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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE EA 460 6OZ AERO known as **PL460 TUBE/ 6 OZ EACH** **IDH number:** 921746
Product type: Adhesive for the Aerospace Industry **Item number:** AO3100002
Restriction of Use: None identified **Region:** United States
Company address: **Contact information:**
 Henkel Corporation Telephone: (860) 571-5100
 One Henkel Way MEDICAL EMERGENCY Phone: Poison Control Center
 Rocky Hill, Connecticut 06067 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

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 thoroughly after handling. 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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. 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.

2 % of the mixture consists of ingredient(s) of unknown acute toxicity.

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 - 100
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

* Exact percentage is a 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 medical 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 anything by mouth to an unconscious person.
Symptoms:	See Section 11.
Notes to physician:	Treat symptomatically and supportively.

5. FIRE 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 contain 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. ACCIDENTAL 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	10 mg/m ³ TWA Inhalable dust. 3 mg/m ³ TWA Respirable fraction.	15 mg/m ³ TWA Total dust. 5 mg/m ³ TWA Respirable fraction.	None	None
Guanidine derivative	None	None	None	None
Treated fumed silica	10 mg/m ³ TWA Inhalable dust. 3 mg/m ³ TWA Respirable fraction.	15 mg/m ³ TWA Total dust. 5 mg/m ³ TWA Respirable fraction.	None	None
Amine	None	None	None	None
Epoxy resin	None	None	None	None

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

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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Color:	Amber
Odor:	Slight
Odor threshold:	Not available.
pH:	Not applicable
Vapor pressure:	Not applicable
Boiling point/range:	246 °C (474.8 °F)
Melting point/ range:	Not determined
Specific gravity:	1.0
Vapor density:	Not applicable
Flash point:	Not applicable
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined
Autoignition temperature:	Not determined
Evaporation rate:	Not applicable
Solubility in water:	Not miscible or difficult to mix
Partition coefficient (n-octanol/water):	Not determined
VOC content:	< 1 %
Viscosity:	Not available.
Decomposition temperature:	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, Eyes, 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
Epoxy resin	Oral LD50 (RABBIT) = 1,980 mg/kg Oral LD50 (RAT) = > 1,000 mg/kg Dermal LD50 (RABBIT) = 20 mg/kg Dermal LD50 (RAT) = > 1,600 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	No	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.

Hazardous waste number: Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

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: Not regulated (Up to 6.8 kg max per inner/primary package when shipped as originally packaged only)

Hazard class or division: None

Identification number: None

Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated (Up to 6.8 kg max per inner/primary package when shipped as originally packaged only)

Hazard class or division: None

Identification number: None

Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated (Up to 6.8 kg max per inner/primary package when shipped as originally packaged only)

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 minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: None above reporting de minimis

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.

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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