

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : TOR HB

Other means of identification : not applicable

Recommended use : Cleaner and disinfectant

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : No dilution information provided.

Company : Ecolab Inc.  
370 N. Wabasha Street  
St. Paul, Minnesota USA 55102  
1-800-352-5326

Emergency telephone : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 04/30/2014

**SECTION 2. HAZARDS IDENTIFICATION**
**GHS Classification**

Flammable liquids : Category 3  
Acute toxicity (Oral) : Category 4  
Skin corrosion : Category 1B  
Serious eye damage : Category 1

**GHS Label element**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Flammable liquid and vapor.  
Harmful if swallowed.  
Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Keep container tightly closed. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**  
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/ physician. Wash contaminated clothing before reuse. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

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**Storage:**

Store in a well-ventilated place. Keep cool. Store locked up.

**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

Chemical Name	CAS-No.	Concentration (%)
Nonionic surfactants	66455-15-0	1 - 5
Sodium Carbonate	497-19-8	1 - 5
Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride	85409-23-0	2.37
n-Alkyl (C14 60%, C16 30%, C12 5%, C18 5%) dimethylbenzyl ammonium chloride	68391-01-5	2.37
d-Limonene	5989-27-5	0.1 - 1

## SECTION 4. FIRST AID MEASURES

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 immediately.

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 immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention immediately.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

**See toxicological information (Section 11)**

## 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.  
Beware of vapors accumulating to form explosive concentrations.  
Vapors can accumulate in low areas.

Hazardous combustion : Carbon oxides

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Special protective equipment for fire-fighters : Use personal protective equipment.

Specific extinguishing methods : Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. 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 : Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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 : Eliminate all ignition sources if safe to do so. 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

Advice on safe handling : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Do not ingest. Keep away from fire, sparks and heated surfaces. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.

Conditions for safe storage : Keep away from heat and sources of ignition. Keep in a cool, well-ventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 15 °C to 30 °C

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m <sup>3</sup>	OSHA Z1

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Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

### Personal protective equipment

- Eye protection : Safety goggles  
Safety glasses with side-shields  
Face-shield
- 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 : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
- 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. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Color : clear, dark yellow
- Odor : pungent
- pH : 11.0 - 12.0, 100 %
- Flash point : 49 °C closed cup
- Odor Threshold : no data available
- Melting point/freezing point : no data available
- Initial boiling point and boiling range : 100 °C
- Evaporation rate : no data available
- Flammability (solid, gas) : no data available
- Upper explosion limit : no data available
- Lower explosion limit : no data available
- Vapor pressure : no data available
- Relative vapor density : no data available
- Relative density : 1.03 - 1.05
- Water solubility : no data available
- Solubility in other solvents : no data available
- Partition coefficient: n-octanol/water : no data available
- Autoignition temperature : no data available

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Thermal decomposition	: no data available
Viscosity, kinematic	: no data available
Explosive properties	: no data available
Oxidizing properties	: no data available
Molecular weight	: no data available
VOC	: no data available

### SECTION 10. STABILITY AND REACTIVITY

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	: Acids Organic materials
Hazardous decomposition products	: Carbon oxides

### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

#### Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Harmful if swallowed. Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.

#### Experience with human exposure

Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough

#### Toxicity

Acute oral toxicity	: no data available
Acute inhalation toxicity	: no data available
Acute dermal toxicity	: Acute toxicity estimate : > 5,000 mg/kg

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Skin corrosion/irritation	: Causes burns.
Serious eye damage/eye irritation	: no data available
Respiratory or skin sensitization	: Does not cause skin sensitization.
Carcinogenicity	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
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

### Ingredients

Acute oral toxicity	: Nonionic surfactants LD50 rat: 500 mg/kg
	Sodium Carbonate LD50 rat: 2,800 mg/kg
	Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride LD50 rat: 304.5 mg/kg
	n-Alkyl (C14 60%, C16 30%, C12 5%, C18 5%) dimethylbenzyl ammonium chloride LD50 rat: 850 mg/kg
	d-Limonene LD50 rat: 4,400 mg/kg

### Ingredients

Acute inhalation toxicity	: Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride 4 h LC50 rat: > 0.054 mg/l
	n-Alkyl (C14 60%, C16 30%, C12 5%, C18 5%) dimethylbenzyl ammonium chloride 4 h LC50 rat: > 0.054 mg/l

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Environmental Effects	: Very toxic to aquatic life.
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### Product

- Toxicity to fish : no data available  
Toxicity to daphnia and other aquatic invertebrates : no data available  
Toxicity to algae : no data available

### Ingredients

- Toxicity to fish : Nonionic surfactants  
96 h LC50 Fish: 1.125 mg/l

### Ingredients

- Toxicity to daphnia and other aquatic invertebrates : Sodium Carbonate  
48 h EC50 Daphnia : 200 mg/l
- Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride  
48 h EC50 Daphnia : 0.0058 mg/l
- n-Alkyl (C14 60%, C16 30%, C12 5%, C18 5%) dimethylbenzyl ammonium chloride  
48 h EC50 Daphnia : 0.47 mg/l

### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

### Other adverse effects

no data available

## SECTION 13. DISPOSAL CONSIDERATIONS

- Disposal methods : The product should not be allowed to enter drains, water courses or the soil. 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.

## 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)

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Not dangerous goods

## SECTION 15. REGULATORY INFORMATION

**EPA Registration number** : 61178-1-303

### **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** : Fire Hazard  
Acute Health Hazard

**SARA 302** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : 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.

### **The ingredients of this product are reported in the following inventories:**

**1907/2006 (EU)** :  
not determined

**Switzerland. New notified substances and declared preparations** :  
not determined

**United States TSCA Inventory** :  
On 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

**Japan. ISHL - Inventory of Chemical Substances (METI)** :  
not determined

**Korea. Korean Existing Chemicals Inventory (KECI)** :  
not determined

**Philippines Inventory of Chemicals and Chemical Substances (PICCS)** :



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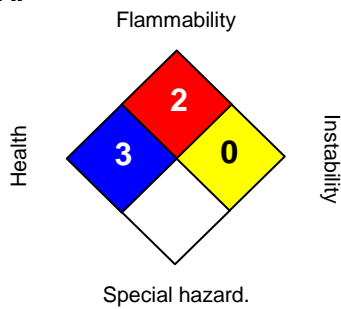
**TOR HB**

not determined

**China. Inventory of Existing Chemical Substances in China (IECSC) :**  
not determined

## SECTION 16. OTHER INFORMATION

### NFPA:



### HMIS III:

<b>HEALTH</b>	<b>3</b>
<b>FLAMMABILITY</b>	<b>2</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

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

Issuing date : 04/30/2014  
Version : 1.1  
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 Material 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.