1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Germ-X Hand Sanitizer (w/o IPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Number:</td>
<td>234AC</td>
</tr>
<tr>
<td><strong>Other means of identification</strong></td>
<td></td>
</tr>
<tr>
<td>Synonyms:</td>
<td>None</td>
</tr>
</tbody>
</table>

**Recommended use of the chemical and restrictions on use**

<table>
<thead>
<tr>
<th>Recommended Use:</th>
<th>Hand Sanitizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses advised against:</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**Details of the supplier of the safety data sheet**

<table>
<thead>
<tr>
<th>Supplier Address</th>
<th>Vi-Jon Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8800 Page Avenue</td>
</tr>
<tr>
<td></td>
<td>Saint Louis</td>
</tr>
<tr>
<td></td>
<td>MO</td>
</tr>
<tr>
<td></td>
<td>63114</td>
</tr>
<tr>
<td></td>
<td>US</td>
</tr>
<tr>
<td></td>
<td>Phone: 314-427-1000 (M-F 8am-4pm CST)</td>
</tr>
<tr>
<td></td>
<td>Fax:3144271010</td>
</tr>
</tbody>
</table>

**Emergency telephone number**

| Chemtrec                  | 1-800-424-9300 (24-Hour)       |
2. HAZARDS IDENTIFICATION FOR INDUSTRIAL SETTING

Classification
This product contains a chemical or chemicals considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

| Flammable liquids                  | Category 3 |

GHS Label elements, including precautionary statements

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flammable liquid and vapor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency Overview</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquid and vapor</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical State</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear to slightly hazy, Colorless, Viscous liquid</td>
<td>Viscous liquid</td>
<td>Alcohol</td>
</tr>
</tbody>
</table>

Precautionary Statements - Prevention
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
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Specific treatment (see supplemental first aid instructions on this label)

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

Fire
In case of fire: Use CO2, dry chemical, or foam for extinction

Inhalation
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not Applicable

Unknown Toxicity
0.201% of the mixture consists of ingredient(s) of unknown toxicity

Other information
Prolonged or repeated contact may dry skin and cause irritation
May cause slight eye 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>Ethyl Alcohol 63%</td>
<td>64-17-5</td>
<td>50-100</td>
<td>*</td>
</tr>
<tr>
<td>Acrylates/C10-13 Alkyl Acrylates Crosspolymer</td>
<td>Proprietary</td>
<td>0-10</td>
<td>*</td>
</tr>
<tr>
<td>Benzophenone-4</td>
<td>4065-45-6</td>
<td>0-10</td>
<td>*</td>
</tr>
<tr>
<td>Fragrance</td>
<td>Proprietary</td>
<td>0-10</td>
<td>*</td>
</tr>
<tr>
<td>Glycerin</td>
<td>56-81-5</td>
<td>0-10</td>
<td>*</td>
</tr>
<tr>
<td>Tocopheryl</td>
<td>7695-91-2</td>
<td>0-10</td>
<td>*</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>10-50</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 applicable, and continue flushing. If symptoms persist, call a physician.

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

Inhalation
Move to fresh air. Get medical attention immediately if symptoms occur. If breathing has stopped, contact emergency medical services immediately and give artificial respiration.

Ingestion
Do NOT induce vomiting. Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable Extinguishing Media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical
Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).

Uniform Fire Code
Flammable Liquid: I-C

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact
No
Sensitivity to Static Discharge
Yes

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES FOR INDUSTRIAL SETTING

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Avoid contact with eyes and clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. See section 8 for more information. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other Information
Refer to protective measures listed in Sections 7 and 8. Ventilate the area.

Environmental precautions

Environmental Precautions
Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways.

