

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : RESTORA

Other means of identification : not applicable

Recommended use : Laundry detergent

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

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)

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

Serious eye damage : Category 1

**GHS Label element**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes serious eye damage.

Precautionary Statements : **Prevention:**  
Wear eye protection/ face protection.  
**Response:**  
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.

Other hazards : None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration (%)
2-(2-hexyloxyethoxy)ethanol	112-59-4	10 - 30
alcohols, c12-14-secondary, ethoxylated	84133-50-6	10 - 30
2-phenoxyethanol	122-99-6	5 - 10
2-hexyloxyethanol	112-25-4	0.1 - 1

**SECTION 4. FIRST AID MEASURES**

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- 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 : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
- 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 : 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  
Oxides of phosphorus
- 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 : Ensure adequate ventilation. 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 : 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.

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## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling.
- Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.
- Storage temperature : 0 °C to 50 °C

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

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

### Personal protective equipment

- Eye protection : Safety goggles  
Face-shield
- Hand protection : No special protective equipment required.  
No special protective equipment required.
- 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. 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, colorless
- Odor : slight
- pH : 7.0 - 9.7, 100 %
- Flash point : not applicable, Does not sustain combustion.
- Odor Threshold : no data available
- Melting point/freezing point : no data available
- Initial boiling point and boiling range : no data available
- Evaporation rate : no data available
- Flammability (solid, gas) : no data available
- Upper explosion limit : no data available
- Lower explosion limit : no data available

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Vapor pressure	: no data available
Relative vapor density	: no data available
Relative density	: 0.99 - 1.02
Water solubility	: soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Autoignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, kinematic	: no data available
Explosive properties	: no data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
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	: None known.
Incompatible materials	: None known.
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

### SECTION 11. TOXICOLOGICAL INFORMATION

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

#### Potential Health Effects

Eyes	: Causes serious eye damage.
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 : Redness, Pain, Corrosion

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Skin contact : No symptoms known or expected.  
Ingestion : No symptoms known or expected.  
Inhalation : No symptoms known or expected.

#### Toxicity

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

### SECTION 12. ECOLOGICAL INFORMATION

#### 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

#### Ingredients

Toxicity to fish : alcohols, c12-14-secondary, ethoxylated  
96 h LC50 Fish: 3.4 mg/l  
  
2-phenoxyethanol  
96 h LC50 Fish: > 220 mg/l

#### Ingredients

Toxicity to daphnia and other aquatic invertebrates : 2-(2-hexyloxyethoxy)ethanol  
48 h EC50 Daphnia : 433 mg/l  
  
2-hexyloxyethanol  
48 h EC50 Daphnia : 145 mg/l

#### Persistence and degradability

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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)**

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** : 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.

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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

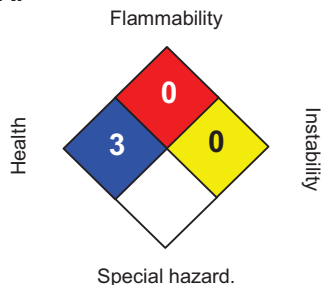
**Korea. Korean Existing Chemicals Inventory (KECI) :**  
not determined

**Philippines Inventory of Chemicals and Chemical Substances (PICCS) :**  
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>0</b>
<b>PHYSICAL HAZARD</b>	<b>0</b>

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

Issuing date : 07/23/2014  
Version : 1.1  
Prepared by : Regulatory Affairs

## **SAFETY DATA SHEET**

### **RESTORA**

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.