1. IDENTIFICATION

Product Name: EPO-TEK 320NC-2 Part A
Product No.: EPO-TEK 320NC-2 Part A
Identified uses: Adhesive.
Supplier: Epoxy Technology, Inc.
14 Fortune Drive
Billerica, MA 01821
USA
www.epotek.com
(978) 667-3805
(978) 663-9782

Emergency Telephone
(800) 255-3924

2. HAZARD(S) IDENTIFICATION

Appearance: Paste
Color: Black.
Odor: Mild.

Signal Word: Danger

Hazard Statements:
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H318: Causes serious eye damage.
- H335: May cause respiratory irritation.
- H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements:
- P271: Use only outdoors or in a well-ventilated area.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P501: Dispose of contents/container in accordance with local regulations.

Contains: Bisphenol A Diglycidyl Ether Resin

GHS Classification:
- Physical and Chemical Hazards: Not classified.
- Human health: Skin Irrit. 2 - H315; Eye Dam. 1 - H318; Skin Sens. 1 - H317; STOT SE 3 - H335
- Environment: Aquatic Chronic 3 - H412

Inhalation:
Gas or vapor may irritate respiratory system.

Ingestion:
May cause discomfort if swallowed.

Skin Contact:
May cause sensitization by skin contact. Irritating to skin.
### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Bisphenol A Diglycidyl Ether Resin</th>
<th>10-30%</th>
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<tbody>
<tr>
<td>CAS No.: 25085-99-8</td>
<td></td>
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<tr>
<td>EC No.:</td>
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<td>Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; Aquatic Chronic 2 - H411</td>
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<table>
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<tr>
<th>Reactive Diluent</th>
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</thead>
<tbody>
<tr>
<td>CAS No.: Proprietary</td>
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<td>GHS Classification</td>
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</tr>
<tr>
<td>Acute Tox. 4 - H302; Acute Tox. 4 - H312; Acute Tox. 4 - H332; Skin Irrit. 2 - H315; Eye Dam. 1 - H318; Skin Sens. 1 - H317</td>
<td></td>
</tr>
</tbody>
</table>

### 4. FIRST-AID MEASURES

**Description of first aid measures**

**Inhalation**
Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

**Ingestion**
NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

**Skin Contact**
Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

**Eye Contact**
Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

**Most important symptoms and effects, both acute and delayed**

**Inhalation**
Irritation of nose, throat and airway. Inhalation of dusts during cutting, grinding or sanding of this product may cause irritation of the respiratory tract.

**Ingestion**
May cause discomfort if swallowed.

**Skin Contact**
Skin irritation. Allergic rash.

**Eye Contact**
Extreme irritation of eyes and mucous membranes, including burning and tearing. Corneal damage.

**Indication of any immediate medical attention and special treatment needed**

Notes To The Physician
Treat Symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Flash point (°C)**
121

**Extinguishing Media**
Fire can be extinguished using: Dry chemicals. Foam. Carbon dioxide (CO2).

**Hazardous combustion products**
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
Special Fire Fighting Procedures
Avoid breathing fire vapors. Water spray should be used to cool containers.

Protective Equipment For Fire-Fighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Wear protective clothing as described in Section 8 of this material safety data sheet.

Environmental Precautions
Do not discharge onto the ground or into water courses. Avoid release to the environment.

Spill Clean Up Methods
Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

Reference to other sections
For personal protection, see section 8.

7. HANDLING AND STORAGE

Handling
Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Do not eat, drink or smoke when using the product. Observe good chemical hygiene practices. Avoid inhalation of vapors.

Storage
Store at moderate temperatures in dry, well ventilated area. Keep container tightly sealed when not in use.

Storage Class
Chemical storage.

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment

Process Conditions
Provide eyewash station.

Engineering Measures
Provide adequate general and local exhaust ventilation.

Respiratory Equipment
If ventilation is insufficient, suitable respiratory protection must be provided.

Hand Protection
Use protective gloves made of: Impermeable material.

Eye Protection
Wear tight-fitting goggles or face shield.

Other Protection
Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene Measures
DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Appearance</td>
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<tr>
<td>Color</td>
<td>Black</td>
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<tr>
<td>Odor</td>
<td>Mild</td>
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<tr>
<td>Solubility</td>
<td>Slightly soluble in water.</td>
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<td>&gt;1</td>
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<td>Evaporation rate</td>
<td>&lt;BuAc</td>
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<tr>
<td>Flash point (°C)</td>
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</table>

10. STABILITY AND REACTIVITY

Reactivity
Reaction with: Strong oxidizing agents. Strong reducing agents.

Stability
Stable under normal temperature conditions.

