

# Safety Data Sheet

Ecolibrium Biologicals Ltd  
Unit 4, 4 Austen Place  
PO Box 274  
Pukekohe 2340 New Zealand  
Tel: +64 9 963 1834  
This MSDS Consists of 16 Sections

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Version 1.1 Date: 18 March 2018

**Slug-em**

## 1. IDENTIFICATION OF THE SUBSTANCE / COMPANY:

### 1.1 Product identifiers

Product name: Slug-em  
Brand: Ecolibrium Biologicals

1.2 Recommended uses: Molluscicide for use in horticultural crops

### 1.3 Details of the supplier of the safety data sheet

Company: Ecolibrium Biologicals Ltd  
PO Box 274,  
Pukekohe 2340,  
New Zealand.  
Telephone: +64 9 963 1834  
Web address: www.ecolibriumbiologicals.nz

### 1.4 Emergency Telephone Number:

Emergency phone: 0800 POISON (0800 764-766)  
Transport emergency only: Dial 111

## 2. HAZARDS IDENTIFICATION:

EPA New Zealand Approval Code: HSR100516

HSNO Hazard Classification: Classified as a hazardous substance  
6.1D (acute toxicant), 6.3A (skin irritant), 6.4A (eye irritant), 9.1D (aquatic ecotoxicant)  
Not classified as Dangerous Goods for transport in accordance with the Land Transport Rule Dangerous Goods 2005 and NZS 5433:2007.

Signal word: Harmful  
Hazard statements:  
H302 Harmful if swallowed  
H315 Causes skin irritation  
H320 Causes eye irritation  
H402 Harmful to aquatic organisms.

Precautionary statements: Keep out of reach of children  
Read the label before use.  
Wash hands thoroughly after handling  
Do not eat drink or smoke when handling  
Wear protective clothing  
Avoid contamination of any water supply with product or empty container.

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS:

Ingredients	CAS Number	Concentration %
<i>Camelia sinensis</i> saponins	8047-15-2	20-24
Non hazardous ingredients		To 100

## 4. FIRST AID MEASURES:

Description of first aid measures:

Eye contact:	Rinse eyes cautiously with running water for several minutes, and continue to rinse for at least 15 minutes. Call 0800 POISON (0800 764-766) or a doctor/physician for advice.
Skin contact:	Remove contaminated clothing. Wash affected areas thoroughly with soap and water. Call 0800 POISON (0800 764-766) or a doctor/physician for advice.
Ingestion:	Rinse mouth and drink 1-2 glasses of water. DO NOT induce vomiting. Seek medical advice. Call 0800 POISON (0800 764-766) or a doctor/physician for advice.
Inhalation:	If inhaled, move the patient to fresh air, rest and seek medical advice.
Most important symptoms and effects:	There are no known symptoms or effects. To the best of our knowledge, saponins can be considered to be non-toxic.

There is no indication of any immediate medical attention or special treatment requirement.

## 5. FIRE FIGHTING MEASURES:

Fire Hazard Status:	This substance is not flammable and will not burn. The substance should not present any adverse risk to fire fighters.
Suitable extinguishing media:	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Special hazards arising:	Carbon oxides.
Advice for firefighters:	Wear self-contained breathing apparatus for fire fighting if necessary.

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## 6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures:

Use appropriate protective equipment to avoid inhalation, skin or eye contact.  
Clear the area of unnecessary personnel.

Environmental precautions: Do not let the substance enter drains or any water supply

Methods and materials for containment and cleaning up:

Where applicable, dyke and pump as much as possible to a salvage container. Absorb with clay granules, sand or other absorbent material and sweep to a waste container. Cover the spill area with water and absorb. Dispose of waste to an approved waste disposal facility.

## 7. HANDLING AND STORAGE:

Handling: Keep out of reach of children. Wash thoroughly after handling. Do not eat, drink or smoke when handling this substance. Avoid uncontrolled release to the environment.  
Wear full personal protective clothing, including gloves and eye protection. tor.

