SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : S&S SANITIZER
Other means of identification : Not applicable
Recommended use : Sanitizer
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : 0.22 % - 1.24 %

Company : Ecolab Inc.
1 Ecolab Place
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 : 10/17/2019

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Product AS SOLD
Skin corrosion : Category 1A
Serious eye damage : Category 1

Product AT USE DILUTION
Eye irritation : Category 2B

GHS label elements
Product AS SOLD
Hazard pictograms : 

Signal Word : Danger
Hazard Statements : Causes severe skin burns and eye damage.
Precautionary Statements : Prevention:
Do not get in eyes, on skin, or on clothing. Wear protective gloves/ protective clothing/ eye protection/ face protection. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.
Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash
contaminated clothing before reuse.

**Storage:**
Store locked up.

**Disposal:**
Dispose of contents/ container to an approved waste disposal plant.

### Product AT USE DILUTION

<table>
<thead>
<tr>
<th>Hazard Statements</th>
<th>: Causes eye irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautionary Statements</td>
<td>Prevention: Wear protective gloves/ protective clothing/ eye protection/ face protection. Do not eat, drink or smoke when using this product.</td>
</tr>
<tr>
<td></td>
<td>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. Wash contaminated clothing before reuse.</td>
</tr>
</tbody>
</table>

### Product AS SOLD

| Other hazards | : Do not mix with bleach or other chlorinated products – will cause chlorine gas. |

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Product AS SOLD

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactic acid</td>
<td>79-33-4</td>
<td>34.1</td>
</tr>
<tr>
<td>Dodecylbenzenesulfonic Acid</td>
<td>68584-22-5</td>
<td>12.8</td>
</tr>
<tr>
<td>methanesulphonic acid</td>
<td>75-75-2</td>
<td>5 - 10</td>
</tr>
<tr>
<td>oxirane, methyl-, polymer with oxirane</td>
<td>9003-11-6</td>
<td>1 - 5</td>
</tr>
<tr>
<td>sulfuric acid</td>
<td>7664-93-9</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

#### Product AT USE DILUTION

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactic acid</td>
<td>79-33-4</td>
<td>0.42</td>
</tr>
<tr>
<td>Dodecylbenzenesulfonic Acid</td>
<td>68584-22-5</td>
<td>0.18</td>
</tr>
</tbody>
</table>

### SECTION 4. FIRST AID MEASURES

#### Product AS SOLD

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact: Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

Protection of first-aiders: If potential for exposure exists refer to Section 8 for specific personal
SAFETY DATA SHEET

S&S SANITIZER

protective equipment.

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.

Product AT USE DILUTION

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD

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
Sulfur oxides

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

Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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.
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Product AT USE DILUTION
Personal precautions, protective equipment and emergency procedures

Personal precautions, protective equipment and emergency procedures:
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

Product AS SOLD
Advice on safe handling:
Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

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

Storage temperature:
5 °C to 40 °C

Product AT USE DILUTION
Advice on safe handling:
Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

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

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD
Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Form of exposure</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>sulphuric acid</td>
<td>7664-93-9</td>
<td>TWA (Thoracic fraction)</td>
<td>0.2 mg/m3</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1 mg/m3</td>
<td>OSHA Z1</td>
</tr>
</tbody>
</table>

Engineering measures:
Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection:
Wear eye protection/ face protection.

Hand protection:
Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of
degradation or chemical breakthrough.

Skin protection: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

**Product AT USE DILUTION**

**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.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>clear, red</td>
<td>light red</td>
</tr>
<tr>
<td>Odor</td>
<td>sweet</td>
<td>sweet</td>
</tr>
<tr>
<td>pH</td>
<td>1.8 - 3.0, (1 %)</td>
<td>1.9 - 3.0</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.128 - 1.138</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>
octanol/water
Autoignition temperature : No data available
Thermal decomposition : No data available
Viscosity, kinematic : No data available
Explosive properties : No data available
Oxidizing properties : The substance or mixture is not classified as oxidizing.
Molecular weight : No data available
VOC : No data available

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD
Reactivity : No dangerous reaction known under conditions of normal use.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid : None known.
Incompatible materials : Chlorine-based bleaching agents
Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
Carbon oxides
Sulfur oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Product AS SOLD
Eyes : Causes serious eye damage.
Skin : Causes severe skin burns.
Ingestion : Causes digestive tract burns.
Inhalation : May cause nose, throat, and lung irritation.
Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION
Eyes : Causes eye irritation.
Skin : Health injuries are not known or expected under normal use.
Ingestion : Health injuries are not known or expected under normal use.
Inhalation : Health injuries are not known or expected under normal use.
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Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

