

MATERIAL SAFETY DATA SHEET

Loctite Aerospace  
 Loctite Corporation  
 2850 Willow Pass Road  
 Bay Point, CA 94565-3237  
 USA

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EMERGENCY ASSISTANCE

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For Help in Chemical Emergencies Call CHEMTREC Anytime

Within North America call Toll Free (800) 424-9300  
 Outside North America call Collect (202) 483-7616

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SECTION 1. MATERIAL IDENTIFICATION

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TRADE NAME: EA 9359.3 PART A PART A PREPARED: JANUARY 2003 REV: 06

PRODUCT CODE: AA9318000 SHIP CODE: Z004AB SUPERCEDES: APRIL 2001 REV: 05

EMERGENCY OVERVIEW:

CAUTION! CAUSES EYE IRRITATION AND MAY CAUSE SKIN IRRITATION.  
 CONTAINS EPOXY RESINS. AVOID CONTACT. WASH AFTER  
 HANDLING.

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SECTION 2. COMPOSITION

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The composition of this material is proprietary. However, the composition will be disclosed as required pursuant to 29 CFR 1910.1200(i).

COMPONENT	CAS No.	Wt. %	EXPOSURE LIMITS, ppm		
			OSHA PEL	ACGIH TLV	OTHER LIMITS
1. Bisphenol A/ Epichlorohydrin epoxy resin	25068-38-6	30-60	None	None	None
2. 4-Glycidyloxy-n, n-diglycidyl aniline	5026-74-4	10-30	None	None	None
3. Fumed silica	67762-90-7	1-5	None	None	None
4. Barium Sulfate	7727-43-7	0-1	5 mg/m3	10 mg/m3	None

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SECTION 3. HAZARDS IDENTIFICATION/POTENTIAL HEALTH EFFECTS

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ROUTE(S) OF EXPOSURE:  
 Skin contact, inhalation

SIGNS AND SYMPTOMS OF EXPOSURE:  
 Skin rash, irritation

IMMEDIATE EFFECTS:  
 Brief contact may irritate the skin or cause a rash.

LONG TERM EFFECTS:  
 Repeated or prolonged skin contact may result in allergic sensitization.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:  
 Skin sensitization.

CARCINOGENICITY:  
 Neither this material nor any of its components is considered a carcinogen.

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SECTION 4. FIRST AID MEASURES

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EYE:

Flush eyes with water for 15 minutes. If irritation persists, get medical attention.

SKIN:

Wash skin thoroughly with soap and water. If irritation persists, get medical attention.

INHALATION:

Remove victim to fresh air. If symptoms persist, get medical attention.

INGESTION:

Drink plenty of water. Get medical attention immediately.

SECTION 5. FIRE-FIGHTING MEASURES

FLASHPOINT, DEG. F:	Not tested	EXPLOSIVE LIMITS,	
METHOD USED:	Not tested	LOWER/UPPER:	Not tested

EXTINGUISHING MEDIA:

Dry chemical, or halon fire extinguisher, or water spray, foam or fog.

FIRE FIGHTING INSTRUCTIONS:

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 AND EXPLOSION HAZARDS:

May liberate large quantities of dense foul-smelling smoke which may contain unidentified toxic gasses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

IF MATERIAL LEAKS OR SPILLS:

Wear protective clothing, gloves and safety glasses. Scrape up or shovel into DOT approved waste containers.

NEUTRALIZING AGENT:

Not applicable

SECTION 7. STORAGE AND HANDLING

STORAGE PRECAUTIONS:

Refrigerated storage is recommended to maintain product quality. This product may be stored at room temperature (77 deg. F.) for up to 12 months.

HANDLING PRECAUTIONS:

Follow curing schedule as recommended in product literature. See also MSDS Section 9.

REPAIR AND MAINTENANCE PRECAUTIONS:

Do not cut, grind, weld, or drill on or near this container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION:

Wear appropriate goggles, face shields or other personal protective equipment which will be effective under the circumstances if the possibility of contact exists. A program meeting U.S. 29 CFR 1910.133 requirements must be followed when personal protective equipment is necessary.

SKIN PROTECTION:

Impermeable gloves and protective clothing as necessary to prevent skin contact.

