

Material Safety Data Sheet



Revision Number: 003.1

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Loctite(R) 3936 Light Cure Adhesive
Medical Device Visible/UV Cure
Fluorescent
Product type: Ultraviolet adhesive
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

IDH number: 312050
Item number: 32304
Region: United States
Contact information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid
Color: Clear
Odor: Mild

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

WARNING: COMBUSTIBLE LIQUID.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.
MAY BE HARMFUL IF SWALLOWED OR INHALED.

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

Potential Health Effects

Inhalation: Moderate respiratory tract irritation. Shortness of breath. Coughing.
Skin contact: May cause allergic skin reaction. May be harmful if absorbed through skin. May cause skin irritation with discomfort or rash.
Eye contact: Contact with eyes will cause irritation. Moderate eye irritation. Redness. Excess tearing.
Ingestion: May be harmful if swallowed. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

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 Polymer	Proprietary	30 - 60
Acrylate monomer	Proprietary	10 - 30
Hydroxyalkyl methacrylate	27813-02-1	10 - 30
Substituted silane	Proprietary	1 - 5
Photoinitiator	Proprietary	1 - 5
Trimethylolpropane triacrylate	15625-89-5	1 - 5
2-Hydroxyethyl acrylate	818-61-1	0.1 - 1

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Page 1 of 5

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.
Skin contact:	Wash with soap and water. Remove contaminated clothing and footwear. Wash clothing before reuse. If symptoms develop and persist, get medical attention.
Eye contact:	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.
Ingestion:	Do not induce vomiting. Keep individual calm. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 90 °C (> 194°F) Pensky Martens closed cup
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special firefighting procedures:	None
Unusual fire or explosion hazards:	Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Oxides of silicon. Irritating organic vapours.

6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions:	Remove all sources of ignition. Do not allow product to enter sewer or waterways.
Clean-up methods:	Spontaneous hazardous polymerization may occur. Ventilate area. 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:	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.
Storage:	For safe storage, store between 10 °C (50°F) and 32 °C (89.6 °F) Store away from heat, sparks, flames, or other sources of ignition.

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 Polymer	None	None	None	None
Acrylate monomer	None	None	None	None
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
Substituted silane	None	None	None	None
Photoinitiator	None	None	None	None
Trimethylolpropane triacrylate	None	None	1 mg/m3 TWA (SKIN)	None
2-Hydroxyethyl acrylate	None	None	None	None

Engineering controls:

No specific ventilation requirements noted, but forced ventilation may still be required if concentrations exceed occupational exposure limits.

Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection:

Safety goggles or safety glasses with side shields.

Skin protection:

Use impermeable gloves and protective clothing as necessary to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Clear
Odor:	Mild
Odor threshold:	Not available
pH:	Not applicable
Vapor pressure:	< 5 mm hg (20 °C (68°F))
Boiling point/range:	> 93 °C (> 199.4 °F)
Melting point/ range:	Not available
Specific gravity:	1.08
Vapor density:	> 1
Flash point:	> 90 °C (> 194°F) Pensky Martens closed cup
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Autoignition temperature:	Not available
Evaporation rate:	Not available
Solubility in water:	Slight
Partition coefficient (n-octanol/water):	Not available
VOC content:	0.46 % (process) 1.1 % (potential) 1.56 %; 16.5 g/l (total)

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Oxides of silicon. Irritating organic vapours.
Incompatible materials:	Strong oxidizing agents. Strong acids. Strong bases. Peroxides. Sulfur. Iron. Copper alloys. Carbon steel. Other polymerization initiators.
Conditions to avoid:	See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Urethane Polymer	No	No	No
Acrylate monomer	No	No	No
Hydroxyalkyl methacrylate	No	No	No
Substituted silane	No	No	No
Photoinitiator	No	No	No
Trimethylolpropane triacrylate	No	No	No
2-Hydroxyethyl acrylate	No	No	No

Hazardous components	Health Effects/Target Organs
Urethane Polymer	No Records
Acrylate monomer	Irritant, Allergen
Hydroxyalkyl methacrylate	Irritant, Allergen
Substituted silane	Irritant, Allergen
Photoinitiator	No Records
Trimethylolpropane triacrylate	Irritant, Allergen
2-Hydroxyethyl acrylate	Allergen, Central nervous system, Heart, Irritant, Kidney, Liver, Lung, Some evidence of carcinogenicity, Spleen

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 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. (Hydroxypropyl methacrylate)
Hazard class or division: Combustible Liquid
Identification number: NA 1993
Packing group: III
Exceptions: Unrestricted, (Not more than 450 Liters)

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Isobornyl acrylate

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:	None above reporting de minimus
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer. 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.2.B

16. OTHER INFORMATION

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

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