Safety Data Sheet



Revision Number: 006.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product type: Epoxy i Restriction of Use: None of Company address: Henkel Canada Corporation Meadowpine Boulevard 2515 Mississauga, Ontario L5N 6C3

LOCTITE EA E-00NS/100 known as DB IDH number: EPOXY ADH E-00NS 400 ML Epoxy resin None identified Region: Contact infor

 Item number:
 29296_209524

 Region:
 Canada

 Contact information:
 Zanada

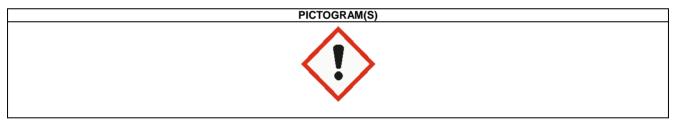
Telephone: +1 (905) 814-6511 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com

701959

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW WARNING: CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1



Precautionary Statements

Prevention:	Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.
Response:	IF ON SKIN: Wash with plenty of water. 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. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage:	Not prescribed
Disposal:	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with Canadian Hazardous Products Regulations (WHMIS 2015) and is consistent with the provision 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

IDH number: 701959

Product name: LOCTITE EA E-00NS/100 known as DB EPOXY ADH E-00NS 400 ML

Hazardous Component(s)	CAS Number	Weight %*
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	70 - 80
Phenol polymer with formaldehyde, glycidyl ether	28064-14-4	20 - 30
Treated fumed silica	67762-90-7	1 - 5
4,4'-Methylenediphenol, polymer with 1- chloro-2,3-epoxypropane	42423-25-6	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:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.	
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.	
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 1 minutes. Get medical attention.	
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.	
Symptoms:	See Section 11.	
	5. FIRE FIGHTING MEASURES	
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.	
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such a turn-out gear.	
Unusual fire or explosion hazards:	In case of fire, keep containers cool with water spray. Closed containers manual rupture (due to build up of pressure) when exposed to extreme heat.	

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:	Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean- up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling:

Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed. Refer to Section 8.

Storage:

Store in original container until ready to use. Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store away from heat, sparks, flames, or other sources of ignition.

Shelf Life Statement: Not available.

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
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Phenol polymer with formaldehyde, glycidyl ether	None	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
4,4'-Methylenediphenol, polymer with 1-chloro-2,3- epoxypropane	None	None	None	None
Engineering controls:	Provide adeque exposure limits	ate local exhaust venti	lation to maintain wor	ker exposure below
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. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.			
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: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water):	Liquid Clear, Yellow Faint, Epoxy Not available. Not applicable Not available. > 149 °C (> 300.2 °F) Not available. 1.17 Not available. > 93.4 °C (> 200.12 °F) Pensky Martens closed cup Not available. Not available.
VOC content: Viscosity:	< 1 %; < 10 g/l Estimated Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Polymerization may occur at elevated temperature or in the presence of incompatible materials.
Hazardous decomposition products:	Oxides of carbon. Aldehydes. Formaldehyde. Toxic fumes. Irritating vapors.
Incompatible materials:	Strong oxidizing agents. Strong acids and strong bases. Amines.
Reactivity:	Not available.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials. Note: Heating the epoxy resin in this product above 148.9 °C (300 °F) in the presence of air may cause slow oxidative decomposition. Above 260 °C (500 °F) polymerization of the epoxy resin may occur. Aliphatic polyamines can produce exothermic reactions with epoxy resins which in large masses can cause runaway polymerization and charring of the reactants. Fumes and vapors from these thermal and chemical decompositions vary widely in composition and toxicity. Do not breathe fumes.
	11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation:	May cause irritation to nose and throat. Inhalation of vapors or mists of the product may be irritating to the respiratory system.
Skin contact:	Causes skin irritation. May cause allergic skin reaction. Itching. Redness.
Eye contact:	Causes serious eye irritation. Redness.
Ingestion:	May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant
Phenol polymer with formaldehyde, glycidyl ether	None	Allergen, Irritant
Treated fumed silica	None	Irritant
4,4'-Methylenediphenol, polymer with 1- chloro-2,3-epoxypropane	None	No Data

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Phenol polymer with formaldehyde, glycidyl ether	No	No	No
Treated fumed silica	No	No	No
4,4'-Methylenediphenol, polymer with 1- chloro-2,3-epoxypropane	No	No	No

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.				
	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.				
Canada Transportation of Dangerous	Goods - Ground			
Proper shipping name:	Not regulated			
Hazard class or division:	None			
Identification number:	None			
Packing group:	None			
International Air Transportation //CAC				
International Air Transportation (ICAC Proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin			
Toper shipping hame.	resin)			
Hazard class or division:	9			
Identification number:	UN 3082			
Packing group:				
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:				
Marine pollutant:	Bisphenol-A Epichlorhydrin resin			
1	5. REGULATORY INFORMATION			
Canada Regulatory Information				
CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic			
CELA DOL/NDOL Status.	Substances List.			
United States Demulatery 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.			

16. OTHER INFORMATION

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

Prepared by: Rebecca Coons, Regulatory Affairs Specialist

Issue date: 05/10/2017

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

Safety Data Sheet



Revision Number: 007.0

1. PRODUCT AND COMPANY IDENTIFICATION

IDH number:

Product name:

Product type: **Restriction of Use:** Company address: Henkel Canada Corporation Meadowpine Boulevard 2515 Mississauga, Ontario L5N 6C3

LOCTITE EA E-00NS/100 B HARDENER known as DB EPOXY ADH E-00NS 400 ML HARD Epoxy Hardener None identified

Item number: 29296_209525 Region: Canada Contact information: Telephone: +1 (905) 814-6511 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

701960

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW		
DANGER:	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.	
	MAY CAUSE AN ALLERGIC SKIN REACTION.	
	MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING	
	DIFFICULTIES IF INHALED.	

