SAFETY DATA SHEET

TRI-STAR LAUNDRY DETERGENT PLUS

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

TRI-STAR LAUNDRY DETERGENT PLUS Product name

Other means of identification Not applicable

Recommended use Laundry detergent

Reserved for industrial and professional use. Restrictions on 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)

07/10/2019 Issuing date

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD

Category 1A Skin corrosion Serious eye damage Category 1

Product AT USE DILUTION

Category 1A Skin corrosion Category 1 Serious eye damage

GHS label elements

Product AS SOLD Hazard pictograms

Signal Word Danger

Causes severe skin burns and eye damage. **Hazard Statements**

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 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
 10 - 30

 alcohols, c12-16, ethoxylated
 68551-12-2
 5 - 10

 poly(oxy-1,2-ethanediyl), .alpha.-isotridecyl 9043-30-5
 5 - 10

.omega.-hydroxy-

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

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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

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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

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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

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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 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

Appearance : Emulsion lic

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Color : opaque, light cream colorless

Odor : slight

pH : 13.0 - 14.0, (100 %) 11.0 - 12.0

odorless

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- : No data available

octanol/water

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

Incompatible materials

reactions

: No dangerous reaction known under conditions of normal use.

Conditions to avoid : None known.

: Acids Metals

Organic materials

Hazardous decomposition

products

: Decomposition products may include the following materials:

Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

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exposure

Information on likely routes of : 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.

May cause nose, throat, and lung irritation. Inhalation

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

Product AT USE DILUTION

: Causes serious eye damage. Eyes

: Causes severe skin burns. Skin

Causes digestive tract burns. Ingestion

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

: Redness, Pain, Corrosion Eye contact

Redness, Pain, Corrosion Skin contact

Corrosion, Abdominal pain Ingestion

Inhalation Respiratory Irritation, Cough

Product AT USE DILUTION

Eye contact : Redness, Pain, Corrosion

Redness, Pain, Corrosion Skin contact

: Corrosion, Abdominal pain Ingestion

Respiratory Irritation, Cough Inhalation

Toxicity

Product AS SOLD

Product

: Acute toxicity estimate : > 5,000 mg/kg Acute oral toxicity

: No data available Acute inhalation toxicity

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg

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Respiratory or skin

sensitization

: No data available

Carcinogenicity

: No data available

Reproductive effects

No data available

Germ cell mutagenicity

No data available

Teratogenicity STOT-single exposure No data available

: 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), .alpha.-isotridecyl-.omega.-hydroxy-

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 degradability

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 13. DISPOSAL CONSIDERATIONS

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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 reuse 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 reuse 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

Description of the goods : SODIUM HYDROXIDE SOLUTION

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

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			(lbs)
Sodium hydroxide	1310-73-2	1000	4810
	Venezative Control of the Control of		

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
alcohols, c12-16, ethoxylated	68551-12-2	Cleaning Agent	Not Applicable
poly(oxy-1,2-ethanediyl), .alpha	9043-30-5	Cleaning Agent	Not Applicable
isotridecylomegahydroxy-			
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

^{*}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):

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not determined

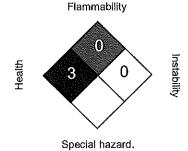
China. Inventory of Existing Chemical Substances in China (IECSC): not determined

Taiwan Chemical Substance Inventory (TCSI): not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD

NFPA:

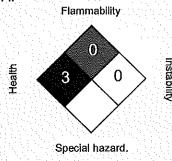


HMIS III:

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 FLAMMABILITY	3
PHYSICAL HAZARD	0

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

issuing date

: 07/10/2019

Version

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.

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