1. IDENTIFICATION

Product Name: Sani-24® Germicidal Spray

Finished Product Number: N/A

Formula Item Number: 4OP23201

EPA Registration Number: 42182-9-9480

Date of Preparation: February 8, 2019

Last update: February 12, 2020

Recommended use of the chemical and restrictions on use:

Recommended use: Use as a disinfectant on hard, non-porous surfaces. Read and understand the entire label before using. Use only according to label directions. It is a violation of Federal law to use this product in a manner inconsistent to label directions.

Restrictions on use: For professional and hospital use.

Manufacturer/Supplier: Professional Disposables International, Inc.
400 Chestnut Ridge Road
Woodcliff Lake, NJ 07677

Emergency Phone Number: PERS: 1-800-633-8253 (Domestic/Canada)
1-801-629-0667 (International)

2. HAZARD(S) IDENTIFICATION

GHS Classification:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Health</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Liquid Category 3</td>
<td>Eye Irritant Category 2A</td>
<td>Not Classified</td>
</tr>
</tbody>
</table>

Label Elements:

Warning!

Hazard Statements:

Flammable liquid and vapor.
Causes serious eye irritation.

Precautionary Statements:

Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
Keep container tightly closed.
Ground or bond container and receiving equipment.
Use explosion-proof electrical, ventilating, or lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash thoroughly after handling.
Wear eye protection per facility protocol.

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 attention.

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

In case of fire: Use water fog, alcohol-resistant foam, carbon dioxide and dry chemical to extinguish.

Store in a well-ventilated place. Keep cool.

Dispose of contents and container in accordance with local and national regulations.

Other Hazards: None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol (Ethanol)</td>
<td>64-17-5</td>
<td>65-80%</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Alkyl (50% C14, 40% C12, 10% C16) dimethyl benzyl ammonium chloride</td>
<td>68424-85-1</td>
<td>0.276%</td>
</tr>
<tr>
<td>Octyl decyl dimethyl ammonium chloride</td>
<td>32426-11-2</td>
<td>0.207%</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium chloride</td>
<td>5538-94-3</td>
<td>0.104%</td>
</tr>
<tr>
<td>Dioctyl dimethyl ammonium chloride</td>
<td>7173-51-5</td>
<td>0.104%</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Description of First Aid Measures:

**Eye:** Immediately flush eyes with water for 15 minutes, while holding the eye lids open to be sure the material is washed out. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Get medical attention if irritation persists.

**Skin:** No first aid should be required. Wash skin with water. Get medical attention if irritation develops or persists.

**Inhalation:** If symptoms develop move victim to fresh air. Get medical attention if irritation or other symptoms persists.

**Ingestion:** Rinse mouth with water. Do not induce vomiting unless directed to do so by a medical professional. Get medical attention if you feel unwell.

Most Important Symptoms/Effects, Acute and Delayed: Direct contact may cause moderate eye irritation. Inhalation of vapors or mists may cause upper respiratory tract irritation and central nervous system effects. Swallowing large amounts of liquid may cause gastrointestinal irritation and central nervous system depression effects such as dizziness, drunkenness, and drowsiness.

Indication of Immediate Medical Attention and Special Treatment, If Necessary: None required under normal conditions of use.

5. FIRE-FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use water fog, alcohol-resistant foam, carbon dioxide and dry chemical.
Specific Hazards Arising From the Chemical: Flammable liquid and vapor. Vapors are heavier than air and may flow along surfaces to remote ignition sources and flash back. Combustion may produce oxides of carbon, nitrogen, halogenated compounds and carbonyl halides. Flammable vapors may be invisible in daylight.

Special Protective Equipment and Precautions for Fire-Fighters: Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Contain runoff.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Evacuate spill area and keep unprotected personnel away. Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Minimize generation of static electricity which may cause sparking. Avoid contact with eyes. Wear appropriate protective clothing as described in Section 8. Avoid breathing vapors or mists. Ventilate area with explosion proof equipment.

Environmental Hazards: Avoid releases to the environment. Report spill as required by local and federal regulations.

