Revision Number: 003.2

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	**LOCTITE EA 9394 AERO PART B 50ML KIT known as EA 9394 PART B 50ML SEMPAK**	**IDH number:**	944953
Product type:	Epoxy HardenerAdhesive for the Aerospace Industry	**Item number:**	AB9277329
Restriction of Use:	None identified	**Region:**	United States

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

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 IN CONTACT WITH SKIN. CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY DERMAL	4
SKIN CORROSION	1C
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1

PICTOGRAM(S)

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.
Response:	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*
Tetraethylene pentamine	112-57-2	30 - 40
N,N'-Bis(3-aminopropyl)piperazine	7209-38-3	30 - 40
3,6,9,12-tetraazatetradecamethylenediamine	4067-16-7	5 - 10
Silica, amorphous, fumed, crystal-free	112945-52-5	5 - 10
Triethylenetetramine	112-24-3	1 - 5
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. 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.

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
Tetraethylene pentamine	None	None	(SKIN) Aerosol. 1 ppm (5 mg/m3) TWA Aerosol. (Skin sensitizer)	None
N,N'-Bis(3-aminopropyl)piperazine	None	None	None	None
3,6,9,12-tetraazatetradecamethylenediamine	None	None	None	None
Silica, amorphous, fumed, crystal-free	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m3 TWA	None	None
Triethylenetetramine	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Carbon black	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL	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: Solid
Color: Brown
Odor: Amine
Odor threshold: Not available.
pH: Not applicable
Vapor pressure: < 0.1 mm hg
Boiling point/range: 340 °C (644°F)
Melting point/ range: Not determined
Specific gravity: 1.0
Vapor density: 8.6
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:	Complete
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

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
3,6,9,12-tetraazatetradecamethylenediamine	None	Irritant, Allergen
Silica, amorphous, fumed, crystal-free	None	Nuisance dust
Triethylenetetramine	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
3,6,9,12-tetraazatetradecamethylenediamine	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Triethylenetetramine	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.

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, 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 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 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 Safety Data Sheet format.

Prepared by: Regulatory Affairs

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