



SAFETY DATA SHEET

SOLID ENZYMATIC DETERGENT

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SOLID ENZYMATIC DETERGENT

Other means of identification : Not applicable

Recommended use : Instrument cleaner

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.19531 % - 0.78125 %

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 : 05/24/2019

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD

Eye irritation : Category 2B

Product AT USE DILUTION

Not a hazardous substance or mixture.

GHS label elements

Product AS SOLD

Signal Word : Warning

Hazard Statements : Causes eye irritation.

Precautionary Statements : **Prevention:**
Wash skin thoroughly after handling.
Response:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.

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 (%)
oxirane, methyl-, polymer with oxirane	9003-11-6	30 - 60
Urea	57-13-6	10 - 30
Alkoxylated Ether	Proprietary Ingredient	10 - 30
alcohols, c12-15, ethoxylated	68131-39-5	1 - 5

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sodium chloride	7647-14-5	1 - 5
subtilisin	9014-01-1	1 - 5

Product AT USE DILUTION

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

Product AS SOLD

In case of eye contact	: Rinse with plenty of water.
In case of skin contact	: Rinse with plenty of water.
If swallowed	: Rinse mouth. Get medical attention if symptoms occur.
If inhaled	: Get medical attention if symptoms occur.
Protection of first-aiders	: No special precautions are necessary for first aid responders.
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	: Rinse with plenty of water.
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	: Not flammable or combustible.
Hazardous combustion products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx)
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.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD

Personal precautions, protective equipment and emergency procedures : 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 : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : No special environmental precautions required.

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 : 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.

Storage temperature : -10 °C to 25 °C

Product AT USE DILUTION

Advice on safe handling : Wash hands after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE). For personal protection see section 8.

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
Urea	57-13-6	TWA	10 mg/m ³	AIHA WEEL
subtilisin	9014-01-1	Ceiling	0.00006 mg/m ³ (crystalline active enzyme)	ACGIH
		STEL	0.00006 mg/m ³	NIOSH REL

Engineering measures : Good general ventilation should be sufficient to control worker

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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.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice.

Product AT USE DILUTION

Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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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	: Extruded solid.	liquid
Color	: purple	purple
Odor	: sweet	sweet
pH	: 5.0 - 7.5, (1 %)	5.0 - 7.5
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	: No data available	
Water solubility	: partly soluble	
Solubility in other solvents	: No data available	

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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	: None known.
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon oxides Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects

Product AS SOLD

Eyes	: Causes eye irritation.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Product AT USE DILUTION

Eyes	: Health injuries are not known or expected under normal use.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.

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

Experience with human exposure

Product AS SOLD

Eye contact : Redness, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Product AT USE DILUTION

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product AS SOLD

Product

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

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : Mild eye irritation

Respiratory or skin sensitization : Does not cause respiratory sensitization.

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

Components

Acute inhalation toxicity : oxirane, methyl-, polymer with oxirane
4 h LD50 Rat: 1 mg/l
Test atmosphere: dust/mist

Urea
4 h LC50 Rat: > 2.71 mg/l
Test atmosphere: dust/mist

Components

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Acute dermal toxicity : Urea
LD50 Rat: 8,200 mg/kg

alcohols, c12-15, ethoxylated
LD50 Rat: > 2,000 mg/kg

sodium chloride
LD50 Rabbit: > 10,000 mg/kg

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 : oxirane, methyl-, polymer with oxirane
96 h LC50 Fish: > 100 mg/l

Urea
96 h LC50 Fish: 127.9 mg/l

Alkoxylated Ether
96 h LC50 Fish: 5 mg/l

alcohols, c12-15, ethoxylated
96 h LC50 Pimephales promelas: 1.4 mg/l

sodium chloride
96 h LC50 Fish: 5,840 mg/l

Components

Toxicity to daphnia and other aquatic invertebrates : alcohols, c12-15, ethoxylated
48 h EC50 Daphnia magna (Water flea): 0.14 mg/l

subtilisin
48 h EC50: 1.4 mg/l

Components

Toxicity to algae : alcohols, c12-15, ethoxylated
72 h EC50 Pseudokirchneriella subcapitata (green algae): 0.75 mg/l

Persistence and degradability

Product AS SOLD

Biodegradable

Product AT USE DILUTION

Biodegradable

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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-use empty containers. Dispose of in accordance with local, state, and federal regulations.

Product AT USE DILUTION

- Disposal methods : Diluted product can be flushed to sanitary sewer.
- Disposal considerations : 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)

Not dangerous goods

Sea transport (IMDG/IMO)

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

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SARA 311/312 Hazards : 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)
oxirane, methyl-, polymer with oxirane	9003-11-6	Diluent	Not Applicable
Urea	57-13-6	Diluent	Not Applicable
Alkoxylated Ether	Not Available	Cleaning Agent	Not Applicable
alcohols, c12-15, ethoxylated	68131-39-5	Cleaning Agent	Not Applicable
water	7732-18-5	Diluent	Not Applicable
Siloxane compound	Withheld	Cleaning Agent	Not Applicable
subtilisin	9014-01-1	Cleaning Agent	8
Colorant	Withheld	Dye	Not Applicable
Halogenated thiazole	Withheld	Biocide	Not Applicable
Isothiazolinones	Withheld	Biocide	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 :

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) :

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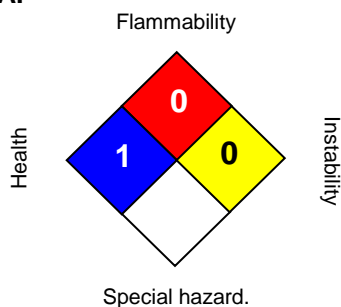
not determined

Taiwan Chemical Substance Inventory (TCSI) :
not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD

NFPA:



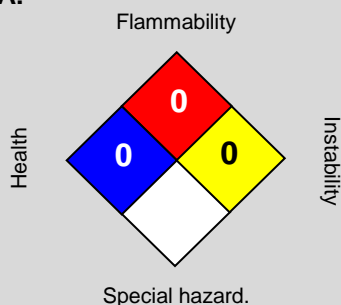
HMIS III:

HEALTH	1
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	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

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

Issuing date : 05/24/2019
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 Material 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.