



## SAFETY DATA SHEET EPO-TEK 320 PMF Syringe

### 1. Identification

#### Product identifier

**Product name** EPO-TEK 320 PMF Syringe

**Product number** 320

#### Recommended use of the chemical and restrictions on use

**Application** Adhesive.

#### Details of the supplier of the safety data sheet

**Supplier** Epoxy Technology, Inc.  
14 Fortune Drive  
Billerica, MA 01821  
USA  
(978) 667-3805  
(978) 663-9782  
www.epotek.com, SDS@epotek.com

#### Emergency telephone number

**Emergency telephone** +1 (800) 255-3924, +1 (813) 248-0585

### 2. Hazard(s) identification

#### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

**Environmental hazards** Aquatic Chronic 2 - H411

#### Label elements

##### Pictogram



**Signal word**

Danger

##### Hazard statements

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

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**Precautionary statements**

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
 P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 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 national regulations.

**Contains** Bisphenol A Diglycidyl Ether Resin, Reactive Diluent, Trimethyl-1, 6-Hexanediamine

### Other hazards

Harmful dust may be released during cutting or grinding process.

**Hazards not otherwise classified (HNOC)** Contains epoxy constituents. May produce an allergic reaction.

### 3. Composition/information on ingredients

#### Mixtures

|   |               |
|---|---------------|
| <b>Bisphenol A Diglycidyl Ether Resin</b> | <b>30-60%</b> |
| CAS number: 25085-99-8                    |               |
| <b>Classification</b>                     |               |
| Skin Irrit. 2 - H315                      |               |
| Eye Irrit. 2 - H319                       |               |
| Skin Sens. 1 - H317                       |               |
| Aquatic Chronic 2 - H411                  |               |
| <b>Reactive Diluent</b>                   | <b>10-30%</b> |
| CAS number: Proprietary                   |               |
| <b>Classification</b>                     |               |
| Acute Tox. 4 - H302                       |               |
| Acute Tox. 4 - H312                       |               |
| Acute Tox. 4 - H332                       |               |
| Skin Irrit. 2 - H315                      |               |
| Eye Dam. 1 - H318                         |               |
| Skin Sens. 1 - H317                       |               |
| <b>Trimethyl-1, 6-Hexanediamine</b>       | <b>10-30%</b> |
| CAS number: 25513-64-8                    |               |
| <b>Classification</b>                     |               |
| Acute Tox. 4 - H302                       |               |
| Skin Corr. 1B - H314                      |               |
| Eye Dam. 1 - H318                         |               |
| Skin Sens. 1 - H317                       |               |
| Aquatic Chronic 3 - H412                  |               |

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|                       |               |
|-----------------------|---------------|
| <b>Carbon Black*</b>  | <b>10-30%</b> |
| CAS number: 1333-86-4 |               |
| <b>Classification</b> |               |
| Carc. 2 - H351        |               |

The Full Text for all Hazard Statements are Displayed in Section 16.

**Ingredient notes**                      \*This product contains Carbon Black, which is suspected of causing cancer when inhaled in fine particulate form. Carbon Black should not be respirable in this formulation. However, if cured material will be ground, milled, etc., wear respiratory protection to avoid inhaling any dust that may be produced.

### 4. First-aid measures

#### Description of first aid measures

**Inhalation**                              Move affected person to fresh air at once. Rinse nose and mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Keep affected person warm and at rest. Get medical attention immediately.

**Ingestion**                                Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention immediately.

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

**Eye contact**                             Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

**Inhalation**                                Inhalation of dust during cutting, grinding or sanding operations involving this product may cause irritation of the respiratory tract. Gas or vapor in high concentrations may irritate the respiratory system.

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

**Skin contact**                             Burning pain and severe corrosive skin damage. Blistering may occur. Allergic rash.

**Eye contact**                              Causes serious eye damage.

#### Indication of immediate medical attention and special treatment needed

**Notes for the doctor**                    Treat symptomatically.

### 5. Fire-fighting measures

#### Extinguishing media

**Suitable extinguishing media**      Dry chemicals. Foam. Carbon dioxide (CO2).

#### Special hazards arising from the substance or mixture

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

#### Advice for firefighters

**Protective actions during firefighting**    Avoid breathing fire gases or vapors. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

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**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8.

#### Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground. Avoid release to the environment.