Methods for Cleaning Up
Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE FOR INDUSTRIAL SETTING

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact eyes and clothing. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. 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
None known based on information supplied.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION FOR INDUSTRIAL SETTING

Exposure Guidelines

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>STEL: 1000 ppm</td>
<td>TWA: 1000 ppm</td>
<td>IDLH: 3300 ppm 10% LEL</td>
</tr>
<tr>
<td>64-17-5</td>
<td>TWA: 1900 mg/m³ (vacated) TWA: 1000 ppm</td>
<td>TWA: 1900 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Glycerin</td>
<td>TWA: 10 mg/m³ mist</td>
<td>TWA: 15 mg/m³ mist, total particulate</td>
<td></td>
</tr>
<tr>
<td>56-81-5</td>
<td>(vacated) TWA: 10 mg/m³ mist, respirable fraction</td>
<td>(vacated) TWA: 10 mg/m³ mist, total particulate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 5 mg/m³ mist, respirable fraction</td>
<td></td>
<td></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) See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Tight sealing safety goggles.

Skin and Body Protection
Wear protective gloves/clothing. Long sleeved clothing. Impervious gloves.

Respiratory Protection
No protective equipment is needed under normal use conditions. If irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Avoid contact with eyes and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State
Viscous liquid

Appearance
Clear to slightly hazy, Colorless, Viscous liquid

Color
No information available

Odor Threshold
Alcohol

Property
Values
Remarks/ Method

pH
7.0
None known

Melting/freezing point
No data available
None known

Boiling Point/Range
No data available
None known

Flash Point
23 C / 73 F
None known

Evaporation rate
No data available
None known

Flammability (solid, gas)
No data available
None known

Flammability Limits in Air

Upper flammability limit
No data available

Lower flammability limit
No data available

Vapor pressure
No data available
None known

Vapor density
No data available
None known

Specific Gravity
0.90
None known

Water Solubility
Miscible with water
None known

Solubility in other solvents
No data available
None known

Partition coefficient: n-octanol/water
No data available
None known

Autoignition temperature
No data available
None known

Decomposition temperature
No data available
None known

Kinematic viscosity
No data available
None known

Dynamic viscosity
No data available
None known

Explosive Properties
No data available

Oxidizing Properties
No data available

Softening Point
No data available

VOC Content (%)
No data available

Other Information

Particle Size
No data available

Particle Size Distribution
No data available
10. STABILITY AND REACTIVITY FOR INDUSTRIAL SETTING

Reactivity
No data available.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
None known based on information supplied.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION FOR INDUSTRIAL SETTING

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

Information on likely routes of exposure

Product Information

- **Inhalation**: May cause irritation of respiratory tract.
- **Eye Contact**: Irritating to eyes. 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
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol 64-17-5</td>
<td>-</td>
<td>-</td>
<td>= 124.7 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Glycerin 56-81-5</td>
<td>-</td>
<td>&gt; 10 g/kg (Rabbit)</td>
<td></td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
Redness of the skin. May cause redness and tearing of the eyes. Itching. Rashes. Hives. Coughing and/ or wheezing. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

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**: N/A
- **Reproductive Toxicity**: No information available.
- **STOT - single exposure**: No information available.
- **STOT - repeated exposure**: No information available.
- **Chronic Toxicity**: No information available.
- **Target Organ Effects**: Eyes, Skin.
- **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 (inhalation-dust/mist)
208.10 mg/l
12. ECOLOGICAL INFORMATION FOR INDUSTRIAL SETTING

There is no ecological data on the Product. The Product ingredients are expected to be safe for the environment at concentrations predicted under normal use and accidental spill scenarios. Packaging components are compatible with the conventional solid waste management practices.

Ecotoxicity
No information available.

Persistence and Degradability
No information available.

Bioaccumulation
No information available.

Other Adverse Effects
No information available.

13. DISPOSAL CONSIDERATIONS FOR INDUSTRIAL SETTING

Waste treatment methods

Waste Disposal Methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging
Dispose of in accordance with local regulations.

