

# SAFETY DATA SHEET

Revision #1

Product name: **ENZO**  
Last revised date: 11 May 2018

## 1. SUBSTANCE AND SUPPLIER IDENTIFICATION

**PRODUCT NAME:** ENZO  
**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:** Automated instrument washer detergent solution.

## 2. HAZARD IDENTIFICATION

**EMERGENCY OVERVIEW:** WARNING  
EYE AND SKIN IRRITANT

**SIGNAL WORD:** **Warning**

HAZARD STATEMENTS:	PRECAUTIONARY STATEMENTS:
<b>EYES:</b> H320 Causes eye irritation	P332 + P313: If skin irritation occurs, get Medical attention
<b>SKIN:</b> H316 Causes mild skin irritation.	P264: Wash thoroughly after handling. P305 + P351 + P338: If in eyes: Rinse continuously with water for for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313: If eye irritation persists: get medical advice/ attention.

### OTHER PHRASES:

**INGESTION:** May cause nausea and vomiting. May be irritating to mouth and throat.

**INHALATION:** Can cause allergic type reaction in susceptible individuals upon repeated exposure.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**INGREDIENT:** Subtilisin  
**CAS No:** 9014-01-1 % wt 1-5%  
**HAZARDOUS:** yes

**INGREDIENT:** Propylene Glycol  
**CAS No** 57-55-6 % wt 10 - 30%  
**HAZARDOUS:** yes

**INGREDIENT:** Tetrasodium Ethylenediaminetetraacetate Tetrahydrate  
**CAS No** 13235-36-4 % wt 1 - 10%  
**HAZARDOUS:** yes

**INGREDIENT:** 2-Pyrrolidone, 1-Octyl  
**CAS No** 2687-94-7 % wt 1 - 5%  
**HAZARDOUS:** yes

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**INGREDIENT:** Sodium Xylene Sulfonate  
**CAS No:** 1300-72-7 % wt 10-20%  
**HAZARDOUS:** yes

**INGREDIENT:** Alcohols, C12-14, ethoxylated propoxylated  
**CAS No:** 68439-51-0 % wt 1-3%  
**HAZARDOUS:** mildly

## 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with water for at least 15 minutes while holding the eyelids open. Seek medical attention immediately.

**SKIN:** Wash thoroughly with water. If irritation occurs, seek medical attention.

**INGESTION:** Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Seek medical attention immediately.

**INHALATION:** If respiratory problems arise, move the victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical advice immediately.

## 5. FIREFIGHTING MEASURES

**FLAMMABILITY:** N/A

**HAZARDOUS COMBUSTION PRODUCTS:** Thermal decomposition products are toxic and may include oxides of carbon and irritating gases.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** Do not direct a solid stream of foam into hot, burning pools. This may cause spattering and increase fire intensity. Closed containers exposed to heat may burst. Spilled material may cause floors and contact surfaces to become slippery. Aqueous solutions containing less than 95% Propylene Glycol by weight have no flash points as obtained by standard test methods. However, aqueous solutions of Propylene Glycol greater than 22% by weight, if heated sufficiently, will produce flammable vapours. Only aqueous solutions of Propylene Glycol less than 22% by weight should be used in sprinkler systems or other fire-fighting equipment.

**FIRE EXTINGUISHING MEDIA:** Use carbon dioxide or dry chemical media for small fires. If only water is available, use it in the form of a fog. Do not use high volume water jet.

## 6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment. Flush with plenty of water. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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## 7. HANDLING AND STORAGE

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Do not store with aluminum or magnesium.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**VENTILATION:** Ensure adequate ventilation, especially in confined areas.  
**RESPIRATORY PROTECTION:** NIOSH approved respirator should be used when airborne concentrations of the ingredients exceed occupational limits.  
**EYE PROTECTION:** Safety glasses and goggles are recommended.  
**SKIN PROTECTION:** Gloves and protective clothing made from neoprene, PVC, nitrile rubber, and butyl rubber should be impervious under conditions of use. Prior to use, user should confirm impermeability. Discard contaminated gloves and protective clothing.  
**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Wear regular work clothing. The use of coveralls recommended. Locate safety shower and eyewash station close to chemical handling area. Take all precautions to avoid personal contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Clear yellowish liquid  
**ODOUR:** N/A  
**PHYSICAL STATE:** Liquid  
**pH:** 8 - 11  
**BOILING POINT:** N/A  
**FREEZING POINT:** N/A  
**EVAPORATION RATE:** N/A  
**VISCOSITY @ 22 ± 1°C:** N/A  
**VAPOUR PRESSURE (mmHg):** N/A  
**SPECIFIC GRAVITY @ 25 ± 1°C:** 1.0 - 1.2  
**SOLUBILITY:** N/A

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions.  
**CONDITIONS TO AVOID (STABILITY):** High temperatures, sparks, open flames, and all other sources of ignition. Temperature above 40°C (104°F). Avoid moisture contamination. Hygroscopic.  
**INCOMPATIBILITY (MATERIALS TO AVOID):** Oxidizing agents, strong acids.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition products are toxic and may include oxides of carbon and irritating gases.

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## 11. TOXICOLOGICAL INFORMATION

**SUBTILISIN** Oral Rat LD 50 >2,000 mg/kg  
**PROPYLENE GLYCOL** Oral rat LD50 20,000 mg/kg  
**TETRASODIUM  
ETHYLENEDIAMINETETRAACETATE  
TETRAHYDRATE** Oral rat LD50 1,780 - 2,000 mg/kg  
**2-PYRROLIDINONE, 1-OCTYL  
SODIUM XYLENE SULFONATE** Oral rat LD50 2,050 mg/kg  
Oral Rat LD50 7,200 mg/kg  
**ALCOHOLS, C12-14, ETHOXYLATED  
PROPOXYLATED** Oral rat LD50 >2,000 - < 5,000 mg/kg

## 12. ECOLOGICAL INFORMATION

N/A

## 13. DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Dispose in accordance with Federal, Provincial and Municipal regulations.

## 14. TRANSPORT INFORMATION

N/A

## 15. REGULATORY INFORMATION

N/A

## 16. OTHER INFORMATION

**Prepared by:** Germiphene Technical Department

### Disclaimer

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