

Material Safety Data Sheet

DENTA-ZYME



1. Product and company identification

Trade name of product : DENTA-ZYME

Product dilution information : Up to 1 oz/gal in water

Supplier's information : Ecolab Inc. Healthcare Division
370 N. Wabasha St.
St. Paul, MN 55102
1-866-781-8787

Code : 920942-01

Date of issue : 12-November-2010

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

2. Hazards identification

Product AS SOLD

Physical state : Liquid.

Emergency overview : CAUTION !

MAY CAUSE EYE IRRITATION.
MAY CAUSE ALLERGIC RESPIRATORY REACTION.

Avoid contact with eyes. Avoid breathing vapors, spray or mists. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Product AT USE DILUTION

Liquid.
CAUTION !

No specific hazard.

No specific hazard.

Potential acute health effects

Product AS SOLD

Eyes : Slightly irritating to the eyes.

Skin : Slightly irritating to the skin.

Inhalation : May cause sensitization by inhalation.

Ingestion : May be harmful if swallowed.

Product AT USE DILUTION

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

See toxicological information (Section 11)

3. Composition/information on ingredients

Product AS SOLD

Name	CAS number	% by weight
alcohols, c12-14-secondary, ethoxylated	84133-50-6	1 - 5
SUBTILISIN	9014-01-1	<1.0

Product AT USE DILUTION

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

4. First aid measures

	Product AS SOLD	Product AT USE DILUTION
Eye contact	: Rinse with water for a few minutes.	No known effect after eye contact. Rinse with water for a few minutes.
Skin contact	: Rinse with water for a few minutes.	No known effect after skin contact. Rinse with water for a few minutes.
Inhalation	: If inhaled, remove to fresh air. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel. Get medical attention.	No special measures required. Treat symptomatically.
Ingestion	: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.	Get medical attention if symptoms occur.

5. Fire-fighting measures

Product AS SOLD

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

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

Dike area of fire to prevent runoff.

In a fire or if heated, a pressure increase will occur and the container may burst.

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.

6. Accidental release measures

	Product AS SOLD	Product AT USE DILUTION
Personal precautions	: Use personal protective equipment as required.	Use personal protective equipment as required.
Environmental precautions	: Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.	Avoid contact of large amounts of spilled material and runoff with soil and surface waterways.
Methods for cleaning up	: Use a water rinse for final clean-up.	Use a water rinse for final clean-up.

7. Handling and storage

	Product AS SOLD	Product AT USE DILUTION
Handling	: Avoid contact with eyes. Avoid breathing vapors, spray or mists. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.	Wash thoroughly after handling.
Storage	: Keep out of reach of children. Store in a closed container. Do not store below the following temperature: 0°C	Keep out of reach of children.

8. Exposure controls/personal protection

8. Exposure controls/personal protection

	Product AS SOLD	Product AT USE DILUTION
Engineering measures	: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.	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.	No protective equipment is needed under normal use conditions.
Hands	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Skin	: No protective equipment is needed under normal use conditions.	No protective equipment is needed under normal use conditions.
Respiratory	: Wear appropriate respirator when ventilation is inadequate and occupational exposure limits are exceeded.	No special protection is required.

Ingredient	Exposure limits
SUBTILISIN	ACGIH TLV (United States, 2/2010). C: 0.00006 mg/m ³ , (measured as 100% pure crystalline enzyme)

9. Physical and chemical properties

	Product AS SOLD	Product AT USE DILUTION
Physical state	: Liquid.	Liquid.
Flash point	: > 100°C Product does not support combustion.	> 100°C
Color	: Green [Light]	Green [Light]
Odor	: Fragrance-like	Fragrance-like
pH	: 6 to 8.5 [Conc. (% w/w): 100%]	6.5 to 6.8
Relative density	: 1.02 to 1.04	

10. Stability and reactivity

Product AS SOLD

Stability	: The product is stable. Under normal conditions of storage and use, hazardous polymerization will not occur.
Reactivity	: Reactive or incompatible with the following materials: oxidizing materials.
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.

11. Toxicological information

Potential acute health effects

	Product AS SOLD	Product AT USE DILUTION
Eyes	: Slightly irritating to the eyes.	No known significant effects or critical hazards.
Skin	: Slightly irritating to the skin.	No known significant effects or critical hazards.

11. Toxicological information

Inhalation : May cause sensitization by inhalation.

No known significant effects or critical hazards.

Ingestion : May be harmful if swallowed.

No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity : Not reported

13. Disposal considerations

Product AS SOLD

Waste disposal : Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

Product AT USE DILUTION

Diluted product can be flushed to sanitary sewer. Discard empty container in trash.

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.

Product AS SOLD

DOT Classification : Not regulated.

For transport in bulk or using IMDG regulations, see shipping documents for specific transportation information.

Product AT USE DILUTION

Not intended for transport.

15. Regulatory information

Product AS SOLD

HCS Classification : Sensitizing material

Product AT USE DILUTION

Not regulated.

Product AS SOLD

U.S. Federal regulations

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

SARA 302/304/311/312 extremely hazardous substances: No listed substance

SARA 302/304 emergency planning and notification: No listed substance

SARA 313	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
-----------------	---------------------	-------------------	----------------------

Form R - Reporting requirements : No listed substance

California Prop. 65 : No listed substance

16. Other information

Product AS SOLD

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

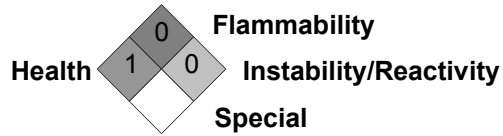
Health	1
Flammability	0
Physical hazards	0

Product AT USE DILUTION

Health	0
Flammability	0
Physical hazards	0

16. Other information

National Fire Protection Association (U.S.A.) :



Date of issue : 12-November-2010

Responsible name : Regulatory Affairs
1-800-352-5326

☑ Indicates information that has changed from previously issued version.

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.**