SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : TRISTAR CHLORLITE
Other means of identification : Not applicable
Recommended use : Bleach
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : 0.05 % - 0.14 %

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 : 12/18/2019

SECTION 2. HAZARDS IDENTIFICATION

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

Product AT USE DILUTION
Skin corrosion : Category 1A
Serious eye damage : Category 1

GHS label elements
Product AS SOLD
Hazard pictograms : 

Signal Word : Danger
Hazard Statements : Causes severe skin burns and eye damage.
Precautionary Statements : Prevention:
Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.
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 pictograms</th>
<th><img src="image" alt="Hazard Pictogram" /></th>
</tr>
</thead>
</table>

**Signal Word**: Danger

**Hazard Statements**: Causes severe skin burns and eye damage.

**Precautionary Statements**:

- **Prevention**: Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
- **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 AS SOLD**

| Other hazards | Mixing this product with acid or ammonia releases chlorine gas.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium hypochlorite</td>
<td>7681-52-9</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

**Product AT USE DILUTION**

No hazardous ingredients

### SECTION 4. FIRST AID MEASURES

<table>
<thead>
<tr>
<th>Product AS SOLD</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In case of eye contact</td>
<td>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.</td>
</tr>
<tr>
<td>In case of skin contact</td>
<td>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.</td>
</tr>
<tr>
<td>If swallowed</td>
<td>Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.</td>
</tr>
</tbody>
</table>
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.

**Product AT USE DILUTION**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>In case of eye contact</td>
<td>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.</td>
</tr>
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<td>Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.</td>
</tr>
<tr>
<td>If inhaled</td>
<td>Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.</td>
</tr>
</tbody>
</table>

**SECTION 5. FIRE-FIGHTING MEASURES**

Product AS SOLD

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>None known.</td>
</tr>
<tr>
<td>Specific hazards during fire fighting</td>
<td>Not flammable or combustible.</td>
</tr>
<tr>
<td>Hazardous combustion products</td>
<td>Decomposition products may include the following materials: Carbon oxides</td>
</tr>
<tr>
<td>Special protective equipment for fire-fighters</td>
<td>Use personal protective equipment.</td>
</tr>
<tr>
<td>Specific extinguishing methods</td>
<td>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.</td>
</tr>
</tbody>
</table>

**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 |
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). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Product AT USE DILUTION

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). 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. Mixing this product with acid or ammonia releases chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).


Storage temperature: -15 °C to 40 °C

Product AT USE DILUTION

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. 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</th>
<th>Permissible</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>900043_97</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 / 11
### 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: 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.

### 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><strong>Appearance</strong></td>
<td>liquid</td>
<td>liquid</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>light yellow</td>
<td>colorless</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Chlorine</td>
<td>Chlorine</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>12.5, (100 %)</td>
<td>9.5 - 11.5</td>
</tr>
</tbody>
</table>
Flash point : Not applicable
Odor Threshold : No data available
Melting point/freezing point : No data available
Initial boiling point and boiling range : No data available
Evaporation rate : No data available
Flammability (solid, gas) : Not applicable
Upper explosion limit : No data available
Lower explosion limit : No data available
Vapor pressure : No data available
Relative vapor density : No data available
Relative density : 1.154
Water solubility : No data available
Solubility in other solvents : No data available
Partition coefficient: n-octanol/water : No data available
Autoignition temperature : No data available
Thermal decomposition : No data available
Viscosity, kinematic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
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 : Mixing this product with acid or ammonia releases chlorine gas.
Conditions to avoid : None known.
Incompatible materials : Acids
Metals
Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects
### Product AS SOLD

<table>
<thead>
<tr>
<th>Eye Contact</th>
<th>Causes serious eye damage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Causes severe skin burns.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Causes digestive tract burns.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause nose, throat, and lung irritation.</td>
</tr>
<tr>
<td>Chronic Exposure</td>
<td>Health injuries are not known or expected under normal use.</td>
</tr>
</tbody>
</table>

### Product AT USE DILUTION

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</tr>
</tbody>
</table>

### Experience with human exposure

#### Product AS SOLD

<table>
<thead>
<tr>
<th>Eye Contact</th>
<th>Redness, Pain, Corrosion</th>
</tr>
</thead>
<tbody>
<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>Eye Contact</th>
<th>Redness, Pain, Corrosion</th>
</tr>
</thead>
<tbody>
<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>

### Toxicity

#### Product AS SOLD

<table>
<thead>
<tr>
<th>Product</th>
<th>Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Acute inhalation toxicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>No data available</td>
</tr>
<tr>
<td>Serious eye damage/eye 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>
</tbody>
</table>
SAFETY DATA SHEET
TRISTAR CHLORLITE

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

Components
Acute oral toxicity: sodium hypochlorite
   LD50 Rat: 5,230 mg/kg

Components
Acute dermal toxicity: sodium hypochlorite
   LD50 Rabbit: > 10,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD
Ecotoxicity
   Environmental Effects: Very toxic 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

Components
Toxicity to fish: sodium hypochlorite
   96 h EC50: 0.14 mg/l

Components
Toxicity to daphnia and other aquatic invertebrates: sodium hypochlorite
   48 h EC50: 0.071 mg/l
   Sodium hydroxide
   48 h EC50: 40 mg/l

Persistence and degradability
Product AS SOLD
Not applicable - inorganic

Product AT USE DILUTION
Not applicable - inorganic

Bioaccumulative potential
No data available

Mobility in soil
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: 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

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)
UN number: 1791
Description of the goods: Hypochlorite solutions (sodium hypochlorite)
Class: 8
Packing group: III
Environmentally hazardous: no

Sea transport (IMDG/IMO)
UN number: 1791
Description of the goods: HYPOCHLORITE SOLUTION (sodium hypochlorite)
Class: 8
Packing group: III
Marine pollutant: yes
SAFETY DATA SHEET
TRISTAR CHLORLITE

Product AS SOLD
EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium hypochlorite</td>
<td>7681-52-9</td>
<td>100</td>
<td>1000</td>
</tr>
</tbody>
</table>

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>sodium hypochlorite</td>
<td>7681-52-9</td>
<td>Cleaning Agent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>Cleaning Agent</td>
<td>20</td>
</tr>
</tbody>
</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:
On the inventory, or in compliance with the inventory

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:

HMIS III:

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

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

Product AT USE DILUTION
NFPA:

HMIS III:

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

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

Issuing date : 12/18/2019
Version : 1.0
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.