Revision Date 20 June 2014 Revision 1



SAFETY DATA SHEET EPO-TEK 301-2 Part A

1. IDENTIFICATION

Product Name	EPO-TEK 301-2 Part A
Product No.	EPO-TEK 301-2 Part A
Identification No.	UN3082
Identified uses	Adhesive.
Supplier	Epoxy Technology, Inc. 14 Fortune Drive Billerica, MA 01821 USA www.epotek.com (978) 667-3805
Emergency Telephone	(978) 663-9782 (800) 255-3924

2. HAZARD(S) IDENTIFICATION

Appearance Color Odor GHS Pictogram Liquid Clear Colourless. Slight odor.



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.
	Bisphenol A diglycidyl ether resin	
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 may irritate respiratory	system.	
Ingestion		
May cause discomfort if swallowed.		
Skin Contact		

May cause sensitization by skin contact. Irritating to skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Bisphenol A diglycidyl ether resin

60-100%

CAS No.: 1675-54-3 GHS Classification EC No.:

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

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

Ingestion

May cause discomfort if swallowed. <u>Skin Contact</u> Skin irritation. Allergic rash. <u>Eye Contact</u> Extreme irritation of eyes and mucous membranes, including burning and tearing.

Indication of any immediate medical attention and special treatment needed

Notes To The Physician

Treat Symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point (°C)

251

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 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. Keep away from heat, sparks and open flame. Store away from: Oxidizing material. Protect from freezing and direct sunlight.

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
Use 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 AREAL Wash hands at the end of each work shift and

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		
Appearance	Liquid	
Color	Clear Colourless.	
Odor	Slight odor.	
Evaporation rate	<buac< td=""><th></th></buac<>	
Flash point (°C)	251	

10. STABILITY AND REACTIVITY

Reactivity

Violent reaction with: Acids. Alkalis. Oxidizing materials. <u>Stability</u> Stable under normal temperature conditions. Not available. Conditions To Avoid

Avoid exposure to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition. Avoid contact with acids and alkalis. Reacts violently with strong oxidizing substances.

Materials To Avoid

Strong acids. Strong alkalis. Strong oxidizing substances.

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION

Toxicological Information on Ingredients:

Bisphenol A diglycidyl ether resin (CAS: 1675-54-3)

Toxic Dose 1 - LD 50

>15, 000 mg/kg (oral, rat) <u>Toxic Dose 2 - LD 50</u> 23, 000 mg/kg (dermal, rabbit)

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

There are no data on the ecotoxicity of this product. Degradability No data available. Bioaccumulative potential No data available on bioaccumulation. 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)	3082	
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.
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 None of the ingredients are listed. Pennsylvania "Right To Know" List None of the ingredients are listed.

International Inventories

EU - EINECS/ELINCS	
All ingredients are listed or exempt.	
Canada – DSL/NDSL	
All ingredients are listed or exempt.	
<u>US - TSCA</u>	
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	
All ingredients are listed or exempt.	
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 INFORMATI	ION
Revision Date	20 June 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 301-2 Part B

1. IDENTIFICATION		
Product Name	EPO-TEK 301-2 Part B	
Product No.	EPO-TEK 301-2 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) IDENTIF	ICATION	
Appearance	Liquid	
Color	Clear	
Odor	Slight odor.	
GHS Pictogram		
Signal Word	Danger	
Hazard Statements		
	H302	Harmful if swallowed.
	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
	P310	contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
	P501	Dispose of contents/container in accordance with local regulations.
Contains	Polyoxypropylenediamine	
GHS Classification		
	Physical and Chemical Hazards	Not classified
	Human health	Acute Tox. 4 - H302;Skin Corr. 1B - H314
	Environment	Not classified.
Inhalation		
Gas or vapor in high concentration Ingestion	s may irritate respiratory system.	
Harmful if swallowed.		
Skin Contact		
Causes burns. Harmful in contact	with skin.	
Eye Contact		
Causes burns.		

