



Revision Number: 004.6

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**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	<b>Loctite(R) 277 Threadlocker High Strength</b>	<b>IDH number:</b>	231089
<b>Product type:</b>	Anaerobic Sealant	<b>Item number:</b>	21434
<b>Company address:</b>	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	<b>Region:</b>	United States
		<b>Contact information:</b>	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**

<b>Physical state:</b>	Liquid	<b>HEALTH:</b>	*2
<b>Color:</b>	Red	<b>FLAMMABILITY:</b>	1
<b>Odor:</b>	Characteristic	<b>PHYSICAL HAZARD:</b>	1
		<b>Personal Protection:</b>	See MSDS Section 8

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

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

**Potential Health Effects**

<b>Inhalation:</b>	May cause respiratory tract irritation.
<b>Skin contact:</b>	May cause allergic skin reaction.
<b>Eye contact:</b>	May cause irritation.
<b>Ingestion:</b>	May be harmful if swallowed.

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

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**

Hazardous components	CAS NUMBER	%
Polyglycol dimethacrylate	25852-47-5	30 - 60
Bisphenol A fumarate resin	39382-25-7	30 - 60
Cumene hydroperoxide	80-15-9	1 - 5
Saccharin	81-07-2	1 - 5
Cumene	98-82-8	0.1 - 1

**4. FIRST AID MEASURES**

**Inhalation:** Move to fresh air. If symptoms develop and persist, get medical attention.

<b>Skin contact:</b>	Wash with soap and water. Remove contaminated clothing and footwear. Wash clothing before reuse. If symptoms develop and persist, get medical attention.
<b>Eye contact:</b>	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.
<b>Ingestion:</b>	Do not induce vomiting. Keep individual calm. Get medical attention.

## 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	> 93.3 °C (> 199.94 °F) Tagliabue closed cup
<b>Autoignition temperature:</b>	Not available.
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Extinguishing media:</b>	If product is involved in fire extinguish with dry powder, foam or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
<b>Unusual fire or explosion hazards:</b>	None
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.</b>	
<b>Environmental precautions:</b>	Ventilate area. Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a partly filled, closed container until disposal.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.
<b>Storage:</b>	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.

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.**

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Polyglycol dimethacrylate	None	None	None	None
Bisphenol A fumarate resin	None	None	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m <sup>3</sup> ) TWA (SKIN)	None
Saccharin	None	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m <sup>3</sup> ) TWA (SKIN)	None	None

<b>Engineering controls:</b>	Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.
<b>Respiratory protection:</b>	None required where adequate ventilation conditions exist. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. Use an organic vapor respirator for concentrations exceeding the Occupational Exposure Limit.
<b>Eye/face protection:</b>	Safety goggles or safety glasses with side shields.
<b>Skin protection:</b>	Use impermeable gloves and protective clothing as necessary to prevent skin contact. Neoprene gloves. Butyl rubber gloves. Natural rubber gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Red
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	< 5 mm hg (27 °C (80.6 °F))
<b>Boiling point/range:</b>	> 149 °C (> 300.2 °F)
<b>Melting point/ range:</b>	Not available.
<b>Specific gravity:</b>	1.1
<b>Vapor density:</b>	Not available.
<b>Flash point:</b>	> 93.3 °C (> 199.94 °F) Tagliabue closed cup
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not available.
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Slight
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	0.71 %; 7.13 g/l

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours. Phenolics.
<b>Incompatible materials:</b>	Strong acids and oxidizing agents. copper Rust. Iron. Oxygen scavengers. Strong alkalis. Reducing agents. Other polymerization initiators.
<b>Conditions to avoid:</b>	See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

## 11. TOXICOLOGICAL INFORMATION

<b>Acute oral product toxicity:</b>	LD50 (rat) > 5,000 mg/kg (Estimated)
<b>Acute dermal product toxicity:</b>	LD50 (rabbit) > 2,000 mg/kg (Estimated)

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polyglycol dimethacrylate	No	No	No
Bisphenol A fumarate resin	No	No	No
Cumene hydroperoxide	No	No	No
Saccharin	No	No	No
Cumene	No	Group 2B	No

Hazardous components	Health Effects/Target Organs
Polyglycol dimethacrylate	Irritant, Allergen
Bisphenol A fumarate resin	No Target Organs
Cumene hydroperoxide	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Saccharin	No Target Organs
Cumene	Central nervous system, Irritant, Lung

## 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 shipping classifications in this sections are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

### 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:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

### Water Transportation (IMO/IMDG)

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None  
**Additional information:** IMDG-Code: Segregation group 1- Acids

## 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:** Delayed Health, Immediate Health

**CERCLA/SARA 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).

**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.

**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

**16. OTHER INFORMATION**

**This material safety data sheet contains changes from the previous version in sections: 1, 3, 8, 11, 15**

**Prepared by:** Kyra Kozak Woods, Manager, Regulatory Affairs

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