SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: SaniZide Pro 1 Ready-To-Use Liquid Disinfectant

Other means of identification

: 32oz bottle

Recommended use of the chemical and restrictions on use

: Disinfectant.
  Restriction on use: None known

Chemical family

: Mixture.

Name, address, and telephone number of the supplier:

Safetec of America, Inc.
887 Kensington Avenue
Buffalo, NY, USA
14215
(716) 895 1822

Name, address, and telephone number of the manufacturer:

Refer to supplier

24 Hr. Emergency Tel # : 1-800-255-3924

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Clear colourless liquid. Alcohol odour.

This is a registered EPA product. The product labeling is in compliance with EPA regulations and guidelines. This chemical is a disinfectant product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-disinfectant chemicals. The hazard information required on the disinfectant label is reproduced below. The disinfectant label also includes other important information, including directions for use.

Hazards to humans and Domestic animals.

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating and drinking, chewing gum, using tobacco or using toilet.

Flammable. Keep away from heat or open flame.

The following OSHA classification is for informational purposes only:

Flammable Liquid - Category 2
Serious eye damage/irritation - Category 2A
Specific Target Organ Toxicity - Single Exposure - Category 3 (narcotic effects)

Label elements

Hazard pictogram(s)

Signal Word

DANGER!
SAFETY DATA SHEET

Hazard statement(s)

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

Precautionary statement(s)

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/Bond container and receiving equipment. Use explosion-proof electrical and ventilating equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/clothing and eye/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: get medical advice/attention. In case of fire: Use appropriate media to extinguish.

Keep cool. Store in a well-ventilated place. Keep container tightly closed.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS #</th>
<th>Concentration (% by weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>Alcohol</td>
<td>64-17-5</td>
<td>80.0 - 100.0</td>
</tr>
<tr>
<td></td>
<td>Ethyl alcohol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>1-Decanaminium, N-decyI-N,N-dimethyl-, chloride</td>
<td>7173-51-5</td>
<td>0.1 - 1.0</td>
</tr>
</tbody>
</table>

The exact concentrations of the above listed chemicals are being withheld as a trade secret.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

**Ingestion**

None required under normal conditions. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting, unless directed to do so by qualified medical personnel. Get medical attention.

**Inhalation**

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist.

**Skin contact**

Wash off with warm water and soap. Get medical attention if symptoms occur.

**Eye contact**

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms persist.

Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

**Suitable extinguishing media**

Dry chemicals. Foam. Carbon dioxide (CO2).
SAFETY DATA SHEET

Unsuitable extinguishing media

Do not use water jet as extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture / Conditions of flammability

Highly flammable liquid and vapor. Vapors may travel considerable distance to a source of ignition and flash back. Toxic fumes, gases or vapors may evolve on burning.

Flammability classification (OSHA 29 CFR 1910.106)

Flammable liquids - Category 2

Hazardous combustion products

Carbon oxides.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

Firefighter should wear full protective clothing including self contained breathing apparatus. Normal protective clothing (bunker gear) may not be adequate. A full-body encapsulating chemical protective suit may be necessary.

Special fire-fighting procedures

Fight fire with normal precautions from a reasonable distance. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).

Special spill response procedures

In case of a transportation accident, in the United States contact CHEMTREC at 1-800-424-9300 or International at 1-703-527-3887.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking. Avoid breathing mist or vapor. Avoid contact with skin, eyes and clothing. Observe good industrial hygiene practices.

Conditions for safe storage

Do not store around flammable or combustible materials. Store in tightly close original container in a well-ventilated place. Keep cool.

Incompatible materials

Strong oxidizing agents. Acids.
SAFETY DATA SHEET

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Limits:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
</tr>
<tr>
<td>Ethanol</td>
<td>N/Av</td>
<td>1000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>N/Av</td>
<td>N/Av</td>
</tr>
</tbody>
</table>

**Exposure controls**

**Ventilation and engineering measures**

: Explosion-proof general and local exhaust ventilation.

**Respiratory protection**

: None required when used as intended.

**Skin protection**

: None required when used as intended.

**Eye / face protection**

: None required when used as intended. Chemical goggles are recommended when there is a potential for splashing.

**Other protective equipment**

: None required when used as intended.

**General hygiene considerations**

: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**

: Clear colourless liquid.

**Odour**

: Alcohol odour.

**Odour threshold**

: Not available.

**pH**

: 3.7 @ 77°F

**Melting Point/Freezing point**

: Not available.

