# SAFETY DATA SHEET
## EPO-TEK EE129-4 Part A

## 1. IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name</th>
<th>EPO-TEK EE129-4 Part A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product No.</td>
<td>EPO-TEK EE129-4 Part A</td>
</tr>
<tr>
<td>Identified uses</td>
<td>Adhesive.</td>
</tr>
<tr>
<td>Supplier</td>
<td>Epoxy Technology, Inc. 14 Fortune Drive Billerica, MA 01821 USA <a href="http://www.epotek.com">www.epotek.com</a> (978) 667-3805 (978) 663-9782</td>
</tr>
<tr>
<td>Emergency Telephone</td>
<td>(800) 255-3924</td>
</tr>
</tbody>
</table>

## 2. HAZARD(S) IDENTIFICATION

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Paste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Silver.</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild.</td>
</tr>
<tr>
<td>GHS Pictogram</td>
<td><img src="image" alt="Warning Pictogram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Warning</th>
</tr>
</thead>
</table>

### Hazard Statements

- **H315**: Causes skin irritation.
- **H317**: May cause an allergic skin reaction.
- **H319**: Causes serious eye irritation.
- **H341**: Suspected of causing genetic defects.
- **H351**: Suspected of causing cancer.
- **H412**: Harmful to aquatic life with long lasting effects.

### Precautionary Statements

- **P280**: Wear protective gloves/protective clothing/eye protection/face protection.
- **P281**: Use personal protective equipment as required.
- **P305+351+338**: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P308+313**: IF exposed or concerned: Get medical advice/attention.
- **P313**: Get medical advice/attention.
- **P501**: Dispose of contents/container in accordance with local regulations.

### Contains

- Epoxy Phenol Novolac
- Resorcinol Diglycidyl Ether

### GHS Classification

- **Physical and Chemical Hazards**: Not classified.
- **Human health**: Skin Irrit. 2 - H315;Eye Irrit. 2 - H319;Skin Sens. 1 - H317;Muta. 2 - H341;Carc. 2 - H351
- **Environment**: Aquatic Chronic 3 - H412

**In high concentrations, vapors may irritate throat and respiratory system.**
Ingestion
May cause discomfort if swallowed.

Skin Contact
Irritating to skin. May cause sensitization by skin contact.

Eye Contact
Irritating to eyes.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curing Agent</td>
<td>1-5%</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Acute Tox. 4 - H302; Acute Tox. 4 - H312; Skin Corr. 1B - H314; Skin Sens. 1 - H317; Aquatic Chronic 3 - H412</td>
</tr>
<tr>
<td>Epoxy Phenol Novolac</td>
<td>5-10%</td>
<td>9003-36-5</td>
<td>Proprietary</td>
<td>Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; Aquatic Chronic 2 - H411</td>
</tr>
<tr>
<td>Reactive Diluent Blend</td>
<td>1-5%</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Acute Tox. 4 - H312; Acute Tox. 4 - H332; Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317</td>
</tr>
<tr>
<td>Resorcinol Diglycidyl Ether</td>
<td>5-10%</td>
<td>101-90-6</td>
<td>Proprietary</td>
<td>Acute Tox. 4 - H302; Acute Tox. 4 - H312; Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; Muta. 2 - H341; Carc. 2 - H351; Aquatic Chronic 2 - H411</td>
</tr>
</tbody>
</table>

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.

Ingestion
May cause discomfort if swallowed.

Skin Contact
Allergic rash. Skin irritation.

Eye Contact
May cause severe irritation to eyes.

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.

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. Provide good ventilation.

Storage
Store at -40 degrees C. Keep container tightly sealed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>STD</th>
<th>TWA (8-hrs)</th>
<th>STEL (15 min)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver (dust)*</td>
<td>PEL</td>
<td>0.01 mg/m3</td>
<td></td>
<td>as Ag</td>
</tr>
<tr>
<td>Silver (dust)*</td>
<td>ACGIH</td>
<td>0.1 mg/m3</td>
<td></td>
<td>as Ag</td>
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</table>
COMPONENT | IDLH
---|---
Silver (dust)* | 10 mg/m3

ACGIH=American Conference of Governmental Industrial Hygienists.

*This product contains Silver, which may cause respiratory irritation when inhaled in fine particulate form. Silver should not be respirable in this formulation. However, if cured material will be ground, milled, etc., wear respiratory protection to avoid inhaling any dust that may be produced.

### Protective Equipment

**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

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</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Paste</td>
</tr>
<tr>
<td>Color</td>
<td>Silver.</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water</td>
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<tr>
<td>Bulk Density</td>
<td>2.95 kg/l</td>
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<tr>
<td>Flash point (°C)</td>
<td>&gt;93</td>
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</table>

### 10. STABILITY AND REACTIVITY

**Reactivity**

**Stability**
Stable under normal temperature conditions.

**Hazardous Polymerisation**
Will not polymerise.

**Conditions To Avoid**
Avoid contact with oxidizers or reducing agents. Avoid heat, flames and other sources of ignition.

**Materials To Avoid**

**Hazardous Decomposition Products**
Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

### 11. TOXICOLOGICAL INFORMATION

Toxicological Information on Ingredients:
Toxic Dose 1 - LD 50
2, 570 mg/kg (oral, rat)

Toxic Dose 2 - LD 50
980 mg/kg (oral, mouse)

Carcinogenicity:
IARC Carcinogenicity
IARC Group 2B Possibly carcinogenic to humans.
NTP - Carcinogenicity
Reasonably anticipated human carcinogen.

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
No data available on bioaccumulation.

Mobility:
Mobile.

Other adverse effects
Not known.

