



## SAFETY DATA SHEET

### APEX POWER PLUS

#### Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : APEX POWER PLUS  
Other means of identification : Not applicable.  
Recommended use : Machine Warewashing Detergent  
Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.12 % - 0.26 %

Company : Ecolab Co.  
5105 Tomken Road  
Mississauga, Ontario Canada L4W 2X5  
1-800-352-5326

Emergency health information : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 03/03/2016

#### 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 : Mixing this product with acid or ammonia releases chlorine gas.

#### Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

# SAFETY DATA SHEET

## APEX POWER PLUS

### Product AS SOLD

Pure substance/mixture : Mixture

| Chemical Name                              | CAS-No.    | Concentration: (%) |
|--|------------|--------------------|
| Sodium Carbonate(soda)                     | 497-19-8   | 60 - 100           |
| sodium metasilicate                        | 6834-92-0  | 1 - 5              |
| Alcohol ethoxylate                         | 68439-51-0 | 1 - 5              |
| Sodium dichloro-s-triazinetrione dihydrate | 51580-86-0 | 1 - 5              |
| potassium hydroxide                        | 1310-58-3  | 0.1 - 1            |

### 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. FIREFIGHTING 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)

# SAFETY DATA SHEET

## APEX POWER PLUS

Sulphur oxides  
Oxides of phosphorus

- Special protective equipment for firefighters : 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.
- Risk of explosion. : Not available.

### 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). 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. Mixing this product with acid or ammonia releases chlorine gas.
- 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

Components with workplace control parameters

# SAFETY DATA SHEET

## APEX POWER PLUS

| Components          | CAS-No.   | Form of exposure | Permissible concentration | Basis      |
|---------------------|-----------|------------------|---------------------------|------------|
| potassium hydroxide | 1310-58-3 | (c)              | 2 mg/m <sup>3</sup>       | CAD AB OEL |
|                     |           | C                | 2 mg/m <sup>3</sup>       | CAD BC OEL |
|                     |           | C                | 2 mg/m <sup>3</sup>       | OEL (QUE)  |
| potassium hydroxide | 1310-58-3 | Ceiling          | 2 mg/m <sup>3</sup>       | ACGIH      |
|                     |           | Ceiling          | 2 mg/m <sup>3</sup>       | NIOSH REL  |

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

|   | Product AS SOLD     | Product AT USE DILUTION |
|---|---------------------|-------------------------|
| Appearance                              | : solid             | liquid                  |
| Colour                                  | : opaque, white     | colourless              |
| Odour                                   | : Chlorine          | odourless               |
| pH                                      | : 11.0 - 11.8, 1 %  | 10.79 - 10.91           |
| Flash point                             | : Not applicable.   |                         |
| Odour Threshold                         | : no data available |                         |
| Melting point/freezing point            | : no data available |                         |
| Initial boiling point and boiling range | : no data available |                         |
| Evaporation rate                        | : no data available |                         |
| Flammability (solid, gas)               | : no data available |                         |

## SAFETY DATA SHEET

### APEX POWER PLUS

|  |                     |
|--|---------------------|
| Upper explosion limit                  | : no data available |
| Lower explosion limit                  | : no data available |
| Vapour pressure                        | : no data available |
| Relative vapour density                | : no data available |
| Relative density                       | : no data available |
| Water solubility                       | : no data available |
| Solubility in other solvents           | : no data available |
| Partition coefficient: n-octanol/water | : no data available |
| Auto-ignition temperature              | : no data available |
| Thermal decomposition                  | : no data available |
| Viscosity, kinematic                   | : no data available |
| Explosive properties                   | : no data available |
| Oxidizing properties                   | : no data available |
| 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 | : Mixing this product with acid or ammonia releases chlorine gas.   |
| Conditions to avoid                | : None known.   |
| Incompatible materials             | : Acids<br>Bases  |
| Hazardous decomposition products   | : Decomposition products may include the following materials:<br>Carbon oxides<br>nitrogen oxides (NOx)<br>Sulphur oxides<br>Oxides of phosphorus |

### Section: 11. TOXICOLOGICAL INFORMATION

#### 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

## SAFETY DATA SHEET

### APEX POWER PLUS

|                  |   |
|------------------|---|
| 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 | : 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

###### Product

|                                   |   |
|-----------------------------------|---|
| Acute oral toxicity               | : Acute toxicity estimate : 2,938 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                       |

### Section: 12. ECOLOGICAL INFORMATION

# SAFETY DATA SHEET

## APEX POWER PLUS

### Product AS SOLD

#### Ecotoxicity

Environmental Effects : Harmful to aquatic life.

#### Product

Toxicity to fish : 96 h LC50: 13.50 mg/l

Toxicity to daphnia and other aquatic invertebrates : no data available

Toxicity to algae : no data available

#### Components

Toxicity to daphnia and other aquatic invertebrates : Sodium Carbonate(soda)  
48 h EC50 Ceriodaphnia (water flea): 213.5 mg/l

Sodium dichloro-s-triazinetrione dihydrate  
48 h EC50 Daphnia: 0.196 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 : 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 : 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.

## SAFETY DATA SHEET

### APEX POWER PLUS

#### 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 (TDG)

Not dangerous goods

##### Sea transport (IMDG/IMO)

Not dangerous goods

#### Section: 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the HPR and the SDS contains all of the information required by the HPR.

**The components of this product are reported in the following inventories:**

##### Switzerland. New notified substances and declared preparations :

not determined

##### 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. 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) :

On the inventory, or in compliance with the inventory

##### Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

not determined

##### China Inventory of Existing Chemical Substances :

not determined

#### Section: 16. OTHER INFORMATION

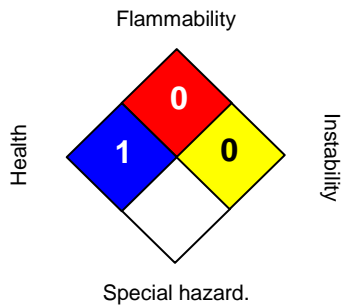
##### Product AS SOLD



# SAFETY DATA SHEET

## APEX POWER PLUS

### NFPA:



### HMIS III:

|                        |          |
|------------------------|----------|
| <b>HEALTH</b>          | <b>1</b> |
| <b>FLAMMABILITY</b>    | <b>0</b> |
| <b>PHYSICAL HAZARD</b> | <b>0</b> |

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

### Product AT USE DILUTION

### NFPA:



### HMIS III:

|                        |          |
|------------------------|----------|
| <b>HEALTH</b>          | <b>0</b> |
| <b>FLAMMABILITY</b>    | <b>0</b> |
| <b>PHYSICAL HAZARD</b> | <b>0</b> |

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

Issuing date : 03/03/2016  
version : 1.0  
Prepared by : Regulatory Affairs 1-800-352-5326

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.