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

1. PRODUCT IDENTIFIER

PRODUCT NAME: ISOPROPYL ALCOHOL 70% All Grades

PRODUCT NUMBER(S): 183500, 183510, 183530 and 183541

TRADE NAMES/SYNONYMS: IPA 70% Blend

CHEMICAL FAMILY: Alcohol, aliphatic

RECOMMENDED USE: Manufacture of substances, Laboratory chemical, Cleaning Solvent
USES ADVISED AGAINST: No information available.

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)

2. HAZARDS IDENTIFICATION

OSHA Hazards
Flammable liquid, Target Organ Effect, Irritant

Other hazards which do not result in classification
May form explosive peroxides.

Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)
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	68-72	Flammable liquids (Category 2)
	EC-No.200-661-7		Skin irritation (Category 3)
	Index-No.603-117-00-0		Eye irritation (Category 2A)
			STOT-SE (CATEGORY 3),Central Nervous System
Water	7732-18-5	28-32	Not a hazardous substance or mixture.
	EC-No.231-791-2		
	Non volatile residue:	0.001% max.	

---

4. FIRST-AID PROCEDURES

INHALATION: ISOPROPYL ALCOHOL 70% in water

****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 70% in water

****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 70% in water

****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). Remove contact lenses, if worn, after initial flush. Get medical attention immediately.**

INGESTION: ISOPROPYL ALCOHOL 70% in water

****FIRST AID*- In respiratory depression, give oxygen by artificial respiration. Do not induce vomiting. Treatment should be administered by qualified medical personnel (Dreisbach, Handbook of Poisoning, 12th ed.). Get medical attention.**

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.

FLASH POINT: 72 F (22.2 C) (TCC) **UPPER EXPLOSIVE LIMIT: 12.7%**
LOWEREXPLOSIVE LIMIT: 2.0%
FLAMMABILITY CLASS (OSHA): IB **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 Emergency Response Guidebook, DOT P 5800.5).
ALCOHOL FOAM (NFPA 325M, Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids, 1991).

CONDITIONS OF FLAMMABILITY: Flammable in the presence of a source of ignition when the temperature is above the flash point.

ADVICE FOR FIREFIGHTERS: Keep personnel removed from and upwind of fire. Shut off source. Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind Do not spray pool fires directly. A solid stream of water or foam directed into hot burning liquid can cause frothing. Move container from fire area if you can do it without risk.
Apply cooling water to sides of containers that are exposed to flames until well after fire is out. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Cool containers with water fog from as far a distance as possible. Wear NIOSH approved self-contained breathing apparatus for confined spaces. Use full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors may be heavier than air. Vapors may travel long distances along the ground before igniting and flashing back to vapor source. Keep containers tightly closed. Flammable liquid;isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat.

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.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE MEASURES: Flammable Liquid; 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.

---

7. HANDLING AND STORAGE

PERSONAL PRECAUTIONARY MEASURES: This material presents a fire hazard. 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 prolonged contact with eyes, skin and clothing. Do not take internally.

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.

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. Vapor space above liquid may be flammable/explosive unless blanketed with inert gas. Under proper storage conditions a storage stability of 1 year is expected at ambient temperature. Store in closed containers away from direct sunlight. Do not store above 100°F. Store large quantities only in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use.

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.

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.

⑧. EXPOSURE CONTROL (PERSONAL PROTECTION)

EXPOSURE GUIDELINES:

COMPONENT	CAS NO.	% BY WT.	EXPOSURE LIMITS
Isopropyl alcohol	67-63-0	68-72	200ppm TLV(ACGIH) 400ppm STEL(ACGIH) 400ppm TWA(OSHA) 500ppm STEL(OSHA) 400ppm TWA(NIOSH)

			500ppm STEL(NIOSH)
Water	7732-18-5	28-32	N.E.
Non volatile residue:		0.001% max.	

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 2), 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.

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse.

SKIN PROTECTION: Employee must wear appropriate protective gloves to prevent contact with this substance. Rubber or neoprene chemical resistant gloves. Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

EYE/FACE PROTECTION: Use safety eyewear with splash-guards or face shield must be worn where possibility exists for eye contact. Contact lenses should not be worn.
Emergency shower and eyewash fountains should be easily available in the immediate vicinity of any potential exposure.

⑨. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, COLOR AND ODOR: Isopropyl alcohol 70% is a watery liquid with an unpleasant "rubbing alcohol" odor.

Odor Threshold---------- > 40-45 ppm
pH---------- > No data available
Molecular Weight---------- > No data available
Melting/Freezing Point)---------- > No data available
Boiling Point (°F)---------- > 80.9 - 83.2 °C (177.6 - 181.8 °F)
Specific Gravity---------- > 0.872-0.883@25°C
Vapor Pressure---------- > 23mmHg@20°C
Vapor Density (air=1)---------- > 2.1
Water Solubility---------- > Soluble
Partition Coefficient n-Octanol/Water- > No data available
Evaporation Rate (Butyl Acetate=1)---- > 2.0
Flash Point---------- > 22 °C (72 °F) – closed cup
Upper Flammability Limit---------- > 12.7%(V)
Lower Flammability Limit---------- > 2%(V)

Auto-Ignition Temperature---------- > No data available
Decomposition Temperature---------- > No data available
Viscosity---------- > No data available
Explosive Properties---------- > No data available
Oxidizing Properties---------- > No data available

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

10. STABILITY AND REACTIVITY INFORMATION

CHEMICAL STABILITY: Unstable ( ) Stable (X)

POSSIBILITY OF HAZARDOUS REACTIONS: Stable under normal temperatures and pressures. 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, Sparks, Pilot Lights, Static Electricity, and Open Flame.

