

SAFETY DATA SHEET



Date Issued : 3/25/2014
SDS No : 128748

Casting Resin

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Casting Resin
GENERAL USE: Unsaturated Polyester solution for composite manufacturing.
PRODUCT CODE: 128748

MANUFACTURER

Fiberglass Coatings Inc.
4301A 34th Street North
St. Petersburg, FL 33714
Emergency Phone: ChemTel(800)255-3924
Customer Service: 800-272-7890
E-Mail: www.fgci.com

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2
Eye Irritation, Category 2A
Acute Toxicity (Inhalation), Category 5
Acute Toxicity (Oral), Category 5

Environmental:

Aquatic Toxicity, Category 2

Physical:

Flammable Liquids, Category 3

GHS LABEL



Flame



Exclamation
mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H226: Flammable liquid and vapor.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H333: May be harmful if inhaled.
H303: May be harmful if swallowed.

H401: Toxic to aquatic life.

PRECAUTIONARY STATEMENT(S)

Prevention:

- P202: Do not handle until all safety precautions have been read and understood.
- P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- P223: Keep away from any possible contact with water, because of violent reaction and possible flash fire.
- P240: Ground/bond container and receiving equipment.
- P241: Use explosion-proof electrical/ventilating/lighting/ equipment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P264: Wash thoroughly after handling.
- P273: Avoid release to the environment.

Response:

- P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- 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.
- P308+P313: IF exposed or concerned: Get medical advice/attention.

Storage:

- P403+P235: Store in a well-ventilated place. Keep cool.

Disposal:

- P501: Dispose of contents/container in accordance with all Federal, State, and local regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Clear, Colorless Liquid, Pungent Odor.

IMMEDIATE CONCERNS: Flammable liquid and vapor. Aspiration hazard if swallowed, may cause lung damage. May cause eye, skin, respiratory, and digestive tract irritation. May cause central nervous system depression (CNS). May cause reproductive and fetus effects. May cause cancer based on animal studies. Uninhibited material may form explosive peroxides.

POTENTIAL HEALTH EFFECTS

EYES: Contact may cause eye irritation.

SKIN: May cause moderate to severe skin irritation. Prolonged exposure may cause skin burns.

INGESTION: May be harmful if swallowed. Symptoms include: gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration Hazard. Can cause chemical pneumonitis which can be fatal.

INHALATION: Breathing of high vapor concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Vapors expected to be slightly irritating.

CARCINOGENICITY: IARC: Classified 2B (possible for humans)

ROUTES OF ENTRY: Skin, Inhalation, Eyes

TARGET ORGAN STATEMENT: Liver, Central nervous system.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Polyester Resin (Trade Secret)	60 - 65	N/A
Styrene	30 - 40	100-42-5

COMMENTS: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

EYES: Flush eyes for at least 15 minutes, holding eyelids open. If easily accomplished, check for and remove contact lenses. Seek immediate medical attention.

SKIN: Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

INGESTION: Aspiration hazard. If swallowed, Do NOT induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

NOTES TO PHYSICIAN: Styrene: Do not induce vomiting. Gastrointestinal decontamination in accidental petroleum distillate ingestions is not recommended, because of the severe aspiration hazard. Gastric lavage is indicated in those patients who require decontamination. Be sure that an endotracheal tube is in place prior to lavage; use cuffed tubes in patients over 7 years of age. All contaminated clothing should be removed, and contaminated skin areas washed with lipophilic soap, or green soap, and water. If ingested, cardiac and respiratory status must be continuously monitored. Be prepared to give oxygen and, if necessary, intubate. A chest x-ray should be taken immediately after stabilization of breathing and circulation to document aspiration and detect the presence of pneumothorax.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Category 3 Flammable Liquid

EXTINGUISHING MEDIA: Small Fire: Water spray or fog, Alcohol-resistant foam, Dry chemical powder, carbon dioxide, sand or earth can be used for small fires.

Large Fire: Water spray or fog, Alcohol-resistant foam. Do not discharge extinguishing waters into the aquatic environment.

HAZARDOUS COMBUSTION PRODUCTS: Produces carbon oxides (CO, CO₂).

FIRE FIGHTING PROCEDURES: Cool containers with flooding quantities of water until well after fire is out to avoid pressure build up, autoignition or explosion.

FIRE FIGHTING EQUIPMENT: Full Bunker gear(helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus (SCBA).

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb with an inert material and put the spilled material in an appropriate waste disposal container.

LARGE SPILL: Flammable liquid. Keep away from heat and other sources of ignition. Eliminate all ignition sources. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV.