13. DISPOSAL CONSIDERATIONS

Waste Management
Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

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

14. TRANSPORT INFORMATION

General
The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, DOT).

Road Transport Notes
Not Classified

Rail Transport Notes
Not classified.

Sea Transport Notes
Not classified.

Air Transport Notes
Not classified.

Transport Labels
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 Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The following ingredients are listed.
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.
Resorcinol Diglycidyl Ether
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
WARNING: This product contains a substance known to the State of California to cause cancer and/or reproductive harm.

California Air Toxics “Hot Spots” (A-I)
The following ingredients are listed. Silver

California Air Toxics “Hot Spots” (A-II)
The following ingredients are listed.
Resorcinol Diglycidyl Ether

Massachusetts “Right To Know” List
The following ingredients are listed.
Curing Agent
Resorcinol Diglycidyl Ether
Silver

Rhode Island “Right To Know” List
The following ingredients are listed.
Silver

Minnesota “Right To Know” List
The following ingredients are listed.
Resorcinol Diglycidyl Ether
Silver

New Jersey “Right To Know” List
The following ingredients are listed. Curing Agent
Resorcinol Diglycidyl Ether
Silver

Pennsylvania “Right To Know” List
The following ingredients are listed. Curing Agent
Resorcinol Diglycidyl Ether
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
At least one ingredient is not listed.
All ingredients are listed or exempt.

Philippines – PICCS
All ingredients are listed or exempt.

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>10 June 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision</td>
<td>1</td>
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Declaration

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 EE129-4 Part B

1. IDENTIFICATION

Product Name: EPO-TEK EE129-4 Part B
Product No.: EPO-TEK EE129-4 Part B
Identification No.: UN2735
Identified uses: Adhesive.
Supplier: Epoxy Technology, Inc.
14 Fortune Drive
Billerica, MA 01821
USA
www.epotek.com
(978) 667-3805
(978) 663-9782
Emergency Telephone: (800) 255-3924

2. HAZARD(S) IDENTIFICATION

Appearance: Paste
Color: Silver.
Odor: Mild.

GHS Pictogram

Signal Word: Danger

Hazard Statements:
H314 Causes severe skin burns and eye damage.

Precautionary Statements:
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.

GHS Classification:
Physical and Chemical Hazards: Not classified.
Human health: Skin Corr. 1B - H314
Environment: Not classified.

Inhalation:
Gas or vapor in high concentrations may irritate respiratory system.

Ingestion:
May cause discomfort if swallowed.

Skin Contact:
Causes burns.

Eye Contact:
Causes burns. Risk of corneal damage.

3. COMPOSITION/INFORMATION ON INGREDIENTS
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 irritation persists 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. Get medical attention immediately. Continue to rinse.

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.

Ingestion
May cause discomfort if swallowed.

Skin Contact
Burns can occur.

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) 121

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.

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 eat, drink or smoke when using the product. Provide good ventilation.

Storage
Store at -40 degrees C. Keep container tightly sealed when not in use. Store away from: Acids. Oxidizing material.

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>STD</th>
<th>TWA (8-hrs)</th>
<th>STEL (15 min)</th>
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<tbody>
<tr>
<td>Silver (dust)*</td>
<td>PEL</td>
<td>0.01 mg/m³</td>
<td></td>
<td>as Ag</td>
</tr>
<tr>
<td>Silver (dust)*</td>
<td>ACGIH</td>
<td>0.1 mg/m³</td>
<td></td>
<td>as Ag</td>
</tr>
</tbody>
</table>

ACGIH=American Conference of Governmental Industrial Hygienists.

*This product contains Silver, which may cause respiratory irritation when inhaled in fine particulate form. Silver should not be respirable in this formulation. However, if cured material will be ground, milled, etc., wear respiratory protection to avoid inhaling any dust that may be produced.

Protective Equipment

Process Conditions
Provide eyewash station.

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

Respiratory Equipment
No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Hand Protection
Use suitable protective gloves if risk of skin contact.

Eye Protection
If risk of splashing, wear safety 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

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Paste</td>
</tr>
<tr>
<td>Color</td>
<td>Silver.</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Slightly soluble in water.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range (°C)</td>
<td>260</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity

Stability
Stable under normal temperature conditions.

Hazardous Polymerisation
Will not polymerise.

Conditions To Avoid
Avoid contact with oxidizers or reducing agents. Avoid heat, flames and other sources of ignition. Avoid contact with acids and alkalis.

Materials To Avoid

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

11. TOXICOLOGICAL INFORMATION

No toxicological information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The product contains a substance which is harmful to aquatic organisms.

Degradability
The product is biodegradable.

Bioaccumulative potential
No data available on bioaccumulation.

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

Road Transport Notes
Rail Transport Notes
Sea Transport Notes
Air Transport Notes
UN No. (DOT/TDG) UN2735
UN No. (IMDG) 2735
UN No. (ICAO) 2735
DOT Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S. (Substituted Amine Blend)
TDG Proper Shipping Name AMINES, LIQUID, CORROSIVE, N.O.S. (Substituted Amine Blend)
DOT Hazard Class 8
DOT Hazard Label Corrosive
15. REGULATORY INFORMATION

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The following ingredients are listed.
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.
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.
Silver

California Air Toxics “Hot Spots” (A-II)
None of the ingredients are listed.

Massachusetts “Right To Know” List
The following ingredients are listed.
Silver

Rhode Island “Right To Know” List
The following ingredients are listed.
Silver

Minnesota “Right To Know” List
The following ingredients are listed.
Silver
New Jersey “Right To Know” List
The following ingredients are listed.
Substituted Amine
Silver
Pennsylvania “Right To Know” List
The following ingredients are listed.
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

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>10 June 2014</th>
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