SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : STER-BAC QUAT
Other means of identification : Not applicable
Recommended use : Sanitizer
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : US EPA not tested, refer to product label when applying this product.
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 : 02/03/2020

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Acute toxicity (Oral) : Category 3
Acute toxicity (Inhalation) : Category 3
Acute toxicity (Dermal) : Category 4
Skin corrosion : Category 1C
Serious eye damage : Category 1

GHS label elements
Hazard pictograms :

Signal Word : Danger
Hazard Statements : Toxic if swallowed or if inhaled. Harmful in contact with skin. Causes severe skin burns and eye damage.
Precautionary Statements : Prevention:
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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
SAFETY DATA SHEET

STER-BAC QUAT

clothing before reuse.

Storage:
Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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

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>Didecyl dimethyl ammonium carbonate</td>
<td>148788-55-0</td>
<td>3.75</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium bicarbonate</td>
<td>148812-65-1</td>
<td>3.75</td>
</tr>
<tr>
<td>methanol</td>
<td>67-56-1</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

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 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.

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)
SAFETY DATA SHEET

STER-BAC QUAT

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 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.

SECTION 7. HANDLING AND STORAGE

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.

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:
Contains no substances with occupational exposure limit values.

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

Personal protective equipment:

Eye protection:
Safety goggles
Face-shield

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th></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, light yellow</td>
<td>clear, light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>aromatic</td>
<td>aromatic</td>
</tr>
<tr>
<td>pH</td>
<td>6.0 - 10.0, (100 %)</td>
<td>6.0 - 10.0, (100 %)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable, Does not sustain combustion.</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>100 °C</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>0.98 - 1.0</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-octanol/water</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>The substance or mixture is not classified as oxidizing.</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No data available</td>
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<tr>
<td>VOC</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.
### SAFETY DATA SHEET

**STER-BAC QUAT**

<table>
<thead>
<tr>
<th>Chemical stability</th>
<th>Stable under normal conditions.</th>
</tr>
</thead>
<tbody>
<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

**Information on likely routes of exposure**

Inhalation, Eye contact, Skin contact

**Potential Health Effects**

**Eyes**

Causes serious eye damage.

**Skin**

Harmful in contact with 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.

**Experience with human exposure**

**Eye contact**

Redness, Pain, Corrosion

**Skin contact**

Redness, Pain, Corrosion

**Ingestion**

Corrosion, Abdominal pain

**Inhalation**

Respiratory irritation, Cough

**Toxicity**

**Product**

**Acute oral toxicity**

No data available

**Acute inhalation toxicity**

No data available

**Acute dermal toxicity**

No data available

**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
SAFETY DATA SHEET

STER-BAC QUAT

<table>
<thead>
<tr>
<th>Germ cell mutagenicity</th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<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>
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**Components**

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<thead>
<tr>
<th>Acute oral toxicity</th>
<th>Didecyl dimethyl ammonium carbonate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LD50 Rat: 245 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acute dermal toxicity</th>
<th>Didecyl dimethyl ammonium bicarbonate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LD50 Rat: 245 mg/kg</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>Didecyl dimethyl ammonium carbonate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96 h LC50 Fish: 0.73 mg/l</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>Didecyl dimethyl ammonium bicarbonate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96 h LC50 Fish: 0.73 mg/l</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>Methanol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96 h LC50: 15,400 mg/l</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>Methanol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48 h EC50: &gt; 10,000 mg/l</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>Toxicity to algae</th>
<th>Methanol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72 h EC50: 22,000 mg/l</td>
</tr>
</tbody>
</table>

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Environmental Effects**

This product has no known ecotoxicological effects.

**Product**

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

**Components**

<table>
<thead>
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</thead>
<tbody>
<tr>
<td></td>
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<tr>
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<th>Methanol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
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<th>Toxicity to algae</th>
<th>Methanol</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72 h EC50: 22,000 mg/l</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

Not applicable - Biocide
SAFETY DATA SHEET

STER-BAC QUAT

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 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.

**Product AT USE DILUTION**
Attempt to use product completely in accordance with intended use. Dispose of diluted product 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

**EPA Registration number**: 1677-231

**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
WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

California Cleaning Product Right to Know Act of 2017 (SB 258)
This regulation does not apply to this product.

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

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):
not determined

New Zealand Inventory of Chemical Substances:
not determined

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):
not determined

Philippines Inventory of Chemicals and Chemical Substances (PICCS):
not determined

China. Inventory of Existing Chemical Substances in China (IECSC):
not determined

SECTION 16. OTHER INFORMATION

NFPA:

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Health</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS III:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Issuing date: 02/03/2020
Version: 1.3
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 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.