G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

1. PRODUCT IDENTIFIER

PRODUCT NAME: **ISOPROPYL ALCOHOL**

PRODUCT NUMBER(S): 183900, 183910, 183920, 183930, 183940, 183950 and 183980

TRADE NAMES/SYNONYMS: Isopropanol; 2-Propanol; IPA, Isohol; Propyl Alcohol;

RECOMMENDED USE: Chemical for synthesis, Solvent
USES ADVISED AGAINST: No information available.

CAS-NO: 67-63-0 **CHEMICAL FAMILY: Alcohol, aliphatic**

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.
Address: 40 VERONICA AVENUE
SOMERSET, NJ 08873
Telephone: 1-973-589-1450
Fax: 1-973-589-3072

Emergency Telephone Number
Emergency Phone: 1-800-424-9300 (Chemtrec)

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2. HAZARDS IDENTIFICATION

GHS Classification
Flammable liquids (Category 2)
Skin irritation (Category 3)
Eye irritation (Category 2A)
Specific target organ toxicity - single exposure (Category 3), Central nervous system
GHS Label elements, including precautionary statements

Pictogram

Signal word Danger
Hazard statement(s)
H225 Highly flammable liquid and vapor.
H316 Causes mild skin irritation.

H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

3. INGREDIENTS

COMPONENT	CAS NO.	% BY WT.	CLASSIFICATION
Isopropyl alcohol	67-63-0 EC-No.200-661-7 Index-No.603-117-00-0	99.5%min.	Flammable liquids (Category 2) Skin irritation (Category 3) Eye irritation (Category 2A) STOT-SE 3
Water	7732-18-5 EC-No.231-791-2	0.2%max.	
Other organic contaminants not tested for:		0.3%max.	
Non volatile residue		0.001max.	

Note: Assay levels on IPA can reach as high as 99.99%

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4. FIRST-AID PROCEDURES

INHALATION: ISOPROPYL ALCOHOL (ISOPROPANOL; 2-PROPANOL): IRRITANT/NARCOTIC. 12,000 PPM (IDLH) IMMEDIATELY DANGEROUS TO LIFE OR HEALTH.

****_FIRST AID_- Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.**

SKIN CONTACT: ISOPROPYL ALCOHOL (ISOPROPANOL; 2-PROPANOL): NARCOTIC.

****_FIRST AID_- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.**

EYE CONTACT: ISOPROPYL ALCOHOL (ISOPROPANOL; 2-PROPANOL): IRRITANT.

****_FIRST AID_- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.**

INGESTION: ISOPROPYL ALCOHOL (ISOPROPANOL; 2-PROPANOL): NARCOTIC.

****_FIRST AID_- In respiratory depression, give oxygen by artificial respiration. Give activated charcoal. Gastric lavage with protected airway is useful even if delayed. Do not attempt emesis if respiration is depressed. Maintain blood pressure. Treatment should be administered by qualified medical personnel (Dreisbach, Handbook of Poisoning, 12th ed.). Get medical attention.**

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5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.
VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK.
VAPOR-AIR MIXTURES ARE EXPLOSIVE.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL.

FLASH POINT: 53 F (12 C) (CC)
LOWER EXPLOSIVE LIMIT: 2.0%
FLAMMABILITY CLASS (OSHA): IB
BURN RATE: 2.3mm/min
UPPER EXPLOSIVE LIMIT: 12.7% @ 93 C
AUTOIGNITION TEMP.: 797 F (425 C)
ELECTRICAL HAZARD: CLASS I GROUP D

SUITABLE EXTINGUISHING MEDIA:

DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR ALCOHOL-RESISTANT FOAM (1990 Emergency Response Guidebook, DOT P 5800.5).
FOR LARGER FIRES, USE WATER SPRAY, FOG OR ALCOHOL-RESISTANT FOAM (1990 Emer. Res. Guidebook, DOT P 5800.5).
ALCOHOL FOAM (NFPA 325M, Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids, 1991).

ADVICE FOR FIREFIGHTERS:

Conditions of flammability: Flammable in the presence of a source of ignition when the temperature is above the flash point.

