

Material Safety Data Sheet



OPTIPRO SOLID ENZYMATIC DETERGENT

Section 1. Chemical product and company identification

Trade name : OPTIPRO SOLID ENZYMATIC DETERGENT
Product use : Instrument cleaner
Supplier : Ecolab Inc. Healthcare Division
370 N. Wabasha St.
St. Paul, MN 55102
1-866-781-8787
Code : 912755-01
Date of issue : **04-January-2010**

EMERGENCY HEALTH INFORMATION: 1-800-328-0026
Outside United States and Canada CALL 1-651-222-5352 (in USA)

Section 2. Hazards identification

Physical state : Solid. [Solid.]
Emergency overview : CAUTION !

MAY CAUSE EYE IRRITATION.
Avoid contact with eyes. Wash thoroughly after handling.

Potential acute health effects

Eyes : Slightly irritating to the eyes.
Skin : Slightly irritating to the skin.
Inhalation : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

See toxicological information (section 11)

Section 3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
SUBTILISIN	9014-01-1	1 - 5

Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses and flush again. Get medical attention if irritation persists.
Skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Inhalation : If inhaled, remove to fresh air.
Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious person. If irritation persists, get medical attention.

Section 5. Fire-fighting measures

Flash point : > 100°C
Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
halogenated compounds
metal oxide/oxides

Fire-fighting media and instructions : Use an extinguishing agent suitable for the surrounding fire.

Dike area of fire to prevent runoff.

No specific fire or explosion hazard.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions : Use suitable protective equipment (section 8). Do not allow to enter drains or watercourses.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up : Use a tool to scoop up solid or absorbed material and place into appropriate labeled waste container. Avoid creating dusty conditions and prevent wind dispersal.

Section 7. Handling and storage

Handling : Avoid contact with eyes. Wash thoroughly after handling.

Storage : Keep out of reach of children. Keep container in a cool, well-ventilated area. Keep container tightly closed.

Do not store below the following temperature: 45°C

Section 8. Exposure controls/personal protection

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

Personal protection :

Eyes : No protective equipment is needed under normal use conditions.

Hands : No protective equipment is needed under normal use conditions.

Skin : No protective equipment is needed under normal use conditions.

Respiratory : A respirator is not needed under normal and intended conditions of product use.

Name

SUBTILISIN

Exposure limits

ACGIH TLV (United States, 1/2009).

C: 0.00006 mg/m³, (measured as 100% pure crystalline enzyme)

NIOSH REL (United States, 6/2009).

STEL: 0.00006 mg/m³ 60 minute(s).

Section 9. Physical and chemical properties

Physical state : Solid. [Solid.]

Color : Violet.

Odor : Odorless.

pH : 7 to 9 [Conc. (% w/w): 1%]

Solubility : Easily soluble in the following materials: cold water and hot water.

Section 10. Stability and reactivity

- Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Potential acute health effects

- Eyes** : Slightly irritating to the eyes.
- Skin** : Slightly irritating to the skin.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

Potential chronic health effects

Other adverse effects

- Target organs** : Contains material which may cause damage to the following organs: upper respiratory tract.

Section 12. Ecological information

- Ecotoxicity data** : Not reported

Section 13. Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Consult your local or regional authorities.

Section 14. Transport information

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

UN Classification Not regulated.

See shipping documents for specific transportation information.

Section 15. Regulatory information

HCS Classification : Target organ effects

U.S. Federal regulations

TSCA 8(b) inventory : All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

California Prop. 65 : No products were found.

Section 16. Other information

Hazardous Material
Information System (U.S.A.) :

Health	*	1
Flammability		0
Physical hazards		0

Date of issue : 04-January-2010.
Responsible name : Regulatory Affairs
Date of previous issue : No previous validation.

Notice to reader

The above information is believed to be correct with respect to the formula used to manufacture the product in the country of origin. As data, standards, and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.