

**SAFETY DATA SHEET**

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements of the Global Harmonizing System.  
THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)  
IMPORTANT: Read this SDS before handling & disposing of this product.  
Pass this information on to employees, customers, & users of this product.

**SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER**

PRODUCT IDENTITY: ISOPROPANAL 99%  
SYNONYMS: Isopropyl Alcohol, IPA, Rubbing Alcohol  
PRODUCT USES: Solvent thinner  
RESTRICTIONS: Professional use only  
COMPANY IDENTITY: Shay and Company  
COMPANY ADDRESS: 10639 SE Fuller Rd  
COMPANY CITY: Milwaukie, OR 97222  
COMPANY PHONE: 1-503-653-1155  
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)

**SECTION 2. HAZARDS IDENTIFICATION**

**2.1 HAZARD STATEMENTS: (CAT = Hazard Category)**

**GHS SIGNAL WORD: DANGER!!!**

**HAZARD CLASS (CAT=CATEGORY):**

FLAMMABLE LIQUIDS (CAT:2)  
SKIN CORROSION/IRRITATION (CAT:2)  
SERIOUS EYE DAMAGE/EYE IRRITATION (CAT:2B)  
SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE (CAT:3)  
SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE - NARCOTIC (CAT: 3)  
HAZARDOUS TO THE AQUATIC ENVIRONMENT, ACUTE (CAT: 3)



**GHS HAZARD STATEMENTS:**

H225 HIGHLY FLAMMABLE LIQUID AND VAPOR.  
H315 CAUSES SKIN IRRITATION.  
H320 CAUSES EYE IRRITATION.  
H335 MAY CAUSE RESPIRATORY IRRITATION.  
H336 MAY CAUSE DROWSINESS OR DIZZINESS.  
H402 HARMFUL TO AQUATIC LIFE.

**GHS PRECAUTIONARY STATEMENTS:**

**EXPOSURE PREVENTION:**

**P100s = General, P200s = Prevention, P300s = Response, P400s = Storage, P500s = Disposal**

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.  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 Wash with soap & water thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302+352 IF ON SKIN: Wash with soap & water.  
P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+340 IF INHALED: Remove victim to fresh air & keep at rest in a position comfortable for breathing.  
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present & easy to do - Continue rinsing.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P332+313 If skin irritation occurs: Get medical advice/attention.  
P337+313 If eye irritation persists, get medical advice/attention.  
P361 Take off immediately all contaminated clothing.  
P363 Wash contaminated clothing before reuse.  
P370 In case of fire: Use dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2) to extinguish.  
P403+235 Store in a well-ventilated place. Keep cool.  
P405 Store locked up.  
P500 Dispose of contents/container following local/regional/federal regulations.

**2.2 HAZARDS NOT OTHERWISE CLASSIFIED: None**

**SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.**  
**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 MIXTURE OR SUBSTANCE: MIXTURE**

CHEMICAL NAME	CAS#	EINCES #	% WT
ISOPROPANOL	67-63-0	200-661-7	99
WATER	7732-18-5	231-791-2	1

The specific chemical component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1).

TRACE COMPONENTS: Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, reproductive toxins, respiratory tract mutagens, and sensitizers). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents, and Canadian Hazardous Materials Identification System Standard (CPR 4).

**SECTION 4. FIRST AID MEASURES**

**4.1 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE & CHRONIC:**

Skin and eye damage. See Section 11 for symptoms/effects, acute & chronic.

**4.2 GENERAL ADVICE:**

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

**4.3 EYE CONTACT:**

If this product enters the eyes, check for and remove any contact lenses. Open eyes while under gently running water. Use sufficient force to open eyelids. "Roll" eyes to expose more surface. Minimum flushing is for 15 minutes. Seek immediate medical attention.

**4.4 SKIN CONTACT:**

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

**4.5 INHALATION:**

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR). Seek immediate medical attention.

**4.6 SWALLOWING:**

If swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, give two glasses of water to drink. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

**4.7 RESCUERS:** Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of label and SDS to physician or health professional with victim.

**4.8 NOTES TO PHYSICIAN:**

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Any material aspirated during vomiting may cause lung injury. Therefore, emesis should not be induced mechanically or pharmacologically. If it is considered necessary to evacuate the stomach contents, this should be done by means least likely to cause aspiration (such as: Gastric lavage after endotracheal intubation).

**SECTION 5. FIRE FIGHTING MEASURES**

**5.1 FIRE & EXPLOSION PREVENTIVE MEASURES:**

NO open flames, NO sparks, & NO smoking. Above flash point, use

a closed system, ventilation, explosion-proof electrical equipment, lighting.

**5.2 SUITABLE (& UNSUITABLE) EXTINGUISHING MEDIA:**

Use dry powder, alcohol-resistant foam, water in large amounts, carbon dioxide.

