



SAFETY DATA SHEET  
EPO-TEK 310M-1 Part A

### 1. IDENTIFICATION

<u>Product Name</u>	EPO-TEK 310M-1 Part A
<u>Product No.</u>	EPO-TEK 310M-1Part A
<u>Identification No.</u>	UN3082
<u>Supplier</u>	Epoxy Technology, Inc. 14 Fortune Drive Billerica, MA 01821 USA www.epotek.com (978) 667-3805 (978) 663-9782

### 2. HAZARD(S) IDENTIFICATION

<u>Appearance</u>	Liquid
<u>Color</u>	Clear
<u>Odor</u>	Mild.
<u>GHS Pictogram</u>	



<u>Signal Word</u>	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

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container in accordance with local regulations.

#### GHS Classification

Physical and Chemical Hazards	Not classified.
Human health	Skin Irrit. 2 - H315;Eye Dam. 1 - H318;Skin Sens. 1 - H317
Environment	Aquatic Chronic 2 - H411

#### Inhalation

High concentrations of vapors may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

#### Ingestion

May cause discomfort if swallowed.

#### Skin Contact

May cause sensitization by skin contact. Irritating to skin.

#### Eye Contact

Extreme irritation of eyes and mucous membranes, including burning and tearing. Risk of serious damage to eyes.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Epoxy Resin Blend	60-100%
CAS No.: Proprietary	EC No.: Proprietary
GHS Classification Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; Aquatic Chronic 2 - H411	
Reactive Diluent	10-30%
CAS No.: Proprietary	EC No.: Proprietary
GHS Classification Acute Tox. 4 - H302; Acute Tox. 4 - H312; Skin Irrit. 2 - H315; Eye Dam. 1 - H318; Skin Sens. 1 - H317	

## 4. FIRST-AID MEASURES

Description of first aid measuresInhalation

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin Contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye Contact

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayedInhalation

Vapors may cause headache, fatigue, dizziness and nausea.

Ingestion

May cause discomfort if swallowed.

Skin Contact

Skin irritation. Allergic rash.

Eye Contact

Extreme irritation of eyes and mucous membranes, including burning and tearing. Corneal damage.

Indication of any immediate medical attention and special treatment neededNotes To The Physician

Treat Symptomatically.

## 5. FIRE-FIGHTING MEASURES

Flash point (°C) 204

Extinguishing Media

Fire can be extinguished using: Dry chemicals. Foam. Carbon dioxide (CO<sub>2</sub>).

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

Special Fire Fighting Procedures

Avoid breathing fire vapors.

# EPO-TEK 310M-1 Part A

## Protective Equipment For Fire-Fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions

Wear protective clothing as described in Section 8 of this material safety data sheet.

### Environmental Precautions

Do not discharge onto the ground or into water courses. Avoid release to the environment.

### Spill Clean Up Methods

Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

### Reference to other sections

For personal protection, see section 8.

## 7. HANDLING AND STORAGE

### Handling

Avoid spilling, skin and eye contact. Do not handle broken packages without protective equipment. Do not eat, drink or smoke when using the product. Avoid inhalation of vapors.

### Storage

Store at moderate temperatures in dry, well-ventilated area. Keep container tightly sealed when not in use.

### Storage Class

Chemical storage.

### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Protective Equipment



### Process Conditions

Provide eyewash station.

### Engineering Measures

Provide adequate ventilation.

### Respiratory Equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

### Hand Protection

Wear protective gloves.

### Eye Protection

Wear goggles/face shield.

### Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

### Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance</u>	Liquid
<u>Color</u>	Clear
<u>Odor</u>	Mild.
<u>Solubility</u>	Slightly soluble in water.
<u>Vapor density (air=1)</u>	>1
<u>Evaporation rate</u>	<BuAc

Flash point (°C)

204

**10. STABILITY AND REACTIVITY**Reactivity

Violent reaction with: Strong oxidizing agents. Strong reducing agents.

Stability

Stable under normal temperature conditions.

Hazardous Polymerisation

Will not occur.

Conditions To Avoid

Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition. Avoid contact with oxidizers or reducing agents.

Materials To Avoid

Strong oxidizing substances. Strong reducing agents.

Hazardous Decomposition ProductsFire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).**11. TOXICOLOGICAL INFORMATION**Toxicological Information on Ingredients:Reactive Diluent (CAS: Proprietary)Toxic Dose 1 - LD 50

1, 163 mg/kg (oral, rat)

**12. ECOLOGICAL INFORMATION**Ecotoxicity

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

Acute Fish Toxicity

Very toxic to aquatic organisms.

Degradability

There are no data on the degradability of this product.

Bioaccumulative potential

No data available on bioaccumulation.

Mobility:

The product has poor water-solubility.

**13. DISPOSAL CONSIDERATIONS**Disposal Methods

Dispose of waste and residues in accordance with local authority requirements.

