SAFETY DATA SHEET
TURBOFRESH

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : TURBOFRESH
Other means of identification : Not applicable
Recommended use : Laundry softener
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 : 08/16/2019

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Flammable liquids : Category 4
Specific target organ systemic toxicity - repeated exposure (Oral) : Category 2 (Kidney)

GHS label elements
Hazard pictograms :

Signal Word : Warning

Hazard Statements : Combustible liquid.
May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Precautionary Statements : Prevention:
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Wear protective gloves/ eye protection/ face protection.
Response:
Get medical advice/ attention if you feel unwell. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
Store in a well-ventilated place. Keep cool.
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>Propylene glycol</td>
<td>57-55-6</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Diethylene Glycol</td>
<td>111-46-6</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

**SECTION 4. FIRST AID MEASURES**

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.
Protection of first-aiders : No special precautions are necessary for first aid responders.
Notes to physician : No specific measures identified.
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 : High volume water jet
Specific hazards during fire fighting : Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.
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**

Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition. 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 : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so.
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TURBOFRESH

containment and cleaning up

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

Advice on safe handling

: Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). 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


Storage temperature

: 10 °C to 40 °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>Propylene glycol</td>
<td>57-55-6</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>AiHA WEEL</td>
</tr>
<tr>
<td>Diethylene Glycol</td>
<td>111-46-6</td>
<td>TWA</td>
<td>10 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

: 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

: 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: liquid

Color

: opaque, green

Odor

: Floral

pH

: 2.1 - 3.1, (100 %)
### SAFETY DATA SHEET

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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>66 °C closed cup, Does not sustain combustion.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt; 35 °C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.98 - 1.03</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>150.000 mm²/s (40 °C)</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No data available</td>
</tr>
<tr>
<td>VOC</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### 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**: No dangerous reaction known under conditions of normal use.
- **Conditions to avoid**: Heat, flames and sparks.
- **Incompatible materials**: Amines
- **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

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

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
Acute oral toxicity: Acute toxicity estimate: > 5,000 mg/kg
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
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 inhalation toxicity: Propylene glycol
4 h LC50 Rat: > 158.5 mg/l
Test atmosphere: dust/mist

Components

Acute dermal toxicity: Diethylene Glycol
LD50 Rabbit: 13,300 mg/kg
Ecotoxicity
Environmental Effects: Harmful 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:
- Propylene glycol
  96 h LC50: > 10,000 mg/l
- Diethylene Glycol
  96 h LC50 Pimephales promelas: 75,200 mg/l

Components
Toxicity to daphnia and other aquatic invertebrates:
- Propylene glycol
  48 h EC50: 18,340 mg/l
- Diethylene Glycol
  24 h EC50 Daphnia magna (Water flea): > 10,000 mg/l

Components
Toxicity to algae:
- Propylene glycol
  96 h EC50: 19,000 mg/l
- Diethylene Glycol
  96 h EC50: 9,362 mg/l

Persistence and degradability
Readily biodegradable.

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)
Not dangerous goods

SECTION 15. REGULATORY INFORMATION

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
- Flammable (gases, aerosols, liquids, or solids)
- Specific target organ toxicity (single or repeated exposure)

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>ethanaminium, 2-hydroxy-n,n-bis(2-hydroxyethyl)-n-methyl-esters with c16-18 and c18-unsatd. fatty acids, me sulfates (</td>
<td>157905-74-3</td>
<td>Cleaning Agent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Inorganic Salt</td>
<td>Withheld</td>
<td>Processing Aid</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>glutaraldehyde</td>
<td>111-30-8</td>
<td>Biocide</td>
<td>8, 20</td>
</tr>
<tr>
<td>Fragrance</td>
<td>Not Available</td>
<td>Fragrance</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Colorant</td>
<td>Withheld</td>
<td>Dye</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:
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) :
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:  
<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HMIS III:  

| HEALTH | 0* |
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |

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

Issuing date : 08/16/2019
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.

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