1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOC XTR EPXY 0.85 OZ PT A
Product type: Epoxy resin
Restriction of Use: None identified
Company address: Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

IDH number: 1427688
Item number: 1405603_588019
Region: United States

Contact information:
Telephone: (860) 571-5100
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS

<table>
<thead>
<tr>
<th>HAZARD CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SKIN SENSITIZATION</td>
</tr>
<tr>
<td>2. EYE IRRITATION</td>
</tr>
<tr>
<td>2A. SKIN IRRITATION</td>
</tr>
</tbody>
</table>

PICTOGRAM(S)

Precautionary Statements

Prevention: Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves.

Response: IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.

Storage: Not prescribed
Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.


See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>CAS Number</th>
<th>Percentage*</th>
</tr>
</thead>
</table>

IDH number: 1427688
Product name: LOC XTR EPXY 0.85 OZ PT A

Page 1 of 5
4. FIRST AID MEASURES

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.

**Skin contact:** Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Ingestion:** DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

**Symptoms:** See Section 11.

5. FIRE FIGHTING MEASURES

**Extinguishing media:** Water spray (fog), foam, dry chemical or carbon dioxide.

**Special firefighting procedures:** Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Unusual fire or explosion hazards:** Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. In case of fire, keep containers cool with water spray.

**Hazardous combustion products:** Oxides of carbon. Phenolics. Toxic fumes. Irritating vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental precautions:** Do not allow product to enter sewer or waterways.

**Clean-up methods:** Ensure adequate ventilation. Wear appropriate personal protective equipment. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

**Handling:** Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed.

**Storage:** Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame. Protect from direct sunlight.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Engineering controls:**
Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

**Respiratory protection:**
Use a NIOSH approved respirator if ventilation is inadequate.

**Eye/face protection:**
Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.

**Skin protection:**
Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid
**Color:** Translucent, Clear
**Odor:** None
**Odor threshold:** Not available.
**pH:** Not applicable
**Vapor pressure:** 0.03 mm hg
**Boiling point/range:** > 260.2 °C (> 500.4 °F)
**Melting point/ range:** Not available.
**Specific gravity:** 1.17
**Vapor density:** Not available.
**Flash point:** > 249 °C (> 480.2 °F) Pensky Martens closed cup
**Flammable/Explosive limits - lower:** Not available.
**Flammable/Explosive limits - upper:** Not available.
**Autoignition temperature:** Not available.
**Evaporation rate:** Not available.
**Solubility in water:** Slight
**Partition coefficient (n-octanol/water):** Not available.
**VOC content:** 0.1 % (value for resin and hardener together)
**Viscosity:** Not available.
**Decomposition temperature:** Not available.

10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions of storage and use.
**Hazardous reactions:** None under normal processing.
**Hazardous decomposition products:** Oxides of carbon. Phenolics. Toxic fumes. Irritating vapors.
**Incompatible materials:** Strong oxidizing agents. Strong bases. Strong acids. Amines.
**Reactivity:** Not available.
**Conditions to avoid:** Keep away from heat, ignition sources and incompatible materials. Protect from direct sunlight.

11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes
Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: Not expected under normal conditions of use.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>LD50s and LC50s</th>
<th>Immediate and Delayed Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin</td>
<td>None</td>
<td>Allergen, Irritant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy resin</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)
- Proper shipping name: Not regulated
- Hazard class or division: None
- Identification number: None
- Packing group: None

International Air Transportation (ICAO/IATA)
- Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin resin)
- Hazard class or division: 9
- Identification number: UN 3082
- Packing group: III

Water Transportation (IMO/IMDG)
- Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A Epichlorhydrin resin)
- Hazard class or division: 9
- Identification number: UN 3082
- Packing group: III
- Marine pollutant: Bisphenol-A Epichlorhydrin resin

15. REGULATORY INFORMATION

United States Regulatory Information
- TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
- TSCA 12 (b) Export Notification: None above reporting de minimis
- CERCLA/SARA Section 302 EHS: None above reporting de minimis
- CERCLA/SARA Section 311/312: Immediate Health
16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Rena Petrides, Regulatory Affairs Specialist

Issue date: 09/15/2014

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOC XTR EPXY 0.85 OZ PT B
IDH number: 1427687
Product type: Epoxy Hardener
Item number: 1405603_1295957
Region: United States

Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

Contact information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid
Color: Transparent, Light amber
Odor: Amine

HEALTH: *3
FLAMMABILITY: 1
PHYSICAL HAZARD: 0

Personal Protection: See MSDS Section 8

DANGER:
CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.
MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.
HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED.

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects

Inhalation: Harmful if inhaled; may cause delayed lung damage. Respiratory tract burns. May cause lung damage. May cause nose, throat and lung irritation. Inhalation of aerosol may cause irritation to the upper respiratory tract. Can cause severe eye, skin and respiratory tract burns. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. May cause central nervous system effects with nausea, dizziness and headache. Severe cases of overexposure can result in respiratory failure. Inhalation of vapors or mists of the product may be irritating to the respiratory system. May cause allergic respiratory reaction.

