity: 0

Prepared By:

Jason Whitt

Information herein is given in good faith as authoritative and valid; however, no warranty, expressed or implied can be made.