## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other means of identification</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Recommended use</strong></td>
<td>Laundry detergent</td>
</tr>
<tr>
<td><strong>Restrictions on use</strong></td>
<td>Reserved for industrial and professional use.</td>
</tr>
<tr>
<td><strong>Product dilution information</strong></td>
<td>0.02 % - 0.19 %</td>
</tr>
</tbody>
</table>

**Company**
Ecolab Inc.
370 N. Wabasha Street
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**
07/29/2015

## SECTION 2. HAZARDS IDENTIFICATION

**GHS Classification**
Product **AS SOLD**
Eye irritation : Category 2B

**Product AT USE DILUTION**
Not a hazardous substance or mixture.

**GHS Label element**
Product **AS SOLD**
Signal Word : Warning
Hazard Statements : Causes eye irritation.
Precautionary Statements : **Prevention:** Wash skin thoroughly after handling.
**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Product **AT USE DILUTION**
Precautionary Statements : **Prevention:** Wash hands thoroughly after handling.
**Response:** Get medical advice/attention if you feel unwell.
Storage: Store in accordance with local regulations.

Product **AS SOLD**
Other hazards : None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
SAFETY DATA SHEET
KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT

Product AS SOLD
Pure substance/mixture : Mixture

Chemical Name | CAS-No. | Concentration (%)
---------------|---------|-------------------
Propylene glycol | 57-55-6 | 10 - 30
alcohol ethoxylate | 68551-12-2 | 5 - 10
poly(oxy-1,2-ethanediyl), a-(2-propylheptyl)-w-hydroxy- | 160875-66-1 | 1 - 5
Amphoteric surfactants | 68604-71-7 | 1 - 5

Product AT USE DILUTION
No hazardous ingredients

SECTION 4. FIRST AID MEASURES

Product AS SOLD
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 : Treat symptomatically.
Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Product AT USE DILUTION
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.

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD
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

Product AS SOLD
Personal precautions, protective equipment and emergency procedures: 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.

Product AT USE DILUTION
Personal precautions, protective equipment and emergency procedures: Refer to protective measures listed in sections 7 and 8.
Environmental precautions: No special environmental precautions required.
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.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD
Advice on safe handling: Wash hands thoroughly after handling.
Conditions for safe storage: Keep out of reach of children. Store in suitable labeled containers.
Storage temperature: 5 °C to 40 °C

Product AT USE DILUTION
Advice on safe handling: Wash hands after handling. For personal protection see section 8.
Conditions for safe storage: Keep out of reach of children. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD
Ingredients with workplace control parameters
SAFETY DATA SHEET

KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT

<table>
<thead>
<tr>
<th>Ingredients</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>
</tbody>
</table>

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

**Personal protective equipment**

- **Eye protection**: No special protective equipment required.
- **Hand protection**: 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.

**Product AT USE DILUTION**

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

**Personal protective equipment**

- **Eye protection**: No special protective equipment required.
- **Hand protection**: No special protective equipment required.
- **Skin protection**: No special protective equipment required.
- **Respiratory protection**: No personal respiratory protective equipment normally required.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>cloudy, yellow</td>
<td>colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Floral</td>
<td>Floral</td>
</tr>
<tr>
<td>pH</td>
<td>7.0 - 8.7, 100 %</td>
<td>6.0 - 8.5</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100 °C</td>
<td></td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT

Relative vapor density : No data available
Relative density : 1.01 - 1.05
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

Product AS SOLD
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

Product AS SOLD
Eyes : Causes eye irritation.
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.

Product AT USE DILUTION
Eyes : Health injuries are not known or expected under normal use.
Experience with human exposure

Product AS SOLD
Eye contact : Redness, Irritation
Skin contact : No symptoms known or expected.
Ingestion : No symptoms known or expected.
Inhalation : No symptoms known or expected.

Product AT USE DILUTION
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 AS SOLD
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 : Mild eye irritation
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

Ingredients
Acute inhalation toxicity : Propylene glycol
4 h LC50 Rat: > 158.5 mg/l
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KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT

Product AS SOLD
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:
- Propylene glycol
  96 h LC50: > 10,000 mg/l
- Alcohol ethoxylate
  96 h LC50 Fish: 1.5 mg/l

Toxicity to daphnia and other aquatic invertebrates:
- Propylene glycol
  48 h EC50: 18,340 mg/l
- Poly(oxy-1,2-ethanediyl), a-(2-propylheptyl)-w-hydroxy-
  48 h EC50 Daphnia: 10 mg/l
- Amphoteric surfactants
  48 h EC50 Daphnia: > 100 mg/l

Toxicity to algae:
- Propylene glycol
  96 h EC50: 19,000 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

Product AS SOLD

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
SAFETY DATA SHEET
KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT

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.

Product AT USE DILUTION
Disposal methods : Diluted product can be flushed to sanitary sewer.
Disposal considerations : Dispose of in accordance with local, state, and federal regulations.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD
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

Product AT USE DILUTION
Not intended for transport.

SECTION 15. REGULATORY INFORMATION

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

United States TSCA Inventory :
On TSCA Inventory

Canadian Domestic Substances List (DSL) :
This product contains one or several components listed in the Canadian NDSL.
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

Product AS SOLD
NFPA:  
Flammability

Health
1 0 0 0

Instability

Special hazard. 

HMIS III: 

FLAMMABILITY 0

PHYSICAL HAZARD 0

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

Product AT USE DILUTION
NFPA:  
Flammability

Health
0 0 0

Instability

Special hazard.

HMIS III: 

FLAMMABILITY 0

PHYSICAL HAZARD 0

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

Issuing date : 07/29/2015 
Version : 1.2 
Prepared by : Regulatory Affairs
SAFETY DATA SHEET

KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT

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.