Safety Data Sheet
(TT-I-735B GRADE B)

1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: .....TT-I-735B GRADE B
CHEMICAL NAME/
CLASS/SYNONYMS: .....Isopropanol; Isopropyl Alcohol; 2-Propanol; sec-propyl alcohol; dimethylcarbinol; Rubbing alcohol; IPA 99%
PRODUCT NUMBER:.....TT-I-735B GRADE B
UN/NA NUMBER:.....1219
CHEMICAL FAMILY: .....Alcohol
CAS NUMBER:.....67-63-0
FORMULA:.....C_3H_8O

COMPANY: .....**JMN Specialties, Inc.**
1100 Victory Drive – Westwego, Louisiana USA 70094
Phone (504) 341-3749, Fax (504) 341-5868
www.jmnspecialties.com
EMERGENCY PHONE: .....CALL CHEMTEL: Toll Free US & Canada: (800) 255-3924, Outside USA +01-813-248-0585.
DATE PREPARED: .....September 23, 2021

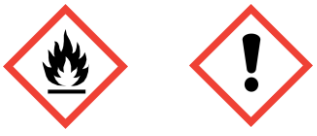
2 – HAZARDS IDENTIFICATION

GHS HAZARD CLASSIFICATION:

Physical Hazards
Flammable Liquids:.....Category 2 - Highly flammable liquid and vapor
Corrosive Liquids: .....No Hazard Statement established for this Product
Health Hazards
Acute Toxicity:.....Category 4 - Harmful if swallowed, in contact with skin, inhaled
Skin Corrosion/Irritation: .....Catagory 2 - Causes skin irritation
Eye Damage/Irritation: .....Catagory 2A - Causes eye irritation
Aspiration Hazard:.....Catagory 2 - May be harmful if swallowed and enters airways.
Carcinogen: .....No Hazard Statement established for this Product
See Section 11 for additional Toxicological information

EMERGENCY OVERVIEW:

Pictograms:



Signal Word (GHS-US): .....DANGER!

Hazard Statements:

Physical Hazards (GHS-US):

H225: Highly flammable liquid and vapor

Health Hazards (GHS-US):

H225 Highly flammable liquid and vapor. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Environmental Hazards (GHS-US):

No Hazard Statement established for this Product.

Precautionary Statements (GHS-US):

P101+102+103: If medical advice is needed, have product container or label at hand. Keep out of the reach of children. Read label before use.

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical, lighting, ventilating equipment P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P261 - Avoid breathing mist, spray, vapors. P264 - Wash exposed skin thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear eye protection, face protection, protective clothing, protective gloves.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P235 Keep cool. P405 Store locked up.

Response Statements (GHS-US):

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 person to fresh air and keep 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 chemical powder, alcohol-resistant foam, carbon dioxide (CO2) to extinguish.

P501: Dispose of contents/container: Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations, and product characteristics at time of disposal.

TOTAL VOC's:.....6.20 pounds per gallon

3 – COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	PERCENT*	CAS NUMBER
Isopropyl Alcohol	99.6 - 99.95	67-63-0

*Any concentration shown as a range is to protect confidentiality or is due to batch variation.

4 – FIRST-AID MEASURES

BREATHING (INHALATION):…… Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial resuscitation. Keep person warm and at rest. Treat symptomatically and supportively. Seek medical attention immediately. Qualified medical personnel should consider administering oxygen.

SWALLOWING (INGESTION):….. Give large amounts of fresh water or milk immediately. Do not give anything by mouth if person is unconscious or otherwise unable to swallow. If vomiting occurs, keep head below hips to prevent aspiration. Treat symptomatically and supportively. Seek medical attention immediately.

EYES: ..... Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.

SKIN (DERMAL): ..... Remove contaminated clothing and wash affected skin with soap and water. If persistent irritation occurs, obtain medical attention. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.

NOTE TO PHYSICIAN: ..... All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Material, if aspirated into the lungs, may cause chemical pneumonitis. Skin contact may aggravate an existing dermatitis. Treat appropriately.

