ATR-525 Epoxy Hardener

Section 1: Identification of the Substance or Mixture and of the Supplier

Product ID: ATR-525 Epoxy Hardener
Product Name: ATR-525 Epoxy Hardener
Revision Date: March 21, 2023
Date Printed: March 21, 2023
Version: 1.0
Manufacturer's Name: LifePort Advanced Composites – Cage Code 0KFL5
Address: 1610 Heritage Street Woodland, WA 98674
Information Phone: LifePort (360-225-1212)
24 Hr Transportation Emergency Phone Number: ChemTrec (800-424-9300) Outside Continental U.S. 703 527 3887)
Email: solutions@lifeport.com

Section 2: Hazards Identification

Classification

Acute aquatic toxicity - Category 3
Acute toxicity Oral - Category 4
Chronic aquatic toxicity - Category 3
Serious Eye Damage - Category 1
Skin Irritation - Category 2
Skin Sensitizer - Category 1
Specific Target Organ Toxicity - Repeated Exposure - Category 1
Specific Target Organ Toxicity - Single Exposure - Category 1
Specific Target Organ Toxicity - Single Exposure - Category 2

Signal Word

Danger

Pictograms

Hazardous Statements – Health

Harmful if swallowed
Causes serious eye damage
Causes skin irritation
May cause an allergic skin reaction
Causes damage to organs through prolonged or repeated exposure
Causes damage to organs
May cause damage to organs

LifePort ADVANCED MATERIALS

ATR-525 Epoxy Hardener

Hazardous Statements – Environmental
Harmful to aquatic life with long lasting effects.

Precautionary Statements – General
If medical advice is needed - have product container or label at hand.
Keep out of reach of children.
Read label before use.

Precautionary Statements – Prevention
Avoid release to the environment.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves, protective clothing, and eye/face protection.
Contaminated work clothing should not be allowed out of the workplace.
Do not breathe dust/fume/gas/mist/vapors/spray.

Precautionary Statements – Response
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Rinse mouth.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor.
IF ON SKIN: Wash with plenty of water.
Specific treatment (see First-Aid on this label).
Take off contaminated clothing and wash it before reuse.
If skin irritation or a rash occurs: Get medical advice/attention. IF exposed or concerned: Call a POISON CENTER or doctor.

Precautionary Statements – Storage
Store locked up.

Precautionary Statements – Disposal
Dispose of contents/container to disposal recycling center. Under RCRA it is the responsibility of the user of the products to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Hazards Not Otherwise Classified (HNOC)
None.

Acute toxicity of 7.43% of the mixture is unknown

LifePort ADVANCED MATERIALS

ATR-525 Epoxy Hardener

Section 3: Composition/Infromation on Ingredients

CAS	Chemical Name	% By Weight
NA-ERAEnviro	Non Hazardous Volatile	50% - 55%
0004246-51-9	1-Propanamine, 3-3'-[oxybis(2,1-ethanedelylocy)]bis-	10% - 15%
0067762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	5% - 10%
0000080-05-7	BISPHENOL A	5% - 10%
NA-ERAEnviro	Heterocyclic amine	5% - 10%
0001761-71-3	METHYLENEDI(CYCLOHEXYLAMINE)	1.0% - 5%
0000693-98-1	METHYL IMIDAZOLE, 2-	1.0% - 5%
0084852-15-3	4-NONYL PHENOL BRANCHED	1.0% - 5%
0000112-24-3	TRIETHYLENE TETRAMINE	0.4% - 2%
Trade Secret	Tertiary Amine	0.4% - 2%

Section 4: First-Aid Measures

Inhalation
Remove source of exposure or move person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you feel unwell.

Skin Contact
Take off all contaminated clothing immediately, shoes and leather goods (e.g. watchbands, belts).Rinse skin with lukewarm, gently flowing water for a duration of 30 minutes or until medical aid is available. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before re-use or discard.

Eye Contact
Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rising for a duration of 30 minutes or until medical aid is available. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a POISON CENTER/doctor.

Ingestion
Do not induce vomiting. Give large amounts of water followed by milk if available. Do not give anything to a victim who is drowsy, unconscious, or convulsing. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Seek medical attention immediately.

Most important symptoms/effects, acute and delayed
No data available.

