SAFETY DATA SHEET



Date Prepared : 03/25/2014 SDS No : 131495 Date Revised : 09/04/2015 Revision No : 1

Boatyard Resin

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Boatyard Resin **GENERAL USE:** Unsaturated Polyester solution for composite manufacturing. **PRODUCT CODE:** 131495

MANUFACTURER

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

24 HR. EMERGENCY TELEPHONE NUMBERS

Chem-Tel (800) 255-3924

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



SIGNAL WORD: DANGER

HAZARD STATEMENTS

H226: Flammable liquid and vapour.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.

H351: May cause cancer

H372: Causes damage to organs through prolonged or repeated exposure

1853NQQU: May damage fertility or the unborn child (fetotoxic and teratogenic effects).

PRECAUTIONARY STATEMENT(S)

Prevention:

- P202: Do not handle until all safety precautions have been read and understood.
- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P223: Do not allow contact with water.
- P240: Ground and bond container and receiving equipment.
- P241: Use explosion-proof equipment.
- P280: Wear protective gloves, protective clothing, eye and face protection.
- P264: Wash skin thoroughly after handling.
- P273: Avoid release to the environment.

Response:

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P302+P352: IF ON SKIN: Wash with plenty of 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 and container in accordance with 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, nasuea, 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 or 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
Styrene	25 - 40	100-42-5
Acetone	3	67-64-1
Alpha-methyl Styrene	2	98-83-9
Proprietary Polyester Resin	30 - 70	XXXXXX

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 with water for at least 15 minutes, holding eyelids open. Remove contact lenses if present and easy to do so. 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: <u>Small Fire</u>: 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

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 CFR1910.1200)					
	EXPOSURE LIMITS				
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm mg/m³ ppm mg/m³			
Shurana	TWA	50		20	85
Styrene	STEL	100		40	170
	TWA	1000	2400	500	
Acetone				750	
	TWA	50		50	
Alpha-methyl Styrene		100		100	

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: 6.0 (Butyl Acetate = 1) SPECIFIC GRAVITY: 1.03 to 1.30 (Water = 1) VISCOSITY: No data available. (VOC): No data available.

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

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

STABILITY: Stable under recommended storage conditions.

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)
Acetone	5800 mg / kg (Rat)	7426 mg / kg (guinea pig)	50100 mg/m3 (inhalation / rat) (8h)
Alpha-methyl Styrene	4900 mg / kg (Rat)		

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

SKIN EFFECTS: Skin irritant.

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

CARCINOGENICITY

IARC: Group 2B - Possibly carcinogenic for humans.

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

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

UN NUMBER: 1866

HAZARD CLASS: 3

PACKING GROUP: III

AIR (ICAO/IATA)

SHIPPING NAME: Resin Solution

UN/NA NUMBER: 1866

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: III

VESSEL (IMO/IMDG)

SHIPPING NAME: Resin Solution

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

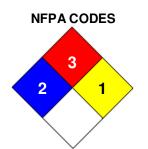
DOMESTIC SUBSTANCE LIST (INVENTORY): Listed.

16. OTHER INFORMATION

PREPARED BY: BC Date Revised: 09/04/2015

REVISION SUMMARY: This MSDS replaces the 03/25/2014 MSDS. Revised: Section 2: .

HMIS RATING				
HEALTH	*	2		
FLAMMABILITY		3		
PHYSICAL HAZARD		1		
PERSONAL PROTECT	ON			



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

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.

SAFETY DATA SHEET



Date Prepared : 06/04/2014 SDS No : 132661 Date Revised : 09/25/2015 Revision No : 3

Catalyst, 50%, Clear, MEKP-925

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Catalyst, 50%, Clear, MEKP-925 **PRODUCT CODE:** 132661

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

Chem-Tel (800) 255-3924

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

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Corrosion, Category 1B Organic Peroxides, Type D Serious Eye Damage, Category 1

Environmental:

Acute Hazards to the Aquatic Environment, Category 3 Chronic Hazards to the Aquatic Environment, Category 3

Physical:

Flammable Liquids, Category 4

GHS LABEL



SIGNAL WORD: DANGER

HAZARD STATEMENTS

H227: Combustible liquid.H242: Heating may cause a fire.H314: Causes severe skin burns and eye damage.H412: Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S)

Prevention:

P270: Do not eat, drink or smoke when using this product.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P234: Keep only in original packaging.