5 – FIRE-FIGHTING MEASURES

GENERAL FIRE HAZARDS: ..... Flammable liquid and vapor Secondary alcohols are readily autooxidized in contact with oxygen or air, forming ketones and hydrogen peroxide. It can become potentially explosive. It reacts with oxygen to form dangerously unstable peroxides which can concentrate and explode during distillation or evaporation. The presence of 2-butanone increases the reaction rate for peroxide formation. Explosive in the form of vapor when exposed to heat or flame. May form explosive mixtures with air. Isopropyl alcohol + phosgene forms isopropyl chloroformate and hydrogen chloride. In the presence of iron salts, thermal decompositon can occur, whicn in some cases can become explosive. A homogeneous mixture of concentrated peroxides + isopropyl alcohol are capable of detonation by shock or heat. Barium perchlorate + isopropyl alcohol gives the highly explosive alkyl perchlorates. It forms

explosive mixtures with trinitormethane and hydrogen peroxide. It produces a violent explosive reaction when heated with aluminum isopropoxide + crotonaldehyde. Mixtures of isopropyl alcohol + nitroform are explosive.

AUTOIGNITION TEMP:…… 750°F (399°C)

EXTINGUISHING MEDIA:…… Determined by surrounding material. In case of fire, use water fog, dry chemical, CO_2, or "alcohol" foam. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

SPECIAL FIRE FIGHTING PROCEDURES:…… Spilled product on ground may be slippery.

UNUSUAL FIRE AND EXPLOSION HAZARDS:..... Containers may explode from internal pressure if confined to fire. Cool with water spray. Vapor accumulation could flash or explode if in contact with an open flame.

6 – ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES: ..... Wear appropriate personal protective equipment before approaching spill site. For small spills, dilute with water to sewer if allowed by local and state regulations. If unable to wash product with water, absorb with inert material (sand or other approved material) and dispose of in accordance with applicable regulations.

WASTE DISPOSAL:..... Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

RCRA STATUS:……If discarded in its purchased form, this product is considered a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).

7 – HANDLING and STORAGE

STORAGE:…… Keep in a tightly closed container, stored in a cool, dry, ventilated area below 44°C (110°F). Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Drum must not be washed out or used for other purposes.

HANDLING:……Avoid contact with eyes, skin and clothing. Do not inhale vapors and fumes. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally. For industrial use only.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

HAZARDOUS INGREDIENT	PEL	TLV-TWA
Isopropyl Alcohol	400 ppm	500 ppm

EXPOSURE CONTROLS:…… Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

RESPIRATORY PROTECTION:….. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where

applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information. Self-Contained Breathing Apparatus may be required for use in confined or enclosed spaces.

PROTECTIVE CLOTHING:…… Eye/face protection: Wear chemical goggles; face shield (if splashing is possible). **Skin protection:** Chemical resistant, impermeable gloves. Gloves should be tested to determine suitability for prolonged contact. Use of impervious apron or chemical suit and chemical resistant boots are recommended.

ADDITONAL MEASURES:…… Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.

9 – PHYSICAL / CHEMICAL PROPERITES

BOILING POINT:…… 181°F (83°C)
FREEZING POINT:…… -130°F (-90°C)
FLASHPOINT: .....53°F (12°C)
UPPER FLAME LIMIT (%):.....12.7%
LOWER FLAME LIMIT (%):.....2.0%
VAPOR PRESSURE: .....4.4 kPa @ 20°C
VAPOR DENSITY (AIR=1):.....2.07
SPECIFIC GRAVITY: 0.79
pH: .....NA
SOLUBILITY IN WATER:..... Miscible
VOLATILITY
INCLUDING WATER: .....6.20 pounds per gallon
MOLECULAR WEIGHT:.....60.10 g mol^{-1}
EVAPORATION RATE: .....ND
PHYSICAL STATE:..... Liquid
COLOR: ..... Clear
ODOR: ..... Sharp, Alcohol

10 – STABILITY and REACTIVITY

STABILITY: ..... Stable
HAZARDOUS DECOMP.: ..... Will not occur
INCOMPATIBILITY: ..... Oxidizers or Oxidizing Materials.
HAZARDOUS REACTIONS:…… Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

11 – TOXICOLOGICAL INFORMATION

THRESHOLD LIMIT VALUE:.....200 ppm
OSHA PEL:.....400 ppm
LISTED CARCINOGEN:.....CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE]. May cause damage to the following organs: kidneys, liver, skin, central nervous system (CNS).
MEDICAL CONDITION AGGRAVATED:..... Existing dermatitis.

