

# Safety Data Sheet



Revision Number: 002.0

Issue date: 01/09/2023

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** LOCTITE EDAG PE 409 E&C known as ELECTRODAG PE-409 1.5 KG  
**Product type/use:** PTF ink  
**Restriction of Use:** None identified  
**Company address:** Henkel Corporation  
One Henkel Way  
Rocky Hill, Connecticut 06067

**IDH number:** 1395629

**Region:** United States  
**Contact information:**  
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

**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 vapors, mist, or spray. 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*
Silver	7440-22-4	30 - 60
Diethylene glycol monoethyl ether acetate	112-15-2	10 - 30
Silver chloride	7783-90-6	5 - 10

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

IDH number: 1395629

Product name: LOCTITE EDAG PE 409 E&C known as ELECTRODAG PE-409 1.5 KG

Page 1 of 5

## 4. FIRST AID MEASURES

<b>Inhalation:</b>	If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Move to fresh air. If symptoms persist, seek medical advice.
<b>Skin contact:</b>	Rinse with running water and soap. Remove contaminated clothing and shoes. If symptoms develop and persist, get medical attention. Wash contaminated clothing before reuse. Thoroughly clean shoes before reuse. Discard any shoes or clothing items that cannot be decontaminated.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention immediately.
<b>Ingestion:</b>	Seek immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.
<b>Symptoms:</b>	See Section 11.

## 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
<b>Unusual fire or explosion hazards:</b>	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. In case of fire, keep containers cool with water spray.
<b>Hazardous combustion products:</b>	Oxides of carbon. 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.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	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

<b>Handling:</b>	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. See Section 8 of the SDS for Personal Protective Equipment.
<b>Storage:</b>	For safe storage, store between -20 °C (-4°F) and 50 °C (122°F) 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. Store in original container until ready to 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
Silver	0.1 mg/m <sup>3</sup> TWA Dust and fume.	0.01 mg/m <sup>3</sup> PEL (as Ag)	None	None
Diethylene glycol monoethyl ether acetate	None	None	None	None
Silver chloride	None	None	None	None

<b>Engineering controls:</b>	Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.
<b>Respiratory protection:</b>	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
<b>Eye/face protection:</b>	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.
<b>Skin protection:</b>	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Color:</b>	Silver
<b>Odor:</b>	acetic acid medium
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not applicable, Product is non-soluble (in water).
<b>Vapor pressure:</b>	< 1 hPa (20 °C (68°F))
<b>Boiling point/range:</b>	> 100 °C (> 212°F)
<b>Melting point/ range:</b>	Not applicable, Product is a liquid
<b>Specific gravity:</b>	2.49
<b>Vapor density:</b>	> 1 20 °C
<b>Flash point:</b>	> 93 °C (> 199.4 °F) no method
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not available.
<b>Flammability:</b>	The product is not flammable.
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Insoluble
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	Not available.
<b>Viscosity:</b>	10,000 - 40,000 mPa.s
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions of storage and use.
<b>Hazardous reactions:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of Metals in Section 3. Toxic fumes. Irritating vapors.
<b>Incompatible materials:</b>	Strong oxidizing agents. Strong acids and strong bases. Ammonia. Peroxides.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Keep away from heat, ignition sources and incompatible materials. Protect from direct sunlight.

## 11. TOXICOLOGICAL INFORMATION

<b>Relevant routes of exposure:</b>	Skin, Inhalation, Eyes
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## Potential Health Effects/Symptoms

<b>Inhalation:</b>	May cause respiratory tract irritation. May cause central nervous system effects with nausea, dizziness and headache.
<b>Skin contact:</b>	Causes skin irritation. May cause allergic skin reaction. Argyria (a non-toxic, cosmetic blue-gray discoloration of the skin and mucous membranes that is irreversible).
<b>Eye contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	Not expected under normal conditions of use. May cause gastrointestinal tract irritation if swallowed.

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 Inhalation LC50 (Rat, 4 h) = 750 µg/m <sup>3</sup> Inhalation LC50 (Rat, 4 h) = > 5.16 mg/l	Allergen, Eyes, Irritant, Respiratory, Skin
Diethylene glycol monoethyl ether acetate	Oral LD50 (Rabbit) = 4.4 g/kg Oral LD50 (Rat) = 11 g/kg Inhalation LC50 (Mouse, 4 h) = 568.963440 mg/l	Central nervous system, Irritant, Kidney
Silver chloride	None	Irritant, Eyes, Skin, Allergen, Respiratory, Nervous System

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Silver	No	No	No
Diethylene glycol monoethyl ether acetate	No	No	No
Silver chloride	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:** Follow all local, state, federal and provincial regulations for disposal.

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any packaging.

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

**Proper shipping name:** RQ, Environmentally hazardous substance, liquid, n.o.s.  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III  
**DOT Hazardous Substance(s):** Silver

### International Air Transportation (ICAO/IATA)

**Proper shipping name:** RQ, Environmentally hazardous substance, liquid, n.o.s. (Silver, Silver chloride)  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III

### Water Transportation (IMO/IMDG)

**Proper shipping name:** RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver, Silver chloride)  
**Hazard class or division:** 9  
**Identification number:** UN 3082  
**Packing group:** III  
**Marine pollutant:** Silver, Silver chloride

## 15. REGULATORY INFORMATION

### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.
<b>TSCA 12 (b) Export Notification:</b>	None above reporting de minimis
<b>CERCLA/SARA Section 302 EHS:</b>	None above reporting de minimis.
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health
<b>CERCLA/SARA Section 313:</b>	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). Diethylene glycol monoethyl ether acetate (CAS# 112-15-2). Silver chloride (CAS# 7783-90-6).
<b>CERCLA Reportable quantity:</b>	Silver (CAS# 7440-22-4) 1,000 lbs. (454 kg) Silver chloride (CAS# 7783-90-6) 1 lbs. (0.454 kg)
<b>California Proposition 65:</b>	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

<b>CEPA DSL/NDSL Status:</b>	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
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## 16. OTHER INFORMATION

**This safety data sheet contains changes from the previous version in sections: 9**

**Prepared by:** Product Safety and Regulatory Affairs

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