Safety Data Sheet



Revision Number: 006.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product type/use: Acrylic Restriction of Use: None i Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

LOCTITE 383 known as Output(TM) H/S Thermal Conduct Acrylics None identified IDH number:

146462

Item number:12991Region:United StatesContact information:Telephone: +1 (860) 571-5100MEDICAL EMERGENCY Phone: Poison Control Center1-877-671-4608 (toll free) or 1-303-592-1711TRANSPORT EMERGENCY Phone: CHEMTREC1-800-424-9300 (toll free) or 1-703-527-3887Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW		
DANGER:	CAUSES SKIN IRRITATION.	
	MAY CAUSE AN ALLERGIC SKIN REACTION.	
	CAUSES SERIOUS EYE DAMAGE.	
	MAY CAUSE RESPIRATORY IRRITATION.	
	MAY DAMAGE FERTILITY OR THE UNBORN CHILD.	

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1
REPRODUCTIVE TOXICITY	1B
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)



Precautionary Statements

Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection.
Response:	IF ON SKIN: Wash with plenty of water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal:	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*	
Aluminum	7429-90-5	30 - 60	
Tetrahydrofurfuryl methacrylate	2455-24-5	10 - 30	
methacrylic acid	79-41-4	1 - 5	
2-Ethylhexyl methacrylate	688-84-6	1 - 5	
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5	
1,3-Butylene glycol dimethacrylate	1189-08-8	0.1 - 1	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	0.1 - 1	
Talc	14807-96-6	0.1 - 1	

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES			
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.		
Skin contact:	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). 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 medical attention.		
Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.		
Symptoms:	See Section 11.		
5. FI	RE FIGHTING MEASURES		
Extinguishing media:	Foam, dry chemical or carbon dioxide. Do not use high volume water jet.		
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.		
Unusual fire or explosion hazards:	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.		
Hazardous combustion products:	Oxides of carbon. Toxic and irritating vapors.		

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. Remove all sources of ignition. 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. Make sure containers are properly grounded before use or transfer of material. Refer to Section 8.

Storage:

For safe storage, store at or below 32 °C (89.6 °F) Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

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 Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Aluminum	1 mg/m3 TWA Respirable fraction.	15 mg/m3 PEL (as Al) Total dust. 5 mg/m3 PEL (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust.	None	None
Tetrahydrofurfuryl methacrylate	None	None	None	None
methacrylic acid	20 ppm TWA	None	None	None
2-Ethylhexyl methacrylate	None	None	None	None
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
1,3-Butylene glycol dimethacrylate	None	None	None	None
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Talc	2 mg/m3 TWA Respirable fraction.	0.1 mg/m3 TWA Respirable. 2.4 MPPCF TWA Respirable. 20 MPPCF TWA	None	50 ppm

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. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.
Skin protection:	Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): **VOC content:** Viscosity: Decomposition temperature:
- Liquid Gray Mild Not available. Not available. < 5 mm hg (23 °C (73.4 °F)) > 200 °C (> 392°F) Not available. 2.32 Not available. > 93 °C (> 199.4 °F) Tagliabue closed cup Not available. Not available. Not available. Not applicable Faster than ether. Soluble Not available. 0 % Not available. Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.		
Hazardous reactions:	None under normal processing. Polymerization may occur at elevated temperature or in the presence of incompatible materials.		
Hazardous decomposition products:	Oxides of carbon. Oxides of sulfur. Alcohols. Hydrogen chloride. Irritating organic vapours. Toxic fumes.		
Incompatible materials:	Oxidizing agents. Reducing agents. Strong acids and strong bases. Free radical initiators. Oxygen scavengers. Heavy metals. Nitrates. Alkalis.		
Reactivity:	Not available.		
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials. UV light. Inert gas blanketing. Avoid static discharge. Avoid moisture. Protect from direct sunlight.		

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation:	May cause respiratory tract irritation. May cause central nervous system effects.
Skin contact:	Causes skin irritation. May cause allergic skin reaction.
Eye contact:	Causes serious eye damage.
Ingestion:	May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Aluminum	None	Central nervous system, Irritant, Lung	
Tetrahydrofurfuryl methacrylate	None	Irritant, Allergen	
methacrylic acid	Oral LD50 (Mouse) = 1,332 mg/kg Oral LD50 (Mouse) = 1,600 mg/kg Oral LD50 (Mouse) = 1,250 mg/kg Oral LD50 (Rabbit) = 1,200 mg/kg Oral LD50 (Rat) = 1,060 mg/kg Oral LD50 (Rat) = 2,224 mg/kg Dermal LD50 (Rabbit) = 500 mg/kg	Corrosive, Irritant, Allergen	
2-Ethylhexyl methacrylate	Oral LD50 (Rat) = > 2,000 mg/kg	Irritant, Allergen	
Silica, amorphous, fumed, crystal-free	None	Nuisance dust	
1,3-Butylene glycol dimethacrylate	None	Irritant, Allergen	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant	
Talc	None	Irritant, Lung, Some evidence of carcinogenicity	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminum	No	No	No
Tetrahydrofurfuryl methacrylate	No	No	No
methacrylic acid	No	No	No
2-Ethylhexyl methacrylate	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
1,3-Butylene glycol dimethacrylate	No	No	No
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Talc	No	Group 2B	No

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 transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)		
Proper shipping name:	RQ, Environmentally hazardous substance, liquid, n.o.s.	
Hazard class or division:	9	
Identification number:	UN 3082	
Packing group:	III	
DOT Hazardous Substance(s):	alpha, alpha-Dimethylbenzylhydroperoxide, Carbon tetrachloride	

International Air Transportation (ICAO/IATA) Proper shipping name: Hazard class or division: Identification number: Packing group:	RQ, Environmentally hazardous substance, liquid, n.o.s. 9 UN 3082 III
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group:	RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 UN 3082 III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 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). Aluminum (CAS# 7429-90-5).
CERCLA Reportable quantity:	Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)
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: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3,15

Prepared by: F	Product Safety and Regulatory Affairs
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Issue date: 12/06/2019

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