Hazardous Polymerisation
Will not polymerise.

Conditions To Avoid
Avoid excessive heat for prolonged periods of time.

Materials To Avoid
Strong oxidizing substances. Strong reducing agents.

Hazardous Decomposition Products
Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

11. TOXICOLOGICAL INFORMATION

Toxicological Information on Ingredients:

**Bisphenol A Diglycidyl Ether Resin (CAS: 25085-99-8)**

Toxic Dose 1 - LD 50
>15,000 mg/kg (oral, rat)

Toxic Dose 2 - LD 50
>23,000 mg/kg (dermal, rabbit)

**Reactive Diluent (CAS: Proprietary)**

Toxic Dose 1 - LD 50
1,163 mg/kg (oral, rat)

Toxic Dose 2 - LD 50
1,130 mg/kg (dermal, rabbit)

12. ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Acute Toxicity - Fish
Not available.

Degradability
No data available.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility:
The product has poor water-solubility.

Other adverse effects
Not known.
13. DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

General
The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).

Road Transport Notes
Not Classified

Rail Transport Notes
Not classified.

Sea Transport Notes
Not classified.

Air Transport Notes
Not classified.

Transport Labels
No transport warning sign required.

Environmentally Hazardous Substance/Marine Pollutant
No.

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes
Not applicable.

15. REGULATORY INFORMATION

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed.

SARA 313 Emission Reporting
None of the ingredients are listed.

CAA Accidental Release Prevention
None of the ingredients are listed.

OSHA Highly Hazardous Chemicals
None of the ingredients are listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed.

California Air Toxics “Hot Spots” (A-I)
None of the ingredients are listed.

California Air Toxics “Hot Spots” (A-II)
None of the ingredients are listed.

Massachusetts “Right To Know” List
None of the ingredients are listed.

Rhode Island “Right To Know” List
None of the ingredients are listed.

Minnesota “Right To Know” List
None of the ingredients are listed.
New Jersey “Right To Know” List
None of the ingredients are listed.
Pennsylvania “Right To Know” List
None of the ingredients are listed.

International Inventories

EU - EINECS/ELINCS
At least one ingredient is not listed.
Canada – DSL/NDSL
All ingredients are listed or exempt.
US - TSCA
All ingredients are listed or exempt.
US – TSCA 12(b) Export Notification
None of the ingredients are listed.
Australia - AICS
All ingredients are listed or exempt.
Japan – MITI
At least one ingredient is not listed.
Korea - KECI
All ingredients are listed or exempt.
China - IECSC
All ingredients are listed or exempt.
Philippines – PICCS
All ingredients are listed or exempt.

16. OTHER INFORMATION

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Disclaimer

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Epoxy Technology, Inc. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Epoxy Technology, Inc. accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.
1. IDENTIFICATION

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<tr>
<td>Supplier</td>
<td>Epoxy Technology, Inc.</td>
</tr>
<tr>
<td></td>
<td>14 Fortune Drive</td>
</tr>
<tr>
<td></td>
<td>Billerica, MA 01821 USA</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.epotek.com">www.epotek.com</a></td>
</tr>
<tr>
<td></td>
<td>(978) 667-3805</td>
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<tr>
<td>Emergency Telephone</td>
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2. HAZARD(S) IDENTIFICATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
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<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
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<tr>
<td>Color</td>
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<td>Odor</td>
<td>Pungent</td>
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<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Danger</th>
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</thead>
<tbody>
<tr>
<td>Hazard Statements</td>
<td></td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>Precautionary Statements</td>
<td></td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
<tr>
<td>P305+351+338</td>
<td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>P310</td>
<td>Immediately call a POISON CENTER or doctor/physician.</td>
</tr>
<tr>
<td>P501</td>
<td>Dispose of contents/container in accordance with local regulations.</td>
</tr>
<tr>
<td>Contains</td>
<td>Trimethyl-1, 6-Hexanediamine</td>
</tr>
<tr>
<td>GHS Classification</td>
<td></td>
</tr>
</tbody>
</table>

Inhalation

High concentrations of vapors may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

Ingestion

May cause chemical burns in mouth and throat. May cause stomach pain or vomiting. Harmful if swallowed.

Skin Contact

May cause sensitization by skin contact. Causes burns.
Eye Contact
Extreme irritation of eyes and mucous membranes, including burning and tearing. Causes burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>Trimethyl-1, 6-Hexanediameine</td>
<td>60-100%</td>
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CAS No.: 25513-64-8  
EC No.:  
GHS Classification  
Acute Tox. 4 - H302; Skin Corr. 1B - H314; Skin Sens. 1 - H317; Aquatic Chronic 3 - H412

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation
Move the exposed person to fresh air at once. Rinse nose and mouth with water. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion
DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

Skin Contact
Remove affected person from source of contamination. Rinse the skin immediately with lots of water. Get medical attention promptly if symptoms occur after washing.