7. HANDLING AND STORAGE

HANDLING: Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and

explosion proof equipment. Avoid direct contact (eye, skin, inhalation, ingestion) when possible. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

STORAGE: Monitor inhibitor to maintain appropriate concentration. Keep containers tightly closed when not in use and store in a well-ventilated area. Isolate incompatible materials such as oxidizers. Containers should be clearly labeled. Metal containers used to store this material should be grounded.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Styrene	TWA	50		20	85
	STEL	100		40	170

ENGINEERING CONTROLS: Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (PEL/TLV). Any installed emergency eye wash station or safety showers should be located near the work area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles. Always use proper eye protection around the work area.

SKIN: Wear solvent resistant gloves (consult safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910. 134.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid.

ODOR: Pungent, Sweet

APPEARANCE: Colorless Liquid

pH: No data available.

PERCENT VOLATILE: No data available.

FLASH POINT AND METHOD: 32°C (98°F) Closed Cup

FLAMMABLE LIMITS: 1% to 7%

AUTOIGNITION TEMPERATURE: 490°C (914°F)

VAPOR PRESSURE: 4.5 mm Hg @ 20 C

VAPOR DENSITY: 3.6 (Air =1)

BOILING POINT: 145°C (293°F) to 146°C (295°F)

MELTING POINT: No data available.

POUR POINT: No data available.

SOLUBILITY IN WATER: Insoluble.

EVAPORATION RATE: Slower than Ethyl Ether.

SPECIFIC GRAVITY: 1.03 to 1.30 (Water = 1)

VISCOSITY: No data available.

(VOC): No data available.

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable under recommended storage conditions.

POLYMERIZATION: Under normal conditions of use, hazardous reactions will not occur. Extreme heat can cause rapid, uncontrolled polymerization.

CONDITIONS TO AVOID: Avoid contact with incompatible materials and ignition sources / heat.

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)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Styrene	5000 mg / kg (Rat)	> 2000 mg / kg (dermal Rabbit)	11.8 mg/L (4h)

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

SKIN EFFECTS: Causes mild skin irritant.

Prolonged or repeated exposure: may cause defatting of the skin, which can lead to dermatitis.

CARCINOGENICITY

IARC: Classified 2B (Possible for human.)

NTP: Reasonably anticipated to be a human carcinogen

OSHA: Possible select carcinogen.

Notes: Listed by IARC as possibly carcinogenic to humans (Group 2B), based on limited evidence of carcinogenicity in humans and experimental animals.

TARGET ORGANS: Cardiac sensitization. Nervous system. Nasal cavity. Lung. Eye. Skin.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Readily Biodegradable.

ECOTOXICOLOGICAL INFORMATION: Toxic to fish, invertebrates and microorganisms, however, substantial aquatic exposure is not expected based on the volatile nature of this material.

BIOACCUMULATION/ACCUMULATION: This material is not expected to bioaccumulate.

AQUATIC TOXICITY (ACUTE): Values are for: Styrene (CAS# 100-42-5)

96-HOUR LC₅₀: 4-10 mg / L (Fathead Minnow)

48-HOUR EC₅₀: 4.7 mg/L (Daphnia magna)

96-HOUR EC₅₀: 4.9 mg/L (green algae).

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be in accordance with all Federal, State, and local regulations. Empty containers may still be considered dangerous due to residual vapors/liquid/dust.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Resin Solution, Flammable

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: 1866

PACKING GROUP: III

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 1000 lbs (STYRENE)

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Resin Solution, Flammable

UN NUMBER: 1866

HAZARD CLASS: 3

PACKING GROUP: III

AIR (ICAO/IATA)

SHIPPING NAME: Resin Solution, Flammable

UN/NA NUMBER: 1866

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: III

VESSEL (IMO/IMDG)

SHIPPING NAME: Resin Solution, Flammable

UN/NA NUMBER: 1866

PRIMARY HAZARD CLASS/DIVISION: 3.3

PACKING GROUP: III

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

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

Reactivity.

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

313 REPORTABLE INGREDIENTS: Styrene

TITLE III NOTES: Components meeting the requirements are listed.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: 1000 pounds

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: Listed.

CALIFORNIA PROPOSITION 65: This material contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

OSHA HAZARD COMM. RULE: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

CLEAN WATER ACT: Listed.

CANADA

DOMESTIC SUBSTANCE LIST (INVENTORY): Listed.

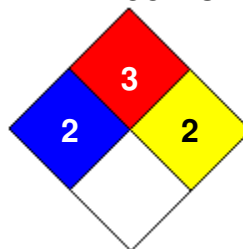
16. OTHER INFORMATION

PREPARED BY: BC

HMIS RATING

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

NFPA CODES



HMIS RATINGS NOTES: The customer is responsible for determining the PPE code for this material.

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