Skin contact: Harmful in contact with skin. Causes skin burns. May cause central nervous system effects. Headache, nausea, dizziness, confusion, breathing difficulties. May cause allergic skin reaction.

Eye contact: Corneal edema may give appearance of “blue haze” or “fog” around lights. Causes eye burns. May cause blindness. Severe eye irritation.

Ingestion: Harmful if swallowed. If ingested, severe burns of the mouth and throat may occur, as well as perforation of the esophagus and the stomach.


This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer</td>
<td>68082-29-1</td>
<td>30-60</td>
</tr>
<tr>
<td>Amines</td>
<td>Unknown</td>
<td>10-30</td>
</tr>
<tr>
<td>4-Tert-butylphenol</td>
<td>98-54-4</td>
<td>10-30</td>
</tr>
<tr>
<td>Aliphatic amines</td>
<td>Unknown</td>
<td>10-30</td>
</tr>
<tr>
<td>1,2-Ethanediamine, N-(2-aminoethyl)-, polymer with oxirane</td>
<td>28063-82-3</td>
<td>1-5</td>
</tr>
<tr>
<td>Benzylic alcohol</td>
<td>100-51-6</td>
<td>1-5</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, crystal-free</td>
<td>112945-52-5</td>
<td>1-5</td>
</tr>
<tr>
<td>Triethylenetetramine</td>
<td>112-24-3</td>
<td>1-5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Thoroughly clean shoes before reuse. If symptoms develop and persist, get medical attention.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Keep individual calm. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point: 100 °C (212°F) ; Estimated

Autoignition temperature: Not available

Flammable/Explosive limits - lower: Not available

Flammable/Explosive limits - upper: Not available

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Unusual fire or explosion hazards: In case of fire, keep containers cool with water spray.


6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Immediately contact emergency personnel. Scrape up as much material as possible. Clean residue with soap and water.
7. HANDLING AND STORAGE

Handling: Keep away from heat, spark and flame. Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Keep container closed.

Storage: Store in original container until ready to use. Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Amines</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>4-Tert-butylphenol</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Aliphatic amines</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>1,2-Ethanediamine, N-(2-aminoethyl), polymer with oxirane</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>None</td>
<td>None</td>
<td>10 ppm (44 mg/m3) TWA</td>
<td>None</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, crystal-free</td>
<td>10 mg/m3 TWA 3 mg/m3 TWA 20 MPPCF TWA 0.8 mg/m3 TWA</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Triethylenetetramine</td>
<td>None</td>
<td>None</td>
<td>1 ppm (6 mg/m3) TWA (SKIN)</td>
<td>None</td>
</tr>
</tbody>
</table>

Engineering controls: Use local exhaust ventilation if the potential for airborne exposure exists.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields.

Skin protection: Chemical resistant, impermeable gloves. Neoprene, Butyl-rubber, or nitrile-rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state: Liquid
- Color: Transparent, Light amber
- Odor: Amine
- Odor threshold: Not available
- pH: Not available
- Vapor pressure: Not available
- Boiling point/range: Not available
- Melting point/ range: Not available
- Specific gravity: 1
- Vapor density: Not available
- Flash point: 100 °C (212°F) ; Estimated
- Flammable/Explosive limits - lower: Not available
- Flammable/Explosive limits - upper: Not available
- Autoignition temperature: Not available
- Evaporation rate: Not available
- Solubility in water: Not available
- Partition coefficient (n-octanol/water): Not available
- VOC content: 0.1 g/l (calculated)
10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Will not occur.

Hazardous decomposition products: None


Conditions to avoid: Excessive heat. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Amines</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4-Tert-butylphenol</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Aliphatic amines</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>1,2-Ethanediame, N-(2-aminoethyl)-, polymer with oxirane</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Benzy alcohol</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Silica, amorphous, fumed, crystal-free</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Triethylenetetramine</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Hazardous components: Health Effects/Target Organs
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer: No Records
Amines: No Data
4-Tert-butylphenol: Irritant, Allergen, Skin, Corrosive
Aliphatic amines: No Data
1,2-Ethanediame, N-(2-aminoethyl)-, polymer with oxirane: No Records
Benzy alcohol: Allergen, Central nervous system, Corrosive, Irritant
Silica, amorphous, fumed, crystal-free: Nuisance dust
Triethylenetetramine: Allergen, Corrosive, Developmental, Irritant, Mutagen

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)
Proper shipping name: Corrosive liquids, n.o.s. (p-tert Butyl phenol)
Hazard class or division: 8
Identification number: UN 1760
Packing group: III
15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act inventory.

TSCA 12(b) Export Notification: None above reporting de minimus

CERCLA/SARA Section 302 EHS: None above reporting de minimus

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA 313: None above reporting de minimus

California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Domestic Substances List.


16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: First issue.

Prepared by: Gary Pierson, Sr. Regulatory Affairs Specialist

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