

SAFETY DATA SHEET

Safety Data Sheet



Date Issued : 11/11/2013
MSDS No : 128745
Date Revised : 11/12/2013
Revision No : 1

Polyester Boatyard Resin Gallon Jugs**1. PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: Polyester Boatyard Resin Gallon Jugs
GENERAL USE: Unsaturated Polyester solution for composite manufacturing.
PRODUCT DESCRIPTION: Unsaturated Polyester Resin solution.
CHEMICAL FAMILY: Mixture
GENERIC NAME: Polyester Resin; USP resin.

MANUFACTURER

Fiberglass Coatings Inc.
 www.fgci.com
 4301A 34th Street North
 St. Petersburg, FL 33714
Customer Service: 800-272-7890
E-Mail: fgci@fgci.com

24 HR. EMERGENCY TELEPHONE NUMBERS

Chem-Tel (800) 255-3924

2. HAZARDS IDENTIFICATION**GHS CLASSIFICATIONS****Health:**

Acute Toxicity (Oral)
 Acute Toxicity (Inhalation)
 Eye Irritation
 Skin Irritation

Environmental:

Aquatic Toxicity

Physical:

Flammable Liquids

GHS LABEL

Flame

Exclamation
mark**SIGNAL WORD:** WARNING**HAZARD STATEMENTS**

H224: Extremely flammable liquid and vapor.
 H302: Harmful if swallowed.

H320: Causes eye irritation.
 H315: Causes skin irritation.
 H304: May be fatal if swallowed and enters airways.

PRECAUTIONARY STATEMENT(S)

Prevention:

P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
 P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P243: Take precautionary measures against static discharge.
 P301+P310: IF SWALLOWED: 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.
 P337+P313: If eye irritation persists: Get medical advice/attention.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Colored Liquid to Syrup like consistency

IMMEDIATE CONCERNS: **Extremely Flammable Liquid** which may be ignited by open flames or sparks including static electricity, This material also has strong vapors which may be irritating to the eyes and respiratory tract. It will be burning to the eyes and moderately irritating to the skin. Flammable Vapors may travel with air currents or settle in low areas. Product when mixed with other reactive chemicals could hazardously polymerize.

POTENTIAL HEALTH EFFECTS

EYES: Irritating and may injure eye tissue if not removed promptly.

SKIN: Can cause skin irritation. Prolonged or repeated contact may cause sensitization. Symptoms include redness, burning, and drying and cracking of skin, burns and other skin damage.

SKIN ABSORPTION: Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

INGESTION: Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

INHALATION: High concentrations in immediate area can displace oxygen and can cause dizziness, unconsciousness, and even death with longer exposure. Keep people away from such vapors without self-contained breathing apparatus.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Styrene	25 - 40	100-42-5
Polyester Resin (Trade Secret)	25 - 75	XXXXXX

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists seek immediate medical attention.

SKIN: Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison control center or physician.

INHALATION:

Move individual away from exposure and into fresh air. If breathing is stopped administer artificial respiration and immediately contact a physician. If breathing is difficult or irregular oxygen may be administered by trained medical personal. If symptoms

persist seek medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Category 3 Flammable Liquid

EXTINGUISHING MEDIA: Water spray, Carbon dioxide (CO₂), Dry chemical, Alcohol-resistant foam.

HAZARDOUS COMBUSTION PRODUCTS: Carbon Oxides, Phenolics.

OTHER CONSIDERATIONS: Flammable Vapors are heavier than air and may settle into low areas.

EXPLOSION HAZARDS: Vapors may form an explosive mixture with air.

FIRE FIGHTING PROCEDURES: Fire Fighters should wear appropriate protective equipment and self contained apparatus (SCBA) with full face piece operated in positive pressure mode. Cool any adjacent drums to prevent vapor build up.

FIRE EXPLOSION: Product vapors in empty drums can ignite explosively.

SENSITIVE TO STATIC DISCHARGE: Some potential for static discharge ignition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Eliminate all sources of ignition. Take up small spills as well as possible and return material to the original container. Take up the remaining portion with rags or other absorbent material.

LARGE SPILL: Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump, vacuum, or otherwise transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for proper disposal according to all Federal, State, and Local ordinances.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Prevent run-off into sewers, streams, or other bodies of water. If run-off occurs, notify the proper authorities as required, that a spill has occurred.

LAND SPILL: Prevent material from being absorbed into the soil, treat contaminated soil as hazardous waste.

AIR SPILL: The volatile component of this material (styrene) is a recognized air pollutant and release of it into the atmosphere should be avoided as much as possible by keeping drums and containers of this product closed when not in use and by the choice of manufacturing technique.

SPECIAL PROTECTIVE EQUIPMENT: Proper safety equipment is essential to any large spill clean up, Safety Glasses, Gloves, Impervious clothing, and Breathing masks as necessary to maintain Permissible Exposure Limits (PELs) below regulatory guidelines.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Eliminate all ignition sources when working with this material including open flames, possible electrical arcing, and static electrical discharges. When pouring, mixing, or transferring the material all the equipment used must be grounded. Provide sufficient ventilation and air exchange in work rooms. Always wear personal protective equipment including suitable eye wear, impermeable gloves, and if necessary to control permissible exposure limits proper approved breathing masks.

STORAGE TEMPERATURE: For safety to prevent pressure build up, and to maintain the product's proper shelf life store at temperatures below 80 degrees F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Styrene	TWA	100		20	85
	STEL			40	170

ENGINEERING CONTROLS: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below any exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

SKIN: Avoid skin contact, use impervious latex, rubber, vinyl, or nitrile gloves

RESPIRATORY: If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

PROTECTIVE CLOTHING: Clothing should be applicable for the job at hand to protect the skin from repeated exposure to the material.

