

# Material Safety Data Sheet

TRI-STAR TURBO BOOST



## 1. Product and company identification

Trade name of product : TRI-STAR TURBO BOOST

Product use : Laundry detergent

Product dilution information : Up to 10 oz/50 gal or 1.56 mL/L in water

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 : 06-October-2010

EMERGENCY HEALTH INFORMATION: 1-800-328-0026  
Outside United States and Canada CALL 1-651-222-5352 (in USA)

## 2. Hazards identification

### Product AS SOLD

Physical state : Liquid.

Emergency overview : WARNING!

CAUSES EYE IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION.  
MAY CAUSE SKIN IRRITATION.  
COMBUSTIBLE LIQUID AND VAPOR.

Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

### Product AT USE DILUTION

Liquid.

CAUTION !

No specific hazard.

No specific hazard.

### Potential acute health effects

#### Product AS SOLD

Eyes : Irritating to eyes.

Skin : Moderately irritating to the skin. May cause sensitization by skin contact.

Inhalation : Slightly irritating to the respiratory system.

Ingestion : No known significant effects or critical hazards.

#### Product AT USE DILUTION

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

See toxicological information (section 11)

## 3. Composition/information on ingredients

### Product AS SOLD

Name	CAS number	% by weight
Limonene	5989-27-5	>50
alcohols, c12-15, ethoxylated	68131-39-5	5 - 20
alcohols, c12-18, ethoxylated	68213-23-0	5 - 20
benzenesulfonic acid, decyl(sulfophenoxy)-, disodium salt	36445-71-3	1 - 5

### 3. Composition/information on ingredients

#### 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.

### 4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
<b>Eye contact</b>	: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses and flush again. Get medical attention if irritation persists.	No known effect after eye contact. Rinse with water for a few minutes.
<b>Skin contact</b>	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.	No known effect after skin contact. Rinse with water for a few minutes.
<b>Inhalation</b>	: No special measures required. Treat symptomatically.	No special measures required. Treat symptomatically.
<b>Ingestion</b>	: Get medical attention if symptoms occur.	Get medical attention if symptoms occur.

### 5. Fire-fighting measures

#### Product AS SOLD

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 sulfur oxides  
 metal oxide/oxides

**Fire-fighting media and instructions** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**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.

### 6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
<b>Personal precautions</b>	: Use personal protective equipment as required.	Use personal protective equipment as required.
<b>Environmental precautions</b>	: Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
<b>Methods for cleaning up</b>	: 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.	Use a water rinse for final clean-up.

## 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. Wash thoroughly after handling.

**Storage** : Keep out of reach of children. Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Store in a closed container. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above the following temperature: 40°C

**Product AT USE DILUTION**

Wash thoroughly after handling.

Keep out of reach of children.

## 8. Exposure controls/personal protection

**Product AS SOLD**

**Engineering measures** : 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

**Eyes** : Safety eyewear should be used when there is a likelihood of exposure.

**Hands** : Use chemical-resistant, impervious gloves.

**Skin** : Use suitable protective equipment.

**Respiratory** : No special protection is required.

**Product AT USE DILUTION**

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

No protective equipment is needed under normal use conditions.

No protective equipment is needed under normal use conditions.

No protective equipment is needed under normal use conditions.

No special protection is required.

Ingredient	Exposure limits
Limonene	AIHA WEEL (United States, 1/2007). TWA: 30 ppm 8 hour(s).

## 9. Physical and chemical properties

**Product AS SOLD**

**Physical state** : Liquid.

**Flash point** : 50.5556 °C (Open cup)

**Color** : Yellow. [Light]

**Odor** : citrus

**pH** : 4.5 to 6.5 [Conc. (% w/w): 100%]

**Boiling/condensation point** : >100°C (>212°F)

**Relative density** : 0.87 to 0.91

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

**Product AT USE DILUTION**

Liquid.

> 100°C

Colorless.

citrus

5 to 7

## 10. Stability and reactivity

### Product AS SOLD

- Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## 11. Toxicological information

### Potential acute health effects

- Product AS SOLD**
- Eyes** : Irritating to eyes.
- Skin** : Moderately irritating to the skin. May cause sensitization by skin contact.
- Inhalation** : Slightly irritating to the respiratory system.
- Ingestion** : No known significant effects or critical hazards.

### Product AT USE DILUTION

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

## 12. Ecological information

- Ecotoxicity** : Not reported

## 13. Disposal considerations

- Product AS SOLD**
- Waste disposal** : 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.

### Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

## 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.

### Product AS SOLD

#### IMO/IMDG Classification

- |                             |                                                          |
|-----------------------------|----------------------------------------------------------|
| <b>UN number</b>            | UN1993                                                   |
| <b>Proper shipping name</b> | Flammable liquid, n.o.s., (d-Limonene), Marine pollutant |
| <b>Class</b>                | 3                                                        |
| <b>Packing group</b>        | III                                                      |

See shipping documents for specific transportation information.

### Product AT USE DILUTION

Not intended for transport.

# 15. Regulatory information

**Product AS SOLD**

**HCS Classification** : Combustible liquid  
Irritating material  
Sensitizing material

**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

**SARA 313** Product name CAS number Concentration

**Form R - Reporting requirements** : No listed substance

**California Prop. 65** : No listed substance

**Product AT USE DILUTION**

Not regulated.

# 16. Other information

**Product AS SOLD**

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

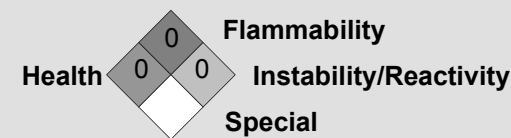
Health	2
Flammability	2
Physical hazards	0

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



**Product AT USE DILUTION**

Health	0
Flammability	0
Physical hazards	0



**Date of issue** : 06-October-2010  
**Date of previous issue** : No previous validation  
**Responsible name** : Regulatory Affairs  
1-800-352-5326

☑ Indicates information that has changed from previously issued version.

**Notice to reader**

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, **NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.**