1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: 91% Isopropyl Alcohol
Item Number: 804AA
Recommended Use: First-Aid
Supplier Address: Vi-Jon, Inc.
8515 Page Avenue
Saint Louis, MO 63114

General Information Contact: Phone: 314-427-1000 (M-F 8am-4pm CST)
Email: info@vijon.com

In Case of Spill Emergency Contact: Chemtrec: 1-800-424-9300 (24-Hour)

2. HAZARDS IDENTIFICATION FOR INDUSTRIAL SETTING

CAUTION!

Emergency Overview

FLAMMABLE LIQUID AND VAPOR
Irritating to eyes
Harmful if swallowed

Appearance: Clear, Colorless, Water-thin liquid
Physical State: Water-thin liquid
Odor: Alcohol

Potential Health Effects

Primary Routes of Exposure: Skin contact.

Acute Toxicity

Eyes: Irritating to eyes.
Skin: Non-irritating during normal use. Prolonged or repeated contact may dry skin and cause irritation.

Inhalation: Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion: Not an expected route of exposure. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression.

Chronic Effects: Avoid repeated exposure.


Environmental Hazard: See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol 91% v/v</td>
<td>67-63-0</td>
<td>91</td>
</tr>
<tr>
<td>Water 9% v/v</td>
<td>7732-18-5</td>
<td>9</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact
In the case of skin irritation or allergic reactions see a physician.

Inhalation
Move to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. If symptoms persist, call a physician.

Ingestion
Call a physician or Poison Control Center immediately. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.

Notes to Physician
Treat symptomatically. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

Protection of First-aiders
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Flammable Properties
HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Many liquids are lighter than water.

Flash Point
22C / 71F

Suitable Extinguishing Media
Use extinguishing agent suitable for type of surrounding fire. Dry chemical or CO2, water spray, fog or alcohol-resistant foam. Move containers from fire area if you can do so without risk.

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

Unsuitable Extinguishing Media
CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient. Do not use a solid water stream as it may scatter and spread fire.

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact
No.

Specific Hazards Arising from the Chemical
Flammable. 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). Keep product and empty container away from heat and sources of ignition. Risk of ignition.

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 so without risk.

NFPA Health Hazard 1 Flammability 3 Stability 0 Physical and Chemical Hazards - None

6. ACCIDENTAL RELEASE MEASURES FOR INDUSTRIAL SETTING

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. Do not touch or walk through spilled material. Stop leak if you can do it without risk. Take precautionary measures against static discharges. Use personal protective equipment. Avoid contact with eyes.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up
Use personal protective equipment. Damp up. Absorb with earth, sand or other non-combustible material. Use clean non-sparking tools to collect absorbed material. Keep in suitable and closed containers for disposal. Clean contaminated surface thoroughly.

Other Information
Water spray may reduce vapor, but may not prevent ignition in closed spaces.
# 7. HANDLING AND STORAGE FOR INDUSTRIAL SETTING

**Handling**
Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Wear personal protective equipment. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

**Storage**
Keep in properly labeled containers. Keep away from heat and sources of ignition. Keep containers tightly closed in a cool, well-ventilated place.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION FOR INDUSTRIAL SETTING

**Exposure Guidelines**
There is no exposure data pertaining to the Product. This section reflects exposure data pertaining to individual ingredients.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>STEL: 400 ppm</td>
<td>TWA: 400 ppm</td>
<td>IDLH: 2000 ppm 10% LEL</td>
</tr>
<tr>
<td>67-63-0</td>
<td>TWA: 200 ppm</td>
<td>(vacated) TWA: 400 ppm</td>
<td>TWA: 980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 980 mg/m³</td>
<td>TWA: 400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 500 ppm</td>
<td>STEL: 500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 1225 mg/m³</td>
<td>STEL: 1225 mg/m³</td>
</tr>
</tbody>
</table>

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).

**Engineering Measures**
Showers
Eyewash stations
Ventilation systems

**Personal Protective Equipment**

Eye/Face Protection
Tightly fitting safety goggles.

Skin and Body Protection
Protective gloves.

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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, Colorless, Water-thin liquid</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>71°F / 22°C</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>No information available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Miscible in water.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol</td>
</tr>
<tr>
<td>Physical State</td>
<td>Water-thin liquid</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>78°C / 173°F</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition Coefficient: n-octanol/water</td>
<td>N/A</td>
</tr>
</tbody>
</table>

# 10. STABILITY AND REACTIVITY FOR INDUSTRIAL SETTING

**Stability**
Stable under recommended storage conditions.

**Incompatible Products**
Strong oxidizing agents.

**Conditions to Avoid**
Heat, flames and sparks.

**Hazardous Decomposition Products**
Carbon oxides.

**Hazardous Polymerization**
Hazardous polymerization does not occur.
11. TOXICOLOGICAL INFORMATION FOR INDUSTRIAL SETTING

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

Acute Toxicity

Product Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral (mg/kg)</th>
<th>LD50 Dermal (mg/kg)</th>
<th>LC50 Inhalation (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>4396 (Rat)</td>
<td>12800 (Rat)</td>
<td>72.6 (Rat) 4h</td>
</tr>
<tr>
<td>Water</td>
<td>&gt; 90 (Rat)</td>
<td>12870 (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Chronic Toxicity

Avoid repeated exposure.

Carcinogenicity

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>Group 3</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

IARC: (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Target Organ Effects

Respiratory system.

12. ECOLOGICAL INFORMATION FOR INDUSTRIAL SETTING

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.

13. DISPOSAL CONSIDERATIONS FOR INDUSTRIAL SETTING

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

331

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California EHW</th>
<th>California Carc</th>
<th>California Hazardous Waste</th>
<th>California Waste - Part 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>Toxic</td>
<td>Ignitable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

Emergency Response Guide Number

129

DOT Description

CONSUMER COMMODITY, ORM-D

TDG Description

UN1219, ISOPROPANOL, 3, PG II

MEX Description

UN1219 Isopropanol, 3, I

ICAO Description

UN1219, Isopropyl alcohol, 3, PG II

IATA Description

UN1219, Isopropyl alcohol, 3, PG II

IMDG/IMO Description

UN1219, Isopropanol, 3, PG II
15. REGULATORY INFORMATION FOR INDUSTRIAL SETTING

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

International Inventories

TSCA Exempt
DSL Not determined

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

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

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61). This product does not contain any ingredients which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act.

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65 – None
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations For Industrial Setting

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

International Regulations

Mexico - Grade Severe risk, Grade 4

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td></td>
<td>Mexico: TWA 400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: TWA 980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL 500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL 1225 mg/m³</td>
</tr>
</tbody>
</table>

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
B2
D2B

Legend
NPRI - National Pollutant Release Inventory
16. OTHER INFORMATION

Prepared By: WERCS Professional Services, LLC
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date: June 20, 2013
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 Material Safety Data Sheet (MSDS) 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