



Revision Date: 03/06/2006

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### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Loctite(R) 648 Retaining Compound Press Fit  
**Product type:** Anaerobic Adhesive  
**Company address:**  
 Henkel Corporation  
 1001 Trout Brook Crossing  
 Rocky Hill, Connecticut 06067

**Item No. :** 21444 / IDH No. 231105  
**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>
Polyurethane methacrylate resin PROPRIETARY	30-60	None	None	None
Polyglycol dimethacrylate 109-16-0	10-30	None	None	None
Acrylic acid 79-10-7	5-10	2 ppm TWA (skin)	10 ppm TWA; 30 mg/m <sup>3</sup>	1 ppm TWA (skin); 3 ppm STEL (skin)
Hydroxyalkyl methacrylate 27813-02-1	5-10	None	None	1 ppm TWA; 3 ppm STEL
Polyglycol dimethacrylate 25852-47-5	1-5	None	None	None
Cumene hydroperoxide 80-15-9	1-5	None	None	1 ppm (6 mg/m <sup>3</sup> ) Skin (WEEL)
1-Acetyl-2-phenylhydrazine 114-83-0	0.1-1	None	None	None

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

##### HMIS:

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

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

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

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

#### Potential Health Effects

**Inhalation:** May cause irritation to nose and throat.  
**Skin contact:** Irritating to skin. May cause allergic skin reaction.  
**Eye contact:** Vapors may irritate eyes. Contact with eyes will cause irritation.  
**Ingestion:** May cause gastrointestinal tract irritation if swallowed.

**Existing conditions aggravated by exposure:**

Eye, skin, and respiratory disorders.

**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>	None
<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>	Avoid contact with eyes, skin and clothing. Do not breathe mist or vapors.
<b>Storage:</b>	For safe storage, store at or below 38°C (100°F).
<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>	Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.
<b>Respiratory protection:</b>	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
<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.**

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Green
<b>Odor:</b>	Sharp
<b>Vapor pressure:</b>	Less than 10 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>	1.1
<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>	5.3403%; 50.9756 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. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapors.
<b>Incompatibility:</b>	Strong oxidizers.
<b>Conditions to avoid:</b>	See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

## 11. TOXICOLOGICAL INFORMATION

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

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Polyurethane methacrylate resin PROPRIETARY	No	No	No
Polyglycol dimethacrylate 109-16-0	No	No	No
Acrylic acid 79-10-7	No	No	No
Hydroxyalkyl methacrylate 27813-02-1	No	No	No
Polyglycol dimethacrylate 25852-47-5	No	No	No
Cumene hydroperoxide 80-15-9	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
Polyurethane methacrylate resin PROPRIETARY	Allergen, Irritant
Polyglycol dimethacrylate 109-16-0	Allergen, Irritant
Acrylic acid 79-10-7	Allergen, Corrosive, Irritant, Kidney, Liver
Hydroxyalkyl methacrylate 27813-02-1	Allergen, Irritant
Polyglycol dimethacrylate 25852-47-5	Allergen, Irritant
Cumene hydroperoxide 80-15-9	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
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

### WaterTransportation (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). Acrylic acid (CAS# 79-10-7). Cumene hydroperoxide (CAS# 80-15-9).

California Proposition 65: This product contains a chemical known to 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 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: 14

Prepared by: Regulatory Affairs

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