

SAFETY DATA SHEET
LAMBDA CYHALOTHRIN 50 EC

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

Substance: lambda cyhalothrin
Product Name: **LAMBDA CYHALOTHRIN 50 EC**
Product Use: Insecticide
Creation Date: July 2024

Registration holder / Registrasiehouer:

Green Island Investments Pty Ltd
P.O Box 1822, Heidelberg 1438

Emergency telephone number

Griffon Poison information centre: 082 446 8946
Poisons Information Helpline: 0861 555 777
Spill Tech: 086 100 0366 (a/h)

SECTION 2 - HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to Regulation (EC) No 1272/2008 EU-GHS/CLP

Hazard classes/Hazard categories	Hazard statement
Acute toxicity (Category 4)	H302
Acute toxicity (Category 4)	H312
Acute toxicity (Category 4)	H332
STOT SE (Category 3)	H335
STOT SE (Category 3)	H336
STOT RE (Category 2)	H373
Aspiration Hazard (Category 1)	H304
Germ cell mutagenicity (Category 2)	H341
Flammable Liquid (Category 3)	H226
Aquatic Toxicity Acute (Category 1)	H400
Aquatic Toxicity Chronic (Category 2)	H411

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: Highly flammable liquid and vapour

The most important adverse human health effects: May be fatal if ingested and aspiration occurs. Harmful if swallowed. Harmful if inhaled. Causes severe skin burns and eye damage. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure. May cause respiratory irritation.

Label elements



Signal Word Danger

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Hazard Statements:

H302	Harmful if swallowed
H312	Harmful in contact with skin
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H304	May be fatal if swallowed and enters airways
H373	May cause damage to organs through prolonged or repeated exposure
H341	Suspected of causing genetic defects
H226	Flammable liquid and vapour
H400	Very toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Precautionary Statements:

P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P233	Keep container tightly closed.
P264	Wash hands, forearms, and face thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P280	Wear impervious rubber gloves and boots, protective clothing and chemical safety goggles.
P271	Use only outdoors or in a well-ventilated area.
P260	Do not breathe dust/fumes/gas/mist/vapours/spray.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331	Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P310	Immediately call a POISON CENTRE.
P362/364:	Take off contaminated clothing and wash it before reuse.
P405	Store locked up
P403+P235	Store in a well-ventilated place. Keep cool.
P273	Avoid release to the environment.
P391	Collect spillage
P501	Dispose of contents/container in accordance with local/regional/ national regulations.

Other hazards: No data available

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SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/ MIXTURE: mixture

Description: Mixture of substances listed below with non-hazardous additions.

Substance name (IUPAC/EC)	Concentration % by weight	Classification
		EC1272/2008
Light aromatic petroleum	70-80%	Flammable liquid (Category 3) H226. Aspiration toxicity (Category 1) H304. Mutagenicity (Category 1B) H340. Carcinogenicity (Category 1B) H350.
Isotridecanoethoxylate	1-10%	Acute oral (Category 4) H302. Serious eye damage (Category 1) H318. Aquatic acute 2 H401.
Calcium dodecylbenzene sulphonate	1-10%	Skin irritant (Category 2) H315. Serious eye damage (Category 1) H318.
Isobutanol	1-10%	Flammable liquid (Category 3) H226, STOT SE H335+H336. Skin irritant (Category 2) H315. Serious eye damage (Category 1) H318.
Lambda cyhalothrin	1-10%	Acute toxicity oral (Category 3) H301. Acute toxicity dermal (Category 4) H311. Acute toxicity inhalation (Category 2) H330. Aquatic acute (Category 1) H400. Aquatic chronic (Category 1) H410. M=10000

SECTION 4 - FIRST AID MEASURES

General Information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.

Ingestion:

If swallowed, seek immediate medical attention. Do not give anything by mouth to an unconscious person.

