1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DB EPOXY Pot CMPD E-60NC 50ML
Product type: Epoxy Hardener
IDH number: 701990
Item number: 29324_209537
Region: United States
Company address: Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

2. HAZARDS IDENTIFICATION

2.1 EMERGENCY OVERVIEW

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Pale yellow</td>
</tr>
<tr>
<td>Odor:</td>
<td>Mild</td>
</tr>
</tbody>
</table>

**HMIS:**
- **HEALTH:** *3
- **FLAMMABILITY:** 1
- **PHYSICAL HAZARD:** 0

**Personal Protection:** See MSDS Section 8

**DANGER:**
- CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.
- MAY CAUSE ALLERGIC SKIN REACTION.
- HARMFUL IF SWALLOWED OR INHALED.
- MAY BE HARMFUL IF ABSORBED THROUGH SKIN.

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

**Potential Health Effects**

- **Inhalation:** Can cause severe irritation and burns to the respiratory tract. Harmful if inhaled. May cause delayed lung injury.
- **Skin contact:** Causes skin burns. May cause allergic skin reaction. May be harmful if absorbed through skin.
- **Eye contact:** Causes eye burns. Burns of the eye may cause blindness.
- **Ingestion:** May cause burns of mouth, throat and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness and collapse. Harmful if swallowed. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

**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

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol, branched</td>
<td>84852-15-3</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Cycloaliphatic amine</td>
<td>Proprietary</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Alcohol derivative</td>
<td>Proprietary</td>
<td>5 - 10</td>
</tr>
</tbody>
</table>
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: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flash point: > 93 °C (> 199.4 °F) Setadflash Closed Cup

Autoignition temperature: Not available.

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 self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Unusual fire or explosion hazards: Burning produces obnoxious and toxic fumes. Personnel in vicinity and downwind should be evacuated. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses.


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. Ensure adequate ventilation. Wear appropriate personal protective equipment. 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: 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.

Storage: Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. 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.

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol, branched</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Cycloaliphatic amine</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Alcohol derivative</td>
<td>None</td>
<td>None</td>
<td>10 ppm (44 mg/m3) TWA</td>
<td>None</td>
</tr>
</tbody>
</table>

**Engineering controls:**
Use local exhaust ventilation if the potential for airborne exposure exists.

**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. Butyl rubber gloves. Nitrile gloves. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid
**Color:** Pale yellow
**Odor:** Mild
**Odor threshold:** Not available.
**pH:** Not available.
**Vapor pressure:** Not available.
**Boiling point/range:** Not available.
**Melting point/ range:** Not available.
**Vapor density:** Not available.
**Flash point:** > 93 °C (> 199.4 °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:** Not available.
**Partition coefficient (n-octanol/water):** Not available.
**VOC content:** < 1 %; < 10 g/l Estimated

10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions of storage and use.

**Hazardous reactions:** None under normal processing.


**Conditions to avoid:** Keep away from heat, ignition sources and incompatible materials.
11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol, branched</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cycloaliphatic amine</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Alcohol derivative</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Health Effects/Target Organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Nonylphenol, branched</td>
<td>Irritant, Corrosive</td>
</tr>
<tr>
<td>Cycloaliphatic amine</td>
<td>Brain, Corrosive, Irritant, Liver, Lung, Muscle, Skin</td>
</tr>
<tr>
<td>Alcohol derivative</td>
<td>Allergen, Central nervous system, Corrosive, Irritant</td>
</tr>
</tbody>
</table>

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: Corrosive liquids, n.o.s. (cycloaliphatic amine, Nonylphenol)
- Hazard class or division: 8
- Identification number: UN 1760
- Packing group: III
- Marine pollutant: Nonylphenol

International Air Transportation (ICAO/IATA)
- Proper shipping name: Corrosive liquid, n.o.s. (cycloaliphatic amine, Nonylphenol)
- Hazard class or division: 8
- Identification number: UN 1760
- Packing group: III

Water Transportation (IMO/IMDG)
- Proper shipping name: CORROSIVE LIQUID, N.O.S. (cycloaliphatic amine, Nonylphenol)
- Hazard class or division: 8
- Identification number: UN 1760
- Packing group: III
- Marine pollutant: Nonylphenol

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/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.