P261: Avoid breathing fumes, dust, vapors, gases or spray.

P273: Avoid release to the environment.

P220: Keep away from clothing and other combustible materials.

P280: Wear protective gloves, protective clothing, eye and face protection.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310: Immediately call a POISON CENTER/doctor/...

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P233+P235: Keep container tightly closed at a cool to ambient temperature.

Disposal:

P501: Dispose of contents/container to ...

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Colorless Liquid

IMMEDIATE CONCERNS: Aspiration Hazard. Corrosive. Can cause severe skin and eye damage. Ingestion can also burn throat and lead to aspiration hazard.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive, contact causes severe eye burns.

SKIN: Corrosive, causes skin burning.

INGESTION: Aspiration Hazard. Can cause severe burns in the throat. Corrosive.

INHALATION: Aspiration may cause respiratory tract irritation or lung damage. May be harmful if inhaled.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Vol. %	CAS
Methyl Ethyl Ketone Peroxide	0	1338-23-4
Dimethyl phthalate	0	131-11-3
Phlegmatizer (Trade Secret)	6 - 26	XXXXXX
2-butanone	1 - 2	78-93-3
Hydrogen Peroxide	0 - 1	7722-84-1

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

4. FIRST AID	MEASURES				
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- **EYES:** Flush eyes with water for at least 15 minutes, holding eyelids open. Remove contact lenses if present and easy to do so. 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:** 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:** Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material.

This material is severely corrosive to the eyes and may cause delayed keratitis. The normally prescribed 15 minute eye irrigation after exposure may be difficult because of severe pain. The prior installing of a topical ocular anesthetic is essential to facilitate a comprehensive ocular lavage. If swallowed, do not induce vomiting. Give patient plenty of water to drink. Ingestion of this corrosive material may result in severe ulceration, inflammation, and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this material during induced emesis can result in severe lung injury. Contact a Poison Control Center for additional treatment information. Treat any additional effect symptomatically.

5. FIRE FIGHTING MEASURES

- FLAMMABLE CLASS: Combustible and reactive liquid. Material may burn slowly at first, and after heating, burn quickly or explode.
- **EXTINGUISHING MEDIA:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Dry Chemical combined with peroxide may reignite fire. Light water additives may be particularly effective at extinguishing peroxide fires.
- **OTHER CONSIDERATIONS:** The heat of decomposition of the peroxides adds to the heat of the fire. Dry chemical fire extinguishing agent may catalyze the decomposition
- FIRE FIGHTING PROCEDURES: Evacuate any non-essential personnel. Extinguish all ignition sources if safe to do so. Use water to cool exposed containers and structures until fire is out. Avoid spreading burning material with water used for cooling purposes.
- 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).

HAZARDOUS DECOMPOSITION PRODUCTS: CO2, Water, Acetic Acid, Formic Acid, Propanoic Acid, Methyl Ethyl Ketone.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Extinguish all nearby ignition sources. Stop leak if it can be done safely. Prevent from entering waterways and sewers. Absorb with non-combustible material and transfer into appropriate disposal container using non-sparking tools.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: 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). Water polluting material. May be harmful to the environment if released in large quantities.

GENERAL PROCEDURES: Dike spill to prevent runoff from entering drains, sewers, streams, etc. Wet spilled material with water and absorb with an inert absorbent material such as perlite, vermiculite, or sand. Sweep up using non-sparking tools and place in a clean polyethylene drum or a polyethylene pail. DO NOT place into a steel container, lined or unlined, as decomposition may occur. Treat any contaminated cardboard packaging as hazardous waste. Wet container with additional water prior to sealing. Use absorbent/absorbent material to solidify liquids. Clean up promptly by sweeping or vacuum. Wear protective equipment, including eye protection, to avoid exposure (see Section 8 for specific handling precautions).