Indication of immediate medical attention and special treatment needed, if necessary
In case of inhalation of decomposition products in a fire, symptoms may be delayed.

LifePort ADVANCED MATERIALS

ATR-525 Epoxy Hardener

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media
Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media
No data available.

Specific Hazards in Case of Fire
No data available.

Fire-fighting Procedures
Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions
Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6: Accidental Release Measures

Emergency Procedure
Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.
Do not touch or walk through spilled material.
ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Recommended Equipment
Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions
Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up

Cover the liquid with inert absorbent. Scoop all contaminated material into containers for proper disposal. Flush area with water to remove residues.

Section 7: Handling and Storage

General

Wash hands after use.
Do not get in eyes, on skin or on clothing.
Do not breathe vapors or mists.
Use good personal hygiene practices.
Eating, drinking and smoking in work areas is prohibited.
Remove contaminated clothing and protective equipment before entering eating areas.
Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Storage Room Requirements

Keep container(s) tightly closed and properly labeled.
Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities.
Store in approved containers and protect against physical damage.
Keep containers securely sealed when not in use.
Indoor storage should meet OSHA standards and appropriate fire codes.
Containers that have been opened must be carefully resealed to prevent leakage.
Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld or perform similar operations on or near containers.
Do not store near acids or epoxy resins. Do not store product in reactive metal containers. For products supplied in side-by-side cartridges, keep cartridges in a location where they cannot be punctured or ruptured which would expose the catalyst to the resin in an uncontrolled environment.

Section 8: Exposure Controls/Personal Protection

Eye Protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

LifePort ADVANCED MATERIALS

ATR-525 Epoxy Hardener

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, and dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Chemical-resistant clothing is recommended to avoid prolonged contact. Avoid unnecessary skin contact.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
CARBON BLACK		3.5			1			

Chemical Name	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)
CARBON BLACK	3.5a			1		3 (I)		

Chemical Name	ACGIH Carcinogen	ACGIH Notations	ACGIH TLV Basis
CARBON BLACK	A3	A3	Bronchitis

(I) - Inhalable fraction, A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

ATR-525 Epoxy Hardener

Section 9: Physical and Chemical Properties

% VOC: N/A
Specific Gravity: N/A
Appearance: N/A
Odor Description: N/A
pH: N/A
Flammability: Flash point at or above 200°F/93°C
Flash Point Symbol: N/A
Flash Point: N/A
Low Boiling Point: N/A
Evaporation Rate: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Water Solubility: N/A
Auto Ignition Temp: N/A

Section 10: Stability and Reactivity

Stability
Stable at normal temperature and pressure.

Conditions to Avoid
Heat and flames.

Hazardous Polymerization
Will not occur.

Incompatibility (Materials to Avoid)
Strong oxidizing agents and acids. Hazardous Decomposition Products Hazardous decomposition products may include oxides of carbon and nitrogen, hydrocarbon fragments and organic decomposition fragments.

Section 11: Toxicological Information

Skin Corrosion/Irritation
Causes skin irritation.

Serious Eye Damage/Irritation
Corrosive to eyes and may cause severe damage including blindness.
Causes serious eye damage 0000100-51-6 BENZYL ALCOHOL.
Contact with eyes causes local irritation.

LifePort ADVANCED MATERIALS

ATR-525 Epoxy Hardener

Carcinogenicity
Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity
Based on available data, the classification criteria are not met.

Reproductive Toxicity
Based on available data, the classification criteria are not met.

Respiratory/Skin Sensitization
Inhalation of vapors may cause irritation of the respiratory tract.
May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure
Causes damage to organs.
May cause damage to organs.

Specific Target Organ Toxicity - Repeated Exposure
Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard
Based on available data, the classification criteria are not met.

Acute Toxicity
Harmful if swallowed.

Likely Routes of Exposure
Inhalation, ingestion or skin absorption.
Inhalation, Ingestion, Skin contact, Eye contact.
0000100-51-6 BENZYL ALCOHOL
The substance can be absorbed into the body by inhalation of its vapor and by ingestion.

