

# MATERIAL SAFETY DATA SHEET

Product name: **GZYME**  
Last revised date: 23-Dec-10  
Print date: 21-Jul-11

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## 1. SUBSTANCE AND SUPPLIER IDENTIFICATION

**PRODUCT NAME:** Gzyme  
**MANUFACTURER:** Germiphene Corporation  
**ADDRESS:** 1379 Colborne Street East, Brantford, Ontario N3T 5M1, Canada  
**PHONE:** 519-759-7100  
**FAX:** 519-759-1625  
**EMERGENCY PHONE:** CANUTEC 613-996-6666  
**PRODUCT USE:** Enzymatic cleaning solution

## 2. COMPOSITION / INFORMATION ON INGREDIENTS (not intended as specifications)

**INGREDIENT:** Propylene glycol  
**CAS No** 57-55-6      **% wt** 40 - 50  
**HAZARDOUS:** May cause irritation to skin and eyes.

**INGREDIENT:** Triethanolamine  
**CAS No** 102-71-6      **% wt** 7 - 15  
**HAZARDOUS:** May cause irritation to skin and eyes.

**INGREDIENT:** Boric acid  
**CAS No** 10043-35-3      **% wt** 3 - 6  
**HAZARDOUS:** May cause irritation to skin, eyes and respiratory tract.

## 3. HAZARD IDENTIFICATION

**EMERGENCY OVERVIEW:** Harmful if swallowed. May cause eye and skin irritation.  
**INHALATION:** May cause respiratory tract irritation.  
**INGESTION:** May cause gastro-intestinal upset.  
**SKIN ADSORPTION:** No adverse effects with normal skin.  
**SKIN CONTACT:** May cause skin irritation.  
**EYE CONTACT:** Eye irritant in case of direct contact.

## 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with water for at least 15 minutes, holding the eyelids open. If irritation persists, contact physician.  
**SKIN:** Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention if irritation develops or persists. Wash clothing before re-use.  
**INHALATION:** Remove person to fresh air.  
**INGESTION:** Induce vomiting immediately as directed by medical personnel. Contact a physician immediately.

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## 5. FIREFIGHTING MEASURES

**EXTINGUISHING MEDIA:** Apply all-purpose type foams by manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires. Water is suitable.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Ammonia, nitrous oxides, carbon monoxide and carbon dioxide.

## 6. ACCIDENTAL RELEASE MEASURES

Contain spilled material. Provide adequate ventilation. Spill should be collected in suitable containers or absorbed on a suitable absorbent material for subsequent disposal. Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

## 7. HANDLING AND STORAGE

Keep away from heat in a cool well-ventilated area. Protect from freezing. Keep container closed when not in use. Avoid breathing vapours. Avoid contact with eyes.

**OTHER PRECAUTIONS:** Good personal hygiene practices are suggested.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**VENTILATION:** Use adequate ventilation.

**RESPIRATORY PROTECTION:** Avoid breathing vapours.

**EYE PROTECTION:** Avoid contact with eyes.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Clear blue to green coloured liquid

**ODOUR:** Mild

**PHYSICAL STATE:** Liquid

**pH @ 22°C:** 7.00 - 8.00

**BOILING POINT:** Above 100 °C

**MELTING POINT:** N/Av

**FREEZING POINT:** Below 0 °C

**SPECIFIC GRAVITY @ 22 ± 1°C:** 0.900 - 1.100

**EVAPORATION RATE:** N/Av

**SOLUBILITY IN WATER:** Soluble

**PROTEOLYTIC ACTIVITY:** Min 0.068 AU/ml

## 10. STABILITY AND REACTIVITY

**STABILITY:** N/Av

**CONDITIONS TO AVOID (STABILITY):** N/Av

**INCOMPATIBILITY (MATERIAL TO AVOID):** Oxidizing materials

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**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Burning can produce carbon monoxide and carbon dioxide, ammonia and nitrous oxides (small amounts).

## 11. TOXICOLOGICAL INFORMATION

**PROPYLENE GLYCOL** Oral rat LD50 20g/kg  
Dermal rabbit LD50 20.8g/kg  
Eye irritation rabbit (Draize) 500 mg/24h, mild

**TRIETHANOLAMINE** Oral rat LD50 4920 mg/kg  
Oral rabbit LD50 5160 mg/kg  
Oral mouse LD50 7400 mg/kg  
Oral guinea pig LD50 5300 mg/kg  
Dermal rabbit LD50 > 20 mL/kg  
Skin irritation rabbit 560 mg/24h, mild  
Eye irritation rabbit 20 mg, severe

**BORIC ACID** Oral rat LD50 2660 mg/kg  
Oral woman LDLo 200 mg/kg

Investigated as a mutagen, tumorigen, reproductive effector.

## 12. ECOLOGICAL INFORMATION

N/Av

## 13. DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** According to state, federal, provincial, and local regulations.

## 14. TRANSPORT INFORMATION

**TRANSPORT HAZARD CLASS:** N/Av

## 15. REGULATORY INFORMATION

N/Av

## 16. OTHER INFORMATION

**Prepared by:** Germiphene Technical Department

### Disclaimer

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