**SECTION 1 - IDENTIFICATION**

Product Name: Liquid Hand Sanitizer
Product No.: 71535, 81537, 81538
Manufacturer: Rainbow Technology Corporation 1-800-637-6047
Contact: Larry Joe Steeley, Jr.
Emergency Phone No. (24 Hrs.): CHEM-TEL 1-800-255-3924

**SECTION 2: HAZARDS IDENTIFICATION**

2.1. Classification of the Substance or Mixture

Classification (GHS-US)
- Flammable Liquid 3
- Eye Irritant 2A

2.2. Hazard Pictograms:

2.3. Signal Word: WARNING

2.4. Hazard Statements:

- H226 Flammable liquid and vapor
- H319 Causes serious eye irritation

2.5. Precautionary Statements:

**Prevention:**
- P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- P233 Keep container tightly closed.
- P241 Use explosion-proof electrical, ventilating and lighting equipment
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P280 Wear eye protection & face protection.

**Response:**
P305, P351, P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337, P313 If eye irritation persists: Get medical advice/attention.

Storage:
P403, P235 Store in a well-ventilated place. Keep cool.
Disposal:
P501 Dispose of contents & container in an approved waste disposal plant.

2.6. Other Hazards: Vapors may form explosive mixture with air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1. Substance
Not applicable
3.2. Mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>&gt;80%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&lt;18.425%</td>
</tr>
<tr>
<td>Glycerin</td>
<td>56-81-5</td>
<td>&gt;1.45%</td>
</tr>
<tr>
<td>Hydrogen Peroxide</td>
<td>7722-84-1</td>
<td>&gt;0.125%</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES
First aid measures if inhaled:
Move to fresh air. Get medical attention immediately if symptoms occur. May cause allergic respiratory reaction. If breathing has stopped, contact emergency medical services immediately and give artificial respiration.
First aid measures for skin contact:
When used according to the directions, skin contact is expected. In the case of skin irritation or allergic reactions see a physician.
First aid measures in case of eye contact:
Immediately flush eyes with plenty of water for at least 15 minutes.
First aid measures if swallowed:
DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

SECTION 5: FIREFIGHTING MEASURES
5.1. Extinguishing Media
Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.
5.2. Special Hazards Arising From the Substance or Mixture
Fire hazard: Do not use a solid water stream as it may scatter and spread fire. Flash back possible over considerable distance. Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to health.
5.3. Advice for Firefighters
Protection during firefighting: Keep upwind of fire. Wear full firefighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire- exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES
6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Use personal protections recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.
6.1.1. For Non-emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).
6.1.2. For Emergency Responders
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Ventilate area.
6.2. Environmental Precautions
Prevent entry to sewers and public waters.

6.3. Methods and Material for Containment and Cleaning Up
For Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning Up: Scoop up material and place in a disposal container. Provide ventilation. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the clean-up of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4. Reference to Other Sections
See section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Additional hazards when processed. Handle empty containers with care because residual vapours are flammable. Keep away from sources of ignition - No smoking. Avoid contact with eyes. Avoid breathing vapour or mist. Handle and open container with care. Take precautionary measures against static discharge. Use only non-sparking tools. When using do not eat or drink. Use only outdoors or in a well- ventilated area.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Proper grounding procedures to avoid static electricity should be followed.


Incompatible Products: Do not store with the following product types: Strong oxidizing agents, organic peroxides, flammable solids, gas, pyrophoric liquids or solids, explosives, self-heating substances or mixtures.

7.3. Specific End Use(s)
Hand sanitizer. Keep out of the reach of children.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
Ethanol (64-17-5):

<table>
<thead>
<tr>
<th>Agency</th>
<th>Exposure Type</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>Permissible Exposure Limit – Time Weighted Average</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
<tr>
<td>OSHA</td>
<td>IDLH</td>
<td>3300 ppm (10% LEL)</td>
</tr>
<tr>
<td>ACGIH</td>
<td>Threshold Limit Value – Short Term Exposure Limit</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>Recommended Exposure Limit – Time Weighted Average</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure Controls
Appropriate Engineering Controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal Protective Equipment: Not generally required. The use of personal protective equipment may be necessary as conditions warrant.

Materials for Protective Clothing: No special protective equipment required during normal use. For large quantities, wear suitable protective clothing.

