



SAFETY DATA SHEET

EPO-TEK® EJ2312 PMF Syringe

1. Identification

Product identifier

Product name EPO-TEK® EJ2312 PMF Syringe
Product number EJ2312

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

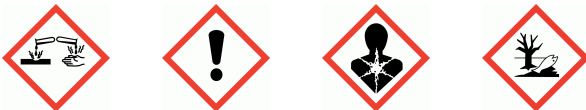
2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 - H361fd
Environmental hazards Aquatic Chronic 2 - H411

Label elements

Hazard symbols



Signal word Danger

Hazard statements H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H317 May cause an allergic skin reaction.
 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
 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 Epoxy Phenol Novolac, Reactive Diluent, Cycloaliphatic Diamine, Paratertiarybutylphenol

Other hazards

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

3. Composition/information on ingredients

Mixtures

Silver	60-100%
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. 2 - 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	
Cycloaliphatic Diamine	1-5%
CAS number: Proprietary	
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

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Accelerating Agent	1-5%
CAS number: Proprietary	
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Paratertiarybutylphenol	1-5%
CAS number: 98-54-4	
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Repr. 2 - H361fd	
STOT SE 3 - H335	

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

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

General information	May damage fertility or the unborn child.
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. Carbon dioxide (CO₂).

Special hazards arising from the substance or mixture

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

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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. Keep unnecessary and unprotected personnel away from the spillage. Avoid contact with skin and eyes.

Environmental precautions

Environmental precautions Avoid discharge to the aquatic environment.

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.

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. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.

Advice on general occupational hygiene Provide eyewash station. 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 Chemical 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

Silver

Long-term exposure limit (8-hour TWA): 0.1

Exposure controls

Protective equipment



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Appropriate engineering controls	Provide adequate general and local exhaust ventilation. Avoid inhalation of vapors.
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.
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.
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
Evaporation factor	No specific test data are available.
Flammability (solid, gas)	No specific test data are available.
Upper/lower flammability or explosive limits	No specific test data are available.
Vapor pressure	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.
Viscosity	No specific test data are available.
Other information	None.

10. Stability and reactivity

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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) 4,985.36

Acute toxicity - dermal

ATE dermal (mg/kg) 64,192.34

Acute toxicity - inhalation

ATE inhalation (gases ppm) 315,126.05

ATE inhalation (vapours mg/l) 770.31

ATE inhalation (dusts/mists mg/l) 105.04

General information Possible risk of adverse reproductive effects.

Inhalation May cause respiratory irritation. 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.

12. Ecological information

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

Acute aquatic toxicity

Acute toxicity - fish Not available.

Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient No specific test data are available.

Mobility in soil

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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) UN3082

UN proper shipping name

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

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

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

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

Transport hazard class(es)

DOT hazard class 9

DOT hazard label 9

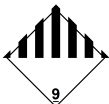
TDG class 9

TDG label(s) 9

IMDG Class 9

ICAO class/division 9

Transport labels



DOT transport labels



Packing group

TDG Packing Group III

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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

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)

The following ingredients are listed or exempt:

Silver

1,000 lbs (454 Kg)

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 or exempt:

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.

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

The following ingredients are listed or exempt:

Silver

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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:

Accelerating Agent

Silver

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Silver

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Accelerating Agent

Silver

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Cycloaliphatic Diamine

Silver

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Accelerating Agent

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 or exempt.

Australia - AICS

Some of 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.

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Philippines - PICCS

All the ingredients are listed or exempt.

16. Other information

Revision date	8/16/2019
Revision	2
Supersedes date	9/20/2017
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. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.