Symptoms Caused by Exposure:

Inhalation: Excessive exposure to spray mist may be harmful. Symptoms that may occur if this product is mishandled include central nervous system depression, loss of coordination, impaired judgement and unconsciousness. May cause respiratory irritation.

Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed. Ingestion of the concentrate may result in headache, nausea.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Water spray or fog, foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, hydrogen chloride and other pyrolysis products. Product is combustible.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from firefighting entering drains or water courses.

HAZCHEM Code: •3Z

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

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SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal Precautions: Avoid contact with eyes and skin. Ventilate area of spill or leak, especially in contained areas.

Protective equipment: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

Emergency procedures: Alert firefighting personnel, evacuate unprotected personnel and animals.

Environmental Precautions: Prevent spilled product from entering sewers, waterways or ground water. This product is classified to be toxic to aquatic organisms with long-term adverse effects in the aquatic environment. Any spillages or uncontrolled discharges into water courses should be reported immediately to the police and the Department of Water/Environmental Affairs.

Methods and Materials for Containment: Contain spilled product by diking area with sand, earth or lime.

Methods and Materials for Clean-up: Cover contained spill with an inert absorbent material such as sand, earth or other appropriate non-combustible material. Vacuum, scoop, or sweep up material and place the material into a clean, dry, sealable container. Label containers with the contents and dispose of according to local regulations. Do not place spilled material back in original container. Do not re-use spilled material. Collect washings and add to the drums already collected. Do not flush spilled material or washings into drains or waterways. To decontaminate the spill area, tools and equipment, wash with water and suitable detergent. Add the solution to the drums already collected. Open burning or dumping of this material is prohibited. See section 13 for disposal considerations.

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Handling:

Precautions for safe handling: Avoid contact with eyes and skin. Harmful if swallowed. Ensure adequate ventilation during handling and use. Do not handle broken containers without protective equipment. Immediately clean up spills that occur during handling. Keep containers tightly closed when not in use. In the case of contact with the product refer to First Aid Measures – Section 4.

General occupational hygiene: Practice good hygiene when using this material. Wash hands before eating, drinking, chewing gum, smoking, using the toilet or applying cosmetics. Worker should shower at the end of each workday. Launder all clothing before it is re-used.

Storage:

Conditions for safe storage: Keep out of reach of unauthorised persons, children and animals. Store in its original labelled container tightly closed, in an isolated, dry, cool and well-ventilated area. Do not store near heat, open flame, sources of ignition or hot surfaces. Avoid cross contamination with other pesticides and fertilisers.

Incompatible substances and mixtures: Product is incompatible with galvanized steel or unlined mild steel.

Packaging material: Plastic containers.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

Respirator:

It is usually safe to use the product without a mask or respirator. If the product is used in dusty or confined conditions, a mask or respirator suitable for protection from dusts and mists of pesticides is adequate. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

Clothing:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves:

Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection:

Wear safety goggles or face shield.

Emergency eye wash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to amber liquid.
Odour: Mild halide odour.
Relative density: 0.89 -0.98 ± 0.05 g/cm³
Solubility in water: Completely miscible.
Flash point: >38 degrees
pH: 4,94
Oxidizing properties: None.
Solubility in Solvents: Soluble in aromatic and chlorinated hydrocarbons, moderately soluble in diesel, kerosene and mineral oils.

SECTION 10 - STABILITY AND REACTIVITY

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: Heat, sparks, open flames, hot surfaces and direct sunlight.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products: Oxides of carbon, hydrogen chloride and other pyrolysis products.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute oral LD₅₀: >250 mg/kg in rats (calculated)
(technical = 250 g/kg in rats)

Acute dermal LD₅₀: > 3000 mg/kg in rats (calculated)
(technical = 1600 mg/kg in rats)

Inhalation: Harmful.
Technical = 2,5 (4 hours, rats)

Acute skin irritation: Moderate irritant.
Harmful if absorbed through skin.

