SAFETY DATA SHEET



Date Issued: 2/21/2014

SDS No: 129156

Isopropyl Alcohol

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Isopropyl Alcohol

GENERAL USE: Solvent PRODUCT CODE: 129156

ALTERNATE TRADE NAME(S): 2-Propanol, Isopropanol

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:

Eye Irritation, Category 2A Skin Irritation, Category 3 Target Organ Toxicity (Single exposure), Category 3

Environmental:

Aquatic Toxicity (Acute), Category 3

Physical:

Flammable Liquids, Category 2

GHS LABEL





Flame

Exclamation mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H225: Highly flammable liquid and vapor. H319: Causes serious eye irritation.

H315: Causes skin irritation.

H336: May cause drowsiness or dizziness.

H402: Harmful to aquatic life.

PRECAUTIONARY STATEMENT(S)

Prevention:

P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/ equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P264: Wash thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P271: Use only outdoors or in a well-ventilated area.

P273: Avoid release to the environment.

Response:

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.

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

P332+P313: If skin irritation occurs: Get medical advice/attention.

P362: Take off contaminated clothing and wash before reuse.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P370+P378: In case of fire: Use appropriate extinguishing media (see Section 5).

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: Colorless Liquid

IMMEDIATE CONCERNS: Flammable Liquid. May be ignited by open flames or sparks including static electricity. The vapors of this product may run along the ground to remote ignition sources. This material also has strong vapors which may be irritating to the respiratory tract and cause headache and blurred vision. It will be burning to the eyes and moderately irritating to the skin.

POTENTIAL HEALTH EFFECTS

EYES: Irritating to the eyes causing a burning sensation, redness, swelling and/or blurred vision.

SKIN: Moderate irritant.

INGESTION: Irritating to the gastrointestinal tract, causing abdominal pain and vomiting, sometimes bloody. Ingestion may cause CNS depression, low blood pressure and rapid heart beat. May be harmful if swallowed. Liquid can directly enter the lungs (aspiration) when swallowed or vomited. Serious lung damage and possible fatal chemical pneumonia can develop.

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.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Isopropyl Alcohol	100	67-63-0

4. FIRST AID MEASURES

EYES: Flush eyes with a large amount of water for at least 15 minutes, while holing eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling persist, consult a physician.

SKIN: Flush with water, then wash with soap.

INGESTION: Do NOT induce vomiting. Have victim rinse mouth out with water, then drink sips of water to remove taste from mouth. DO NOT GIVE LIQUIDS TO A DROWSY, CONVULSING OR UNCONSCIOUS PERSON. If victim begins to spontaneously vomit, keep head below hips to prevent aspiration. Transport to nearest medical facility for additional treatment.

INHALATION: Move victim to fresh air. If the victim has difficult breathing or tightness of the chest, is dizzy, vomiting or unresponsive, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Category 2 Flammable Liquid

EXTINGUISHING MEDIA: Use 'alcohol foam,' dry chemical or carbon dioxide (CO2) to extinguish flames.

FIRE FIGHTING PROCEDURES: Flammable. Vapors are heavier than air and may travel across the ground and reach remote ignition sources. Clear fire area of all non-emergency personnel. Do not enter confined fire space without full bunker gear and SCBA. Containers exposed to intense heat from fires should be cooled with large quantities of water to prevent weakening of container structure which could result in container rupture.

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: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

LARGE SPILL: Shut off source of leak if safe to do so. Create a dike to contain spill. Use water spray (fog) to reduce vapors or divert vapor cloud drift. If vapor cloud forms, use water fog to suppress or blanket spill area with foam. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly. Flush area with water to remove trace residue. Contain run-off from residue flush and dispose of properly. Prevent entry into waterways, sewer, basements or confined areas.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not allow spill to enter drains, sewers or waterways.

GENERAL PROCEDURES: Protective Measures: Evacuate area of unprotected personnel. Eliminate potential sources of ignition (no smoking, flares, sparks, or flames in immediate area). Stay upwind and keep out of low areas. Handling equipment must be bonded and grounded to prevent sparking. Wear appropriate personal protective equipment when responding to spills.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with Skin, Eyes and Clothing

HANDLING: Surfaces that are sufficiently hot may ignite liquid material. Do not store or handle in aluminum equipment at temperatures above 120 F. Keep away from all ignition sources (flame, spark, etc.) until all vapors have dissipated. Use explosion-proof ventilation to prevent vapor accumulation while in use. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Air-dry contaminated clothing in a well-ventilated area before laundering. Bond and ground handling equipment and transfer containers to prevent sparking.

STORAGE: Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Keep in cool, dry well-ventilated area. Keep container closed when not in use. Ground fixed equipment.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
	OSHA PEL		ACGIH TLV				
Chemical Name	I Name		mg/m³	ppm	mg/m³		
Isopropyl Alcohol	TWA	400	980	200			
	STEL	500	1225	400			

ENGINEERING CONTROLS: Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Eye washes and showers for emergency use.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles should be worn to prevent exposure of eyes to liquid, vapor or mist. An eye wash station should be maintained near work area.

