



SAFETY DATA SHEET

Chemtrec 24-Hour Emergency Telephone
Domestic North America (800) 424-9300
International (703) 527-3887

*This SDS complies with 29 CFR 1910.1200
(Hazard Communication) and the GHS*

1. Product and Supplier Identification / Product Hazard Summary

Product: ISOPROPYL ALCOHOL

Product No: 2035Q, 2035G, 2035F

Trade Name: ISOPROPYL ALCOHOL

Supplier: Fiberlay Inc.
1468 Northgate Blvd.
Sarasota, FL 34234
(206) 782-0660

HEALTH: 2

*CAUTION!

*May be harmful if swallowed or inhaled

*May be irritating to the skin eyes and respiratory tract

*May cause allergic skin reaction

*Heated material may cause thermal burns

FLAMMABILITY: 3

*Warning! Flammable
Liquid & Vapor

REACTIVITY: 0

*Caution! Unstable at
high temperatures

SPECIFIC HAZARD:

-- X

2. Composition

Hazardous Components	CAS#	Concentration
Isopropyl Alcohol	67-63-0	90-100

3. Hazards Identification

Emergency Overview

Appearance: liquid, colorless

WARNING! FLAMMABLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

Potential Health Effects

Exposure routes: Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact: Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact: Unlikely to cause skin irritation or injury. Prolonged or repeated contact may dry the skin.

Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion: This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation: Breathing of vapor or mist is possible. It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

Aggravated Medical Condition: Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:., Skin, lung (for example, asthma-like conditions), Kidney

Symptoms: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:., stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Lowered blood pressure, respiratory depression (slowing of the breathing rate), Lack of coordination, confusion, lung edema (fluid buildup in the lung tissue), kidney damage, coma

Target Organs: Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans., Breathing isopropanol vapors has caused damage to the lining of the middle ear in experimental animals. The relevance of this finding to humans is uncertain., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:., mild, reversible liver effects

Carcinogenicity: This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard: This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. The relevance of these findings to humans is uncertain.

4. First Aid Measures

Eyes: If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention. Remove contact lenses.

Skin: First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

Ingestion: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended. Do NOT induce vomiting.

Inhalation: If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Administration of high doses of isopropanol in combination with known hepatotoxic chemicals resulted in enhanced liver toxicity in experimental animals.

Treatment: No information available.

5. Fire Fighting Measures

Suitable extinguishing media: Dry chemical, Carbon dioxide (CO₂), Water spray

Hazardous combustion products: Carbon dioxide and carbon monoxide

Precautions for fire-fighting: Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water may be ineffective for extinguishment unless used under favorable conditions by experienced fire fighters. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification: Flammable Liquid Class IB

6. Accidental Release Measures

Personal precautions: For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

Environmental precautions: Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods for cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Other information: Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapors/mists with a water spray jet.

7. Handling and Storage

Handling: Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage: Store in a cool, dry, ventilated area, away from incompatible substances.

8. Exposure Controls, Personal Protection

Exposure Guidelines Isopropyl Alcohol

67-63-0

ACGIH	8-hour, time-weighted average	200 ppm
ACGIH	Short-term exposure limit	400 ppm
NIOSH	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek	400 ppm
NIOSH	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek	980 mg/m ³
NIOSH	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday	500 ppm
NIOSH	STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday	1,225 mg/m ³
OSHA	8-hour time weighted average	400 ppm
OSHA	8-hour time weighted average	980 mg/m ³
OSHA	8-hour time weighted average	400 ppm
OSHA	8-hour time weighted average	980 mg/m ³
OSHA	Short-term exposure limit	500 ppm
OSHA	Short-term exposure limit	1,225 mg/m ³

General advice: These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection: Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection: Wear resistant gloves (consult your safety equipment supplier).

Respiratory protection: A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. Physical and Chemical Properties

Physical state	liquid
Color	colorless
Odor	alcohol-like
Boiling point/boiling range	180°F / 82°C
Melting point/range	Freezing Point -128°F / -89°C
pH	no data available
Flash point	54°F / 12°C
Evaporation rate	2.9
Lower explosion limit/Upper explosion limit	2.0 %(V) / 12.0 %(V)
Vapor pressure	33.000 mmHg @ 68 °F / 20 °C
Relative vapor density	2.1
Density	0.785 g/cm ³ @ 68 °F / 20 °C
Water solubility	68°F / 20°C completely soluble
log Pow	0.05
Viscosity, kinematic	no data available

10. Stability and Reactivity

Stability: Stable.