#### Methods and material for containment and cleaning up

**Methods for cleaning up** Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Avoid contamination of ponds or watercourses with washing down water.

**Reference to other sections** For personal protection, see Section 8.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions** Handle all packages and containers carefully to minimize spills. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes.

**Advice on general occupational hygiene** Provide eyewash station and safety shower. Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Wash after use and before eating, smoking and using the toilet. Wash contaminated clothing before reuse. Use appropriate skin cream to prevent drying of skin.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store at -40 degrees C. Keep container tightly sealed when not in use.

**Storage class** Corrosive storage.

#### Specific end uses(s)

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

### 8. Exposure Controls/personal protection

#### Control parameters

#### Occupational exposure limits

##### **Carbon Black\***

Long-term exposure limit (8-hour TWA): 3

**Ingredient comments** \*This product contains Carbon Black, which is suspected of causing cancer when inhaled in fine particulate form. Carbon Black should not be respirable in this formulation. However, if cured material will be ground, milled, etc., wear respiratory protection to avoid inhaling any dust that may be produced.

#### Exposure controls

##### **Protective equipment**



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|   |  |
|---|--|
| <b>Appropriate engineering controls</b> | Provide adequate general and local exhaust ventilation.  |
| <b>Eye/face protection</b>              | Wear tight-fitting, chemical splash goggles or face shield.  |
| <b>Hand protection</b>                  | It is recommended that chemical-resistant, impervious gloves are worn.   |
| <b>Other skin and body protection</b>   | Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station and safety shower.   |
| <b>Hygiene measures</b>                 | Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated. |
| <b>Respiratory protection</b>           | If ventilation is inadequate, suitable respiratory protection must be worn.  |

### 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

|                          |                            |
|--------------------------|----------------------------|
| <b>Appearance</b>        | Paste.                     |
| <b>Color</b>             | Black.                     |
| <b>Odor</b>              | Mild.                      |
| <b>Flash point</b>       | >93°C                      |
| <b>Evaporation rate</b>  | <BuAc                      |
| <b>Vapor density</b>     | >1                         |
| <b>Solubility(ies)</b>   | Slightly soluble in water. |
| <b>Other information</b> | None.                      |

### 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | The following materials may react with the product: Strong oxidizing agents. Strong reducing agents.   |
| <b>Stability</b>                          | Stable at normal ambient temperatures and when used as recommended.  |
| <b>Possibility of hazardous reactions</b> | May polymerize.  |
| <b>Conditions to avoid</b>                | Avoid excessive heat for prolonged periods of time.  |
| <b>Materials to avoid</b>                 | Strong oxidizing agents. Strong reducing agents.   |
| <b>Hazardous decomposition products</b>   | Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). |

### 11. Toxicological information

#### Information on toxicological effects

##### Carcinogenicity

##### **Carcinogenicity**

\*This product contains Carbon Black, which is suspected of causing cancer when inhaled in fine particulate form. Carbon Black should not be respirable in this formulation. However, if cured material will be ground, milled, etc., wear respiratory protection to avoid inhaling any dust that may be produced.

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|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Inhalation of dust during cutting, grinding or sanding operations involving this product may cause irritation of the respiratory tract. Gas or vapor in high concentrations may irritate the respiratory system. |
| <b>Ingestion</b>    | Harmful if swallowed. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.  |
| <b>Skin Contact</b> | Causes severe burns. May cause sensitisation by skin contact.  |
| <b>Eye contact</b>  | Causes serious eye damage. Severe irritation, burning and tearing.   |

### Toxicological information on ingredients.

#### Carbon Black

#### Carcinogenicity

|                             |  |
|-----------------------------|--|
| <b>IARC carcinogenicity</b> | IARC Group 2B Possibly carcinogenic to humans.   |
| <b>NTP carcinogenicity</b>  | Reasonably anticipated to be a human carcinogen. |
| <b>OSHA Carcinogenicity</b> | Not listed.                                      |

### 12. Ecological Information

|   |   |
|---|---|
| <b>Ecotoxicity</b>                          | Dangerous for the environment if discharged into watercourses. Dangerous for the environment. May cause long-term adverse effects in the aquatic environment. |
| <b><u>Toxicity</u></b>                      |   |
| <b>Acute toxicity - fish</b>                | Not available.  |
| <b><u>Persistence and degradability</u></b> |   |
| <b>Persistence and degradability</b>        | No data available.  |
| <b><u>Bioaccumulative potential</u></b>     |   |
| <b>Bio-Accumulative Potential</b>           | No data available on bioaccumulation.   |
| <b><u>Mobility in soil</u></b>              |   |
| <b>Mobility</b>                             | The product contains substances which are water-soluble and may spread in water systems.  |
| <b><u>Other adverse effects</u></b>         |   |
| <b>Other adverse effects</b>                | Not known.  |