Acute eye irritation: Moderate irritant.

Dermal sensitization: Not a skin sensitizer.

Teratogenicity:

Not teratogenic. No birth defects were observed in the offspring of rats given doses as high as 70 mg/kg/day.

Mutagenicity:

Not mutagenic, but tests with very high doses on mice caused a temporary increase in the number of bone marrow cells with micronuclei. Other tests in human, bacterial, and hamster cell cultures and in live mice have been negative.

Carcinogenic effects:

EPA has classified cypermethrin as a possible human carcinogen because available information is inconclusive.

ADI: 0.05 mg/kg b.w (1996).

SECTION 12 - ECOLOGICAL INFORMATION

Lambda Cyhalothrin CAS No. 91465-08-6

Toxicity

Birds	
Acute oral LD ₅₀	>3950 mg/kg Mallard Ducks
Dietary LC ₅₀	> 5300 mg/kg Quail
Aquatic Toxicity Fish LC ₅₀ (96h)	0.00021 mg/l (bluegill sunfish); 0.00036 mg/l (rainbow trout)
Aquatic Toxicity Daphnia EC ₅₀	0.00026 mg/l in water; 0.00031 mg/l in water/ sediment
(72h) Algae Toxicity E _r C ₅₀ (96h)	>1000 µg/l (<i>Selenastrum capricornutum</i>)
Bee Toxicity LD ₅₀	909 ng/bee (oral); 38ng/bee (contact)
Other beneficial organisms:	Toxic to some non-target arthropods. Effects under field conditions are reduced, with rapid recovery.

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Persistence and degradability	Is moderately persistent in the soil. Field half-lives range from 4 to 12 weeks. Lambda-cyhalothrin shows a high affinity for soil, reported Koc is 180 000, and not expected to be appreciably mobile in most soils. Little potential for groundwater contamination.
Bioaccumulation potential	Low bioaccumulation potential.
Mobility in soil	Low mobility (soil)

SECTION 13 - DISPOSAL CONSIDERATION

Pesticide disposal:

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product that cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers.

Comply with local legislation applying to waste disposal.

Container disposal:

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

TRIPLE RINSE empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and bury in an approved dump site.

Prevent contamination of food, feedstuffs, drinking water and eating utensils.

Comply with local legislation applying to waste disposal.

SECTION 14 - TRANSPORT INFORMATION

UN Number	3352
UN proper shipping name	Pyrethroid Pesticide; Liquid; Toxic; Flammable, flash point not less than 23 °C (Lambda-cyhalothrin 50g/l/ xylene)
Transport hazard class	6.1 (3)
Packaging group	II
Marine pollutant	Yes

SECTION 15 - REGULATORY INFORMATION

Safety, health, and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 8, 2019.

Relevant information regarding restrictions:

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations:

National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes. National Environmental Management Waste Act 59 of 2008.

Act 36 of 1947 of the Republic of South Africa. This product is registered under a violation of South African law to use this product in any manner inconsistent with its approved labelling. Read and follow all label directions

Chemical Safety Assessment carried out? No

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SECTION 16 - OTHER INFORMATION

Indication of changes:

Classification according to SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP] GHS aligned – all sections

Relevant H statements (number and full text): Section 3

STOT SE 3- Specific Target Organ Toxicity single exposure (Category 3), Respiratory System

STOT RE 2- Specific Target Organ Toxicity repeated exposure (Category 2), Respiratory system, Central nervous system, Liver, Kidney.

H301-Toxic if swallowed

H302-Harmful if swallowed H311-Toxic in contact with skin H315-Causes skin irritation H330-Fatal if inhaled

H413-May cause long lasting harmful effects to aquatic life H226-Flammable liquid and vapour

H312-Harmful in contact with skin H332-Harmful if inhaled

H315-Causes skin irritation

H412-harmful to aquatic life with long lasting effects H319-Causes serious eye irritation

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed.