



## SAFETY DATA SHEET EPO-TEK E2001 Part A

### 1. IDENTIFICATION

<u>Product Name</u>	EPO-TEK E2001 Part A
<u>Product No.</u>	EPO-TEK E2001 Part A
<u>Identification No.</u>	UN3082
<u>Identified uses</u>	Adhesive.
<u>Supplier</u>	Epoxy Technology, Inc. 14 Fortune Drive Billerica, MA 01821 USA www.epotek.com (978) 667-3805 (978) 663-9782
<u>Emergency Telephone</u>	(800) 255-3924

### 2. HAZARD(S) IDENTIFICATION

<u>Appearance</u>	Paste
<u>Color</u>	Silver.
<u>Odor</u>	Mild.
<u>GHS Pictogram</u>	



Signal Word Warning

#### Hazard Statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
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.
P313	Get medical advice/attention.
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 Irrit. 2 - H319; Skin Sens. 1 - H317
Environment	Aquatic Chronic 2 - H411

#### Inhalation

Gas or vapor in high concentrations may irritate respiratory system.

#### Ingestion

May cause discomfort if swallowed.

#### Skin Contact

May cause sensitization by skin contact. Irritating to skin.

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## Eye Contact

Irritating to eyes.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Antioxidant	< 1%
CAS No.: Proprietary	EC No.: Proprietary
GHS Classification Acute Tox. 4 - H302; Eye Dam. 1 - H318; Skin Sens. 1 - H317; Muta. 2 - H341; Carc. 2 - H351; Aquatic Acute 1 - H400	
Epoxy Phenol Novolac	10-30%
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	5-10%
CAS No.: Proprietary	EC No.: Proprietary
GHS 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	

### 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. 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 delayed

##### Inhalation

Inhalation of dusts during cutting, grinding or sanding of this product may cause irritation of the respiratory tract. Vapors may cause headache, fatigue, dizziness and nausea.

##### Ingestion

May cause discomfort if swallowed.

##### Skin Contact

Skin irritation. Allergic rash.

##### Eye Contact

Irritating and may cause redness and pain.

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

# EPO-TEK E2001 Part A

## Notes To The Physician

Treat Symptomatically.

### 5. FIRE-FIGHTING MEASURES

Flash point (°C) 93

#### Extinguishing Media

Fire can be extinguished using: Dry chemicals. Foam. Water spray.

#### 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.

#### 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 into drains, water courses or onto the ground. 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. Keep away from heat, sparks and open flame. 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

COMPONENT	STD	TWA (8-hrs)		STEL (15 min)		Notes
Antioxidant	ACGIH		1 mg/m3			A3, Sen
Antioxidant	PEL		2 mg/m3			
COMPONENT						IDLH
Antioxidant						50 mg/m3

ACGIH=American Conference of Governmental Industrial Hygienists.

A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.

SEN: Sensitizer.

Protective EquipmentProcess 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

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>	Paste
<u>Color</u>	Silver.
<u>Odor</u>	Mild.
<u>Solubility</u>	Insoluble in water
<u>Evaporation rate</u>	<BuAc
<u>Flash point (°C)</u>	93

## 10. STABILITY AND REACTIVITY

Reactivity

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

Stability

Stable under normal temperature conditions.

Hazardous Polymerisation

Will not polymerise.

Conditions To Avoid

Avoid excessive heat for prolonged periods of time. Avoid contact with oxidizers or reducing agents. Avoid contact with acids and alkalis.

Materials To Avoid

Strong acids. Strong alkalis. Strong oxidizing substances. Strong reducing agents.

Hazardous Decomposition Products

Fire 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)

Toxic Dose 2 - LD 50

1, 130 mg/kg (dermal, rabbit)

EPO-TEK E2001 Part A  
Antioxidant (CAS: Proprietary)

Carcinogenicity:

IARC Carcinogenicity

IARC Group 3 Not classifiable as to its carcinogenicity to humans.

NTP - Carcinogenicity

Reasonably anticipated human carcinogen.

OSHA - Carcinogenicity

Not listed.

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

The product is moderately biodegradable.

Bioaccumulative potential

The product contains potentially bio-accumulating substances.

Mobility:

Mobile.

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>	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. (Silver)
<u>TDG Proper Shipping Name</u>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Silver)
<u>DOT Hazard Class</u>	
9	
<u>DOT Hazard Label</u>	
Class 9	
<u>TDG Class</u>	9
<u>TDG Label(s)</u>	9
<u>IMDG Class</u>	9
<u>ICAO Class</u>	9
<u>Transport Labels</u>	



<u>DOT Pack Group</u>	III
<u>IMDG Pack Group</u>	III
<u>Air Pack Group</u>	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

The following ingredients are listed.

Antioxidant; EPCRA 302 TPQ 10 000 lbs 500 lbs Tier II TPQ 500 lbs

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

The following ingredients are listed.

Antioxidant; 100 lbs (45.4 Kg)

Silver; 1, 000 lbs (454 Kg)

#### SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

#### SARA 313 Emission Reporting

The following ingredients are listed.

Antioxidant

Silver

#### CAA Accidental Release Prevention

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)

The following ingredients are listed.

Antioxidant

Silver

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

None of the ingredients are listed.

#### Massachusetts "Right To Know" List

The following ingredients are listed.

Antioxidant

Silver

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

The following ingredients are listed.

Antioxidant

Silver

#### Minnesota "Right To Know" List

The following ingredients are listed.

Antioxidant

Silver

New Jersey "Right To Know" List

The following ingredients are listed.

Antioxidant

Silver

Pennsylvania "Right To Know" List

The following ingredients are listed.

Antioxidant

Silver

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

<u>Revision Date</u>	01/23/2015
<u>Revision</u>	1

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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 E2001 Part B

### 1. IDENTIFICATION

<u>Product Name</u>	EPO-TEK E2001 Part B
<u>Product No.</u>	EPO-TEK E2001 Part B
<u>Identified uses</u>	Adhesive.
<u>Supplier</u>	Epoxy Technology, Inc. 14 Fortune Drive Billerica, MA 01821 USA www.epotek.com (978) 667-3805
<u>Emergency Telephone</u>	(800) 255-3924

### 2. HAZARD(S) IDENTIFICATION

<u>Appearance</u>	Liquid
<u>Color</u>	Amber.
<u>Odor</u>	Slight odor.
<u>GHS Pictogram</u>	



Signal Word Danger

#### Hazard Statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

#### 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.
P501	Dispose of contents/container in accordance with local regulations.

#### GHS Classification

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H302; Skin Irrit. 2 - H315; Eye Dam. 1 - H318; Skin Sens. 1 - H317; STOT SE 3 - H335
Environment	Aquatic Chronic 3 - H412

#### Inhalation

Irritating to respiratory system.

#### Ingestion

Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach. May cause stomach pain or vomiting.

#### Skin Contact

May cause sensitization by skin contact. Irritating to skin.



## EPO-TEK E2001 Part B

### Eye Contact

Irritating to eyes.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Amine adduct with epoxy resin	5-10%
CAS No.: Proprietary	EC No.: Proprietary
GHS Classification Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; STOT SE 3 - H335; Aquatic Chronic 2 - H411	
Amine Curing Agent	< 1%
CAS No.: Proprietary	EC No.: Proprietary
GHS Classification Acute Tox. 4 - H302; Acute Tox. 4 - H312; Skin Corr. 1B - H314; Skin Sens. 1 - H317	
Substituted Imidazole Blend	60-100%
CAS No.: Proprietary	EC No.: Proprietary
GHS Classification Acute Tox. 4 - H302; Skin Irrit. 2 - H315; Eye Dam. 1 - H318; STOT SE 3 - H335	

### 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. 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 delayed

##### Inhalation

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

##### Ingestion

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

##### 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 needed

##### Notes To The Physician

Treat Symptomatically.

## 5. FIRE-FIGHTING MEASURES

Flash point (°C) 93

### Extinguishing Media

Fire can be extinguished using: Dry chemicals. Foam. Water spray.

### 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.

### 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

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. Keep away from heat, sparks and open flame. 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

COMPONENT	STD	TWA (8-hrs)		STEL (15 min)		Notes
Amine Curing Agent	ACGIH	1 ppm				Skin

ACGIH=American Conference of Governmental Industrial Hygienists.

Skin: Danger of cutaneous absorption. (ACGIH)

### Protective Equipment



### Process Conditions

Provide eyewash station.

### Engineering Measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

## EPO-TEK E2001 Part B

### Respiratory Equipment

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

### Hand Protection

Wear protective gloves.

### Eye Protection

Wear tight-fitting goggles or 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>	Amber.
<u>Odor</u>	Slight odor.
<u>Solubility</u>	Insoluble in water
<u>Flash point (°C)</u>	93

## 10. STABILITY AND REACTIVITY

### Reactivity

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

### Stability

Stable under normal temperature conditions.

### Hazardous Polymerisation

Will not polymerise.

### Conditions To Avoid

Avoid excessive heat for prolonged periods of time. Avoid contact with oxidizers or reducing agents. Avoid contact with acids and alkalis.

### Materials To Avoid

Strong acids. Strong alkalis. Strong oxidizing substances. Strong reducing agents.

### Hazardous Decomposition Products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

### Toxicological information

No information available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

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

### Degradability

The product is moderately biodegradable.

### Bioaccumulative potential

The product contains potentially bio-accumulating substances.

### Mobility:

Mobile.

### 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>General</u>	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).
<u>Road Transport Notes</u>	Not Classified
<u>Rail Transport Notes</u>	Not classified.
<u>Sea Transport Notes</u>	Not classified.
<u>Air Transport Notes</u>	Not classified.
<u>Transport Labels</u>	No transport warning sign required.

Environmentally Hazardous Substance/Marine Pollutant

No.

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes

Not applicable.

## 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.

Amine Curing Agent

Rhode Island "Right To Know" List

The following ingredients are listed.

Amine Curing Agent

Minnesota "Right To Know" List

The following ingredients are listed.

Amine Curing Agent

New Jersey "Right To Know" List

The following ingredients are listed.

Amine Curing Agent

Pennsylvania "Right To Know" List

The following ingredients are listed.

Amine Curing Agent

International Inventories

EU - EINECS/ELINCS

At least one ingredient is not listed.

Canada – DSL/NDSL

At least one ingredient is not listed.

US - TSCA

At least one ingredient is not listed.

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

All ingredients are listed or exempt.

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16. OTHER INFORMATION

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Revision Date 01/23/2015

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.