SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PANTASTIC
Other means of identification : Not applicable
Recommended use : Manual Warewashing Detergent
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : 0.0468 % - 0.131 %

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 : 10/14/2014

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Product AS SOLD
Eye irritation : Category 2B
Skin sensitization : Category 1
Carcinogenicity : Category 2

Product AT USE DILUTION
Not a hazardous substance or mixture.

GHS Label element
Product AS SOLD
Hazard pictograms :

Signal Word : Warning
Hazard Statements : May cause an allergic skin reaction.
Causes eye irritation.
Suspected of causing cancer.

Precautionary Statements : Prevention:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Use personal protective equipment as required.
Response:
IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned:
Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse.

**Storage:**
Store locked up.

**Disposal:**
Dispose of contents/container to an approved waste disposal plant.

---

**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><strong>Response:</strong> Get medical advice/attention if you feel unwell.</td>
</tr>
<tr>
<td></td>
<td><strong>Storage:</strong> Store in accordance with local regulations.</td>
</tr>
</tbody>
</table>

---

**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>amides, coco, n,n-bis(hydroxyethyl)</td>
<td>68603-42-9</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Secondary Alkanesulphonates</td>
<td>68439-57-6</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Ethoxylated alkyl sulfate</td>
<td>68585-34-2</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Sodium Xylenesulfonate</td>
<td>1300-72-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2,2'-iminodiethanol</td>
<td>111-42-2</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>d-Limonene</td>
<td>5989-27-5</td>
<td>0.1 - 1</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: 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.

If swallowed: Rinse mouth. Get medical attention if symptoms occur.

If inhaled: 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.

**Product AT USE DILUTION**

In case of eye contact: Rinse with plenty of water.

In case of skin contact: Rinse with plenty of water.
SAFETY DATA SHEET

PANTASTIC

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 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 : 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.

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: 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

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>ethanol</td>
<td>64-17-5</td>
<td>TWA</td>
<td>1,000 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1,900 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1,000 ppm</td>
<td>OSHA Z1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1,900 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>1,000 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td>2,2'-iminodiethanol</td>
<td>111-42-2</td>
<td>TWA (Inhalable fraction and vapor)</td>
<td>1 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>3 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

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

Personal protective equipment

Eye protection: No special protective equipment required.

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: 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.

Product AT USE DILUTION

911601 

4 / 10
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>liquid</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>clear, dark blue</td>
<td>light blue</td>
</tr>
<tr>
<td>Odor</td>
<td>Floral</td>
<td>odorless</td>
</tr>
<tr>
<td>pH</td>
<td>6.8 - 8.5, 100 %</td>
<td>7.0 - 7.4</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>1.005 - 1.035</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>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 10. STABILITY AND REACTIVITY
## SAFETY DATA SHEET

### PANTASTIC

#### Product AS SOLD

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>No dangerous reaction known under conditions of normal use.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>None known.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>None known.</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Decomposition products may include the following materials: Carbon oxides</td>
</tr>
<tr>
<td></td>
<td>Nitrogen oxides (NOx)</td>
</tr>
<tr>
<td></td>
<td>Sulfur oxides</td>
</tr>
<tr>
<td></td>
<td>Oxides of phosphorus</td>
</tr>
</tbody>
</table>

#### 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:** May cause allergic skin reaction.
- **Ingestion:** Health injuries are not known or expected under normal use.
- **Inhalation:** Health injuries are not known or expected under normal use.
- **Chronic Exposure:** Suspected of causing cancer.

**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**

- **Eye contact:** Redness, Irritation
- **Skin contact:** Redness, Irritation, Allergic reactions
- **Ingestion:** No symptoms known or expected.
- **Inhalation:** No symptoms known or expected.

**Product AT USE DILUTION**

- **Eye contact:** No symptoms known or expected.
**SAFETY DATA SHEET**

**PANTASTIC**

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>: No symptoms known or expected.</th>
</tr>
</thead>
<tbody>
<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**

| 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**

**IARC**  
Group 2B: Possibly carcinogenic to humans

- amides, coco, n,n-bis(hydroxyethyl) 68603-42-9
- 2,2'-iminodiethanol 111-42-2

**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

**SECTION 12. ECOLOGICAL INFORMATION**

**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 | : amides, coco, n,n-bis(hydroxyethyl) 96 h LC50 Fish: 3.6 mg/l |

911601 7 / 10
PANTASTIC

Secondary Alkanesulphonates
96 h LC50 Fish: 4.2 mg/l

Ethoxylated alkyl sulfate
96 h LC50 Fish: 28 mg/l

Ingredients
Toxicity to daphnia and other aquatic invertebrates: 2,2'-iminodiethanol
48 h EC50 Daphnia: 65.5 mg/l

Ingredients
Toxicity to algae: Sodium Xylenesulfonate
96 h EC50: 230 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 an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Product AT USE DILUTION
Disposal methods: 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

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

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2’-iminodiethanol</td>
<td>111-42-2</td>
<td>100</td>
<td>24337</td>
</tr>
</tbody>
</table>

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
  Chronic 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
WARNING! This product contains a chemical known in the State of California to cause cancer.

  amides, coco, n,n-bis(hydroxyethyl)  68603-42-9
  2,2’-iminodiethanol                  111-42-2

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

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

New Zealand. Inventory of Chemical Substances :
On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory :
On the inventory, or in compliance with the inventory

Japan. ISHL - Inventory of Chemical Substances (METI) :
not determined
SAFETY DATA SHEET

PANTASTIC

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

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:

HMIS III:

<table>
<thead>
<tr>
<th>Flammability</th>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2*</td>
<td>0</td>
</tr>
</tbody>
</table>

Health
2
Special hazard.

NFPA:

HMIS III:

<table>
<thead>
<tr>
<th>Flammability</th>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Physical Hazard
Special hazard.

Issuing date : 10/14/2014
Version : 1.0
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.