Methods and Materials for Containment and Cleaning Up: Cover with an inert absorbent material and collect into an appropriate container for disposal. Use non-sparking tools and equipment.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes. Wear protective clothing and equipment as described in Section 8. Avoid breathing vapors or mists. Use with adequate ventilation. Wash hands with soap and water after use. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use. Use with non-sparking tools and explosion proof equipment. Refer to product label for additional information on use and handling. Follow all SDS precautions in Section 13 when handling empty containers.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a cool, dry location away from incompatible materials. Do not store near heat or open flame. Do not freeze or expose to extreme cold for a long period. Do not contaminate water, food or feed by storage or disposal. For containers: Protect container from physical damage. When not in use keep center cap of lid closed to prevent moisture loss.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Substance</th>
<th>Exposure Guidelines</th>
</tr>
</thead>
</table>
| Ethyl Alcohol | 1000 ppm STEL ACGIH TLV  
| Isopropanol | 200 ppm TWA, 400 ppm STEL ACGIH TLV  
| Alkyl (50% C14, 40% C12, 10% C16) dimethyl benzyl ammonium chloride | None Established  
| Octyl decyl dimethyl ammonium chloride | None Established  
| Didecyl dimethyl ammonium chloride | None Established  

Dioctyldimethylammonium chloride | None Established

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits. Use explosion proof electrical equipment and wiring where required.

**Individual Protection Measures, Such As Personal Protective Equipment:**

**Respiratory Protection:** If the exposure levels are exceeded, use an approved organic vapor respirator. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with facility protocol, local regulations, and good Industrial Hygiene practice.

**Skin Protection:** No special protective equipment required under normal use conditions. If needed, wear protective gloves per facility protocol to avoid skin contact.

**Eye Protection:** No special protective equipment required under normal use conditions. If needed, wear eye protection per facility protocol to avoid eye contact.

**Other:** None required under normal conditions of use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong> Clear colorless liquid</td>
<td><strong>Flammable limits:</strong></td>
</tr>
<tr>
<td></td>
<td>LEL: 3.3% (Ethanol)</td>
</tr>
<tr>
<td></td>
<td>UEL: 19.0% (Ethanol)</td>
</tr>
<tr>
<td><strong>Odor:</strong> Slight alcohol odor</td>
<td><strong>Vapor pressure:</strong> Not available</td>
</tr>
<tr>
<td><strong>Odor Threshold:</strong> Not applicable</td>
<td><strong>Vapor density:</strong> Not available</td>
</tr>
<tr>
<td><strong>pH:</strong> 7-9 (Liquid)</td>
<td><strong>Relative density:</strong> 7.24 lb/gal</td>
</tr>
<tr>
<td><strong>Melting point/freezing point:</strong></td>
<td><strong>Solubility(ies):</strong> Soluble in water</td>
</tr>
<tr>
<td>(-114.1°C (-173.38°F) (Ethanol))</td>
<td><strong>Boiling point/range:</strong> Not available</td>
</tr>
<tr>
<td><strong>Flash point:</strong> 26.7°C (80.1°F)</td>
<td><strong>Partition coefficient (n-octanol/water):</strong> Not available</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong> Not available</td>
<td><strong>Auto-ignition temperature:</strong> 363°C (685.40°F) (Ethanol)</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong> Not applicable</td>
<td><strong>Decomposition temperature:</strong> Not available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Reactivity:** Not reactive under normal conditions of use.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions To Avoid:** Keep away from heat, sparks, flames and other sources of ignition.

**Incompatible Materials:** Avoid contact with oxidizing materials and acids.

**Hazardous Decomposition Products:** Thermal decomposition may produce oxides of carbon, nitrogen, halogenated compounds and carbonyl halides.

### 11. TOXICOLOGICAL INFORMATION

**Potential Health Effects:**

- **Eye:** Direct contact with liquid may cause moderate eye irritation.
- **Skin:** Prolonged contact may cause skin irritation with drying and dermatitis.
- **Inhalation:** Inhalation of spray mists or vapors may cause upper respiratory tract irritation, headache, dizziness, drowsiness, confusion, and other central nervous system effects.
Ingestion: Swallowing may cause gastrointestinal irritation and central nervous system depression with symptoms similar to those described under inhalation.

Chronic Effects: None known.

Carcinogenicity: None of the components of this product are listed as a carcinogen or suspected carcinogen by OSHA, IARC, and NTP.

Reproductive Effects: Reproductive harm is not expected from this product.

Mutagenic Effects: Not expected to cause mutagenic activity.