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3. COMPOSITION/INFORMATION ON INGREDIENTS

 Polyoxypropylenediamine
 60-100%

 CAS No.: 9046-10-0
 EC No.:

 GHS Classification
 4. FIRST-AID MEASURES

Description of first aid measures

Inhalation

Remove victim immediately from source of exposure. Keep the affected person warm and at rest. Get prompt medical attention. Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention immediately! Skin Contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and 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. Get medical attention immediately. Continue to rinse.

Most important symptoms and effects, both acute and delayed

Inhalation

Vapors may cause headache, fatigue, dizziness and nausea.

Ingestion

May cause discomfort if swallowed.

Skin Contact

Burns can occur.

Eye Contact

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. Specific Hazards In case of fire, toxic gases may be formed (COx, NOx). Special Fire Fighting Procedures Water spray should be used to cool containers. 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. <u>Environmental Precautions</u> Avoid release to the environment. <u>Spill Clean Up Methods</u> Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb with sand or other inert absorbent. Wear necessary protective equipment.

Reference to other sections

For personal protection, see section 8.

7. HANDLING AND STORAGE

Handling

Avoid spilling, skin and eye contact. <u>Storage</u> Store at moderate temperatures in dry, well-ventilated area. Keep away from heat, sparks and open flame. <u>Storage Class</u> Corrosive storage. <u>Specific end use(s)</u> The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment



Process Conditions

Provide eyewash, quick drench.

Engineering Measures

Provide adequate ventilation.

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. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Liquid
Color	Clear
Odor	Slight odor.
Solubility	Slightly soluble in water.
Initial boiling point and boiling range	260
<u>(°C)</u>	
Bulk Density	.95 g/ml
Vapor density (air=1)	>1
Vapor pressure	
Not available.	
Evaporation rate	<buac< td=""></buac<>
Flash point (°C)	121
10. STABILITY AND REACTIVITY	

Reactivity

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.

 Materials To Avoid

 Strong oxidizing substances. Strong reducing agents.

 Hazardous Decomposition Products

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

 11. TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation: Corrosive to skin.

Serious eye damage/irritation: Corrosive to eyes.

Toxicological Information on Ingredients:

Polyoxypropylenediamine (CAS: 9046-10-0)

Toxic Dose 1 - LD 50 2, 880 mg/kg (oral, rat) Toxic Dose 2 - LD 50 2, 980 mg/kg (dermal, rabbit)

12. ECOLOGICAL INFORMATION

Ecotoxicity

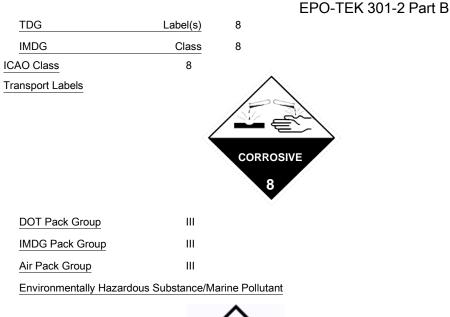
There are no data on the ecotoxicity of this product.
Degradability
The product is biodegradable.
Bioaccumulative potential
Will not bio-accumulate.
Mobility:
Mobile.
Other adverse effects
Not known.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

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

14. TRANSPORT	INFORMATION
UN No. (DOT/TDG)	UN2735
UN No. (IMDG)	2735
UN No. (ICAO)	2735
DOT Proper Shipping Name	POLYAMINES, LIQUID, CORROSIVE, NOS (Polyoxypropylenediamine)
TDG Proper Shipping Name	POLYAMINES, LIQUID, CORROSIVE, NOS (Polyoxypropylenediamine)
DOT Hazard Class	
8	
DOT Hazard Label	
Corrosive	
TDG	Class 8





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

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SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

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OSHA Highly Hazardous Chemicals

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US State Regulations

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Pennsylvania "Right To Know" List None of the ingredients are listed.

International Inventories

EU - EINECS/ELINCS None of the ingredients are 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 All ingredients are listed or exempt. 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

20 June 2014

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Revision Date Revision

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