Safety Data Sheet



Revision Number: 002.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product type:Output
AcrylicsRestriction of Use:None ideCompany address:Henkel Electronic Materials LLC14000 Jamboree RoadIrvine, CA 92606

LOCTITE 383 known as Loctite(R) 383 IDH number: Output(TM) Adhe Acrylics Item number None identified Region: Contact infor rials LLC Telephone: +'

Item number:33348Region:United StatesContact information:Telephone: +1 (888) 943-6535MEDICAL 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.henkel.com/electronics

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2. HAZARDS IDENTIFICATION

	EMERGENCY OVERVIEW
DANGER:	CAUSES SKIN IRRITATION.
	MAY CAUSE AN ALLERGIC SKIN REACTION.
	CAUSES SERIOUS EYE DAMAGE.
	HARMFUL IF INHALED.
	MAY CAUSE DROWSINESS OR DIZZINESS.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY INHALATION	4
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)	

Precautionary Statements

Prevention:	Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves.
Response:	IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Immediately call a poison control center or physician. 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	
Methacrylate Ester	Proprietary	10 - 30	
Methacrylic acid	79-41-4	1 - 5	
Alkyl methacrylate	Proprietary	1 - 5	
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5	
Substituted silane	Proprietary		
Epoxy resin	Proprietary	0.1 - 1	
Methacrylate monomer	Proprietary	0.1 - 1	
Cumene hydroperoxide	80-15-9	0.1 - 1	

* Exact percentage is a 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:	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.	
Symptoms:	See Section 11.	
5. F	IRE 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.	
Unusual fire or explosion hazards:	Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers. In case of fire, keep containers cool with water spray.	
Hazardous combustion products:	Oxides of carbon. Oxides of sulfur. Alcohols. Aldehydes. Hydrogen chloride. Toxic fumes. Acrid smoke and fumes. 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. 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:

Provide adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. 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 container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store away from heat, sparks, flames, or other sources of ignition.

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.	5 mg/m3 PEL (as Al) Respirable dust. 15 mg/m3 PEL (as Al) Total dust.	None	None
Methacrylate Ester	None	None	None	None
Methacrylic acid	20 ppm TWA	None	None	None
Alkyl 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
Substituted silane	None	None	None	None
Epoxy resin	None	None	None	None
Methacrylate monomer	None	None	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None

Engineering controls:

Respiratory protection:

Eye/face protection:

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Liquid

Gray

Mild

Not available.

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:

Not available. $< 5 \text{ mm hg } (23 \degree C (73.4 \degree F))$ $> 200 \degree C (> 392\degree F)$ Not available. 2.32Not available. $> 93 \degree C (> 199.4 \degree F)$ Tagliabue closed cup Not available. Not available.

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Skin protection:

Autoignition temperature: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature:

Not available. Faster than ether. Soluble Not available. 34.9 %; 810 g/l 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. Acids. Bases. Free radical initiators. Oxygen scavengers. Heavy metals. Peroxides. Nitrates. Alkalis. Ammonia.
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:	Harmful if inhaled. May cause respiratory tract irritation.
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 Central nervous system, Irritant, Lung	
Aluminum	None		
Methacrylate Ester	None	Irritant, Allergen	
Methacrylic acid	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 Inhalation LC50 (RAT, 4 h) = 7.1 mg/l	Corrosive, Irritant, Allergen	
Alkyl methacrylate	Oral LD50 (RAT) = > 2,000 mg/kg	Irritant, Allergen	
Silica, amorphous, fumed, crystal-free	None	Nuisance dust	
Substituted silane	None	Allergen, Irritant	
Epoxy resin	None	Allergen, Irritant	
Methacrylate monomer	None	Irritant, Allergen	
Cumene hydroperoxide	None	Allergen, Central nervous system, Corrosive, Irritant, Mutagen	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminum	No	No	No
Methacrylate Ester	No	No	No
Methacrylic acid	No	No	No
Alkyl methacrylate	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Substituted silane	No	No	No
Epoxy resin	No	No	No
Methacrylate monomer	No	No	No
Cumene hydroperoxide	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:

Hazardous waste number:

Dispose of according to Federal, State and local governmental regulations.

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 substances, liquid, n.o.s.
Hazard class or division:	9
Identification number:	UN 3082
Packing group:	III
DOT Hazardous Substance(s):	alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA) Proper shipping name: Hazard class or division: Identification number: Packing group:	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:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 UN 3082 III
15. REGULATORY INFORMATION	
United States Regulatory Information	

TSCA 8 (b) Inventory Status: TSCA 12 (b) Export Notification:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. 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).
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: New Safety Data Sheet format.

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