SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name: ChloraPrep® Solutions

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Antimicrobial

1.3. Details of the supplier of the safety data sheet
CareFusion
75 N. Fairway Drive
Vernon Hills, IL 60061
T 800-523-0502 - F 855-329-6985

1.4. Emergency telephone number
Emergency number: Chemtrec 1 800 424 9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Flam. Liq. 2 H225
Eye Irrit. 2A H319
STOT SE 3 H336
STOT SE 3 H335

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US): 

GHS02

GHS07

Signal word (GHS-US): Danger
Hazard statements (GHS-US): H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
Precautionary statements (GHS-US): P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting/… equipment
P243 - Use only non-sparking tools
P244 - Take precautionary measures against static discharge
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash ... thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P337+P313 - If eye irritation persists; Get medical advice/attention
P370+P378 - In case of fire: Use ... for extinction
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to ...
2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS-US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable
Full text of H-phrases: see section 16

3.2. Mixture

ChloraPrep® Clear

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>(CAS No) 67-63-0</td>
<td>70</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>Chlorhexidine digluconate</td>
<td>(CAS No) 18472-51-0</td>
<td>2</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
</tbody>
</table>

ChloraPrep® Teal Green

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>(CAS No) 67-63-0</td>
<td>70</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>Chlorhexidine digluconate</td>
<td>(CAS No) 18472-51-0</td>
<td>2</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td>C.I. Food Green 3</td>
<td>(CAS No) 2353-45-9</td>
<td>0 - 0.1</td>
<td>Muta. 2, H341</td>
</tr>
</tbody>
</table>

ChloraPrep® Hi-Lite Orange

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>(CAS No) 67-63-0</td>
<td>70</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>Chlorhexidine digluconate</td>
<td>(CAS No) 18472-51-0</td>
<td>2</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
<tr>
<td>FD and C Yellow No. 6</td>
<td>(CAS No) 2783-94-0</td>
<td>0 - 0.1</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: If symptoms of exposure develop, move to fresh air. Seek medical attention if symptoms persist.
First-aid measures after skin contact: Wash material off the skin with copious amounts of water. If redness or a burning sensation develops, seek medical attention and discontinue use.
First-aid measures after eye contact: Flush with copious amounts of water. After initial flushing remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel immediately.
First-aid measures after ingestion: Give individual one to two glasses of water to drink. If gastrointestinal symptoms develop, consult medical personnel. (Never give anything by mouth to an unconscious person).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: Inhalation of vapors may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness and drowsiness.
Symptoms/injuries after skin contact: May cause irritation, drying, defatting of the skin. Prolonged contact may cause dermatitis.
Symptoms/injuries after eye contact: Contact may cause severe irritation with redness, tearing and pain with possible eye damage.
Symptoms/injuries after ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation, abdominal pain, nausea, vomiting, dizziness and drowsiness.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water fog, alcohol-resistant foam, carbon dioxide or dry chemical. Water spray can be used to cool exposed containers and structures, dilute spills and disperse flammable vapors.

Unsuitable extinguishing media: None.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Highly flammable liquid and vapor. Ampoules may explode if exposed to extreme heat or flame. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back.

Explosion hazard: None known.
5.3. Advice for firefighters
Protection during firefighting:
Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
General measures:
No special measures required.

6.1.1. For non-emergency personnel
No additional information available

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
For containment:
Stop the flow of material, if this is without risk.

Methods for cleaning up:
Wear skin, eye and respiratory protection during cleanup. For small spills, wipe or mop up and rinse to sewer serviced by a wastewater treatment facility. For large spills, eliminate sources of ignition and ventilate spill area. Soak up liquid with inert absorbent and collect into a suitable waste container. Wash residue from spill area with water and flush to sewer serviced by a wastewater treatment facility if permitted.

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling:
Avoid prolonged exposure (ingestion, inhalation, or skin contact). Avoid breathing vapors. Use in well-ventilated areas. Keep product away from heat, sparks and flames.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions:
Store in a cool, dry, well-ventilated area away from incompatible chemicals and all sources of ignition.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Isopropyl alcohol (67-63-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
</tr>
<tr>
<td>USA ACGIH</td>
</tr>
<tr>
<td>USA OSHA</td>
</tr>
<tr>
<td>USA OSHA</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls:
Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits. Use explosion proof equipment where required.

Hand protection:
Latex rubber for limited contact. Butyl rubber or nitrile recommended for prolonged contact.

Eye protection:
Safety glasses or goggles recommended if eye contact is possible.

Skin and body protection:
Wear suitable working clothes.

