Supersedes Date 24 January 2014



# SAFETY DATA SHEET EPO-TEK 301 Part A

# 1. IDENTIFICATION

Product NameEPO-TEK 301 Part AProduct No.EPO-TEK 301 Part A

Identification No.UN3082Identified usesAdhesive.

Supplier Epoxy Technology, Inc.

14 Fortune Drive Billerica, MA 01821

USA

www.epotek.com (978) 667-3805 (978) 663-9782 (800) 255-3924

Emergency Telephone

# 2. HAZARD(S) IDENTIFICATION

AppearanceLiquidColorClearOdorSlight odor.

**GHS Pictogram** 



Signal Word	Danger
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**Hazard Statements** 

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P271 Use only outdoors or in a well-ventilated area.

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.

Contains Bisphenol A Diglycidyl Ether Resin

Reactive Diluent

**GHS Classification** 

Physical and Chemical Hazards Not classified

Human health Acute Tox. 4 - H302; Acute Tox. 4 - H312; Acute Tox. 4 - H332; Skin Irrit. 2 -

H315;Eye Dam. 1 - H318;Skin Sens. 1 - H317

Environment Aquatic Chronic 2 - H411

1/6

Inhalation

Harmful by inhalation.

Ingestion

Harmful if swallowed.

Skin Contact

May cause sensitization by skin contact. Irritating to skin. Harmful in contact with skin.

Eye Contact

Risk of serious damage to eyes.

Bisphenol A Diglycidyl Ether Resin

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

60-100%

CAS No.: 25085-99-8

EC No.:

**GHS Classification** 

Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; Skin Sens. 1 - H317; Aquatic Chronic 2 - H411

Reactive Diluent 30-60%

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

Irritation of nose, throat and airway. Vapors may cause headache, fatigue, dizziness and nausea. Difficulty in breathing. Ingestion

May cause stomach pain or vomiting. May cause nausea, headache, dizziness and intoxication.

Skin Contact

Skin irritation. Allergic rash. Blistering may 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)

Extinguishing Media

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

110

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 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. 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 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 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

AppearanceLiquidColorClearOdorSlight odor.SolubilityInsoluble in water

Evaporation rate <BuAc Flash point (°C) 110

# 10. STABILITY AND REACTIVITY

Reactivity

Reaction with: Acids. Alkalis. Strong oxidizing 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.

Materials To Avoid

Strong alkalis. Strong oxidizing substances. Strong acids.

Hazardous Decomposition Products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).

#### 11. TOXICOLOGICAL INFORMATION

#### Toxicological Information on Ingredients:

Bisphenol A Diglycidyl Ether Resin (CAS: 25085-99-8)

Toxic Dose 1 - LD 50

>15, 000 mg/kg (oral, rat)

Toxic Dose 2 - LD 50

>23, 000 mg/kg (dermal, rabbit)

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)

# 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

No data available.

Bioaccumulative potential

No data available on bioaccumulation.

Mobility

The product has poor water-solubility.

Other adverse effects

Not known

#### 13. DISPOSAL CONSIDERATIONS

# Disposal Methods

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

#### 14. TRANSPORT INFORMATION

# EPO-TEK 301 Part A

 UN No. (DOT/TDG)
 UN3082

 UN No. (IMDG)
 3082

 UN No. (ICAO)
 3082

DOT Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Diglycidyl Ether

Resin)

TDG Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A Diglycidyl Ether

Resin)

**DOT Hazard Class** 

9

**DOT Hazard Label** 

 Class 9

 TDG Class
 9

 TDG Label(s)
 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.

### EPO-TEK 301 Part A

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

The following ingredients are listed.

Reactive Diluent

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 11/19/2014

Revision 2

Supersedes Date 24 January 2014

#### 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.

Supersedes Date 24 January 2014



# SAFETY DATA SHEET EPO-TEK 301 Part B

# 1. IDENTIFICATION

Product NameEPO-TEK 301 Part BProduct No.EPO-TEK 301 Part B

Identification No.UN2327Identified usesAdhesive.

Supplier Epoxy Technology, Inc.

14 Fortune Drive Billerica, MA 01821

USA

www.epotek.com (978) 667-3805

Emergency Telephone (800) 255-3924

# 2. HAZARD(S) IDENTIFICATION

AppearanceLiquidColorClearOdorAmine.

**GHS Pictogram** 



Signal Word 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.

**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 to ...

Contains Trimethyl-1, 6-Hexanediamine

**GHS Classification** 

Physical and Chemical Hazards Not classified.

Human health Acute Tox. 4 - H302; Skin Corr. 1B - H314; Skin Sens. 1 - H317

Environment Aquatic Chronic 3 - H412

Inhalation

Gas or vapor in high concentrations may irritate respiratory system.

Ingestion

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

Skin Contact

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

# Eye Contact

Causes burns. Risk of serious damage to eyes.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Trimethyl-1, 6-Hexanediamine

60-100%

CAS No.: 25513-64-8

EC No.:

**GHS Classification** 

Acute Tox. 4 - H302; Skin Corr. 1B - H314; Skin Sens. 1 - H317; Aquatic Chronic 3 - H412

# 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.

#### Ingestion

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

#### Skin Contact

Allergic rash. Severe irritation. 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)

104

# 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. Fire creates: Toxic gases/vapors/fumes of: Ammonia or amines.

### Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

# 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

### EPO-TEK 301 Part B

#### 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 discharge into drains. 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

Do not handle broken packages without protective equipment. 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 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





#### **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
 Amine.

Solubility Miscible with water

Initial boiling point and boiling range 232

(°C)

Vapor density (air=1)>1Evaporation rate<BuAc</td>Flash point (°C)104

# 10. STABILITY AND REACTIVITY

### EPO-TEK 301 Part B

Reactivity

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

Stable under normal temperature conditions.

**Hazardous Polymerisation** 

Will not polymerise.

Conditions To Avoid

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

Avoid excessive heat for prolonged periods of time.

Materials To Avoid

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

Hazardous Decomposition Products

Ammonia or amines.

# 11. TOXICOLOGICAL INFORMATION

Toxicological Information on Ingredients:

Trimethyl-1, 6-Hexanediamine (CAS: 25513-64-8)

Toxic Dose 1 - LD 50 910 mg/kg (oral, rat)

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** 

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

Degradability

The product is biodegradable.

Bioaccumulative potential

Will not bio-accumulate.

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

UN No. (DOT/TDG) UN2327 2327 UN No. (IMDG) 2327 UN No. (ICAO)

**DOT Proper Shipping Name** TRIMETHYLHEXAMETHYLENEDIAMINES TDG Proper Shipping Name TRIMETHYLHEXAMETHYLENEDIAMINES

**DOT Hazard Class** 

8

**DOT Hazard Label** 

Corrosive

**ICAO** 

TDG Class 8 TDG Label(s) 8

**IMDG** Class

> 8 Class

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 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)

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 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

All ingredients are listed.

Pennsylvania "Right To Know" List

None of the ingredients are listed.

### EPO-TEK 301 Part B

# International Inventories

EU - EINECS/ELINCS

All ingredients are listed or exempt.

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

None of the ingredients are listed.

Korea - KECI

None of the ingredients are listed.

China - IECSC

All ingredients are listed or exempt.

Philippines - PICCS

None of the ingredients are listed.

# 16. OTHER INFORMATION

Revision Date 11/19/2014

Revision

Supersedes Date 24 January 2014

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