# Safety Data Sheet



**Revision Number: 005.1** Issue date: 04/25/2022

# PRODUCT AND COMPANY IDENTIFICATION

**LOCTITE EA 9394 AERO PART A QT** Product name: Product type/use: Adhesive for the Aerospace Industry None identified

Restriction of Use:

Company address: Henkel Corporation One Henkel Way

Rocky Hill, Connecticut 06067

IDH number: Item number: AA9277016 **United States** Region:

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** 

**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 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.

IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several Response:

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*	
Aluminum	7429-90-5	30 - 40	
Tetraglycidyl diaminodiphenylmethane	28768-32-3	30 - 40	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	20 - 30	
Modified epoxy resin	Unknown	5 - 10	
Treated fumed silica	67762-90-7	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 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 medical attention. Do not induce vomiting. Never give anything by mouth

to a victim who is unconscious or is having convulsions.

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.

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.

### 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: Absorb spill with inert material. Shovel material into appropriate container for

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

regulations.

### 7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Use only with adequate ventilation.

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 80  $^{\circ}$ C (176  $^{\circ}$ 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: 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
Aluminum	1 mg/m3 TWA Respirable fraction.	15 mg/m3 PEL (as Al) Total dust. 5 mg/m3 PEL (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust.	None	None
Tetraglycidyl diaminodiphenylmethane	None	None	None	None
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Modified epoxy resin	None	None	None	None
Treated fumed silica	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	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

oroduct.

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 safety glasses; chemical goggles (if splashing is possible).

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:SolidColor:GrayOdor:MildOdor threshold:Not available.pH:NeutralVapor pressure:Nil

Boiling point/range:

Melting point/ range:

Not determined
Not determined

Specific gravity: 1.49 Vapor density: > 1

Flash point: > 93 °C (> 199.4 °F) Flammable/Explosive limits - lower: Not determined Flammable/Explosive limits - upper: Not determined Autoignition temperature: Not determined 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)

Viscosity: Not available.

Decomposition temperature: > 200 °C

# 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:** Strong acids and oxidizing agents. Amines.

Reactivity: Not available.

**Conditions to avoid:** To avoid thermal decomposition, do not overheat.

# 11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

#### Potential Health Effects/Symptoms

**Inhalation:** May cause nose, throat and lung irritation.

**Skin contact:** Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation. Ingestion: May be harmful if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Aluminum	Inhalation LC50 (Rat, 4 h) = > 0.888 mg/l Inhalation LC50 (Rat, 4 h) = > 2.3 mg/l	Central nervous system, Irritant, Lung
Tetraglycidyl diaminodiphenylmethane	Inhalation LC50 (Rat, 4 h) = > 30 mg/m3	Allergen, Blood, Central nervous system, Gastrointestinal, Irritant, Kidney, Liver, Mutagen, Nervous System
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant
Modified epoxy resin	None	No Data
Treated fumed silica	None	Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminum	No	No	No
Tetraglycidyl diaminodiphenylmethane	No	No	No
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Modified epoxy resin	No	No	No
Treated fumed silica	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.

# 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, liquid, n.o.s. (Tetraglycidyl

diaminodiphenylmethane, Bisphenol-A Epichlorhydrin resin)

Hazard class or division: Identification number: UN 3082 Packing group: Ш

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Tetraglycidyl

diaminodiphenylmethane, Bisphenol-A Epichlorhydrin resin)

Hazard class or division: Identification number: UN 3082 Packing group: Ш

Marine pollutant: Tetraglycidyl diaminodiphenylmethane, Bisphenol-A Epichlorhydrin resin

**Exceptions:** Classified per IMDG Amendment 34; Effective Jan 1, 2010.

#### REGULATORY INFORMATION **15.**

**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.

Propylene oxide (CAS# 75-56-9). Epichlorohydrin (CAS# 106-89-8).

CERCL A/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). Aluminum (CAS# 7429-90-5).