WORK HYGIENIC PRACTICES: Never eat or drink in areas where the chemical is being used. Wash hands after handling to limit exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid variously colored syrup like consistency.

ODOR: Sharp distinctive Styrene odor.

APPEARANCE: Water Clear to Dark colored syrup.

pH: N/A = Not Applicable

PERCENT VOLATILE: 25 - 40

Notes: While the percentage of volatile material predominantly styrene can seem quite high compared to a paint like product, it is only a theoretical number as the styrene is actually a reactive chemical itself and once the material is cross-linked (set up) for a proper cure using a peroxide catalyst, the vast proportion of that Styrene will irreversibly become a part of that plastic material. The actual loss of volatiles to the atmosphere depends upon the particular composite technique being used but generally represents just a small portion of the total volatiles content.

FLASH POINT AND METHOD: 31.1 °C (88°F) Setflash Closed Cup

FLAMMABLE LIMITS: 1.1 % to 6.1%

VAPOR PRESSURE: 4.3 mm Hg @ 20 C

VAPOR DENSITY: 3.6

BOILING POINT: 146°C (295°F)

Notes: (styrene)

FREEZING POINT: N/A = Not Applicable

SOLUBILITY IN WATER: Practically Insoluble in water.

EVAPORATION RATE: < 1

DENSITY: 8.5 to 9.6 Gallon

SPECIFIC GRAVITY: 1.02 to 1.16

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: Yes

STABILITY: This product is stable under normal conditions of storage and use.

POLYMERIZATION: This product is not known to undergo hazardous polymerization on its own, but could hazardous polymerize when mixed with strong reactive chemicals particularly with MEK Peroxides in large masses which can generate significant heat and possible self ignite and catch fire.

CONDITIONS TO AVOID: Heat, Open Flames, Electrical and Static electrical sparks, and any other possible source of ignition.

INCOMPATIBLE MATERIALS: Avoid all unplanned contact with strong reactive chemicals, Acids, Bases, Aliphatic Amines, and Oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	INHALATION LC ₅₀ (rat)
Styrene	2650 mg / kg (Rat)	12000 mg/m ³ (4h)

EYE EFFECTS: Causes eye irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

SKIN EFFECTS: May cause skin irritation. May be harmful if absorbed through the skin.

TARGET ORGANS: Target organs are Liver, Kidney, Central Nervous System, Eyes, and Respiratory system

MUTAGENICITY: Mixed results positive and negative

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Styrene is toxic to aquatic organisms and should not be released to any sewage, drainage system or body of water.

BIOACCUMULATION/ACCUMULATION: Styrene released to the soil is subject to biodegradation. The results of an extensive study showed that styrene will be rapidly destroyed by biodegradation in most aerobic environments.

Bioconcentration factor 13.5 fish, Log Kow 2.95

AQUATIC TOXICITY (ACUTE)

96-HOUR LC₅₀: 9.1 mg / l (Sheepshead minnow)

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: The generation of wastes should be avoided or minimized whenever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product solutions and any by-products should at

all times comply with the requirements of environmental protection and waste disposal legislation and any regional local requirements. Avoid dispersal of spilled material, run-off, and contact with soil, waterways, drains, and sewers.

EMPTY CONTAINER: Empty containers as defined under 40 CFR 261.7 or other applicable State or provincial regulations or transportation regulations are not classified as hazardous waste.

RCRA/EPA WASTE INFORMATION: US, EPA RCRA D list of Hazardous Wastes (40 CFR 261.21-24) D001

RCRA HAZARD CLASS: Flammable, Ignitable.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Resin Solution

TECHNICAL NAME: Flammable Liquid

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: 1866

PACKING GROUP: III

NAERG: 127

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 1000 Pounds

PLACARDS: Flammable

LABEL: Flammable UN 1866

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Fire Hazard, Immediate (acute) Health Hazard.

FIRE: Yes **PRESSURE GENERATING:** Yes **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

313 REPORTABLE INGREDIENTS: Styrene

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Styrene

CERCLA RQ: 1000 pounds

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All items are TSCA listed

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS: Considered Hazardous

CALIFORNIA PROPOSITION 65: This product contains a chemical known to the state of California to cause cancer.

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): B2 Flammable Liquid; D2A Very Toxic Material; D2B Toxic Material; F Dangerous Reactive Material

WHMIS CLASS: Classified according to the hazard criteria of the CPR and containing all the information required by the CPR

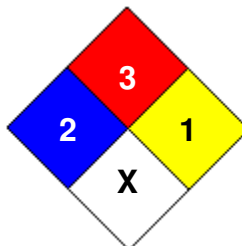
16. OTHER INFORMATION

PREPARED BY: R.D.

REVISION SUMMARY: This MSDS replaces the 11/11/2013 MSDS.

HMIS RATING

HEALTH	<input type="checkbox"/>	2
FLAMMABILITY	<input type="checkbox"/>	3
PHYSICAL HAZARD	<input type="checkbox"/>	1
PERSONAL PROTECTION	<input checked="" type="checkbox"/>	

NFPA CODES

DATA SOURCES: Manufacturer supplied data sheets.

MANUFACTURER DISCLAIMER: This information is compiled from sources believed reliable as of the date of issue, it is provided in good faith and correct to the best of our knowledge. No warranty, guarantee, or representation is made as to the sufficiency of the information for the safe use of the product nor to relieve the end user of their own Federal, State, and Local regulatory compliance requirements.