SAFETY DATA SHEET

LIQUID HAND SOAP

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : LIQUID HAND SOAP
Other means of identification : Not applicable
Recommended use : Skin-care
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : Product is sold ready to use.
Company : Ecolab Inc.
370 N. Wabasha Street
St. Paul, Minnesota USA 55102
1-800-352-5326
Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)
Issuing date : 03/28/2016

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Eye irritation : Category 2A

GHS label elements
Hazard pictograms :

Signal Word : Warning
Hazard Statements : Causes serious eye irritation.
Precautionary Statements : 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.

Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium poly(oxyethylene) dodecyl ether sulfate</td>
<td>68585-34-2</td>
<td>1 - 5</td>
</tr>
<tr>
<td>sodium chloride</td>
<td>7647-14-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>glycerin</td>
<td>56-81-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Alkylamidopropylbetaines</td>
<td>61789-40-0</td>
<td>1 - 5</td>
</tr>
<tr>
<td>sulfuric acid, mono-c10-16-alkyl esters, sodium</td>
<td>68585-47-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>salts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>
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SECTION 4. FIRST AID MEASURES

In case of eye contact: Rinse with water.
In case of skin contact: Rinse with water.
If swallowed: Rinse mouth. Get medical attention if symptoms occur.
If inhaled: Get medical attention if symptoms occur.
Protection of first-aiders: No special precautions are necessary for first aid responders.
Notes to physician: Treat symptomatically.
Most important symptoms and effects, both acute and delayed: See Section 11 for more detailed information on health effects and symptoms.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media: None known.
Specific hazards during fire fighting: Not flammable or combustible.
Hazardous combustion products: Decomposition products may include the following materials:
- Carbon oxides
- Nitrogen oxides (NOx)
- Sulfur oxides
- Oxides of phosphorus
Special protective equipment for fire-fighters: Use personal protective equipment.
Specific extinguishing methods: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
Environmental precautions: Do not allow contact with soil, surface or ground water.
Methods and materials for containment and cleaning up: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.
**SECTION 7. HANDLING AND STORAGE**

Advice on safe handling: No special handling advice required.

Conditions for safe storage: Keep out of reach of children. Store in suitable labeled containers.

Storage temperature: 0 °C to 50 °C

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Ingredients with workplace control parameters**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Form of exposure</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>glycerin</td>
<td>56-81-5</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable fraction)</td>
<td>5 mg/m³</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>ethanol</td>
<td>64-17-5</td>
<td>TWA</td>
<td>1,000 ppm 1,900 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm 1,900 mg/m³</td>
<td>OSHA Z1</td>
</tr>
</tbody>
</table>

Engineering measures: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Personal protective equipment**

Eye protection: No special protective equipment required.

Hand protection: No special protective equipment required.

Skin protection: No special protective equipment required.

Respiratory protection: No personal respiratory protective equipment normally required.

Hygiene measures: No specific measures identified.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: liquid

Color: clear, pink

Odor: Perfumes, fragrances

pH: 6.0 - 8.0, 100 %

Flash point: Not applicable, Does not sustain combustion.

Odor Threshold: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: > 100 °C

Evaporation rate: No data available

Flammability (solid, gas): No data available
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## LIQUID HAND SOAP

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.025 - 1.045</td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>774.338 mm²/s (40 °C)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>The substance or mixture is not classified as oxidizing.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No data available</td>
</tr>
<tr>
<td>VOC</td>
<td>No data available</td>
</tr>
</tbody>
</table>

## SECTION 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>No dangerous reaction known under conditions of normal use.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>None known.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>None known.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus</td>
</tr>
</tbody>
</table>

## SECTION 11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information on likely routes of exposure</td>
<td>Inhalation, Eye contact, Skin contact</td>
</tr>
</tbody>
</table>

### Potential Health Effects

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Health Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eyes</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Skin</td>
<td>Health injuries are not known or expected under normal use.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Health injuries are not known or expected under normal use.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Health injuries are not known or expected under normal use.</td>
</tr>
<tr>
<td>Chronic Exposure</td>
<td>Health injuries are not known or expected under normal use.</td>
</tr>
</tbody>
</table>
Experience with human exposure

Eye contact : Redness, Pain, Irritation
Skin contact : No symptoms known or expected.
Ingestion : No symptoms known or expected.
Inhalation : No symptoms known or expected.

Toxicity

Product
Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Acute inhalation toxicity : No data available
Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg
Skin corrosion/irritation : No data available
Serious eye damage/eye irritation : No data available
Respiratory or skin sensitization : No data available
Carcinogenicity : No data available
Reproductive effects : No data available
Germ cell mutagenicity : No data available
Teratogenicity : No data available
STOT-single exposure : No data available
STOT-repeated exposure : No data available
Aspiration toxicity : No data available

Ingredients
Acute inhalation toxicity : ethanol
4 h LC50 Rat: 117 mg/l

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
Environmental Effects : Harmful to aquatic life.

Product
Toxicity to fish : No data available
Toxicity to daphnia and other aquatic invertebrates : No data available
Toxicity to algae : No data available

Ingredients
Toxicity to fish : Sodium poly(oxyethylene) dodecyl ether sulfate
96 h LC50 Fish: 28 mg/l
sodium chloride
96 h LC50 Fish: 5,840 mg/l
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Ingredients
- glycerin
  96 h LC50 Fish: 855 mg/l
- Alkylamidopropylbetaines
  96 h LC50 Fish: 2 mg/l
- ethanol
  96 h LC50 Pimephales promelas (fathead minnow): > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates:
- sulfuric acid, mono-c10-16-alkyl esters, sodium salts
  48 h EC50 Daphnia: 1.37 mg/l

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods:
- Do not contaminate ponds, waterways or ditches with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations:
- Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)
Not dangerous goods

Sea transport (IMDG/IMO)
Not dangerous goods

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards**
- Acute Health Hazard

**SARA 302**
- No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**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.

**California Prop 65**
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

- **1907/2006 (EU)**: not determined
- **Switzerland. New notified substances and declared preparations**: not determined
- **United States TSCA Inventory**: On TSCA Inventory
- **Canadian Domestic Substances List (DSL)**: All components of this product are on the Canadian DSL
- **Australia Inventory of Chemical Substances (AICS)**: On the inventory, or in compliance with the inventory
- **New Zealand. Inventory of Chemical Substances**: On the inventory, or in compliance with the inventory
- **Japan. ENCS - Existing and New Chemical Substances Inventory**: not determined
- **Japan. ISHL - Inventory of Chemical Substances (METI)**: not determined
- **Korea. Korean Existing Chemicals Inventory (KECI)**: On the inventory, or in compliance with the inventory
- **Philippines Inventory of Chemicals and Chemical Substances (PICCS)**: On the inventory, or in compliance with the inventory
- **China. Inventory of Existing Chemical Substances in China (IECSC)**: On the inventory, or in compliance with the inventory

**SECTION 16. OTHER INFORMATION**
SAFETY DATA SHEET
LIQUID HAND SOAP

Issuing date: 03/28/2016
Version: 1.1
Prepared by: Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material 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.