**14. TRANSPORT INFORMATION**

<u>UN No. (DOT/TDG)</u>	UN3082
<u>UN No. (IMDG)</u>	3082
<u>UN No. (ICAO)</u>	3082
<u>DOT Proper Shipping Name</u>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin Blend)
<u>TDG Proper Shipping Name</u>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin Blend)
<u>DOT Hazard Class</u>	9
<u>DOT Hazard Label</u>	
Class 9	
<u>TDG Class</u>	9
<u>TDG Label(s)</u>	9

IMDG Class 9

ICAO Class 9

Transport Labels



DOT Pack Group III

IMDG Pack Group III

Air Pack Group III

Environmentally Hazardous Substance/Marine Pollutant



EMS F-A, S-F

## 15. REGULATORY INFORMATION

### US Federal Regulations

#### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

#### OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

### US State Regulations

#### California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

#### Massachusetts "Right To Know" List

None of the ingredients are listed.

#### Rhode Island "Right To Know" List

None of the ingredients are listed.

#### Minnesota "Right To Know" List

None of the ingredients are listed.

#### New Jersey "Right To Know" List

None of the ingredients are listed.

#### Pennsylvania "Right To Know" List

None of the ingredients are listed.

### International Inventories

#### EU - EINECS/ELINCS

At least one ingredient is not listed.

#### Canada - DSL/NDSL

All ingredients are listed or exempt.

US - TSCA

All ingredients are listed or exempt.

US – TSCA 12(b) Export Notification

None of the ingredients are listed.

Australia - AICS

All ingredients are listed or exempt.

Japan – MITI

At least one ingredient is not listed.

Korea - KECI

All ingredients are listed or exempt.

China - IECSC

All ingredients are listed or exempt.

Philippines – PICCS

All ingredients are listed or exempt.

16. OTHER INFORMATION

Revision Date 11/07/2014

Revision 1

Disclaimer

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.



## SAFETY DATA SHEET EPO-TEK 310M-1 Part B

### 1. IDENTIFICATION

<u>Product Name</u>	EPO-TEK 310M-1 Part B
<u>Product No.</u>	EPO-TEK 310M-1 Part B
<u>Identification No.</u>	UN2735
<u>Identified uses</u>	Adhesive.
<u>Supplier</u>	Epoxy Technology, Inc. 14 Fortune Drive Billerica, MA 01821 USA www.epotek.com (978) 667-3805 (800) 255-3924
<u>Emergency Telephone</u>	(800) 255-3924

### 2. HAZARD(S) IDENTIFICATION

<u>Appearance</u>	Liquid
<u>Color</u>	Clear
<u>Odor</u>	Mild.
<u>GHS Pictogram</u>	



Signal Word Danger

#### Hazard Statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.

#### Precautionary Statements

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P501	Dispose of contents/container in accordance with local regulations.

#### Contains

Accelerating Agent  
Methylenebiscyclohexanamine, 4,4'-

#### GHS Classification

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H302; Acute Tox. 4 - H332; Skin Corr. 1B - H314; Skin Sens. 1 - H317
Environment	Not classified.

#### Inhalation

Vapors may irritate throat and respiratory system and cause headache, dizziness and dullness. Prolonged inhalation of high concentrations may damage respiratory system.

#### Ingestion

Causes burns. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

## EPO-TEK 310M-1 Part B

### Skin Contact

May cause allergic contact eczema. May cause sensitization by skin contact. Causes burns. Harmful in contact with skin.

### Eye Contact

Extreme irritation of eyes and mucous membranes, including burning and tearing. Causes burns.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Accelerating Agent	30-60%
CAS No.: Proprietary	EC No.: Proprietary
GHS Classification Acute Tox. 4 - H302; Acute Tox. 4 - H332	
Methylenebiscyclohexanamine, 4,4'-	30-60%
CAS No.: 1761-71-3	EC No.:
GHS Classification Acute Tox. 4 - H302; Skin Corr. 1B - H314; Skin Sens. 1 - H317	

## 4. FIRST-AID MEASURES

### Description of first aid measures

#### Inhalation

Move the exposed person to fresh air at once. Rinse nose and mouth with water. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Keep the affected person warm and at rest. Get prompt medical attention.

#### Ingestion

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

#### Skin Contact

Remove affected person from source of contamination. Rinse the skin immediately with lots of water. Get medical attention promptly if symptoms occur after washing.

#### Eye Contact

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

### Most important symptoms and effects, both acute and delayed

#### Inhalation

Vapors may cause headache, fatigue, dizziness and nausea. Irritation of nose, throat and airway.

#### Ingestion

May cause stomach pain or vomiting.

#### Skin Contact

Allergic rash. May cause serious chemical burns to the skin.

#### Eye Contact

Extreme irritation of eyes and mucous membranes, including burning and tearing. Corneal damage.

### Indication of any immediate medical attention and special treatment needed

#### Notes To The Physician

Treat Symptomatically.