7. HANDLING AND STORAGE

HANDLING: Rotate stock using the oldest material first. Avoid contact with skin, eyes and clothing. Use PPE as specified in section 8. Keep containers closed to prevent contamination. Keep away from sources of heat, sparks, or flame. Do not add to hot solvents or monomers as a violent decomposition and/or reaction may result. When using spray equipment, never spray raw peroxide onto curing or into raw resin or flues. Keep peroxide in its original container. DO NOT USE NEAR FOOD OR DRINK. Wash thoroughly after handling. Protect from contamination. Keep tightly sealed in original packing. Risk of decomposition. Wash thoroughly after handling.

STORAGE: The stability of peroxide formulations us directly related to the shipping and storage temperature history.Cool storage at 80° F (27°C) or below is recommended for longer shelf life and stability. Prolonged storage at elevated temperatures of 100° F (38°C) and higher will cause product degradation, gassing and potential container rupture which can result in a fire and/or explosion. Store out of direct sunlight in a well ventilated area away from combustible and incompatible material. DO NOT STORE WITH FOOD OR DRINK. Refer to NFPA 400 Hazardous Materials Code from the National Fire Protection Association for additional storage information.

Further information:

Store apart from other dangerous and incompatible substances.

Keep away from direct sunlight.

Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m³	ppm	mg/m³
Dimethyl phthalate TWA			5		5
2-butanone		200	590	200	590
		300		300	885

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 and/or face shield. Always use proper eye protection around the work area.

- **SKIN:** Wear impermeable gloves. Clothing should limit skin exposure. Gloves contaminated with product should be discarded. Promptly remove clothing that becomes soiled with product. Maintain eyewash and shower station near work area in case of exposure.
- **RESPIRATORY:** Vapor respirator may be required if exposure limits are exceeded. Use a NIOSH approved respirator or equivalent when required. Proper mechanical ventilation should be installed to ensure the exposure levels are below the allowable thresholds (PEL/TLV).
- **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.
- **OTHER USE PRECAUTIONS:** A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid.

ODOR: Faint Odor.

COLOR: White.

PERCENT VOLATILE: No data available.

FLASH POINT AND METHOD: > 76°C (168°F) Setaflash Closed Cup

AUTOIGNITION TEMPERATURE: No data available.

VAPOR PRESSURE: No data available.

VAPOR DENSITY: > 1 (Air =1)

BOILING POINT: No data available.

SOLUBILITY IN WATER: Slightly soluble

EVAPORATION RATE: No data available.

SPECIFIC GRAVITY: 1.1 (Water = 1)

10. STABILITY AND REACTIVITY

REACTIVITY: Stable under recommended storage conditions.

HAZARDOUS POLYMERIZATION: Under normal conditions of use, hazardous reactions will not occur. Extreme heat or contact with incompatible materials can cause rapid, uncontrolled polymerization.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke), Irritant, caustic, flammable,noxious/toxic gases and vapors can develop in the case of fire and decomposition, Acrid smoke and irritating fumes.

INCOMPATIBLE MATERIALS: Keep away from strong acids, bases, heavy metals, salts, reducing agents and accelerators, contaminants (e.g. rust, dust, ash), combustible materials, dimethylaniline, cobalt napthenate and other promoters, accelerators, reducing agents, or any hot material.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Methyl Ethyl Ketone Peroxide	484 mg / kg	500 mg / kg	200 ppm (4h)
Dimethyl phthalate	6800 mg/ kg		
2-butanone	2737 mg / kg (Rat)	6480 mg / kg (Rabbit)	320 ppm (4h)
Hydrogen Peroxide	376 mg / kg	500 mg / kg	67 ppm (6h)

DERMAL LD50: 1200 mg/kg (Rat)

ORAL LD50: 1017 mg/kg (Rat)

INHALATION LC50: 10.4 mg/L (6h) (Rat)

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

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Environmental studies have not been performed for this mixture.