16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 1, 2, 4, 5, 6, 7, 8, 10

Prepared by: Rena Petrides, Regulatory Affairs Specialist

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DB EPOXY Pot CMPD E-60NC 50 ML
IDH number: 701989
Item number: 29324_209536
Region: United States

Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

Contact information:
Telephone: 860.571.5100
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

HMIS:
Physical state: Liquid
Color: Black
Odor: Epoxy

HEALTH: 2
FLAMMABILITY: 1
PHYSICAL HAZARD: 1

WARNING: MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

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

Existing conditions aggravated by exposure: Skin 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 | %
--- | --- | ---
Epichlorohydrin-4,4’-isopropylidene diphenol resin | 25068-38-6 | 30 - 60
Phenol polymer with formaldehyde, glycidyl ether | 28064-14-4 | 30 - 60
Styrene polymer | Unknown | 1 - 5

4. FIRST AID MEASURES

Inhalation: Move 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 flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. If symptoms develop and persist, 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. If symptoms develop and persist, get medical attention.

5. FIRE FIGHTING MEASURES

Flash point: > 93 °C (> 199.4 °F) Setaflash Closed Cup
Autoignition temperature: Not available.
Flammable/Explosive limits - lower: Not available.
Flammable/Explosive limits - upper: Not available.
Extinguishing media: Foam, dry chemical or carbon dioxide.
Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turnout gear.
Unusual fire or explosion hazards: In case of fire, keep containers cool with water spray. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. May decompose above 149°C (300°F). May polymerize above 260°C (500°F) in which case closed containers may rupture or explode. Fumes and vapors from thermal decompositions vary in composition and toxicity.

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. Ensure adequate ventilation. Wear appropriate personal protective equipment. 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: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed.

Storage: For safe storage, store at or below 149 °C (300.2 °F) Store in original container until ready to use. Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame.

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.

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epichlorohydrin-4,4’-isopropylidene diphenol resin</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Styrene polymer</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Engineering controls:** Use local exhaust ventilation if the potential for airborne exposure exists.

**Respiratory protection:** Use a NIOSH approved respirator if ventilation is inadequate.

**Eye/face protection:** Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

**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

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Black</td>
</tr>
<tr>
<td>Odor:</td>
<td>Epoxy</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point/range:</td>
<td>&gt; 149 °C (&gt; 300.2 °F)</td>
</tr>
<tr>
<td>Melting point/range:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt; 93 °C (&gt; 199.4 °F) Setaflash Closed Cup</td>
</tr>
<tr>
<td>Flammable/Explosive limits - lower:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammable/Explosive limits - upper:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Autoignition temperature:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Negligible</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not available.</td>
</tr>
<tr>
<td>VOC content:</td>
<td>&lt; 1 %; &lt; 10 g/l Estimated</td>
</tr>
</tbody>
</table>

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.


**Conditions to avoid:** Keep away from heat, ignition sources and incompatible materials. Avoid temperatures above 149°C (300°F). 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. Take measures to prevent the build-up of electrostatic charges.
11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene diphenol resin</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Styrene polymer</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Health Effects/Target Organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene diphenol resin</td>
<td>Allergen, Irritant</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>Styrene polymer</td>
<td>No Data</td>
</tr>
</tbody>
</table>

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: 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

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
- CERCLA/SARA 313: None above reporting de minimus

IDH number: 701989

Product name: DB EPOXY Pot CMPD E-60NC 50 ML
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/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: 1, 2, 3, 4, 5, 6, 7, 8, 10, 14

Prepared by: Rena Petrides, Regulatory Affairs Specialist

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