



Revision Number: 001.1

Issue date: 08/26/2014

**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	<b>LOCTITE EA 9313 AERO PART A QT known as EA 9313 PART A QUART</b>	<b>IDH number:</b>	1053934
<b>Product type:</b>	Adhesive for the Aerospace Industry	<b>Item number:</b>	AA9359016
<b>Restriction of Use:</b>	None identified	<b>Region:</b>	United States
<b>Company address:</b>	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	<b>Contact information:</b>	Telephone: (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**

<b>Prevention:</b>	Avoid breathing dust or fumes. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves.
<b>Response:</b>	IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. 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.

6 % of the mixture consists of ingredient(s) of unknown acute toxicity.

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	30 - 60
Bisphenol A - Epichlorohydrin Polymer	25085-99-8	10 - 30
Epoxy resin	Proprietary	5 - 10
Epoxy resin	Proprietary	1 - 5

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If inhaled, immediately remove the affected person to fresh air. If symptoms develop and persist, get medical attention.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention.
<b>Eye contact:</b>	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
<b>Ingestion:</b>	Get immediate medical attention. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions.
<b>Symptoms:</b>	See Section 11.
<b>Notes to physician:</b>	Treat symptomatically and supportively.

#### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear full protective clothing. Wear self-contained breathing apparatus.
<b>Unusual fire or explosion hazards:</b>	May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.
<b>Hazardous combustion products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.

#### 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>	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.
<b>Clean-up methods:</b>	Scrape up spilled material and place in a closed container for disposal. Dispose of according to Federal, State and local governmental regulations.

## 7. HANDLING 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:** Safety goggles or safety glasses with side shields.

**Skin protection:** Wear impervious gloves for prolonged contact. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Paste
<b>Color:</b>	Cream
<b>Odor:</b>	Pungent
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Neutral
<b>Vapor pressure:</b>	Not available.
<b>Boiling point/range:</b>	Not determined
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	1.13
<b>Vapor density:</b>	> 1
<b>Flash point:</b>	> 200 °F (> 93.33 °C)
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not determined
<b>Solubility in water:</b>	Not miscible or difficult to mix
<b>Partition coefficient (n-octanol/water):</b>	Not determined
<b>VOC content:</b>	< 10 g/l per SCAQMD Rule 1124 [EPA Test Method 24/304-91] (estimated)
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous reactions:</b>	May occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.
<b>Incompatible materials:</b>	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	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

<b>Inhalation:</b>	May cause respiratory tract irritation.
<b>Skin contact:</b>	This product may cause irritation to the skin. This product may cause an allergic skin reaction.
<b>Eye contact:</b>	This product may cause irritation to the eyes.
<b>Ingestion:</b>	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.

## 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:** Not regulated  
**Hazard class or division:** None  
**Identification number:** None  
**Packing group:** 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:** III

### 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:** III  
**Marine pollutant:** Bisphenol-A Epichlorhydrin resin, Bisphenol A diglycidyl ether

## 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:** Delayed Health, Immediate Health  
**CERCLA/SARA Section 313:** None above reporting de minimis

**California Proposition 65:** No California Proposition 65 listed chemicals are known to be present.

### Canada 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: New Material Safety Data Sheet format.

**Prepared by:** Mark Mau, Regulatory Affairs Specialist  
**Issue date:** 08/26/2014

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Revision Number: 002.1

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**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** LOCTITE EA 9313 AERO PART B 8OZ  
**known as EA 9313 PART B 8 OZ**

**Product type:** Adhesive for the Aerospace Industry

**Restriction of Use:** None identified

**Company address:**  
 Henkel Corporation  
 One Henkel Way  
 Rocky Hill, Connecticut 06067

**IDH number:** 1053935

**Item number:** AB9359014

**Region:** United States

**Contact information:**  
 Telephone: (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:** 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)**



**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 remove. 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.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous Component(s)	CAS Number	Percentage*
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	60 - 100
Silane derivative	Proprietary	1 - 5

\* Exact percentage is a 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 symptoms persist, seek medical advice.
<b>Skin contact:</b>	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention.
<b>Eye contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	Get immediate medical attention. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions.
<b>Symptoms:</b>	See Section 11.
<b>Notes to physician:</b>	This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. Treat symptomatically and supportively.

#### 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. Cartridge respirators do not provide adequate protection for fire fighters or exotherm mitigation.
<b>Unusual fire or explosion hazards:</b>	May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.
<b>Hazardous combustion products:</b>	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.

#### 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>	Prevent further leakage or spillage if safe to do so. Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	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. HANDLING 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 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. Do not cut, grind, weld, or drill on or near this container.
- Storage:** For safe storage, store between 0 °C (32°F) and 25 °C (77°F)  
Keep container closed.

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
Silane derivative	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.
- Respiratory protection:** If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.
- Eye/face protection:** Wear appropriate goggles, face shields or other PPE which will be effective under the circumstances if the possibility of contact exists.
- Skin protection:** Wear impervious gloves for prolonged contact. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state:** Liquid  
**Color:** Red  
**Odor:** Ammoniacal  
**Odor threshold:** Not available.  
**pH:** Not determined  
**Vapor pressure:** Not available.  
**Boiling point/range:** 224 °C (435.2 °F)  
**Melting point/ range:** Not determined  
**Specific gravity:** 1.0  
**Vapor density:** 8.45  
**Flash point:** > 93 °C (> 199.4 °F)  
**Flammable/Explosive limits - lower:** Not determined  
**Flammable/Explosive limits - upper:** Not determined  
**Autoignition temperature:** Not determined  
**Evaporation rate:** Not determined  
**Solubility in water:** Partially miscible  
**Partition coefficient (n-octanol/water):** Not determined  
**VOC content:** < 10 g/l per SCAQMD Rule 1124 [EPA Test Method 24/304-91] (estimated)  
**Viscosity:** Not available.  
**Decomposition temperature:** Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous reactions:</b>	May occur.
<b>Hazardous decomposition products:</b>	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.
<b>Incompatible materials:</b>	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	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

<b>Inhalation:</b>	Mists, vapors or liquid may cause severe irritation or burns.
<b>Skin contact:</b>	This product is severely irritating to the skin and may cause burns. May cause allergic skin reaction.
<b>Eye contact:</b>	This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.
<b>Ingestion:</b>	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
Silane derivative	None	Irritant, Allergen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	No	No	No
Silane derivative	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.

## 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

**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, Delayed Health  
**CERCLA/SARA Section 313:** None above reporting de minimis

**California Proposition 65:** 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:** One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

## 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

**Prepared by:** Mark Mau, Regulatory Affairs Specialist  
**Issue date:** 08/26/2014

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