Eye Contact
Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed

Inhalation
Vapors may cause headache, fatigue, dizziness and nausea. Irritation of nose, throat and airway.

Ingestion
May cause stomach pain or vomiting. May cause chemical burns in mouth and throat.

Skin Contact
Severe irritation. Burns can occur. Blistering may occur. Allergic rash.

Eye Contact
Extreme irritation of eyes and mucous membranes, including burning and tearing. Corneal damage.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician
Treat Symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point (°C) 93

Extinguishing Media
Fire can be extinguished using: Dry chemicals. Foam. Carbon dioxide (CO2).

Hazardous combustion products
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Unusual Fire & Explosion Hazards
No unusual fire or explosion hazards noted.

Special Fire Fighting Procedures
Avoid breathing fire vapors. Water spray should be used to cool containers.

Protective Equipment For Fire-Fighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES
Personal Precautions
Wear protective clothing as described in Section 8 of this material safety data sheet.

Environmental Precautions
Do not discharge onto the ground or into water courses. Avoid release to the environment.

Spill Clean Up Methods
Wear necessary protective equipment. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers.
Do not let washing down water contaminate ponds or waterways.

Reference to other sections
For personal protection, see section 8.

7. HANDLING AND STORAGE

Storage
Store at moderate temperatures in dry, well ventilated area. Keep container tightly sealed when not in use.

Storage Class
Corrosive storage.

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment

Engineering Measures
Provide adequate general and local exhaust ventilation.

Respiratory Equipment
If ventilation is insufficient, suitable respiratory protection must be provided.

Hand Protection
Use protective gloves made of: Impermeable material.

Eye Protection
Wear tight-fitting goggles or face shield.

Other Protection
Provide eyewash station. Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures
Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes wet.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
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<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Pungent</td>
</tr>
<tr>
<td>Solubility</td>
<td>Slightly soluble in water.</td>
</tr>
<tr>
<td>Vapor density (air=1)</td>
<td>&gt;1</td>
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<tr>
<td>Evaporation rate</td>
<td>&lt;BuAc</td>
</tr>
<tr>
<td>Flash point (°C)</td>
<td>93</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Reaction with: Strong oxidizing agents. Strong reducing agents.

Stability
Stable under normal temperature conditions.
Hazardous Polymerisation
Will not polymerise.

Conditions To Avoid
Avoid contact with oxidizers or reducing agents. Avoid excessive heat for prolonged periods of time.

Materials To Avoid
Strong oxidizing substances. Strong reducing agents.

Hazardous Decomposition Products
In case of fire, toxic gases (CO, CO₂, NOₓ) may be formed.

11. TOXICOLOGICAL INFORMATION

Toxicological Information on Ingredients:

Trimethyl-1, 6-Hexanediamine (CAS: 25513-64-8)

Toxic Dose 1 - LD 50
910 mg/kg (oral, rat)

12. ECOLOGICAL INFORMATION

Ecotoxicity
The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Acute Toxicity - Fish
Not available.

Degradability
No data available.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility:
The product has poor water-solubility.

Other adverse effects
Not known.

13. DISPOSAL CONSIDERATIONS

Disposal Methods
Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORT INFORMATION

UN No. (DOT/TDG)  UN2327
UN No. (IMDG)  2327
UN No. (ICAO)  2327

DOT Proper Shipping Name  TRIMETHYLHEXAMETHYLENEDIAMINES
TDG Proper Shipping Name  TRIMETHYLHEXAMETHYLENEDIAMINES

DOT Hazard Class  8

DOT Hazard Label  Corrosive

TDG Class  8

TDG Label(s)  8

IMDG Class  8

ICAO Class  8

Transport Labels
15. REGULATORY INFORMATION

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed.
CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
None of the ingredients are listed.
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US State Regulations

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Massachusetts “Right To Know” List
None of the ingredients are listed.
Rhode Island “Right To Know” List
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International Inventories

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Canada – DSL/NDSL
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US – TSCA 12(b) Export Notification
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Australia - AICS
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Japan – MITI
None of the ingredients are listed.

Korea - KECI
None of the ingredients are listed.

China - IECSC
All ingredients are listed or exempt.

Philippines – PICCS
None of the ingredients are listed.

16. OTHER INFORMATION

<table>
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<th>Revision Date</th>
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