# SAFETY DATA SHEET

## TRI-STAR TURBO BOOST

### Section 1. Chemical product and company identification

<table>
<thead>
<tr>
<th>Product name</th>
<th>TRI-STAR TURBO BOOST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended use and restrictions</td>
<td>Laundry detergent</td>
</tr>
</tbody>
</table>

Use only for the purpose on the product label.

<table>
<thead>
<tr>
<th>Product dilution information</th>
<th>Up to 0.2 oz/gal or 1.6 mL/L in water</th>
</tr>
</thead>
</table>

**Supplier's information:**

- Ecolab Inc. Institutional Division
- 370 N. Wabasha Street
- St. Paul, MN 55102
- 1-800-352-5326

**Code:** 904839-01

**Date of issue:** 23 Aug 2013

**EMERGENCY HEALTH INFORMATION:**

1-800-328-0026

Outside United States and Canada CALL 1-651-222-5352 (in USA)

### Section 2. Hazards identification

**Product AS SOLD**

- **GHS Classification**
  - FLAMMABLE LIQUIDS - Category 3
  - SKIN CORROSION/IRRITATION - Category 2
  - SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
  - SKIN SENSITIZATION - Category 1

**GHS label elements**

- **Signal word:** Warning
- **Symbol:**

**Hazard statements**

- Flammable liquid and vapor.
- Causes serious eye irritation.
- Causes skin irritation.
- May cause an allergic skin reaction.

**Precautionary statements**

- **Prevention**
  - Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Keep container tightly closed. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

- **Response**
  - Wash thoroughly after handling.

**Product AT USE DILUTION**

Not classified.

No signal word.

No known significant effects or critical hazards.
Section 2. Hazards identification

**Storage**
Store in a well-ventilated place. Keep cool.

**Disposal**
See section 13 for waste disposal information.

**Other hazards**
None known.

Section 3. Composition/information on ingredients

**Substance/mixture**
Mixture

**Product AS SOLD**

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>Concentration Range (%)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limonene</td>
<td>&gt;50</td>
<td>5989-27-5</td>
</tr>
<tr>
<td>alcohols, c12-15, ethoxylated</td>
<td>5 - 20</td>
<td>68131-39-5</td>
</tr>
<tr>
<td>alcohols, c12-18, ethoxylated</td>
<td>5 - 20</td>
<td>68213-23-0</td>
</tr>
<tr>
<td>benzenesulfonic acid, decyl(sulfophenoxy)-, disodium salt</td>
<td>1 - 5</td>
<td>36445-71-3</td>
</tr>
</tbody>
</table>

**Product AT USE DILUTION**

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

Section 4. First aid measures

**Eye contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.

**Skin contact**
Take off contaminated clothing. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Inhalation**
No special measures required. Treat symptomatically.

**Ingestion**
Get medical attention if symptoms occur.

**Protection of first-aiders**
No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**Notes to physician**
Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See toxicological information (section 11)
Section 5. Fire-fighting measures

Product AS SOLD
Suitable fire extinguishing media: Use dry chemical, CO₂, water spray (fog) or foam.
Specific hazards arising from the chemical: Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides
Specific fire-fighting methods: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Product AS SOLD
Personal precautions: Eliminate all ignition sources. Use personal protective equipment as required. Do not touch or walk through spilled material.
Environmental precautions: Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
Methods for cleaning up: If emergency personnel are not present, contain and collect small spillages with non-combustible absorbent material, e.g. sand, earth or other suitable material and place in a suitable container for disposal. Use a water rinse for final clean-up.

Product AT USE DILUTION
Use personal protective equipment as required.
Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
Use a water rinse for final clean-up.

Section 7. Handling and storage

Product AS SOLD
Handling: Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Use only with adequate ventilation. Wash thoroughly after handling.
Storage: Keep out of reach of children. Keep container tightly closed. Keep container tightly closed and sealed until ready for use. Keep container in a cool, well-ventilated area. Avoid all possible sources of ignition (spark or flame). Store in a segregated and approved area.
Store between the following temperatures: 0 and 40°C

Product AT USE DILUTION
Wash thoroughly after handling.
Keep out of reach of children.
Section 8. Exposure controls/personal protection

Control parameters

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limonene</td>
<td>AIHA WEEL (United States, 5/2010). TWA: 30 ppm 8 hours.</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits.

