SAFETY DATA SHEET

1. Identification

Product Name: Jet Liquid Hand Sanitizer
Product Code: QB-9000
SDS Date: 03/20/2020
Use: Industrial/Hand Sanitizer
Manufacturer:
Express Chem
600 West Woodbine Avenue
Kirkwood, MO 63122
www.ExpressChem.com

General Information: 314-266-4600
Emergency 24hrs CHEMTREC: 1-800-424-9300

2. Hazard(s) identification

GHS Classification
Flammable liquids (Category 2)
Eye irritation (Category 2A)

GHS Labeling
Symbols:

Signal Word: Danger
Hazard Statements:
Highly flammable liquid and vapor.
Causes serious eye irritation.

Precautionary Statements:
Causes serious eye irritation.
Keep away from heat, sparks, open flames, hot surfaces. 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.

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.

**Hazards not otherwise classified:** Not available

### 3. Composition/Information on ingredients

<table>
<thead>
<tr>
<th>No.</th>
<th>Component</th>
<th>Synonyms</th>
<th>CAS Reg#</th>
<th>Amount %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethyl Alcohol</td>
<td>ethanol; alcohol; ETOH; methyl carbinol; ethyl hydrate; grain alcohol</td>
<td>64-17-5</td>
<td>75 - 95</td>
</tr>
<tr>
<td>2</td>
<td>Tert-Butyl Alcohol</td>
<td>TBA, 2-Methyl-2-propanol, Trimethyl carbinol, tert-Butyl alcohol</td>
<td>75-65-0</td>
<td>&lt;1^1</td>
</tr>
<tr>
<td>3</td>
<td>Denatonium Benzoate</td>
<td>N,N-Diethyl-N-[(2,6 dimethyl[phenylcarbamoyl]methyl] benzylammonium benzoate, Benzylidiethyl (2,6-xylylcarbamoylmethyl) ammonium benzoate</td>
<td>3734-33-6</td>
<td>&lt;1^1</td>
</tr>
<tr>
<td>4</td>
<td>Glycerine 99.5 % USP^1</td>
<td>glycerol</td>
<td>56-81-5</td>
<td>1.5 - 2.5</td>
</tr>
<tr>
<td>5</td>
<td>Hydrogen Peroxide 35%</td>
<td>H₂O₂</td>
<td>7722-84-1</td>
<td>&lt;1^1</td>
</tr>
<tr>
<td>6</td>
<td>Water ^1</td>
<td>H₂O</td>
<td>7732-18-5</td>
<td>15 - 25</td>
</tr>
</tbody>
</table>

1. This component is NOT classified as hazardous according to the criteria contained in the Hazard Communication Standard 29 CFR 1910.1200.

### 4. First-aid measures

<table>
<thead>
<tr>
<th>General Advice</th>
<th>If symptom are experienced. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.</th>
</tr>
</thead>
<tbody>
<tr>
<td>If Inhaled</td>
<td>If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.</td>
</tr>
<tr>
<td>In Case of Skin Contact</td>
<td>If irritation is experienced, flush with water. If irritation persists, get medical attention.</td>
</tr>
<tr>
<td>In Case of Eye Contact</td>
<td>Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.</td>
</tr>
<tr>
<td>If Swallowed</td>
<td>Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.</td>
</tr>
</tbody>
</table>
5. Fire-fighting measures

**Suitable Extinguishing Media:** Use methods appropriate for the surrounding fire. Consider water spray or fog, carbon dioxide, dry chemical powder, or alcohol resistant foam.

**Products of Combustion:** Upon decomposition this product may emit carbon dioxide, carbon monoxide, and/or low molecular weight hydrocarbons.

**Fire Fighting Equipment/Instructions:** Wear protective clothing and equipment suitable for the surrounding fire, including helmet, facemask, and self-contained breathing apparatus.

