



ATR-1000 Resin

Section 1: Chemical Product and Suppliers Identification

Product ID: ATR-1000 Resin

Product Name: ATR-1000 Resin

Date: September 19, 2023

Version: 1.0

Manufacturer's Name: LifePort Advanced Materials

Address: 1610 Heritage Street Woodland, WA 98674

Emergency Phone: LifePort (360-225-1212)

Information Phone Number: ChemTrec (800-424-9300)

Email: solutions@lifeport.com

Section 2: Hazards Identification

OSHA Regulatory Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Classification:

Flammable Liquid - Category 3

Acute Toxicity /Inhalation - Category 4

Skin Irritation - Category 2

Eye Irritation – Category 2B

Organ Toxicity – Category 3

Carcinogenicity – Category 2

Pictograms:



Signal Word:

DANGER! Flammable liquid and vapors. Harmful if inhaled, causes skin irritation and eye irritation. May cause respiratory irritation and suspected of causing cancer.

Hazardous Statements – Health:

Flammable liquid and vapors

Causes eye irritation

May cause respiratory irritation

Suspected of causing cancer

Hazardous Statements – Environmental

Highly flammable liquid and vapor.



ATR-1000 Resin

Precautionary Statements – General:

No precautionary statement available.

Precautionary Statements – Prevention:

Keep away from heat/sparks/open flames/hot surfaces – no smoking.
 Avoid breathing dust/fume/gas/mist/vapors/spray.
 Keep container tightly closed. Take precaution against static discharge.
 Use personal protective equipment as required.
 Use in well ventilated area.

Precautionary Statements - Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do. Continue rinsing. If irritation persists, seek medical attention.

IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if you feel unwell.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs seek medical attention. Remove contaminated clothing.

IF INGESTED: Obtain medical attention. Do not give milk or alcoholic beverages.

Precautionary Statements - Storage:

Store Locked up.

Precautionary Statements - Disposal:

Waste management should be in full compliance with federal, state and local laws.

Section 3: Composition/Information on Ingredients

CAS No.	Chemical Name	% by Weight
proprietary	Polyester Resin	65 – 75%
100-42-5	Styrene Monomer	1-5%
65997-17-3	Borosilicate Glass	5-10%
proprietary	organic fillers	15-20%
91-99-6	Diethanolamine	5-2%

Section 4: First-Aid Measures

General Advice:

Show this safety data sheet to the doctor in attendance.

Eyes:

Flush with plenty of cool water for at least 15 minutes, holding eyelids apart for thorough irrigation. If irritation persists, get immediate medical attention.



ATR-1000 Resin

Skin:

Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash affected areas thoroughly with mild soap. If skin irritation persists, get immediate medical attention.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen and get immediate medical attention.

Ingestion:

Do not induce vomiting – seek immediate medical attention. If vomiting occurs, keep head lower than hips to prevent aspiration.

Notes to Physician

Treat symptomatically.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:

Carbon dioxide, dry chemicals, foam. Water may be helpful in keeping adjacent containers cool; avoid spreading the liquid with water used for cooling. Water-based sprinkler systems may help contain larger fires.

Specific Hazards arising from the Chemical

Closed containers may rupture if exposed to fire or extreme heat. May produce toxic fumes if burning.

Special protective Equipment:

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions:

Use personal protective equipment. Remove all sources of ignition.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for Clean-up

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.



ATR-1000 Resin

Other Information

None known.

Section 7: Handling and Storage

Handling:

Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Wear appropriate personal protective equipment. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from open flames, hot surfaces and sources of ignition.

Storage Room Requirements:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from extremes of heat or cold. Keep in properly labeled containers.

Section 8: Exposure Controls/Personal Protection

NFPA is a Health, Flammability and Reactivity rating: 130B

4 – SEVERE HAZARD

3 – SERIOUS HAZARD

2 – MODERATE HAZARD

1 – SLIGHT HAZARD

0 – MINIMAL HAZARD * – Chronic Hazard

Exposure Limits

Hazardous Components	OSHA PEL	ACGIH TLV
Styrene	100 ppm	20 ppm TWA / 40 ppm STEL

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eyes/Face:

Safety goggles or glasses, or full face shield.

