

Section 1: Identification

Product

Product Code – Resin Research Hardeners
Product Name(s) – MARINE PRO
HMIS Ratings - Health 3, Fire 1, Reactivity 0
CAS# Trade Secret

Identified Uses

Material Uses – Epoxy Resin Systems
Professional and Consumer Uses – Use per epoxy industry standards and Resin Research TDS
Most Common technical function of substance (what it does) –
Resin and Hardener create an adhesive used to join two or more objects together. Epoxy solution can be used as a sealant as well as adding structural integrity. Examples include fiberglass, countertops, surfboards, tabletops, boats, etc.

Company Identification

Contact

Resin Research UK LTD
E-mail resin.research@gmail.com
Website 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



GHS05
Corrosive



GHS08
Health hazards



GHS09
Environmental

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.
- 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	50-80%	(Mixture is a trade secret)
Benzyl Alcohol	5-30%	(Mixture is a trade secret)
Trade Secret	2-26%	(Mixture is a trade secret)

Section 4: First Aid Measures

Eye contact

Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Skin contact

Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation

Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Ingestion

Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person.

Notes to physician

Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

Section 5: Firefighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture

Hazards during firefighting:
No hazards known.

Advice for fire-fighters

Protective equipment for firefighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Section 6: Accidental Release Measures

Personal precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk-through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7: Handling and Storage

Handling:

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking, and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Storage stability:

Storage duration: 12 Months From the data on storage duration in this safety data sheet no agreed statement regarding the warranty 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

Preventive Measures

Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Engineering controls

Use local exhaust ventilation to maintain airborne concentrations below the TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. For guidance on engineering control measures refer to publications such as the ACGIH current edition of 'Industrial Ventilation, a manual of Recommended Practice.'

Personal protection

Eyes

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts

Skin

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Section 9: Physical and Chemical Properties

Appearance: Clear liquid

Odor: Slight ammonia odor

Odor threshold: NA

pH: 11.2

Melting point/freezing point: NA

Boiling Range: 205C

Flash point: 150C

Evaporation rate: 1.8

Flammability: Product is combustible

Vapor Pressure: .1 @25C

Vapor density: 3.72

Solubility: 1g/25ml water at 17C

Partition coefficient: NA

Auto-ignition temperature: NA

Decomposition Temperature: <400C

Viscosity: 200cps

Section 10: Stability and Reactivity

Reactive Hazard - None known, based on information available

Stability - Stable under normal conditions.

Conditions to Avoid - Incompatible products.

Incompatible Materials - Acids, Strong oxidizing agents, Acid anhydrides, Acid chlorides

Hazardous Decomposition Products - Nitrogen oxides (NO_x), Carbon monoxide (CO), Carbon dioxide (CO₂)

Hazardous Polymerization - Hazardous polymerization does not occur.

Hazardous Reactions - None under normal processing.

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

Ecotoxicity - Do not empty into drains.

Persistence and Degradability - No information available

Bioaccumulation/ Accumulation - No information available.

Mobility - No information available.

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 (EPRCA) 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:

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