

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	ECO-STAR LAUNDRY DETERGENT PLUS	
Other means of identification	Not applicable	
Recommended use	Laundry detergent	
Restrictions on use	Reserved for industrial and professional use.	
Product dilution information	0.1 % - 0.18 %	
Company	Ecolab Inc. 1 Ecolab Place St. Paul, Minnesota USA 55102 1-800-352-5326	
Emergency health information	1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)	
Issuing date	06/19/2019	
SECTION 2. HAZARDS IDEN	ICATION	
GHS Classification Product AS SOLD Skin corrosion Serious eye damage	Category 1A Category 1	
Product AT USE DILUTION Skin corrosion Serious eye damage	Category 1A 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 (or hair): Take off immediately all contaminated clothing. Rinse s with water/shower. IF INHALED: Remove person to fresh air an comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for see minutes. Remove contact lenses, if present and easy to do. Cor rinsing. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before rause	skin d keep everal

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 Sodium hydroxide alcohols, c12-16, ethoxylated poly(oxy-1,2-ethanediyl), .alphaisotridecyl- .omegahydroxy-	CAS-No. 1310-73-2 68551-12-2 9043-30-5	Concentration (%) 10 - 30 5 - 10 5 - 10
Product AT USE DILUTION		
No hazardous ingredients		
SECTION 4. FIRST AID MEASURES		
Product AS SOLD		

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.
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	:	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 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). Flush away traces with water. 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). Flush away traces with water. 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. 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	:	5 °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

Ingredients with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
sodium hydroxide	1310-73-2	Ceiling	2 mg/m3	ACGIH
,		Ceiling	2 mg/m3	NIOSH REL
		TWA	2 mg/m3	OSHA Z1
Engineering measures		Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.		
Personal protective equipme	ent			
Eye protection	: Wear eye prot	ection/ face prot	ection.	
Hand protection	Standard glov Gloves should	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	practice. Rem Wash face, ha Provide suitab	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 equipme	ent			
Eye protection	: Wear eye prot	ection/ face prot	ection.	
Hand protection	Standard glov Gloves should	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		ective equipment s and protective	t comprising: suitable clothing	protective gloves,
Respiratory protection		When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.		
SECTION 9. PHYSICAL AND	CHEMICAL PRO	PERTIES		

	Product AS SOLD	Product AT USE DILUTION
Appearance	: Emulsion	liquid
		•

Color	: opaque, light cream	colorless
Odor	: slight	odorless
рН	: 13.0 - 14.0, (100 %)	11.0 - 12.0
Flash point	: Not applicable	
Odor 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	
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	: 1.175 - 1.275	
Water solubility	: soluble	
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	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	None known.
Incompatible materials	:	Acids Metals Organic materials
Hazardous decomposition products	:	Decomposition products may include the following materials: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

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

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.
	: 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

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

Product AS SOLD Ecotoxicity		
Environmental Effects	:	Toxic 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	:	alcohols, c12-16, ethoxylated LC50: 1.5 mg/l
		poly(oxy-1,2-ethanediyl), .alphaisotridecylomegahydroxy- 96 h LC50 Fish: 0.25 mg/l
Components		
Toxicity to daphnia and other aquatic invertebrates	:	Sodium hydroxide 48 h EC50: 40 mg/l
Persistence and degradabilit	y	
Product AS SOLD No data available		
Product AT USE DILUTION Readily biodegradable.		
Bioaccumulative potential		
No data available		
Mobility in soil		
No data available		
Other adverse effects		
No data available		
SECTION 12 DISPOSAL CON		

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD Disposal methods Disposal considerations	 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. 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
RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste	federal regulations. : 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	: 11
Environmentally hazardous	: no

Sea transport (IMDG/IMO)

UN number	: 1824
Description of the goods	: SODIUM HYDROXIDE SOLUTION
Class	: 8
Packing group	: 11
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 F	RQ
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			(lbs)
Sodium hydroxide	1310-73-2	1000	4810

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.

This regulation applies to this prod	401.		
Chemical Name	CAS-No.	Function	List(s)
water	7732-18-5	Diluent	Not Applicable
Sodium hydroxide	1310-73-2	Cleaning Agent	20
alcohols, c12-16, ethoxylated	68551-12-2	Cleaning Agent	Not Applicable
poly(oxy-1,2-ethanediyl), .alpha isotridecylomegahydroxy-	9043-30-5	Cleaning Agent	Not Applicable
Sodium Polyacrylate	9003-04-7	Cleaning Agent	Not Applicable
Polyacrylate	Withheld	Cleaning Agent	Not Applicable
Polymer	Withheld	Cleaning Agent	Not Applicable
Polymer	Withheld	Cleaning Agent	Not Applicable
Sulfonic Acid	Withheld	Brightener	Not Applicable
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*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 :

On the inventory, or in compliance with the inventory

Canadian Domestic Substances List (DSL) :

This product contains one or several components that are not on the Canadian DSL nor NDSL.

Australia Inventory of Chemical Substances (AICS) :

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) : not determined

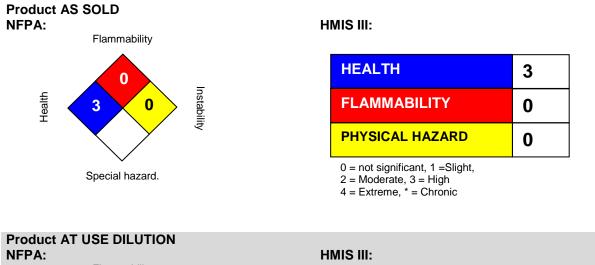
Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

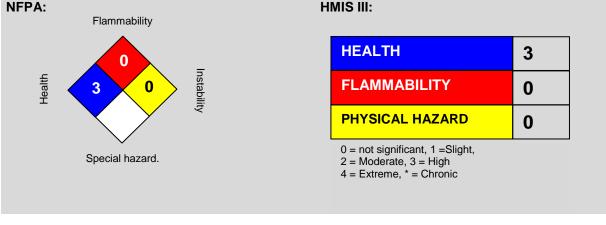
not determined

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

Taiwan Chemical Substance Inventory (TCSI) : not determined

SECTION 16. OTHER INFORMATION





Issuing date	:	06/19/2019
Version	:	1.4
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.