 SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : BLEACH DISINFECTANT CLEANER
Other means of identification : Not applicable
Recommended use : Disinfectant
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : Product is sold ready to use.
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 : 08/06/2019

 SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Eye irritation : Category 2B
Skin sensitization : Category 1

GHS label elements
Hazard pictograms :

Signal Word : Warning
Hazard Statements : May cause an allergic skin reaction. Causes eye irritation.
Precautionary Statements : Prevention:
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.
Response:
IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/ attention. If eye irritation persists: Get medical advice/ attention. Wash contaminated clothing before reuse.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.
Other hazards : Mixing this product with acid or ammonia releases chlorine gas.

 SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture
SECTION 4. FIRST AID MEASURES

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

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.

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

If inhaled: 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
- Hydrogen chloride

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: Do not get in eyes, on skin, or on clothing. 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: -5 °C to 30 °C

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

**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>sodium hypochlorite</td>
<td>7681-52-9</td>
<td>STEL</td>
<td>2 mg/m3</td>
<td>AIHA WEEL</td>
</tr>
<tr>
<td>chlorine</td>
<td>7782-50-5</td>
<td>TWA</td>
<td>0.1 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>0.4 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceiling</td>
<td>0.5 ppm 1.45 mg/m3</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>1 ppm 3 mg/m3</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td>sodium hypochlorite</td>
<td>7681-52-9</td>
<td>STEL</td>
<td>2 mg/m3</td>
<td>AIHA WEEL</td>
</tr>
</tbody>
</table>

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

**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: Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: liquid

Color: clear, light yellow

Odor: Chlorine

pH: 12.0 - 12.8, (100 %)
SAFETY DATA SHEET

BLEACH DISINFECTANT CLEANER

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
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: 1.028 - 1.057
Water solubility: soluble
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: yes
Molecular weight: No data available
VOC: No data available

SECTION 10. STABILITY AND REACTIVITY

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
Organic materials
Hazardous decomposition products: Decomposition products may include the following materials:
Carbon oxides
Hydrogen chloride gas

SECTION 11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects
Eyes

- Causes eye irritation.

Skin

- May cause allergic skin reaction.

Ingestion

- Health injuries are not known or expected under normal use.

Inhalation

- Health injuries are not known or expected under normal use.

Chronic Exposure

- Health injuries are not known or expected under normal use.

Experience with human exposure

**Eye contact**

- Redness, Irritation

**Skin contact**

- Redness, Irritation, Allergic reactions

**Ingestion**

- No symptoms known or expected.

**Inhalation**

- No symptoms known or expected.

**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**: Mild eye irritation
- **Respiratory or skin sensitization**: May cause sensitization by skin contact.
- **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

**Components**

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

- **Acute dermal toxicity**: sodium hypochlorite
  - LD50 Rabbit: > 10,000 mg/kg
Environmental Effects: Toxic to aquatic life.  
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

Persistence and degradability
Not applicable - inorganic

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)
SAFETY DATA SHEET

BLEACH DISINFECTANT CLEANER

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

EPA Registration number : 1677-235
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>3846</td>
</tr>
</tbody>
</table>

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 : Serious eye damage or eye irritation
Respiratory or skin sensitization

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>Brightener</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Alkyl sulfate</td>
<td>Withheld</td>
<td>Cleaning Agent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Chelating agent</td>
<td>Withheld</td>
<td>Biocide</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Fragrance Ingredient(s)</td>
<td>Not Available</td>
<td>Fragrance</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
<td>Cleaning Agent</td>
<td>20</td>
</tr>
<tr>
<td>Inorganic salt</td>
<td>Withheld</td>
<td>Stabilizer</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Nonionic Surfactant</td>
<td>Withheld</td>
<td>Cleaning Agent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Nonionic surfactant</td>
<td>Withheld</td>
<td>Cleaning Agent</td>
<td>Not Applicable</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:

Switzerland. New notified substances and declared preparations : not determined

United States TSCA Inventory : All substances listed as active on the TSCA inventory
SAFETY DATA SHEET

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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

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

Taiwan Chemical Substance Inventory (TCSI) :
not determined

SECTION 16. OTHER INFORMATION

NFPA: Flammability

Health 2 0

Instability 0

Special hazard.

HMIS III:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>2*</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABILITY</td>
<td>0</td>
</tr>
<tr>
<td>PHYSICAL HAZARD</td>
<td>0</td>
</tr>
</tbody>
</table>

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

Issuing date : 08/06/2019
Version : 1.5
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.