1. IDENTIFICATION

Product Identifier
Product Name Symmetry Foaming Hand Sanitizer

Other means of identification
SDS # BE-9005
UN/ID No UN1170
Product Code 9005

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

Details of the supplier of the safety data sheet
Supplier Address
Buckeye International, Inc.
2700 Wagner Place
Maryland Heights, MO 63043 USA

Emergency Telephone Number
Company Phone Number 1-651-632-8956 (International)
(Medical) 1-800-303-0441 (North America)
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
(Transportation) 1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid
Physical State Liquid
Odor Fruity Floral

Classification

Flammable Liquids Category 3

Signal Word
Warning

Hazard Statements
Flammable liquid and vapor
Precautionary Statements - Prevention
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed

Precautionary Statements - Response
IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

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

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>64-17-5</td>
<td>65.26</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt;30.74</td>
</tr>
<tr>
<td>Polydimethylsiloxane</td>
<td>63148-62-9</td>
<td>&lt;3</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation persists.

Skin Contact
If skin irritation occurs, rinse affected area with water.

Inhalation
Remove to fresh air.

Ingestion
Drink 2-3 large glasses of water. Do not induce vomiting. Call a physician. Never give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms
Contact may cause irritation and redness.

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.

Unsuitable Extinguishing Media  Not determined.

Specific Hazards Arising from the Chemical
Flammable due to alcohol content.

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

Personal precautions, protective equipment and emergency procedures

Personal Precautions  Use personal protective equipment as required. Spills may be slippery.

Environmental Precautions  Collect spillage.

Methods and material for containment and cleaning up

Methods for Containment  Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up  Pick up with mop, wet/dry vac, or absorbent material. Rinse area with clear water and allow floor to dry before allowing traffic.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling  Keep out of the reach of children. Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Conditions for safe storage, including any incompatibilities

Storage Conditions  Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from heat, sparks, flame. Keep container closed when not in use. Store at room temperature. Keep from freezing.

Incompatible Materials  Chlorine bleach.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<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</td>
</tr>
<tr>
<td>64-17-5</td>
<td>TWA: 1900 mg/m³ (vacated)</td>
<td>TWA: 1000 ppm</td>
<td>TWA: 1900 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls

Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

When using product, do not rub eyes.

Skin and Body Protection

No special technical protective measures are necessary.

Respiratory Protection

No protective equipment is needed under normal use conditions.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Fruity Floral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>78 °C / 172 °F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>23 °C / 74 °F</td>
<td>CC (closed cup)</td>
<td>(Water = 1)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&gt; 1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>n/a-liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Infinite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</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
Not reactive under normal conditions.

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
Chlorine bleach.

Hazardous Decomposition Products
None under normal use conditions.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
Product does not present an acute toxicity hazard based on known or supplied information

Eye Contact
Avoid contact with eyes.

Skin Contact
Not expected to be a skin irritant during prescribed use.

Inhalation
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Ingestion
Do not taste or swallow.

Component Information

<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</td>
<td>64-17-5</td>
<td>= 7060 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Polydimethylsiloxane</td>
<td>63148-62-9</td>
<td>&gt; 17 g/kg (Rat)</td>
<td>&gt; 2 g/kg (Rabbit)</td>
</tr>
</tbody>
</table>

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**

Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol 64-17-5</td>
<td>A3</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
</tr>
</tbody>
</table>

**Legend**

- **ACGIH (American Conference of Governmental Industrial Hygienists)**
  - A3 - Animal Carcinogen
- **IARC (International Agency for Research on Cancer)**
  - Group 1 - Carcinogenic to Humans
- **NTP (National Toxicology Program)**
  - Known - Known Carcinogen
- **OSHA (Occupational Safety and Health Administration of the US Department of Labor)**
  - X - Present

**Numerical measures of toxicity**

Not determined

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol 64-17-5</td>
<td>12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through</td>
<td>EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min</td>
<td>9268 - 14221: 48 h Daphnia magna mg/L LC50 10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static</td>
<td></td>
</tr>
</tbody>
</table>

**Persistence/Degradability**

Not determined

**Bioaccumulation**

Not determined

**Mobility**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol 64-17-5</td>
<td>-0.32</td>
</tr>
</tbody>
</table>

**Other Adverse Effects**

Not determined
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.

California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol 64-17-5</td>
<td>Toxic Ignitable</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1170</td>
<td>Ethanol solution</td>
<td>3</td>
<td>III</td>
</tr>
</tbody>
</table>

IATA

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1170</td>
<td>Ethanol solution</td>
<td>3</td>
<td>III</td>
</tr>
</tbody>
</table>

IMDG

<table>
<thead>
<tr>
<th>UN/ID No</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN1170</td>
<td>Ethanol solution</td>
<td>3</td>
<td>III</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

International Inventories
Not determined

US Federal Regulations

SARA 313
Not determined

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol - 64-17-5</td>
<td>Carcinogen/Developmental</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Alcohol</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>64-17-5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NFPA**
- Health Hazards: 0
- Flammability: 3
- Instability: 0
- Special Hazards: Not determined

**HMIS**
- Health Hazards: Not determined
- Flammability: Not determined
- Physical Hazards: Not determined
- Personal Protection: Not determined

**Issue Date**: 27-Dec-2011
**Revision Date**: 18-Oct-2013
**Revision Note**: New format

**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