

## Section 1: Identification

### Product

Product Code – Prepreg Hardener  
Product Name(s) – Prepreg Hardener  
HMIS Ratings - Health 3, Fire 1, Reactivity 0

### Company Identification

#### Contact

E-mail [resin.research@gmail.com](mailto:resin.research@gmail.com)  
Website [www.resinresearch.net](http://www.resinresearch.net)

#### Locations

USA West 4231 S Fremont Ave. Tucson, AZ 85714  
USA East 131 Tomahawk Dr. #11 Indian Harbor Beach, FL 32937  
UK Unit 6 Clonmel Business Park, Clonmel Road, Sturchley, UK, B30 2BU

### Emergency Telephone Number

CHEMTEL 800-255-3924 OR 813-248-0585

## Section 2: Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

### Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Acute Tox.	4 (dermal)	Acute toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Skin Sens.	1A	Skin sensitization
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

**Signal Word:** Danger

#### Hazard Statement:

H312 Harmful in contact with skin.  
H302 Harmful if swallowed.  
H317 May cause an allergic skin reaction.  
H314 Causes severe skin burns and eye damage.  
H402 Harmful to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

#### Precautionary Statements (Prevention):

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe dust or mist.  
P273 Avoid release to the environment.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P270 Do not eat, drink, or smoke when using this product.  
P264 Wash with plenty of water and soap thoroughly after handling.

**Precautionary Statements (Response):**

P310 Immediately call a POISON CENTER or doctor/physician.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P361 + P364 Take off immediately all contaminated clothing and wash it before reuse.

**Precautionary Statements (Storage):**

P405 Store locked up.

**Section 3: Composition/Information on Ingredients**

INGREDIENT	WT%	CAS#
Aliphatic Amines	70-75%	(Mixture is a trade secret)
Benzyl Alcohol	20-30%	100-51-6

**Section 4: First Aid Measures**

**EMERGENCY AND FIRST AID PROCEDURES:**

**Eyes:**

Flush with water for 15 minutes holding eyelids open. Seek medical attention.

**Skin:**

Remove contaminated clothing and shoes and wipe excess off skin. Flush skin with water. Follow by washing in soap and water. If irritation occurs, seek medical attention. Do not reuse clothing until cleaned. Contaminated leather articles (shoes) cannot be decontaminated and should be destroyed.

**Inhalation:**

Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

**Ingestion:**

DO NOT INDUCE VOMITING. Vomiting will cause further damage to throat or respiratory tract. Dilute by giving water or milk to drink if victim is conscious. GET IMMEDIATE MEDICAL ATTENTION. Medical Conditions Generally Aggravated by Exposure: Other than skin sensitization which appears to be permanent, epoxy resin does not appear to cause long term health effects. Nor does it appear to aggravate other medical conditions.

## Section 5: Firefighting Measures

**Flash Point:** > 300°F Method: Pensky-Martens Closed Cup

**Flammable Limits in Air By Volume:**

Lower: N/A

Upper: N/A

**Extinguishing Media:**

Foam, Carbon Dioxide, Dry Chemical, Water Fog Special Firefighting Procedures: When fighting chemical fires wear full protective equipment with self-contained breathing apparatus. Water spray may be used to cool fire-exposed containers. Toxic fumes may be evolved when this substance is burned.

**Fire and explosion hazards:** Toxic fumes will be involved when material is involved in a fire

## Section 6: Accidental Release Measures

**If material is spilled:**

Avoid all skin contact. Absorb spills with clay, diatomaceous earth, vermiculite or other suitable absorbent material and shovel into waste metal drums.

**Waste disposal method:**

Incinerate or bury in approved dumping area in accordance with Federal, State and local regulations.

## Section 7: Handling and Storage

**Precautions for safe handling:**

Containers should be opened carefully in well-ventilated areas to avoid static discharge. Protection against fire and explosion: No explosion proofing necessary.

**Conditions for safe storage, including any incompatibilities:**

Segregate from acids forming substances. Segregate from isocyanates. Segregate from epoxides. Suitable materials for containers: Carbon steel (Iron), Stainless steel 1.4401, Stainless steel 1.4301 (V2), High density polyethylene (HDPE), glass, Low density polyethylene (LDPE) Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Keep tanks under inert gas. Keep away from sources of ignition - No smoking. Keep container tightly closed and in a cool place.

**Storage stability:**

Storage duration: 12 Months From the data on storage duration in this safety data sheet no agreed statement regarding the warrantee of application properties can be deduced.

**Storage Temperatures:**

Store at room temperature.

**Handling Preparation:**

Do not heat prior to mixing with resins.

## Section 8: Exposure Controls/Personal Protection

### Respiratory protection:

NIOSH Approved respiratory protection required in absence of proper environmental control. Use amine respiratory cartridge mask or an atmosphere supplying respirator.