Respiratory protection:
If the exposure limits are exceeded a NIOSH/EN approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state:
Liquid

Appearance:
Clear in product; when activated, clear orange, teal
Color: Clear, orange, or teal
Odor: Odorless
Odor threshold: No data available
pH: 7 - 7.5
Relative evaporation rate (butylacetate=1): No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: 67 °F
Self ignition temperature: 2 - 12.7
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Specific gravity: 0.88
Solubility: Water: Complete
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosive limits: No data available

9.2. Other information
VOC content: 100 %

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions
Will not occur.

10.4. Conditions to avoid
Extreme heat, sparks or flame.

10.5. Incompatible materials
Oxidizing materials

10.6. Hazardous decomposition products
Carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, chlorine compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified

<table>
<thead>
<tr>
<th>Isopropyl alcohol (67-63-0)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>4396 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>12800 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>16000 ppm (Exposure time: 8 h)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chlorhexidine digluconate (18472-51-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE (oral)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
</tr>
</tbody>
</table>
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

**Isopropyl alcohol (67-63-0)**

| IARC group | 3 - Not classifiable |

**C.I. Food Green 3 (2353-45-9)**

| IARC group | 3 - Not classifiable |

**FD and C Yellow No. 6 (2783-94-0)**

| IARC group | 3 - Not classifiable |

Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): May cause drowsiness or dizziness. May cause respiratory irritation.
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Isopropyl alcohol (67-63-0)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fishes 1</td>
<td>9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>&gt; 1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 2</td>
<td>&gt; 1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

**Isopropyl alcohol (67-63-0)**

| Log Pow | 0.05 (at 25 °C) |

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations: Dispose of contents/container in accordance with local/regional/national/international regulations.

### SECTION 14: Transport information

In accordance with DOT

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport document description</td>
<td>UN1219 Isopropanol Solution, 3, II</td>
</tr>
<tr>
<td>UN-No.(DOT)</td>
<td>1219</td>
</tr>
<tr>
<td>DOT NA no.</td>
<td>UN1219</td>
</tr>
<tr>
<td>DOT Proper Shipping Name</td>
<td>Isopropanol Solution</td>
</tr>
<tr>
<td>Department of Transportation (DOT) Hazard Classes</td>
<td>3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120</td>
</tr>
</tbody>
</table>
Hazard labels (DOT) : 3 - Flammable liquid

Packing group (DOT) : II - Medium Danger
DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 °C (1.1 bar at 122 °F), or 130 kPa at 55 °C (1.3 bar at 131 °F) are authorized.

T4 - 2.65 178.274(d)(2) Normal............. 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 4b;150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/airway (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
DOT Vessel Stowage Location : B - (i) The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) “On deck only” on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

SECTION 15: Regulatory information
15.1. US Federal regulations
Isopropyl alcohol (67-63-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on SARA Section 313 (Specific toxic chemical listings)
EPA TSCA Regulatory Flag : T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting : 1.0 % (only if manufactured by the strong acid process, no supplier notification)
C.I. Food Green 3 (2353-45-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Chlorhexidine digluconate (18472-51-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
FD and C Yellow No. 6 (2783-94-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
15.2. US State regulations
Isopropyl alcohol (67-63-0)
U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information
Full text of H-phrases:

<table>
<thead>
<tr>
<th>H-phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation, Category 2A</td>
</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids, Category 2</td>
</tr>
<tr>
<td>Muta. 2</td>
<td>Germ cell mutagenicity, Category 2</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity — Single exposure, Category 3, Narcosis</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation</td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapor</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H341</td>
<td>Suspected of causing genetic defects</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Aplicare® Alcohol Swabsticks

Other means of identification

Product Code(s) S-1105, S-1105-1S, S-3105, S-3105-5S

Recommended use of the chemical and restrictions on use

Recommended Use Topical skin antiseptic

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Name Aplicare Inc.
Supplier Address 550 Research Parkway
Meriden, CT 06450

Supplier Phone Number Phone: 203-630-0500

Emergency telephone number

Emergency Phone Numbers For Medical Emergencies call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300
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</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

GHS Label elements, including precautionary statements

Emergency Overview

Signal word: Danger

Hazard Statements
Causes serious eye irritation
May cause drowsiness or dizziness
Highly flammable liquid and vapor

Appearance: Clear, colorless liquid absorbed into white, rayon swabs on polystyrene sticks
Physical State: Thin liquid absorbed into rayon swabs
Odor: Alcohol

Precautionary Statements - Prevention
Wash hands and face thoroughly after handling
Wear protective gloves/eye protection
Avoid breathing 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
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.
If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a poison center or doctor if you feel unwell
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
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.
Keep cool.
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal in accordance with all applicable federal, state, and local regulations.
Hazard not otherwise classified (HNOC)
Not applicable

Unknown Toxicity
None 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>60 - 80</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. In the case of skin irritation, call a doctor.

Inhalation
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen. If symptoms persist, call a doctor.