Hand Protection: No special protective equipment required during normal use. For large quantities, wear impervious gloves.
Eye Protection: No special protective equipment required during normal use. For large quantities, Chemical goggles or safety glasses.

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Other Information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.0-7.5, 100%</td>
</tr>
<tr>
<td>Relative Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>25°C</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>&gt;425°C</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Vapor Density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>0.847 at 20°C</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>7.04 lb/gal</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, Kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, Dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>3.3% - 19%</td>
</tr>
</tbody>
</table>

9.2. Other Information: No additional information available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.


10.3. Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use. Flammable liquid and vapor. Vapors may form explosive mixture with air. Can react with strong oxidizing agents.


10.5. Incompatible Materials: Oxidizing agents.

10.6. Hazardous Decomposition Products: Carbon oxides (CO, CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

Ethanol (64-17-5)

LD50 oral rat 7060 mg/kg
LC50 inhalation rat 124.7 mg/l/4h
**Safety Data Sheet (SDS)**

**Skin corrosion/irritation:** Based on available data, classification criteria are not met. Serious eye damage/irritation: Causes eye irritation.

**Respiratory or skin sensitization:** Based on available data, classification criteria are not met. Germ cell mutagenicity: May cause genetic defects.

**Carcinogenicity:** May cause cancer.

IARC group 1 - Carcinogenic to humans

**Reproductive toxicity:** May damage fertility or the unborn child.

**Specific target organ toxicity (single exposure):** Based on available data, the classification criteria are not met.

**Specific target organ toxicity (repeated exposure):** Based on available data, the classification criteria are not met.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

**Symptoms/injuries after inhalation:** No known adverse effects. May cause nausea, dizziness or vomiting if large quantities are inhaled.

**Symptoms/injuries after skin contact:** No known adverse effects. May cause slight skin irritation in sensitive individuals.

**Symptoms/injuries after eye contact:** Causes eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva

**Symptoms/injuries after ingestion:** May be harmful if swallowed in large quantities. May cause stomach distress, nausea or vomiting. Signs of alcohol intoxication.

### SECTION 12: ECOLOGICAL INFORMATION

12.1. **Toxicity:** Ecology - general: May cause long-term adverse effects in the aquatic environment.

12.2. **Persistence and degradability:** Not established

12.3. **Bio accumulative potential:** Not established.

12.4. **Mobility in soil:** No additional information available

12.5. **Other adverse effects:** Effect on the global warming: No known ecological damage caused by this product.

### SECTION 13: DISPOSAL CONSIDERATIONS

13.1. **Waste treatment methods**

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

### SECTION 14: TRANSPORT INFORMATION

14.1. **DOT: UN Number** UN1170

14.2. **UN Proper Shipping Name** Ethanol Solution, 80%

Class 3

Packing Group II

14.3. **Additional Information**

**Other information** : ERG Code - 127

**Marine Pollutant** : No

14.4. **IATA-DGR Shipping Name and Description:** UN1170 Proper Shipping name: Ethanol Solution, 80%

Class: 3

Packaging Group/CATEGORY: II

Labels: Flammable Liquids

Packing instructions (cargo aircraft): 220 L

Packing instructions (Passenger aircraft): 60 L

14.5. **IMDG-Code Shipping Name and Description:** UN1170 Proper Shipping name: Ethanol Solution, 80%

Class: 3

Packaging Group/CATEGORY: III

EmS Code F-E, S-D
SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

SARA 313

Section 313 of Title 111 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) 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.

15.2. US State Regulations

California Proposition 65 - NONE

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Ethyl Alcohol (64-17-5): Massachusetts
Glycerin (56-81-5): New Jersey, Massachusetts, Pennsylvania, Rhode Island

15.3. International Regulations

CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) 1988

CCOHS WHMIS 1988 Classification: D2B - Poisonous and infectious material Other effects - Toxic
WHMIS 1988 Health Effects Criteria Met by this Chemical: D2B - Eye irritation - toxic - other
WHMIS 1988 Ingredient Disclosure List: Included for disclosure at 0.1% or greater.

SECTION 16: OTHER INFORMATION

NFPA Diamond:

Revision date: 03/24/2020
Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

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.

SDS US (GHS HazCom) - US