

Material Safety Data Sheet



Revision Number: 004.0

Issue date: 03/13/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 3381 Light Cure Adhesive Medical Device
Product type: Ultraviolet adhesive
Company address: Henkel Corporation
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067

IDH number: 231590
Item number: 25785
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: Transparent, Slightly Hazy
Odor: Mild

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

WARNING: 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. Vapors and mists will irritate nose and throat and possibly eyes. Causes respiratory tract irritation. Headache. Nausea. DO NOT heat or spray as this increases the inhalation hazard.

Skin contact: Modified acrylamide may be absorbed through skin in harmful amounts. Toxic. May cause allergic skin reaction. Causes skin irritation.

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	30 - 60
Isobornyl acrylate	5888-33-5	10 - 30
Acrylate ester	7328-17-8	10 - 30
Modified acrylamide	2680-03-7	10 - 30
2-Hydroxyethyl methacrylate	868-77-9	5 - 10
Silica, amorphous, treated	68909-20-6	1 - 5
Ethylene/methyl Acrylate	Unknown	1 - 5
Photoinitiator	947-19-3	1 - 5

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4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin contact:	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.
Eye contact:	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. 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:	> 93.4 °C (> 200.12 °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:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
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:	Ensure adequate ventilation. 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. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling:	Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. DO NOT heat or spray. 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
Isobornyl acrylate	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
Silica, amorphous, treated	10 mg/m ³ TWA Inhalable dust.	6 mg/m ³ TWA	None	None
Ethylene/methyl Acrylate	None	None	None	None
Photoinitiator	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

Physical state:	Liquid
Color:	Transparent, Slightly Hazy
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:	1.0832
Vapor density:	> 1
Flash point:	> 93.4 °C (> 200.12 °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:	1.04 %; 11.27 g/l (process) 0.70 %; 7.58 g/l (potential) 1.74 %; 18.85 g/l (total) (ASTM D5403)

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 heat, spark and flame. Avoid temperatures above 26°C (80°F). Store away from incompatible materials.

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 (vapor)

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Urethane Polymer	No	No	No
Isobornyl acrylate	No	No	No
Acrylate ester	No	No	No
Modified acrylamide	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
Silica, amorphous, treated	No	No	No
Ethylene/methyl Acrylate	No	No	No
Photoinitiator	No	No	No

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

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 classifications in this sections are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

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

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
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 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/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: 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. 2-5, 8-11, and 15

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