Material Safety Data Sheet





Revision Date: 05/17/2005 **Issue date:** 05/27/2005

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Kit Number: AS9280000

Product name:EA 9396 PART BItem No. :AB9280000Product type:Adhesive for the Aerospace IndustryRegion:United States

Company address: Henkel Corporation 2850 Willow Pass Road Bay Point, California 94565 **Contact Information:**Telephone: 925.458.8000 Fax: 925.458.8030.
Emergency Telephone: 860.571.5100.

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2. COMPOSITION/INFORMATION ON INGREDIENTS

ACGIH TLV OSHA PEL OTHER % **Hazardous components** Tetraethylenepentamine 30-60 None None None 112-57-2 Polyamine 30-60 None None None Proprietary Polyethylenepolyamines 10-30 None None None 29320-38-5 Triethylenetetramine 1-5 None None None 112-24-3

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state:Gel LiquidHEALTH:3Color:Red to OrangeFLAMMABILITY:1Odor:AmmoniacalPHYSICAL HAZARD:1

Personal Protection: See Section 8

DANGER: CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.

MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.

MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Vapors and mists will irritate the respiratory tract and nasal passages. May cause allergic respiratory

reaction. This product contains an ingredient that may be carcinogenic in its respirable form. However, since the ingredient is completely encapsulated by the epoxy resin, only if the cured product is dry sanded, ground, or abraded, might the carcinogenic material be released. In that case, wear a NIOSH

approved respirator to protect against the potential release.

Skin contact:

Possible burns to skin. Repeated or prolonged skin contact may result in allergic sensitization.

Eye contact:

Severe eye irritation. Possible burns to eyes. May cause corneal injury. May cause permanent visual

impairment.

Ingestion: Not expected under normal conditions of use. May cause burns of mouth and throat if swallowed. May

cause an aspiration hazard if swallowed.

Existing conditions aggravated by exposure:

Eye, skin, and respiratory disorders.

See Section 11 for additional toxicological information.

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If discomfort persists seek medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing

and shoes. Get medical attention if symptoms occur.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion: Clean mouth with water and drink afterwards plenty of water. Get medical attention immediately.

Notes to physician:Treat symptomatically and supportively. Aspiration may cause pulmonary edema or aspiration

pneumonia.

5. FIRE-FIGHTING MEASURES

Flash point: Greater than 93°C (200°F) (estimated) (estimated)

Autoignition temperature: Not determined

Flammable/Explosive limits-lower %: Not determined

Flammable/Explosive limits-upper %: Not determined

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special fire fighting procedures: 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.

Unusual fire or explosion hazards: Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

Hazardous combustion products: Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions: Do not allow material to contaminate ground water system.

Clean-up methods: Wear protective clothing, gloves and safety glasses. Soak up with inert absorbent. Do not use

sawdust, wood chips or other cellulosic materials to absorb the spill. Scrape up as much material as

possible. Store in a closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing 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 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 in a cool, well ventilated area. Keep container closed.

Incompatible products: Keep away from strong oxidizing agents, strong Lewis or mineral acids.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne

contamination.

Respiratory protection: When workplace hazards warrant the use of a respirator, appropriate respirators must be used, and a

program that follows 29 CFR 1910.134 must be followed.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to

prevent skin contact.

Eye/face protection: Wear appropriate goggles, face shields or other PPE which will be effective under the circumstances if

the possibility of contact exists.

See Section 2 for exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:Gel LiquidColor:Red to OrangeOdor:Ammoniacal

Vapor pressure: Less than 0.1 mm Hg at 20°C (68°F)

pH: Not applicable
Boiling point/range: 340°C (644°F)
Melting point/range: Not determined
Specific gravity: 1.0

Vapor density: 8.6

Evaporation rate:

Solubility in water:

Partition coefficient (n-octanol/water):

Not determined

Not determined

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

10. STABILITY AND REACTIVITY

Stability: Stable.

Hazardous polymerization: May occur.

Hazardous decomposition products: Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.

Incompatability: Keep away from strong oxidizing agents, strong Lewis or mineral acids.

Conditions to avoid: Avoid mixing resin (Part A) and curing agent (Part B) in batches greater than 1 pound(s) (.454 kg)

unless you plan to use immediately. Do not heat mixed adhesive above 52°C (125°F) 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

Product toxicity data: Loctite is not aware of any toxicity data on the specific mixture of chemical components contained in

this product.

Carcinogen Status

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Tetraethylenepentamine 112-57-2	No	No	No
Polyamine Proprietary	No	No	No
Polyethylenepolyamines 29320-38-5	No	No	No
Triethylenetetramine 112-24-3	No	No	No

<u>Literature Referenced Target Organ & Other Health Effects</u>

Hazardous components	Health Effects/Target Organs	
Tetraethylenepentamine	Mutagen, Irritant, Allergen	
112-57-2		
Polyamine	No data	
Proprietary		
Polyethylenepolyamines	No Target Organs	
29320-38-5		
Triethylenetetramine	Allergen, Developmental, Irritant, Mutagen, Corrosive	
112-24-3		

12. ECOLOGICAL INFORMATION

Ecological information:

No specific studies have been conducted by Henkel on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, groundwater, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Legal disposition of wastes is the responsibility of the owner/generator of the waste. Applicable

federal, state and/or local regulations must be followed during treatment, storage, or disposal of waste

containing this product.

EPA hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

U.S. Postal System: Postal regulations prohibit the shipment of this material through the U.S. mail.

U.S. Department of Transportation Ground (49 CFR):

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Tetraethylenepentamine / Piperazine)

Hazard class or division: 8
Identification number: UN 2735
Packing group: III

Packing group: III
Marine pollutant: None

International Air Transportation (ICAO/IATA):

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Tetraethylenepentamine / Piperazine)

Hazard class or division: 8

Identification number: UN 2735
Packing group: III

WaterTransportation (IMO/IMDG):

Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Tetraethylenepentamine / Piperazine)

Hazard class or division:
Identification number:
Packing group:
Warine pollutant:

UN 2735
III
None

15. REGULATORY INFORMATION

<u>United States Regulatory Information</u>

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.

CERCLA/SARA Section 302 EHS: None.

CERCLA/SARA Section 311/312: Immediate Health Hazard

CERCLA/SARA 313: None.

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 Domestic Substances List.

WHMIS hazard class: D.1.B, D.2.A, D.2.B, E

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 3,15

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