INFORMATION ON ACUTE TOXICOLOGICAL EFFECTS

ORAL

Product: ..... Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion of this product may result in central nervous system depression including headache, weakness, dizziness, loss of coordination and judgement and coma. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury, possibly death. Ingestion of this product may cause diarrhoea & stomach discomfort – not a route of industrial exposure.

DERMAL

Product: ..... May cause irritation with pain and stinging, especially if the skin is abraded. Isopropanol has a low potential to cause allergic skin reactions; however, rare cases of allergic contact dermatitis have been reported. May be absorbed through intact skin. Dermal absorption has been considered toxicologically insignificant.

INHALATION

Product: ..... Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause narcotic effects in high concentration. Causes upper respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. The probable oral lethal dose in humans is 240 ml (2696 mg/kg), but ingestion of only 20 ml (224 mg/kg) has caused poisoning.

REPEATED DOSE TOXICITY

Product: ..... Product is a colorless, flammable liquid with typical alcohol odor. Chronic exposure is harmful by inhalation, when in contact with the skin and if it is swallowed. Liquid and vapor may be irritating to the eyes, skin and respiratory system. Product may cause central nervous system (CNS) depression characterized by nausea, dizziness, headache, lack of coordination, loss of consciousness and coma.

SKIN CORROSION / IRRITATION

Product: ..... Repeated and prolonged exposure to concentrated material may cause dermatitis.

SERIOUS EYE DAMAGE / IRRITATION

Product: ..... Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause transient corneal injury.

RESPIRATORY OR SKIN SENSITIZATION

Product: ..... Not expected to be sensitizing based on tests of this product, components, or similar products.

MUTAGENCITY

IN VITRO

Product: ..... No Data Available

IN VIVO

Product: ..... No Data Available

Specified Substance(s)	**Information as provided by manufacturer**
Isopropyl Alcohol (Isopropanol)	No Data Available

CARCINOGENICITY

Product: ..... Based on available data, the classification criteria are not met.

REPODUCTIVE TOXICITY

Product: ..... Based on available data the classification criteria are not met. Not classified as hazardous.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE

Product:…….. GENERAL: Solvent vapors may be irritating to skin and eyes. **INHALATION:** High concentrations of vapor may cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, possibly with chest pain and coughing. **NOTICE:** Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. **EYES:** May cause mild to severe rritation experienced as discomfort or pain, excess blinking and tear production, possibly with marked redness and swelling of the conjunctiva. **SKIN:** Brief contact may cause slight irritation with itching and local redness. Prolonged contact may cause more severe irritation, with discomfort or pain. **SWALLOWING:** May cause headache, dizziness, nausea, vomiting, diarrhea, coma, and death.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE

Product: ..... The effects of long-term, low-level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposure. This product may aggravate existing eye, skin, and respiratory conditions.

ASPIRATION HAZARD

Product: ..... Droplets of the product aspirated into the lungs through ingestion or vomiting may cause chemical pneumonia.

OTHER ADVERSE EFFECTS

Product: ..... Negligible ecotoxicity

12 – ECOLOGICAL INFORMATION

ACUTE TOXICITY

FISH

Product: .....LC_{50} (mg/L) 96 hours: Pimephales promelas: 9,640 mg/L

AQUATIC INVERTEBRATES

Product: .....EC_{50} 24 hours: Water flea - 5,102 mg/L

CHRONIC TOXICITY

FISH

Product: .....NOEC/NOEL: >10 - <100 mg/L (based on similar products / components)

AQUATIC INVERTEBRATES

Product: .....NOEC/NOEL: >10 - <100 mg/L (based on similar products / components)

TOXICITY TO AQUATIC PLANTS

Product: .....EC_{50} 72 hours: Desmodesmus subspicatus > 2,000 mg/L

PERSISTENCE AND DEGRADABILITY

BIODEGRADATION

Product: ..... Relatively Biodegradable.

BIOLOGICAL OXYGEN DEMAND

Product: ..... Biodegradation: 58% theoretical BOD, 5 days at 20º C - Relatively biogradeable.

CHEMICAL OXYGEN DEMAND

Product: .....2.00 g O_2/g

BOD / COD RATIO

Product: ..... No data available

BIOACCUMULATIVE POTENTIAL

Product: ..... Accumulation in terrestrial organisms is unlikely. Bioaccumulation is unlikely.

