Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

Other means of identification: Not applicable.

Recommended use: Instrument cleaner

Product dilution information: 0.39% - 1.6%

Company: ECOLAB PTY LTD
2 Drake Avenue
Macquarie Park, NSW Australia 2113
1 800 022 002

Emergency telephone number: 1800 205 506, +64 7 958 2372

Issuing date: 22.09.2016

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD
Respiratory sensitization: Category 1

Product AT USE DILUTION
Not a hazardous substance or mixture.

GHS Label element

Product AS SOLD
Hazard pictograms:

Signal Word: Danger

Hazard Statements: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements: Prevention:

Response:
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

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

Product AT USE DILUTION
Precautionary Statements: Prevention:
Wash hands thoroughly after handling.

Response:
Get medical advice/ attention if you feel unwell.
SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

Storage:
Store in accordance with local regulations.

Product AS SOLD

Other hazards: Do not mix with bleach or other chlorinated products – will cause chlorine gas.

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>30 - 60</td>
</tr>
<tr>
<td>triethanolamine</td>
<td>102-71-6</td>
<td>1 - 5</td>
</tr>
<tr>
<td>subtilisin</td>
<td>9014-01-1</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: Rinse with plenty of water.
If swallowed: Rinse mouth. Get medical attention if symptoms occur.

Contact the Poison's Information Centre (eg Australia 13 1126; New Zealand 0800 764 766).

If inhaled: Remove to fresh air. Treat symptomatically. Get medical attention.

Protection of first-aiders: If potential for exposure exists refer to Section 8 for specific personal protective equipment.

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.

Contact the Poison's Information Centre (eg Australia 13 1126; New Zealand 0800 764 766).

If inhaled: Get medical attention if symptoms occur.

Section: 5. FIREFIGHTING MEASURES
## 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). 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). 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 breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not get in eyes, on skin, or on clothing. Do not mix with bleach or other chlorinated products – will cause chlorine gas.
SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT


Storage temperature: 15 °C to 30 °C

Product AT USE DILUTION

Advice on safe handling: Wash hands after handling. For personal protection see section 8.


Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

Components 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>150 ppm</td>
<td>AU OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>474 mg/m³</td>
<td></td>
</tr>
<tr>
<td>triethanolamine</td>
<td>102-71-6</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>AU OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 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: Safety glasses

Hand protection: Impervious gloves

Skin protection: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

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>liquid</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>clear, dark blue</td>
<td>light blue</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
<td>odourless</td>
</tr>
<tr>
<td>pH</td>
<td>7.0 - 8.0, 100 %</td>
<td>7.0 - 8.0</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable., Does not sustain combustion.</td>
<td></td>
</tr>
<tr>
<td>Odour 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>
<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>Vapour pressure</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.03 - 1.07</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>no data available</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>Auto-ignition 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**

**Product AS SOLD**
- Chemical stability: Stable under normal conditions.
- Possibility of hazardous reactions: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
- Conditions to avoid: None known.
- Incompatible materials: None known.
- Hazardous decomposition products: No decomposition if stored and applied as directed.
Section: 11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects

Product AS SOLD

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: May cause allergic respiratory reaction.
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

Eye contact: No symptoms known or expected.
Skin contact: No symptoms known or expected.
Ingestion: No symptoms known or expected.
Inhalation: Respiratory irritation, Cough

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: no data available
Acute inhalation toxicity: 4 h Acute toxicity estimate: > 20 mg/l
Acute dermal toxicity: no data available
Skin corrosion/irritation: no data available
### SAFETY DATA SHEET

**OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT**

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>no data available</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**

<table>
<thead>
<tr>
<th>Component</th>
<th>Acute oral toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>LD50 rat 22,000 mg/kg</td>
</tr>
<tr>
<td>triethanolamine</td>
<td>LD50 rat 6,400 mg/kg</td>
</tr>
<tr>
<td>subtilisin</td>
<td>LD50 rat 1,800 mg/kg</td>
</tr>
</tbody>
</table>

### Section: 12. ECOLOGICAL INFORMATION

**Product AS SOLD**

**Ecotoxicity**

<table>
<thead>
<tr>
<th>Environmental Effects</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This product has no known ecotoxicological effects.</td>
</tr>
</tbody>
</table>

**Product**

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no data available</td>
</tr>
<tr>
<td>Toxicity to daphnia and other aquatic invertebrates</td>
<td>no data available</td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>no data available</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to fish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>96 h LC50: &gt; 10,000 mg/l</td>
</tr>
<tr>
<td>triethanolamine</td>
<td>96 h LC50: 11,800 mg/l</td>
</tr>
</tbody>
</table>

**Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol</td>
<td>48 h EC50: 18,340 mg/l</td>
</tr>
<tr>
<td>triethanolamine</td>
<td>48 h EC50: 609.88 mg/l</td>
</tr>
<tr>
<td>subtilisin</td>
<td>48 h EC50: 1.4 mg/l</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

Toxicity to algae:
- Propylene glycol: 96 h EC50: 19,000 mg/l
- Triethanolamine: 72 h EC50: > 100 mg/l

Persistence and degradability
Product AS SOLD:
no data available

Product AT USE DILUTION:
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:
  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 (ADG):
  Not dangerous goods

- Sea transport (IMDG/IMO):
  Not dangerous goods

Section: 15. REGULATORY INFORMATION

National regulatory information:
- Standard for the Uniform:
  No poison schedule number allocated
Scheduling of Medicines and Poisons

The components 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. Industrial Chemical (Notification and Assessment) Act**
On the inventory, or in compliance with the inventory

**New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand**
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)**
not determined

**Philippines Inventory of Chemicals and Chemical Substances (PICCS)**
not determined

**China Inventory of Existing Chemical Substances**
On the inventory, or in compliance with the inventory

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**Section: 16. OTHER INFORMATION**

Sources of key data used to compile the Safety Data Sheet

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
IARC: (International Agency for Research on Cancer)
US. National Toxicology Program (NTP) Report on Carcinogens
ECHA List of Publishable Substances Registered
EU HPVCs (High Production Volume Chemicals)

Issuing date : 22.09.2016
Date of first issue : 22.09.2016
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 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.