Special Fire Fighting Procedures: Shut off source. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Wear self-contained breathing apparatus where there is exposure to vapors. Use full fire-fighting turn out gear. Fight fire from safe distance or protected location. Burning liquid may float on water, although soluble.
It may not be practical to extinguish fire by water dilution.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely Flammable; OSHA Class 1B flammable liquid. Five percent THF in water is flammable. Releases Flammable Vapors below normal ambient temperatures when mixed with air and exposed to an ignition source, vapors can burn in the open or explode if confined. Vapors may be heavier than air and may travel long distances along the ground before igniting or flash back to vapor source. Diluting with water may not suffice to raise Flash Point above ambient temperatures. Keep containers tightly closed. Isolate from all sources of ignition. To avoid explosion, THF should never be distilled to dryness. Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

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⑥. ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL SPILL:

Personal Protective Measures> Extremely Flammable; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

Methods for Containment and Clean Up> Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent such as clay or silica in spill area. If an odor or acidity problem exists, add lime or sodium bicarbonate. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Remove contaminated soil to remove contaminated trace residues. Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Flush with water to remove trace reside. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable

government regulations. Keep all nonessential people away. Caution: Spontaneous polymerization can occur if material is released or mixed with incompatibles.

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7. HANDLING AND STORAGE

Personal Precautionary Measures> This material presents a fire hazard. Acetone is a class IB flammable liquid (NFPA). Liquid quickly evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing.

Handling Information> Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.
Vapor space above liquid may be flammable/explosive unless blanketed with inert gas. Do not take internally. Avoid prolonged or repeated contact with skin, eyes, and clothing.

Static Hazard> Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

Conditions for Safe Storage> Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities.
Do not store above 100°F. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally.
Under proper storage conditions a storage stability of 1 year is expected at ambient temperature.
Store in closed containers away from direct sunlight.
Store large quantities only in buildings designed to comply with OSHA 1910.106.
Do not store with incompatible materials.

Avoid breathing vapors in top of shipping container. Use with adequate ventilation.
Decontamination Procedures: Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Remove all ignition sources. Check atmosphere for explosiveness and oxygen deficiencies. Use adequate personal protective equipment. Observe precautions pertaining to confined space entry.
Container Warnings> Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

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8. EXPOSURE CONTROL (PERSONAL PROTECTION)

EXPOSURE GUIDELINES

COMPONENT	CAS NO.	% BY WT.	EXPOSURE LIMITS

Isopropyl alcohol	**67-63-0**	**99.5%min.**	**200ppm TLV(ACGIH)** **400ppm STEL(ACGIH)** **400ppm TWA(OSHA)** **500ppm STEL(OSHA)** **400ppm TWA(NIOSH)** **500ppm STEL(NIOSH)**

Note: Assay levels on IPA can reach as high as 99.99%

Key: (PEL) = Permissible Exposure Limit OSHA
(TLV) = Threshold Limit Value OSHA & ACGIH
(STEL) = Short Term Exposure Limit ACGIH
(WEEL) = USA. Workplace Environmental Exposure Levels
(TWA) = Time Weighted Average
CAS = Chemical Abstracts Registry Number
IDLH = Immediate Danger to Life and Health
N.E. =None Established

EXPOSURE GUIDELINES> Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

ENGINEERING CONTROLS> Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

RESPIRATOR: The following respirators and maximum use concentrations are recommendations by the U.S. Department of Health and Human Services, NIOSH Pocket Guide to Chemical Hazards; NIOSH criteria documents or by the U.S. Department of Labor, 29 CFR 1910 Subpart Z.
The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

1000 PPM- Any powered, air-purifying respirator with organic vapor cartridge(s).
Any chemical cartridge respirator with a full face-piece and organic vapor cartridge(s).

10,000 PPM- Any supplied-air respirator operated in a continuous flow mode.

12,000 PPM- Any air-purifying, full-face-piece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister.
Any self-contained breathing apparatus with a full face-piece.
Any supplied-air respirator with a full face-piece.

