



Revision Number: 001.2

Issue date: 02/14/2011

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	EA 9309.3NA PART A 50G E-Z PAK	IDH number:	1043778
Product type:	Molding Compound	Item number:	AA9354318
		Region:	United States
Company address:	Contact information:		
Henkel Corporation	Telephone: 925.458.8000 Fax: 925.458.8030		
2850 Willow Pass Road	MEDICAL EMERGENCY Phone: Poison Control Center		
Bay Point, California 94565	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		

Contains one or more components for which a Toxic Substances Control Act (TSCA) Low Volume Exemption (LVE) applies. See Section 15.

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Liquid	HMIS:	
Color:	Pink	HEALTH:	*2
Odor:	Epoxy	FLAMMABILITY:	1
		PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8
WARNING:	MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION.		

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation:	May cause respiratory tract irritation.
Skin contact:	This product may cause irritation to the skin. May cause allergic skin reaction.
Eye contact:	This product may cause irritation to the eyes.
Ingestion:	Not expected under normal conditions of use.

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	%
Epoxy resin	Proprietary	60 - 100
Epoxy resin	Proprietary	10 - 30
Modified Epoxy Resin	Unknown	1 - 5
Modified Epoxy Resin	Unknown	1 - 5
Glass, oxide, chemicals	65997-17-3	1 - 5
Treated fumed silica	67762-90-7	1 - 5
Titanium dioxide	13463-67-7	0.1 - 1

4. FIRST AID MEASURES

Inhalation:	If inhaled, immediately remove the affected person to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.
Skin contact:	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.
Notes to physician:	Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash point:	120 °C (248°F)
Autoignition temperature:	Not applicable
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
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.

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:	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing vapors or mists of this product. Do not take internally.
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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Epoxy resin	None	None	None	None
Epoxy resin	None	None	None	None
Modified Epoxy Resin	None	None	None	None
Modified Epoxy Resin	None	None	None	None
Glass, oxide, chemicals	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	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
Titanium dioxide	10 mg/m3 TWA	15 mg/m3 TWA Total dust.	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

Physical state:	Liquid
Color:	Pink
Odor:	Epoxy
Odor threshold:	Not available
pH:	Not applicable
Vapor pressure:	Not applicable
Boiling point/range:	Not applicable
Melting point/ range:	Not available
Specific gravity:	1.54
Vapor density:	Not applicable
Flash point:	120 °C (248°F)
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Autoignition temperature:	Not applicable
Evaporation rate:	Not applicable
Solubility in water:	Negligible
Partition coefficient (n-octanol/water):	Not available
VOC content:	< 10 g/l per SCAQMD Rule 1124 [EPA Test Method 24/304-91] (estimated)

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:	This product may react with strong oxidizing agents.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epoxy resin	No	No	No
Epoxy resin	No	No	No
Modified Epoxy Resin	No	No	No
Modified Epoxy Resin	No	No	No
Glass, oxide, chemicals	No	No	No
Treated fumed silica	No	No	No
Titanium dioxide	No	Group 2B	No

Hazardous components	Health Effects/Target Organs
Epoxy resin	Allergen, Irritant
Epoxy resin	Allergen, Irritant
Modified Epoxy Resin	No Data
Modified Epoxy Resin	No Data
Glass, oxide, chemicals	Allergen, Respiratory
Treated fumed silica	Irritant
Titanium dioxide	Irritant, Respiratory, Some evidence of carcinogenicity

12. ECOLOGICAL INFORMATION

Ecological information: Toxic to aquatic organisms

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: Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

14. TRANSPORT INFORMATION

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. (Bisphenol-A Epichlorhydrin resin)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A Epichlorhydrin resin)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Bisphenol-A Epichlorhydrin resin
Exceptions: Classified per IMDG Amendment 34; Effective Jan 1, 2010.

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components of this product are listed on the U.S. Toxic Substances Control Act (TSCA) inventory or are exempt from listing because a Low Volume Exemption (LVE) has been granted in accordance with 40 CFR 723.50.
TSCA 12(b) Export Notification:	None above reporting de minimus
CERCLA/SARA Section 302 EHS:	None above reporting de minimus
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA 313:	None above reporting de minimus
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/NDL 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.
WHMIS hazard class:	D.2.A, 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.