RESPIRATORY PROTECTION:

Appropriate respirators must be used, and a program that follows U.S. 29 CFR 1910.134 must be followed, when workplace hazards warrant the use of a respirator. NIOSH-approved respirators must be used when respiratory protection is necessary.

ENGINEERING CONTROLS:

Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the Permissible Exposure Limits and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

OTHER PROTECTIVE MEASURES:

An eyewash and safety shower should be nearby and ready for use.

SECTION 9. STABILITY AND REACTIVITY

STABILITY:

Stable

POLYMERIZATION:

May occur

CONDITIONS TO AVOID:

Avoid mixing resin (Part A) and curing agent (Part B) in batches greater than 1 pound 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.

INCOMPATIBILITY:

Strong oxidizing agents, strong Lewis or mineral acids.

HAZARDOUS DECOMPOSITION PRODUCTS:

CO, NOx, aldehydes, acids and undetermined organics.

SECTION 10. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT, DEG. F: Undefined PHYSICAL STATE: Paste  
SPECIFIC GRAVITY, WATER=1: 1.16 VISCOSITY, p: Not tested

SOLUBILITY IN WATER:  
Negligible

CORROSION RATE:  
Not applicable

MAGNETISM:  
Not applicable

AUTOIGNITION TEMPERATURE:  
Not tested

DECOMPOSITION TEMPERATURE:  
Not tested

VAPOR PRESSURE, mmHg:  
Nil

VAPOR DENSITY, AIR=1:  
>1

VOLATILE ORGANIC CONTENT, g/l (Test Method):  
<10 g/l (Estimate)

APPEARANCE/ODOR:  
Viscous yellow paste with slight odor

pH:  
Undefined

SECTION 11. TOXICOLOGICAL INFORMATION

This mixture has not been tested as a whole. However, data for its identified components include:

	COMPONENT 1	COMPONENT 2	COMPONENT 3
ORAL, rat LD50:	11,400 mg/kg	>4000 mg/kg	No data found

DERMAL, rabbit LD50: >20 ml/kg No data found No data found

INHALATION, rat LC50: No data found No data found No data found

ORAL, rat LD50: COMPONENT 4  
No data found

DERMAL, rabbit LD50: No data found

INHALATION, rat LC50: No data found

OTHER INFORMATION:  
No data found

## SECTION\_12. DISPOSAL CONSIDERATIONS

DISPOSAL AS A WASTE:  
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. Do not dispose of in an uncontrolled manner.

## SECTION\_13. TRANSPORT INFORMATION

U.S. DOT SHIPPING INFORMATION:  
Proper Shipping Name: ADHESIVES, NOI NON-REGULATED

REPORTABLE QUANTITY:  
Not applicable

POSTAL SERVICE:  
This material is allowed to be sent through the Postal Service.

IATA SHIPPING INFORMATION:  
Proper Shipping Name: ADHESIVES, NOI NON-REGULATED

## SECTION\_14. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:  
All components of this material are listed on the TSCA Inventory.

This material is considered an irritant for Hazard Communication purposes

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):

CAS#	Chemical Name	%by Weight
7727-43-7	Barium sulfate	0.04

This information must be included in all MSDS's that are copied and distributed for this material.

U.S. STATE REGULATIONS:

- 1) Massachusetts  
Component 4 is listed on the Massachusetts Hazardous Substance List.
- 2) New Jersey  
Component 4 is listed on the New Jersey Right to Know Hazardous Substance List.
- 3) Pennsylvania  
Component 4 is listed on the Pennsylvania Hazardous Substance List.

## INTERNATIONAL REGULATIONS:

Canada WHMIS: Hazard class = D2B

Europe EEC: Risk phrase(s) = R36,38,43

Safeguard phrase(s) = S24,37,44,51

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SECTION\_15.\_SUPPLEMENTAL\_INFORMATION

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HAZARD RATING SYSTEM: HMIS: Health = 1 Flammability = 1 Reactivity = 1

PREPARED BY: M.S.D.S. Department, Loctite Corporation, (925) 458-8000.

## REVISION INDICATORS:

January, 2003: Corrected CAS# in Section 2 and added SARA 313 information.

