



Revision Number: 004.0

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**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	<b>LOCTITE ABLESTIK 83C known as</b>	<b>IDH number:</b>	1595253
	<b>ECCOBOND 83C-R</b>		
<b>Product type:</b>	Conductive Epoxy	<b>Region:</b>	United States
<b>Restriction of Use:</b>	None identified	<b>Contact information:</b>	
<b>Company address:</b>		Telephone: +1 (860) 571-5100	
Henkel Corporation		MEDICAL EMERGENCY Phone: Poison Control Center	
One Henkel Way		1-877-671-4608 (toll free) or 1-303-592-1711	
Rocky Hill, Connecticut 06067		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**

<b>Prevention:</b>	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.
<b>Response:</b>	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.
<b>Storage:</b>	Not prescribed
<b>Disposal:</b>	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**

IDH number: 1595253

Product name: LOCTITE ABLESTIK 83C known as ECCOBOND 83C-R  
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Hazardous Component(s)	CAS Number	Percentage*
Silver	7440-22-4	70 - 80
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	20 - 30
Furfuryl alcohol	98-00-0	1 - 5
P-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	3101-60-8	1 - 5
1,4-Bis(2,3-epoxypropoxy)butane	2425-79-8	0.1 - 1

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

## 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Skin contact:</b>	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.
<b>Eye contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Symptoms:</b>	See Section 11.

## 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Foam, dry chemical or carbon dioxide. Water spray or fog.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
<b>Unusual fire or explosion hazards:</b>	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of Metals in Section 3. Toxic and 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.
<b>Storage:</b>	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/m <sup>3</sup> TWA Dust and fume.	0.01 mg/m <sup>3</sup> PEL (as Ag)	None	None
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Furfuryl alcohol	(SKIN) 0.2 ppm TWA	50 ppm (200 mg/m <sup>3</sup> ) PEL	None	None
P-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	None	None	None	None
1,4-Bis(2,3-epoxypropoxy)butane	None	None	None	None

<b>Engineering controls:</b>	Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
<b>Respiratory protection:</b>	Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.
<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>	Paste, Liquid
<b>Color:</b>	Silver
<b>Odor:</b>	Slight
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not available.
<b>Vapor pressure:</b>	< 1.0 mbar (25 °C (77°F))
<b>Boiling point/range:</b>	Not available.
<b>Melting point/ range:</b>	Not available.
<b>Specific gravity:</b>	3
<b>Vapor density:</b>	> 1.0
<b>Flash point:</b>	> 93.3 °C (> 199.94 °F)
<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>	Not applicable
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Not available.
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	3 %; < 0.01 g/l
<b>Viscosity:</b>	Not available.
<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. Polymerization may occur at elevated temperature or in the presence of incompatible materials.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Oxides of Metals in Section 3. Toxic fumes. Irritating vapors.
<b>Incompatible materials:</b>	Acids. Strong oxidizing agents. Strong bases.
<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>Product toxicity data:</b>	Henkel is not aware of any toxicity data on the specific mixture of chemical components contained in this product.
<b>Relevant routes of exposure:</b>	Skin, Inhalation, Eyes

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	May cause respiratory tract irritation.
<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>	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	Allergen, Eyes, Irritant, Respiratory, Skin
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant
Furfuryl alcohol	Oral LD50 (Rat) = 275 mg/kg Oral LD50 (Mouse) = 160 mg/kg Dermal LD50 (Rabbit) = 400 mg/kg Inhalation LC50 (Rat, 4 h) = 233 ppm	Irritant, Central nervous system
P-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	None	Irritant, Allergen
1,4-Bis(2,3-epoxypropoxy)butane	None	Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Silver	No	No	No
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Furfuryl alcohol	No	Group 2B	No
P-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	No	No	No
1,4-Bis(2,3-epoxypropoxy)butane	No	No	No

## 12. ECOLOGICAL INFORMATION

<b>Ecological information:</b>	Not available.
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## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

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

**Hazardous waste number:** This product contains a component or components identified as hazardous under 40 CFR 261.24. 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:** 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 or are exempt from listing on the Toxic Substances Control Act 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  
**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/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: 2,5,10,14

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

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