

ENZYME PRESOAK

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ENZYME PRESOAK

Other means of identification : Not applicable

Recommended use : Presoak

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.8 %

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 : 10/15/2019

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD

Flammable liquids : Category 4
Skin irritation : Category 2
Serious eye damage : Category 1

Product AT USE DILUTION

Not a hazardous substance or mixture.

GHS label elements

Product AS SOLD

Hazard pictograms



Signal Word : Danger

Hazard Statements : Combustible liquid.

Causes skin irritation.

Causes serious eye damage.

Precautionary Statements : Prevention:

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Wash skin thoroughly after handling. Wear protective gloves/ eye

protection/ face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water. 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. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse. In case of fire:

955864-10 1 / 11

ENZYME PRESOAK

Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

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

Product AT USE DILUTION

Precautionary Statements

: Prevention:

Wash hands thoroughly after handling.

Response:

Get medical advice/ attention if you feel unwell.

Storage:

Store in accordance with local regulations.

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 (%)

 Propylene glycol
 57-55-6
 5 - 10

 monoethanolamine
 141-43-5
 1 - 5

 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N 61789-40-0
 1 - 5

dimethyl-, N-coco acyl derivs., hydroxides, inner

salts

subtilisin 9014-01-1 0.1 - 1

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

a mild soap if available. Get medical attention if irritation develops and

persists.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

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.

955864-10 2 / 11

ENZYME PRESOAK

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

: High volume water jet

Specific hazards during fire

fighting

: Fire Hazard

Keep away from heat and sources of ignition. Flash back possible over considerable distance.

Hazardous combustion

products

: Decomposition products may include the following materials:

Carbon oxides

Nitrogen oxides (NOx)

for fire-fighters

Special protective equipment : 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. Remove all sources of ignition. 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 : Eliminate all ignition sources if safe to do so. 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 : Refer to protective measures listed in sections 7 and 8.

955864-10 3/11

ENZYME PRESOAK

emergency procedures

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 noncombustible 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 get in eyes, on skin, or on clothing. Keep away from fire,

sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). 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 away from heat and sources of ignition. Keep away from

oxidizing agents. Keep out of reach of children. Store in suitable

labeled containers.

: 0 °C to 40 °C Storage temperature

Product AT USE DILUTION

: Wash hands after handling. In case of mechanical malfunction, or if in Advice on safe handling

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 |
|------------------|-----------|------------------|---|-----------|
| Propylene glycol | 57-55-6 | TWA | 10 mg/m3 | AIHA WEEL |
| monoethanolamine | 141-43-5 | TWA | 3 ppm | ACGIH |
| | | STEL | 6 ppm | ACGIH |
| | | TWA | 3 ppm 8 mg/m3 | NIOSH REL |
| | | STEL | 6 ppm 15 mg/m3 | NIOSH REL |
| | | TWA | 3 ppm 6 mg/m3 | OSHA Z1 |
| subtilisin | 9014-01-1 | Ceiling | 0.00006 mg/m3 (crystalline active enzyme) | ACGIH |
| | | STEL | 0.00006 mg/m3 | NIOSH REL |

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations

below occupational exposure standards.

955864-10 4/11

ENZYME PRESOAK

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 : 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. 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

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

exposure to airborne contaminants.

Personal protective equipment

Eye protection : No special protective equipment required.

Hand protection : No special protective equipment required.

: No special protective equipment required. Skin protection

Respiratory protection : No personal respiratory protective equipment normally required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Product AT USE DILUTION Product AS SOLD

liquid

8.5 - 10.0

Appearance : liquid

: clear, dark green

Color light green

Odor : slight not significant

: 8.5 - 10.5, (100 %) рΗ

Flash point : 86 °C closed cup, Does not sustain combustion.

Odor Threshold : No data available Melting point/freezing point : No data available

Initial boiling point and

boiling range

 $: > 100 \, ^{\circ}\text{C}$

Evaporation rate : No data available

: Not applicable Flammability (solid, gas)

Upper explosion limit : No data available : No data available

Lower explosion limit : No data available Vapor pressure

: No data available Relative vapor density

Relative density : 1.035 - 1.055

955864-10 5/11

ENZYME PRESOAK

Water solubility : soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

: No data available Autoignition temperature 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 : Heat, flames and sparks.

