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**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** LOCTITE EDAG 503 62% E&C known as DAG503 62%  
**Product type:** Lubricant  
**Restriction of Use:** None identified  
**Company address:** Henkel Electronic Materials LLC  
14000 Jamboree Road  
Irvine, CA 92606

**IDH number:** 1224957

**Region:** United States

**Contact information:**  
Telephone: +1 (888) 943-6535  
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.henkel.com/electronics

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**DANGER:** HIGHLY FLAMMABLE LIQUID AND VAPOR.  
CAUSES SKIN IRRITATION.  
CAUSES SERIOUS EYE IRRITATION.  
MAY CAUSE RESPIRATORY IRRITATION.  
MAY CAUSE DROWSINESS OR DIZZINESS.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	2
SKIN IRRITATION	2
EYE IRRITATION	2A
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection.

**Response:** If on skin (or hair): Take off immediately all contaminated clothing. 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. Call a poison control center or physician if you feel unwell. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

**Storage:** Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. 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*
None	None	None

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.
<b>Skin contact:</b>	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.
<b>Symptoms:</b>	See Section 11.
<b>Notes to physician:</b>	Treat symptomatically and supportively.

### 5. FIRE FIGHTING MEASURES

<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>	DANGEROUS when exposed to heat or flame. This material can be ignited by flame or spark under all normal atmospheric conditions. Formation of toxic gases is possible during heating or in fires.
<b>Hazardous combustion products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

### 6. ACCIDENTAL RELEASE MEASURES

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

<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>	Absorb spill with inert material. Shovel material into appropriate 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. Avoid breathing vapors or mists of this product. For industrial use only. Ground and bond all equipment as required (when transferring products).
- Storage:** Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Ground and bond metal containers for liquid transfer to avoid static sparks.

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
None	None	None	None	None

- Engineering controls:** Not available.
- Respiratory protection:** Not available.
- Eye/face protection:** Not available.
- Skin protection:** Not available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state:** Liquid
- Color:** Silver
- Odor:** Solvent
- Odor threshold:** Not available.
- pH:** Not applicable
- Vapor pressure:** 15 mm hg
- Boiling point/range:** 117 - 118 °C (242.6 - 244.4 °F)
- Melting point/ range:** < 0 °C (< 32°F)
- Specific gravity:** 1.77
- Vapor density:** > 1.0
- Flash point:** Not available.
- Flammable/Explosive limits - lower:** 1.2 %
- Flammable/Explosive limits - upper:** 8 %
- Autoignition temperature:** 460 °C (860°F)
- Evaporation rate:** Not applicable
- Solubility in water:** Slight
- Partition coefficient (n-octanol/water):** Not available.
- VOC content:** Not available.
- Viscosity:** 1,700 cp
- Decomposition temperature:** Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	Will not occur.
<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.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Elevated temperatures.

## 11. TOXICOLOGICAL INFORMATION

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

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	This product is irritating to the respiratory system. May cause central nervous system effects with nausea, dizziness and headache.
<b>Skin contact:</b>	This product is irritating to the skin. Argyria (a non-toxic, cosmetic blue-gray discoloration of the skin and mucous membranes that is irreversible).
<b>Eye contact:</b>	Causes eye irritation. Redness. Tearing.
<b>Ingestion:</b>	May cause gastrointestinal tract irritation if swallowed. May cause dizziness, incoordination, headache, nausea, and vomiting.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
None	None	None

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
None	None	None	None

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

<b>Recommended method of disposal:</b>	Dispose of according to Federal, State and local governmental regulations.
<b>Hazardous waste number:</b>	D011: Silver (Check TCLP Level).

## 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)

<b>Proper shipping name:</b>	Methyl isobutyl ketone
<b>Hazard class or division:</b>	3
<b>Identification number:</b>	UN 1245
<b>Packing group:</b>	II
<b>DOT Hazardous Substance(s):</b>	Silver, Methyl isobutyl ketone

**International Air Transportation (ICAO/IATA)**

**Proper shipping name:** Methyl isobutyl ketone  
**Hazard class or division:** 3  
**Identification number:** UN 1245  
**Packing group:** II

**Water Transportation (IMO/IMDG)**

**Proper shipping name:** METHYL ISOBUTYL KETONE (Silver)  
**Hazard class or division:** 3  
**Identification number:** UN 1245  
**Packing group:** II  
**Marine pollutant:** Silver

**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:** CP Difluoroethylene-hexafluoropropene (CAS# 9011-17-0).  
**CERCLA/SARA Section 302 EHS:** None above reporting de minimis  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health, Fire  
**CERCLA/SARA Section 313:** 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). Silver (CAS# 7440-22-4). Methyl isobutyl ketone (CAS# 108-10-1).  
**CERCLA Reportable quantity:** Silver (CAS# 7440-22-4) 1,000 lbs. (454 kg)  
Methyl isobutyl ketone (CAS# 108-10-1) 5,000 lbs. (2,270 kg)  
**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

**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 Material Safety Data Sheet format.

**Prepared by:** Timothy Pratt, Regulatory Affairs Specialist

**Issue date:** 11/07/2014

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