Conditions to avoid: Avoid contact with: Heat, flames and sparks., excessive heat

Incompatible products: Avoid contact with: Aldehydes, halogens, Strong acids, Strong oxidizing agents, alkalis, Amines, Ethylene oxide, halogenated hydrocarbons, isocyanates, Do not use with aluminum equipment at temperatures above 120°F.

Hazardous decomposition products: Carbon dioxide and carbon monoxide

Hazardous reactions: Hazardous polymerization does not occur.

11. Toxicological Information

Acute oral toxicity

Acute oral toxicity - Product no data available

Acute oral toxicity - Components

Isopropyl alcohol LD50: > 5,500 mg/kg Species: rat Method: OECD Test Guideline 401 Symptoms: ataxia, decreased motor activity, bradypnea

Acute inhalation toxicity

Acute inhalation toxicity - Product no data available

Acute inhalation toxicity - Components

Isopropyl alcohol > 10,000 mg/l Exposure time: 6 h Species: rat Method: OECD Test Guideline 403 Symptoms: ataxia, labored breathing, decreased activity and muscle tone, decreased motor activity, depression

Acute dermal toxicity

Acute dermal toxicity - Product no data available

Acute dermal toxicity - Components

Isopropyl alcohol LD50: Method: OECD Test Guideline 402

Acute toxicity (other routes of administration)

Acute toxicity (other routes of administration) no data available

12. Ecological Information

Biodegradability

Biodegradability - Product no data available

Biodegradability - Components

Isopropyl alcohol Primary biodegradation 53 %

Bioaccumulation

Bioaccumulation - Product no data available

Ecotoxicity effects**Toxicity to fish**

Toxicity to fish - Product no data available

Toxicity to daphnia and other aquatic invertebrates

Toxicity to daphnia and other aquatic invertebrates - Product no data available

Toxicity to algae

Toxicity to algae - Product no data available

Toxicity to bacteria

Toxicity to bacteria - Product no data available

13. Disposal Considerations

Waste disposal methods: Dispose of in accordance with all applicable local, state and federal regulations.

14. Transport Information

REGULATION ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	PACKING GROUP
U.S. DOT - ROAD			
UN1219	Isopropanol	3	II
U.S. DOT - RAIL			
UN1219	Isopropanol	3	II
U.S. DOT - INLAND WATERWAYS			
UN1219	Isopropanol	3	II
TRANSPORT CANADA - ROAD			
UN1219	Isopropanol	3	II
TRANSPORT CANADA - RAIL			
UN1219	Isopropanol	3	II
TRANSPORT CANADA - INLAND WATERWAYS			
UN1219	Isopropanol	3	II
INTERNATIONAL MARITIME DANGEROUS GOODS			
UN1219	Isopropanol	3	II
INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO			
UN1219	Isopropanol	3	II
INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER			
UN1219	Isopropanol	3	II
MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES			
UN1219	Isopropanol	3	II

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

15. Regulatory Information

California Prop. 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SARA Hazard Classification Fire Hazard Acute Health Hazard

SARA 311/312 Classification Fire Hazard Acute Health Hazard

New Jersey RTK Label Information

Isopropyl alcohol 67-63-0

Pennsylvania RTK Label Information

Isopropyl alcohol 67-63-0

Notification status

United States TSCA Inventory y (positive listing)

Canadian Domestic Substances List (DSL) y (positive listing)

Australia Inventory of Chemical Substances (AICS) y (positive listing)

New Zealand. Inventory of Chemical Substances y (positive listing)

Japan. ENCS - Existing and New Chemical Substances Inventory y (positive listing)

Japan. ISHL - Inventory of Chemical Substances (METI) y (positive listing)

Korea. Korean Existing Chemicals Inventory (KECI) y (positive listing)

Philippines Inventory of Chemicals and Chemical Substances (PICCS) y (positive listing)

China. Inventory of Existing Chemical Substances in China (IECSC) y (positive listing)

16. Other Information

Fiberlay Inc. believes the law requires us to inform you that detectable amounts of any of the listed chemicals might be present in Fiberlay products. Based on a review of the list, Fiberlay products, like all synthetic and naturally occurring chemical substances, may conceivably contain trace contaminants of some of the listed substances. While not necessarily added to our products as ingredients, some of the listed chemicals may be present in the raw materials as received from suppliers over which we have no control.

Preparation Date: 7/2/2015

Prepared by: Kevin Aber

Comments: This Material Safety Data Sheet was prepared using information provided by Fiberlay Inc.

We believe the above information is correct as of the date of this SDS. However, as this information and the conditions under which the product are used are beyond the control of Fiberlay Inc., it is the user's obligation to determine the conditions for the safe use of the product. No warranty, expressed or implied, is hereby made.