**Initial boiling point and boiling range**

: Not available.

**Flash point**

: 18.5°C (65.3°F)

**Flashpoint (Method)**

: Closed cup

**Evaporation rate (BuAe = 1)**

: Not available.

**Flammability (solid, gas)**

: Not applicable.

**Lower flammable limit (% by vol.)**

: 3.3% (Ethanol)

**Upper flammable limit (% by vol.)**

: 19% (Ethanol)

**Oxidizing properties**

: None.

**Explosive properties**

: Not explosive.

**Vapour pressure**

: Not available.

**Vapour density**

: Not available.

**Relative density / Specific gravity**

: 0.86

**Solubility in water**

: Complete
SAFETY DATA SHEET

Other solubility(ies) : Not available.
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution : Not available.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : 3.23 cSt @ 68°F
Volatiles (% by weight) : Not available.
Volatile organic Compounds (VOC's) : Not available.
Absolute pressure of container : Not available.
Flame projection length : Not available.
Other physical/chemical comments : None known or reported by the manufacturer.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Hazardous polymerization does not occur.
Conditions to avoid : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources - No smoking.
Hazardous decomposition products : None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : YES
Routes of exposure skin absorption : YES

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation : High concentrations may cause nausea, headache, dizziness and incoordination.
Sign and symptoms ingestion : None expected, when used as intended. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Sign and symptoms skin : None expected, when used as intended. Direct skin contact may cause slight or mild, transient irritation.
Sign and symptoms eyes : Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision.
SAFETY DATA SHEET

Potential Chronic Health Effects

- None reported by the manufacturer.

Mutagenicity

- Not expected to be mutagenic.

Carcinogenicity

- This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive effects & Teratogenicity

- This product is not expected to cause reproductive or developmental effects.

Sensitization to material

- Not expected to be a skin or respiratory sensitizer.

Specific target organ effects

- None expected, when used as intended. May cause drowsiness or dizziness.

Medical conditions aggravated by overexposure

- None reported by the manufacturer.

Synergistic materials

- None reported by the manufacturer.

Toxicological data

- There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LC50(4hr) inh, rat</th>
<th>LD50 (Oral, rat)</th>
<th>LD50 (Rabbit, dermal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>&gt; 32 380 ppm (61 mg/L) 4 hours (vapour)</td>
<td>7060 mg/kg</td>
<td>&gt; 15 800 mg/kg</td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>N/Av</td>
<td>658 mg/kg</td>
<td>2730 mg/kg</td>
</tr>
</tbody>
</table>

Other important toxicological hazards

- None reported by the manufacturer.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

- Contains material that may be harmful in the environment. Do not release, unmonitored, into the environment.

Ecotoxicity data:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Fish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LC50 / 96h</td>
</tr>
<tr>
<td>Ethanol (Fathead minnow)</td>
<td>64-17-5</td>
<td>&gt; 100 mg/L (Pimephales promelas)</td>
</tr>
<tr>
<td>Ethanol (Water flea)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>7173-51-5</td>
<td>0.33 mg/L (Rainbow trout)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Daphnia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EC50 / 48h</td>
</tr>
<tr>
<td>Ethanol (Water flea)</td>
<td>64-17-5</td>
<td>5012 mg/L (Daphnia magna)</td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>7173-51-5</td>
<td>0.029 mg/L (Daphnia magna)</td>
</tr>
</tbody>
</table>
SaniZide Pro 1 Ready-To-Use Liquid
Disinfectant
SDS Preparation Date (mm/dd/yyyy): 08/20/2019

SAFETY DATA SHEET

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Toxicity to Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EC50 / 96h or 72h</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>1000 mg/L/96hr Green algae (Selenastrum capricornutum)</td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>7173-51-5</td>
<td>0.110mg/L (Green algae)</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
- Ethanol is considered to be readily biodegradable.

**Bioaccumulation potential**
- No data is available on the product itself. See the following data for ingredient information.

<table>
<thead>
<tr>
<th>Components</th>
<th>Partition coefficient n-octanol/water (log Kow)</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>- 0.31</td>
<td>N/Av</td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride (CAS 7173-51-5)</td>
<td>2.59</td>
<td>81</td>
</tr>
</tbody>
</table>

**Mobility in soil**
- None known or reported by the manufacturer.

**Other Adverse Environmental effects**
- No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Handling for Disposal**
- Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Methods of Disposal**
- Dispose in accordance with all applicable regulations.

