



SAFETY DATA SHEET

EPO-TEK® 310M-1 PMF Syringe

1. Identification

Product identifier

Product name EPO-TEK® 310M-1 PMF Syringe

Product number 310M-1

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 3 - H412

Label elements

Pictogram



Signalword

Danger

Hazard statements

H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H412 Harmful to aquatic life with long lasting effects.

EPO-TEK® 310M-1 PMF Syringe

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>
Contains	Epoxy Resin Blend, Accelerating Agent, Methylenebiscyclohexanamine, 4,4'-, Reactive Diluent

3. Composition/Information on ingredients

Substances

Epoxy Resin Blend	30-60%
CAS number: Proprietary	
Classification	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	
Accelerating Agent	10-30%
CAS number: Proprietary	
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H332	
Methylenebiscyclohexanamine,4,4'-	10-30%
CAS number: 1761-71-3	
Classification	
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Reactive Diluent	5-10%
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	

EPO-TEK® 310M-1 PMF Syringe

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

Product name EPO-TEK® 310M-1 PMF Syringe

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	Causes severe burns. 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

Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.
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 For personal protection, see Section 8.

Environmental precautions

EPO-TEK® 310M-1 PMF Syringe

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. 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

Ingredient comments No exposure limits known for ingredient(s).

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 and safety shower. Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Wash contaminated clothing before reuse. Wash after use and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

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

EPO-TEK® 310M-1 PMF Syringe

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Clear. Yellowish.
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: 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. Avoid heat, flames and other sources of ignition.
Materials to avoid	Strong oxidizing agents. Strong reducing agents.
Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

EPO-TEK® 310M-1 PMF Syringe

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 1,468.34

Acute toxicity - dermal

ATE dermal (mg/kg) 11,219.91

Acute toxicity - inhalation

ATE inhalation (gases ppm) 20,521.71

ATE inhalation (vapours mg/l) 50.16

ATE inhalation (dusts/mists mg/l) 6.84

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	Severe irritation, burning and tearing. Causes burns.

12. Ecological Information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Acute aquatic toxicity

Acute toxicity - fish Not available.

Persistence and degradability

Persistence and degradability The product is biodegradable.

Bioaccumulative potential

Bio-Accumulative Potential The product is not bioaccumulating.

Partition coefficient No specific test data are available.

Mobility in soil

Mobility Mobile.

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) 2735

EPO-TEK® 310M-1 PMF Syringe

UN No. (IMDG) 2735
 UN No. (ICAO) 2735
 UN No. (DOT) UN2735

UN proper shipping name

Proper shipping name (TDG) AMINES, LIQUID, CORROSIVE, N.O.S. (Methylenebiscyclohexanamine, 4,4'-)

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. (Methylenebiscyclohexanamine, 4,4'-)

Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, N.O.S. (Methylenebiscyclohexanamine, 4,4'-)

Proper shipping name (DOT) AMINES, LIQUID, CORROSIVE, N.O.S. (Methylenebiscyclohexanamine, 4,4'-)

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

EPO-TEK® 310M-1 PMF Syringe

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.

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)

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:

Accelerating Agent

Rhode Island "Right To Know" List

None of the ingredients are required to be listed.

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Accelerating Agent

New Jersey "Right To Know" List

None of the ingredients are required to be listed.

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Accelerating Agent

EPO-TEK® 310M-1 PMF Syringe

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 - 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	6/12/2018
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. H411 Toxic to aquatic life with long lasting effects. H412 Harmful 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.