



Revision Number: 003.1

Issue date: 04/24/2009

**1. PRODUCT AND COMPANY IDENTIFICATION**

<b>Product name:</b>	<b>DB EPOXY ADH E-20HP 400 ML HARD</b>	<b>IDH number:</b>	701984
<b>Product type:</b>	Epoxy Hardener	<b>Item number:</b>	29316_209533
		<b>Region:</b>	United States
<b>Company address:</b>	<b>Contact information:</b>		
Henkel Corporation	Telephone: 860.571.5100		
1001 Trout Brook Crossing	Emergency telephone: 860.571.5100		
Rocky Hill, Connecticut 06067	Internet: www.henkelna.com		

**2. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

<b>Physical state:</b>	Liquid	<b>HEALTH:</b>	*3
<b>Color:</b>	Light yellow	<b>FLAMMABILITY:</b>	1
<b>Odor:</b>	Mild	<b>PHYSICAL HAZARD:</b>	0
		<b>Personal Protection:</b>	See MSDS Section 8
<b>DANGER:</b>	CAUSES EYE AND SKIN BURNS. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED.		

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

<b>Inhalation:</b>	Harmful if inhaled and may cause delayed lung injury. Inhalation of aerosol may cause irritation to the upper respiratory tract. Risk of serious damage to the lungs (by inhalation). May cause nose, throat and lung irritation. Can cause respiratory tract burns.
<b>Skin contact:</b>	Causes skin burns. May cause allergic skin reaction. May cause severe irritation due to defatting of skin. May be harmful if absorbed through skin.
<b>Eye contact:</b>	Causes eye burns. Burns of the eye may cause blindness. Exposure to vapor may cause tearing of the eyes, irritation and burning sensation.
<b>Ingestion:</b>	If ingested, severe burns of the mouth and throat may occur, as well as perforation of the esophagus and the stomach. May be harmful if swallowed.

**Existing conditions aggravated by exposure:** Asthma. 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	%
Substituted polyamine	Proprietary	30 - 60
Polyglycol diamine	Proprietary	10 - 30
Acid salt	Proprietary	5 - 10
Glycerol	56-81-5	1 - 5
Substituted aminophenol	Proprietary	1 - 5
Filler	Proprietary	1 - 5
Diethyleneglycol monoethyl ether	111-90-0	1 - 5
Ethylene glycol	107-21-1	0.1 - 1

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Skin contact:</b>	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention.
<b>Eye contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	Do not induce vomiting. Keep individual calm. Give a conscious person several glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

### 5. FIRE FIGHTING MEASURES

<b>Flash point:</b>	> 93.4 °C (> 200.12 °F) Setaflash Closed Cup
<b>Autoignition temperature:</b>	Not available
<b>Flammable/Explosive limits - lower:</b>	Not available
<b>Flammable/Explosive limits - upper:</b>	Not available
<b>Extinguishing media:</b>	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.
<b>Unusual fire or explosion hazards:</b>	Personnel in vicinity and downwind should be evacuated. Burning produces obnoxious and toxic fumes.
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of nitrogen. Ammonia. Hydrogen fluoride. Irritating organic vapours. Nitric acid.

### 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>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Remove all sources of ignition. Ensure adequate ventilation. Wear butyl rubber protective clothing. Scrape up as much material as possible. Clean residue with soap and water. Store in a closed container until ready for disposal.

## 7. HANDLING AND STORAGE

### Handling:

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

### Storage:

Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Do not store in reactive metal containers.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

## 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
Substituted polyamine	None	None	None	None
Polyglycol diamine	None	None	None	None
Acid salt	None	None	None	None
Glycerol	10 mg/m3 TWA Mist.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Substituted aminophenol	None	None	None	None
Filler	None	None	None	None
Diethyleneglycol monoethyl ether	None	None	25 ppm (140 mg/m3) TWA	None
Ethylene glycol	100 mg/m3 Ceiling Aerosol.	None	None	None

### Engineering controls:

Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

### Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

### 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.

### Skin protection:

Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene, Butyl-rubber, or nitrile-rubber gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Light yellow
Odor:	Mild
Odor threshold:	Not available
pH:	Not applicable
Vapor pressure:	Not available
Boiling point/range:	Not available
Melting point/ range:	Not available
Specific gravity:	1.15
Vapor density:	Not available
Flash point:	> 93.4 °C (> 200.12 °F) Setaflash Closed Cup
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Autoignition temperature:	Not available
Evaporation rate:	Not available
Solubility in water:	Partially soluble
Partition coefficient (n-octanol/water):	Not available

VOC content:

< 1.0 %; < 10 g/l Estimated

## 10. STABILITY AND REACTIVITY

Stability:

Stable

Hazardous reactions:

Will not occur.

Hazardous decomposition products:

Ammonia. Oxides of carbon. Oxides of nitrogen. Nitric acid. Irritating organic vapours. Hydrogen fluoride.

Incompatible materials:

Oxidizing agents. Sodium hypochlorite. Organic acids. Mineral acids. Peroxides. This product slowly corrodes copper, aluminum, zinc and galvanized surfaces.

Conditions to avoid:

Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Substituted polyamine	No	No	No
Polyglycol diamine	No	No	No
Acid salt	No	No	No
Glycerol	No	No	No
Substituted aminophenol	No	No	No
Filler	No	No	No
Diethyleneglycol monoethyl ether	No	No	No
Ethylene glycol	No	No	No

Hazardous components	Health Effects/Target Organs
Substituted polyamine	No Records
Polyglycol diamine	Corrosive
Acid salt	No Records
Glycerol	Blood, Irritant, Kidney, Nuisance dust
Substituted aminophenol	Irritant, Allergen
Filler	No Target Organs
Diethyleneglycol monoethyl ether	Blood, Central nervous system, Irritant, Kidney
Ethylene glycol	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic

## 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:** Not a RCRA hazardous waste.

### 14. TRANSPORT INFORMATION

The shipping classifications in this sections are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

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

**Proper shipping name:** Amines, liquid, corrosive, n.o.s. (Polyglycol diamine)  
**Hazard class or division:** 8  
**Identification number:** UN 2735  
**Packing group:** II  
**Exceptions:** (Not more than 1 Liter), Consumer Commodity, ORM-D

#### International Air Transportation (ICAO/IATA)

**Proper shipping name:** Amines, liquid, corrosive, n.o.s. (Polyglycol diamine)  
**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. (Polyglycol diamine)  
**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:** 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). Diethyleneglycol monoethyl ether (CAS# 111-90-0).  
**California Proposition 65:** This product contains a chemical known in the State of California to cause cancer.

#### Canada Regulatory Information

**CEPA DSL/NDSL Status:** Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.  
**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. 2,3,8,11, and 15

**Prepared by:** Gary Pierson, Sr. 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.