### 13. Disposal considerations

#### Waste treatment methods

|                         |   |
|-------------------------|---|
| <b>Disposal methods</b> | Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. |
|-------------------------|---|

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### 14. Transport information

#### UN Number

|               |        |
|---------------|--------|
| UN No. (TDG)  | 2327   |
| UN No. (IMDG) | 2327   |
| UN No. (ICAO) | 2327   |
| UN No. (DOT)  | UN2327 |

#### UN proper shipping name

|                             |                                |
|-----------------------------|--------------------------------|
| Proper shipping name (TDG)  | TRIMETHYLHEXAMETHYLENEDIAMINES |
| Proper shipping name (IMDG) | TRIMETHYLHEXAMETHYLENEDIAMINES |
| Proper shipping name (ICAO) | TRIMETHYLHEXAMETHYLENEDIAMINES |
| Proper shipping name (DOT)  | TRIMETHYLHEXAMETHYLENEDIAMINES |

#### Transport hazard class(es)

|                     |   |
|---------------------|---|
| DOT hazard class    | 8 |
| DOT hazard label    | 8 |
| TDG class           | 8 |
| TDG label(s)        | 8 |
| IMDG Class          | 8 |
| ICAO class/division | 8 |

#### Transport labels



#### DOT transport labels



#### Packing group

|                    |     |
|--------------------|-----|
| TDG Packing Group  | III |
| IMDG packing group | III |
| ICAO packing group | III |
| DOT packing group  | III |

#### Environmental hazards

#### Environmentally Hazardous Substance



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### Special precautions for user

**EmS** F-A, S-B

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

### 15. Regulatory information

**Regulatory References** Proprietary information protected pursuant to WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Section 7, Art. 39.

### US Federal Regulations

#### **SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

None of the ingredients are required to be listed.

#### **CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**

None of the ingredients are required to be listed.

#### **SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

None of the ingredients are required to be listed.

#### **SARA 313 Emission Reporting**

None of the ingredients are required to be listed.

#### **CAA Accidental Release Prevention**

None of the ingredients are required to be listed.

#### **OSHA Highly Hazardous Chemicals**

None of the ingredients are required to be listed.

### US State Regulations

#### **California Proposition 65 Carcinogens and Reproductive Toxins**

WARNING: This product contains a substance known to the State of California to cause cancer and/or reproductive harm.

#### **California Air Toxics "Hot Spots" (A-I)**

None of the ingredients are required to be listed.

#### **California Air Toxics "Hot Spots" (A-II)**

None of the ingredients are required to be listed.

#### **Massachusetts "Right To Know" List**

The following ingredients are listed or exempt:

*Carbon Black*

#### **Rhode Island "Right To Know" List**

The following ingredients are listed or exempt:

*Carbon Black*

#### **Minnesota "Right To Know" List**

The following ingredients are listed or exempt:

*Carbon Black*

#### **New Jersey "Right To Know" List**

The following ingredients are listed or exempt:



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*Trimethyl-1, 6-Hexanediamine*

*Carbon Black*

### Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

*Carbon Black*

### Inventories

#### EU - EINECS/ELINCS

Some of the ingredients are listed or exempt.

#### Canada - DSL/NDSL

All the ingredients are listed or exempt.

#### US - TSCA

All the ingredients are listed or exempt.

#### US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

#### Australia - AICS

All the ingredients are listed or exempt.

#### Japan - MITI

Some of the ingredients are listed or exempt.

#### Korea - KECI

Some of the ingredients are listed or exempt.

#### China - IECSC

All the ingredients are listed or exempt.

#### Philippines - PICCS

Some of the ingredients are listed or exempt.

### 16. Other information

|                                  |  |
|----------------------------------|--|
| <b>Revision date</b>             | 8/11/2016  |
| <b>Revision</b>                  | 1  |
| <b>Hazard statements in full</b> | <p>H302 Harmful if swallowed.</p> <p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H351 Suspected of causing cancer.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p> |

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