

SAFETY DATA SHEET

Enzymatic

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Product Name: Enzymatic
Use: Enzyme based preparation used in dish washing.
Company: e-hygiene systems ltd
Telephone: 01689 892522

2. INFORMATION ON INGREDIENTS

Definition Dish washing detergent with solvent and surfactant stabilised reaction mass of genetically altered Bacillus licheniformis, Bacillus metallosubtilis, and Aspergillus niger.

Justification Contains less than 20% Hazardous and Irritant materials so non-hazardous.

Substance name		Registry No.	Classification
Naturally derived metalloendopeptidase, carboxylic ester hydrolases and glycosidases	<15%	EC 3.1.1, EC 3.2.1, EC 3.4.21, EC 3.4.24	
Ethoxylated dodecyl alcohol	<15%	CAS# 9004-83-4	Non-Hazardous
Co-solvent B233	<10%	EC 212-856-1	Xi: R37/38
Foam enhancer and stabiliser	<5%	CAS# 61788-40-0	Non-hazardous
Amphoteric surfactant AM432	<5%	CAS# 141464-42-8	Non-Hazardous
Halite stabiliser	<5%	CAS# 7647-14-5	Non hazardous

3. HAZARDS IDENTIFICATION

Classified as Non-Hazardous under CHIP 3.1

4. FIRST AID MEASURES

Skin Contact: Wash skin with plenty of water
Eye Contact: Rinse eyes with plenty of water and seek medical attention immediately.
Ingestion: Rinse mouth and throat thoroughly with water.
Inhalation: Remove from exposure.

5. FIRE-FIGHTING MEASURES

Fire & Explosion protection: No special requirements
Fire Extinguishing Media: Water, foam
Non-Suitable Media: None
Special Exposure Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Clean-up measures Spilled preparation should be removed immediately. Take up by mechanical means preferably by a vacuum cleaner equipped with a high efficiency filter. Flush remainder carefully with plenty of water.

Precautions Wear suitable protective clothing, gloves, waterproof boots and eye/face protection. Ensure sufficient ventilation. Wash contaminated clothing.

Avoid Formation of dust from dried preparation, splashing and high-pressure washing (avoid formation of aerosols).

7. HANDLING AND STORAGE

Handling Apply good manufacturing practice and industrial hygiene. DO NOT eat, drink or

Avoid	smoke whilst handling. Wear eye protection and gloves. The formation of aerosols and dust from drying out of spilled preparation. Avoid splashing and high-pressure washing. Ensure good ventilation of the room, when handling this preparation.
Storage	Store container in a cool place.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Respiratory Protection:	Respirator with P3 filter
Hand protection:	Impermeable gloves
Eye Protection:	Protective glasses or eye shield
Clothing:	Wear suitable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Green
Odour,	Characteristic
pH	6-9
Boiling point	100 C (approx)
Melting point	0 C (approx)
Flash point	Non-flammable
Specific Gravity	1.0-1.1 g/ml
Solubility	Fully miscible in water

10. STABILITY AND REACTIVITY

Stability	This material is stable under normal conditions of use.
Materials to avoid:	Strong acids, strong alkalis and oxidising agents.
Hazardous Decomposition	None.

11. TOXICOLOGICAL INFORMATION

Route of Entry	Inhalation, eye contact and skin contact.
Inhalation	Inhalation of aerosols or dust resulting from inappropriate handling may induce sensitisation and may cause allergic reaction in sensitised individuals.
Irritation	Prolonged skin contact can cause minor irritation. The preparation is irritating to eyes and there is a risk of serious eye damage.
Oral Toxicity	Oral rat LD-50 > 2g/kg body weight so classified as "non-hazardous" by ingestion.

12. ECOLOGICAL INFORMATION

Mobility	Water soluble
Eco-toxicity	LC-50(fish)>100mg/l, EC-50(daphnia) >100mg/l IC-50(algae) >100mg/l,
Classification	Non-hazardous to the environment.
Degradability	Biodegradable.

13. DISPOSAL CONSIDERATIONS

Product Disposal	No special disposal method required, except that in accordance with current local authority regulations.
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14. TRANSPORT INFORMATION

UN No:	Not applicable
Sea:	Not applicable

