# Safety Data Sheet



Revision Number: 002.1

1. PRODUCT AND COMPANY IDENTIFICATION

#### Product name:

LOCTITE EA 9891RP AERO PART A

Product type: Restriction of Use: Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

QT Adhesive for the Aerospace Industry None identified

**IDH number:** 

944960

Item number: AA9340016 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

# WARNING:

CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.

**EMERGENCY OVERVIEW** 

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1



#### **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.

#### **COMPOSITION / INFORMATION ON INGREDIENTS** 3.

Hazardous Component(s)	CAS Number	Percentage*
Epoxy resin	Proprietary	70 - 80
Modified epoxy resin	Unknown	10 - 20
Titanium dioxide	13463-67-7	0.1 - 1
Carbon black	1333-86-4	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	
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 medical 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.
Symptoms:	See Section 11.
Notes to physician:	Treat symptomatically and supportively.
5. FIRE 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.	

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 contain 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. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

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. 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 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 at or below 29 °C (84.2 °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
Epoxy resin	None	None	None	None
Modified epoxy resin	None	None	None	None
Titanium dioxide	10 mg/m3 TWA	15 mg/m3 PEL Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Carbon black	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL	None	None

**Engineering controls:** 

**Respiratory protection:** 

Eye/face protection:

Skin protection:

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

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.

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

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Boeific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Solid Black Epoxy Not available. Not available. Nil Not determined Not applicable 1.03 > 1 > 93 °C (> 199.4 °F) Not available. Not available. Not applicable Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature: Not applicable Not determined Negligible 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 at normal conditions.
Hazardous reactions:	May occur.
Hazardous decomposition products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
Incompatible materials:	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
Reactivity:	Not available.
Conditions to avoid:	Do not mix in batches greater than 200 grams (0.44 pounds) unless you plan to use immediately. 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. The exotherm has the potential for release of toxic gasses.

# 11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes

#### Potential Health Effects/Symptoms

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

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Epoxy resin	None	Allergen, Irritant
Modified epoxy resin	None	No Data
Titanium dioxide	None	Irritant, Respiratory, Some evidence of carcinogenicity
Carbon black	Oral LD50 (Rat) = > 8,000 mg/kg	Respiratory, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epoxy resin	No	No	No
Modified epoxy resin	No	No	No
Titanium dioxide	No	Group 2B	No
Carbon black	No	Group 2B	No

# 12. ECOLOGICAL INFORMATION

**Ecological information:** 

Toxic to aquatic organisms

## **13. DISPOSAL CONSIDERATIONS**

#### Information provided is for unused product only. Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations. 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) Hazard class or division: 9 Identification number: UN 3077 Packing group: ш Water Transportation (IMO/IMDG) Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Bisphenol-A Epichlorhydrin resin) Hazard class or division: 9 Identification number: UN 3077 Packing group: Ш Marine pollutant: Bisphenol-A Epichlorhydrin resin Exceptions: Classified per IMDG Amendment 34; Effective Jan 1, 2010. **15. REGULATORY INFORMATION**

**United States Regulatory Information** 

TSCA 8 (b) Inventory Status: TSCA 12 (b) Export Notification:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. None above reporting de minimis
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.
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:	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 Safety Data Sheet format.

# Safety Data Sheet



Revision Number: 002.8

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Product name:

LOCTITE EA 9891RP AERO PART B

Product type: Restriction of Use: Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

PT Adhesive for the Aerospace Industry None identified

**IDH number:** 

944971

Item number: AB9340015 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** DANGER: HARMFUL IF SWALLOWED. CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY ORAL	4
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1



#### **Precautionary Statements**

Prevention:	Do not breathe dust or fumes. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection.
Response:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. 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. 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*	
4-Tert-butylphenol	98-54-4	30 - 40	
Trimethylhexane-1,6-diamine	25620-58-0	10 - 20	
m-Phenylenebis(methylamine)	1477-55-0	10 - 20	
Silicon dioxide	7631-86-9	10 - 20	
4-Nonylphenol, branched	84852-15-3	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 medicattention.	
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 anythir by mouth to an unconscious person.	
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 as 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:	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

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.

personnel.

Dispose of according to Federal, State and local governmental regulations.