US EPA Waste Number
D001

California Hazardous Waste Codes
331

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>Toxic</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ignitable</td>
</tr>
</tbody>
</table>
### 14. TRANSPORT INFORMATION

**DOT**  
**Proper Shipping Name**  
CONSUMER COMMODITY  
**Hazard Class**  
ORM-D  
**Description**  
CONSUMER COMMODITY, ORM-D  
**Emergency Response Guide Number**  
127  
**TDG**  
**UN-No.**  
UN1170  
**Proper Shipping Name**  
ETHANOL  
**Hazard Class**  
3  
**Packing Group**  
III  
**Description**  
UN1170, ETHANOL, 3, III  
**MEX**  
**UN-No.**  
UN1170  
**Proper Shipping Name**  
ETHANOL  
**Hazard Class**  
3  
**Packing Group**  
III  
**Description**  
UN1170, ETHANOL, 3, III  
**ICAO**  
**UN-No.**  
UN1170  
**Proper Shipping Name**  
ETHANOL  
**Hazard Class**  
3  
**Packing Group**  
III  
**Description**  
UN1170, ETHANOL, 3, III  
**IATA**  
**UN-No.**  
UN1170  
**Proper Shipping Name**  
ETHANOL  
**Hazard Class**  
3  
**Packing Group**  
III  
**Description**  
UN1170, ETHANOL, 3, III  
**IMDG/IMO**  
**UN-No.**  
UN1170  
**Proper Shipping Name**  
ETHANOL SOLUTION  
**Hazard Class**  
3  
**Packing Group**  
III  
**EmS No.**  
F-E, S-D  
**Description**  
UN1170, ETHANOL SOLUTION, 3, III, (23°C C.C.)  
**RID**  
**UN-No.**  
UN1170  
**Proper Shipping Name**  
ETHANOL SOLUTION  
**Hazard Class**  
3  
**Packing Group**  
III  
**Classification code**  
F1  
**Description**  
UN1170, ETHANOL SOLUTION, 3, III  
**ADR**  
**UN-No.**  
UN1170  
**Proper Shipping Name**  
ETHANOL SOLUTION  
**Hazard Class**  
3  
**Packing Group**  
III  
**Classification code**  
F1  
**Tunnel restriction code**  
(D/E)  
**Description**  
UN1170, ETHANOL SOLUTION, 3, III  
**ADN**  
**UN-No.**  
UN1170  
**Proper Shipping Name**  
ETHANOL SOLUTION  
**Hazard Class**  
3  
**Packing Group**  
III  
**Classification code**  
F1  
**Special Provisions**  
144, 601  
**Description**  
UN1170, ETHANOL SOLUTION, 3, III  
**Limited Quantity**  
5 L  
**Ventilation**  
VE01
15. REGULATORY INFORMATION FOR INDUSTRIAL SETTING

International Inventories

TSCA Exempt
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

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

- Acute Health Hazard: No
- Chronic Health Hazard: No
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

Clean Water Act (CWA)
This product does not contain any substances regulated as pollutants pursuant to the CWA (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).

U.S. State Regulations

California Proposition 65 - NONE
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>Ethyl Alcohol 64-17-5</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerin 56-81-5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</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>Ethyl Alcohol 64-17-5</td>
<td></td>
<td>Mexico: TWA 1000 ppm</td>
</tr>
<tr>
<td>Glycerin 56-81-5</td>
<td>-</td>
<td>Mexico: TWA 1900 mg/m³</td>
</tr>
</tbody>
</table>

Canada
WHMIS Hazard Class
B2
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared By: WERCS Professional Services, LLC

23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date: January 16, 2015
Revision Date: None
Revision Note: None

General Disclaimer:
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Approved and Updated by Vi-Jon, Inc.

Disclaimer:
The information and recommendations contained in the Safety Data Sheet (SDS) are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. The information and recommendations set forth herein are presented in good faith and believed to be correct as of this date hereof.

Vi-Jon, however, makes no representation as to the completeness or accuracy thereof, and information is supplied upon the express condition that the persons receiving the information will be required to make their own determination as to its suitability for their purposes prior to use. In no event will Vi-Jon be responsible for any damages of any nature whatsoever resulting from the use of, reliance upon, or the misuse of this information.

No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, are made hereunder with respect to information or the product to which the information refers. The information as supplied herein is simply to be informative and intended solely to alert the user of the substance which is the subject matter of this SDS. The ultimate compliance with federal, state or local regulations concerning the use of this compound, or compliance with respect to product liability, rests solely upon the purchaser thereof.

End of Safety Data Sheet