2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2</td>
<td>Flammable liquids</td>
</tr>
<tr>
<td>Category 2</td>
<td>Serious eye damage/eye irritation</td>
</tr>
<tr>
<td>Category 3</td>
<td>Specific target organ toxicity (single exposure)</td>
</tr>
</tbody>
</table>

GHS Label elements, including precautionary statements
Emergency Overview

Precautionary Statements - Prevention
- Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection
- Avoid breathing dust/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
- Keep cool
- Wear eye/face protection

Precautionary Statements - Response

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

Skin
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

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**

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION

**Interactions with Other Chemicals**

No information available.

---

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>30 - 60</td>
<td>*</td>
</tr>
</tbody>
</table>

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

---

### 4. FIRST AID MEASURES

**First aid measures**

**General Advice**

Show this safety data sheet to the doctor in attendance.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

**Skin contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen.

**Ingestion**

Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

**Self-protection of the first aider**

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms and Effects**

Burning sensation. 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

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

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

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 dry chemical extinguishers to control fires involving nitromethane or nitroethane. Do not use straight streams.

Specific hazards arising from the chemical
Vapors can 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
Irritant: Liquid
Flammable Liquid: I-B

Explosion Data
Sensitivity to Mechanical Impact
None.

Sensitivity to Static Discharge
Yes.

Protective equipment and precautions for firefighters
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. 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 containment 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
Use clean non-sparking tools to collect absorbed material. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<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 TWA: 200 ppm</td>
<td>TWA: 400 ppm TWA: 980 mg/m³</td>
<td>IDLH: 2000 ppm 10% LEL</td>
</tr>
<tr>
<td></td>
<td></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)

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection

If splashes are likely to occur:. None required for consumer use. Tight sealing safety goggles.

Skin and body protection

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures
Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td>Odor</td>
<td>Alcohol</td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>UNKNOWN</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>82 °C / 180 °F</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>121 °C / 53 °F</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.93</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble in water</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
<td>None</td>
<td>known</td>
</tr>
<tr>
<td>Other Information</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening Point</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particle Size</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particle Size Distribution</td>
<td>No data available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness and dizziness.

Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact | Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>= 4396 mg/kg (Rat)</td>
<td>= 12800 mg/kg (Rabbit)</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms | May cause redness and tearing of the eyes. 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.
Isopropyl alcohol  
67-63-0  

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

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**  
X - Present  

**Reproductive toxicity**  
No information available.  

**STOT - single exposure**  
No information available.  

**STOT - repeated exposure**  
No information available.  

**Chronic Toxicity**  
Contains a known or suspected carcinogen. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.  

**Target Organ Effects**  

**Aspiration Hazard**  
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)**  
8,792.00 mg/kg  

**ATEmix (dermal)**  
25,600.00 mg/kg (ATE)  

**ATEmix (inhalation-vapor)**  
111.22 ATEmix  

**12. ECOLOGICAL INFORMATION**  

**Ecotoxicity**  
The environmental impact of this product has not been fully investigated.  

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Daphnia Magna (Water Flea)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>96h EC50: &gt; 1000 mg/L (Desmodesmus subspicatus) 72h EC50: &gt; 1000 mg/L (Desmodesmus subspicatus)</td>
<td>96h LC50: &gt; 1400000 µg/L (Lepomis macrochirus) 96h LC50: = 11130 mg/L (Pimephales promelas) 96h LC50: = 9640 mg/L (Pimephales promelas)</td>
<td>48h EC50: = 13299 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

**Persistence and Degradability**  
No information available.  

**Bioaccumulation**  

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>0.05</td>
</tr>
</tbody>
</table>

**Other adverse effects**  
No information available.
13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods
This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Should not be released into the environment. Dispose of contents/containers in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated Packaging
Dispose of contents/containers 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 hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>Toxic, Ignitable</td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name CONSUMER COMMODITY
Hazard Class N/A
Description CONSUMER COMMODITY, ORM-D
Emergency Response Guide Number 129

TDG

UN-No. Not regulated
Proper Shipping Name ISOPROPAOL
Hazard Class 3
Packing Group II
Description UN1219, ISOPROPAOL, 3, II

MEX

UN-No. Not regulated
Proper Shipping Name ISOPROPAOL
Hazard Class 3
Packing Group II
Description UN1219, ISOPROPAOL, 3, II

ICAO

UN-No. Not regulated
Proper Shipping Name ISOPROPAOL
Hazard Class 3
Packing Group II
Description UN1219, ISOPROPAOL, 3, II

IATA

UN-No. Not regulated
Proper Shipping Name NON REGULATED
Hazard Class N/A
15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL 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

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol - 67-63-0</td>
<td>67-63-0</td>
<td>30 - 60</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: Yes
Sudden release of pressure hazard: No
Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances 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 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

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

International Regulations

Mexico
National occupational exposure limits

<table>
<thead>
<tr>
<th>Component</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>67-63-0 (30 - 60)</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>

Mexico - Occupational Exposure Limits - Carcinogens

Canada
WHMIS Hazard Class
Not determined

16. OTHER INFORMATION

NFPA
Health Hazards: 2
Flammability: 3
Instability: 0

HMIS
Health Hazards: 2
Flammability: 3
Physical Hazard: 0

Prepared By: Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date: 07-May-2015
Revision Note: No information available

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 a 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

End of Safety Data Sheet