Skin:

Protective gloves and impervious clothing.



ATR-1000 Resin

Respiratory Protection:

In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions.

Hygiene Practices:

Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling. When using, do not eat, drink or smoke.

Section 9: Physical and Chemical Properties

Appearance: white colored paste

Odor: pungent odor

Odor: Threshold not available

VOC (g/L): not reported

VOC (g/L): less exempt & water: not reported

Non-volatile (wt. %): 27.99

Specific Gravity (g/l): 1.08 pH not determined

Flash Point: 89°F (32°C)

Vapor Pressure: 6.13 (mm Hg)

Vapor Density: not determined

Solubility: not soluble in water

Auto Ignition Temperature: 915°F (490°C)

Flammable Limits: LFL: 1.1% in air Styrene; UFL 7% in air Styrene

Section 10: Stability and Reactivity

Chemical Stability:

Stable under normal conditions. Hazardous polymerization may occur above 150°F. Hazardous polymerization will occur if exposed to peroxides and metal salts.

Conditions to Avoid:

Keep away from open flames, hot surfaces, static electricity and sources of ignition. Avoid extreme heat.

Materials to Avoid:

Incompatible with strong acids and oxidizing agents, metal salts and polymerization catalysts.

Hazardous Decomposition Products:

Thermal decomposition can lead to release of hydrocarbon vapors.

Possibility of Hazardous Reactions:

None under normal conditions of use.

Section 11: Stability and Reactivity

Likely routes of exposure: Inhalation, skin contact and eye contact.

Acute toxicity

Not classified based on available information.

Components:

STYRENE:

Acute oral toxicity:

LD50 Oral (Rat): > 2,000 mg/kg

Acute inhalation toxicity:

LC 50 (Rat): 11.8 mg/l, 2770 ppm

Exposure time:

4 h

Test atmosphere:

Vapor

No observed adverse effect level (Humans):

100 ppm

Exposure time:

7 h

Test atmosphere:

Vapor

Acute dermal toxicity:

LD 50 (Rat): > 2,000 mg/kg

Method:

OECD Test Guideline 402

Assessment:

No adverse effect has been observed in acute dermal toxicity tests.

Skin corrosion/irritation

Causes skin irritation.



ATR-1000 Resin

Result:

Repeated exposure may cause skin dryness or cracking.

Remarks:

May cause skin irritation and/or dermatitis.

Components:

STYRENE

Species:

Rabbit

Result:

Irritating to skin serious eye damage/eye irritation.

Causes serious eye irritation.

Remarks:

Vapors may cause irritation to the eyes, respiratory system and the skin. Causes serious eye irritation.

Components:

STYRENE:

Result:

Irritating to eyes.

Remarks:

Vapor during processing may be irritating to the respiratory tract and to the eyes.

Respiratory or skin sensitization.

Skin sensitization:

Not classified based on available information.

Respiratory sensitization:

Not classified based on available information.

Components:

STYREN Exposure routes: Skin contact

Species:

Guinea pig



ATR-1000 Resin

Assessment:

Does not cause skin sensitization.

Result:

Negative

Exposure routes:

Inhalation (vapor)

Species:

Humans

Assessment:

Does not cause respiratory sensitization.

Result:

Negative.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Product: Carcinogenicity - Assessment:

Styrene has been tested for carcinogenicity in rats and mice.

Styrene caused lung tumors in mice only. These tumors are not considered to be relevant to humans.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause respiratory irritation.

Components:

STYRENE:

Assessment:

May cause respiratory irritation.



ATR-1000 Resin

STOT - repeated exposure

Causes damage to organs (Auditory system) through prolonged or repeated exposure if inhaled.