**5.3 SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS FOR FIRE FIGHTERS:**

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots).

**5.4 SPECIFIC HAZARDS OF CHEMICAL & HAZARDOUS COMBUSTION PRODUCTS:**

HIGHLY FLAMMABLE!! VAPORS CAN CAUSE FLASH FIRE.  
Isolate from oxidizers, heat, sparks, electric equipment & open flame.  
Closed containers may explode if exposed to extreme heat.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, EMERGENCY PROCEDURES:**

The proper personal protective equipment for incidental releases (such as: 1 Liter of the product released in a well-ventilated area), use impermeable gloves, they should be Level B: **triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and Self-Contained Breathing Apparatus** specific for the material handled, goggles, face shield, and appropriate body protection. In the event of a large release, use impermeable gloves, specific for the material handled, chemically resistant suit and boots, and hard hat. Self-Contained Breathing Apparatus or respirator may be required where engineering controls are not adequate or conditions for potential exposure exist. When respirators are required, select NIOSH/MSHA approved based on actual or potential airborne concentrations in accordance with latest OSHA and/or ANSI recommendations.

**6.2 ENVIRONMENTAL PRECAUTIONS:**

Stop spill at source. Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material. Close or cap valves and/or block or plug hole in leaking container and transfer to another container. Keep from entering storm sewers and ditches which lead to waterways, and if necessary, call the local fire or police department for immediate emergency assistance.

**6.3 METHODS AND MATERIAL FOR CONTAINMENT & CLEAN-UP:**

Absorb spilled liquid with non-combustible absorbent (such as: sand, soil, and so on). Shovel up and place all spill residue in suitable containers. Dispose of at an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal (see Section 13 - Disposal Considerations).

**6.4 NOTIFICATION PROCEDURES:**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting release of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800) 424-8802.

**SECTION 7. HANDLING AND STORAGE**

**7.1 PRECAUTIONS FOR SAFE HANDLING:**

Isolate from oxidizers, heat, sparks, electric equipment & open flame.  
Use only with adequate ventilation. Avoid breathing of vapor or spray mist.  
Avoid contact with skin & eyes. Wear OSHA Standard goggles or face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse.

**7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**

Keep in fireproof surroundings. Keep separated from strong oxidants. Keep cool.  
Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage.

**7.3 NONBULK: CONTAINERS:**

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.

**7.4 BULK CONTAINERS:**

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

**7.5 TANK CAR SHIPMENTS:**

Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level, brakes must be set or wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tanks (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.

**7.6 PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:**

Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Collect all rinsates and dispose of according to applicable Federal, State, Provincial, or local procedures.

**7.7 EMPTY CONTAINER WARNING:**

Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.**

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 EXPOSURE LIMITS:**

CHEMICAL NAME	SYNONYMS	OSHA PEL	NIOSH REL	ACGIH TLV	IDLH
ISOPROPANOL	Dimethyl carbinol: IPA: isopropanol: sec-propyl alcohol: rubbing alcohol, isopropyl alcohol	TWA: 400 ppm (980 mg/m <sup>3</sup> )	TWA: 400 ppm (980 mg/m <sup>3</sup> ) STEL: 500 ppm (1225 mg/m <sup>3</sup> )	TWA: 200 ppm [2001] STEL: 400 ppm	2000 ppm

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

**8.2 APPROPRIATE ENGINEERING CONTROLS:**

**RESPIRATORY EXPOSURE CONTROLS**

Airborne concentrations should be kept to lowest levels possible. If vapor, dust or mist is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations, after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Maintain airborne contaminant concentrations below exposure limits. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For particulates, a particulate respirator (NIOSH Type N95 or better filters) may be worn. If oil particles (such as: lubricants, cutting fluids, glycerine, and so on) are present, use a NIOSH Type R or P filter. For a higher level of protection, use positive pressure supplied air respiration protection or Self-Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

**EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS**

Positive pressure, full-face piece Self-Contained Breathing Apparatus; or positive pressure, full-face piece Self-Contained Breathing Apparatus with an auxiliary positive pressure Self-Contained Breathing Apparatus.

