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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE EDAG 503 62% E&C known as DAG50362%	IDH number:	1224957
Product type:	Lubricant	Region:	United States
Restriction of Use:	None identified	Contact information:	
Company address:	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	Telephone: +1 (860) 571-5100 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

DANGER: HIGHLY FLAMMABLE LIQUID AND VAPOR.
CAUSES SKIN IRRITATION.
CAUSES SERIOUS EYE 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 non-sparking tools. Take action to prevent static discharges. Avoid breathing vapors, mist, or spray. Wash affected area 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 victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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*
Silver	7440-22-4	50 - 60
Methyl isobutyl ketone	108-10-1	30 - 40
CP Difluoroethylene-hexafluoropropene	9011-17-0	5 - 10

* 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:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
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.
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:	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.
Hazardous combustion products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of Metals in Section 3. Toxic fumes. Irritating vapors.

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.
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Clean-up methods:

Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling:

Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed. 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. Keep away from heat, spark and flame. Protect from direct sunlight. 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
Silver	0.1 mg/m3 TWA Dust and fume.	0.01 mg/m3 PEL (as Ag)	None	None
Methyl isobutyl ketone	20 ppm TWA 75 ppm STEL	100 ppm (410 mg/m3) PEL	None	None
CP Difluoroethylene-hexafluoropropene	None	None	None	None

Engineering controls:

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

Respiratory protection:

Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

Eye/face protection:

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.

Skin protection:

Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

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:	16 °C (60.8 °F)
Flammable/Explosive limits - lower:	1.2 %
Flammable/Explosive limits - upper:	8 %
Autoignition temperature:	460 °C (860°F)
Flammability:	Not applicable
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

Stability: Stable under normal conditions of storage and use.
Hazardous reactions: None under normal processing.
Hazardous decomposition products: Oxides of carbon. Oxides of Metals in Section 3. Toxic fumes. Irritating vapors.
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. Protect from direct sunlight.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. May cause central nervous system effects with nausea, dizziness and headache.
Skin contact: Causes skin irritation. Argyria (a non-toxic, cosmetic blue-gray discoloration of the skin and mucous membranes that is irreversible).
Eye contact: Causes serious eye irritation. Redness. Tearing.
Ingestion: 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
Silver	Oral LD50 (Rat) = > 5,000 mg/kg Dermal LD50 (Rat) = > 2,000 mg/kg	Allergen, Eyes, Irritant, Respiratory, Skin
Methyl isobutyl ketone	Oral LD50 (Rat) = 2,080 mg/kg Dermal LD50 (Rabbit) = > 16,000 mg/kg Inhalation LC50 (Rat, 4 h) = 8.2 mg/l	Irritant, Central nervous system
CP Difluoroethylene-hexafluoropropene	None	No Target Organs

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Silver	No	No	No
Methyl isobutyl ketone	No	Group 2B	No
CP Difluoroethylene-hexafluoropropene	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

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: Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. D001: Ignitable. 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)

Proper shipping name: Methyl isobutyl ketone
Hazard class or division: 3
Identification number: UN 1245
Packing group: II
DOT Hazardous Substance(s): 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: Fire, Immediate Health, Delayed Health
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. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDL 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: 2,5,10

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