

## Material Safety Data Sheet



Revision Number: 004.0

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### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b>	<b>Loctite(R) 3341 Light Cure Medical Device Adhesive</b>	<b>IDH number:</b>	230199
<b>Product type:</b>	Ultraviolet adhesive	<b>Item number:</b>	23440
<b>Company address:</b>		<b>Region:</b>	United States
Henkel Corporation		<b>Contact information:</b>	
1001 Trout Brook Crossing		Telephone: 860.571.5100	
Rocky Hill, Connecticut 06067		Emergency telephone: 860.571.5100	
		Internet: www.henkelna.com	

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

<b>Physical state:</b>	Liquid	<b>HMIS:</b>	
<b>Color:</b>	Transparent, Light yellow	<b>HEALTH:</b>	*2
<b>Odor:</b>	Mild	<b>FLAMMABILITY:</b>	2
		<b>PHYSICAL HAZARD:</b>	1
		<b>Personal Protection:</b>	See MSDS Section 8

**WARNING:** COMBUSTIBLE LIQUID AND VAPOR.  
HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED.  
DO NOT SPRAY. DO NOT HEAT.  
MAY CAUSE ALLERGIC SKIN REACTION.  
CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

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

#### Potential Health Effects

<b>Inhalation:</b>	Modified acrylamide is harmful if inhaled. Causes respiratory tract irritation. Vapors and mists will irritate nose and throat and possibly eyes. Inhalation of vapors or mists of the product may be irritating to the respiratory system. Headache. Nausea. DO NOT heat or spray as this increases the inhalation hazard.
<b>Skin contact:</b>	Modified acrylamide may be absorbed through skin in harmful amounts. Toxic. May cause allergic skin reaction. Causes skin irritation.
<b>Eye contact:</b>	Contact with eyes will cause irritation.
<b>Ingestion:</b>	Modified acrylamide is harmful if swallowed. Toxic.

**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	%
Urethane acrylate oligomer	Unknown	30 - 60
Modified acrylamide	2680-03-7	10 - 30
Acrylate ester	Proprietary	10 - 30
Urethane acrylate oligomer	Unknown	10 - 30
Acrylate monomer	Proprietary	5 - 10
Photoinitiator	Proprietary	1 - 5
Photoinitiator	Proprietary	1 - 5
Acrylate ester	7328-17-8	1 - 5

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.
<b>Skin contact:</b>	Immediately flush skin with plenty of water (using soap, if available). 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 immediate medical attention.
<b>Ingestion:</b>	Do not induce vomiting. Keep individual calm. Never give anything by mouth to an unconscious person. Get immediate medical attention.

### 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	88.9 °C (192.02 °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 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 nitrogen. Irritating organic vapours. Toxic fumes.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. 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

**Handling:** Keep away from heat, spark and flame. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. DO NOT heat or spray. Use only with adequate ventilation. Keep container closed. Do not taste or swallow. Refer to Section 8.

**Storage:** For safe storage, store at or below 26 °C (78.8 °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
Urethane acrylate oligomer	None	None	None	None
Modified acrylamide	None	None	None	0.1 mg/m <sup>3</sup> TWA (Skin) 0.025 ppm TWA (Skin)
Acrylate ester	None	None	None	None
Urethane acrylate oligomer	None	None	None	None
Acrylate monomer	None	None	None	None
Photoinitiator	None	None	None	None
Photoinitiator	None	None	None	None
Acrylate ester	None	None	None	None

**Engineering controls:** Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

**Respiratory protection:** Use NIOSH approved respirator if there is potential to exceed exposure limit(s). If this material is handled at elevated temperatures or under mist forming conditions, without engineering controls, a NIOSH approved respirator must be used.

**Eye/face protection:** Safety goggles or safety glasses with side shields. Wear chemical goggles; face shield (if splashing is possible).

**Skin protection:** Use impermeable gloves and protective clothing as necessary to prevent skin contact. Neoprene gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Transparent, Light yellow
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	< 5 mm Hg (20.0 °C (68°F))
<b>Boiling point/range:</b>	> 93.0 °C (> 199.4 °F)
<b>Melting point/ range:</b>	Not available
<b>Specific gravity:</b>	1.094
<b>Vapor density:</b>	Not available
<b>Flash point:</b>	88.9 °C (192.02 °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

Partition coefficient (n-octanol/water):  
VOC content:

Not available  
3.37 %; 36.87 g/l (process)  
1.02 %; 11.16 g/l (potential)  
4.39 %; 48.03 g/l (total)  
(ASTM D5403)

## 10. STABILITY AND REACTIVITY

**Stability:** Stable

**Hazardous reactions:** May occur.

**Hazardous decomposition products:** Oxides of carbon. Oxides of nitrogen. Irritating organic vapours.

**Incompatible materials:** Strong oxidizing agents. Reducing agents. Peroxides. Free radical initiators. Other polymerization initiators.

**Conditions to avoid:** Keep away from heat, spark and flame. Avoid temperatures above 26°C (80°F).

## 11. TOXICOLOGICAL INFORMATION

**Acute oral product toxicity:** Modified acrylamide LD50 (rat) 316 mg/kg

**Acute dermal product toxicity:** Modified acrylamide LD50 (rabbit) 518 mg/kg

**Acute inhalation product toxicity:** Modified acrylamide LC50 (rat) 1 h > 776 ppm

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Urethane acrylate oligomer	No	No	No
Modified acrylamide	No	No	No
Acrylate ester	No	No	No
Urethane acrylate oligomer	No	No	No
Acrylate monomer	No	No	No
Photoinitiator	No	No	No
Photoinitiator	No	No	No
Acrylate ester	No	No	No

Hazardous components	Health Effects/Target Organs
Urethane acrylate oligomer	Irritant, Allergen
Modified acrylamide	Irritant, Eyes, Mutagen, Kidney, Less weight gain and food intake.
Acrylate ester	Allergen, Irritant
Urethane acrylate oligomer	Irritant, Allergen
Acrylate monomer	Irritant, Allergen
Photoinitiator	No Records
Photoinitiator	No Records
Acrylate ester	Irritant, Allergen

## 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.

**Hazardous waste number:** Not a RCRA hazardous waste.

### 14. TRANSPORT INFORMATION

The shipping classification in this section are for bulk packaging only. Shipping classification may be different for non-bulk packaging as exceptions may apply. Refer to shipping documents for package specific transportation classification.

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

**Proper shipping name:** Combustible liquid, n.o.s. (Modified Acrylamide)  
**Hazard class or division:** Combustible Liquid  
**Identification number:** NA 1993  
**Packing group:** III

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

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** None

#### Water Transportation (IMO/MDG)

**Proper shipping name:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** 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:** None above reporting de minimus  
**CERCLA/SARA Section 302 EHS:** None above reporting de minimus  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health, Fire  
**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). Acrylate ester (CAS# 7328-17-8).  
**California Proposition 65:** 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:** Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.  
**WHMIS hazard class:** B.3, D.1.B, D.2.B

### 16. OTHER INFORMATION

**This material safety data sheet contains changes from the previous version in sections:** New Material Safety Data Sheet format.

**Prepared by:** Jennifer Glieco, Regulatory Affairs Specialist

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