

SAFETY DATA SHEET

MONOGRAM CLEAN FORCE SILVERWARE PRESOAK LIQUID WITH ENZYME

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : MONOGRAM CLEAN FORCE SILVERWARE PRESOAK LIQUID WITH ENZYME

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 : 12/24/2019

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.

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Take off contaminated clothing and wash before reuse. In case of fire:
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-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	61789-40-0	1 - 5
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	: See Section 11 for more detailed information on health effects and symptoms.

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delayed

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)
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. 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,	: Refer to protective measures listed in sections 7 and 8.
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protective equipment and 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 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 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.

Storage temperature : 0 °C to 40 °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
Propylene glycol	57-55-6	TWA	10 mg/m ³	AIHA WEEL
monoethanolamine	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m ³	NIOSH REL
		STEL	6 ppm 15 mg/m ³	NIOSH REL
		TWA	3 ppm 6 mg/m ³	OSHA Z1
subtilisin	9014-01-1	Ceiling	0.00006 mg/m ³ (crystalline active enzyme)	ACGIH
		STEL	0.00006 mg/m ³	NIOSH REL

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

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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

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	: liquid	liquid
Color	: clear, dark green	light green
Odor	: slight	not significant
pH	: 8.5 - 10.5, (100 %)	8.5 - 10.0
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 °C	
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	

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Relative density	: 1.035 - 1.055
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	: Heat, flames and sparks.
Incompatible materials	: Acids
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NO _x)

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.
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.

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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.

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 irritation	: 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	: Harmful to aquatic life.
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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

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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.

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.

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

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hydroxy-, monopotassium salt			
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

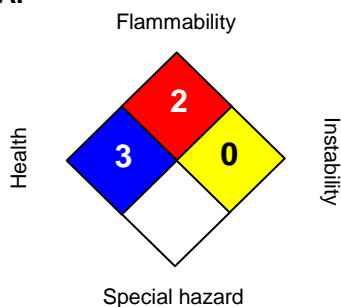
Taiwan Chemical Substance Inventory (TCSI) :

not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	2
PHYSICAL HAZARD	0

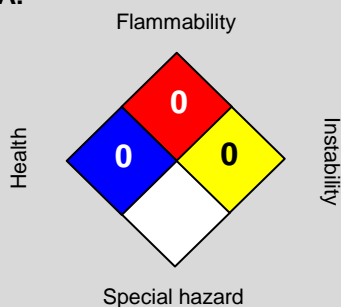
0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

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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 : 12/24/2019
Version : 1.1
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.