

Revision Number: 003.1

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:LOCTProduct type/use:AdhesRestriction of Use:NoneCompany address:Henkel CorporationOne Henkel WayRocky Hill, Connecticut 06067

LOCTITE EA 460 60Z AERO Adhesive for the Aerospace Industry None identified IDH number:2559109Item number:A03100060Region: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

 WARNING:
 CAUSES SKIN IRRITATION.

 MAY CAUSE AN ALLERGIC SKIN REACTION.
 CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

PICTOGRAM(S)

Precautionary Statements

Prevention:	Avoid breathing dust or fumes. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.
Response:	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage:	Not prescribed
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*	
Epoxy resin	Proprietary	60 - 80	
Glass, oxide, chemicals	65997-17-3	10 - 30	
Guanidine derivative	Proprietary	1 - 5	
Treated fumed silica	67762-90-7	1 - 5	
Amine	Proprietary	1 - 5	
Epoxy resin	Proprietary	1 - 5	

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

4.	FIRST AID MEASURES
Inhalation:	If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.
Skin contact:	Remove contaminated clothing and footwear. Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medica attention.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	Get immediate medical attention. Do not induce vomiting. Never give anythin by mouth to an unconscious person.
Symptoms:	See Section 11.
Notes to physician:	Treat symptomatically and supportively.
5. F	IRE FIGHTING MEASURES
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear full protective clothing. Wear self-contained breathing apparatus.
Unusual fire or explosion hazards:	May liberate large quantities of dense, foul-smelling smoke which may conta unidentified toxic gasses.
Hazardous combustion products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
6. ACCII	DENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Prevent further leakage or spillage if safe to do so. Wear appropriate protective equipment and clothing during clean-up. Do not allow product to enter sewer or waterways.
Clean-up methods:	Scrape up spilled material and place in a closed container for disposal. Dispose of according to Federal, State and local governmental regulations.
7.	HANDLING AND STORAGE
Handling:	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not breathe fumes or dust from this material. For industrial use only.
Storage:	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, please review labels on container or check the Technical Data Sheet.

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
Epoxy resin	None	None	None	None
Glass, oxide, chemicals	5 mg/m3 TWA Inhalable fraction. 10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Guanidine derivative	None	None	None	None
Treated fumed silica	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Amine	None	None	None	None
Epoxy resin	None	None	None	None

Engineering controls:

Respiratory protection:

Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.

Eye/face protection:

Skin protection:

Wear safety glasses; chemical goggles (if splashing is possible).

Wear impervious gloves for prolonged contact. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Solid

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:

Amber Slight Not available. Not applicable Not applicable 246 °C (474.8 °F) Not determined 1.0 Not applicable Not applicable Not determined Not determined Not determined Not applicable Not applicable Not miscible or difficult to mix Not determined <1% Not available. Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
Incompatible materials:	This product may react with strong acids, bases and oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	May cause respiratory tract irritation.
Skin contact:	This product may cause irritation to the skin. This product may cause an allergic skin reaction.
Eye contact:	This product may cause irritation to the eyes.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Epoxy resin None		Allergen, Irritant	
Glass, oxide, chemicals	None	Allergen, Respiratory	
Guanidine derivative	None Allergen, Central nervous system, Irritant		
Treated fumed silica	None	Irritant	
Amine	Oral LD50 (Rat) = 6,400 mg/kg Oral LD50 (Rat) = 7,500 mg/kg Oral LD50 (Rat) = 4,000 mg/kg	Irritant	
Oral LD50 (Rabbit) = 1,980 mg/kg Oral LD50 (Robbit) = 1,980 mg/kg Oral LD50 (Mouse) = 15,600 mg/kg Oral LD50 (Rat) = > 1,000 mg/kg Oral LD50 (Mouse) = > 500 mg/kg Dermal LD50 (Rabbit) = 20 mg/kg Dermal LD50 (Rat) = > 1,600 mg/kg Dermal LD50 (Mouse) = > 800 mg/kg Dermal LD50 (Mouse) = > 800 mg/kg		Allergen, Central nervous system, Irritant, Liver, Respiratory	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epoxy resin	No	No	No
Glass, oxide, chemicals	Reasonably Anticipated to be a Human Carcinogen.	No	No
Guanidine derivative	No	No	No
Treated fumed silica	No	No	No
Amine	No	No	No
Epoxy resin	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

Harmful to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:

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

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:

Hazard class or division: Identification number: Packing group: Not regulated (Up to 6.8 kg max per inner/primary package when shipped as originally packaged only) None None None

International Air Transportation (ICAO/IATA)

Proper shipping name:

Hazard class or division: Identification number: Packing group: Not regulated (Up to 6.8 kg max per inner/primary package when shipped as originally packaged only) None None

Water Transportation (IMO/IMDG)

Proper shipping name:

Hazard class or division: Identification number: Packing group: Not regulated (Up to 6.8 kg max per inner/primary package when shipped as originally packaged only) None None None

15. REGULATORY INFORMATION

None

United States Regulatory Information

TSCA 8 (b) Inventory Status: TSCA 12 (b) Export Notification:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) 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 None above reporting de minimis.
California Proposition 65:	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. This product contains a chemical known in the State of California to cause cancer.
Canada Regulatory Information	
CEPA DSL/NDSL Status:	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

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