

Material Safety Data Sheet

RAPID-ZYME



Section 1. Chemical product and company identification

Trade name : RAPID-ZYME
Product use : Presoak
Supplier : Ecolab Healthcare Division
370 Wabasha Street N
St. Paul MN 55102
5105 Tomken Road
Mississauga ON L4W 2X5
1-800-352-5326

Code : 903860

Date of issue : 17-August-2005

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

Section 2. Composition, Information on Ingredients

Name	CAS number/% by weight
propylene glycol	57-55-6 30 - 60
alcohols, c12-14-secondary, ethoxylated	84133-50-6 1 - 5
lipase, triacylglycerol	9001-62-1 0.1 - 1

Section 3. Hazards identification

Physical state : Liquid. (Liquid.)
Emergency overview : CAUTION!

MAY CAUSE ALLERGIC RESPIRATORY REACTION.
MAY CAUSE EYE AND SKIN IRRITATION.

Do not ingest. Avoid contact with skin and clothing. Do not breathe vapour or mist.
Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Routes of entry : Skin contact, Eye contact, Inhalation, Ingestion

Potential acute health effects

Eyes : Moderately irritating to eyes.

Skin : Moderately irritating to the skin.

Inhalation : May cause sensitisation by inhalation.

Ingestion : No known significant effects or critical hazards.

See toxicological Information (section 11)

Section 4. First aid measures

Eye contact : In case of contact, immediately flush eyes with cool running water. Remove contact lenses and continue flushing with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

Skin Contact : Wash with soap and water. Get medical attention if irritation occurs. Wash clothing before reuse.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Section 5. Fire fighting measures

Auto-ignition temperature : Not available.
Flash point : > 100°C

Product does not support combustion.

Flammable limits

Upper: Not available.
Lower: Not available.

Products of combustion : Not available.
Fire-fighting media and instructions : Use an extinguishing agent suitable for surrounding fires.

Dike area of fire to prevent product run-off.
No specific 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.

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Section 6. Accidental release measures

Personal Precautions : Ventilate area of leak or spill. Do not touch damaged containers or spilled material unless wearing appropriate protective equipment (Section 8). Stop leak if without risk. Prevent entry into sewers, water courses, basements or confined areas.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up : If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.--

Section 7. Handling and storage

Handling : Do not ingest. Do not get in eyes, on skin or on clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapour or mist. Wash thoroughly after handling.

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

Store between 15 and 30°C

Section 8. Exposure Controls, Personal Protection

Engineering controls : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits.

Personal protection

Eyes : Eye protection recommended.

Hands : For prolonged or repeated handling, use Impervious gloves.

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

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state	: Liquid. (Liquid.)
Colour	: Orange.
Odour	: Sweetish.
pH	: 7 (100%)
Boiling/condensation point	: 100 °C
Melting/freezing point	: Not available.
Specific gravity	: 1.045 (Water = 1)
Vapour pressure	: Not applicable.
Vapour density	: Not available.
Odour threshold	: Not available.
Evaporation rate	: Not available.
LogK _{ow}	: Not available.
Dispersion properties	: Easily dispersed in cold water, hot water.
Solubility	: Easily soluble in cold water, hot water.

Section 10. Stability and reactivity

Stability	: The product is stable.
Conditions of instability	: Not available.
Incompatibility with various substances	: Not available.
Hazardous Decomposition Products	: Not available.

Section 11. Toxicological information

Potential acute health effects

Eyes	: Moderately irritating to eyes.
Skin	: Moderately irritating to the skin.
Inhalation	: May cause sensitisation by inhalation.
Ingestion	: No known significant effects or critical hazards.
Irritancy of Product	: Hazardous by WHMIS criteria.

Potential chronic health effects

Carcinogenic effects	: No known significant effects or critical hazards.
Mutagenic effects	: No known significant effects or critical hazards.
Teratogenic effects	: No known significant effects or critical hazards.
Reproductive effects	: No known significant effects or critical hazards.
Sensitization to Product	: May cause sensitisation by inhalation.
Synergistic Products (Toxicologically)	: Not available.

Toxicity data

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
propylene glycol	LD50	18500 mg/kg	Oral	Rabbit
	LD50	>2080 mg/kg	Oral	quail
	LD50	18350 mg/kg	Oral	Guinea pig
	LD50	20800 mg/kg	Dermal	Rabbit

Target organs : Not available.

Section 12. Ecological information

Ecotoxicity data

<u>Ingredient name</u>
propylene glycol

<u>Species</u>	<u>Period</u>	<u>Result</u>
Daphnia magna (EC50)	48 hour(s)	>10000 mg/l
Pimephales promelas (LC50)	96 hour(s)	710 mg/l
Pimephales promelas (LC50)	96 hour(s)	55770 mg/l
Pimephales promelas (LC50)	96 hour(s)	>62000 mg/l
Products of degradation	: These products are carbon oxides (CO, CO ₂) and water, nitrogen oxides (NO, NO ₂ ...). Some metallic oxides.	

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimised 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

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional Information
TDG Classification	Not regulated.	-	-	-	-

APPLIES ONLY DURING ROAD TRANSPORT

Any variation of the shipping description based on the packaging is not addressed.

Section 15. Regulatory information

WHMIS

: Class D-2A: Material causing other toxic effects (VERY TOXIC).
Class D-2B: Material causing other toxic effects (TOXIC).

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the MSDS contains all the information required by the *Controlled Products Regulations*.

Section 16. Other information

Date of issue : 17-August-2005.
Responsible name : Regulatory Affairs
Date of previous issue : 27-April-2005.

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.