ECOTOXICOLOGICAL INFORMATION: Do NOT discharge into sewers or waterways.

BIOACCUMULATION/ACCUMULATION: No data available.

AQUATIC TOXICITY (ACUTE): Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

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.

EMPTY CONTAINER: Empty containers may contain product residue. Follow warning labels even after container has been emptied.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Organic Peroxide type D, Liquid (Methyl ethyl ketone peroxide <= 45%)

PRIMARY HAZARD CLASS/DIVISION: 5.2

UN/NA NUMBER: 3105

PACKING GROUP:

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Organic Peroxide type D, Liquid (Methyl ethyl ketone peroxide <= 45%)

UN NUMBER: 3105

HAZARD CLASS: 5.2

PACKING GROUP: ||

AIR (ICAO/IATA)

SHIPPING NAME: Organic Peroxide type D, Liquid (Methyl ethyl ketone peroxide <= 45%)

UN/NA NUMBER: 3105

PRIMARY HAZARD CLASS/DIVISION: 5.2

PACKING GROUP: ||

VESSEL (IMO/IMDG)

SHIPPING NAME: Organic Peroxide type D, Liquid (Methyl ethyl ketone peroxide <= 45%)

UN/NA NUMBER: 3105

PRIMARY HAZARD CLASS/DIVISION: 5.2

PACKING GROUP: II

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

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

313 REPORTABLE INGREDIENTS: None of the chemicals in this product are subject to the reporting requirements of Section 313

TITLE III NOTES: Components meeting the requirements are listed.

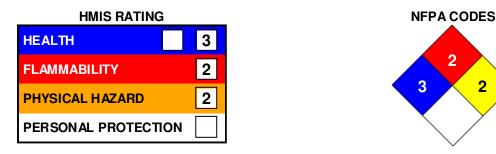
TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: Not Listed.

16. OTHER INFORMATION

PREPARED BY: Fiberglass Coatings, Inc. (GS) Date Revised: 09/25/2015

REVISION SUMMARY: This MSDS replaces the 02/06/2015 MSDS. Revised: Section 5: EXTINGUISHING MEDIA, OTHER CONSIDERATIONS. Section 6: GENERAL PROCEDURES, LARGE SPILL, WATER SPILL. Section 7: HANDLING, STORAGE, STORAGE TEMPERATURE. Section 8: OTHER USE PRECAUTIONS, PERSONAL PROTECTIVE EQUIPMENT -PROTECTIVE CLOTHING. Section 9: FLASH POINT AND METHOD, pH. Section 10: HAZARDOUS DECOMPOSITION PRODUCTS, HAZARDOUS POLYMERIZATION, INCOMPATIBLE MATERIALS, STABLE, POSSIBILITY OF HAZARDOUS REACTIONS. Section 11: ACUTE (DERMAL LD₅₀ (rabbit), ORAL LD₅₀ (rat), ORAL LD₅₀ (rat), INHALATION LC₅₀ (rat), INHALATION LC50 (rat)), EYE EFFECTS, SKIN EFFECTS. Section 12: BIOACCUMULATION/ACCUMULATION, AQUATIC TOXICITY (ACUTE), AQUATIC TOXICITY (ACUTE) (96-HOUR EC₅₀). Section 13: EMPTY CONTAINER. Section 14: AIR (ICAO/IATA) - SHIPPING NAME DOT (DEPARTMENT OF TRANSPORTATION) - PROPER SHIPPING NAME ROAD AND RAIL (ADR/RID), ROAD AND RAIL (ADR/RID) (UN NUMBER, PACKING GROUP), VESSEL (IMO/IMDG) - SHIPPING NAME. Section 15: 313 REPORTABLE INGREDIENTS, TSCA REGULATORY. Section 16: NFPA CODES - SPECIAL.



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.

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