MOBILITY IN SOIL

Product: ..... Not expected to partition to sediment and wastewater solids.

RESULTS OF PBT AND mPvB ASSESSMENT

Product: ..... Not fulfilling PBT (persistent/bio accumulative/toxic) criteria. Not fulfilling vPvB (very persistent, very bio accumulative) criteria.

OTHER ADVERSE EFFECTS

Product: ..... No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential or global warming potential) are expected from this product.

13 –DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:..... Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

RCRA STATUS:..... If discarded in its purchased form, this product is considered a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).

14 – TRANSPORTATION INFORMATION

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

UN/NA NUMBER:.....1219
PROPER SHIPPING NAME:..... Isopropyl Alcohol
HAZARD CLASS:.....3
PACKAGING GROUP : II
LETTER:.....F (Highly flammable)
ENVIRONMENTAL HAZARD: ..... Because of modern treatment methods or method of use of this product, only an insignificant amount of the ingredients reaches the environment. That amount is at such levels as to typically not cause any adverse effects.
REPORTABLE QUANTITY:..... None

15 - REGULATIONS

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards 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.

EPA SRA Title III Chemical Listings:

TSCA STATUS: ..... This product is listed on the TSCA inventory. If this product is a blend, all ingredients in the product are listed on the TSCA Inventory List. Any impurities present in this product are exempt from listing.
SECTION 302:..... Listed: Isopropyl alcohol
SECTION 304:..... Listed: Isopropyl alcohol
SECTION 312:..... Yes
SARA SECTION 313:..... Isopropyl alcohol: CAS # 67-63-0; 5000 Lbs. (2267.962 Kilograms). Threshold Planning Quantity (TPQ)
ACUTE: ..... Yes
CHRONIC: ..... No
FIRE: ..... Yes
PRESSURE: ..... No
REACTIVE:..... No
CLEAN WATER ACT:..... None

IMDG – International Marine Dangerous Goods Code
UN1219, Isopropanol, 3, F, PGII. Marine Pollutant: No Static Accumulator: Yes. EMS-No: F-E, S-D
IATA
UN1219, Isopropanol, 3, F, PGII.

DEA Chemical Trafficking Act: .. No
Homeland Security Regulated .. This product does not contain any reportable DHS chemicals.

California Proposition 65..... This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
Component..... Chemical / Mixture not Listed
Cal Prop 65 NSRL..... No Significant Risk Level

US State Right to Know (RTK)
Component..... Chemical / Mixture not Listed
Massachusetts ..... No
New Jersey ..... No
Pennsylvania ..... No

Illinois ..... No
Rhode Island..... No

****RTK Chemical(s) .....**Chemical / Mixture not Listed

Canada NPRI ..... Chemical / Mixture not Listed

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): All ingredients in this product are listed on the DSL. Any impurities present in this product are exempt from listing.
AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): All ingredients in this product are listed on AICS or otherwise complies with NICNAS.
MITI (Japanese Handbook of Existing and New Chemical Substances): All ingredients in this product are listed in the Handbook or has been approved in Japan by new substance notification.
ECL (Korean Toxic Substances Control Act): All ingredients in this product are listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.KE-04134
Philippines Inventory (PICCS): All ingredients in this product are listed on the Philippine Inventory or otherwise complies with PICCS.
Inventory of Existing Chemical Substances in China: All ingredients in this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

Safety Data Sheet
(TT-I-735B GRADE B)

16 – OTHER INFORMATION

HMIS*

HEALTH	2
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	H

HMIS®HAZARD INDEX: 0=Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard.
HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS and product label must be considered.

ND = No Data, NA = Not Applicable/Not Available, ≤ = Less than or equal to, ≥ = Greater than or equal to

REVISION STATEMENT: Changes have been made throughout this Safety Data Sheet (SDS). Please read the entire document. Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) by the Company Health and Risk Assessment Unit.

DISCLAIMER:
Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving this Safety Data Sheet (SDS) will make their own determination as to its suitability for their intended purposes prior to use. Since the product is within the exclusive control of the user, it is the user's obligation to determine the conditions of safe use of this product. Such conditions should comply with all Federal and State Regulations concerning the Product. It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. **NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.**

*****This is the last page of this SDS*****