SAFETY DATA SHEET

TRI-STAR DETERGENT OZ

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : TRI-STAR DETERGENT OZ
Other means of identification : Not applicable
Recommended use : Laundry detergent
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : 0.02 % - 0.06 %

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 : 09/17/2019

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD
Acute toxicity (Oral) : Category 4
Skin irritation : Category 2
Eye irritation : Category 2B

Product AT USE DILUTION
Not a hazardous substance or mixture.

GHS label elements

Product AS SOLD
Hazard pictograms : !

Signal Word : Warning
Hazard Statements : Harmful if swallowed. Causes skin and eye irritation.
Precautionary Statements : Prevention:
Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves.
Response:
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. 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 occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Disposal:
Dispose of contents/container to an approved waste disposal plant.

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: None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD
Pure substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>alcohols, c12-16, ethoxylated</td>
<td>68551-12-2</td>
<td>30 - 60</td>
</tr>
<tr>
<td>2-methylpentane-2,4-diol</td>
<td>107-41-5</td>
<td>10 - 30</td>
</tr>
<tr>
<td>dodecylbenzenesulphonic acid, compound with</td>
<td>27323-41-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2,2',2''-nitrilotriethanol (1:1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Product AT USE DILUTION

No hazardous ingredients.

SECTION 4. FIRST AID MEASURES

Product AS SOLD

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. Get medical attention if irritation develops and persists.

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

If inhaled: Get medical attention if symptoms occur.

Protection of first-aiders: No special precautions are necessary for first aid responders.

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
Nitrogen oxides (NOx)
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 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 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
SAFETY DATA SHEET

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Advice on safe handling: Do not ingest. Avoid contact with skin and eyes. 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.

Storage temperature: 5 °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

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>2-methylpentane-2,4-diol</td>
<td>107-41-5</td>
<td>Ceiling</td>
<td>25 ppm 125 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Vapour.)</td>
<td>25 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL (Vapour.)</td>
<td>50 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL (Inhalable fraction, Aerosol only)</td>
<td>10 mg/m³</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

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: 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: No personal respiratory protective equipment normally required.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Product AT USE DILUTION

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

Personal protective equipment
SAFETY DATA SHEET

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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>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>clear, light yellow</td>
<td>colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>slight</td>
<td>slight</td>
</tr>
<tr>
<td>pH</td>
<td>5.0 - 9.0, (100 %)</td>
<td>5.0 - 8.0</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>&gt; 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>No data available</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>0.895 - 1.015</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>partly 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>No data available</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD
Reactivity : No dangerous reaction known under conditions of normal use.
Chemical stability : Stable under normal conditions.
SAFETY DATA SHEET
TRI-STAR DETERGENT OZ

Possibility of hazardous reactions:
No dangerous reaction known under conditions of normal use.

Conditions to avoid:
None known.

Incompatible materials:
None known.

Hazardous decomposition products:
In case of fire hazardous decomposition products may be produced such as:
- Carbon oxides
- Nitrogen oxides (NOx)
- 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 eye irritation.

Skin:
Causes skin irritation.

Ingestion:
Harmful if swallowed.

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, Irritation

Skin contact:
Redness, Irritation

Ingestion:
No information available.

Inhalation:
No symptoms known or expected.

Product AT USE DILUTION

Eye contact:
No symptoms known or expected.

Skin contact:
No symptoms known or expected.

Ingestion:
No symptoms known or expected.
**SAFETY DATA SHEET**

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**Inhalation**: No symptoms known or expected.

**Toxicity**

**Product AS SOLD**

**Product**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>Acute toxicity estimate: 1,914 mg/kg</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>Mild eye irritation</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>

**Components**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute inhalation toxicity</td>
<td>2-methylpentane-2,4-diol</td>
</tr>
<tr>
<td></td>
<td>4 h LC50 Rat: &gt; 1.1 mg/l</td>
</tr>
<tr>
<td></td>
<td>Test atmosphere: dust/mist</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute dermal toxicity</td>
<td>alcohols, c12-16, ethoxylated</td>
</tr>
<tr>
<td></td>
<td>LD50 Rabbit: &gt; 2,000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>2-methylpentane-2,4-diol</td>
</tr>
<tr>
<td></td>
<td>LD50 Rat: &gt; 2,000 mg/kg</td>
</tr>
</tbody>
</table>

**SECTION 12. ECOLOGICAL INFORMATION**

**Product AS SOLD**

**Ecotoxicity**

<table>
<thead>
<tr>
<th>Environmental Effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxic to aquatic life.</td>
<td>Toxic to aquatic life.</td>
</tr>
</tbody>
</table>

**Product**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td>No data available</td>
</tr>
<tr>
<td>Toxicity to daphnia and other</td>
<td>48 h EC50 Daphnia magna (Water flea): 1.7 mg/l</td>
</tr>
<tr>
<td>aquatic invertebrates</td>
<td>Test substance: Product</td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td>alcohols, c12-16, ethoxylated</td>
</tr>
<tr>
<td></td>
<td>LC50: 1.5 mg/l</td>
</tr>
</tbody>
</table>
dodecylbenzenesulphonic acid, compound with 2,2',2''-nitrilotriethanol (1:1)
96 h LC50: 2.5 mg/l

Persistence and degradability
Product AS SOLD
Biodegradable

Product AT USE DILUTION
Readily biodegradable.

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

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)
Not dangerous goods

Sea transport (IMDG/IMO)
Not dangerous goods

SECTION 15. REGULATORY INFORMATION
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TRI-STAR DETERGENT OZ

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>dodecylbenzenesulphonic acid, compound with 2,2',2''-nitrilotriethanol (1:1)</td>
<td>27323-41-7</td>
<td>1000</td>
<td>35536</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:
- Acute toxicity (any route of exposure)
- 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>alcohols, c12-16, ethoxylated</td>
<td>68551-12-2</td>
<td>Cleaning Agent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>Diluent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>2-methylpentane-2,4-diol</td>
<td>107-41-5</td>
<td>Solvent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>dodecylbenzenesulphonic acid, compound with 2,2',2''-nitrilotriethanol (1:1)</td>
<td>27323-41-7</td>
<td>Cleaning Agent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Amine</td>
<td>Withheld</td>
<td>Buffer</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Colorant</td>
<td>Withheld</td>
<td>Brightener</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:

United States TSCA Inventory:
On or in compliance with the active portion of the TSCA inventory

Canadian Domestic Substances List (DSL):
This product contains one or several components that are not on the Canadian DSL nor NDSL.

Australia Inventory of Chemical Substances (AICS):
not determined

New Zealand. Inventory of Chemical Substances:
not determined
SAFETY DATA SHEET

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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

Product AS SOLD

NFPA:

Health: 2
Flammability: 0
Instability: 0

HMIS III:

Health: 2
Flammability: 0
Physical Hazard: 0

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

Product AT USE DILUTION

NFPA:

Health: 0
Flammability: 0
Instability: 0

HMIS III:

Health: 0
Flammability: 0
Physical Hazard: 0

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

Issuing date: 09/17/2019
Version: 1.4
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.