



SAFETY DATA SHEET

EPO-TEK® E415G PMF Syringe

1. Identification

Product identifier

Product name EPO-TEK® E415G PMF Syringe

Product number E415G

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

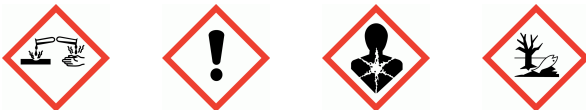
Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 2 - H351

Environmental hazards Aquatic Chronic 2 - H411

Label elements

Pictogram



Signal word

Danger

Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements	<p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
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Contains Polyoxypropylenediamine, Resorcinol Diglycidyl Ether

3. Composition/information on ingredients

Mixtures

<p>Silver 60-100%</p> <p>CAS number: 7440-22-4</p>
<p>Classification</p> <p>Aquatic Chronic 2 - H411</p>
<p>Polyoxypropylenediamine 5-10%</p> <p>CAS number: 9046-10-0</p>
<p>Classification</p> <p>Acute Tox. 4 - H302</p> <p>Skin Corr. 1B - H314</p> <p>Eye Dam. 1 - H318</p>
<p>Resorcinol Diglycidyl Ether 5-10%</p> <p>CAS number: 101-90-6</p>
<p>Classification</p> <p>Acute Tox. 4 - H302</p> <p>Acute Tox. 4 - H312</p> <p>Skin Irrit. 2 - H315</p> <p>Eye Irrit. 2 - H319</p> <p>Skin Sens. 1 - H317</p> <p>Muta. 2 - H341</p> <p>Carc. 2 - H351</p>

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

4. First-aid measures

Description of first aid measures

Inhalation	<p>Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if symptoms are severe or persist. Place unconscious person on their side in the recovery position and ensure breathing can take place. Never give anything by mouth to an unconscious person.</p>
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Ingestion	Remove affected person from source of contamination. Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting unless under the direction of medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms are severe or persist.
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Do not use organic solvents. Get medical attention if symptoms are severe or persist after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Most important symptoms and effects, both acute and delayed

General information	Suspected of causing genetic defects. Suspected of causing cancer.
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 severe burns. May cause sensitisation by skin contact. May cause an allergic skin reaction.
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.

Special hazards arising from the substance or mixture

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

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.

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 inhalation of vapors and contact with skin and eyes. Use suitable respiratory protection if ventilation is inadequate.

Environmental precautions

Environmental precautions Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up

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Methods for cleaning up Stop leak if safe to do so. Eliminate all sources of ignition. Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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

7. Handling and storage

Precautions for safe handling

Usage precautions Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Handle all packages and containers carefully to minimize spills. Avoid inhalation of vapors and 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.

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



Appropriate engineering controls Provide adequate general and local exhaust ventilation.

Personal protection Pregnant or breastfeeding women should not work with this product if there is any risk of exposure.

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 Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. 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.

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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
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

Reactivity	The following materials may react with the product: Acids. Alkalis. Oxidizing agents. 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	Acids. Alkalis. Oxidizing agents. 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

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Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 3,453.04

Acute toxicity - dermal

ATE dermal (mg/kg) 15,873.02

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 severe burns. May cause sensitisation by skin contact. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Acute and chronic health hazards	Suspected of causing cancer. Suspected of causing genetic defects.

12. Ecological Information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish No information available.

Persistence and degradability

Persistence and degradability No data available.

Bioaccumulative potential

Bio-Accumulative Potential No information available.

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

General information Dispose of waste via a licensed waste disposal contractor.

14. Transport information

UN Number

UN No. (TDG) 2735

UN No. (IMDG) 2735

UN No. (ICAO) 2735

UN No. (DOT) UN2735

UN proper shipping name

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Proper shipping name (TDG) AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine)

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine)

Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine)

Proper shipping name (DOT) AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylenediamine)

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



Special precautions for user

IMDG Code segregation group 18. Alkalis

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.

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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

Resorcinol Diglycidyl Ether

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

The following ingredients are listed:

Resorcinol Diglycidyl Ether

Known to the State of California to cause cancer.

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

The following ingredients are listed or exempt:

Silver

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

The following ingredients are listed or exempt:

Resorcinol Diglycidyl Ether

Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Silver

Resorcinol Diglycidyl Ether

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:

Silver

Resorcinol Diglycidyl Ether

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New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Silver

Resorcinol Diglycidyl Ether

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Silver

Resorcinol Diglycidyl Ether

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

All the ingredients are listed or exempt.

16. Other information

Revision date	9/27/2018
Revision	1
Hazard statements in full	<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>H341 Suspected of causing genetic defects.</p> <p>H351 Suspected of causing cancer.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>

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