



## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ENCAPSULATED POWDER DISHMACHINE DETERGENT

Other means of identification : Not applicable

Recommended use : All Purpose Cleaner

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.11 % - 0.22 %

Company : Ecolab Inc.  
1 Ecolab Place  
St. Paul, Minnesota USA 55102  
1-866-444-7450

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

Issuing date : 08/15/2019

#### SECTION 2. HAZARDS IDENTIFICATION

##### GHS Classification

###### Product AS SOLD

Skin corrosion : Category 1A

Serious eye damage : Category 1

###### Product AT USE DILUTION

Skin corrosion : Category 1A

Serious eye damage : Category 1

##### GHS label elements

###### Product AS SOLD

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**

Do not breathe dusts or mists. Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash

## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

contaminated clothing before reuse.

**Storage:**

Store locked up.

**Disposal:**

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

#### Product AT USE DILUTION

Hazard pictograms

:



Signal Word

: Danger

Hazard Statements

: Causes severe skin burns and eye damage.

Precautionary Statements

: **Prevention:**

Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

**Storage:**

Store locked up.

**Disposal:**

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

#### Product AS SOLD

Other hazards

: None known.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Product AS SOLD

Pure substance/mixture

: Mixture

| Chemical name    | CAS-No.   | Concentration (%) |
|------------------|-----------|-------------------|
| Sodium hydroxide | 1310-73-2 | 30 - 60           |
| Sodium Carbonate | 497-19-8  | 30 - 60           |

#### Product AT USE DILUTION

No hazardous ingredients

### SECTION 4. FIRST AID MEASURES

#### Product AS SOLD

In case of eye contact

: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

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

## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

shoes before reuse. Get medical attention immediately.

- |   |   |
|---|---|
| If swallowed  | : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately. |
| If inhaled  | : Remove to fresh air. Treat symptomatically. 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.  |
| 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 immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.      |
| 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 immediately. |
| If swallowed            | : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.  |
| If inhaled              | : Remove to fresh air. Treat symptomatically. 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          | : Fire Hazard<br>Keep away from heat and sources of ignition.<br>Flash back possible over considerable distance.  |
| Hazardous combustion products                  | : Decomposition products may include the following materials:<br>Carbon oxides<br>Nitrogen oxides (NOx)<br>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. |

## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

##### Product AS SOLD

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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 : Sweep up and shovel into suitable containers for disposal.

##### Product AT USE DILUTION

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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.

#### SECTION 7. HANDLING AND STORAGE

##### Product AS SOLD

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). 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 away from heat and sources of ignition. Do not store near acids. Keep away from oxidizing agents. Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : -30 °C to 50 °C

##### Product AT USE DILUTION

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.

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

## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Product AS SOLD

##### Ingredients with workplace control parameters

| Components       | CAS-No.   | Form of exposure | Permissible concentration | Basis     |
|------------------|-----------|------------------|---------------------------|-----------|
| sodium hydroxide | 1310-73-2 | Ceiling          | 2 mg/m <sup>3</sup>       | ACGIH     |
|                  |           | Ceiling          | 2 mg/m <sup>3</sup>       | NIOSH REL |
|                  |           | TWA              | 2 mg/m <sup>3</sup>       | OSHA Z1   |

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

##### Personal protective equipment

Eye protection : Wear eye protection/ face protection.

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 : 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.  
Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

##### Product AT USE DILUTION

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

##### Personal protective equipment

Eye protection : Wear eye protection/ face protection.

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 : 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.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Product AS SOLD

Product AT USE DILUTION

## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

|   |  |                 |
|---|--|-----------------|
| Appearance                              | : powder   | liquid          |
| Color                                   | : opaque, white  | colorless       |
| Odor                                    | : not significant  | not significant |
| pH                                      | : 12.5 - 12.6, (1 %)                                       | 11.5 - 12.5     |
| Flash point                             | : 0 °C, Does not sustain combustion.                       |                 |
| Odor Threshold                          | : No data available  |                 |
| Melting point/freezing point            | : No data available  |                 |
| Initial boiling point and boiling range | : > 100 °C   |                 |
| Evaporation rate                        | : No data available  |                 |
| Flammability (solid, gas)               | : No data available  |                 |
| Upper explosion limit                   | : No data available  |                 |
| Lower explosion limit                   | : No data available  |                 |
| Vapor pressure                          | : No data available  |                 |
| Relative vapor 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  |                 |
| 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                | : Heat, flames and sparks.   |
| Incompatible materials             | : Acids  |
| Hazardous decomposition products   | : In case of fire hazardous decomposition products may be produced such as:<br>Carbon oxides<br>Nitrogen oxides (NO <sub>x</sub> )<br>Oxides of phosphorus |

## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

#### SECTION 11. TOXICOLOGICAL INFORMATION

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

##### Potential Health Effects

###### Product AS SOLD

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns.