LOCTITE[®]

Revision Number: 001.1

Issue date: 07/20/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	EA 9309.3NA PART B 50G E-Z PAK	IDH number:	1043779
Product type:	Adhesive for the Aerospace Industry	Item number:	AB9354319
		Region:	United States
Company address:		Contact information:	
Henkel Corporation		Telephone: 925.458.8000	Fax: 925.458.8030
2850 Willow Pass Road		Emergency telephone: 860.571.5100	
Bay Point, California 94565		Internet: www.henkelna.com	

2. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

Physical state:	Gel	HEALTH:	*2
Color:	Blue	FLAMMABILITY:	1
Odor:	Ammoniacal	PHYSICAL HAZARD:	1
		Personal Protection:	See MSDS Section 8
DANGER:	CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.		

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion**Potential Health Effects**

Inhalation:	Respiratory tract burns.
Skin contact:	May cause skin burns. Allergic skin reaction. May be harmful if absorbed through skin.
Eye contact:	Possible burns to eyes. Severe eye irritation.
Ingestion:	May be harmful if swallowed. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

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

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	%
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	4246-51-9	60 - 100
Substituted Piperazine	Proprietary	10 - 30
2,2'-Iminodi(ethylamine)	111-40-0	1 - 5
Silane derivative	Proprietary	1 - 5
Phenol	108-95-2	0.1 - 1

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.
--------------------	---

Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	Drink water as a precaution. Never give anything by mouth to an unconscious person. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 93 °C (> 199.4 °F) ; Estimated
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting 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:	May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.
Hazardous combustion products:	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.

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:	Do not allow product to enter sewer or waterways.
Clean-up methods:	Wear suitable protective clothing, gloves and eye/face protection. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a partly filled, closed container until disposal.

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:	For safe storage, store between 0 °C (32°F) and 25 °C (77°F) Keep container closed.

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
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	None	None	None	None
Substituted Piperazine	None	None	None	None
2,2'-Iminodi(ethylamine)	1 ppm TWA (SKIN)	None	None	None
Silane derivative	None	None	None	None
Phenol	5 ppm TWA (SKIN)	5 ppm (19 mg/m3) TWA (SKIN)	None	None

Engineering controls:	Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.
Respiratory protection:	Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.
Eye/face protection:	Safety goggles or safety glasses with side shields.
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:	Gel
Color:	Blue
Odor:	Ammoniacal
Odor threshold:	Not available
pH:	Not determined
Vapor pressure:	Not determined
Boiling point/range:	Not available
Melting point/ range:	Not determined
Specific gravity:	1
Vapor density:	8.45
Flash point:	> 93 °C (> 199.4 °F) ; Estimated
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined
Autoignition temperature:	Not available
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)

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	May occur.
Hazardous decomposition products:	Oxides of carbon and nitrogen, aldehydes, acids and undetermined organics.
Incompatible materials:	Keep away from strong oxidizing agents, strong Lewis or mineral acids.
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.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	No	No	No
Substituted Piperazine	No	No	No
2,2'-Iminodi(ethylamine)	No	No	No
Silane derivative	No	No	No
Phenol	No	No	No

Hazardous components	Health Effects/Target Organs
3,3'-Oxybis(ethyleneoxy)bis(propylamine)	Corrosive
Substituted Piperazine	Irritant, Corrosive, Allergen
2,2'-Iminodi(ethylamine)	Allergen, Irritant, Eyes
Silane derivative	Irritant, Allergen
Phenol	Blood, Cardiac, Corrosive, Developmental, Eyes, Irritant, Kidney, Liver, Mutagen, Nervous System, Skin, Vascular

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

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

Proper shipping name: Amines, liquid, corrosive, n.o.s. (Diethylene glycol di-(3-aminopropyl) ether, Substituted piperazine)
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. (Diethylene glycol di-(3-aminopropyl) ether, Substituted piperazine)
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. (Diethylene glycol di-(3-aminopropyl) ether, Substituted piperazine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: II

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 minimus

CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA 313: None above reporting de minimus
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

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

16. OTHER INFORMATION

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

Prepared by: Gary Pierson, Manager, Regulatory Affairs

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.