



Revision Date: 08/04/2006

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Loctite(R) 680 Retaining Compound High Strength  
**Product type:** Anaerobic Adhesive  
**Company address:** Henkel Corporation  
1001 Trout Brook Crossing  
Rocky Hill, Connecticut 06067

**Item No. :** 68090 / IDH No. 234954  
**Region:** United States  
**Contact Information:**  
Telephone: (860) 571-5100  
Emergency telephone: (860) 571-5100  
Internet: www.loctite.com

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Hazardous components</u>	<u>%</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>OTHER</u>
Aromatic dimethacrylate ester 24448-20-2	30-60	None	None	None
Hydroxyalkyl methacrylate 27813-02-1	30-60	None	None	1 ppm TWA; 3 ppm STEL
Bisphenol A fumarate resin 39382-25-7	10-30	None	None	None
Cumene hydroperoxide 80-15-9	1-5	None	None	1 ppm (6 mg/m <sup>3</sup> ) Skin (WEEL), 1ppm, skin TWA, (WEEL) None
Polyglycol dimethacrylate 25852-47-5	1-5	None	None	None
1-Acetyl-2-phenylhydrazine 114-83-0	0.1-1	None	None	None

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**Physical state:** Liquid  
**Color:** Green  
**Odor:** Mild

#### HMIS:

**HEALTH:** 2\*  
**FLAMMABILITY:** 1  
**PHYSICAL HAZARD:** 1  
**Personal Protection:** See Section 8

**WARNING:** CAUSES EYE IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION.  
MAY CAUSE RESPIRATORY TRACT IRRITATION.  
MAY CAUSE SKIN IRRITATION.  
MAY BE HARMFUL IF SWALLOWED.

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

### Potential Health Effects

**Inhalation:** May cause respiratory tract irritation.  
**Skin contact:** May cause skin irritation. May cause allergic skin reaction.  
**Eye contact:** Contact with eyes will cause irritation.  
**Ingestion:** May be harmful if swallowed.

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

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See Section 11 for additional toxicological information.

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Remove to fresh air. If symptoms develop and persist, get medical attention.
<b>Skin contact:</b>	Wash with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.
<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. Obtain medical attention.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash point:</b>	Greater than 93°C (200°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>	Foam, dry chemical or carbon dioxide.
<b>Special fire fighting 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 vapors.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Environmental precautions:</b>	Prevent product from entering drains or open waters.
<b>Clean-up methods:</b>	Ensure adequate ventilation. Soak up with inert absorbent. Store in a partly filled, closed container until disposal.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Wash thoroughly after handling.
<b>Storage:</b>	For safe storage, store at or below 38°C (100°F). Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.
<b>Incompatible products:</b>	Refer to Section 10.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<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>	Use NIOSH approved respirator if there is potential to exceed exposure limit(s). The recommended air purifying respirator cartridge is an organic vapor/particulate filter combination cartridge (OV/P100).
<b>Skin protection:</b>	Use impermeable gloves and protective clothing as necessary to prevent skin contact. Neoprene gloves.
<b>Eye/face protection:</b>	Safety goggles or safety glasses with side shields.

See Section 2 for exposure limits.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Green
<b>Odor:</b>	Mild
<b>Vapor pressure:</b>	Less than 5 mm Hg at 27°C (80°F)
<b>pH:</b>	Not applicable
<b>Boiling point/range:</b>	Greater than 149°C (300°F)
<b>Melting point/range:</b>	Not available
<b>Specific gravity:</b>	1.11 at 26.6°C (80°F)
<b>Vapor density:</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>	4.2216%; 40.2971 grams/liter

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable.
<b>Hazardous polymerization:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Irritating organic vapors. Phenols.
<b>Incompatibility:</b>	Strong oxidizers. Reducing agents. Acids. Bases. Rust. Zinc. Aluminum. Iron. Copper. Alkalis. Aldehydes. Amines. Free radical initiators. Peroxides.
<b>Conditions to avoid:</b>	Exposure to sunlight. Heat, flames and sparks. See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

## 11. TOXICOLOGICAL INFORMATION

<b>Product toxicity data:</b>	Acute oral LD50 greater than 5000mg/kg (rat)(estimated). Acute dermal LD50 greater than 2000 mg/kg (rabbit) (estimated).
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### Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Aromatic dimethacrylate ester 24448-20-2	No	No	No
Hydroxyalkyl methacrylate 27813-02-1	No	No	No
Bisphenol A fumarate resin 39382-25-7	No	No	No
Cumene hydroperoxide 80-15-9	No	No	No
Polyglycol dimethacrylate 25852-47-5	No	No	No
1-Acetyl-2-phenylhydrazine 114-83-0	No	No	No

### Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Aromatic dimethacrylate ester 24448-20-2	Allergen, Irritant
Hydroxyalkyl methacrylate 27813-02-1	Allergen, Irritant
Bisphenol A fumarate resin 39382-25-7	Allergen, Irritant
Cumene hydroperoxide 80-15-9	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Polyglycol dimethacrylate 25852-47-5	Allergen, Irritant
1-Acetyl-2-phenylhydrazine 114-83-0	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity

## 12. ECOLOGICAL INFORMATION

Ecological information: Not available

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

EPA hazardous waste number: Not a RCRA hazardous waste.

## 14. TRANSPORT INFORMATION

### U.S. Department of Transportation Ground (49 CFR):

Proper shipping name: Unrestricted  
Hazard class or division: None  
Identification number: None  
Packing group: None

### International Air Transportation (ICAO/IATA):

Proper shipping name: Unrestricted  
Hazard class or division: None  
Identification number: None  
Packing group: None

### Water Transportation (IMO/IMDG):

Proper shipping name: Unrestricted  
Hazard class or division: None  
Identification number: None  
Packing group: None  
Marine pollutant: None

## 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: 4-Methoxyphenol (150-76-5).

CERCLA/SARA Section 302 EHS: None above reporting de minimus.  
CERCLA/SARA Section 311/312: Immediate Health Hazard, Delayed Health Hazard  
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) .

California Proposition 65: This product contains a chemical known to the State of California to cause cancer and 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 Domestic Substances List.  
WHMIS hazard class: D.2.B

## 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 8

Prepared by: Regulatory Affairs

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