**RCRA**
- If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261.
SAFETY DATA SHEET

SECTION 14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Regulatory Information</th>
<th>UN Number</th>
<th>UN proper shipping name</th>
<th>Transport hazard class(es)</th>
<th>Packing Group</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICAO/IATA</td>
<td>UN1170</td>
<td>Ethanol</td>
<td>3</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Refer to ICAO/IATA Packing Instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49CFR/DOT</td>
<td>UN1170</td>
<td>ETHANOL</td>
<td>3</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>May be shipped as LIMITED QUANTITY when transported in quantities no larger than 1 Litre, in packages not exceeding 30 kg gross mass. Refer to 49 CFR Section 173.150.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMDG</td>
<td>UN1170</td>
<td>ETHANOL</td>
<td>3</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Consult the IMDG regulations for exceptions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG</td>
<td>UN1170</td>
<td>ETHANOL</td>
<td>3</td>
<td>II</td>
<td></td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>May be shipped as LIMITED QUANTITY when transported in quantities no larger than 1 Litre, in packages not exceeding 30 kg gross mass. Please consult the TDG guidelines for further information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Special precautions for user: None reported by the manufacturer.

Environmental hazards: This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See Section 12 for more environmental information.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:
Components listed below are present on the following U.S. Federal chemical lists:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>TSCA Inventory</th>
<th>CERCLA Reportable Quantity(RQ) (40 CFR 117.302):</th>
<th>SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:</th>
<th>SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical</th>
<th>Toxic Chemical</th>
<th>de minimus Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>Yes</td>
<td>N/Ap</td>
<td>No</td>
<td>N/Ap</td>
<td>No</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>7173-51-5</td>
<td>Yes</td>
<td>N/Ap</td>
<td>N/Av</td>
<td>No</td>
<td>N/Ap</td>
<td></td>
</tr>
</tbody>
</table>

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Flammable Eye irritation Specific target organ toxicity, single exposure.
SAFETY DATA SHEET

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>California Proposition 65</th>
<th>State &quot;Right to Know&quot; Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Listed</td>
<td>Type of Toxicity</td>
</tr>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>No</td>
<td>N/Ap</td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>7173-51-5</td>
<td>No</td>
<td>N/Ap</td>
</tr>
</tbody>
</table>

Canadian Information:

WHMIS Classification: See Section 2.
All ingredients are present on the DSL.

International Information:

Components listed below are present on the following International Inventory list:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS #</th>
<th>European EINECs</th>
<th>Australia AICS</th>
<th>Philippines PICCS</th>
<th>Japan ENCS</th>
<th>Korea KECL</th>
<th>China IECSC</th>
<th>NewZealand IOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>Present</td>
<td>Present</td>
<td>(2)-202</td>
<td>KE-13217</td>
<td>Present</td>
<td>HSR001144</td>
</tr>
<tr>
<td>Dodecyldimethyl ammonium chloride</td>
<td>7173-51-5</td>
<td>230-525-2</td>
<td>Present</td>
<td>Present</td>
<td>(2)-184</td>
<td>KE-10281</td>
<td>Present</td>
<td>HSR002708</td>
</tr>
</tbody>
</table>

SECTION 16. OTHER INFORMATION

Legend:
- ACGIH: American Conference of Governmental Industrial Hygienists
- CA: California
- CAS: Chemical Abstract Services
- CEPA: Canadian Environmental Protection Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- CPR: Controlled Products Regulation
- CSA: Canadian Standards Association
- DOT: Department of Transportation
- DSL: Domestic Substances List
- EPA: Environmental Protection Agency
- HMIS: Hazardous Materials Identification System
- HPA: Hazardous Products Act
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organisation
- IMDG: International Maritime Dangerous Goods
- Inh: Inhalation
- LC: Lethal Concentration
- LD: Lethal Dose
- MA: Massachusetts
- MN: Minnesota
- N/Ap: Not Applicable
- N/Av: Not Available
SAFETY DATA SHEET

NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OEL: National occupational exposure limits
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
PPE: Personal Protective Equipment
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RQ: Reportable Quantity
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
WEL: Workplace Exposure Limit
WHMIS: Workplace Hazardous Materials Identification System

References:
1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2018.
3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2019 (Chempendium, HSDB and RTECs).
4. Safety Data Sheets from manufacturer.

Preparation Date (mm/dd/yyyy):
08/20/2019

Other special considerations for handling:
Provide adequate information, instruction and training for operators.
expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this Safety Data Sheet does not apply to use with any other product or in any other process. This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Safetec of America Inc.

END OF DOCUMENT