1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE HYS 1C 4OZ PTA  
IDH number: 1373719  
Product type: Epoxy resin  
Item number: 1373425_1284591  
Region: United States  
Company address: Henkel Corporation  
One Henkel Way  
Rocky Hill, Connecticut 06067

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

Physical state: Liquid  
Color: Off white  
Odor: Negligible

HMIS:  
HEALTH: *2  
FLAMMABILITY: 1  
PHYSICAL HAZARD: 0  
Personal Protection: See MSDS Section 8

WARNING: MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: May cause irritation to nose and throat. Mild respiratory tract irritation. Coughing.
Skin contact: Allergic skin reaction. Itching. Redness. Moderate skin irritation.
Eye contact: Moderate eye irritation. Redness.
Ingestion: Not expected under normal conditions of use.

Existing conditions aggravated by exposure: Eye, skin and respiratory disorders. Skin allergies.

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>Talc</td>
<td>14807-96-6</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene diphenol resin</td>
<td>25068-38-6</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>28064-14-4</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</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. 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. If symptoms develop and persist, get medical attention.

5. FIRE FIGHTING MEASURES

Flash point: > 200 °C (> 392°F) Cleveland open cup
Autoignition temperature: Not available.
Flammable/Explosive limits - lower: Not available.
Flammable/Explosive limits - upper: Not available.
Extinguishing media: 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. Immediately contact emergency personnel. Scrape up as much material as possible. Clean residue with soap and water. Store in a partly filled, closed container until disposal.

7. HANDLING AND STORAGE

Handling: Keep away from heat, spark and flame. Do not breathe gas/fumes/vapor/spray. Keep container closed. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
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>Talc</td>
<td>2 mg/m³ TWA Respirable.</td>
<td>2.4 MPPCF TWA Respirable.</td>
<td>None</td>
<td>50 ppm</td>
</tr>
<tr>
<td></td>
<td>0.1 mg/m³ TWA Respirable.</td>
<td>0.3 mg/m³ TWA Total dust.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epichlorohydin-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 Total dust.</td>
<td>15 mg/m³ TWA Total dust.</td>
<td>None</td>
<td>None</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.

**Skin protection:**
Chemical resistant, impermeable gloves.

### 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.
- **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)

### 10. STABILITY AND REACTIVITY

- **Stability:** Stable
- **Hazardous reactions:** Will not occur.
- **Conditions to avoid:** 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</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene diphenol resin</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>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Health Effects/Target Organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>Irritant, Lung, Some evidence of carcinogenicity</td>
</tr>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene diphenol resin</td>
<td>Allergen, Irritant</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>Irritant, Respiratory, Some evidence of carcinogenicity</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

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 minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimis
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA 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 material safety data sheet contains changes from the previous version in sections: 1, 14

Prepared by:  Gary Pierson, Manager, Regulatory Affairs

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates (“Henkel”) does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user’s responsibility to determine the suitability of Henkel’s products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel’s products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel’s products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.