1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** LOCTITE® 277™ THREADLOCKER HIGH STRENGTH
**IDH number:** 88448

**Product type/use:** Anaerobic Adhesive
**Item number:** 27731

**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.
CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

<table>
<thead>
<tr>
<th>HAZARD CLASS</th>
<th>HAZARD CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKIN IRRITATION</td>
<td>2</td>
</tr>
<tr>
<td>EYE IRRITATION</td>
<td>2A</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</td>
<td>2</td>
</tr>
</tbody>
</table>

**PICTOGRAM(S)**

**Precautionary Statements**

**Prevention:**
Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Wear protective gloves, eye protection, and face protection.

**Response:**
IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if you feel unwell. If skin irritation 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>
<tbody>
<tr>
<td>Cumene hydroperoxide</td>
<td>80-15-9</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Saccharin</td>
<td>81-07-2</td>
<td>1 - 5</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. Wash clothing before reuse. Get medical attention.

**Eye contact:**
Rinse immediately with plenty of water, also under the eyelids, 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. In case of fire, keep containers cool with water spray.

**Unusual fire or explosion hazards:**
Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers.

**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:**
Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear protective clothing during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 “Exposure Controls / Personal Protection” prior to clean up.

**7. HANDLING AND STORAGE**

**Handling:**
Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed. Refer to Section 8.

**Storage:**
For safe storage, store at or below 38 °C (100.4 °F). Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

**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>Cumene hydroperoxide</td>
<td>None</td>
<td>None</td>
<td>1 ppm (6 mg/m3) TWA (SKIN)</td>
<td>None</td>
</tr>
<tr>
<td>Saccharin</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.

IDH number: 88448

Product name: LOCTITE® 277™ THREADLOCKER HIGH STRENGTH
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. 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. Neoprene gloves. Butyl rubber gloves. Natural rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Red</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available, Product is non-polar/aprotic.</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable, Product is a liquid</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt; 5 mm hg (27 °C (80.6 °F)) &lt; 0.1300000 mbar (20.0 °C (68°F)) &lt; 300 mbar (50 °C (122°F)) no method</td>
</tr>
<tr>
<td>Boiling point/ range</td>
<td>&gt; 150 °C (&gt; 302°F)</td>
</tr>
<tr>
<td>Melting point/ range</td>
<td>Not applicable, Product is a liquid</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.1</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt; 1 20 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100.00 °C ( &gt; 212°F) Tagliabue closed cup; No flash point up to 100 °C165 °C (329°F) Cleveland open cup</td>
</tr>
<tr>
<td>Flammable/Explosive limits - lower</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammable/Explosive limits - upper</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>The product is not flammable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Slight</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not available</td>
</tr>
<tr>
<td>VOC content</td>
<td>0.71 %; 7.13 g/l (California SCAQMD Method 316B) (Estimated)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the presence of incompatible materials.


Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

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

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>Cumene hydroperoxide</td>
<td>None</td>
<td>Allergen, Central nervous system, Corrosive, Irritant, Mutagen</td>
</tr>
<tr>
<td>Saccharin</td>
<td>Oral LD50 (Mouse) = 17 g/kg</td>
<td>No Target Organs</td>
</tr>
</tbody>
</table>

Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
-----------------------|----------------|-----------------|----------------------------------------|
Cumene hydroperoxide   | No             | No              | No                                     |
Saccharin              | No             | No              | No                                     |

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.

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: RQ, Environmentally hazardous substance, liquid, n.o.s.
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

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

Water Transportation (IMO/IMDG)
Proper shipping name: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Additional information: IMDG-Code: Segregation group 1- Acids

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) 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: 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). Cumene hydroperoxide (CAS# 80-15-9), Saccharin (CAS# 81-07-2).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)
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: 3,8,9,11

Prepared by: Product Safety and Regulatory Affairs

Issue date: 12/27/2022

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.

This Safety Data Sheet has been generated based on OSHA Hazard Communication Standard (29 CFR 1910.1200) and provides information in accordance with U.S. federal law only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.