

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : DISHMACHINE DETERGENT CHLORINATED

Other means of identification : Not applicable

Recommended use : Machine Warewashing Detergent

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.1 % - 0.17 %

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 : 11/10/2022

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:**

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.

SAFETY DATA SHEET

DISHMACHINE DETERGENT CHLORINATED

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:

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Storage:

Store locked up.

Disposal:

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

Product AS SOLD

Other hazards

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture

: Mixture

Chemical name

Sodium hydroxide
sodium hypochlorite

CAS-No.

1310-73-2
7681-52-9

Concentration (%)

10 - 30
1 - 5

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. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

SAFETY DATA SHEET

DISHMACHINE DETERGENT CHLORINATED

| | |
|---|---|
| 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. 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 | : Not flammable or combustible. |
| Hazardous combustion products | : Decomposition products may include the following materials: Carbon oxides |
| 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

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|-----------------------|--|
| Personal precautions, | : Ensure adequate ventilation. Keep people away from and upwind of |
|-----------------------|--|

SAFETY DATA SHEET

DISHMACHINE DETERGENT CHLORINATED

protective equipment and emergency procedures : 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.

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. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Conditions for safe storage : Do not store near acids. 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 : 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. 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 out of reach of children. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD

SAFETY DATA SHEET

DISHMACHINE DETERGENT CHLORINATED

Ingredients with workplace control parameters

| Components | CAS-No. | Form of exposure | Permissible concentration | Basis |
|---------------------|-----------|------------------|---------------------------|-----------|
| sodium hydroxide | 1310-73-2 | C | 2 mg/m ³ | ACGIH |
| | | C | 2 mg/m ³ | NIOSH REL |
| | | TWA | 2 mg/m ³ | OSHA Z-1 |
| | | C | 2 mg/m ³ | OSHA P0 |
| | | C | 2 mg/m ³ | |
| sodium hypochlorite | 7681-52-9 | STEL | 2 mg/m ³ | US WEEL |

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

Personal protective equipment

Eye protection : Wear eye protection and/or 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 and/or 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

DISHMACHINE DETERGENT CHLORINATED

| | | |
|---|--|-------------|
| Appearance | : liquid | liquid |
| Color | : clear, light yellow | colorless |
| Odor | : Chlorine | Chlorine |
| pH | : 13.0 - 14.0, (100 %) | 11.3 - 11.8 |
| Flash point | : Not applicable, 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) | : Not applicable | |
| 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 | : 1.26 - 1.31 | |
| 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 | : yes | |
| 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 | : Mixing this product with acid or ammonia releases chlorine gas. |
| Conditions to avoid | : None known. |
| Incompatible materials | : Acids Metals Organic materials |
| Hazardous decomposition products | : In case of fire hazardous decomposition products may be produced such as: Carbon oxides |

SAFETY DATA SHEET

DISHMACHINE DETERGENT CHLORINATED

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

DISHMACHINE DETERGENT CHLORINATED

| | |
|-----------------------------------|---------------------|
| Skin corrosion/irritation | : No data available |
| Serious eye damage/eye irritation | : No data available |
| 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

Ecotoxicity

Product AS SOLD

Environmental Effects : Very toxic to aquatic life.

Product AT USE DILUTION

Environmental Effects : This product has no known ecotoxicological effects.

Product AS SOLD

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 hypochlorite 96 h EC50: 0.14 mg/l |
|------------------|---|

Components

| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : Sodium hydroxide 48 h EC50 Daphnia magna (Water flea): 40 mg/l sodium hypochlorite 48 h EC50: 0.071 mg/l |
|---|---|

Persistence and degradability

Product AT USE DILUTION

Not applicable - inorganic

Bioaccumulative potential

No data available

Mobility in soil

No data available

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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.
- RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste : D002 (Corrosive)

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 : 1824
- Description of the goods : Sodium hydroxide solution
- Class : 8
- Packing group : II
- Environmentally hazardous : no

Sea transport (IMDG/IMO)

- UN number : 1824
- Proper shipping name : SODIUM HYDROXIDE SOLUTION
- Class : 8
- Packing group : II
- Marine pollutant : no

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

SAFETY DATA SHEET

DISHMACHINE DETERGENT CHLORINATED

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---------------------|-----------|--------------------|-----------------------------|
| sodium hypochlorite | 7681-52-9 | 100 | 2500 |

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) |
|--|---------------|----------------|----------------|
| water | 7732-18-5 | Diluent | Not Applicable |
| Sodium hydroxide | 1310-73-2 | Cleaning Agent | 20 |
| sodium hypochlorite | 7681-52-9 | Cleaning Agent | Not Applicable |
| 2-Propenoic acid, polymer with 2,5-furandione, sodium salt | 52255-49-9 | Cleaning Agent | Not Applicable |
| Acrylic polymers | Not Available | Cleaning Agent | Not Applicable |

*refer to ecolab.com/sds for electronic links to designated lists

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

Switzerland. New notified substances and declared preparations :
not determined

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. Australian Industrial Chemicals Introduction Scheme (AICIS) :
not determined

New Zealand. Inventory of Chemical Substances :
not determined

Japan. ENCS - Existing and New Chemical Substances Inventory :
not determined

Korea. Korean Existing Chemicals Inventory (KECI) :

SAFETY DATA SHEET

DISHMACHINE DETERGENT CHLORINATED

not determined

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

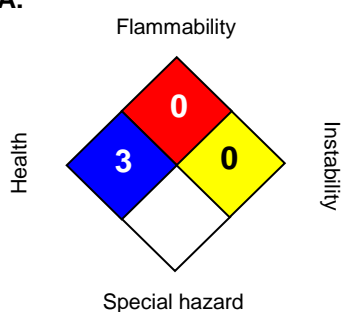
China. Inventory of Existing Chemical Substances in China (IECSC) :
not determined

Taiwan Chemical Substance Inventory (TCSI) :
not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD

NFPA:



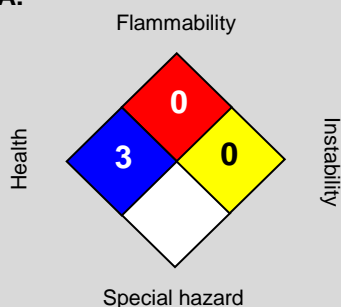
HMIS III:

| | |
|-----------------|---|
| 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 : 11/10/2022
Version : 1.2
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.