SAFETY DATA SHEET
ANTIMICROBIAL FRUIT & VEGETABLE TREATMENT

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ANTIMICROBIAL FRUIT & VEGETABLE TREATMENT
Other means of identification: Not applicable.
Recommended use: Sanitizer
Restrictions on use: Reserved for industrial and professional use.
Product dilution information: 0.58% - 0.78%
Company: Ecolab Co.
5105 Tomken Road
Mississauga, Ontario Canada L4W 2X5
1-800-352-5326
Emergency health information: 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)
Issuing date: 10/18/2019

Section: 2. HAZARDS IDENTIFICATION

GHS Classification
Product AS SOLD
Acute toxicity (Dermal): Category 4
Eye irritation: Category 2A
Skin sensitization: Category 1

Product AT USE DILUTION
Not a hazardous substance or mixture.

GHS Label element
Product AS SOLD
Hazard pictograms: ☢️

Signal Word: Warning
Hazard Statements: Harmful in contact with skin.
May cause an allergic skin reaction.
Causes serious eye irritation.

Precautionary Statements: Prevention:
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/ physician if you feel unwell. 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
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advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

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

Product AT USE DILUTION
Precautionary Statements

Prevention:
Wash hands thoroughly after handling.

Response:
Get medical advice/attention if you feel unwell.

Storage:
Store in accordance with local regulations.

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
Pure substance/mixture

Mixture

Chemical Name | CAS-No. | Concentration: (%)
--- | --- | ---
Lactic acid | 79-33-4 | 10 - 30
Sodium bisulfate | 7681-38-1 | 5 - 10
Organic sulfonic acid salt | 25155-30-0 | 1 - 5

Product AT USE DILUTION
No hazardous ingredients

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.

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

Remove to fresh air. Treat symptomatically. Get medical attention.

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
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. FIREFIGHTING 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 firefighting: Not flammable or combustible.

Hazardous combustion products: Decomposition products may include the following materials:
- Carbon oxides
- Sulphur oxides

Special protective equipment and precautions for firefighters: 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.

Risk of explosion: Not available.

Section: 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD
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.

Product AT USE DILUTION
Personal precautions, protective equipment and emergency procedures: Refer to protective measures listed in sections 7 and 8.

Environmental precautions: No special environmental precautions required.

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...
Section: 7. HANDLING AND STORAGE

Product AS SOLD
Advice on safe handling: Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/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).


Storage temperature: 0 °C to 50 °C

Product AT USE DILUTION
Advice on safe handling: Wash hands after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE). For personal protection see section 8.

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

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD
Components 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 glasses with side-shields

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: No special protective equipment required.

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. Wash face, hands and any exposed skin thoroughly after handling.

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

Personal protective equipment
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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></th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
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<tr>
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<td>Odour</td>
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<tr>
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<td>Evaporation rate</td>
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<td>Partition coefficient: n-octanol/water</td>
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<td>Molecular weight</td>
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</table>

Section: 10. STABILITY AND REACTIVITY

Product AS SOLD
Reactivity : No dangerous reaction known under conditions of normal use.
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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 : Bases
                           Metals

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
                                   Carbon oxides
                                   Sulphur 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 irritation.

Skin : Harmful in contact with 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.

**Product AT USE DILUTION**

Eyes : Health injuries are not known or expected under normal use.

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.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

**Product AS SOLD**

Eye contact : Redness, Pain, Irritation

Skin contact : Redness, Irritation, Allergic reactions

Ingestion : No symptoms known or expected.

Inhalation : No information available.

**Product AT USE DILUTION**

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.
Ingestion: No symptoms known or expected.
Inhalation: No symptoms known or expected.

Toxicity

**Product AS SOLD**

**Product**

- Acute oral toxicity: no data available
- Acute inhalation toxicity: no data available
- Acute dermal toxicity: Acute toxicity estimate: > 1,000 mg/kg
- 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: Lactic acid
  LD50 rat: 3,543 mg/kg
  Sodium bisulfate
  LD50 rat: 2,140 mg/kg
  Organic sulfonic acid salt
  LD50 rat: 1,086 mg/kg

- Acute inhalation toxicity: Lactic acid
  4 h LC50 rat: > 7.94 mg/l
  Test atmosphere: dust/mist
  Sodium bisulfate
  4 h LC50 rat: > 2.4 mg/l
  Test atmosphere: dust/mist

---

**Section: 12. ECOLOGICAL INFORMATION**

**Product AS SOLD**

**Ecotoxicity**

- Environmental Effects: This product has no known ecotoxicological effects.

**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: Lactic acid
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96 h LC50 Fish: 130 mg/l

Sodium bisulfate
96 h LC50 Fish: 7,960 mg/l

Organic sulfonic acid salt
96 h LC50 Fish: 3.2 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 : 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

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 (TDG)
Not dangerous goods

Sea transport (IMDG/IMO)
Not dangerous goods
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Section: 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

SNAc Components : propylene oxide

The components 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. Industrial Chemical (Notification and Assessment) Act** :
On the inventory, or in compliance with the inventory

**New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand** :
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** :
On the inventory, or in compliance with the inventory

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

Section: 16. OTHER INFORMATION

**Product AS SOLD**

**NFPA:**

Flammability

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**HMIS III:**

**HEALTH**

2*

**FLAMMABILITY**

0

**PHYSICAL HAZARD**

0

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

**Product AT USE DILUTION**
Issuing date : 10/18/2019  
Version : 1.3  
Prepared by : Regulatory Affairs 1-800-352-5326

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.