Personal protection

Eye protection : Wear eye protection.

Hand protection : Use chemical-resistant, impervious gloves.

Skin protection : Use suitable protective equipment.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Yellow [Light]</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>citrus</td>
<td>citrus</td>
</tr>
<tr>
<td>pH</td>
<td>4.5 to 6.5 (100%)</td>
<td>5 to 7</td>
</tr>
<tr>
<td>Flash point</td>
<td>51 °C (Open cup)</td>
<td>&gt; 100°C</td>
</tr>
</tbody>
</table>

Explosion limits : Not available.

Flammability (solid, gas) : Not available.

Melting point : Not available.

Boiling point : >100°C (>212°F)

Evaporation rate (butyl acetate = 1) : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 0.87 to 0.91 (Water = 1)

Solubility : Partially soluble in the following materials: cold water and hot water.

Partition coefficient n-octanol/water : Not available.
Section 9. Physical and chemical properties

Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Odor threshold : Not available.
Viscosity : Not available.

Section 10. Stability and reactivity

Product AS SOLD
Stability : The product is stable.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Materials to avoid : Not available.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Route of exposure : Skin contact, Eye contact, Inhalation, Ingestion

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Skin contact</th>
<th>Eye contact</th>
<th>Inhalation</th>
<th>Ingestion</th>
<th>Acute toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product AS SOLD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye contact</td>
<td>Adverse symptoms may include the following: pain or irritation</td>
<td>No specific data.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>watering</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>redness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin contact</td>
<td>Adverse symptoms may include the following: irritation</td>
<td>No specific data.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>redness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>No specific data.</td>
<td></td>
<td></td>
<td></td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No specific data.</td>
<td></td>
<td></td>
<td></td>
<td>No specific data.</td>
</tr>
<tr>
<td><strong>Acute toxicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye contact</td>
<td>Causes serious eye irritation.</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin contact</td>
<td>Causes skin irritation. May cause an allergic skin reaction.</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product/ingredient name</strong></td>
</tr>
<tr>
<td>(r)-p-mentha-1,8-diene</td>
</tr>
<tr>
<td>alcohols, c12-15, ethoxylated</td>
</tr>
<tr>
<td>alcohols, c12-18, ethoxylated</td>
</tr>
<tr>
<td>benzenesulfonic acid, decyl(sulfophenoxy)-, disodium salt</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

Chronic toxicity

Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Section 12. Ecological information

Ecotoxicity: Water polluting material. May be harmful to the environment if released in large quantities. This material is very toxic to aquatic life with long lasting effects.

Aquatic and terrestrial toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>alcohols, c12-15, ethoxylated</td>
<td>Acute LC50 1.4 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>alcohols, c12-18, ethoxylated</td>
<td>Acute LC50 1.5 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>benzenesulfonic acid, decyl(sulfophenoxy)-, disodium salt</td>
<td>Chronic LC50 3 mg/l</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods: Avoid disposal. Attempt to use product completely in accordance with intended use. Disposal should be in accordance with applicable regional, national and local laws and regulations.

RCRA classification: Unused product is D001 (Ignitable)

Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

DOT

DOT Classification: UN1993
DOT Proper shipping name: Flammable liquids, n.o.s. (D-limonene)
Class: 3
Packing group: III

IMO/IMDG

IMO/IMDG Classification: UN1993
IMO/IMDG Proper shipping name: FLAMMABLE LIQUID, N.O.S.. (D-limonene). Marine pollutant
Class: 3
Packing group: III

For transport in bulk, see shipping documents for specific transportation information.

Product AT USE DILUTION
Not intended for transport.
Section 15. Regulatory information

Product AS SOLD

U.S. Federal regulations

TSCA 8(b) inventory: All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No listed substance
SARA 302/304 emergency planning and notification: No listed substance

Form R - Reporting requirements

California Prop. 65: No listed substance

Section 16. Other information

Product AS SOLD

Product AT USE DILUTION

Hazardous Material Information System (U.S.A.)

National Fire Protection Association (U.S.A.)

Date of issue: 23 Aug 2013
Prepared by: Regulatory Affairs
1-800-352-5326

Notice to reader

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