**VENTILATION**

LOCAL EXHAUST: Necessary                   MECHANICAL (GENERAL): Necessary  
SPECIAL: None                            OTHER: None  
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

### 8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

#### EYE PROTECTION:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

#### HAND PROTECTION:

Use gloves chemically resistant to this material. Preferred examples: Butyl rubber, Chlorinated Polyethylene, Polyethylene, Ethyl vinyl alcohol laminate ("EVAL"), Polyvinyl alcohol ("PVA"). Examples of acceptable glove barrier materials include: Natural rubber ("latex"), Neoprene, Nitrile/butadiene rubber ("nitril") or ("NBR"), Polyvinyl chloride ("PVC") or "vinyl", Viton. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### BODY PROTECTION:

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

#### WORK & HYGIENIC PRACTICES:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using toilet facilities and at the end of the working period. Provide readily accessible eye wash stations & safety showers. Remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

## SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Liquid, Water-White
ODOR:	Alcohol
ODOR THRESHOLD:	22 ppm (varies)
pH (Neutrality):	Not Available
FREEZING POINT:	Not Available
BOILING POINT:	181°F* / 83°C
FLASH POINT (TEST METHOD):	53F°* / 12°C (Close Cup)
EVAPORATION RATE (n-Butyl Acetate=1):	1.2
FLAMMABILITY CLASSIFICATION:	Flammable Liquids- Category 2
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	2.0*
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	12.7 @ 200°F* / 93°C
VAPOR PRESSURE (mm of Hg):	33*
VAPOR DENSITY (air=1):	2.07*
DENSITY:	0.785 g/cm3
SPECIFIC GRAVITY (Water=1):	0.847(70% IPA), 0.787 (99% IPA)
POUNDS/GALLON:	7.064 (70% IPA), 6.564 (99% IPA)
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	750°F / 398°C
DECOMPOSITION TEMPERATURE:	Not Available
VOCs (>0.044 Lbs/Sq In) :	100.0 Vol% / 786.0 g/L / 6.5 Lbs/Gal
TOTAL VOC'S (TVOC)*:	100.0 Vol% / 786.0 g/L / 6.5 Lbs/Gal
NONEXEMPT VOC'S (CVOC)*:	100.0 Vol% / 786.0 g/L / 6.5 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS):	0.0 Wt% / 0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	0.0
VISCOSITY:	Not Available

Asterik (\*) indicates the literature value for IPA >99% obtained from OSHA Chemical Database.

## SECTION 10. STABILITY & REACTIVITY

### 10.1 REACTIVITY & CHEMICAL STABILITY:

Stable under normal conditions.

**10.2 POSSIBILITY OF HAZARDOUS REACTIONS & CONDITIONS TO AVOID:**

Explosion hazard. IPA can react with AIR and OXYGEN over time to form unstable peroxides that can explode. IPA forms explosive mixtures when heated with aluminum. Isolate from oxidizers, heat, sparks, electric equipment & open flame.

**10.3 INCOMPATIBLE MATERIALS:**

Reacts with strong oxidants, strong acids, acid anhydrides, alkali metals, alkaline earth metals, ethylene oxide, phosgene, crotonaldehyde, and isocyanates.

**10.4 HAZARDOUS DECOMPOSITION PRODUCTS:**

Carbon Monoxide, Carbon Dioxide from burning.

**10.5 HAZARDOUS POLYMERIZATION:**

Will not occur.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**11.1 ACUTE HAZARDS**

**COMMON ROUTES OF EXPOSURE:** Inhalation and Absorption

**11.11 EYE & SKIN CONTACT:**

Primary irritation to skin, defatting, dermatitis. Wash thoroughly after handling.  
 Primary irritation to eyes, redness, tearing, blurred vision.  
 Liquid can cause eye irritation.

**11.12 INHALATION:**

Vapor harmful. Anesthetic. Irritates respiratory tract. Acute overexposure can cause serious Nervous system depression and can harm affected organs by routes of entry.

**11.13 SWALLOWING:**

Corrosive to cause abdominal contact, causes nausea, vomiting & diarrhea.

**11.2 SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED**

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:**

Pre-existing disorders of any target organs mentioned in this Document can be aggravated by over-exposure by routes of entry to components of this product. Persons with severe skin, liver or kidney problems should avoid use.

**11.3 CHRONIC HAZARDS**

**11.31 CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:**

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%. The International Agency for Research on Cancer concluded that IPA could not be classified as to its carcinogenicity to humans (Group III).

**11.32 TARGET ORGANS:** May cause damage to target organs, based on animal data.

**11.33 IRRITANCY:** Irritating to contaminated tissue.

**11.34 SENSITIZATION:** No component is known as a sensitizer.

**11.35 MUTAGENICITY:** No known reports of mutagenic effects in humans.

**11.36 EMBRYOTOXICITY:** No known reports of embryotoxic effects in humans.

**11.37 TERATOGENICITY:** No known reports of teratogenic effects in humans.

**11.38 REPRODUCTIVE TOXICITY:** No known reports of reproductive effects in humans.

A MUTAGEN is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate across generational lines. An EMBRYOTOXIN is a chemical which causes damage to a developing embryo (such as: within the first 8 weeks of pregnancy in humans), but the damage does not propagate across generational lines. A TERATOGEN is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A REPRODUCTIVE TOXIN is any substance which interferes in any way with the reproductive process.