**Product AS SOLD**

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Redness, Pain, Corrosion</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Redness, Pain, Corrosion</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Corrosion, Abdominal pain</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Respiratory irritation, Cough</td>
</tr>
</tbody>
</table>

**Product AT USE DILUTION**

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Redness, Irritation</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No symptoms known or expected.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No symptoms known or expected.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No symptoms known or expected.</td>
</tr>
</tbody>
</table>

Toxicity

**Product AS SOLD**

<table>
<thead>
<tr>
<th>Toxicity Type</th>
<th>Estimate/Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>Acute toxicity estimate: 2,862 mg/kg</td>
</tr>
<tr>
<td>Acute inhalation toxicity</td>
<td>4 h Acute toxicity estimate: 13.1 mg/l</td>
</tr>
<tr>
<td></td>
<td>Test atmosphere: dust/mist</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>Acute toxicity estimate: &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>No data available</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>No data available</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Reproductive effects</td>
<td>No data available</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>No data available</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>No data available</td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**SECTION 12. ECOLOGICAL INFORMATION**

**Product AS SOLD**

<table>
<thead>
<tr>
<th>Ecotoxicity Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Effects</td>
<td>This product has no known ecotoxicological effects.</td>
</tr>
</tbody>
</table>

**Product**

<table>
<thead>
<tr>
<th>Ecotoxicity Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td>No data available</td>
</tr>
<tr>
<td>Toxicity to daphnia and other aquatic invertebrates</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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Toxicity to algae : No data available

Components
Toxicity to fish : Lactic acid
96 h LC50 Fish: 130 mg/l

Dodecylbenzenesulfonic Acid
96 h LC50 Fish: 5.07 mg/l

oxirane, methyl-, polymer with oxirane
96 h LC50 Fish: > 100 mg/l

sulfuric acid
96 h LC50: 22 mg/l

Components
Toxicity to daphnia and other aquatic invertebrates : methanesulphonic acid
48 h EC50 Daphnia: 70 mg/l

Persistence and degradability
Product AS SOLD
Not applicable - Biocide

Product AT USE DILUTION
Not applicable - Biocide

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD
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.

Product AT USE DILUTION
Disposal methods : Diluted product can be flushed to sanitary sewer.

Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION
SAFETY DATA SHEET

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Product AS SOLD

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)

<table>
<thead>
<tr>
<th>UN number</th>
<th>Description of the goods</th>
<th>Class</th>
<th>Packing group</th>
<th>Environmentally hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>3265</td>
<td>Corrosive liquid, acidic, organic, n.o.s. (methanesulphonic acid)</td>
<td>8</td>
<td>II</td>
<td>no</td>
</tr>
</tbody>
</table>

Sea transport (IMDG/IMO)

<table>
<thead>
<tr>
<th>UN number</th>
<th>Description of the goods</th>
<th>Class</th>
<th>Packing group</th>
<th>Marine pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>3265</td>
<td>CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (methanesulphonic acid)</td>
<td>8</td>
<td>II</td>
<td>no</td>
</tr>
</tbody>
</table>

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

EPA Registration number : 1677-260

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 : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

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.

California Cleaning Product Right to Know Act of 2017 (SB 258)
This regulation applies to this product.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Function</th>
<th>List(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>Diluent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Lactic acid</td>
<td>79-33-4</td>
<td>Biocide</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>dodecylbenzene sulfonic acid</td>
<td>27176-87-0</td>
<td>Biocide</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>methanesulphonic acid</td>
<td>75-75-2</td>
<td>Buffer</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>oxirane, methyl-, polymer with</td>
<td>9003-11-6</td>
<td>Cleaning Agent</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Not Applicable</th>
<th>Dye</th>
<th>Withheld</th>
<th>oxirane</th>
</tr>
</thead>
</table>

*refer to ecolab.com/sds for electronic links to designated lists

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

**United States TSCA Inventory**: All substances listed as active on the 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**: not determined

**Japan. ENCS - Existing and New Chemical Substances Inventory**: 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

**Taiwan Chemical Substance Inventory (TCSI)**: On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION

**Product AS SOLD**

**NFPA:**

- **Health:** 3
- **Flammability:** 0
- **Special hazard:** 0

**HMIS III:**

- **HEALTH:** 3
- **FLAMMABILITY:** 0
- **PHYSICAL HAZARD:** 0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

**Product AT USE DILUTION**

919871 10 / 11
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 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.