

SAFETY DATA SHEET

Revision #0

Product name: **ENZO**
Last revised date: 13 March 2015
Expiry: 13 March 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
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EMERGENCY PHONE: CANUTEC 613-996-6666

PRODUCT USE: Automated instrument washer detergent solution.

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: WARNING
EYE AND SKIN IRRITANT

EYES: H320 Causes eye irritation
SKIN: H316 Causes mild skin irritation.

PRECAUTIONARY STATEMENTS:

P332 + P313: If skin irritation occurs, get Medical attention

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.

SIGNAL WORD: Warning

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

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of water. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

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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