Ingestion : Causes digestive tract burns.

Inhalation : May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

###### Product AT USE DILUTION

Eyes : Causes serious eye damage.

Skin : Causes severe skin burns.

Ingestion : Causes digestive tract burns.

Inhalation : May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

##### Experience with human exposure

###### Product AS SOLD

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Corrosion

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

###### Product AT USE DILUTION

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Corrosion

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

##### Toxicity

###### Product AS SOLD

###### Product

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

## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

|                                   |  |
|-----------------------------------|--|
| Skin corrosion/irritation         | : No data available  |
| Serious eye damage/eye irritation | : No data available  |
| Respiratory or skin sensitization | : Contains an ingredient that can cause asthmatic-like reactions in sulfite-sensitive individuals. |
| 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

#### 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 : Sodium Carbonate  
96 h LC50 *Lepomis macrochirus* (Bluegill sunfish): 300 mg/l

#### Components

Toxicity to daphnia and other aquatic invertebrates : Sodium hydroxide  
48 h EC50: 40 mg/l  
  
Sodium Carbonate  
48 h EC50 *Ceriodaphnia* (water flea): 213.5 mg/l

#### Persistence and degradability

Product AS SOLD  
Poorly biodegradable

Product AT USE DILUTION  
Poorly biodegradable

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects



## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

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 : 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.

#### 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)

- UN number : 3262
- Description of the goods : Corrosive solid, basic, inorganic, n.o.s.  
(sodium hydroxide)
- Class : 8
- Packing group : II
- Environmentally hazardous : no

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

- UN number : 3262
- Description of the goods : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.  
(sodium hydroxide)
- Class : 8
- Packing group : II
- Marine pollutant : no

#### SECTION 15. REGULATORY INFORMATION

##### Product AS SOLD

##### EPCRA - Emergency Planning and Community Right-to-Know

##### CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ |
|------------|---------|--------------------|-----------------------|
|------------|---------|--------------------|-----------------------|

## SAFETY DATA SHEET

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

|                  |           |      |       |
|------------------|-----------|------|-------|
|                  |           |      | (lbs) |
| Sodium hydroxide | 1310-73-2 | 1000 | 2380  |

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : Skin corrosion or irritation  
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.

| Chemical Name   | CAS-No.    | Function       | List(s)        |
|---|------------|----------------|----------------|
| Sodium hydroxide  | 1310-73-2  | Cleaning Agent | 20             |
| Sodium Carbonate  | 497-19-8   | Cleaning Agent | Not Applicable |
| citric acid, trisodium salt, dihydrate                  | 6132-04-3  | Cleaning Agent | Not Applicable |
| 2-Phosphono-1,2,4-Butanetricarboxylic Acid, Sodium Salt | 40372-66-5 | Cleaning Agent | Not Applicable |
| Polyacrylates   | 68479-09-4 | Cleaning Agent | Not Applicable |
| water   | 7732-18-5  | Diluent        | Not Applicable |

\*refer to [ecolab.com/sds](http://ecolab.com/sds) for electronic links to designated lists

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

#### United States TSCA Inventory :

All substances listed as active on the 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 :

not determined

#### Japan. ENCS - Existing and New Chemical Substances Inventory :

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

### ENCAPSULATED POWDER DISHMACHINE DETERGENT

**China. Inventory of Existing Chemical Substances in China (IECSC) :**

On the inventory, or in compliance with the inventory

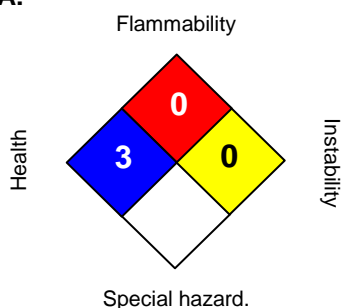
**Taiwan Chemical Substance Inventory (TCSI) :**

On the inventory, or in compliance with the inventory

#### SECTION 16. OTHER INFORMATION

##### Product AS SOLD

###### NFPA:



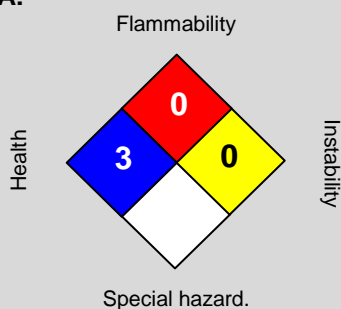
###### HMIS III:

|                 |   |
|-----------------|---|
| HEALTH          | 3 |
| FLAMMABILITY    | 0 |
| PHYSICAL HAZARD | 0 |

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

##### Product AT USE DILUTION

###### NFPA:



###### HMIS III:

|                 |   |
|-----------------|---|
| HEALTH          | 3 |
| FLAMMABILITY    | 0 |
| PHYSICAL HAZARD | 0 |

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

Issuing date : 08/15/2019  
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.