

Revision Number: 001.2

Issue date: 02/25/2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:LOCTProduct type/use:AdhesRestriction of Use:NoneCompany address:Henkel CorporationOne Henkel WayRocky Hill, Connecticut 06067

LOCTITE EA 9313 AERO PART A QT Adhesive for the Aerospace Industry None identified IDH number:1053934Item number:AA9359016Region:United StatesContact information:Telephone: +1 (860) 571-5100MEDICAL EMERGENCY Phone: Poison Control Center1-877-671-4608 (toll free) or 1-303-592-1711TRANSPORT EMERGENCY Phone: CHEMTREC1-800-424-9300 (toll free) or 1-703-527-3887Internet: 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 dust or fumes. 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*	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	60 - 80	
Bisphenol A - Epichlorohydrin Polymer	25085-99-8	10 - 30	
Epoxy resin	Proprietary	5 - 10	
Epoxy resin	Proprietary	1 - 5	

* 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:	Remove contaminated clothing and footwear. Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medica attention.
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. Never give anythin by mouth to a victim who is unconscious or is having convulsions.
Symptoms:	See Section 11.
Notes to physician:	Treat symptomatically and supportively.
5. F	IRE 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:	May liberate large quantities of dense, foul-smelling smoke which may conta unidentified toxic gasses.
Hazardous combustion products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
6. ACCII	DENTAL RELEASE MEASURES
personal protection recommended in Section rotected personnel.	on 8, isolate the hazard area and deny entry to unnecessary and
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.
Clean-up methods:	Scrape up spilled material and place in a closed container for disposal. Dispose of according to Federal, State and local governmental regulations.
7	ANDLING AND STORAGE

Handling:	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. For the Part A plus Part B adhesive mixture, follow curing schedule as recommended in product literature. Do not heat Part A at temperatures greater than 100 °C (212 °F). This material may self-react at higher temperatures and cause an exotherm. The exotherm has the potential for release of excessive energy and toxic gasses. Empty containers retain product residue, so obey hazard warnings and handle empty containers as if they were full.
Storage:	For safe storage, store between 0 °C (32°F) and 25 °C (77°F) Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials.

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
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Bisphenol A - Epichlorohydrin Polymer	None	None	None	None
Epoxy resin	None	None	None	None
Epoxy resin	None	None	None	None

Engineering controls:

Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

Respiratory protection:

When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided.

Eye/face protection:

Skin protection:

Safety goggles or safety glasses with side shields.

Wear impervious gloves for prolonged contact. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Paste

Cream

Physical state: Color: Odor: **Odor threshold:** pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature:

Pungent Not available. Neutral Not available. Not determined Not determined 1.13 > 1 > 200 °F (> 93.33 °C) Not available. Not available. Not applicable Not applicable Not determined Not miscible or difficult to mix Not determined < 10 g/l per SCAQMD Rule 1124 [EPA Test Method 24/304-91] (estimated) Not available. Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	May occur.
Hazardous decomposition products:	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.
Incompatible materials:	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
Reactivity:	Not available.
Conditions to avoid:	Failure to observe these precautions may result in excessive heat build-up causing an exotherm. Do not heat mixed adhesive unless curing surfaces to be bonded. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	May cause respiratory tract irritation.
Skin contact:	Causes skin irritation. This product may cause an allergic skin reaction.
Eye contact:	Causes serious eye irritation.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant
Bisphenol A - Epichlorohydrin Polymer	None	Allergen, Irritant
Epoxy resin	None	Irritant, Allergen
Epoxy resin	None	Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Bisphenol A - Epichlorohydrin Polymer	No	No	No
Epoxy resin	No	No	No
Epoxy resin	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

Harmful to aquatic organisms.

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:

Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

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: Hazard class or division: Identification number: Packing group:	Not regulated None None None
International Air Transportation (ICAO/IATA)	
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (Bisphenol-A Epichlorhydrin resin, Bisphenol A diglycidyl ether)
Hazard class or division:	9
Identification number:	UN 3077
Packing group:	111
Water Transportation (IMO/IMDG)	
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bisphenol-A Epichlorhydrin resin, Bisphenol A diglycidyl ether)
Hazard class or division:	9
Identification number:	UN 3077
Packing group:	
Marine pollutant:	Bisphenol-A Epichlorhydrin resin, Bisphenol A diglycidyl ether

15. REGULATORY INFORMATION

United States Regulatory Information

Cana

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: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	None above reporting de minimis. Delayed Health, Immediate Health None above reporting de minimis.
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.
ada 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: Corrected information in Section(s): 3

Prepared by: Product Safety and Regulatory Affairs

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Revision Number: 003.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:LOCTProduct type/use:AdhesRestriction of Use:None ifCompany address:Henkel CorporationOne Henkel WayRocky Hill, Connecticut 06067

LOCTITE EA 9313 AERO PART B 80Z Adhesive for the Aerospace Industry None identified IDH number:1053935Item number:AB9359014Region:United StatesContact information:Telephone: +1 (860) 571-5100MEDICAL EMERGENCY Phone: Poison Control Center1-877-671-4608 (toll free) or 1-303-592-1711TRANSPORT EMERGENCY Phone: CHEMTREC1-800-424-9300 (toll free) or 1-703-527-3887Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

DANGER:

EMERGENCY OVERVIEW CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1

PICTOGRAM(S)
Part Part

Precautionary Statements

Prevention:	Do not breathe vapors, mist, or spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.
Response:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 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 do. Continue rinsing. Immediately call a poison control center or physician. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.
Storage:	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.