INCOMPATIBLE MATERIALS:
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.

HAZARDOUS POLYMERIZATION: Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

11. TOXICOLOGICAL INFORMATION

ISOPROPYL ALCOHOL (ISOPROPANOL, 2-PROPANOL):

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

ACUTE HEALTH 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.

Chronic Effects: -

Skin: Repeated or prolonged exposure may cause dermatitis due to the de-fatting action on the skin.

Inhalation: Narcotic effects such as drowsiness, headache, and motor problems. Increased incidence of cancer for workers involved in the manufacture of IPA by the strong acid process. Repeated or prolonged exposure to skin may cause dermatitis. Prolonged or repeated exposure to vapors may cause conjunctivitis.

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: 16,000 PPM/ 4 hours inhalation-rat LCLO; 12,000 PPM/3 hours inhalation-mouse LCLO; 12,800 MG/KG oral-man TDLO; 3570 MG/KG oral-human LDLO; 223 MG/KG oral-human TDLO; 5045 MG/KG oral-rat LD50; 3600 MG/KG oral-mouse LD50; 6410 MG/KG oral-rabbit LD50; 1537 MG/KG oral-dog LDLO; 6 MG/KG subcutaneous-mammal LDLO; 6 GM/KG subcutaneous-mouse LDLO; 1088 MG/KG intravenous-rat LD50; 1509 MG/KG intravenous-mouse LD50; 1184 MG/KG intravenous-rabbit LD50; 1963 MG/KG intravenous-cat LDLO; 1024 MG/KG intravenous-dog LDLO; 2735 MG/KG intraperitoneal-rat LD50 4477 MG/KG intraperitoneal-mouse LD50; 667 MG/KG intraperitoneal-rabbit LD50; 2560 MG/KG intraperitoneal-guinea pig LD50; 3444 MG/KG intraperitoneal-hamster LD50; 2770 MG/KG unreported-man LDLO;

MUTAGENIC EFFECTS: No data available

CARCINOGEN STATUS: 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 paranasal and laryngeal cancer. IARC - Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol)
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 or OSHA.

REPRODUCTIVE TOXICITY: No data available.

SPECIFIC TARGET ORGAN TOXICITY (STOT-SE) - single exposure Globally Harmonized System): May cause drowsiness or dizziness.
SPECIFIC TARGET ORGAN TOXICITY (STOT-RE) - repeated exposure Globally Harmonized System): no data available

ASPIRATION HAZARD: No data available

ADDITIONAL DATA: Potentiates the effects of carbon tetrachloride and other hepatotoxic chlorinated aliphatic hydrocarbons.

LOCAL EFFECTS: Irritant-inhalation,eye

ACUTE TOXICITY LEVEL: Slightly toxic by ingestion, dermal absorption
TARGET EFFECTS: Central nervous system depressant.
AT INCREASED RISK FROM EXPOSURE: Persons with pre-existing skin disorders; impaired liver, renal and/or pulmonary function.

Isopropanol - RTECS# NT8050000; Water - RTECS#ZC0110000

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: No data available

PERSISTANCE AND DEGRADABILITY: When released into the soil, this material is expected to quickly evaporate. When released into the soil, this material may leach into groundwater. When released into the soil, this material may biodegrade to a moderate extent. When released to the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released to the air, this material may be removed from the atmosphere to a moderate extent by wet deposition.

May be dangerous if it enters water intakes and is expected to have a half-life between 1-10 days.

BIOACCUMULATION: This material is not expected to significantly bio-accumulate.

BIOCONCENTRATION FACTOR: No data available

BIOLOGICAL OXYGEN DEMAND (BOD): 133%, 3 days

FOOD CHAIN CONCENTRATION POTENTIAL: None noted

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. Incinerate under controlled conditions in a permitted facility.

CONTAMINATED PACKAGING: Dispose of as unused product

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID number is: D001
If the waste is a spent solvent, the appropriate spent solvent code should be used. DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

14. TRANSPORT INFORMATION

USDOT Shipping Name----------> Flammable Liquids, n.o.s.
USDOT Hazard Classification--------> 3, Flammable Liquid
USDOT Label Codes----------> 3
USDOT ID Number----------> UN1993
USDOT Package Code----------> II
Emergency Response Guide--------> 128
Marine Pollutant----------> No
IMDG
UN number: 1993 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: Flammable Liquids, n.o.s.
Marine pollutant: No
IATA
UN number: 1993 Class: 3 Packing group: II
Proper shipping name: Flammable Liquids, n.o.s.

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)- Yes 2-Propanol CAS-No.67-63-0
SECTION 311: Hazard Categorization (40 CFR 370)- Acute, Chronic, and Fire

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)
SECTION 102(A) Hazardous Substances (40 CFR 302.4)- Listed
2-Propanol CAS-No.67-63-0 Reportable Quantity - 5,000 pounds.
SECTION 101(14) Reportable Quantity: 5,000 lbs

Massachusetts Right To Know Components
2-Propanol CAS-No.67-63-0
Pennsylvania Right To Know Components
Water CAS-No 7732-18-5
2-Propanol CAS-No 67-63-0
New Jersey Right To Know Components
Water CAS-No.7732-18-5
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)
2-Propanol CAS-No 67-63-0 is listed on the TSCA Inventory.

---

16. OTHER INFORMATION:

HMIS (Hazardous Materials Identification System)
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=X**

Date of Preparation: February 24, 2005
Revision Number: 1.8
Revision Date: February 5, 2015

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