1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE EA 1C A known as LOCTITE HYS 1C 4OZ PTA
IDH number: 1373719

Product type: Epoxy resin
Item number: 1373425_1284591

Restriction of Use: None identified
Region: United States

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

Contact information:
Telephone: +1 (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.
MAY CAUSE RESPIRATORY IRRITATION.

HAZARD CLASS

<table>
<thead>
<tr>
<th>HAZARD CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKIN IRRITATION</td>
</tr>
<tr>
<td>EYE IRRITATION</td>
</tr>
<tr>
<td>SKIN SENSITIZATION</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</td>
</tr>
</tbody>
</table>

PICTOGRAM(S)

Precautionary Statements

Prevention:
Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.

Response:
IF ON SKIN: Wash with plenty of water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.

Storage:
Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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>
<tbody>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>40 - 50</td>
</tr>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene</td>
<td>25068-38-6</td>
<td>30 - 40</td>
</tr>
<tr>
<td>diphenol resin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde,</td>
<td>28064-14-4</td>
<td>10 - 20</td>
</tr>
<tr>
<td>glycidyl ether</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Gamma-glycidoxypropyl trimethoxysilane</td>
<td>2530-83-8</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Aluminium hydroxide</td>
<td>21645-51-2</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

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. Get medical attention. Wash clothing before reuse.
- **Eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms develop and persist, 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:** In case of fire, keep containers cool with water spray. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

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. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. 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. Refer to Section 8.

Storage: Store in original container until ready to use. Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame.

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>Talc</td>
<td>2 mg/m³ TWA Respirable fraction. Respirable. 0.3 mg/m³ TWA Total dust. 2.4 MPPCF TWA Respirable. 20 MPPCF TWA</td>
<td>0.1 mg/m³ TWA Respirable.</td>
<td>None</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene diphenol resin</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>10 mg/m³ TWA</td>
<td>15 mg/m³ PEL Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m³ TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m³ TWA Respirable fraction.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Gamma-glycidoxypropyl trimethoxysilane</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Aluminium hydroxide</td>
<td>1 mg/m³ TWA Respirable fraction. 10 mg/m³ TWA (as Al) Total dust. 15 mg/m³ TWA (as Al) Total dust. 5 mg/m³ TWA (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 15 mg/m³ TWA Total dust. 5 mg/m³ TWA Respirable fraction. 50 MPPCF TWA Total dust.</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection: Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

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. Safety showers and eye wash stations should be available.

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:** Off white
- **Odor:** Negligible
- **Odor threshold:** Not available.
- **pH:** Not applicable
- **Vapor pressure:** Negligible
- **Boiling point/range:** 260 °C (500°F) 1.013 hPa
- **Melting point/range:** Not available.
- **Specific gravity:** 1.57
- **Vapor density:** Not available.
- **Flash point:** > 200 °C (> 392°F) Cleveland open cup
- **Flammable/Explosive limits - lower:** Not available.
- **Flammable/Explosive limits - upper:** Not available.
- **Autoignition temperature:** Not available.
- **Flammability:** Not applicable
- **Evaporation rate:** Not available.
- **Solubility in water:** Insoluble
- **Partition coefficient (n-octanol/water):** Not available.
- **VOC content:** 0.01 %; 0.13 g/l (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.
- **Incompatible materials:** Strong acids. Strong bases. Strong oxidizing agents. Amines.
- **Reactivity:** Not available.
- **Conditions to avoid:** Keep away from heat, ignition sources and incompatible materials. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe these precautions may result in excessive heat build-up causing an exotherm.

11. TOXICOLOGICAL INFORMATION

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

Inhalation: May cause respiratory tract irritation. May cause irritation to nose and throat.
Skin contact: Causes skin irritation. May cause allergic skin reaction.
Eye contact: Causes serious eye irritation.
Ingestion: May cause gastrointestinal tract irritation if swallowed.

<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>Talc</td>
<td>None</td>
<td>Irritant, Lung, Some evidence of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>carcinogenicity</td>
</tr>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene dipheno</td>
<td>None</td>
<td>Allergen, Irritant</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>None</td>
<td>Allergen, Irritant</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>None</td>
<td>Irritant, Respiratory, Some evidence of carcinogenicity</td>
</tr>
<tr>
<td>Gamma-glycidoxypropyl trimethoxysilane</td>
<td>None</td>
<td>Allergen, Irritant</td>
</tr>
<tr>
<td>Aluminium hydroxide</td>
<td>Oral LD50 (Rat) = &gt; 5,000 mg/kg</td>
<td>Irritant, Lung, Respiratory</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>Talc</td>
<td>No</td>
<td>Group 2B</td>
<td>No</td>
</tr>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene dipheno</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>No</td>
<td>Group 2B</td>
<td>No</td>
</tr>
<tr>
<td>Gamma-glycidoxypropyl trimethoxysilane</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Aluminium hydroxide</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, Delayed Health
CERCLA/SARA Section 313: None above reporting de minimis.
California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Rebecca Coons, Regulatory Affairs Specialist
Issue date: 01/18/2017

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