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SECTION\_16.\_DISCLAIMER

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The information and recommendations contained herein are based upon data believed to be correct. However, since much of the information has been received from sources outside our company, we cannot guarantee its accuracy or completeness. Health and safety precautions contained within this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this data in order to comply with all applicable laws and regulations. Additionally, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

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SECTION 1. MATERIAL IDENTIFICATION

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TRADE NAME: EA 9359.3 PART B PART B PREPARED: APRIL 2001 REV: 07

PRODUCT CODE: AB9318000 SHIP CODE: 2735BD3 SUPERCEDES: FEBRUARY 1999 REV: 06

EMERGENCY OVERVIEW:

WARNING! MAY CAUSE EYE AND SKIN BURNS. CONTAINS DIETHYLENE  
 GLYCOL DIAMINOPROPYL ETHER AND A PIPERAZINE.  
 AVOID CONTACT. AVOID BREATHING VAPORS. WASH AFTER HANDLING.

---

SECTION 2. COMPOSITION

---

The composition of this material is proprietary. However, the composition  
 will be disclosed as required pursuant to 29 CFR 1910.1200(i).

COMPONENT	CAS No.	Wt. %	EXPOSURE LIMITS, ppm		
			OSHA PEL	ACGIH TLV	OTHER LIMITS
1. Polyamine	Proprietary	30-60	None	None	None
2. Butadiene- acrylonitrile copolymer	Proprietary	15-40	None	None	None
3. Diethylene glycol diamino propyl ether	4246-51-9	10-30	None	None	None
4. Silica	112945-52-5	7-15	6 mg/m3	6 mg/m3	None
5. Phenol	108-95-2	1-5	5 ppm (skin)	5 ppm (skin)	None

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SECTION 3. HAZARDS IDENTIFICATION/POTENTIAL HEALTH EFFECTS

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ROUTE(S) OF EXPOSURE:

Skin contact, inhalation

SIGNS AND SYMPTOMS OF EXPOSURE:

Skin or eye irritation, chest discomfort

IMMEDIATE EFFECTS:

This material is corrosive to eyes and skin. Brief contact may cause  
 chemical burns. Vapors and mists will irritate nose and throat.

LONG TERM EFFECTS:

Repeated or prolonged skin contact may result in burns and possible  
 allergic sensitization.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Skin sensitization.

CARCINOGENICITY:

None of the components of this material is considered a carcinogen by  
 OSHA, NTP, or IARC.

SECTION 4. FIRST AID MEASURES

EYE:

Flush eyes with lots of running water for 15 minutes. Get medical attention immediately.

SKIN:

Wash skin thoroughly with soap and water. If irritation persists, get medical attention.

INHALATION:

Remove victim to fresh air. If symptoms persist, get medical attention.

INGESTION:

Drink plenty of water. Get medical attention immediately.

SECTION 5. FIRE-FIGHTING MEASURES

FLASHPOINT, DEG. F:	Not tested	EXPLOSIVE LIMITS,	
METHOD USED:	Not tested	LOWER/UPPER:	Not tested

EXTINGUISHING MEDIA:

Dry chemical, or Halon fire extinguisher, or water spray, foam or fog.

FIRE FIGHTING INSTRUCTIONS:

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 AND EXPLOSION HAZARDS:

May liberate large quantities of dense foul-smelling smoke which may contain unidentified toxic gasses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

IF MATERIAL LEAKS OR SPILLS:

Wear protective clothing, gloves and safety glasses. Absorb spill with sorbent material such as vermiculite or sand. Scrape up or shovel into DOT-approved waste containers.

NEUTRALIZING AGENT:

Not applicable

SECTION 7. STORAGE AND HANDLING

STORAGE PRECAUTIONS:

This product may be stored at room temperature (77 deg. F) for up to 12 months. Keep the container tightly closed when not in use.

HANDLING PRECAUTIONS:

Follow curing schedule and mixing ratios as recommended in product literature. See also MSDS Section 9. Empty containers retain product residue so obey hazard warnings and handle empty containers as if they were full.

REPAIR AND MAINTENANCE PRECAUTIONS:

Do not cut, grind, weld, or drill on or near this container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION:

Wear appropriate goggles, face shields or other personal protective equipment which will be effective under the circumstances if the possibility of contact exists. A program meeting U.S. 29 CFR 1910.133 requirements must be followed when personal protective equipment is necessary.

SKIN PROTECTION:

Impermeable gloves and protective clothing as necessary to prevent skin contact.

