



Revision Number: 003.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE® 312 ADHESIVE
Product type: Anaerobic Adhesive

IDH number: 135398
Item number: 31231
Region: United States

Company address:
 Henkel Corporation
 1001 Trout Brook Crossing
 Rocky Hill, Connecticut 06067

Contact information:
 Telephone: 860.571.5100
 Emergency telephone: 860.571.5100
 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Liquid	HEALTH:	*2
Color:	Clear, Amber	FLAMMABILITY:	1
Odor:	Sharp	PHYSICAL HAZARD:	1
WARNING:		Personal Protection:	See MSDS Section 8
CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF SWALLOWED OR INHALED.			

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation:	Causes respiratory tract irritation. Vapors and mists will irritate nose and throat and possibly eyes. May be harmful if inhaled.
Skin contact:	Causes skin irritation. May cause allergic skin reaction.
Eye contact:	Vapors may irritate eyes. Contact with eyes will cause irritation.
Ingestion:	May be harmful if swallowed.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders. Acrylic acid: Respiratory disorders. Lung disease.

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	%
Hydroxyalkyl methacrylate	27813-02-1	30 - 60
Polyurethane methacrylate resin	Proprietary	30 - 60
Polyurethane methacrylate resin	Proprietary	10 - 30
Acrylic acid	79-10-7	5 - 10
Cumene hydroperoxide	80-15-9	1 - 5
Polyglycol dimethacrylate	109-16-0	1 - 5
Methacrylic acid	79-41-4	1 - 5

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:	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. Never give anything by mouth to an unconscious person. Keep individual calm. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 93.4 °C (> 200.12 °F) Tagliabue 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:	None expected.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Irritating organic vapours. Isocyanates. Hydrogen cyanide. Amines.

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:	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.

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.
Storage:	For safe storage, store at or below 38 °C (100.4 °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
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
Polyurethane methacrylate resin	None	None	None	None
Polyurethane methacrylate resin	None	None	None	None
Acrylic acid	2 ppm TWA (SKIN)	None	None	1 ppm TWA 3 ppm STEL (SKIN)
Cumene hydroperoxide	None	None	1 ppm (6 mg/m ³) TWA (SKIN)	None
Polyglycol dimethacrylate	None	None	None	None
Methacrylic acid	20 ppm TWA	None	None	None

Engineering controls:

Provide adequate local exhaust ventilation to maintain worker exposure below 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, Amber
Odor:	Sharp
Odor threshold:	Not available
pH:	Not applicable
Vapor pressure:	< 10 mm Hg (27 °C (80.6 °F))
Boiling point/range:	> 149 °C (> 300.2 °F)
Melting point/ range:	Not available
Specific gravity:	1.08
Vapor density:	Not available
Flash point:	> 93.4 °C (> 200.12 °F) Tagliabue 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:	6.44 %; 61.48 g/l

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Phenolics. Irritating organic vapours. Isocyanates. Hydrogen cyanide. Amines.
Incompatible materials:	Strong oxidizing agents. Strong reducing agents. Amines. Strong acids. Heavy metals. Peroxides. Free radical initiators.
Conditions to avoid:	Store away from incompatible materials. Keep away from heat, spark and flame.

11. TOXICOLOGICAL INFORMATION

Acute oral product toxicity:	LD50 (rat) > 10,000 mg/kg
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Acute dermal product toxicity:

LD50 (rabbit) > 5,000 mg/kg

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Hydroxyalkyl methacrylate	No	No	No
Polyurethane methacrylate resin	No	No	No
Polyurethane methacrylate resin	No	No	No
Acrylic acid	No	No	No
Cumene hydroperoxide	No	No	No
Polyglycol dimethacrylate	No	No	No
Methacrylic acid	No	No	No

Hazardous components	Health Effects/Target Organs
Hydroxyalkyl methacrylate	Irritant, Allergen
Polyurethane methacrylate resin	Irritant, Allergen
Polyurethane methacrylate resin	Irritant, Allergen
Acrylic acid	Allergen, Corrosive, Irritant, Kidney, Liver
Cumene hydroperoxide	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Polyglycol dimethacrylate	Irritant, Allergen
Methacrylic acid	Corrosive, 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 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). Acrylic acid (CAS# 79-10-7). Cumene hydroperoxide (CAS# 80-15-9).
California Proposition 65:	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:	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. 2,3,4,5,8,9,10,11, and 15

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