**Further Information:** Use water spray to cool unopened containers.

6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

7. Handling and storage

**Safe Handling**

Avoid contact with eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

**Safe Storage**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Hygroscopic.

8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>No.</th>
<th>Component</th>
<th>CAS Reg#</th>
<th>OOSHA TWA = 1000 ppm</th>
<th>OSHA STEL = Not Available</th>
<th>ACGIH TWA = 1000 ppm</th>
<th>ACGIH STEL = Not Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Engineering Control**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Eye/Face Protection**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, State</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor Density (Ethyl Alcohol)</td>
<td>1.6</td>
</tr>
<tr>
<td>Boiling Point (Ethyl Alcohol)</td>
<td>78.5°C</td>
</tr>
<tr>
<td>Vapor Pressure (Ethyl Alcohol)</td>
<td>57.3 hPa at 20°C</td>
</tr>
<tr>
<td>Melting Point (Ethyl Alcohol)</td>
<td>-114.1°C</td>
</tr>
<tr>
<td>Freezing Point (Ethyl Alcohol)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>21°C (69.8°F)</td>
</tr>
<tr>
<td>Auto-ignition Temperature (Ethyl Alcohol)</td>
<td>363°C (685.4°F)</td>
</tr>
<tr>
<td>Lower Explosion Limit (Ethyl Alcohol)</td>
<td>3.3%</td>
</tr>
<tr>
<td>Upper Explosion Limit (Ethyl Alcohol)</td>
<td>19.0%</td>
</tr>
<tr>
<td>Flammability Classification</td>
<td>Class IB Flammable Liquid</td>
</tr>
<tr>
<td>Solubility (in water)</td>
<td>Soluble</td>
</tr>
<tr>
<td>Specific Gravity (Ethyl Alcohol)</td>
<td>0.78-0.8</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Available</td>
</tr>
<tr>
<td>Octanol/Water partition coefficient (Kow) (Ethyl Alcohol)</td>
<td>.32</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Vapors may form explosive mixtures with air.

Conditions to Avoid: Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials: Alkali metals, oxidizing agents, peroxides.

11. Toxicological Information

Hazardous Decomposition Products: Not Available.

ACUTE EFFECTS:

Analysis LD50
Ethyl Alcohol (64-17-5) Oral LD50 Rat: 7060 mg/kg

CHRONIC EFFECTS:
Ethyl Alcohol (64-17-5)

Carcinogenic Effects: A4 - Not classifiable for human or animal by ACGIH.

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available.

Developmental Toxicity: Ethyl alcohol is a developmental toxin when consumed during pregnancy Target Organs: When consumed, ethyl alcohol can target the respiratory system, skin, eyes, CNS, liver, blood, and reproductive system.

Inhalation: May cause irritation to the mucous membranes of the upper respiratory tract. Exposure over 1000 ppm may cause headache, drowsiness, lassitude, loss of appetite, inability to concentrate, throat irritation

Ingestion: Can cause depression of Central Nervous System, nausea, vomiting, diarrhea, intoxication, and in acute cases, death

Eye: Liquid and vapor may cause irritation. Splashes may cause temporary pain and blurred vision

Skin: May cause irritation, cracking, flaking, and defatting of skin on prolonged contact

Chronic Exposure: Prolonged skin contact causes drying and cracking of skin. May affect nervous system, liver, blood, reproductive system.

Signs and Symptoms: Headache, drowsiness, lassitude, loss of appetite, inability to concentrate, irritation of throat/eye/skin, depression of central nervous system, nausea, vomiting, diarrhea, skin defatting.

12. Ecological information

Ecotoxicity: Ethyl Alcohol (64-17-5)

96 hour LC50 Oncorhynchus mykiss: 12,900 mg/L (flow-through) (30days old)
96 hour LC50 Pimephales promelas 14.2 mg/L
5 min EC50 Photobacterium phosphoreum: 35,470 mg/L
30 min EC50 Photobacterium phosphoreum: 34,634 mg/L

13. Disposal considerations

Dispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information

Proper Shipping Name: Flammable Liquids, n.o.s.
Hazard Class: 3
Identification No.: UN1993
Packing Group: II
Label: Flammable Liquid

15. Regulatory Information

TSCA Inventory This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

SARA 302/304 The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

CERCLA The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product or refinery stream that may be subject to this statute are: No components were identified.

SARA 311/312 Hazard The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories: fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard.

16. Other Information, including date of preparation or last revision

SDS Revision Date: 03/24/2020 by Express Chem

<table>
<thead>
<tr>
<th>HAZARD</th>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fire</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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