

#### Material Safety Data Sheet

## **SECTION 1: Chemical Product and Company Identification**

Manufacturer: Vi-Jon, Inc. Date: January 2008

One Swan Drive Smyrna, TN 37167

**Product**: Isopropyl Alcohol (IPA) 50%, 70%, 91% and 99% IPA

**Telephone:** (615) 459-8900

**24hr Emergency:** (615) 459-8900 ext. 5270

# **SECTION 2: Composition/Information on Ingredients**

Name: Isopropanol, CAS#: 67-63-0 Deionized Water CAS# 7732-18-5

### **SECTION 3: Hazards Identification**

Colorless, volatile liquid with the odor of rubbing alcohol. Isopropyl Alcohol is a dangerous fire risk. Prolonged exposure to elevated concentrations of vapors may result in irritation of the eyes, nose, and throat and central nervous system (CNS) depression. Prolonged dermal exposure can result in dry, cracking skin.

Potential Routes of Exposure: Ingestion, inhalation, dermal contact,

eye contact

**Target Organs:** Eyes, skin, respiratory system

**Symptoms of Overexposure:** 

Inhalation: Mild irritation of eyes, nose and throat.

Ingestion: Drowsiness, headache Dermal Contact: Dry, cracking skin

Acute Effects: Irritation of skin and/or upper respiratory tract as noted above.

Acute CNS depression may be manifested as giddiness, headache,

dizziness and/or nausea.

Chronic Effects: Chronic exposure can result in skin irritation and contact dermatitis Pre-

existing disorders of the skin, eyes, and respiratory tract may be

exacerbated by exposure to isopropyl alcohol.

HMIS: H=1, F=3, R=0 See Section 8 for PPE information

### **SECTION 4: First Aid Measures**

Eye: Flush eyes with copious amount of water for at least 15 minutes
Skin: Flush with water. If irritation persists, seek medical attention.
Do not induce vomiting if victim is unconscious or drowsy. Seek

medical attention or contact the poison control center.

Inhalation: Remove victim to fresh air and provided oxygen if breathing is difficult. Seek

Medical attention if breathing continues to be difficult.

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# **SECTION 5: Fire Fighting Measures**

Extinguishing Media: Use water fog, alcohol foam, dry chemical or CO2
Unusual Fire or Containers exposed to intense heat from fires should be

Explosion Hazards: cooled with large amounts of water to prevent buildup of internal pressure

due to vapor generation which could result in container rupture.

Recommendations: Clear area of unprotected personnel. Wear complete turnout gear. Cool

containers exposed to fire with water.

### **SECTION 6: Accidental Release Measures**

Large Spills: Eliminate all ignition sources. Equipment must be grounded to prevent sparking.

Evacuate the area of unprotected personnel. Contain source of spill. Dike or otherwise confine spilled product. Uncontrolled releases to air, land, or water may

be reportable to the National Response Center (1-800-424-8802).

Small Spills: Take up with absorbent material and place in non-leaking container; seal tightly.

Dispose of absorbent (see section 13)

## **SECTION 7: Handling and Storage**

Storage Requirements: Store in tightly closed containers in a cool, dry area away from heat and

other possible ignition sources.

Handling precautions: Use non-sparking tools to open containers. Maintain appropriate class of

fire extinguishers nearby in case of fire.

### **SECTION 8: Exposure Controls / Personal Protection**

OSHA PEL=400ppm\* OSHA STEL=500ppm\* IDLH= 2,000ppm\*

\* 100% Isopropyl Alcohol

**Recommended Engineering Controls:** Use explosion-proof ventilation equipment as necessary to maintain airborne concentrations below the PEL.

Ground all containers to prevent static sparks during fluid transfers.

**Recommended Admin Controls:** Train employees on the hazards of Isopropyl Alcohol

**PPE:** Goggles, gloves, NIOSH approved respiratory protection required when above PEL/TWA **Recommended Hygiene Practices:** Clean PPE and work clothing contaminated prior to reuse. After working with this product, be sure to wash before eating, smoking, drinking, or applying cosmetics.