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

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. Remove all sources of ignition. Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects
Burning sensation.

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). 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 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.

**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, basement 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.
7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

Incompatible Products

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</td>
<td>TWA: 200 ppm</td>
<td>TWA: 400 ppm</td>
</tr>
<tr>
<td>67-63-0</td>
<td>TWA: 200 ppm</td>
<td>TWA: 980 mg/m^3</td>
<td>TWA: 980 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL: 500 ppm</td>
<td>IDLH: 2000 ppm 10% LEL</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

Appropriate engineering controls

Engineering Measures
- Showers
- Eyewash stations
- Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
None required for consumer use. If splashes are likely to occur:. 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/ Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Thin liquid absorbed into pads</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, thin liquid absorbed into rayon swabs on polystyrene sticks</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Colorless liquid - white swabs and sticks</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks/ Method</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flash Point</td>
<td>18° C (liquid)</td>
<td>None known</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>~0.88 (liquid)</td>
<td>None known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble in water</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Softening Point</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Particle Size</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Particle Size Distribution</td>
<td>No data available</td>
<td>None known</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
No data available.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials

Hazardous Decomposition Products
Carbon oxides.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

**Inhalation**  
May cause irritation of respiratory tract.

**Eye Contact**  
May cause redness, itching, and pain.

**Skin Contact**  
Prolonged contact may cause redness and irritation.

**Ingestion**  
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 67-63-0</td>
<td>4.4 g/kg (Rat)</td>
<td>12.8 g/kg (Rabbit)</td>
<td>16000 ppm (Rat, 8 h)</td>
</tr>
</tbody>
</table>

Information on toxicological effects

**Symptoms**  
May cause redness and tearing of the eyes.

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.

<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 67-63-0</td>
<td></td>
<td>Group 3</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

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.

**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)
6.3 g/kg
ATEmix (dermal)
18 g/kg (ATE)
ATEmix (inhalation-vapor)
79  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)</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>
<tr>
<td>67-63-0</td>
<td>72h EC50: &gt; 1000 mg/L (Desmodesmus subspicatus)</td>
<td></td>
<td></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>
<tr>
<td>67-63-0</td>
<td></td>
</tr>
</tbody>
</table>

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods
Dispose of in accordance with all applicable federal, state, and local regulations.

Contaminated Packaging
Dispose of in accordance with all applicable federal, state, and local regulations.
14. TRANSPORT INFORMATION

**DOT**
Limited quantity.

**TDG**

<table>
<thead>
<tr>
<th>UN-No.</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>FLAMMABLE LIQUID, N.O.S.</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Description</td>
<td>UN1993, FLAMMABLE LIQUID, N.O.S. (ISOPROPYL ALCOHOL), 3, II</td>
</tr>
</tbody>
</table>

**ICAO**

<table>
<thead>
<tr>
<th>UN-No.</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>FLAMMABLE LIQUID, N.O.S.</td>
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<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Description</td>
<td>UN1993, FLAMMABLE LIQUID, N.O.S. (ISOPROPYL ALCOHOL), 3, II</td>
</tr>
</tbody>
</table>

**IATA**

<table>
<thead>
<tr>
<th>UN-No.</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>FLAMMABLE LIQUID, N.O.S.</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Description</td>
<td>UN1993, FLAMMABLE LIQUID, N.O.S. (ISOPROPYL ALCOHOL), 3, II</td>
</tr>
</tbody>
</table>

**IMDG/IMO**

<table>
<thead>
<tr>
<th>UN-No.</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
<td>FLAMMABLE LIQUID, N.O.S.</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Ems No.</td>
<td>F-E, S-E</td>
</tr>
<tr>
<td>Description</td>
<td>UN1993, FLAMMABLE LIQUID, N.O.S. (ISOPROPYL ALCOHOL), 3, II, (23°C C.C.)</td>
</tr>
</tbody>
</table>

| Classification code | F1 |
| Special Provisions | 274, 601, 640D |
| Description | UN1993, FLAMMABLE LIQUID, N.O.S. (ISOPROPYL ALCOHOL), 3, II |
| Limited Quantity | 1 L |
| Ventilation | VE01 |
15. REGULATORY INFORMATION

**Chemical 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 the following chemical that is 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
Chronic Health Hazard
Fire Hazard
Sudden release of pressure hazard
Reactive Hazard

**CWA (Clean Water Act)**
This product does not contain any substances that are regulated 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>X</td>
</tr>
</tbody>
</table>

**International Regulations**

Canada
WHMIS Hazard Class
B2 - Flammable liquid
D2B - Toxic materials
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health Hazards</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Health Hazards</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>A</td>
</tr>
</tbody>
</table>

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

Revision Date  
New

Reference  
INT0009/D005

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