

**Revision Date:** 10/20/2006

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product name:** 349 Impruv® Light Cure Adhesive  
**Product type:** Ultraviolet adhesive  
**Company address:**  
 Henkel Corporation  
 1001 Trout Brook Crossing  
 Rocky Hill, Connecticut 06067

**Item No. :** 34990 / IDH No. 135409  
**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
High boiling methacrylate 7534-94-3	10-30	None	None	None
Hydroxyalkyl methacrylate 27813-02-1	10-30	None	None	1 ppm TWA; 3 ppm STEL
Alkyl C12 methacrylate 142-90-5	5-10	None	None	50 ppm
Acrylic acid 79-10-7	1-5	2 ppm TWA (skin)	10 ppm TWA; 30 mg/m <sup>3</sup>	1 ppm TWA (skin); 3 ppm STEL (skin)
Photoinitiator 947-19-3	1-5	None	None	None
gamma-Glycidoxypropyl trimethoxysilane 2530-83-8	1-5	None	None	None
Tetradecyl methacrylate 2549-53-3	1-5	None	None	50 ppm TWA; 75 ppm STEL

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

#### HMIS:

**Physical state:** Liquid  
**Color:** Clear  
**Odor:** Sharp, Irritating

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

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

**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 be harmful if swallowed. May cause gastrointestinal tract irritation if swallowed.

**Existing conditions aggravated by exposure:**

Eye, skin, and respiratory disorders. Acrylic acid: Respiratory disorders. Lung disease.

**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>	Dry powder. Foam. 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>	Trace amounts of toxic fumes may be released on incineration and the use of breathing apparatus is recommended.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Environmental precautions:</b>	Ventilate area.
<b>Clean-up methods:</b>	Soak up with inert absorbent. Contain the spill in a closed container until disposal.

#### 7. HANDLING AND STORAGE

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation.
<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>	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. Butyl rubber gloves. Natural rubber gloves.
<b>Eye/face protection:</b>	Safety goggles or safety glasses with side shields.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Sharp, Irritating
<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>	1.02
<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>	ASTM D5403 Process volatiles 1.19 %, 11.3590 grams/liter; Potential volatiles 0.63 %, 6.0136 grams/liter; Total volatiles 1.82 %, 17.3727 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.
<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): 5000 (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
Polyurethane methacrylate resin PROPRIETARY	No	No	No
High boiling methacrylate 7534-94-3	No	No	No
Hydroxyalkyl methacrylate 27813-02-1	No	No	No
Alkyl C12 methacrylate 142-90-5	No	No	No
Acrylic acid 79-10-7	No	No	No
Photoinitiator 947-19-3	No	No	No
gamma-Glycidoxypropyl trimethoxysilane 2530-83-8	No	No	No
Tetradecyl methacrylate 2549-53-3	No	No	No

### Literature Referenced Target Organ & Other Health Effects

Hazardous components	Health Effects/Target Organs
Polyurethane methacrylate resin PROPRIETARY	Allergen, Irritant
High boiling methacrylate 7534-94-3	Allergen, Irritant
Hydroxyalkyl methacrylate 27813-02-1	Allergen, Irritant
Alkyl C12 methacrylate 142-90-5	Allergen, Irritant
Acrylic acid 79-10-7	Allergen, Corrosive, Irritant, Kidney, Liver
Photoinitiator 947-19-3	No data
gamma-Glycidoxypropyl trimethoxysilane 2530-83-8	Allergen, Irritant
Tetradecyl methacrylate 2549-53-3	Allergen, Irritant

## 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:** 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  
**Marine pollutant:** None

## 15. REGULATORY INFORMATION

### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12 (b) Export Notification:</b>	4-Methoxyphenol (150-76-5).
<b>CERCLA/SARA Section 302 EHS:</b>	None above reporting de minimus.
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health Hazard, Delayed Health Hazard
<b>CERCLA/SARA 313:</b>	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).
<b>California Proposition 65:</b>	This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

### Canada Regulatory Information

<b>CEPA DSL/NDSL Status:</b>	All components are listed on or are exempt from listing on the Domestic Substances List.
<b>WHMIS hazard class:</b>	D.2.A, D.2.B

## 16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 15

**Prepared by:** Kyra Kozak Woods, Product Safety and Regulatory Affairs Specialist

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