



SAFETY DATA SHEET EPO-TEK® H20E PMF Syringe

1. Identification

Product identifier

Product name EPO-TEK® H20E PMF Syringe

Product number H20E

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 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Label elements

Hazard symbols



Signal word

Danger

Hazard statements

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements

P261 Avoid breathing vapor/ spray.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 If on skin: Wash with plenty of water.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains Silver, Epoxy Phenol Novolac

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

Silver	30-60%
CAS number: 7440-22-4	

Classification
 Aquatic Chronic 2 - H411

Epoxy Phenol Novolac	10-30%
CAS number: 9003-36-5	

Classification
 Skin Irrit. 2 - H315
 Eye Irrit. 2A - H319
 Skin Sens. 1 - H317
 Aquatic Chronic 2 - H411

Reactive Diluent	5-10%
CAS number: Proprietary	

Classification
 Acute Tox. 4 - H302
 Eye Dam. 1 - H318
 STOT SE 3 - H336

Substituted Imidazole	1-5%
CAS number: Proprietary	

Classification
 Acute Tox. 4 - H302
 Skin Irrit. 2 - H315
 Eye Dam. 1 - H318
 STOT SE 3 - H335

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

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4. First-aid measures

Description of first aid measures

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin Contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
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	Gas or vapor in high concentrations may irritate the respiratory system. Inhalation of dust during cutting, grinding or sanding operations involving this product may cause irritation of the respiratory tract.
Ingestion	May cause discomfort if swallowed.
Skin contact	Causes skin irritation. May cause sensitisation by skin contact.
Eye contact	Causes serious eye damage.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Dry chemicals. Foam. Water spray.
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Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapors. Use water to keep fire exposed containers cool and disperse vapors.
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	Wear protective clothing as described in Section 8 of this safety data sheet.
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Environmental precautions

Environmental precautions	Avoid discharge to the aquatic environment.
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Methods and material for containment and cleaning up

Methods for cleaning up	Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.
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Reference to other sections	For personal protection, see Section 8.
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7. Handling and storage

Precautions for safe handling

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Usage precautions	Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated. Wash contaminated clothing before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet.
<u>Conditions for safe storage, including any incompatibilities</u>	
Storage precautions	Store at -40°C. Keep container tightly sealed when not in use.
Storage class	Chemical storage.
<u>Specific end uses(s)</u>	
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

Silver

Long-term exposure limit (8-hour TWA): ACGIH 0.1 mg/m³

Short-term exposure limit (15-minute): ACGIH

ACGIH = American Conference of Governmental Industrial Hygienists.

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

The following protection should be worn: 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.

Hygiene measures

Provide eyewash station. Do not smoke in work area. Wash 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.

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	Silver.
Odor	Mild.
Odor threshold	No specific test data are available.
pH	No specific test data are available.

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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.
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.
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: Carbon monoxide (CO). Carbon dioxide (CO ₂).

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 5,128.21

Inhalation	Gas or vapor in high concentrations may irritate the respiratory system.
Ingestion	May cause discomfort if swallowed.
Skin Contact	May cause sensitisation by skin contact. Irritating to skin.
Eye contact	Causes serious eye damage.

12. Ecological information

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

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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 No data available.

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) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (DOT) 3082

UN proper shipping name

Proper shipping name (TDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver, Epoxy Phenol Novolac)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver, Epoxy Phenol Novolac)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver, Epoxy Phenol Novolac)

Proper shipping name (DOT) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver, Epoxy Phenol Novolac)

Transport hazard class(es)

TDG class 9

TDG label(s) 9

IMDG Class 9

ICAO class/division 9

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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-F

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

15. Regulatory information

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)

The following ingredients are listed:

Silver

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are required to be listed.

SARA 313 Emission Reporting

The following ingredients are listed:

Silver

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

None of the ingredients are required to be listed.

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

The following ingredients are listed:

Silver

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:

Silver

Rhode Island "Right To Know" List

The following ingredients are listed:

Silver

Minnesota "Right To Know" List

The following ingredients are listed:

Silver

New Jersey "Right To Know" List

The following ingredients are listed:

Silver

Pennsylvania "Right To Know" List

The following ingredients are listed:

Silver

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.

Australia - AICS

All the ingredients are listed or exempt.

Japan - ENCS

Some of the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

All the ingredients are listed or exempt.

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16. Other information

Revision date	3/8/2021
Revision	2
Supersedes date	5/23/2018
Hazard statements in full	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.

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