**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

<table>
<thead>
<tr>
<th>Product name</th>
<th>APEX RINSE ADDITIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Recommended use</td>
<td>Rinse additive</td>
</tr>
<tr>
<td>Restrictions on use</td>
<td>Reserved for industrial and professional use.</td>
</tr>
<tr>
<td>Product dilution information</td>
<td>0.0018 % - 0.0044 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company</th>
<th>Ecolab Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>370 N. Wabasha Street</td>
</tr>
<tr>
<td></td>
<td>St. Paul, Minnesota USA 55102</td>
</tr>
<tr>
<td></td>
<td>1-800-352-5326</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency telephone</th>
<th>1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issuing date</td>
<td>10/27/2014</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Statements</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>Precautionary Statements</td>
<td>Prevention: Wash skin thoroughly after handling.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

**Product AT USE DILUTION**

<table>
<thead>
<tr>
<th>Precautionary Statements</th>
<th>Prevention: Wash hands thoroughly after handling.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Response: Get medical advice/attention if you feel unwell.</td>
</tr>
<tr>
<td></td>
<td>Storage: Store in accordance with local regulations.</td>
</tr>
</tbody>
</table>

**Other hazards**

None known.

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

**Product AS SOLD**

903397-04 1 / 9
### SAFETY DATA SHEET

**APEX RINSE ADDITIVE**

**Pure substance/mixture**: Mixture

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>oxirane, methyl-, polymer with oxirane</td>
<td>9003-11-6</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>30 - 60</td>
</tr>
<tr>
<td>alcohols, c10-16, ethoxylated</td>
<td>68002-97-1</td>
<td>10 - 30</td>
</tr>
</tbody>
</table>

**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.

**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.

See toxicological information (Section 11)

### 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 firefighting: 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: Fire residues and contaminated fire extinguishing water must be
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: Sweep up and shovel into suitable containers for disposal.

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: 0 °C to 50 °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

<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>Urea</td>
<td>57-13-6</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>WEEL</td>
</tr>
</tbody>
</table>

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

Personal protective equipment
SAFETY DATA SHEET

APEX RINSE ADDITIVE

| 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>Property</th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Extruded solid.</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>clear, dark green</td>
<td>colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
<td>odorless</td>
</tr>
<tr>
<td>pH</td>
<td>4.5 - 7.0, 1 %</td>
<td>6.5 - 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>No data available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.0 - 1.2</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></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
APEX RINSE ADDITIVE

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:
Eye 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
SAFETY DATA SHEET

APEX RINSE ADDITIVE

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 2,815 mg/kg
Acute inhalation toxicity : No data available
Acute dermal toxicity : No data available
Skin corrosion/irritation : No skin irritation
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 : Urea
4 h LC50 Rat: > 2.71 mg/l
alcohols, c10-16, ethoxylated
4 h LC50 Rat: > 50 mg/l

Ingredients
Acute dermal toxicity : Urea
LD50 Rat: 8,200 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD
Ecotoxicity
Environmental Effects: Toxic 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**
  - oxirane, methyl-, polymer with oxirane
    - 96 h LC50 Fish: > 100 mg/l
  - Urea
    - 96 h LC50 Fish: 127.9 mg/l

- **Toxicity to daphnia and other aquatic invertebrates**
  - alcohols, c10-16, ethoxylated
    - 48 h EC50: > 0.1 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.
- **Disposal considerations**: 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
SAFETY DATA SHEET

APEX RINSE ADDITIVE

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:

Switzerland. New notified substances and declared preparations : The mixture contains substances listed on the Swiss Inventory

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 : On the inventory, or in compliance with the inventory

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) : On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS) : On the inventory, or in compliance with the inventory
SAFETY DATA SHEET
APEX RINSE ADDITIVE

China. Inventory of Existing Chemical Substances in China (IECSC):
On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Product AS SOLD
NFPA: Flammability

HMIS III:

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

Product AT USE DILUTION
NFPA: Flammability

HMIS III:

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

Issuing date : 10/27/2014
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.

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