1. IDENTIFICATION

Product Identifier
Product Name: Hand Sanitizer

Other means of identification
SDS # 
Item: M-05029, M-05025, M-05027

Recommended use of the chemical and restrictions on use
Recommended Use: Hand Sanitizer

Details of the supplier of the safety data sheet
Supplier Address: ASHBURN CHEMICAL TECHNOLOGIES
7403 Wright Rd
Houston, TX 77041

Emergency Telephone Number
Company Phone Number: 832-399-1000
Emergency Telephone (24 hr): INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance: clear, colorless
Physical State: Liquid
Odor: alcohol-like

Classification

<table>
<thead>
<tr>
<th>Flammable liquid</th>
<th>Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye irritation</td>
<td>Category 2A</td>
</tr>
</tbody>
</table>

Signal Word
Warning

Hazard Statements
H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
Precautionary Statements - Prevention
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective eye protection/ face protection

Precautionary Statements - Response
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 Wash contaminated clothing before reuse.
P312: Call a poison center or doctor/physician if you feel unwell.
P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P305+P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P338 Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention

Precautionary Statements - Storage
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P235 Keep cool
P405 Store locked up

Precautionary Statements - Disposal
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Unknown Acute Toxicity No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name (and synonyms)</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol (Ethanol)</td>
<td>64-17-5</td>
<td>74 - 84</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact If in eyes, rinse slowly and gently with water for 15–20 minutes. If present, remove contact lenses. Call a poison control center or doctor for further treatment advice.

Skin Contact Not applicable

Ingestion Do not induce vomiting. Call a doctor or poison control center.

Inhalation Move to fresh air. If breathing problems develop, call a doctor.

Most important symptoms and effects (acute and delayed)
Symptoms
Not expected to present a significant hazard under anticipated conditions of normal use

Inhalation
No known significant effects or critical hazards.

Eye Contact
May cause slight irritation

Skin Contact
No known significant effects or critical hazards.

Ingestion
No known significant effects or critical hazards.

Notes to physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Dry chemical, carbon dioxide (CO2), foam, or water spray

Specific Hazards Arising from the Chemical
Alcohol flames may not be readily visible. Vapors are heavier than air and may travel to source of ignition and flash back.

Hazardous Combustion Products:
Oxides of carbon

Protective equipment and precautions for firefighters
Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion.

NFPA Flammable and Combustible Liquids Classification:
Flammable liquid Class IB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
See section 2 for “Precautionary Statement-Prevention”. See section 8 for Personal Protection.

Environmental Precautions
Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so. Absorb or cover with dry earth, sand or other non-combustible material. Do not let chemical enter drains

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid breathing fumes, vapors, mists, spray. Use only with adequate ventilation. Avoid contact with eyes.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed and store in a dry and well-ventilated place away from heat sources, ignition sources, and open flame. Do not store in open or unlabeled containers. Storage temperature 15-30°C (59-86°F)

Incompatible Materials
See section 10

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Exposure Guidelines

Ethyl Alcohol CAS# 64-17-5

ACGIH TWA: 1000 ppm (TVL)
ACGIH STEL: 1000 ppm (short-term exposure limit)
OSHA TWA: 1900 mg/m³; 1000 ppm (limits for air contaminants)

Appropriate engineering controls

Engineering Controls
Maintain eye wash fountain and quick-drench facilities in work area.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
None required for consumer use. If splashes are likely to occur, wear safety glasses.

Skin and Body Protection
No special protective equipment required.

Respiratory Protection
No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Liquid
Appearance: Colorless
Odor: Alcohol-like
Odor Threshold: No data available

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>5 - 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>-144.0 °C (-227.2 °F)</td>
<td>(at 760 mm Hg)</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>78-80°C / 172.4-176°F</td>
<td>Pensky-Martens Closed Cup (PMCC)</td>
<td>(butyl acetate = 1)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>20°C / 68 °F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt; 1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Explosion Limits</td>
<td>19%(V)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Explosion Limit</td>
<td>3.3%(V)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>59.5 hPa @ 20°C</td>
<td>(Air=1)</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
<td>(1=Water)</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>~0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
<td>n-octanol/water</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>363.0°C (685.4°F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: Stable
Chemical Stability: Stable under recommended storage conditions.
11. TOXICOLOGICAL INFORMATION

Component Information

Information on physical, chemical and toxicological effects

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity
Not classified

Reproductive toxicity
No data available.

Aspiration hazard
No data available

Specific target organ toxicity- Repeated Exposure
No data available

Numerical measures of toxicity
Not determined

12. ECOLOGICAL INFORMATION

Component Information

Persistence/Degradability
No information available

Bioaccumulation
No information available

Mobility
No information available

Other Adverse Effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION

International Inventories- Notification Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethyl alcohol</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**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).

**SARA 311/312 Hazard Categories**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**SARA 313** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**US State Right-To-Know Regulations** ETHYL ALCOHOL CAS# 64-17-5

<table>
<thead>
<tr>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>x</td>
<td>X</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Issue Date: March 27, 2020 – Creation date for SDS
Revision Date: April 3, 2020 - Updated formula

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 a 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.

End of Safety Data Sheet