SKIN: Use protective clothing which is chemical resistant to this material. Selection of protective clothing depends on potential exposure conditions and may include gloves, boots, suits and other items. The selection(s) should take into account such factors as job task, type of exposure and durability requirements.

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: Mild characteristic alcohol odor.

APPEARANCE: Colorless Liquid

COLOR: Colorless **pH:** Not Available

PERCENT VOLATILE: No data available.

FLASH POINT AND METHOD: 12°C (54°F) Closed Cup

FLAMMABLE LIMITS: 2% to 12 %

AUTOIGNITION TEMPERATURE: 399 °C (750 °F)

VAPOR PRESSURE: 33 mm Hg @ 20 C

VAPOR DENSITY: 2.1 (Air =1)

BOILING POINT: 82.2°C (180°F) to 83°C (181°F)

FREEZING POINT: No data available.

MELTING POINT: -89 °C (-128 °F)

POUR POINT: No data available.

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: 2.9 (Butyl Acetate = 1)

SPECIFIC GRAVITY: 0.79 (Water = 1) at 20 °C

VISCOSITY #1: to 2.43 mPa

(VOC): 100.000 %

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Prevent vapor accumulation. Avoid heat, sparks, open flames and other ignition sources.

POSSIBILITY OF HAZARDOUS REACTIONS: Special Remarks on Reactivity:

Reacts violently with hydrogen + palladium combination, nitroform, oleum, COCl2, aluminum triisopropoxide, oxidants. Incompatible with acetaldehyde, chlorine, ethylene oxide, isocyanates, acids, alkaline earth, alkali metals, caustics, amines, crotonaldehyde, phosgene, ammonia. Isopropyl alcohol reacts with metallic aluminum at high temperatures. Isopropyl alcohol attacks some plastics, rubber, and coatings. Vigorous reaction with sodium dichromate + sulfuric acid.

Special Remarks on Corrosivity: May attack some forms of plastic, rubber and coating.

INCOMPATIBLE MATERIALS: Avoid all unplanned contact with strong reactive chemicals, Acids, Bases, Aliphatic Amines, Oxidizers and Reactive Metals (Aluminum, Magnesium, etc.).

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Isopropyl Alcohol	3600 mg / kg (Rat)	12800 mg / kg (dermal Rabbit)	16000 ppm (inhalation/rat) (8h)

EYE EFFECTS: Eye irritant

SKIN EFFECTS: Mild skin irritant.

CARCINOGENICITY

Notes: Not considered carcinogenic by OSHA, NTP, or IARC.

REPEATED DOSE EFFECTS: In subchronic testing of IPA via the inhalation route, rats and mice exhibited reversible CNS effects, increases in mortality rate, increases in body weight, and effects of the liver and kidney. The organ effects were likely normal physiologic adaptive changes (liver) or unique rodent pathologic responses (kidney) to the high dose of IPA.

REPRODUCTIVE EFFECTS: IPA was not a primary reproductive or developmental toxicant in animal studies, but pregnant rabbits seemed more susceptible to IPA toxicity than non-pregnant animals.

12. ECOLOGICAL INFORMATION

ECOTOXICOLO GIC AL INFORMATION: Material is practically non-toxic to aquatic organisms on an acute basis (LC 50 / EC 50 > 100 mg / L in the most sensitive species tested).

BIOACCUMULATION/ACCUMULATION: Product is readily biodegradable, shows low potential for bioaccumulation (BCF < 100 or

log Pow <3). Potential for mobility in soil is very high (Koc 0-50).

AQUATIC TOXICITY (ACUTE)

96-HOUR LC₅₀: 9640 mg / L (Fathead Minnow) **48-HOUR EC**₅₀: > 1000 mg/L (Daphnia magna)

96-HOUR EC₅₀: > 1000 mg/L(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: Isopropanol TECHNICAL NAME: Isopropyl alcohol

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: 1219
PACKING GROUP: ||

MARINE POLLUTANT #1: Not Listed.

AIR (ICAO/IATA)

SHIPPING NAME: Isopropanol

TECHNICAL NAME: Isopropyl alcohol

UN/NA NUMBER: 1219

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: II

ERG: 364

VESSEL (IMO/IMDG)

SHIPPING NAME: Isopropanol

TECHNICAL NAME: Isopropyl alcohol

UN/NA NUMBER: 1219

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: II

EmS: F-E, S-D

MARINE POLLUTANT #1: Not Listed.

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.

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

313 REPORTABLE INGREDIENTS: Isopropyl Alcohol (67-63-0)

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: Not Listed.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Isopropanol (CAS# 67-63-0)

CERCLA RQ: None

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All items are TSCA listed

CALIFORNIA PROPOSITION 65: This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

RCRA STATUS: D001

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

CANADA

WHMIS CLASS: B2 Flammable Liquid

DOMESTIC SUBSTANCE LIST (INVENTORY): All components are listed.

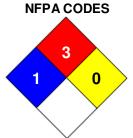
16. OTHER INFORMATION

PREPARED BY: BC

HEALTH 1 FLAMMABILITY 3 PHYSICAL HAZARD 0

PERSONAL PROTECTION

HMIS RATING



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.