

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.

Page 3/11

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:

The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

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End of Safety Data Sheet