Material Safety Data Sheet







1. PRODUCT AND COMPANY IDENTIFICATION

IDH number:

Product name: Product type:

LOCTITE 680 RETAIN CMPND 250ML Adhesive

Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

1835196 Item number: 1835196 Region: United States Contact information: Telephone: 860.571.5100 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

	EMERGENCY OVERVIEW				
Physical s	state:	iquid	<u>HMIS:</u> HE	EALTH:	*2
Color:		Green	FL	AMMABILITY:	1
Odor:	C	Characteris	tic PF	IYSICAL HAZARD:	1
				ersonal Protection:	See MSDS Section 8
	WARNING:	CA	JSES EYE, SKIN AND RESF	PIRATORY TRACT IRF	RITATION.
		MA	Y CAUSE ALLERGIC SKIN F	REACTION.	
		MA	Y BE HARMFUL IF SWALLO	WED	
Relevant	routes of exposure:		Skin, Inhalation, Eyes		
Potential	Health Effects				
	Inhalation:		May cause irritation to nose and thr	roat.	
	Skin contact:		May cause allergic skin reaction. Ca		duct may be harmful if it is
Eye contact:			Vapors may irritate eyes. Contact with eyes will cause irritation.		
	Ingestion:		May cause gastrointestinal tract irrit		
Existing c exposure:	onditions aggravat	ed by	Eye, skin, and respiratory disorders	s. Acrylic acid: Respiratory di	sorders. Lung disease.
			This material is considered hazardo 1910.1200).	ous by the OSHA Hazard Co	mmunication Standard (29 CFF

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%	
Dimethacrylate ester	Proprietary	30 - 60	
Methacrylate monomer	Proprietary	10 - 30	
Fumarate resin	Proprietary	10 - 30	
2-Hydroxyethyl methacrylate	868-77-9	10 - 30	
Polyurethane methacrylate resin	Proprietary	5 - 10	
Acrylic acid	79-10-7	1 - 5	
Hydroxyalkyl methacrylate	27813-02-1	1 - 5	
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1	

4. FIRST AID MEASURES		
Inhalation:	Move to fresh air. 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 leas 15 minutes, holding eyelids open all the time. Get medical attention.	
Ingestion:	Do not induce vomiting. Keep individual calm. Get medical attention.	
5. FI	RE FIGHTING MEASURES	
Flash point:	93.3 °C (199.94 °F)	
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:	None	
Hazardous combustion products:	Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. 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:	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:	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation.
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
Dimethacrylate ester	None	None	None	None
Methacrylate monomer	None	None	None	None
Fumarate resin	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
Polyurethane methacrylate resin	None	None	None	None
Acrylic acid	2 ppm TWA (SKIN)	None	None	1 ppm TWA 3 ppm STEL (SKIN)
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
1-Acetyl-2-phenylhydrazine	None	None	None	None

Engineering controls:

Respiratory protection:

Use local exhaust ventilation if the potential for airborne exposure exists.

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.

Eye/face protection:

Safety goggles or safety glasses with side shields.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Color: Odor: Odor threshold: pH: . Vapor pressure: Boiling point/range: Melting point/ range: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content:

Liquid Green Characteristic Not available. Not available. Not available. Not available. Not available. Not available. 93.3 °C (199.94 °F) Not available. Not available. Not available. Not available. Not available. Not available. Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Not available.
Hazardous decomposition products:	Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Irritating organic vapours.
Incompatible materials:	Not available.
Conditions to avoid:	See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

Skin protection:

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	
Dimethacrylate ester	No	No	No	
Methacrylate monomer	No	No	No	
Fumarate resin	No	No	No	
2-Hydroxyethyl methacrylate	No	No	No	
Polyurethane methacrylate resin	No	No	No	
Acrylic acid	No	No	No	
Hydroxyalkyl methacrylate	No	No	No	
1-Acetyl-2-phenylhydrazine	No	No	No	

Hazardous components	Health Effects/Target Organs
Dimethacrylate ester	Irritant, Allergen
Methacrylate monomer	No Records
Fumarate resin	No Target Organs
2-Hydroxyethyl methacrylate	Irritant, Allergen
Polyurethane methacrylate resin	Irritant, Allergen
Acrylic acid	Allergen, Corrosive, Irritant, Kidney, Liver
Hydroxyalkyl methacrylate	Irritant, Allergen
1-Acetyl-2-phenylhydrazine	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity

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

U.S. Department of Transportation Gro	und (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: CERCLA/SARA Section 311/312: CERCLA/SARA 313:	None above reporting de minimis Immediate Health, Delayed Health 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).
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:	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: 2, 4

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