

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name:	Isopropyl Alcohol 99%
Item Number:	A00AA
Other means of identification	
Synonyms:	None

Recommended use of the chemical and restrictions on use

Recommended Use:	First Aid
Uses advised against:	Use only as directed.

Details of the supplier of the safety data sheet

Supplier Address Vi-Jon Inc. 8800 Page Avenue Saint Louis MO 63114 US Phone: 314-427-1000 (M-F 8am-4pm CST) Fax:3144271010

Emergency telephone number

Chemtrec: 1-800-424-9300 (24-Hour)

2. HAZARDS IDENTIFICATION

Classification

This product contains a chemical or chemicals considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

GHS Label elements, including precautionary statements

Emergency Overview			
Signal word:	Danger		
	Hazard statements May cause drowsiness or dizziness Causes serious eye irritation Highly flammable liquid and vapor		
Appearance: Clear, Colorless, Water thin liquid	Physical State: Water thin liquid	Odor: Alcohol	

Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. - No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof electrical/ventilating/lighting/equipment Use only non-sparking tools Take precautionary measures against static discharge

Precautionary Statements – Response

No information available.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) Not Applicable

Unknown Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

Other information

May be harmful if swallowed May be harmful if inhaled Prolonged or repeated contact may dry skin and cause irritation

Interactions with Other Chemicals

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Isopropyl Alcohol	67-63-0	50-100	*
Water	7732-18-5	0-10	*

* The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES			
First aid measures			
Eye Contact	In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.		
Skin Contact	In the case of skin irritation or allergic reactions see a physician.		
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.		
Ingestion	Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.		
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.		
Most important symptoms and effect	ts, both acute and delayed		
Most Important Symptoms/Effects	Eye irritation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting		
Indication of any immediate medical	attention and special treatment needed		
Notes to Physician	Keep victim warm and quiet. Effects of exposure (inhalation, ingestion or skin contact) to		

substance may be delayed.

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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, CO₂, water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

CAUTION: This product has a very low flash point. Use of water spray when fighting fire may be inefficient. Do not use straight streams.

Specific Hazards Arising from the Chemical

Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

Uniform Fire Code	Flammable Liquid: I-B	
	Irritant: Liquid	

Hazardous Combustion Products

Carbon oxides.

Explosion Data Sensitivity to Mechanical Impact No

Sensitivity to Static Discharge Yes

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Ventilate area with explosion-proof equipment. Do not touch or walk through spilled material. Stop leak if you can do it without risk.
Other Information	Water spray may reduce vapor; but may not prevent ignition in closed spaces.
Environmental precautions	
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined areas.
Methods and material for contain	nment and cleaning up
Methods for Containment	A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Methods for Cleaning Up	Soak up with inert absorbent material. Use clean non-sparking tools to collect absorbed material and transfer to properly labeled containers. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Keep away from heat, sparks and open flame. No smoking.

Conditions for safe storage, including any incompatibilities

StorageKeep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat
and sources of ignition. Keep in properly labeled containers. Do not store near combustible
materials. Keep in an area equipped with sprinklers

Incompatible Products Strong oxidizing agents. Acids. Chlorinated compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol 67-63-0	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 980 mg/m ³ (vacated) STEL: 500 ppm (vacated) STEL: 1225 mg/m ³	IDLH: 2000 ppm 10% LEL TWA: 980 mg/m ³ TWA: 400 ppm STEL: 500 ppm STEL: 1225 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992). See section 15 for national exposure control parameters.

Appropriate engineering controls

Engineering Measures	Showers Eyewash stations Ventilation systems
Individual protection measures	, such as personal protective equipment
Eye/Face Protection	Tightly fitting safety goggles.
Skin and Body Protection	Wear protective gloves/clothing. Antistatic boots
Respiratory Protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Physical and Chemical Properties</u> Physical State Appearance Color	Water thin liquid Clear, Colorless, Water thin liquid Colorless	Odor Odor Threshold	Alcohol No information available
Property	<u>Values</u>	Remarks/ Method	
pH	No data available	None known	
Melting/freezing point	No data available	None known	
Boiling Point/Range	No data available	None known	
Flash Point	12C / 54F	None known	
Evaporation rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	
Specific Gravity	No data available	None known	
Water Solubility	Miscible with water	None known	
Solubility in other solvents	No data available	None known	
Partition coefficient: n-octanol/wate	r	None known	
Autoignition temperature	No data available	None known	
Decomposition temperature	No data available	None known	
Kinematic viscosity	No data available	None known	
Dynamic viscosity		None known	
Explosive Properties	No data available		
Oxidizing Properties	No data available		
Other Information			
Softening Point	No data available		
VOC Content (%)	No data available		
Particle Size	No data available		
Particle Size Distribution	No data available		
10. STABILITY AND REACTIVITY			

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials Strong oxidizing agents. Acids. Chlorinated compounds.

Hazardous Decomposition Products

Carbon oxides.

When used in accordance with the directions.

11. TOXICOLOGICAL INFORMATION

There is no data for this product. The information included in this section describes the potential hazards of the individual ingredients.