## 7. HANDLING AND STORAGE

Handling:Avoid contact with eyes, skin and clothing. For the Part A plus Part B adhesive<br/>mixture, follow curing schedule as recommended in product literature. Do not<br/>heat Part B at temperatures greater than 100 °C (212 °F). This material may<br/>self-react at higher temperatures and cause an exotherm. The exotherm has<br/>the potential for release of excessive energy and toxic gasses. Empty<br/>containers retain product residue, so obey hazard warnings and handle empty<br/>containers as if they were full. Do not cut, grind, weld, or drill on or near this<br/>container.Storage:For safe storage, store at or below 29 °C (84.2 °F)<br/>Keep container tightly closed and in a cool, well-ventilated place away from<br/>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
4-Tert-butylphenol	None	None	None	None
Trimethylhexane-1,6-diamine	None	None	None	None
m-Phenylenebis(methylamine)	0.1 mg/m3 Ceiling (SKIN)	None	None	None
Silicon dioxide	6 mg/m3 TWA	20 MPPCF TWA 0.8 mg/m3 TWA	None	3 mg/m3 TWA Respirable fraction.
4-Nonylphenol, branched	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:

Eye/face protection:

Skin protection:

Safety goggles or safety glasses with side shields.

respiratory protection must be provided.

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

When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid White Color: Odor: Ammoniacal Odor threshold: Not available. Not determined pH: Not determined Vapor pressure: Boiling point/range: Not determined Melting point/ range: Not determined Specific gravity: 0.5 Vapor density: Not determined Flash point: > 93 °C (> 199.4 °F) Flammable/Explosive limits - lower: Not determined Flammable/Explosive limits - upper: Not determined Autoignition temperature: Not applicable Flammability: Not applicable Evaporation rate: Not determined Solubility in water: Negligible Partition coefficient (n-octanol/water): Not determined **VOC content:** < 10 g/l per SCAQMD Rule 1124 [EPA Test Method 24/304-91] (estimated)

Product name: LOCTITE EA 9891RP AERO PART B PT

Viscosity: Decomposition temperature: Not available. Not available.

	10. STABILITY AND REACTIVITY
Stability:	Stable at normal conditions.
Hazardous reactions:	May occur.
Hazardous decomposition products:	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
Incompatible materials:	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
Reactivity:	Not available.
Conditions to avoid:	Do not mix in batches greater than 200 grams (0.44 pounds) unless you plan to use immediately. 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.

# **11. TOXICOLOGICAL INFORMATION**

Relevant routes of exposure:

Skin, Inhalation, Eyes

### Potential Health Effects/Symptoms

Inhalation:	Inhalation of dusts of this product may cause severe irritation and burns to the respiratory tract.
Skin contact:	This product is severely irritating to the skin and may cause burns. May cause allergic skin
	reaction. May be harmful if absorbed through skin.
Eye contact:	This product is severely irritating to the eyes and may cause irreversible damage including
	burns and blindness.
Ingestion:	Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the
-	digestive tract. May be harmful if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
4-Tert-butylphenol	None	Irritant, Allergen, Skin, Corrosive
Trimethylhexane-1,6-diamine	None	Allergen
m-Phenylenebis(methylamine)	None	Irritant, Liver, Kidney, Corrosive
Silicon dioxide	Oral LD50 (Rat) = > 22,500 mg/kg Oral LD50 (Mouse) = > 15,000 mg/kg	Nuisance dust
4-Nonylphenol, branched	None	Irritant, Corrosive

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
4-Tert-butylphenol	No	No	No
Trimethylhexane-1,6-diamine	No	No	No
m-Phenylenebis(methylamine)	No	No	No
Silicon dioxide	No	No	No
4-Nonylphenol, branched	No	No	No

# 12. ECOLOGICAL INFORMATION

**Ecological information:** 

Not available.

# 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.		
Recommended method of disposal:	Dispose of according to Federal, State and local governmental regulations.	
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	

# **14. TRANSPORT INFORMATION**

determine if it meets applicable definitions of hazardous wastes.

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 (4	49 CFR)
Proper shipping name:	Corrosive solids, n.o.s. (m-Xylylenediamine, Nonylphenol)
Hazard class or division:	8
Identification number:	UN 1759
Packing group:	II
Marine pollutant:	Nonylphenol
International Air Transportation (ICAO/IATA)	
Proper shipping name:	Corrosive solid, n.o.s. (m-Xylylenediamine, Nonylphenol)
Hazard class or division:	8
Identification number:	UN 1759
Packing group:	II
Water Transportation (IMO/IMDG)	
Proper shipping name:	CORROSIVE SOLID, N.O.S. (m-Xylylenediamine, Nonylphenol)
Hazard class or division:	8
Identification number:	UN 1759
Packing group:	ll
Marine pollutant:	Nonylphenol

# **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:	Alkyl phenol (CAS# 84852-15-3).
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	None above reporting de minimis. Immediate Health, Delayed Health 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). 4-Nonylphenol, branched (CAS# 84852-15-3).
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer.
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:** 12/27/2016

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# Prepared by: Regulatory Affairs

Issue date: 08/06/2018

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