



SAFETY DATA SHEET

EPO-TEK® MED-320 PMF Syringe

1. Identification

Product identifier

Product name EPO-TEK® MED-320 PMF Syringe

Product number MED-320

Recommended use of the chemical and restrictions on use

Application Adhesive.

Uses advised against Use only for intended applications.

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 ChemTel: +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.

EPO-TEK® MED-320 PMF Syringe

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

Substances

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

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Carbon Black	10-30%
CAS number: 1333-86-4	
Classification	
Carc. 2 - H351	

The full text for all hazard statements is displayed in Section 16.

Product name EPO-TEK® MED-320 PMF Syringe

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

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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.
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°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.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

Carbon Black

Long-term exposure limit (8-hour TWA): ACGIH 3 mg/m³ inhalable fraction

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

A3

Long-term exposure limit (8-hour TWA): OSHA 3.5 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans.

OSHA = Occupational Safety and Health Administration.

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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



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station and safety shower.

Hygiene measures

Wash 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.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Paste.
Color	Black.
Odor	Mild.
Odor threshold	No specific test data are available.
pH	No specific test data are available.
Melting point	No specific test data are available.
Initial boiling point and range	No specific test data are available.
Flash point	>93°C
Evaporation rate	<BuAc
Flammability (solid, gas)	No specific test data are available.
Upper/lower flammability or explosive limits	No specific test data are available.
Vapor density	>1
Relative density	No specific test data are available.
Solubility(ies)	Slightly soluble in water.
Partition coefficient	No specific test data are available.
Auto-ignition temperature	No specific test data are available.
Decomposition Temperature	No specific test data are available.

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Viscosity No specific test data are available.

Other information None.

10. Stability and reactivity

Reactivity The following materials may react with the product: Strong oxidizing agents. Strong reducing agents.

Stability Stable at normal ambient temperatures and when used as recommended.

Possibility of hazardous reactions May polymerize.

Conditions to avoid Avoid excessive heat for prolonged periods of time.

Materials to avoid Strong oxidizing agents. Strong reducing agents.

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO₂).

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 1,363.54

Acute toxicity - dermal

ATE dermal (mg/kg) 5,500.22

Acute toxicity - inhalation

ATE inhalation (gases ppm) 22,500.9

ATE inhalation (vapours mg/l) 55.0

ATE inhalation (dusts/mists mg/l) 7.5

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.

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

Skin Contact Causes severe burns. May cause sensitisation by skin contact.

Eye contact Causes serious eye damage. Severe irritation, burning and tearing.

Toxicological information on ingredients.

Carbon Black

EPO-TEK® MED-320 PMF Syringe**Carcinogenicity**

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

NTP carcinogenicity Reasonably anticipated to be a human carcinogen.

OSHA Carcinogenicity Not listed.

12. Ecological Information

Ecotoxicity Dangerous for the environment if discharged into watercourses. Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

Acute aquatic toxicity

Acute toxicity - fish Not available.

Persistence and degradability

Persistence and degradability No data available.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient No specific test data are available.

Mobility in soil

Mobility The product contains substances which are water-soluble and may spread in water systems.

Other adverse effects

Other adverse effects Not known.

13. Disposal considerations**Waste treatment methods**

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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

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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****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.

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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:

Carbon Black

Trimethyl-1, 6-Hexanediamine

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.

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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

Revision date	6/25/2018
Revision	1
Hazard statements in full	H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H351 Suspected of causing cancer. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

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