Incompatible materials : Acids

Hazardous decomposition

products

: Decomposition products may include the following materials:

Carbon oxides

Nitrogen oxides (NOx)

SECTION 11. TOXICOLOGICAL INFORMATION

exposure

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

Potential Health Effects

Product AS SOLD

Eyes : Causes serious eye damage.

Skin : Causes skin irritation.

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.

955864-10 6/11

ENZYME PRESOAK

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, Irritation

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 : 4 h Acute toxicity estimate : 36.22 mg/l

Test atmosphere: dust/mist

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

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

irritation

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 : Harmful to aquatic life.

955864-10 7 / 11

ENZYME PRESOAK

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 : Propylene glycol

96 h LC50: > 10,000 mg/l

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco

acyl derivs., hydroxides, inner salts

96 h LC50 Fish: 2 mg/l

Components

Toxicity to daphnia and other

aquatic invertebrates

: Propylene glycol

48 h EC50: 18,340 mg/l

monoethanolamine 48 h LC50: 65 mg/l

subtilisin

48 h EC50: 1.4 mg/l

Components

Toxicity to algae : Propylene glycol

96 h EC50: 19,000 mg/l

Persistence and degradability

Product AS SOLD

No data available

Product AT USE DILUTION

No data available

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-

955864-10 8 / 11

ENZYME PRESOAK

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.

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)

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.

| The regulation applies to the product | | | | | |
|---------------------------------------|-----------|----------------|----------------|--|--|
| Chemical Name | CAS-No. | Function | List(s) | | |
| water | 7732-18-5 | Diluent | Not Applicable | | |
| Propylene glycol | 57-55-6 | Stabilizer | 12 | | |
| monoethanolamine | 141-43-5 | Cleaning Agent | Not Applicable | | |
| 1,2,3-propanetricarboxylic acid, 2- | 866-83-1 | Buffer | Not Applicable | | |
| hydroxy-, monopotassium salt | | | | | |

955864-10 9 / 11

ENZYME PRESOAK

| 1-Propanaminium, 3-amino-N- (carboxymethyl)-N,N-dimethyl-, N- coco acyl derivs., hydroxides, inner salts | 61789-40-0 | Cleaning Agent | Not Applicable |
|---|------------|----------------|----------------|
| Substituted carboxylic acid salt | Withheld | Buffer | Not Applicable |
| Inorganic Salt | Withheld | Processing Aid | Not Applicable |
| subtilisin | 9014-01-1 | Cleaning Agent | 8 |
| Colorant | Withheld | Dye | 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:

All substances listed as active on the TSCA inventory

Canadian Domestic Substances List (DSL):

This product contains one or several components listed in the Canadian NDSL.

Australia Inventory of Chemical Substances (AICS):

On the inventory, or in compliance with the inventory

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):

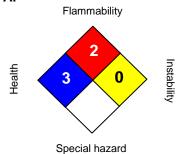
not determined

Taiwan Chemical Substance Inventory (TCSI):

not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD NFPA:



HMIS III:

| HEALTH | 3 |
|-----------------|---|
| FLAMMABILITY | 2 |
| PHYSICAL HAZARD | 0 |

0 = not significant, 1 = Slight,

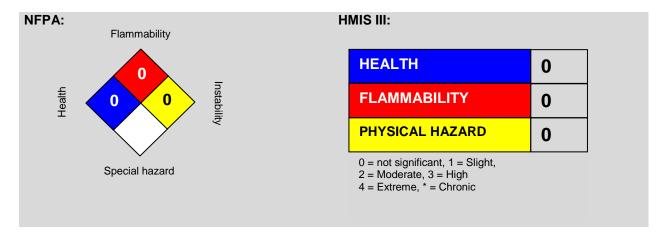
2 = Moderate, 3 = High

4 = Extreme, * = Chronic

Product AT USE DILUTION

955864-10 10 / 11

ENZYME PRESOAK



Issuing date : 10/15/2019

Version : 3.1

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.

955864-10 11 / 11