



SAFETY DATA SHEET EPO-TEK 353ND Part A

1. IDENTIFICATION

<u>Product Name</u>	EPO-TEK 353ND Part A
<u>Product No.</u>	EPO-TEK 353ND 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>	Clear liquid.
<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.

Contains

Epoxy Phenol Novolac

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

EPO-TEK 353ND Part A

Epoxy Phenol Novolac	60-100%
CAS No.: 9003-36-5	EC No.:
GHS Classification Skin Irrit. 2 - H315; Eye Irrit. 2B - H320; Skin Sens. 1 - H317; Aquatic Chronic 2 - H411	

4. FIRST-AID MEASURES

Description of first aid measures

General Information

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion

DO NOT INDUCE VOMITING! Immediately rinse mouth and provide fresh air. 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 if any discomfort continues.

Eye Contact

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Most important symptoms and effects, both acute and delayed

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

Notes To The Physician

Treat Symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point (°C) 93

Extinguishing Media

Fire can be extinguished using: Water spray, fog or mist. Foam. Powder.

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

Ventilate well. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

Reference to other sections

For personal protection, see section 8.

7. HANDLING AND STORAGE

EPO-TEK 353ND Part A

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.

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.

Eye Protection

Wear approved safety goggles.

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor 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. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance</u>	Clear liquid.
<u>Odor</u>	Mild.
<u>Evaporation rate</u>	<BuAc
<u>Flash point (°C)</u>	93

10. STABILITY AND REACTIVITY

Reactivity

Reaction with: Strong oxidizing agents.

Stability

Stable under normal temperature conditions.

Hazardous Polymerisation

Will not occur.

Conditions To Avoid

Avoid heat, flames and other sources of ignition.

Materials To Avoid

Strong oxidizing substances.

Hazardous Decomposition Products

High temperatures generate: Toxic gases/vapors/fumes of: Carbon dioxide (CO₂). Carbon monoxide (CO).

11. TOXICOLOGICAL INFORMATION

EPO-TEK 353ND Part A

Toxicological Information on Ingredients:

Epoxy Phenol Novolac (CAS: 9003-36-5)

Toxic Dose 1 - LD 50

>5, 000 mg/kg (oral, rat)

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Degradability

The product is biodegradable.

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

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. (Epoxy Phenol Novolac)
<u>TDG Proper Shipping Name</u>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Phenol Novolac)
<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

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

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

Revision Date 07/10/2014

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 353ND Part B

1. IDENTIFICATION

<u>Product Name</u>	EPO-TEK 353ND Part B
<u>Product No.</u>	EPO-TEK 353ND Part B
<u>Identification No.</u>	UN3267
<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>	Liquid
<u>Color</u>	Amber.
<u>Odor</u>	Slight odor.
<u>GHS Pictogram</u>	



Signal Word Danger

Hazard Statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H361d	CLP only - Suspected of damaging the unborn child.

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.
P310	Immediately call a POISON CENTER or doctor/physician.
P501	Dispose of contents/container in accordance with local regulations.

Contains Imidazole

GHS Classification

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H302; Skin Corr. 1B - H314; Repr. 2 - H361d
Environment	Not classified.

Human Health

Contains a substance/a group of substances which may cause harm to the unborn child.

Inhalation

Gas or vapor in high concentrations may irritate respiratory system.

Ingestion

Harmful if swallowed.

EPO-TEK 353ND Part B

Skin Contact

Causes burns.

Eye Contact

Causes burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Imidazole	30-60%
CAS No.: 288-32-4	EC No.:
GHS Classification Acute Tox. 4 - H302; Skin Corr. 1B - H314; Repr. 2 - H361d	
Substituted Imidazole Blend	60-100%
CAS No.: Proprietary	EC No.: Proprietary
GHS Classification Acute Tox. 4 - H302; Eye Dam. 1 - H318	

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention. Provide rest, warmth and fresh air. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Remove victim immediately from source of exposure. Drink plenty of water. Get medical attention immediately! Provide rest, warmth and fresh air.

Skin Contact

Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

Eye Contact

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. Get medical attention promptly if symptoms occur after washing.

Most important symptoms and effects, both acute and delayed

Ingestion

May cause chemical burns in mouth and throat.

Skin Contact

Burns can occur.

Eye Contact

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) 93

Extinguishing Media

Water spray, carbon dioxide, dry powder or polar resistant foam.

Hazardous combustion products

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

EPO-TEK 353ND Part B

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

Use protective gloves, goggles and suitable protective clothing.

Environmental Precautions

Avoid release to the environment.

Spill Clean Up Methods

Collect in containers and seal securely.

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. Protect against direct sunlight.

Storage

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

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.

Eye Protection

Wear approved safety goggles.

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

<u>Appearance</u>	Liquid
<u>Color</u>	Amber.
<u>Odor</u>	Slight odor.
<u>Solubility</u>	Slightly soluble in water.
<u>Bulk Density</u>	1.02 kg/m ³
<u>Vapor density (air=1)</u>	>1
<u>Evaporation rate</u>	<BuAc
<u>Flash point (°C)</u>	93

10. STABILITY AND REACTIVITYReactivity

Reaction with: Acids. Alkalis. Strong oxidizing agents. Strong reducing agents.

Stability

Stable under normal temperature conditions.

Hazardous Polymerisation

Will not occur.

Conditions To Avoid

Avoid exposure to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition. Avoid contact with oxidizers or reducing agents. Avoid contact with acids and alkalis.

Materials To Avoid

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

Hazardous Decomposition Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. Fire creates: Toxic gases/vapors/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Hydrogen cyanide (HCN). Nitrous gases (NO_x).

11. TOXICOLOGICAL INFORMATIONToxicological Information on Ingredients:

Imidazole (CAS: 288-32-4)

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

12. ECOLOGICAL INFORMATIONDegradability

The product is moderately biodegradable.

Bioaccumulative potential

The product contains potentially bio-accumulating substances.

Mobility:

Semi-mobile.

Other adverse effects

Not known.

13. DISPOSAL CONSIDERATIONSDisposal Methods

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

14. TRANSPORT INFORMATION

UN No. (DOT/TDG)

UN3267

EPO-TEK 353ND Part B

UN No. (IMDG) 3267
UN No. (ICAO) 3267
DOT Proper Shipping Name CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Imidazole)
TDG Proper Shipping Name CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Imidazole)

DOT Hazard Class

8

DOT Hazard Label

Corrosive

TDG Class
8

TDG Label(s)
8

IMDG Class
8

ICAO 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

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)

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.

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

Revision Date 07/10/2014

Revision 1

Disclaimer

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