## 5. FIRE-FIGHTING MEASURES

Flash point (°C) 112

#### Extinguishing Media

Fire can be extinguished using: Dry chemicals. Foam. Carbon dioxide (CO2).



## EPO-TEK 310M-1 Part B

### Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

### Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

### Protective Equipment For Fire-Fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions

Wear protective clothing as described in Section 8 of this material safety data sheet.

### Environmental Precautions

Avoid release to the environment.

### Spill Clean Up Methods

Wear necessary protective equipment. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Do not let washing down water contaminate ponds or waterways.

### Reference to other sections

For personal protection, see section 8.

## 7. HANDLING AND STORAGE

### Handling

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Do not eat, drink or smoke when using the product. Avoid inhalation of vapors. Provide good ventilation. Do not handle broken packages without protective equipment.

### Storage

Store at moderate temperatures in dry, well-ventilated area. Keep container tightly sealed when not in use.

### Storage Class

Corrosive storage.

### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Protective Equipment



### Process Conditions

Provide eyewash station.

### Engineering Measures

Provide adequate general and local exhaust ventilation.

### Respiratory Equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

### Hand Protection

Use protective gloves made of: Nitrile. Viton rubber (fluor rubber). Polyvinylidene chloride/Polyethylene (PVD/PE).

### Eye Protection

Wear tight-fitting goggles or face shield.

### Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

### Hygiene Measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes wet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Liquid

### Color

Clear

### Odor

Mild.

## EPO-TEK 310M-1 Part B

<u>Vapor density (air=1)</u>	>1
<u>Evaporation rate</u>	<BuAc
<u>Flash point (°C)</u>	112

### 10. STABILITY AND REACTIVITY

#### Reactivity

Violent reaction with: Strong oxidizing agents. Strong reducing agents.

#### Stability

Stable under normal temperature conditions.

#### Hazardous Polymerisation

Will not occur.

#### Conditions To Avoid

Avoid contact with oxidizers or reducing agents.

#### Materials To Avoid

Strong oxidizing substances. Strong reducing agents.

#### Hazardous Decomposition Products

During fire, toxic gases (CO, CO<sub>2</sub>, NO<sub>x</sub>) are formed.

### 11. TOXICOLOGICAL INFORMATION

<u>Toxic Dose 1 - LD 50</u>	>2, 000 mg/kg (oral, rat)
<u>Toxic Dose 2 - LD 50</u>	>2, 110 mg/kg (dermal, rabbit)

### 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

Dangerous for the environment if discharged into watercourses. Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

#### Other adverse effects

Not known.

### 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

Dispose of waste and residues in accordance with local authority requirements.

### 14. TRANSPORT INFORMATION

<u>UN No. (DOT/TDG)</u>	UN2735
<u>UN No. (IMDG)</u>	2735
<u>UN No. (ICAO)</u>	2735
<u>DOT Proper Shipping Name</u>	AMINES, LIQUID, CORROSIVE, N.O.S. (Methylenebiscyclohexanamine, 4, 4'-)
<u>TDG Proper Shipping Name</u>	AMINES, LIQUID, CORROSIVE, N.O.S. (Methylenebiscyclohexanamine, 4, 4'-)
<u>DOT Hazard Class</u>	
8	
<u>DOT Hazard Label</u>	
Corrosive	
<u>TDG</u>	<u>Class</u>
	8
<u>TDG</u>	<u>Label(s)</u>
	8
<u>IMDG</u>	<u>Class</u>
	8
<u>ICAO</u>	<u>Class</u>
	8

Transport Labels

DOT Pack Group III

IMDG Pack Group III

Air Pack Group III

Environmentally Hazardous Substance/Marine Pollutant  
No.

EMS F-A, S-B

---

 15. REGULATORY INFORMATION
 

---

US Federal RegulationsSARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

None of the ingredients are listed.

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State RegulationsCalifornia Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

Massachusetts "Right To Know" List

The following ingredients are listed.

Accelerating Agent

Rhode Island "Right To Know" List

None of the ingredients are listed.

Minnesota "Right To Know" List

The following ingredients are listed.

Accelerating Agent

New Jersey "Right To Know" List

None of the ingredients are listed.

Pennsylvania "Right To Know" List

The following ingredients are listed.

Accelerating Agent

International Inventories

EU - EINECS/ELINCS

At least one ingredient is not listed.

Canada – DSL/NDSL

All ingredients are listed or exempt.

US - TSCA

All ingredients are listed or exempt.

US – TSCA 12(b) Export Notification

None of the ingredients are listed.

Australia - AICS

At least one ingredient is not listed.

Japan – MITI

At least one ingredient is not listed.

Korea - KECI

At least one ingredient is not listed.

China - IECSC

All ingredients are listed or exempt.

Philippines – PICCS

At least one ingredient is not listed.

16. OTHER INFORMATION

Revision Date 11/07/2014

Revision 1

Disclaimer

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.