RESPIRATORY PROTECTION:

Appropriate respirators must be used, and a program that follows U.S. 29 CFR 1910.134 must be followed, when workplace hazards warrant the use of a respirator. NIOSH-approved respirators must be used when respiratory protection is necessary.

ENGINEERING CONTROLS:

Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the Permissible Exposure Limits and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

OTHER PROTECTIVE MEASURES:

An eyewash and safety shower should be nearby and ready for use.

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SECTION 9. STABILITY AND REACTIVITY

---

STABILITY:

Stable

POLYMERIZATION:

May occur

CONDITIONS TO AVOID:

Avoid mixing resin (Part A) and curing agent (Part B) in batches greater than 1 pound 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.

INCOMPATIBILITY:

Strong oxidizing agents, strong Lewis or mineral acids.

HAZARDOUS DECOMPOSITION PRODUCTS:

CO, NOx, aldehydes, acids and undetermined organics.

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SECTION 10. PHYSICAL AND CHEMICAL PROPERTIES

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BOILING POINT, DEG. F: Not avail. PHYSICAL STATE: Liquid

SPECIFIC GRAVITY, WATER=1: 1.11 g/ml VISCOSITY, p: 800-2000  
Brookfield, Spdl. 6

SOLUBILITY IN WATER:

Not tested

CORROSION RATE:

Not applicable

MAGNETISM:

Not applicable

AUTOIGNITION TEMPERATURE:

Not tested

DECOMPOSITION TEMPERATURE:

Not tested

VAPOR PRESSURE, mmHg:

Not tested

VAPOR DENSITY, AIR=1:

Not tested

VOLATILE ORGANIC CONTENT, g/l (Test Method):

<10 g/l (Estimate)

APPEARANCE/ODOR:

Blue paste with rubber odor

pH:

Undefined



This mixture has not been tested as a whole. However, data for its identified components include:

	COMPONENT 1	COMPONENT 2	COMPONENT 3
ORAL, rat LD50:	No data found	No data found	No data found
DERMAL, rabbit LD50:	No data found	No data found	No data found
INHALATION, rat LC50:	No data found	No data found	No data found
	COMPONENT 4	COMPONENT 5	
ORAL, rat LD50:	No data found	No data found	
DERMAL, rabbit LD50:	No data found	850 mg/kg	
INHALATION, rat LC50:	No data found	No data found	

OTHER INFORMATION:  
No data found.

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**SECTION 12. DISPOSAL CONSIDERATIONS**

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**DISPOSAL AS A WASTE:**

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. Do not dispose of in an uncontrolled manner.

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**SECTION 13. TRANSPORT INFORMATION**

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**U.S. DOT SHIPPING INFORMATION:**

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.  
(DIETHYLENEGLYCOL DIAMINOPROPYLETHER/PIPERAZINE)  
UN2735 HAZARD CLASS: 8 PG: III

**REPORTABLE QUANTITY:**

Not applicable

**POSTAL SERVICE:**

U.S. Postal Regulations prohibit the shipment of this material through the mails.

**IATA SHIPPING INFORMATION:**

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.  
(DIETHYLENEGLYCOL DIAMINOPROPYLETHER/PIPERAZINE)  
UN2735 HAZARD CLASS: 8 PG: III

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**SECTION 14. REGULATORY INFORMATION**

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**U.S. FEDERAL REGULATIONS:**

All components of this material are listed on the TSCA Inventory.

Phenol, Component 5, is listed on the SARA 313 list.

**U.S. STATE REGULATIONS:**

1. Massachusetts  
Component 2 is listed on the Massachusetts Substance List.
2. New Jersey  
Components 1 and 5 are listed on the New Jersey Right to Know Hazardous Substance List.

**INTERNATIONAL REGULATIONS:**

Canada WHMIS: Hazard class = E D2B  
Europe EEC: Risk phrase(s) = R34,41,43  
Safeguard phrase(s) = S24/25,26,36/37/39

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SECTION\_15. \_\_SUPPLEMENTAL\_INFORMATION

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HAZARD RATING SYSTEM: HMIS: Health = 2 Flammability = 1 Reactivity = 1

PREPARED BY: M.S.D.S. Department, Loctite Corporation, (925) 458-8000.

REVISION INDICATORS:

April 2001: Company name changed from Dexter to Loctite Aerospace.  
Department telephone numbers removed. No other changes made.

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SECTION\_16. \_\_DISCLAIMER

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