

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : LOW TEMP DISHMACHINE SANITIZER

Other means of identification : Not applicable

Recommended use : Sanitizer

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.84 % - 0.00024 %
UP TO 14 OZ/13 GAL OF WATER

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 : 12/18/2019

SECTION 2. HAZARDS IDENTIFICATION
GHS Classification
Product AS SOLD

Oxidizing liquids : Category 2

Acute toxicity : Category 4

Skin corrosion : Category 1A

Serious eye damage : Category 1

Product AT USE DILUTION

Acute toxicity (Oral) : Category 4

Acute toxicity (Dermal) : Category 4

Eye irritation : Category 2B

GHS label elements
Product AS SOLD

Hazard pictograms :



Signal Word : Danger

Hazard Statements : May intensify fire; oxidizer.
Causes severe skin burns and eye damage.
Harmful if swallowed.

Precautionary Statements : **Prevention:**
Keep away from heat. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Wash skin thoroughly after handling. Wear protective gloves, protective clothing, eye protection, and face protection. Do not eat, drink or smoke when using this product.
Response:
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

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 AT USE DILUTION

Hazard pictograms

:



Hazard Statements

:

Harmful if swallowed or in contact with skin.
Causes eye irritation.

Precautionary Statements

:

Prevention:

Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, protective clothing, eye protection, and face protection.

Response:

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

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

Chemical name

CAS-No.

Concentration (%)

sodium hypochlorite

7681-52-9

8.4

Sodium hydroxide

1310-73-2

0.1 - 1

Product AT USE DILUTION

Chemical name

CAS-No.

Concentration (%)

sodium hypochlorite

7681-52-9

0.071

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 shoes before reuse. Get medical attention immediately.

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

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 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 irritation develops and persists.
If swallowed	: Rinse mouth. Get medical attention if symptoms occur.
If inhaled	: 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	: Oxidizer. Contact with other material may cause fire.
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

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
---	--

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

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). Isolate absorbed wastes contaminated with this product from other waste streams containing combustible materials (paper, wood fibers, cloth, etc.). Combustible materials exposed to this product should be rinsed immediately with large amounts of water to ensure that all product is removed. Residual product which is allowed to dry on organic materials such as rags, cloths, paper, fabrics, cotton, leather, wood, or other combustibles may spontaneously ignite and result in a fire.

Product AT USE DILUTION

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.

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 : Keep in a cool, well-ventilated place. Do not store near acids. Keep away from reducing agents. Keep away from combustible material. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : -15 °C to 40 °C

Product AT USE DILUTION

Advice on safe handling : 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

Ingredients with workplace control parameters

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
sodium hypochlorite	7681-52-9	STEL	2 mg/m ³	AIHA WEEL
sodium hydroxide	1310-73-2	Ceiling	2 mg/m ³	ACGIH
		Ceiling	2 mg/m ³	NIOSH REL
		TWA	2 mg/m ³	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 : 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	: liquid	liquid
Color	: light yellow	colorless
Odor	: Chlorine	slight chlorine
pH	: 12.5, (100 %)	6.0 - 9.5
Flash point	: Not applicable	
Odor Threshold	: No data available	

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

Melting point/freezing point	: No data available
Initial boiling point and boiling range	: No data available
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	: 1.154
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	: No data available
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
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon oxides

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.

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

Skin	: Causes severe skin burns.
Ingestion	: Harmful if swallowed. 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 eye irritation.
Skin	: Harmful in contact with skin.
Ingestion	: Harmful if swallowed.
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, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough

Product AT USE DILUTION

Eye contact	: Redness, Irritation
Skin contact	: No information available.
Ingestion	: No information available.
Inhalation	: No symptoms known or expected.

Toxicity

Product AS SOLD

Product

Acute oral toxicity	: Acute toxicity estimate : 300 - 2,000 mg/kg
Acute inhalation toxicity	: 4 h LC50 Rat: > 5 mg/l Test substance: Product Test atmosphere: dust/mist
Acute dermal toxicity	: No data available
Skin corrosion/irritation	: Corrosive
Serious eye damage/eye irritation	: Corrosive
Respiratory or skin sensitization	: No data available
Carcinogenicity	: No data available
Reproductive effects	: No data available

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

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

Components

Acute dermal toxicity : sodium hypochlorite
LD50 Rabbit: > 10,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD

Ecotoxicity

Environmental Effects : Very toxic to aquatic life.

Product

Toxicity to fish : 96 h LC50 Oncorhynchus mykiss (rainbow trout): 2.1 mg/l
96 h LC50 Inland Silverside: 7.6 mg/l

Toxicity to daphnia and other aquatic invertebrates : 48 h LC50 Daphnia magna (Water flea): 0.57 mg/l
48 h LC50 Americamysis bahia: 18.1 mg/l

Toxicity to algae : No data available

Persistence and degradability

Product AS SOLD

Not applicable - Biocide

Product AT USE DILUTION

Not applicable - Biocide

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-

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

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 : 1791
Description of the goods : Hypochlorite solutions (sodium hypochlorite)
Class : 8
Packing group : III
Environmentally hazardous : no

Sea transport (IMDG/IMO)

UN number : 1791
Description of the goods : HYPOCHLORITE SOLUTION (sodium hypochlorite)
Class : 8
Packing group : III
Marine pollutant : yes

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

EPA Registration number : 1677-52-541

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	1000

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

SARA 311/312 Hazards : Oxidizer (liquid, solid or gas)
Acute toxicity (any route of exposure)
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 hypochlorite	7681-52-9	Cleaning Agent	Not Applicable
Sodium hydroxide	1310-73-2	Cleaning Agent	20

*refer to 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 :

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

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

Taiwan Chemical Substance Inventory (TCSI) :

On the inventory, or in compliance with the inventory

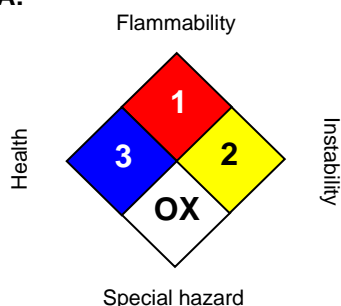
SECTION 16. OTHER INFORMATION

Product AS SOLD

SAFETY DATA SHEET

LOW TEMP DISHMACHINE SANITIZER

NFPA:



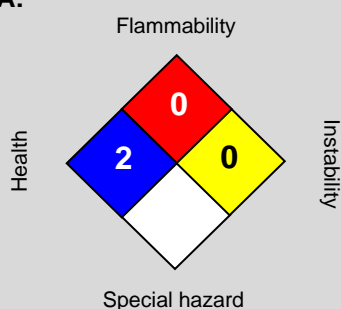
HMIS III:

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	2

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

Product AT USE DILUTION

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

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

Issuing date : 12/18/2019
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 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.