ESCAPE- Any air-purifying, full-face-piece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister.
Any appropriate escape-type, self-contained breathing apparatus.

BODYCLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.
SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance.
EYE/FACE PROTECTION: Employee must wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.
EMERGENCY EYE WASH: Where there is any possibility that an employee's eyes maybe exposed to this substance, the employer should provide an eye wash fountain within the immediate work area for emergency use.

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9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, COLOR AND ODOR: Isopropyl alcohol is a colorless watery liquid with a "rubbing alcohol" odor resembling that of a mixture of ethanol and acetone

ODOR THRESHOLD:	**40-45 PPM**
pH:	**No Data Available**
MOLECULAR WEIGHT:	**60.10 amu**
MELTING POINT:	**-129ºF (-89ºC)**
BOILING POINT:	**180ºF (82.4ºC)**
SPECIFIC GRAVITY:	**0.7855@25°C**
DENSITY (25ºC):	**No data available**
VAPOR PRESSURE:	**40mm Hg @ 24ºC (75.2°F)**
VAPOR DENSITY:	**2.1**
WATER SOLUBILITY:	**Complete**
PARTITION COEFFICIENT N-OCTANOL/WATER	**log Pow: 0.05**
FLASH POINT:	**12.0°C (53.6°F)**
EVAPORATION RATE (BUTYL ACETATE=1):	**3.0**
UPPER FLAMMABILITY LIMIT:	**12.7% (V)**
LOWER FLAMMABILITY LIMIT:	**2% (V)**
AUTO INGNITION TEMPERATURE:	**425°C (797°F)**
DECOMPOSITION TEMPERATURE:	**No data available**
VISCOSITY:	**2.1cps@25°C**
EXPLOSIVE PROPERTIES:	**No data available**
OXIDIZING PROPERTIES:	**No data available**

OTHER INFORMATION:
SURFACE TENSION: **20.8 mN/m at 25.0 °C (77.0 °F)**

SOLVENT SOLUBILITY: Soluble in alcohol, ether, chloroform, acetone, benzene; insoluble in salt solutions.

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10. STABILITY AND REACTIVITY INFORMATION

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

POSSIBILITY OF HAZARDOUS RERACTIONS: May slowly peroxidize on exposure to air under normal storage conditions. An explosion hazard may exist if the substance is distilled or allowed to evaporate to dryness.
CONDITIONS TO AVOID: Heat, flames and sparks. Extremes of temperature and direct sunlight.

INCOMPATIBILE MATERIALS: ISOPROPYL ALCOHOL (ISOPROPANOL; 2-PROPANOL):
ACIDS: Incompatible.
ACIDS ANHYDRIDES: Incompatible.
ALUMINUM: Dissolution is exothermic.
BARIUM PERCHLORATE: Formation of explosive compound.
2-BUTANONE (METHYL ETHYL KETONE): Accelerates the peroxidation of the alcohol.
CHROMIUM TRIOXIDE (GRANULAR): Ignition.
COATINGS: May be attacked.

DIOXYGENYL TETRAFLUOROBORATE: Ignition at ambient temperatures.
HALOGENS: Incompatible.
HYDROGEN + PALLADIUM (PARTICLES): Ignition on exposure to air.
HYDROGEN PEROXIDE: Formation of explosive compound.
KETONES: Markedly increases the possibility of peroxidation.
NITROFORM (TRINITROMETHANE): Dissolves liberating heat and possibly exploding.
OLEUM: Temperature and pressure increase in closed container.
OXIDIZERS (STRONG): Fire and explosion hazard.
OXYGEN (GAS): Autoxidation, on exposure to light, results in formation of ketones and potentially explosive hydrogen peroxide.
PHOSGENE: In the presence of iron salts, may explode.
PLASTICS: May be attacked.
POTASSIUM TERT-BUTOXIDE: Ignition.
RUBBER: May be attacked.
SODIUM DICHROMATE + SULFURIC ACID: Exothermic reaction with possible incandescence.
See also alcohols.