Miscellaneous Health Effects
0000100-51-6 BENZYL ALCOHOL
Inhalation of vapor may cause irritation of upper respiratory tract. Prolonged or excessive inhalation may result in headache, nausea, vomiting, and diarrhea. In severe cases, respiratory stimulation followed by respiratory and muscular paralysis, convulsions, narcosis and death may result. Ingestion may produce severe irritation of the gastrointestinal tract, followed by nausea, vomiting, cramps and diarrhea; tissue ulceration may result.

Chronic Exposure
0001333-86-4 CARBON BLACK
CARCINOGENIC EFFECTS: In 1996, the IARC reevaluated Carbon Black as a Group 2B carcinogen. This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence.
Prolonged inhalation of Carbon black can result in lung disease. Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

Potential Health Effects – Miscellaneous

0001333-86-4 CARBON BLACK
Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease. WARNING: This chemical is known to the State of California to cause cancer.
0025068-38-6 BISPHENOL A DIGLYCIDYL ETHER POLYMER
The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guin
0068609-97-2 Epoxide resins, liquid
The following medical conditions may be aggravated by exposure: allergies, eczema, skin disorders. Irritating to the mouth, throat and stomach. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin.

0000100-51-6 BENZYL ALCOHOL

LC50(Inhalation, rat):>500 mg/m3; Toxic effects: Behavioral - somnolence (general depressed activity) Behavioral - ataxia Lungs, Thorax, or Respiration - respiratory depression; Reference: VCVGK* "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Halogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume (issue)/page/year: -,132,1984.

LD50(Dermal, rabbit): 2000 mg/kg; VCVGK* "Vrednie chemichescie veshestva, galogen I kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Halogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume (issue)/page/year: -,132,1984.

LD50(Oral, rat): 1230 mg/kg; Toxic effects: Behavioral - somnolence (general depressed activity) Behavioral - excitement Behavioral - coma 0001333-86-4 CARBON BLACK

LC50 (rat): 6750 mg/m3 (4-hour exposure); cited as 27000 mg/m3 (27 mg/L) (1-hour exposure) (3).

Section 12: Ecological Information

Toxicity

Harmful to aquatic life.
Harmful to aquatic life with long lasting effects.

Persistence and Degradability

0000100-51-6 BENZYL ALCOHOL
Readily biodegradable. 0001333-86-4 CARBON BLACK
Carbon Black's insolubility in water results in it not being biodegradable in any medium or by biota. It is considered persistent in the natural environment.

Bio accumulative Potential
0000100-51-6 BENZYL ALCOHOL
No potential for bioaccumulation.

Mobility in Soil
No data available.

Other Adverse Effects
No data available.

Results of the PBT and vPvB assessment
0000100-51-6 BENZYL ALCOHOL
The substance is not PBT / vPvB.

Section 13: Disposal Considerations

Waste Disposal
Under RCRA it is the responsibility of the user of the product to determine the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purpose. Return drums to reclamation centers for proper cleaning and reuse.

Section 14: Transport Information

U.S. DOT Information
Status: Not regulated
UN Number: N/A
Proper Shipping Name: N/A
Hazard Classification: N/A
Packaging group: N/A
Reportable Quantity (RQ): N/A

IMDG Information
Status: Not regulated
UN Number: N/A
Proper Shipping Name: N/A
Hazard Classification: N/A
Packaging group: N/A
Reportable Quantity (RQ): N/A

LifePort ADVANCED MATERIALS

ATR-525 Epoxy Hardener

IATA Information

Status: Not regulated
UN Number: N/A
Proper Shipping Name: N/A
Hazard Classification: N/A
Packaging group: N/A
Reportable Quantity (RQ): N/A

Section 15: Regulatory Information

U.S. FEDERAL REGULATIONS: AS FOLLOWS:
SARA SECTION 313
Product: ATR-525 (B), Effective Date: 11/14/2018
Page: 6
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:
None
TOXIC SUBSTANCES CONTROL ACT:
INVENTORY STATUS
The chemical substances in this product are on the TSCA Section 8 Inventory.
EXPORT NOTIFICATION
This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:
None

Section 16: Other Information

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPANational Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Additional information (Section 3)

The specific chemical identity and/or exact percentage (Concentration) of composition has been withheld to protect confidentiality.

Version 1.0:

Revision Date: Mar 21, 2023

ATR-525 Epoxy Hardener

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.