



SAFETY DATA SHEET

EPO-TEK® 353ND-T1 PMF Syringe

1. Identification

Product identifier

Product name EPO-TEK® 353ND-T1 PMF Syringe
Product number 353ND-T1

Recommended use of the chemical and restrictions on use

Application Adhesive.
Uses advised against Use only for intended applications. Restricted to professional users.

Details of the supplier of the safety data sheet

Supplier Epoxy Technology, Inc.
 14 Fortune Drive
 Billerica, MA 01821
 USA
 (978) 667-3805
 (978) 663-9782
 www.epotek.com, SDS@epotek.com

Emergency telephone number

Emergency telephone ChemTel: +1 (800) 255-3924, +1 (813) 248-0585

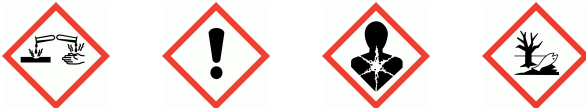
2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 1B - H360 STOT SE 1 - H370
Environmental hazards Aquatic Chronic 2 - H411

Label elements

Pictogram



Signal word

Danger

Hazard statements

H302+H332 Harmful if swallowed or if inhaled.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H360 May damage fertility or the unborn child.
 H370 Causes damage to organs .
 H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 If on skin: Wash with plenty of water.
 P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information

Restricted to professional users.

Contains

Epoxy Phenol Novolac, Substituted Imidazole Blend, Polar Activator, Imidazole

Other hazards

Hazards not otherwise classified (HNOC)

Contains epoxy constituents. May produce an allergic reaction.

3. Composition/information on ingredients

Substances

| |
|---|
| Epoxy Phenol Novolac 60-100% CAS number: 9003-36-5 |
| Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411 |
| Substituted Imidazole Blend 5-10% CAS number: Proprietary |
| Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 |
| Polar Activator 1-5% CAS number: Proprietary |
| Classification Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370 |

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| | |
|-----------------------|-------------|
| Imidazole | 1-5% |
| CAS number: 288-32-4 | |
| Classification | |
| Acute Tox. 4 - H302 | |
| Skin Corr. 1B - H314 | |
| Eye Dam. 1 - H318 | |
| Repr. 1B - H360 | |

The full text for all hazard statements is displayed in Section 16.

Product name EPO-TEK® 353ND-T1 PMF Syringe

4. First-aid measures

Description of first aid measures

| | |
|---------------------|--|
| Inhalation | Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues. |
| Ingestion | Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues. |
| Skin Contact | Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues. |
| Eye contact | Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. |

Most important symptoms and effects, both acute and delayed

| | |
|----------------------------|---|
| General information | May damage fertility or the unborn child. Causes damage to organs (Eyes, Skin, Respiratory system, lungs, Central nervous system, Gastro-intestinal tract). |
| Inhalation | Harmful if inhaled. Vapors may cause headache, fatigue, dizziness and nausea. Inhalation of dust during cutting, grinding or sanding operations involving this product may cause irritation of the respiratory tract. |
| Ingestion | Harmful if swallowed. May cause chemical burns in mouth, esophagus and stomach. May cause stomach pain or vomiting. |
| Skin contact | Causes skin irritation. Allergic rash. May cause sensitisation by skin contact. |
| Eye contact | Causes serious eye damage. |

Indication of immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Extinguish with the following media: Dry chemicals. Foam. Water spray.

Special hazards arising from the substance or mixture

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

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapors.

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Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Avoid release to the environment.

Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

Reference to other sections For personal protection, see Section 8.

7. Handling and storage

Precautions for safe handling

Usage precautions Restricted to professional users. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Handle all packages and containers carefully to minimize spills. Avoid inhalation of vapors and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Wash contaminated clothing before reuse. Use appropriate skin cream to prevent drying of skin.

Conditions for safe storage, including any incompatibilities

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

Storage class Chemical storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

Polar Activator

Long-term exposure limit (8-hour TWA): ACGIH 200 ppm

Short-term exposure limit (15-minute): ACGIH 250 ppm

ACGIH = American Conference of Governmental Industrial Hygienists.

Exposure controls

Protective equipment



Appropriate engineering controls Provide adequate general and local exhaust ventilation.

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| | |
|---------------------------------------|---|
| Eye/face protection | Wear tight-fitting, chemical splash goggles or face shield. |
| Hand protection | It is recommended that chemical-resistant, impervious gloves are worn. |
| Other skin and body protection | Wear appropriate clothing to prevent any possibility of skin contact. |
| Hygiene measures | Do not smoke in work area. Wash 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. |
| Respiratory protection | If ventilation is inadequate, suitable respiratory protection must be worn. |

9. Physical and Chemical Properties

Information on basic physical and chemical properties

| | |
|---|--------------------------------------|
| Appearance | Paste. |
| Color | Tan. |
| Odor | Mild. |
| Odor threshold | No specific test data are available. |
| pH | No specific test data are available. |
| Melting point | No specific test data are available. |
| Initial boiling point and range | No specific test data are available. |
| Flash point | > 93°C |
| Evaporation rate | <BuAc |
| Flammability (solid, gas) | No specific test data are available. |
| Upper/lower flammability or explosive limits | No specific test data are available. |
| Vapor density | >1 |
| Relative density | No specific test data are available. |
| Solubility(ies) | No specific test data are available. |
| Partition coefficient | No specific test data are available. |
| Auto-ignition temperature | No specific test data are available. |
| Decomposition Temperature | No specific test data are available. |
| Viscosity | No specific test data are available. |
| Other information | None. |