# **SECTION 9: Physical and Chemical Properties**

**Appearance:** Colorless Liquid UEL: 12.7% LEL: 2%

**Odor:** Mild Rubbing Alcohol Odor Threshold: 43ppm Water solubility: Miscible

	50% IPA	70% IPA	91%IPA	99% IPA
Vapor Pressure (@ 68 <sup>0</sup> F) approx.	29mm	23mm	33mm	33mm
Specific Gravity	.929	.878	.8185	.785
Boiling Point	$176{}^{0}\mathrm{F}$	176 <sup>0</sup> F	180 <sup>0</sup> F	$181~^{0}{ m F}$
Flash Point (TAG Open Cup)	74.5 <sup>0</sup> F	$70.5~^{0}~{ m F}$	54 <sup>0</sup> F	53 <sup>0</sup> F
Freezing Point	<sup>-</sup> 32- <sup>-</sup> 50 <sup>0</sup> C	-3250 °C	C -32-50 °	°C -127 °F
Molecular Weight	47.5	47.5	47.5	60.1
Auto Ignition Temperature	No Data	No Data	No Data	750 <sup>0</sup> F

# **SECTION 10: Stability and Reactivity**

Stability: Stable

Polymerization: Will not occur

Incompatible Chem: Strong oxidizers, acetaldehyde, chlorine, ethylene oxide, acids,

isocyanates

Conditions to avoid: Heat, sparks, and open flame. Do not store in aluminum > 120°F

Hazardous Products: CO and unidentified organic compounds may be formed of

Decomposition

# **SECTION 11: Toxicological Information**

LD50: 5,840 mg/kg (acute oral - rat); 13,000 mg/kg (acute dermal - rabbit) LD50: 16,000 ppm/8hr (inhalation - rat) **Mutagenicity:** Not Indicated

LD<sub>lo</sub>: 5,000 mg/kg (oral - rabbit) **Reproductive Effects**: Not Indicated

Carcinogenicity: Not identified as a carcinogen by OSHO, IARC, or NTP

# **SECTION 12: Ecological Information**

**Ecotoxicity:** N/A **Environmental Fate:** N/A **Soil Absorption/Mobility:** Highly Mobile

Environmental Degradation: Should be removed readily from soils and water by volatilization and

biodegradation.

### **SECTION 13: Disposal Considerations**

Disposal: Contact your supplier or a licensed contractor for detailed recommendations.

Disposal regulatory Requirements: Follow applicable Federal, state, and local regulations. Consider fuels blending as an alternative to incineration.

### **SECTION 14: Transport Information**

DOT Shipping Name: Consumer Commodity ORM-D

DOT Shipping Name (if Quantities larger than Consumer Commodity limits): Isopropanol

DOT Packing Group: II DOT Hazard Class: 3 DOT Label: Flammable Liquid

UN ID#: UN 1219

Other Regulated Materials –Domestic (ORM-D) – Not DOT regulated (49 CFR 173.144); Quantities not greater than 1 liter or 0.3 gallons and PGII may be shipped as ORM-D (49 CFR 173.150) as a consumer commodity (49 CFR 171.8).

# **SECTION 15: Regulatory Information**

RCRA Hazardous Waste Number/ Classification: D001

CERCLA Substance: N/A

HAZARDOUS AIR POLUTANT (CAA): No

SARA 311/312 Codes: N/A

SARA Toxic Chemical: Yes, (Strong manufacturing only) CERCLA Reportable Quantity: 10,000 lbs (Default)

TSCA: The ingredients of this product are on the TSCA inventory.

### **SECTION 16: Other Information**

Prepared by: Vi-Jon, Inc.

Sources of Information: 29 CFR1910.1000; NIOSH Pocket Guide to Chemical Hazards; Occupational Health Guidelines for Chemical Hazards: NFPA Pocket Guide to Hazardous Materials.

Disclaimer: While reasonable care has been taken to ensure the accuracy and completeness of the

information regarding the material described herein, it is the purchaser's responsibility to ensure the suitability of such information as it applies to the purchaser's intended use of the material.

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