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: 12

Prepared by: Regulatory Affairs

Issue date: 04/25/2022

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

This Safety Data Sheet has been generated based on OSHA Hazard Communication Standard (29 CFR 1910.1200) and provides information in accordance with U.S. federal law only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.

# Safety Data Sheet



**Revision Number: 004.1** Issue date: 07/20/2022

# PRODUCT AND COMPANY IDENTIFICATION

**LOCTITE EA 9394 AERO PART B 80Z** Product name: Product type/use: 2-Component epoxy adhesive

Restriction of Use:

None identified Company address:

Henkel Corporation One Henkel Way

Rocky Hill, Connecticut 06067

IDH number: Item number: AR9277014 **United States** Region:

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: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
SKIN CORROSION	1C - Corrosive
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1



#### **Precautionary Statements**

Prevention: Do not breathe dust or fumes. Wash affected area thoroughly after handling. Contaminated

work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye

and face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off Response:

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*
Tetraethylene pentamine	112-57-2	30 - 60
N,N'-Bis(3-aminopropyl)piperazine	7209-38-3	30 - 60
Silica, amorphous, fumed, crystfree	112945-52-5	5 - 10
3,6,9,12-	4067-16-7	5 - 10
tetraazatetradecamethylenediamine	4001 10 1	0 10
3,6-diazaoctanethylenediamine	112-24-3	1 - 5

Product name: LOCTITE EA 9394 AERO PART B 8OZ IDH number: 937060

Carbon black 1333-86-4 0.1 - 1

# 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. Never give anything

by mouth to a victim who is unconscious or is having convulsions.

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.

Unusual fire or explosion hazards: In case of fire, keep containers cool with water spray. Closed containers may

rupture (due to build up of pressure) when exposed to extreme heat.

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 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: Keep container tightly closed and in a cool, well-ventilated place away from

incompatible materials.

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

# 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
Tetraethylene pentamine	None	None	1 ppm (5 mg/m3) TWA Aerosol. (SKIN) Aerosol. (Skin sensitizer.)	None
N,N'-Bis(3-aminopropyl)piperazine	None	None	None	None
Silica, amorphous, fumed, crystfree	3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	20 MPPCF TWA 0.8 mg/m3 TWA 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. 15 MPPCF TWA Respirable fraction.	None	None
3,6,9,12- tetraazatetradecamethylenediamine	None	None	None	None
3,6-diazaoctanethylenediamine	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Carbon black	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL 5 mg/m3 TWA Respirable fraction. 50 MPPCF TWA Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust.	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

Physical state:
Color:
Brown
Odor:
Amine
Odor threshold:
Not available.
PH:
Not applicable
Vapor pressure:
Vapor pressure:
Vapor pressure:
Solling point/range:
Wot determined

Specific gravity: 1.0 Vapor density: 8.6

> 93 °C (> 199.4 °F) Flash point: Flammable/Explosive limits - lower: Not determined Flammable/Explosive limits - upper: Not determined Autoignition temperature: Not determined Flammability: Not applicable **Evaporation rate:** Not determined Complete Solubility in water: Not determined Partition coefficient (n-octanol/water):

VOC content: < 10 g/l per SCAQMD Rule 1124 [EPA Test Method 24/304-91] (estimated)

Viscosity: Not available.

Decomposition temperature: > 200 °C

# 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: Avoid mixing resin (Part A) and curing agent (Part B) 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, Ingestion

#### **Potential Health Effects/Symptoms**

**Inhalation:** Can cause severe irritation and burns to the respiratory tract.

Skin contact: This product is severely irritating to the skin and may cause burns. Repeated or prolonged skin

contact may result in allergic sensitization. This product may be harmful if it is absorbed

through the skin.