10. Stability and reactivity

| | |
|---|--|
| Reactivity | The following materials may react violently with the product: Strong oxidizing agents. Strong reducing agents. |
| Stability | Stable at normal ambient temperatures and when used as recommended. |
| Possibility of hazardous reactions | May polymerize. |

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| | |
|---|---|
| Conditions to avoid | Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition. |
| Materials to avoid | Strong oxidizing agents. Strong reducing agents. |
| Hazardous decomposition products | Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO ₂). Oxides of nitrogen. |

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 1,746.75

Acute toxicity - dermal

ATE dermal (mg/kg) 7,518.72

Acute toxicity - inhalation

ATE inhalation (gases ppm) 17,543.68

ATE inhalation (vapours mg/l) 75.19

ATE inhalation (dusts/mists mg/l) 12.53

| | |
|---|---|
| Inhalation | Harmful if inhaled. Vapors may cause headache, fatigue, dizziness and nausea. Inhalation of dust during cutting, grinding or sanding operations involving this product may cause irritation of the respiratory tract. |
| Ingestion | Harmful if swallowed. May cause chemical burns in mouth, esophagus and stomach. May cause stomach pain or vomiting. |
| Skin Contact | May cause sensitisation by skin contact. Causes skin irritation. |
| Eye contact | Causes serious eye damage. |
| Acute and chronic health hazards | Causes damage to organs (Eyes, Skin, Respiratory system, lungs, Gastro-intestinal tract, Central nervous system). May damage fertility or the unborn child. |

12. Ecological Information

| | |
|---|--|
| Ecotoxicity | The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. |
| <u>Acute aquatic toxicity</u> | |
| Acute toxicity - fish | Not known. |
| <u>Persistence and degradability</u> | |
| Persistence and degradability | No data available. |
| <u>Bioaccumulative potential</u> | |
| Bio-Accumulative Potential | No specific test data are available. |
| Partition coefficient | No specific test data are available. |
| <u>Mobility in soil</u> | |
| Mobility | No data available. |
| <u>Other adverse effects</u> | |

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Other adverse effects Not known.

13. Disposal considerations

Waste treatment methods

General information Dangerous for the environment. May cause long-term adverse effects in the aquatic environment.

14. Transport information

UN Number

| | |
|----------------------|--------|
| UN No. (TDG) | 3082 |
| UN No. (IMDG) | 3082 |
| UN No. (ICAO) | 3082 |
| UN No. (DOT) | UN3082 |

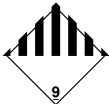
UN proper shipping name

| | |
|------------------------------------|---|
| Proper shipping name (TDG) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Epoxy Phenol Novolac) |
| Proper shipping name (IMDG) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Epoxy Phenol Novolac) |
| Proper shipping name (ICAO) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Epoxy Phenol Novolac) |
| Proper shipping name (DOT) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS Epoxy Phenol Novolac) |

Transport hazard class(es)

| | |
|----------------------------|---|
| DOT hazard class | 9 |
| DOT hazard label | 9 |
| TDG class | 9 |
| TDG label(s) | 9 |
| IMDG Class | 9 |
| ICAO class/division | 9 |

Transport labels



DOT transport labels



Packing group

| | |
|---------------------------|-----|
| TDG Packing Group | III |
| IMDG packing group | III |
| ICAO packing group | III |

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DOT packing group III

Environmental hazards

Environmentally Hazardous Substance

**Special precautions for user**

EmS F-A, S-F

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

Regulatory References Proprietary information protected pursuant to WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Section 7, Art. 39.

US Federal Regulations**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**

None of the ingredients are required to be listed.

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

The following ingredients are listed or exempt:

Polar Activator

5,000 lbs (2270 Kg)

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are required to be listed.

SARA 313 Emission Reporting

The following ingredients are listed or exempt:

*Polar Activator***CAA Accidental Release Prevention**

None of the ingredients are required to be listed.

OSHA Highly Hazardous Chemicals

None of the ingredients are required to be 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 or exempt:

*Polar Activator***California Air Toxics "Hot Spots" (A-II)**

None of the ingredients are required to be listed.

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Massachusetts "Right To Know" List

The following ingredients are listed or exempt:

Polar Activator

Rhode Island "Right To Know" List

The following ingredients are listed or exempt:

Polar Activator

Minnesota "Right To Know" List

The following ingredients are listed or exempt:

Polar Activator

New Jersey "Right To Know" List

The following ingredients are listed or exempt:

Polar Activator

Pennsylvania "Right To Know" List

The following ingredients are listed or exempt:

Polar Activator

Inventories

EU - EINECS/ELINCS

Some of the ingredients are listed or exempt.

Canada - DSL/NDSL

All the ingredients are listed or exempt.

US - TSCA

All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

Australia - AICS

All the ingredients are listed or exempt.

Japan - MITI

Some of the ingredients are listed or exempt.

Korea - KECI

All the ingredients are listed or exempt.

China - IECSC

All the ingredients are listed or exempt.

Philippines - PICCS

All the ingredients are listed or exempt.

16. Other information

Revision date 6/6/2018

Revision 1

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Hazard statements in full

H225 Highly flammable liquid and vapor.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H360 May damage fertility or the unborn child.
H370 Causes damage to organs .
H411 Toxic to aquatic life with long lasting effects.

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