Information on likely routes of exposure

Product Information

Inhalation	May cause drowsiness and dizziness.	
Eye Contact	Irritating to eyes.	
Skin Contact	There is no data available for this product.	
Ingestion	There is no data available for this product.	

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl Alcohol	= 4396 mg/kg (Rat)	= 12800 mg/kg (Rabbit)	= 16000 ppm (Rat) 8 h
67-63-0			

Information on toxicological effects

Symptoms

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No information available.

Mutagenic Effects

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol		Group 3		Х
67-63-0				

IARC: (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans OSHA: (Occupational Safety & Health Administration) X - Present

Reproductive Toxicity STOT - single exposure STOT - repeated exposure Chronic Toxicity Target Organ Effects

Aspiration Hazard

No information available. No information available. No information available. No known effect based on information supplied. Eyes. Respiratory system. Skin. Central nervous system (CNS). No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 4,440.00 mg/kg ATEmix (dermal) 12,929.00 mg/kg (ATE) ATEmix (inhalation-dust/mist) 16,162.00ATEmix

12. ECOLOGICAL INFORMATION

There is no ecological data on the Product. The Product ingredients are expected to be safe for the environment at concentrations predicted under normal use and accidental spill scenarios. Packaging components are compatible with the conventional solid waste management practices.

Ecotoxicity

No information available.

Persistence and Degradability

No information available.

Bioaccumulation No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods		
Waste Disposal Methods	This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261).	
Contaminated Packaging	Dispose of in accordance with local regulations.	
US EPA Waste Number	D001	
California Hazardous Waste Codes	212	
This product contains one or more substances that are listed with the State of California as a becordous waste		

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Isopropyl Alcohol	Toxic
67-63-0	Ignitable

Product Number: A00AA Issuing Date: August 13, 2015

Revision Date: None

14. TRANSPORT INFORMATION

DOT Proper Shipping Name Hazard Class Description Emergency Response Guide Numbe	CONSUMER COMMODITY ORM-D CONSUMER COMMODITY, ORM-D pr129
<u>TDG</u> UN-No. Proper Shipping Name Hazard Class Packing Group Description	UN1219 ISOPROPANOL 3 II UN1219, ISOPROPANOL, 3, II
<u>MEX</u> UN-No. Proper Shipping Name Hazard Class Packing Group Description	UN1219 ISOPROPANOL 3 II UN1219 ISOPROPANOL, 3, II
ICAO UN-No. Proper Shipping Name Hazard Class Packing Group Description	UN1219 ISOPROPANOL 3 II UN1219, ISOPROPANOL, 3, II
<u>IATA</u> UN-No. Proper Shipping Name Hazard Class Packing Group Description	UN1219 ISOPROPANOL 3 II UN1219, ISOPROPANOL, 3, II
<u>IMDG/IMO</u> UN-No. Proper Shipping Name Hazard Class Packing Group EmS-No. Description	UN1219 ISOPROPANOL 3 II F-E, S-D UN1219, ISOPROPANOL, 3, II, FP -11C
<u>RID</u> UN-No. Proper Shipping Name Hazard Class Packing Group Classification code Description	UN1219 ISOPROPANOL 3 II F1 UN1219 ISOPROPANOL, 3, II
<u>ADR</u> UN-No. Proper Shipping Name Hazard Class Packing Group Classification code Description	UN1219 ISOPROPANOL 3 II F1 UN1219 ISOPROPANOL, 3, II
ADN UN-No. Proper Shipping Name Hazard Class Packing Group Classification code Special Provisions Description Hazard Labels Limited Quantity Ventilation	UN1219 ISOPROPANOL 3 II F1 601 UN1219 ISOPROPANOL, 3, II 3 1 L VE01

Revision Date: None

15. REGULATORY INFORMATION

International Inventories

TSCA DSL Exempt All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Yes
No
Yes
No
No

Clean Water Act

This product does not contain any ingredients regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any ingredients regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

U.S. State Regulations

California Proposition 65 - NONE

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Isopropyl Alcohol	Х	Х	Х	Х	
67-63-0					

International Regulations

Mexico - Grade

No information available.

National occupational exposure limits

Chemical Name	Carcinogen Status	Exposure Limits
Isopropyl Alcohol		Mexico: TWA 400 ppm
		Mexico: TWA 980 mg/m ³
		Mexico: STEL 500 ppm
		Mexico: STEL 1225 mg/m ³

Canada

WHMIS Hazard Class B2 D2B



16. OTHER INFORMATION					
<u>NFPA</u>	Health Hazard 2	Flammability 4	Instability 0	Physical and Chemical Hazards - None	
HMIS	Health Hazard 2	Flammability 4	Physical Hazard 0	Personal Protection X	
Prepared By WERCS Professional Services, LLC 23 British American Blvd. 23 British American Blvd. Latham, NY 12110 1-800-572-6501					
Issuing Date	August 13, 2015				
Revision Date	None				
Revision Note	None				

General Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Approved and Updated by Vi-Jon, Inc.

Disclaimer:

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End of Safety Data Sheet