**Eye contact:** This product is severely irritating to the eyes and may cause eye burns.

Ingestion: Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the

digestive tract.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Tetraethylene pentamine	Oral LD50 (Rat) = 3.99 g/kg Oral LD50 (Rat) = 2.1 g/kg Dermal LD50 (Rabbit) = 0.66 g/kg	Irritant, Mutagen, Allergen
N,N'-Bis(3-aminopropyl)piperazine	None	No Records
Silica, amorphous, fumed, crystfree	None	No Data
3,6,9,12- tetraazatetradecamethylenediamine	None	Irritant, Allergen
3,6-diazaoctanethylenediamine	None	Allergen, Corrosive, Developmental, Irritant, Mutagen
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)
Tetraethylene pentamine	No	No	No
N,N'-Bis(3-aminopropyl)piperazine	No	No	No
Silica, amorphous, fumed, crystfree	No	No	No
3,6,9,12- tetraazatetradecamethylenediamine	No	No	No
3,6-diazaoctanethylenediamine	No	No	No
Carbon black	No	Group 2B	No

# 12. ECOLOGICAL INFORMATION

**Ecological information:** Do not empty into drains, soil or bodies of water.

# 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:**Dispose of according to Federal, State and local governmental regulations.

# 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, solid, corrosive, n.o.s. (Tetraethylene pentamine, Substituted piperazine)

Hazard class or division: 8

Identification number: UN 3259
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Amines, solid, corrosive, n.o.s. (Tetraethylene pentamine, Substituted piperazine)

Hazard class or division: 8

Identification number: UN 3259
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: AMINES, SOLID, CORROSIVE, N.O.S. (Tetraethylene pentamine, Substituted

piperazine)

Hazard class or division: 8

Identification number: UN 3259
Packing group: III

Marine pollutant: Tetraethylene pentamine

### 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:
CERCLA/SARA Section 311/312:
CERCLA/SARA Section 313:

None above reporting de minimis.
None above reporting de minimis.

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: minor updates 3, 11

Prepared by: Regulatory Affairs

**Issue date:** 07/20/2022

**DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

This Safety Data Sheet has been generated based on OSHA Hazard Communication Standard (29 CFR 1910.1200) and provides information in accordance with U.S. federal law only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.

# Safety Data Sheet



**Revision Number: 004.1** Issue date: 07/20/2022

# PRODUCT AND COMPANY IDENTIFICATION

**LOCTITE EA 9394 AERO PART B 80Z** Product name: Product type/use: 2-Component epoxy adhesive

Restriction of Use:

None identified Company address:

Henkel Corporation One Henkel Way

Rocky Hill, Connecticut 06067

IDH number: Item number: AR9277014 **United States** Region:

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: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
SKIN CORROSION	1C - Corrosive
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1



#### **Precautionary Statements**

Prevention: Do not breathe dust or fumes. Wash affected area thoroughly after handling. Contaminated

work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye

and face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off Response:

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*
Tetraethylene pentamine	112-57-2	30 - 60
N,N'-Bis(3-aminopropyl)piperazine	7209-38-3	30 - 60
Silica, amorphous, fumed, crystfree	112945-52-5	5 - 10
3,6,9,12-	4067-16-7	5 - 10
tetraazatetradecamethylenediamine	4001 10 1	0 10
3,6-diazaoctanethylenediamine	112-24-3	1 - 5

Product name: LOCTITE EA 9394 AERO PART B 8OZ IDH number: 937060

Carbon black 1333-86-4 0.1 - 1

# 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. Never give anything

by mouth to a victim who is unconscious or is having convulsions.

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.

Unusual fire or explosion hazards: In case of fire, keep containers cool with water spray. Closed containers may

rupture (due to build up of pressure) when exposed to extreme heat.

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 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: Keep container tightly closed and in a cool, well-ventilated place away from

incompatible materials.