### Ventilation:

Breathing of vapors should be avoided. This product should be confined as far as possible in sealed or covered containers in which case normal room ventilation should be adequate. Local ventilation will be needed in areas where vapors are expected.

### Skin protection:

Rubber gloves, clean, body covering clothing and footwear.

### Other protective equipment:

Splash proof goggles or safety glasses

### ----- SPECIAL PRECAUTIONS -----

- Avoid all skin contact.
- Avoid spills and inhalation of vapors.
- A good standard of personal hygiene and good general housekeeping are essential.
- Reseal part used containers after use.
- Ensure all containers are correctly labeled to prevent accidental ingestion.
- Wash with soap and water before eating, drinking, or using lavatory.
- Observe conditions of good industrial hygiene and safe working practice

## Section 9: Physical and Chemical Properties

**Boiling Range:** not applicable Specific Gravity: 0.9-1.0

**Vapor Density:** Heavier than Air Material V.O.C.: None

**Evaporation Rate:** Slower than Ether Water Solubility: Negligible

**Appearance and Odor:** Clear liquid with ammonia-like odor.

## Section 10: Stability and Reactivity

**Stability:** Stable. Hazardous Polymerization: Will not occur.

**Incompatibility:** Strong oxidizing agents, Lewis, and mineral acids.

**Hazardous Decomposition Products:** Oxides of carbon and nitrogen, aldehydes, acids

### Conditions to Avoid:

Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke resulting in hazardous decomposition products.

## Section 11: Toxicological Information

Acute toxicity

Oral:

Type of value: LD50

Species: rat

Value: 1,030 mg/kg

Inhalation:

No data available.

Dermal:

No data available. The European Union (EU) has classified this substance as 'harmful'.

Irritation / corrosion

Skin:

Species: rabbit

Result: Corrosive.

Eye:

Species: rabbit

Result: Risk of serious damage to eyes.

Method: OECD Guideline 405

Sensitization:

Guinea pig maximization test

No mutagenic effects reported.

Experimental/calculated data:

Micronucleus assay

No mutagenic effects reported.

Aspiration Hazard:

No aspiration hazard expected.

Species: guinea pig

Result: sensitizing

Method: OECD Guideline 406

Genetic toxicity

Experimental/calculated data:

Ames-test

## Section 12: Ecological Information

Fish

Acute:

Directive 84/449/EEC, C.1 semi static

Leuciscus idus/LC50 (96 h): 110 mg/l

Nominal values (confirmed by concentration control analytics)

Chronic:

Study scientifically not justified.

Aquatic invertebrates

Acute:

OECD Guideline 202, part 1 static

Daphnia magna/EC50 (48 h): 23 mg/l

Nominal values (confirmed by concentration control analytics)  
semi static

Chaetogammarus marinus/EC50 (48 h): 388 mg/l

The details of the toxic effect relate to the nominal concentration.

Chronic:

OECD Guideline 202, part 2 semi static Daphnia magna (NOEC) 21 d 3 mg/l

Nominal values (confirmed by concentration control analytics)

Aquatic plants

Toxicity to aquatic plants:

Directive 88/302/EEC, part C, p. 89 green algae/EC50 (72 h): > 50 mg/l

Nominal concentration.

Microorganisms

Toxicity to microorganisms:

DIN 38412 Part 8 bacterium/EC10 (18 h): 1,120 mg/l

Nominal concentration.

Degradability / Persistence

Biological / Abiological Degradation

Test method: Directive 92/69/EEC, C.4-A (aerobic),

Method of analysis: DOC reduction

Degree of elimination: 8 % (28 d)

Evaluation: Not readily biodegradable (by OECD criteria).

Hydrolysis

Test method: OECD Guideline 111

Half-life: (50 °C)

Bioaccumulation

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected. Literature data.

Environmental mobility:

Transport between environmental compartments:

calculated adsorption/water - soil

KOC: 928

log KOC: 2.97

Other adverse effects:

Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

### Section 13: Disposal Considerations

#### Waste disposal of substance:

Incinerate in a licensed facility. Do not discharge substance/product into sewer system.

#### Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste (if applicable) and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from

federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.

## Section 14: Transportation Information

**DOT PROPER SHIPPING NAME:** Amine

**UN NUMBER:** UN2735

CLASS 8

PKG III

**DOT HAZARD CLASS:** Corrosive Liquid

**SARA Title III:**

This product contains no toxic chemicals subject to the report requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) and of 40 CFR 372.

Check with your local/federal logistic and shipping companies for proper classification of material.

## Section 15: Regulatory Information

Federal Regulations

**Registration status:**

Chemical TSCA, US released / listed

**OSHA hazard category:** Acute target organ effects reported; Corrosive to skin and/or eyes; Sensitizer

EPCRA 311/312 (Hazard categories): Acute; Chronic

## Section 16: Other Information

### Disclaimer:

Resin Research, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

RESIN RESEARCH, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, RESIN RESEARCH, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.