Storage: Store the container tightly closed in a cool dry well ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Eye Protection: Avoid contact with eyes. When handling wear a face shield or full chemical worker's goggles where there is a risk of eye contact.

Respiratory Protection: Wear an appropriate respirator if inhalation is likely.

Protective clothing: Wear full personal protective clothing (PPE).

Ventilation: Proper ventilation should be provided in accordance with good ventilation practices.

Hygiene precautions: During manufacture, do not eat drink or smoke while working with this product. Remove clothing that becomes contaminated and wash before re-use. Wash hands before breaks and after work.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Dark brown liquid.

Odour: Typically fruity

pH: 3.98 ± 0.1 (20°C).

Specific Gravity: 1.076 (25°C)

Solubility: Soluble in water

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## 10. STABILITY AND REACTIVITY:

Stability: The product Slug-em is stable.

Materials to avoid: Strong oxidizing agents.

Hazardous decomposition products: None known

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## 11. TOXICOLOGICAL INFORMATION:

Acute toxicity: Slug-em is classified under HSNO as 6.1D (acute toxicant)  
Acute oral toxicity to rats LD<sub>50</sub>: > 2000 mg/kg

Skin corrosion /irritation: Slug-em is classified under HSNO as 6.3A (skin irritant)

Serious eye damage /irritation: Slug-em is classified under HSNO as 6.4A (eye irritant)

Carcinogenicity: No data available. Not considered to be carcinogenic.

Potential health effects: None expected.

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## 12. ECOLOGICAL INFORMATION:

Ecotoxicity: Saponins occur naturally in many plants in the environment and demonstrate a low toxicity profile with the result that the potential ecological risk due to exposure to this microorganism is likely to be minimal.

Aquatic ecotoxicity: Slug-em is classified under HSNO as 9.1D (aquatic ecotoxicant). Avoid contamination of water or water supplies.

Soil Toxicity: Short half-life in soil. Readily degraded by micro-organisms. Saponins are completely degraded to carbon dioxide and water within 5 days. Not a soil ecotoxicant.

Terrestrial vertebrates: Not considered to be toxic to terrestrial vertebrates. Birds are not adversely affected by saponins.  
Acute oral LD<sub>50</sub> Bobwhite quail: > 2250mg/kg (related saponin). Practically non-toxic

Terrestrial invertebrates: Not persistent in the environment and has negligible effects on non-target insects.

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## 13. DISPOSAL CONSIDERATIONS:

Product: Unused quantities of the substance can be disposed of in a licensed landfill or composted.  
Disposal of empty container: Crush container and land fill or triple rinse then send to a recycling facility.

Environment protection: As a standard precaution, avoid contamination of any water supply with chemical or empty container.

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## 14. TRANSPORT INFORMATION:

DG Classification: This product is **not** classified as Dangerous Goods for transport in accordance with the Land Transport Rule Dangerous Goods 2005/ NZS 5433:2007.

UN Number: Not applicable

Proper Shipping Name: Not applicable

Hazchem Code: Not applicable

Marine pollutant: This product is not classified as a marine pollutant

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## 15. REGULATORY INFORMATION:

HSNO Approval No: HSR100516  
Hazardous Property Classification: 6.1D (acute toxicant), 6.3A (skin irritant), 6.4A (eye irritant), 9.1D (aquatic ecotoxicant).  
HSNO Controls: See [www.epa.govt.nz](http://www.epa.govt.nz)

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## 16. OTHER INFORMATION:

Abbreviations:  
HSNO: Hazardous substances and New Organisms Act 1996 (HSNO Act)  
NZS: New Zealand Standard  
EPA New Zealand: Environmental Protection Authority of New Zealand  
CAS Number: Chemical Abstracts Service Number  
LD<sub>50</sub>: Lethal Dose 50% (population).

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This MSDS summarises the company's best knowledge of the health and safety hazard information of the product and how to safely handle the product during manufacture and use. The data does not signify any warranty with regard to the products properties.

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