1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE HYS 1C 4OZ PTB
IDH number: 1373718
Product type: Epoxy Hardener
Item number: 1373425_1320207
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

<table>
<thead>
<tr>
<th>HMIS:</th>
<th>HEALTH: *3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Viscous, Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>Green</td>
</tr>
<tr>
<td>Odor:</td>
<td>Ammoniacal, Strong</td>
</tr>
<tr>
<td>FLAMMABILITY:</td>
<td>1</td>
</tr>
<tr>
<td>PHYSICAL HAZARD:</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection:</td>
<td>See MSDS Section 8</td>
</tr>
</tbody>
</table>

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

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

Potential Health Effects

- **Inhalation:** Allergic respiratory reaction. May cause irritation to nose and throat. May cause respiratory tract irritation. May cause central nervous system effects with nausea, dizziness and headache.
- **Skin contact:** May cause skin burns. May be harmful if absorbed through skin. Allergic skin reaction. Redness. Rash.
- **Eye contact:** Causes eye burns. Redness. Tissue damage.
- **Ingestion:** May cause burns of mouth and throat if swallowed. May be harmful if swallowed.

Existing conditions aggravated by exposure:
Eye, skin, and respiratory disorders. Skin allergies. Respiratory 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>Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct</td>
<td>68610-56-0</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>111-40-0</td>
<td>10 - 30</td>
</tr>
<tr>
<td>4,4’-Isopropylidenediphenol</td>
<td>80-05-7</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:**
Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). 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 immediate medical attention.

### 5. FIRE FIGHTING MEASURES

**Flash point:**
> 100 °C (> 212°F)

**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.

**Hazardous combustion products:**

### 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:**
Store in a partly filled, closed container until disposal. Scrape up as much material as possible. Clean residue with soap and water. Immediately contact emergency personnel. Remove all sources of ignition.

### 7. HANDLING AND STORAGE

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

**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 fraction.</td>
<td>2.4 MPPCF TWA Respirable. 0.1 mg/m³ TWA Respirable. 20 MPPCF TWA 0.3 mg/m³ TWA Total dust.</td>
<td>None</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Quartz (SiO₂)</td>
<td>0.025 mg/m³ TWA Respirable fraction.</td>
<td>2.4 MPPCF TWA Respirable. 0.1 mg/m³ TWA Respirable. 0.3 mg/m³ TWA Total dust.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>(SKIN) 1 ppm TWA</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>4,4’-Isopropylidenediphenol</td>
<td>None</td>
<td>None</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:**
If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH.

**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. Butyl rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Visous, Liquid
**Color:** Green
**Odor:** Ammoniacal, Strong
**Odor threshold:** Not available.
**pH:** Not available.
**Vapor pressure:** Not available.
**Boiling point/range:** Not available.
**Melting point/ range:** Not available.
**Specific gravity:** 1.65
**Vapor density:** Not available.
**Flash point:** > 100 °C (> 212°F)
**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:** 0.57 g/l EPA Method 24
10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.


Conditions to avoid: Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Excessive heat. Avoid temperatures above 38°C (100°F). Store away from incompatible materials. Failure to observe these precautions may result in excessive heat build-up causing an exotherm.

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>Talc</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>Known To Be Human Carcinogen.</td>
<td>Group 1</td>
<td>No</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Hazardous components | Health Effects/Target Organs |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>Irritant, Lung; Some evidence of carcinogenicity</td>
</tr>
<tr>
<td>Bisphenol A, epichlorohydrin polymer, diethylenetriamine adduct</td>
<td>No Records</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>Immune system, Lung; Some evidence of carcinogenicity</td>
</tr>
<tr>
<td>Diethylenetriamine</td>
<td>Allergen, Irritant, Eyes</td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol</td>
<td>Allergen, Blood, Irritant, Kidney, Reproductive, Spleen</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)

<table>
<thead>
<tr>
<th>Proper shipping name:</th>
<th>Amines, liquid, corrosive, n.o.s. (Diethylenetriamine)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard class or division:</td>
<td>8</td>
</tr>
<tr>
<td>Identification number:</td>
<td>UN 2735</td>
</tr>
<tr>
<td>Packing group:</td>
<td>III</td>
</tr>
</tbody>
</table>

IDH number: 1373718

Product name: LOCTITE HYS 1C 4OZ PTB
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:** Immediate Health, Delayed Health
- **CERCLA/SARA Section 311/312:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): 4,4'-Isopropylidenediphenol (CAS# 80-05-7).
- **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.
- **WHMIS hazard class:** D.2.A, D.2.B, E

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 1,2,4,5,7,8,9,10,15

**Prepared by:** Rena Petrides, Regulatory Affairs Specialist

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