



Revision Number: 007.0

Issue date: 10/06/2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE ABLESTIK 84-1LMISR4 known as Ablebond 84-1LMISR4 (10.8g),	IDH number:	1199559
Product type/use:	Die attach adhesive	Item number:	1199559
Restriction of Use:	None identified	Region:	United States
Company address:	Contact information:		
Henkel Corporation	Telephone: +1 (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.
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR
REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)



Precautionary Statements

Prevention:	Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.
Response:	IF ON SKIN: Wash with plenty of water. Get medical attention if you feel unwell. If skin irritation or rash occurs: 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	60 - 80
Bisphenol-F Epichlorhydrin resin	9003-36-5	10 - 30
1,4-bis(2,3 epoxypropoxy)butane	2425-79-8	5 - 10
dapsone	80-08-0	1 - 5

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

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Symptoms:	See Section 11.

5. FIRE FIGHTING MEASURES

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

Environmental precautions:	Do not allow product to enter sewer or waterways.
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:	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed.
Storage:	For safe storage, store at or below -40.0 °C (-40°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.

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
Bisphenol-F Epichlorhydrin resin	None	None	None	None
1,4-bis(2,3 epoxypoxy)butane	None	None	None	None
dapsone	None	None	None	None

Engineering controls:	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
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, paste
Color:	silver
Odor:	mild, of hydrocarbons
Odor threshold:	Not available.
pH:	Not applicable, Product is non-soluble (in water).
Vapor pressure:	< 0.1 hPa (20 °C (68°F))
Boiling point/range:	Not applicable, Polymerizes before boiling point is reached.
Melting point/ range:	Not applicable, Product is a liquid
Specific gravity:	3.5
Vapor density:	Not applicable, Heavier than air
Flash point:	> 93 °C (> 199.4 °F)
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Flammability:	The product is not flammable.
Evaporation rate:	Not available.
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	< 5.00 g/l
Viscosity:	8,000.00 mPa.s
Decomposition temperature:	> 200 °C

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:	Strong oxidizing agents. Strong acids and strong bases. Ammonia. Peroxides.
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
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Potential Health Effects/Symptoms

Inhalation:	May cause respiratory tract irritation. Coughing. Shortness of breath.
Skin contact:	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).
Eye contact:	May cause eye irritation. Redness. Tearing.
Ingestion:	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 ³ Inhalation LC50 (Rat, 4 h) = > 5.16 mg/l	Allergen, Eyes, Irritant, Respiratory, Skin
Bisphenol-F Epichlorhydrin resin	None	Allergen, Irritant
1,4-bis(2,3 epoxypropoxy)butane	None	Irritant, Allergen
dapsone	None	Allergen, Blood, Eyes, Irritant, Kidney, Nervous System, Skin

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Silver	No	No	No
Bisphenol-F Epichlorhydrin resin	No	No	No
1,4-bis(2,3 epoxypropoxy)butane	No	No	No
dapsone	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 package/configuration.

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)
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)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Silver

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) 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:	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).
CERCLA Reportable quantity:	Silver (CAS# 7440-22-4) 1,000 lbs. (454 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/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.
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16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3,9,10,11,13,15

Prepared by: Product Safety and Regulatory Affairs

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