SAFETY DATA SHEET

KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: KEYSSTONE HIGH EFFICIENCY LAUNDRY DETERGENT
Other means of identification: Not applicable
Recommended use: Laundry detergent
Restrictions on use: Reserved for industrial and professional use.
Product dilution information: 0.02% - 0.19%
Issuing date: 07/15/2019

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 elements
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

Product AS SOLD
Pure substance/mixture: Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>57-55-6</td>
<td>10 - 30</td>
</tr>
<tr>
<td>alcohols, c12-16, ethoxylated</td>
<td>68851-12-2</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Fattyalcohol ethoxylates &gt; C15 and =/&lt; 5EO</td>
<td>160875-66-1</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

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1-(2-(2-Carboxyethoxy)Ethyl)-1(or 3)-(2-Carboxyethyl)-2-Coconut Oil-2-Imidazolinium Hydroxide, Disodium Salt

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
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. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Conditions for safe storage
Keep out of reach of children. Store in suitable labeled containers.

Storage temperature
5 ºC to 40 ºC

Product AT USE DILUTION
Advice on safe handling
Wash hands after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE). 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

<table>
<thead>
<tr>
<th>Components</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**

<table>
<thead>
<tr>
<th>Eye protection</th>
<th>No special protective equipment required.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand protection</td>
<td>No special protective equipment required.</td>
</tr>
<tr>
<td>Skin protection</td>
<td>No special protective equipment required.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>No personal respiratory protective equipment normally required.</td>
</tr>
<tr>
<td>Hygiene measures</td>
<td>Handle in accordance with good industrial hygiene and safety practice.</td>
</tr>
</tbody>
</table>

**Product AT USE DILUTION**

<table>
<thead>
<tr>
<th>Engineering measures</th>
<th>Good general ventilation should be sufficient to control worker exposure to airborne contaminants.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye protection</td>
<td>No special protective equipment required.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>No special protective equipment required.</td>
</tr>
<tr>
<td>Skin protection</td>
<td>No special protective equipment required.</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>No personal respiratory protective equipment normally required.</td>
</tr>
</tbody>
</table>

### 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>Odor Threshold</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>100 °C</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.01 - 1.05</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>
**SAFETY DATA SHEET**

**KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT**

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**
Reactivity : No dangerous reaction known under conditions of normal use.
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

**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.
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

**Product AS SOLD**

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Redness, Irritation</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No symptoms known or expected.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No symptoms known or expected.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No symptoms known or expected.</td>
</tr>
</tbody>
</table>

**Product AT USE DILUTION**

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>No symptoms known or expected.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No symptoms known or expected.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No symptoms known or expected.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No symptoms known or expected.</td>
</tr>
</tbody>
</table>

Toxicity

**Product AS SOLD**

<table>
<thead>
<tr>
<th>Toxicity Type</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>Acute toxicity estimate: &gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Acute inhalation toxicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>No data available</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Mild eye irritation</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>No data available</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Reproductive effects</td>
<td>No data available</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>No data available</td>
</tr>
<tr>
<td>STOT-repeated exposure</td>
<td>No data available</td>
</tr>
<tr>
<td>Aspiration toxicity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Components**

- **Acute inhalation toxicity**
  - Propylene glycol
  - 4 h LC50 Rat: > 158.5 mg/l
  - Test atmosphere: dust/mist

**Components**

- **Acute dermal toxicity**
  - alcohols, c12-16, ethoxylated
  - LD50 Rabbit: > 2,000 mg/kg
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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

Components
Toxicity to fish : Propylene glycol
96 h LC50: > 10,000 mg/l
alcohols, c12-16, ethoxylated
LC50: 1.5 mg/l

Components
Toxicity to daphnia and other aquatic invertebrates : Propylene glycol
48 h EC50: 18,340 mg/l
Fatty alcohol ethoxylates > C15 and =/< 5EO
48 h Daphnia magna (Water flea): > 1 mg/l
1-(2-(2-Carboxyethoxy)Ethyl)-1(or 3)-(2-Carboxyethyl)-2-Coconut Oil-2-Imidazolinium Hydroxide, Disodium Salt
48 h EC50 Daphnia: > 100 mg/l

Components
Toxicity to algae : Propylene glycol
96 h EC50: 19,000 mg/l

Persistence and degradability
Product AS SOLD
Readily biodegradable.

Product AT USE DILUTION
Readily biodegradable.

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 : Do not contaminate ponds, waterways or ditches with chemical or used container. 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. 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

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
Serious eye damage or eye irritation

SARA 302
This material does not contain any components with a section 302 EHS TPQ.

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.

California Cleaning Product Right to Know Act of 2017 (SB 258)
This regulation applies to this product.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Function</th>
<th>List(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>water</td>
<td>7732-18-5</td>
<td>Diluent</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Propylene glycol</td>
<td>57-55-6</td>
<td>Solvent</td>
<td>12</td>
</tr>
</tbody>
</table>
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KEYSTONE HIGH EFFICIENCY LAUNDRY DETERGENT

| alcohols, c12-16, ethoxylated | 68551-12-2 | Cleaning Agent | Not Applicable |
| Fattyalcohol ethoxylates > C15 and <= 5EO | 160875-66-1 | Cleaning Agent | Not Applicable |
| 1-(2-(2-Carboxyethoxy)Ethyl)-1(or 3)-(2-Carboxyethyl)-2-Coconut Oil-2-Imidazolinium Hydroxide, Disodium Salt | 68604-71-7 | Cleaning Agent | Not Applicable |
| Acrylic polymer | Withheld | Cleaning Agent | Not Applicable |
| Acrylate polymer | Withheld | Cleaning Agent | Not Applicable |
| Fragrance Ingredient(s) | Not Available | Fragrance | Not Applicable |
| Antifoaming agent | Withheld | Stabilizer | Not Applicable |
| subtilisin | 9014-01-1 | Cleaning Agent | 8 |
| Sulfonic Acid | Withheld | Brightener | Not Applicable |
| Substituted organic acid | Withheld | Cleaning Agent | Not Applicable |
| Ethoxylated alcohols | Withheld | Cleaning Agent | Not Applicable |

*refer to ecolab.com/sds for electronic links to designated lists

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

United States TSCA Inventory:
Listed on TSCA

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

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

Taiwan Chemical Substance Inventory (TCSI):
not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD
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 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.