Hazardous Component(s)	CAS Number	Percentage*
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	60 - 100
2-[2-(3-Aminopropoxy)ethoxy]ethanol	112-33-4	1 - 5
N-(3- (Trimethoxysilyl)propyl)ethylenediamine	1760-24-3	1 - 5

3. COMPOSITION / INFORMATION ON INGREDIENTS

* 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 symptoms persist, seek medical advice.
Skin contact:	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, g medical attention.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	Get immediate medical attention. Do not induce vomiting. Never give anythin by mouth to a victim who is unconscious or is having convulsions.
Symptoms:	See Section 11.
Notes to physician:	Treat symptomatically and supportively.
5. F	IRE 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 a turn-out gear. Cartridge respirators do not provide adequate protection for fir fighters or exotherm mitigation.
Unusual fire or explosion hazards:	May liberate large quantities of dense, foul-smelling smoke which may conta unidentified toxic gasses.
Hazardous combustion products:	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics
6. ACCIE	DENTAL RELEASE MEASURES
e personal protection recommended in Section protected personnel.	on 8, isolate the hazard area and deny entry to unnecessary and
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not allow product to enter sewer or waterways.
Clean-up methods:	Store in a partly filled, closed container until disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dispose of according to Federal, State and local governmental regulations.
7. H	IANDLING AND STORAGE
Handling:	For the Part A plus Part B adhesive mixture, follow curing schedule as recommended in product literature. Do not heat Part B at temperatures great than 100 °C (212 °F). This material may self-react at higher temperatures are cause an exotherm. The exotherm has the potential for release of excessive energy and toxic gasses. Empty containers retain product residue, so obey hazard warnings and handle empty containers as if they were full. Do not curing weld or drill on or peer this container.

Storage:

For safe storage, store between 0 °C (32°F) and 25 °C (77°F) Keep container closed.

grind, weld, or drill on or near this container.

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
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	None	None	None	None
2-[2-(3-Aminopropoxy)ethoxy]ethanol	None	None	None	None
N-(3- (Trimethoxysilyl)propyl)ethylenediamine	None	None	None	None

Engineering controls:

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Respiratory protection:

Eye/face protection:

Wear chemical goggles; face shield (if splashing is possible).

Skin protection:

Wear impervious gloves for prolonged contact. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Liquid

Red

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: **Decomposition temperature:**

Ammoniacal Not available. Not determined Not available. 224 °C (435.2 °F) Not determined 1.0 8.45 > 93 °C (> 199.4 °F) Not determined Not determined Not determined Not applicable Not determined Partially miscible Not determined < 10 g/l per SCAQMD Rule 1124 [EPA Test Method 24/304-91] (estimated) Not available. Not available.

	10. STABILITY AND REACTIVITY
Stability:	Stable
Hazardous reactions:	May occur.
Hazardous decomposition products:	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.
Incompatible materials:	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
Reactivity:	Not available.
Conditions to avoid:	Do not heat mixed adhesive unless curing surfaces to be bonded. Failure to observe these precautions may result in excessive heat build-up causing an exotherm. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	Mists, vapors or liquid may cause severe irritation or burns.
Skin contact:	This product is severely irritating to the skin and may cause burns. May cause allergic skin reaction.
Eye contact:	This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.
Ingestion:	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	None	Corrosive
2-[2-(3-Aminopropoxy)ethoxy]ethanol	None	Irritant
N-(3- (Trimethoxysilyl)propyl)ethylenediamine	None	Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	No	No	No
2-[2-(3-Aminopropoxy)ethoxy]ethanol	No	No	No
N-(3- (Trimethoxysilyl)propyl)ethylenediamine	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.

Hazardous waste number:

This product, if discarded, may be characterized as a RCRA corrosive waste, D002. Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

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:	Amines, liquid, corrosive, n.o.s. (Diethylene glycol di-(3-aminopropyl) ether)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	II
International Air Transportation (ICAO/IATA)	
Proper shipping name:	Amines, liquid, corrosive, n.o.s. (Diethylene glycol di-(3-aminopropyl) ether)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	II
Water Transportation (IMO/IMDG)	
Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylene glycol di-(3-aminopropyl) ether)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	II

15. REGULATORY INFORMATION

United States Regulatory Information

CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
Canada Regulatory Information	
California Proposition 65:	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	None above reporting de minimis. Immediate Health, Delayed Health None above reporting de minimis.
TSCA 12 (b) Export Notification:	None above reporting de minimis
TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: This Safety Data Sheet contains changes from the previous version in Section(s): 3

Prepared by: Product Safety and Regulatory Affairs

Issue date: 02/25/2020

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