



Revision Number: 001.1

Issue date: 11/23/2010

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** LOCTITE EA 9323 AERO PART B  
50GR KIT known as EA 9323 PART B  
50G E-Z PAK

**IDH number:** 1067982

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

**Item number:** AB9364319

**Region:** United States

**Company address:**  
Henkel Corporation  
2850 Willow Pass Road  
Bay Point, California 94565

**Contact information:**  
Telephone: 925.458.8000 Fax: 925.458.8030  
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**

<b>Physical state:</b>	Liquid	<b>HEALTH:</b>	*3
<b>Color:</b>	Amber	<b>FLAMMABILITY:</b>	1
<b>Odor:</b>	Ammoniacal	<b>PHYSICAL HAZARD:</b>	1
		<b>Personal Protection:</b>	See MSDS Section 8

**DANGER-CORROSIVE!:** MAY CAUSE EYE, SKIN AND RESPIRATORY BURNS.  
MAY BE HARMFUL IF ABSORBED THROUGH SKIN.  
MAY CAUSE ALLERGIC SKIN REACTION.

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

**Potential Health Effects**

**Inhalation:** Mists, vapors or liquid may cause severe irritation or burns.

**Skin contact:** This product is severely irritating to the skin and may cause burns. May be harmful if absorbed through skin. Repeated or prolonged skin contact may result in allergic sensitization.

**Eye contact:** This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

**Ingestion:** Not expected under normal conditions of use. May cause an aspiration hazard if swallowed.

**Existing conditions aggravated by exposure:** Eye, skin, and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Hazardous components	CAS NUMBER	%
Amine adduct	Proprietary	60 - 100
2,2'-Iminodi(ethylamine)	111-40-0	10 - 30
Triethylenetetramine	112-24-3	1 - 5
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	1760-24-3	1 - 5

#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.
<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>	Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.
<b>Ingestion:</b>	Get immediate medical attention. Do not induce vomiting.
<b>Notes to physician:</b>	Aspiration may cause pulmonary edema or aspiration pneumonia. Treat symptomatically and supportively.

#### 5. FIRE FIGHTING MEASURES

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

<b>Handling:</b>	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. Do not cut, grind, weld, or drill on or near this container. 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. Refrigerated storage is recommended to maintain product quality.

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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Amine adduct	None	None	None	None
2,2'-Iminodi(ethylamine)	1 ppm TWA (SKIN)	None	None	None
Triethylenetetramine	None	None	1 ppm (6 mg/m <sup>3</sup> ) TWA (SKIN)	None
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	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 chemical goggles; face shield (if splashing is possible).

**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>	Liquid
<b>Color:</b>	Amber
<b>Odor:</b>	Ammoniacal
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not determined
<b>Vapor pressure:</b>	< 1 mm hg (20 °C (68°F))
<b>Boiling point/range:</b>	Not determined
<b>Melting point/ range:</b>	Not determined
<b>Specific gravity:</b>	1.22
<b>Vapor density:</b>	Not determined
<b>Flash point:</b>	> 93 °C (> 199.4 °F)
<b>Flammable/Explosive limits - lower:</b>	Not determined
<b>Flammable/Explosive limits - upper:</b>	Not determined
<b>Autoignition temperature:</b>	Not applicable
<b>Evaporation rate:</b>	Not determined
<b>Solubility in water:</b>	Negligible
<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)

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	May occur.
<b>Hazardous decomposition products:</b>	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Oxides of nitrogen.
<b>Incompatible materials:</b>	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
<b>Conditions to avoid:</b>	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.

## 11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Amine adduct	No	No	No
2,2'-Iminodi(ethylamine)	No	No	No
Triethylenetetramine	No	No	No
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	No	No	No

Hazardous components	Health Effects/Target Organs
Amine adduct	No Records
2,2'-Iminodi(ethylamine)	Allergen, Irritant, Eyes
Triethylenetetramine	Allergen, Corrosive, Developmental, Irritant, Mutagen
N-(3-(Trimethoxysilyl)propyl)ethylenediamine	Irritant, Allergen

## 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.

## 14. TRANSPORT INFORMATION

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

**Proper shipping name:** Amines, liquid, corrosive, n.o.s. (Diethylenetriamine, Triethylenetetramine)  
**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. (Diethylenetriamine, Triethylenetetramine)  
**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. (Diethylenetriamine, Triethylenetetramine)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	II

**15. REGULATORY INFORMATION**

**United States Regulatory Information**

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12(b) Export Notification:</b>	None above reporting de minimus
<b>CERCLA/SARA Section 302 EHS:</b>	None above reporting de minimus
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health, Delayed Health
<b>CERCLA/SARA 313:</b>	None above reporting de minimus
<b>California Proposition 65:</b>	No California Proposition 65 listed chemicals are known to be present.

**Canada Regulatory Information**

<b>CEPA DSL/NDSL Status:</b>	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
<b>WHMIS hazard class:</b>	E, D.2.B

**16. OTHER INFORMATION**

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

Prepared by: Mark Mau, Regulatory Affairs Specialist

**DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation 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 of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.