

**OPTIPRO MULTI ENZYMATIC LOW FOAMING
DETERGENT**
SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

Other means of identification : Not applicable

Recommended use : Instrument cleaner

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : 0.39 % - 1.6 %

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 : 04/26/2019

SECTION 2. HAZARDS IDENTIFICATION
GHS Classification
Product AS SOLD

Respiratory sensitization : 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 : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. In case of inadequate ventilation wear respiratory protection.
Response:
IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

Product AT USE DILUTION

Precautionary Statements : **Prevention:**

SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

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

: Do not mix with bleach or other chlorinated products – will cause chlorine gas.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture : Mixture

Chemical name	CAS-No.	Concentration (%)
Propylene glycol	57-55-6	30 - 60
triethanolamine	102-71-6	1 - 5
Boric acid	10043-35-3	1 - 5
glycerin	56-81-5	1 - 5
oxirane, methyl-, polymer with oxirane	9003-11-6	1 - 5
subtilisin	9014-01-1	0.1 - 1
lipase, triacylglycerol	9001-62-1	0.1 - 1
amylase, α -	9000-90-2	0.1 - 1

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 : Remove to fresh air. Treat symptomatically. Get medical attention.

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 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.

SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

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 (NO_x)
- 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 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). 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 : 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). 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 breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not

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OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

mix with bleach or other chlorinated products – will cause chlorine gas.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 15 °C to 30 °C

Product AT USE DILUTION

Advice on safe handling : Wash hands after handling. 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
triethanolamine	102-71-6	TWA	5 mg/m ³	ACGIH
Boric acid	10043-35-3	TWA (Inhalable fraction)	2 mg/m ³ (Borate)	ACGIH
		STEL (Inhalable fraction)	6 mg/m ³ (Borate)	ACGIH
glycerin	56-81-5	TWA	10 mg/m ³	ACGIH
		TWA (respirable fraction)	5 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.

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 : 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. Wash face, hands and any exposed skin thoroughly after handling.

Product AT USE DILUTION

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

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 blue	light blue
Odor	: odorless	odorless
pH	: 7.0 - 8.0, (100 %)	7.0 - 8.0
Flash point	: Not applicable, 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)	: 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	: 1.03 - 1.07	
Water solubility	: No data available	
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.
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OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
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 : Inhalation, Eye contact, Skin contact

Potential Health Effects

Product AS SOLD

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	: May cause allergic respiratory reaction.
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.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact	: No symptoms known or expected.
Skin contact	: No symptoms known or expected.
Ingestion	: No symptoms known or expected.
Inhalation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Product AT USE DILUTION

Eye contact	: No symptoms known or expected.
Skin contact	: No symptoms known or expected.

SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product AS SOLD

Product

Acute oral toxicity : No data available

Acute inhalation toxicity : 4 h Acute toxicity estimate : > 200 mg/l
Test atmosphere: vapor

Acute dermal toxicity : No data available

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

Components

Acute oral toxicity : Propylene glycol
LD50 Rat: 22,000 mg/kg

triethanolamine
LD50 Rat: 6,400 mg/kg

glycerin
LD50 Rat: 18,300 mg/kg

subtilisin
LD50 Rat: 1,800 mg/kg

lipase, triacylglycerol
LD50 Rat: > 5,000 mg/kg

amylase, α -
LD50 Rat: > 5,000 mg/kg

Components

Acute dermal toxicity : glycerin
LD50 Rabbit: 23,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD

SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

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

triethanolamine
96 h LC50: 11,800 mg/l

glycerin
96 h LC50 Fish: 855 mg/l

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

Components

Toxicity to daphnia and other aquatic invertebrates : Propylene glycol
48 h EC50: 18,340 mg/l

triethanolamine
48 h EC50: 609.88 mg/l

subtilisin
48 h EC50: 1.4 mg/l

Components

Toxicity to algae : Propylene glycol
96 h EC50: 19,000 mg/l

triethanolamine
72 h EC50: > 100 mg/l

amylase, α -
72 h EC50: 112 mg/l

Persistence and degradability

Product AS SOLD

Readily biodegradable.

Product AT USE DILUTION

Readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD

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.

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 : Respiratory or skin sensitization

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.

SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

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
triethanolamine	102-71-6	Cleaning Agent	Not Applicable
Boric acid	10043-35-3	Stabilizer	2
oxirane, methyl-, polymer with oxirane	9003-11-6	Cleaning Agent	Not Applicable
subtilisin	9014-01-1	Cleaning Agent	8
lipase, triacylglycerol	9001-62-1	Cleaning Agent	Not Applicable
amylase, α-	9000-90-2	Cleaning Agent	8
Substituted aromatic amine	Withheld	Cleaning Agent	Not Applicable
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 :

On the inventory, or in compliance with the inventory

Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL

Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemical Substances :

On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory :

not determined

Korea. Korean Existing Chemicals Inventory (KECI) :

On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS) :

On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances in China (IECSC) :

On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI) :

not determined

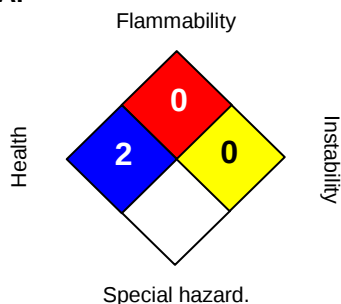
SECTION 16. OTHER INFORMATION

Product AS SOLD

SAFETY DATA SHEET

OPTIPRO MULTI ENZYMATIC LOW FOAMING DETERGENT

NFPA:



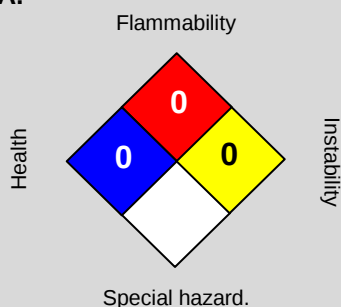
HMIS III:

HEALTH	2*
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 : 04/26/2019
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.