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

# 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
Tetraethylene pentamine	None	None	1 ppm (5 mg/m3) TWA Aerosol. (SKIN) Aerosol. (Skin sensitizer.)	None
N,N'-Bis(3-aminopropyl)piperazine	None	None	None	None
Silica, amorphous, fumed, crystfree	3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	20 MPPCF TWA 0.8 mg/m3 TWA 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. 15 MPPCF TWA Respirable fraction.	None	None
3,6,9,12- tetraazatetradecamethylenediamine	None	None	None	None
3,6-diazaoctanethylenediamine	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Carbon black	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL 5 mg/m3 TWA Respirable fraction. 50 MPPCF TWA Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust.	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

Physical state:
Color:
Brown
Odor:
Amine
Odor threshold:
Not available.
PH:
Not applicable
Vapor pressure:
Vapor pressure:
Vapor pressure:
Solling point/range:
Wot determined

Specific gravity: 1.0 Vapor density: 8.6

> 93 °C (> 199.4 °F) Flash point: Flammable/Explosive limits - lower: Not determined Flammable/Explosive limits - upper: Not determined Autoignition temperature: Not determined Flammability: Not applicable **Evaporation rate:** Not determined Complete Solubility in water: Not determined Partition coefficient (n-octanol/water):

VOC content: < 10 g/l per SCAQMD Rule 1124 [EPA Test Method 24/304-91] (estimated)

Viscosity: Not available.

Decomposition temperature: > 200 °C

# 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: Avoid mixing resin (Part A) and curing agent (Part B) 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, Ingestion

#### **Potential Health Effects/Symptoms**

**Inhalation:** Can cause severe irritation and burns to the respiratory tract.

Skin contact: This product is severely irritating to the skin and may cause burns. Repeated or prolonged skin

contact may result in allergic sensitization. This product may be harmful if it is absorbed

through the skin.

**Eye contact:** This product is severely irritating to the eyes and may cause eye burns.

Ingestion: Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the

digestive tract.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Tetraethylene pentamine	Oral LD50 (Rat) = 3.99 g/kg Oral LD50 (Rat) = 2.1 g/kg Dermal LD50 (Rabbit) = 0.66 g/kg	Irritant, Mutagen, Allergen
N,N'-Bis(3-aminopropyl)piperazine	None	No Records
Silica, amorphous, fumed, crystfree	None	No Data
3,6,9,12- tetraazatetradecamethylenediamine	None	Irritant, Allergen
3,6-diazaoctanethylenediamine	None	Allergen, Corrosive, Developmental, Irritant, Mutagen
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)
Tetraethylene pentamine	No	No	No
N,N'-Bis(3-aminopropyl)piperazine	No	No	No
Silica, amorphous, fumed, crystfree	No	No	No
3,6,9,12- tetraazatetradecamethylenediamine	No	No	No
3,6-diazaoctanethylenediamine	No	No	No
Carbon black	No	Group 2B	No

# 12. ECOLOGICAL INFORMATION

**Ecological information:** Do not empty into drains, soil or bodies of water.

# 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

**Recommended method of disposal:**Dispose of according to Federal, State and local governmental regulations.

# 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, solid, corrosive, n.o.s. (Tetraethylene pentamine, Substituted piperazine)

Hazard class or division: 8

Identification number: UN 3259
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Amines, solid, corrosive, n.o.s. (Tetraethylene pentamine, Substituted piperazine)

Hazard class or division: 8

Identification number: UN 3259
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: AMINES, SOLID, CORROSIVE, N.O.S. (Tetraethylene pentamine, Substituted

piperazine)

Hazard class or division: 8

Identification number: UN 3259
Packing group: III

Marine pollutant: Tetraethylene pentamine

### 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:
CERCLA/SARA Section 311/312:
CERCLA/SARA Section 313:

None above reporting de minimis.
None above reporting de minimis.

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: minor updates 3, 11

Prepared by: Regulatory Affairs

**Issue date:** 07/20/2022

**DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

This Safety Data Sheet has been generated based on OSHA Hazard Communication Standard (29 CFR 1910.1200) and provides information in accordance with U.S. federal law only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.