Acute Toxicity:
No toxicity data available for the mixture. The following toxicity data is for the individual components:
Ethanol: Oral rat LD50: 10470 mg/kg, Inhalation rat LC50: 124.7 mg/L/4hr
Isopropanol: Oral rat LD50: 4396 mg/kg, Dermal rabbit LD50: 12800 mg/kg, Inhalation rat LC50: 16970 mg/L/4hr
Alkyl (50% C14, 40% C12, 10% C16) dimethyl benzyl ammonium chloride: Oral rat LD50: 344 mg/kg, Skin rabbit LD50: 3340 mg/kg
Octyl decyl dimethyl ammonium chloride: No toxicity data available
Didecyl dimethyl ammonium chloride: Oral rat LD50: 329 mg/kg, Skin rat LD50: >2000 mg/kg
Diocyl dimethylammonium chloride: Oral rat LD50: 238 mg/kg, Skin rabbit LD50: 191.4 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Ethanol: 96 hr LC50 Fathead minnow: 14.2 g/L, 48 hr LC50 Ceriodaphnia dubia: 5012 mg/L
Isopropanol: 96 hr LC50 Bluegill (Lepomis macrochirus) : >1400 mg/L, 48 hr EC50 Daphnia: 13299 mg/L, 72 hr IC50 Algae: 1000 mg/L
Alkyl (50% C14, 40% C12, 10% C16) dimethyl benzyl ammonium chloride: 96 hr LC50 Fathead minnow: 0.28 mg/L, 48 hr EC50 Daphnia magna: 0.016 mg/L, 72 hr ErC50 Green Algae: 0.049 mg/L, 96 hr ErC50 Algae: 0.089 mg/L, 34 days NOEC Fathead minnow: 0.032 mg/L, 21 days NOEC Daphnia magna: 0.0042 mg/L (Acute M-Factor: 10, Chronic M-Factor: 1)
Didecyl dimethyl ammonium chloride: 96 hr LC50 Zebrafish: 0.49 mg/L, 48 hr EC50 Daphnia magna: 0.057 mg/L (M-Factor Acute: 10)
Diocyl dimethylammonium chloride: 96 hr LC50 Rainbow trout: 0.35 mg/L, 96 hr LC50 Blue gill: 0.28 mg/L, 34 day NOEC Zebra fish: 32 ug/L, 33 day NOEC Fathead minnow: 18 ug/L (M-Factor Acute: 10)

This product is expected to be toxic to the aquatic environment and harmful to the aquatic environment with long-term adverse effects. Releases to the environment should be avoided.

Persistence and Degratability: Alkyl (50% C14, 40% C12, 10% C16) dimethyl benzyl ammonium chloride: Readily biodegradable- 95.5% in 28 days. Didecyl dimethyl ammonium chloride: Readily biodegradable- 85% after 14 days.

Bioaccumulative Potential: No data available
Mobility in Soil: No data available
Other Adverse Effects: None known.
13. DISPOSAL CONSIDERATIONS

For non-refillable containers: Do not reuse or refill this container. Offer for recycling. If recycling is not available, put in trash collection.

For refillable containers: Rinse cracked or broken containers and offer for recycling. If recycling is not available, discard in trash.

Empty containers or liners may retain some product residues. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. This material and its container must be disposed of in a safe manner. Dispose in accordance with all local, state and federal regulations.

14. TRANSPORT INFORMATION

The following applies to inner packages of <=5 L / 1.3 Gal; package gross weight <=30 kg.

<table>
<thead>
<tr>
<th>UN Number</th>
<th>Proper shipping name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
<th>Environmental Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>US DOT</td>
<td>UN1170 Ethanol solution</td>
<td>3</td>
<td>III</td>
<td>Not applicable</td>
</tr>
<tr>
<td>IMDG</td>
<td>UN1170 Ethanol solution</td>
<td>3</td>
<td>III</td>
<td>Not applicable</td>
</tr>
<tr>
<td>IATA</td>
<td>UN1170 Ethanol solution</td>
<td>3</td>
<td>III</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Special precautions: None known

15. REGULATORY INFORMATION

Safety, Health, and Environmental Regulations Specific for the Product In Question:

CERCLA 103 Reportable Quantity: This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

SARA TITLE III:

Hazard Category for Section 311/312: See OSHA Hazard Classification in Section 2.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the ingredients of this product are listed on the TSCA inventory.

FIFRA Labeling:

Keep Out Of Reach Of Children

PRECAUTIONARY STATEMENTS: Hazards to Humans and Domestic Animals

Warning: Causes substantial but temporary eye injury. DO not get in eyes or on clothing. Wear safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.
STATE REGULATIONS:

California Proposition 65: This product does not contain substances known in the State of California to cause cancer and/or reproductive harm.

Massachusetts RTK: Ethyl Alcohol and Isopropanol are listed.

Pennsylvania RTK: Ethyl Alcohol and Isopropanol are listed.

Rhode Island RTK: Ethyl Alcohol and Isopropanol are listed.

New Jersey RTK: Ethyl Alcohol and Isopropanol are listed.

16. OTHER INFORMATION

HMIS Ratings: Health – 2  Flammability – 3  Physical Hazard - 0
NFPA Ratings: Health – 2  Flammability – 3  Instability – 0

Date of preparation: February 8, 2019
Last update: February 12, 2020