



SAFETY DATA SHEET

EPO-TEK E4110-PFC PMF Syringe

1. Identification

Product identifier

Product name EPO-TEK E4110-PFC PMF Syringe

Product number E4110-PFC

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

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

Environmental hazards Aquatic Chronic 2 - H411

Label elements

Pictogram



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.

Precautionary statements

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.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container in accordance with national regulations.

EPO-TEK E4110-PFC PMF Syringe

Contains Silver, Epoxy Phenol Novolac, Polyoxypropylenediamine

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	
Polyoxypropylenediamine	1-5%
CAS number: 9046-10-0	
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Reactive Diluent	1-5%
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	

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

EPO-TEK E4110-PFC PMF Syringe

4. First-aid measures

Description of first aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. 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. Get medical attention if any discomfort continues.
Ingestion	Remove affected person from source of contamination. Rinse nose and mouth with water. Give plenty of water to drink. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. Do not induce vomiting unless under the direction of medical personnel. 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. Get medical attention if any discomfort continues.
Skin Contact	Remove contaminated clothing and rinse skin thoroughly with water. Continue to rinse for at least 10 minutes. Do not use organic solvents. Get medical attention if irritation persists after washing.
Eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. 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	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.
-----------------------------	------------------------

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 monoxide (CO). Carbon dioxide (CO₂).

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.

EPO-TEK E4110-PFC PMF Syringe

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 safe to do so. Eliminate all sources of ignition. Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Dispose of contents/container in accordance with national regulations.

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

7. Handling and storage

Precautions for safe handling

Usage precautions Avoid spilling. 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 if skin becomes contaminated. Wash after use and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions Store at -40 degrees 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 1.2.

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.

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 eat, drink or smoke when using this product. Wash promptly if skin becomes contaminated. Wash after use and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

Respiratory protection

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

9. Physical and Chemical Properties

EPO-TEK E4110-PFC PMF Syringe

Information on basic physical and chemical properties

Appearance	Paste.
Color	Silver.
Odor	Mild.
Flash point	> 93°C
Evaporation rate	< BuAc
Other information	None.

10. Stability and reactivity

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

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	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 life with long lasting effects.
--------------------	--

EPO-TEK E4110-PFC PMF Syringe

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.

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 contents/container in accordance with national regulations. 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. (DOT) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN proper shipping name

Proper shipping name (DOT) 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)

Transport hazard class(es)

IMDG Class 9

ICAO class/division 9

Transport labels



Packing group

DOT pack group III

IMDG packing group III

EPO-TEK E4110-PFC PMF Syringe

ICAO 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 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

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:

EPO-TEK E4110-PFC PMF Syringe

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:

Silver

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Silver

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

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

All the ingredients are listed or exempt.

Japan - MITI

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.

16. Other information

Revision date 1/6/2016

Revision 1

EPO-TEK E4110-PFC PMF Syringe

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.
H411 Toxic to aquatic life with long lasting effects.

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Epoxy Technology, Inc. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Epoxy Technology, Inc. accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.