HAZARD CLASS	HAZARD CATEGORY
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1

PICTOGRAM(S)

Precautionary Statements

Prevention:	Avoid breathing vapors, mist, or spray. 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. In case of inadequate ventilation wear respiratory 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. If experiencing respiratory symptoms: Call a poison center or physician. 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.
IDH number: 701960	Product name: LOCTITE EA E-00NS/100 B HARDENER known as DB EPOXY ADH E-00NS 400 ML HARD

Classification complies with Canadian Hazardous Products Regulations (WHMIS 2015) and is consistent with the provision 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	Weight %*
Poly[oxy(methyl-1,2-ethanediyl)], a-hydro- w-hydroxy-, ether with 2,2- bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop	72244-98-5	80 - 90
Benzyldimethylamine	103-83-3	5 - 10
Treated fumed silica	67762-90-7	1 - 5
Monoethanolamine	141-43-5	1 - 5

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4.	FIRST AID MEASURES
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 1 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Symptoms:	See Section 11.
5. F	IRE FIGHTING MEASURES
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such a turn-out gear.
Unusual fire or explosion hazards:	In case of fire, keep containers cool with water spray. Closed containers m rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Formaldehyde. Hydrogen sulfide. Toxic fumes. Irritating vapors.

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:

Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling:

Storage:

Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. Use only with adequate ventilation. Keep container closed.

Store in original container until ready to use. Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store away from heat, sparks, flames, or other sources of ignition.

Shelf Life Statement: Not available.

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
Poly[oxy(methyl-1,2-ethanediyl)], a-hydro-w- hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3- propanediol (4:1), 2-hydroxy-3-mercaptop	None	None	None	None
Benzyldimethylamine	None	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
Monoethanolamine	6 ppm STEL 3 ppm TWA	3 ppm (6 mg/m3) PEL	None	None
Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.				
Respiratory protection: Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.				
Eye/face protection:	Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.			
Skin protection:		resistant, impermeable suit to prevent skin cor	0 00	ves and either an
9. PHYSICAL AND CHEMICAL PROPERTIES				

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Liquid Light, Cream Mercaptan, Sulfur Not available. Not available. Not available. Not available. 1.12 Not available. 258 °C (496.4 °F) Cleveland closed cup Not available. Not available. Not available. Not available. Not available. Not applicable

Product name: LOCTITE EA E-00NS/100 B HARDENER known as DB EPOXY ADH E-00NS 400 ML HARD

Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature: Not available. Not available. Not available. < 1 %; < 10 g/l Estimated Not available. Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Formaldehyde. Hydrogen sulfide. Toxic fumes. Irritating vapors.
Incompatible materials:	Acids. Oxidizing agents. Halogenated compounds.
Reactivity:	Not available.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation:	May cause allergic respiratory reaction. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed (up to several hours after exposure). Can cause severe irritation and burns to the respiratory tract.
Skin contact:	
Skin contact:	Corrosive to skin. Causes skin burns. May cause allergic skin reaction.
Eye contact:	Causes serious eye damage. Causes eye burns. Burns of the eye may cause blindness.
Ingestion:	May cause burns of mouth and throat if swallowed. Irritation and corrosive action can occur in
	the mouth, stomach tissue and digestive tract if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Poly[oxy(methyl-1,2-ethanediyl)], a-hydro- w-hydroxy-, ether with 2,2- bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop	None	No Records
Benzyldimethylamine	None	Irritant, Corrosive, Allergen, Respiratory
Treated fumed silica	None	Irritant
Monoethanolamine	Oral LD50 (Rat) = 10.2 g/kg Oral LD50 (Mouse) = 700 mg/kg Dermal LD50 (Rabbit) = 1,025 mg/kg	Irritant, Kidney, Liver, Corrosive, Respiratory, Developmental

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Poly[oxy(methyl-1,2-ethanediyl)], a-hydro- w-hydroxy-, ether with 2,2- bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptop	No	No	No
Benzyldimethylamine	No	No	No
Treated fumed silica	No	No	No
Monoethanolamine	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

Not available.

Product name: LOCTITE EA E-00NS/100 B HARDENER known as DB EPOXY ADH E-00NS 400 ML HARD

13. DISPOSAL CONSIDERATIONS			
Information provided is for unused product only.			
Recommended method of disposal:	Follow all local, state, federal and provincial regulations for disposal.		
	14. TRANSPORT INFORMATION		
The transport information provided in package/configuration.	this section only applies to the material/formulation itself, and is not specific to any		
Canada Transportation of Dangerous Goods - Ground Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic amines) Hazard class or division: 8 Identification number: UN 2735 Packing group: III			
International Air Transportation (ICAO/IATA) Proper shipping name: Amines, liquid, corrosive, n.o.s. (Aliphatic amines) Hazard class or division: 8 Identification number: UN 2735 Packing group: III			
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group:	AMINES, LIQUID, CORROSIVE, N.O.S. (Aliphatic amines) 8 UN 2735 III		
1	5. REGULATORY INFORMATION		
Canada Regulatory Information			
CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.		
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.		
16. OTHER INFORMATION			

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

Prepared by: Rebecca Coons, Regulatory Affairs Specialist

Issue date: 02/14/2017

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