INCOMPATIBILITIES: ALCOHOLS:
ACETALDEHYDE: Violent condensation reaction.
BARIUM PERCHLORATE: Formation of highly explosive perchloric ester on refluxing.
CHLORINE: Formation of highly explosive alkyl hypochlorites.
DIETHYL ALUMINUM BROMIDE: Spontaneous ignition.
ETHYLENE OXIDE: Possible explosion.
HEXAMETHYLENE DISOCYANATE: Possible explosion in absence of solvent.
HYDROGEN PEROXIDE + SULFURIC ACID: Possible explosion.
HYPOCHLOROUS ACID: Formation of highly explosive alkyl hypochlorites.
ISOCYANATES: Possible explosion in absence of solvent.
LITHIUM ALUMINUM HYDRIDE: Vigorous reaction.
NITROGEN TETROXIDE: Possible explosion.
PERCHLORIC ACID (HOT): Dangerous interaction.
PERMONOSULFURIC ACID: Possible explosion on contact with primary or secondary alcohols.
TRI-ISO-BUTYL ALUMINUM: Violent reaction.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products may include toxic oxides of carbon.
POLYMERIZATION: Hazardous polymerization has not been reported to occur under normal temperatures and pressures.
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11. TOXICOLOGICAL INFORMATION

Primary Routes of Exposure: Inhalation, Ingestion, skin and eye contact.

Acute Effects:

Inhalation: Exposure to high concentrations has a narcotic effect when inhaled, production symptoms of drowsiness, headache, staggering, unconsciousness and possibly death.

Skin: Contact with skin has a de-fatting action that can cause irritation. May cause irritation with a stinging effect and burning sensation. Contact dermatitis has been reported in a few sensitive individuals. Substance may be dermally absorbed resulting in systemic toxicity as detailed in acute ingestion. Toxic effects may become more marked if absorption and inhalation occur concurrently.

Eyes: Splashes in eyes may cause severe irritation, possible corneal burns and eye damage.

Ingestion: May cause drowsiness, unconsciousness, and death. Gastrointestinal pain, cramps, nausea, vomiting, and diarrhea may also result. Vomiting with aspiration may cause aspiration pneumonia.

ACUTE TOXICITY:

IRRITATION DATA: 500 MG skin-rabbit mild; 100 MG/eye-rabbit severe; 10 MG eye-rabbit moderate; 100 MG/24 hours eye-rabbit moderate.

TOXICITY DATA:

Ingredient	Oral LD50(Rat)	Skin LD50(Rabbit)	Inhalation LC50
Isopropyl Alcohol	5045mg/kg	12800mg/kg	16000ppm/8hr.

MUTAGENIC EFFECTS: No information available.

CARCINOGEN STATUS: Human inadequate evidence, animal inadequate evidence (IARC Group-3). Strong acid manufacturing process: human sufficient evidence (IARC Group-1). Workers involved in the manufacture of isopropyl alcohol by the strong-acid process, involving the formation of isopropyl oils, showed an increase in para-nasal and laryngeal cancer.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: No information available.

SPECIFIC TARGET ORGAN TOXICITY (STOT-SE) - single exposure GHS
May cause drowsiness or dizziness.

SPECIFIC TARGET ORGAN TOXICITY (STOT-RE) - repeated exposure GHS
no data available

AT INCREASED RISK FROM EXPOSURE: Persons with pre-existing skin disorders; impaired liver, renal and/or pulmonary function.
ADDITIONAL DATA: Potentiates the effects of carbon tetrachloride and other hepatotoxic chlorinated aliphatic hydrocarbons.
RTECS# NT8050000

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12. ECOLOGICAL INFORMATION

DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS
May be dangerous if it enters water intakes.
Notify local health and wildlife officials.
Notify operators of nearby water intakes.

AQUATIC TOXICITY:
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 9,640.00 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 5,102.00 mg/l - 24 h
Immobilization EC50 - Daphnia magna (Water flea) - 6,851 mg/l - 24 h
Toxicity to algae EC50 - Desmodesmus subspicatus (green algae) - > 2,000.00 mg/l - 72 h
EC50 - Algae - > 1,000.00 mg/l - 24 h

WATERFOWL TOXICITY: Data not available

PERSISTANCE AND DEGRADABILITY: Data not available.

