

Material Safety Data Sheet



Revision Number: 001.1

Issue date: 07/16/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE® 3974™ LIGHT CURE ADHESIVE PART NO. 1135733	IDH number:	1135733
Product type:	Ultraviolet adhesive	Item number:	1135733
Company address:		Region:	United States
Henkel Corporation		Contact information:	
One Henkel Way		Telephone: 860.571.5100	
Rocky Hill, Connecticut 06067		Emergency telephone: 860.571.5100	
		Internet: www.henkelna.com	

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Liquid	HMIS:	
Color:	Translucent, Colorless, Pale yellow	HEALTH:	*2
Odor:	Mild	FLAMMABILITY:	2
		PHYSICAL HAZARD:	1
		Personal Protection:	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

Inhalation:	Modified acrylamide is harmful if inhaled. DO NOT heat or spray as this increases the inhalation hazard. Vapors may cause headaches, nausea, dizziness and respiratory tract irritation. Inhalation of mist or spray may cause irritation of the respiratory tract and nasal passages.
Skin contact:	Modified acrylamide may be absorbed through skin in harmful amounts. Toxic. May cause allergic skin reaction. Irritating to skin.
Eye contact:	Contact with eyes will cause irritation.
Ingestion:	Modified acrylamide is harmful if swallowed. Toxic.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders. Immune system 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	10 - 30
Acrylate monomer	Proprietary	10 - 30
Acrylated carbamate	Proprietary	10 - 30
Acrylate ester	7328-17-8	10 - 30
Modified acrylamide	2680-03-7	5 - 10
2-Hydroxyethyl methacrylate	868-77-9	1 - 5
Photoinitiator	Proprietary	1 - 5
Multifunctional acrylate ester	Proprietary	1 - 5
Acrylate ester	Proprietary	1 - 5
Silica, amorphous, treated	68909-20-6	1 - 5

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention. Wash clothing before reuse.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical attention.
Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Keep individual calm. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	81.5 °C (178.7 °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:	Not available
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. 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.

Environmental precautions:	Remove all sources of ignition. Do not allow product to enter sewer or waterways.
Clean-up methods:	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:	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. DO NOT heat or spray. Do not taste or swallow. Use only with adequate ventilation. 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 Polymer	None	None	None	None
Acrylate monomer	None	None	None	None
Acrylated carbamate	None	None	None	None
Acrylate ester	None	None	None	None
Modified acrylamide	None	None	None	0.1 mg/m ³ TWA (Skin) 0.025 ppm TWA (Skin)
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
Photoinitiator	None	None	None	None
Multifunctional acrylate ester	None	None	None	None
Acrylate ester	None	None	None	None
Silica, amorphous, treated	10 mg/m ³ TWA Inhalable dust.	6 mg/m ³ TWA	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. Full face protection should be used if the potential for splashing or spraying of product exists.
Skin protection:	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Translucent, Colorless, Pale yellow
Odor:	Mild
Odor threshold:	Not available
pH:	Not available
Vapor pressure:	< 5 mm hg (20 °C (68°F))
Boiling point/range:	> 93 °C (> 199.4 °F)
Melting point/ range:	Not available
Specific gravity:	1.1062
Vapor density:	> 1
Flash point:	81.5 °C (178.7 °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:	1.48 %; 16.37 g/l

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	May occur.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Aldehydes. Irritating organic vapours.
Incompatible materials:	Acids. Bases. Strong oxidizing agents. Reducing agents. Free radical initiators. Other polymerization initiators.
Conditions to avoid:	Keep away from open flames, hot surfaces and sources of ignition. Avoid temperatures above 26°C (80°F).

11. TOXICOLOGICAL INFORMATION

Product toxicity data:	Modified acrylamide: LD50 (oral, rat) 316 mg/kg LD50 (dermal, rabbit) 518 mg/kg LC50 (vapor, 1hour, rat) greater than 776 ppm.
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Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Urethane Polymer	No	No	No
Acrylate monomer	No	No	No
Acrylated carbamate	No	No	No
Acrylate ester	No	No	No
Modified acrylamide	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
Photoinitiator	No	No	No
Multifunctional acrylate ester	No	No	No
Acrylate ester	No	No	No
Silica, amorphous, treated	No	No	No

Hazardous components	Health Effects/Target Organs
Urethane Polymer	No Records
Acrylate monomer	Irritant, Allergen
Acrylated carbamate	Irritant, Allergen
Acrylate ester	Irritant, Allergen
Modified acrylamide	Irritant, Eyes, Mutagen, Kidney, Less weight gain and food intake.
2-Hydroxyethyl methacrylate	Irritant, Allergen
Photoinitiator	No Records
Multifunctional acrylate ester	Irritant, Allergen
Acrylate ester	Irritant, Allergen
Silica, amorphous, treated	No Target Organs

12. ECOLOGICAL INFORMATION

Ecological information:	Not available
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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. (N,N-Dimethylacrylamide)
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. This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDL Status: One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.
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. 1,2

Prepared by: Regulatory Affairs

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