



Revision Number: 002.1

Issue date: 07/12/2011

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** LOCTITE EF 562 50M AERO known as MA562 .050 12IN X 24IN 2SF  
**Product type:** Adhesive for the Aerospace Industry  
**Company address:** Henkel Corporation  
 2850 Willow Pass Road  
 Bay Point, California 94565

**IDH number:** 750046  
**Item number:** CF3100502  
**Region:** United States

**Contact information:**  
 Telephone: 925.458.8000 Fax: 925.458.8030  
 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 state:** Solid  
**Color:** Amber  
**Odor:** Little intrinsic odor

**HEALTH:** \*2  
**FLAMMABILITY:** 1  
**PHYSICAL HAZARD:** 1  
**Personal Protection:** See MSDS Section 8

**WARNING:** MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.  
 MAY CAUSE ALLERGIC SKIN REACTION.

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects**

**Inhalation:** Prolonged inhalation of large concentrations can be irritating to lungs, and mucous membranes of nose and throat.  
**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.

**Existing conditions aggravated by exposure:** Eye, skin and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous components	CAS NUMBER	%
Epoxy resin	Proprietary	60 - 100
Epoxy resin	Proprietary	10 - 30
Aluminium hydroxide	21645-51-2	5 - 10
Quarternary amine/mineral clay complex	Proprietary	1 - 5
Glass	Proprietary	1 - 5
Polyamide resin	Proprietary	1 - 5
Cyanoguanidine	461-58-5	1 - 5
Hydrazide	Proprietary	1 - 5
Polymer	Proprietary	1 - 5

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If inhaled, immediately remove the affected person to fresh air. If breathing is difficult, give oxygen. Get immediate medical attention.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.
<b>Notes to physician:</b>	Treat symptomatically and supportively.

#### 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	> 200 °F (> 93.33 °C)
<b>Autoignition temperature:</b>	Not determined
<b>Flammable/Explosive limits - lower:</b>	Not determined
<b>Flammable/Explosive limits - upper:</b>	Not determined
<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Concentrated vapors can be ignited by high intensity energy source.
<b>Hazardous combustion products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.</b>	
<b>Environmental precautions:</b>	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.
<b>Clean-up methods:</b>	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

<b>Handling:</b>	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not breathe fumes or dust from this material. Do not take internally.
<b>Storage:</b>	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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Epoxy resin	None	None	None	None
Epoxy resin	None	None	None	None
Aluminium hydroxide	10 mg/m <sup>3</sup> TWA (as Al) Total dust. 1 mg/m <sup>3</sup> TWA Respirable fraction.	15 mg/m <sup>3</sup> TWA (as Al) Total dust. 5 mg/m <sup>3</sup> TWA (as Al) Respirable fraction.	None	None
Quarternary amine/mineral clay complex	None	None	None	None
Glass	10 mg/m <sup>3</sup> TWA Inhalable dust. 3 mg/m <sup>3</sup> TWA Respirable fraction.	15 mg/m <sup>3</sup> TWA Total dust. 5 mg/m <sup>3</sup> TWA Respirable fraction.	None	None
Polyamide resin	None	None	None	None
Cyanoguanidine	None	None	None	None
Hydrazide	0.1 mg/m <sup>3</sup> TWA Inhalable fraction.	None	None	None
Polymer	None	None	None	None

**Engineering controls:**

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

**Respiratory protection:**

If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

**Eye/face protection:**

Safety goggles or safety glasses with side shields.

**Skin protection:**

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Solid
<b>Color:</b>	Amber
<b>Odor:</b>	Little intrinsic odor
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	Not determined
<b>Boiling point/range:</b>	Not applicable
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	1.2
<b>Vapor density:</b>	Not applicable
<b>Flash point:</b>	> 200 °F (> 93.33 °C)
<b>Flammable/Explosive limits - lower:</b>	Not determined
<b>Flammable/Explosive limits - upper:</b>	Not determined
<b>Autoignition temperature:</b>	Not determined
<b>Evaporation rate:</b>	Not applicable
<b>Solubility in water:</b>	Not miscible
<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>VOC content:</b>	< 1 %

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
<b>Incompatible materials:</b>	This product may react with strong acids, bases and oxidizing agents. Amines.
<b>Conditions to avoid:</b>	Keep away from heat, ignition sources and incompatible materials. High temperatures.

## 11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epoxy resin	No	No	No
Epoxy resin	No	No	No
Aluminium hydroxide	No	No	No
Quarternary amine/mineral clay complex	No	No	No
Glass	No	No	No
Polyamide resin	No	No	No
Cyanoguanidine	No	No	No
Hydrazide	No	No	No
Polymer	No	No	No

Hazardous components	Health Effects/Target Organs
Epoxy resin	Irritant, Allergen
Epoxy resin	Irritant, Allergen
Aluminium hydroxide	Irritant, Lung, Respiratory
Quarternary amine/mineral clay complex	No Records
Glass	Allergen, Respiratory
Polyamide resin	No Records
Cyanoguanidine	Allergen, Central nervous system, Eyes, Irritant
Hydrazide	Adrenals, Irritant, Kidney, Liver, Mutagen, Nervous System
Polymer	Irritant, Lung

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Toxic 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

### U.S. Department of Transportation Ground (49 CFR)

<b>Proper shipping name:</b>	Not regulated
<b>Hazard class or division:</b>	None
<b>Identification number:</b>	None
<b>Packing group:</b>	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:** None above reporting de minimus  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health  
**CERCLA/SARA 313:** None above reporting de minimus  
**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:** 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.  
**WHMIS hazard class:** D.2.B

**16. OTHER INFORMATION**

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

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