**11.4 MAMMALIAN TOXICITY INFORMATION**

Chemical	Route of Exposure	Animal	Dosage	Toxicity Effect
Isopropanol	Oral	Rat	5,045 mg/kg	Behavioral abnormalities observed such as altered sleep time and decreased activity
	Inhalation (vapor)	Rat	16,000 mg/kg/8hr	Not Available
	Dermal	Rabbit	5,045 mg/kg	Not Available

\*Long term exposure (2 years) to IPA via inhalation at concentrations up to 5,000 ppm relates to increases in tumors in animals.

**SECTION 12. ECOLOGICAL INFORMATION**

**12.1 ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.**

**12.2 EFFECT OF MATERIAL ON PLANTS AND ANIMALS:**

This product may be harmful or fatal to plant and animal life if released into the environment. Ecotoxicity assessment indicates toxicity to aquatic life.

**12.3 EFFECT OF MATERIAL ON AQUATIC LIFE:**

Chemical	Species/Aquatic Life	Ecotoxicity	Effect
ISOPROPANOL	Pimephales promelas (fathead minnow)	LC50 - 9,640 mg/L/96 hr	Toxic to fish
	Water flea	EC50 - 5,102mg/L/24 hr	Toxic to aquatic invertebrates
	Desmodesmus subspicatus	EC50 - 2,000 mg/L/72 hr	Toxic to aquatic plants
	Water flea	EC50 - 6,851 mg/L/24 hr	Causes immobilization to aquatic invertebrates

\*The most sensitive known aquatic group to any component of this product is: Chub 1000 ppm or mg/L/24 hr exposure. Keep out of sewers and natural water supplies.

**12.4 MOBILITY IN SOIL**

This material is mobile in soil.

**12.5 DEGRADABILITY**

This product is completely biodegradable.

**12.6 BIOACCUMULATION**

This product does not accumulate or biomagnify in the environment.

**SECTION 13. DISPOSAL CONSIDERATIONS**

The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers and liners may retain some product residues. Vapor from some product residues may create a highly flammable or explosive atmosphere inside the container. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE USED CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY BURST AND CAUSE INJURY OR DEATH.** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Processing, use or contamination may change the waste disposal requirements. Do not dispose of on land, in surface waters, or in storm drains. Waste should be recycled or disposed of in accordance with regulations. Large amounts should be collected for reuse or consigned to licensed hazardous waste haulers for disposal. **ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS. IF IN DOUBT, CONTACT PROPER AGENCIES.**

**SECTION 14. TRANSPORT INFORMATION**

MARINE POLLUTANT: No  
 DOT/TDG SHIP NAME: UN1219, ISOPROPANOL, 3, PG-II  
 DRUM LABEL: (FLAMMABLE LIQUID)  
 IATA / ICAO: UN1219, ISOPROPANOL, 3, PG-II  
 IMO / IMDG: UN1219, ISOPROPANOL, 3, PG-II  
 EMERGENCY RESPONSE GUIDEBOOK NUMBER: 129

**SECTION 15. REGULATORY INFORMATION**

**15.1 STANDARD REGULATIONS:**

**SARA SECTION 311/312 HAZARDS:** Acute Health, Fire  
**TSCA (Toxic Substances Control Act):** All components of this product are on the TSCA list.  
**CERCLA - Hazardous Substance list (40 CFR 302.4) - Reportable quantity:** None  
**Section 211 Hazardous Substances (40 CFR 117.3) - Reportable quantity:** None  
**Section 302 (TPQ) - Reportable Quantity:** None  
**Section 304- Reportable Quantity:** None  
**Section 313 (Specific Toxic Chemical Listings):** This material contains no known products restricted under SARA Title III, Section 313 in amounts greater or equal to 1%.

**15.2 STATE REGULATIONS:**

**CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65):**

This product contains no chemicals known to the State of California to cause cancer, reproductive toxicity, or developmental toxicity.

**15.3 INTERNATIONAL REGULATIONS**

The identified components of this product are listed on the chemical inventories of the following countries:

Australia (AICS), Canada (DSL or NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

**15.4 CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)**

B2: Flammable Liquid.  
D2B: Irritating to skin / eyes.

This product was classified using the hazard criteria of the Controlled Products Regulations (CPR). This Document contains all information required by the CPR.

**SECTION 16. OTHER INFORMATION**

**16.1 HAZARD RATINGS:**

<b>NFPA:</b>		<b>HMIS:</b>	
HEALTH	1	HEALTH	2
FIRE	3	FLAMMABILITY	3
REACTIVITY	0	PHYSICAL HAZARDS	0
SPECIFIC HAZARDS	N/A	PERSONAL PROTECTION	*

(\*Personal Protection Rating to be supplied by user based on use conditions.)

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

**16.2 EMPLOYEE TRAINING**

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

**16.3 SDS DATE: 09/01/2020**

**NOTICE**

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.