Components:

STYRENE:

Exposure routes:

Inhalation (vapor)

Target Organs:

Auditory system

Assessment:

Causes damage to organs through prolonged or repeated exposure. Repeated dose toxicity.

Components:

STYRENE:

Species:

Human

85 mg/m³

Application Route:

Inhalation (vapor)

Species:

Human

615 mg/kg

Application Route:

Skin contact

Aspiration toxicity:

Not classified based on available information.

Components:

STYRENE:

May be fatal if swallowed and enters airways.



ATR-1000 Resin

Further information:

Product:

Remarks: Solvents may degrease the skin.

Carcinogenicity:

IARC

Group 2B: Possibly carcinogenic to humans

STYRENE

100-42-5

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

Reasonably anticipated to be a human carcinogen

STYRENE

100-42-5

Section 12: Ecological Information

Eco toxicity Components:

STYRENE:

Toxicity to fish:

LC 50 (Pimephales promelas (fathead minnow)): 4.02 mg/l

Exposure time:

96 h

Toxicity to daphnia and other aquatic invertebrates:

EC 50 (Water flea (Daphnia magna)): 4.7 mg/l

Exposure time:

48 h

Toxicity to algae:

ErC50 (Pseudokirchneriella subcapitata (green algae)): 4.9 mg/l

Exposure time:

72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

NOEC (Water flea (Daphnia magna)): 1.01 mg/l



ATR-1000 Resin

Exposure time:

21 d

Toxicity to bacteria:

EC 50 (activated sludge): ca. 500 mg/l

Exposure time:

0.5 h

Toxicity to soil dwelling organisms:

NOEC (Eisenia fetida (earthworms)): 34 mg/kg

Exposure time:

14 d

Method:

OECD Test Guideline 207
Persistence and degradability

Components:

STYRENE:

Biodegradability:

Result: Readily biodegradable
Biodegradation: > 60 %

Section 13: Disposal Consideration

Waste Disposal Method

Dispose of in accordance with all applicable local, state, and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit, and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Section 14: Transport Information

Regulation	Description
DOT (49CFR)	
UN Classification:	UN1866
Proper Shipping Name	Resin Solution
Hazard Class	3
Packing Group	PGIII



ATR-1000 Resin

Section 15: Regulatory Information

US TSCA: Yes – All components are listed or exempt.

Federal Regulations

OSHA – material is classified as a hazardous chemical.

SARA 304 CERCLA: Styrene (CAS # 100-42-5), reportable quantity = 1,000 lb.

SARA 311/312: This material is classified as an immediate health hazard, flammability hazard and reactivity hazard under the US Superfund Amendment and Reauthorization Act. Toxic Chemical List: Styrene (CAS# 100-42-5).

Section 313 OF Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). If listed below, this product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

California Proposition 65

This product contains the following substance(s) known to the state of California to cause cancer or reproductive harm:

Chemical Name: STYRENE (100-42-5)

Section 16: Other Information

The above Information is provided in good faith and is based on present knowledge of the product at the time of publication. LifePort rejects any and all warranties whether expressed or implied including warranties of merchantability or fitness for a particular purpose. It is the responsibility of the end user to determine that the product is suitable for the particular purposes intended.

IMPORTANT NOTICE: The information in this technical data sheet regarding supplier's products, equipment, and processes was obtained through testing in laboratories under controlled conditions. The information is reliable to the best of supplier's knowledge. As supplier cannot anticipate every situation in which supplier's products may be used, supplier does not warrant the suitability, accuracy, or completeness of any such information. Supplier rejects any and all warranties of merchantability or fitness for a particular purpose, whether expressed or implied. It is the user's responsibility to undertake sufficient testing to verify the suitability of supplier's products for their particular application. In no case will supplier be liable for any direct, special, incidental, or consequential damages, to property or life, resulting from the use of supplier's products. The information contained herein shall not be construed as inducement, permission or recommendation to infringe upon any patent rights or other rights of third parties.