BIOACCUMULATION: log Pow <=4 No bioaccumulation is expected

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13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS> Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Burn concentrate liquids in systems compatible with water-soluble wastes in a permitted facility. Dilute aqueous waste may biodegrade.
CONTAMINATED PACKAGING: Dispose of as unused product.

RCRA Hazardous waste number: D001.
DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

US DOT DESCRIPTION: ISOPROPYL ALCOHOL, 3, UN1219, GROUP II

Proper shipping name: Isopropyl Alcohol
Hazard class or Division: 3
Identification Numbers: UN1219
Packing Group: II
Label(s) Required (if not excepted): Flammable Liquid.
Special Provisions: T1; Refers to transportation of IM portable tanks
Packaging authorizations: Exceptions: 173.150; for small quantities of flammable liquids
Non-bulk packaging: 173.202: for liquid hazardous material in packing group II
Bulk-packaging: 173.242: for liquid hazardous material
Quantity Limitations: Passenger aircraft or railcar: 5 L
Cargo aircraft only: 60 L
Vessel stowage requirements: B

IMDG
UN Number: 1219 Class: 3 Packing Group: II EMS-No: F-E, S-D
Proper Shipping Name: Isopropanol

Marine Pollutant: No

IATA
UN Number: 1219 Class: 3 Packing Group: II EMS-No: F-E, S-D
Proper Shipping Name: Isopropanol

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15. REGULATORY INFORMATION

SARA TITLE III (Superfund Amendment and Reauthorization Act)
SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355)- Not Listed
SECTION 313: Toxic Chemicals Listing (40 CFR 372.65)- Listed as a toxic chemical
SECTION 311/312: Hazard Categorization (40 CFR 370)- Acute Health, Chronic Health, and Fire

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)
SECTION 102(A) Hazardous Substances (40 CFR 302.4)- Listed
Reportable Quantity - 5,000 pounds.
SECTION 101(14) Reportable Quantity: 5,000 lbs

RCRA (Resource Conservation and Recovery Act.)
40 CFR 261.33 Hazardous Waste Number: D001

Massachusetts Right To Know Components
2-Propanol CAS-No.67-63-0
Pennsylvania Right To Know Components
2-Propanol CAS-No.67-63-0
New Jersey Right To Know Components
2-Propanol CAS-No.67-63-0
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA (Toxic Substance Control Act)
IPA is listed on the TSCA Inventory.

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16. OTHER INFORMATION:

Date of Preparation: JULY 27, 2000
Revision Number: 2.8
Revision Date: December 9, 2014

Hazard Rating:
- **4-Extreme**
- **3-High**
- **2-Moderate**
- **1-Slight**
- **0-Insignificant**

NFPA RATINGS (SCALE 0-4):	**Health=2**	**Fire=3**	**Reactivity=0**	
HMIS RATINGS (SCALE 0-4)	**Health=2**	**Fire=3**	**Reactivity=0**	**PPE=G**

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists
AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute
API - American Petroleum Institute
CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act
DOT - U.S. Department of Transportation
EPA - U.S. Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency For Research On Cancer
MSHA - Mine Safety and Health Administration
NFPA - National Fire Protection Association
NIOSH - National Institute of Occupational Safety and Health
NOIC - Notice of Intended Change (Proposed change to ACGIH TLV)
NTP - National Toxicology Program
OPA - Oil Pollution Act of 1990
OSHA - U.S. Occupational Safety & Health Administration
PEL - Permissible Exposure Limit (OSHA)
RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limit (NIOSH)
SARA - Superfund Amendments and Reauthorization Act of 1986 Title III
SCBA - Self-Contained Breathing Apparatus
STEL - Short-Term Exposure Limit (generally 15 minutes)
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average (8hr.)
WHMIS - Canadian Workplace Hazardous Materials Information System

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