SAFETY DATA SHEET
CYPER 200 EC

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

Substance: cypermethrin
Product Name: **CYPER 200 EC**
Product Use: Insecticide
Creation Date: May 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

Hazardous Nature:
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition), IATA and IMDG/IMSBC.
Not subject to the ADG Code when transported in Australia by Road or Rail in packaging's that do not incorporate a receptacle exceeding 500(L) or less; or IBCs (refer to SP AU01). However, if transported by Air or Sea, this provision does not apply.


Environment

Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.

Acute Toxicity (Oral) 4 H302 Harmful if swallowed. Skin Corrosion/Irritation 2 H315 Causes skin irritation.
Skin Sensitisation 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation.
Flammable Liquids 4 H227 Combustible liquid.

Signal Word Warning

Hazard Statements
H227 Combustible liquid.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H410 Very 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. P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P362+P364 Take off contaminated clothing and wash it before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P321 Specific treatment (see on this label).
P370+P378 In case of fire: Use CO2, powder or water spray to extinguish.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national regulations

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/ MIXTURE: mixture
Description: Mixture of substances listed below with non-hazardous additions.

Hazardous Components:		
CAS: 52315-07-8	cypermethrin cis/trans +/-80/20 Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Toxicity (Oral) 4, H302; Skin Corrosion/Irritation 2, H315; Skin Sensitisation 1, H317; STOT SE 3, H335	≥20-<22%

Additional information: Hydrocarbon solvent - 64%

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 fire fighting 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.

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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear golden yellow to amber liquid.
Odour:	Mild halide odour.
Relative density:	0.95 -0.98 ± 0.05 g/cm^3
Solubility in water:	Completely miscible.
Flash point:	>63 degrees
pH:	4,94
Oxidizing properties:	None.

Solubility in Solvents: Soluble in aromatic and chlorinated hyrocarbons, 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 LD_{50}:	>250 mg/kg in rats (calculated) *(technical = 250 g/kg in rats)*
Acute dermal LD_{50}:	> 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:	Mild sensitizer. Reversible skin sensations (paresthesia) may occur.

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

Degradability:
Biological degradation is rapid, and consequently levels of cypermethrin and its degradation products in soil and surface waters are very low.

Cypermethrin has a moderate persistence in soils. Typical DT_{50} is 60 days (fine sandy loam). Cypermethrin is not soluble in water and has a strong tendency to adsorb to soil particles. It is therefore unlikely to cause groundwater contamination. Field dissipation is much faster. K_{oc} 26 492 to 144 652; K_f 821 to 1042; not pH-dependent.

In neutral or acid aqueous solution, cypermethrin hydrolyzes slowly, with hydrolysis being more rapid at pH 9. Under normal environmental temperatures and pH, cypermethrin is stable to hydrolysis with a half-life of greater than 50 days and to photodegradation with a half-life of greater than 100 days. Microbial degradation and photodegradation also occur.

ECOTOXICOLOGY:

Birds: Practically non-toxic to birds.

Oral LD_{50}:	Mallard ducks:	> 10 000 mg/kg
	Chickens:	> 2000 mg/kg

Fish: Very toxic to fish. Under filed conditions, fish are not at risk from normal agriculture usage.

LC_{50} (96 hours):	Rainbow trout:	0.69 µg/ℓ
	Sheepshead minnows:	2.37 µg/ℓ

Daphnia:

LC_{50} (48 hours):	*Daphnia magna:*	0.15 µg/ℓ

Bees: Highly toxic to bees. However, no hazard to bees under normal application conditions.

LD_{50} (oral) (24 hours):	0.035 µg/bee
LC_{50} (topical):	0.02 µg/bee

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
ADG, IMDG, IATA UN3082

Proper Shipping Name
ADG, IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (cypermethrin cis/trans +/-80/20)

Dangerous Goods Class
ADG Class: 9
Subsidiary Risk:
Packing Group:
ADG, IMDG, IATA III

Marine pollutant:

EMS Number: F-A,S-F

Hazchem Code: •3Z

Special Provisions: 274, 331, 335, 375, AU01
Transport/Additional information: Not subject to the ADG Code when transported by road or rail in packaging's that do not incorporate a receptacle exceeding 500 kg(L) or IBCs. (refer to SP AU01)

Limited Quantities: 5L

Packagings & IBCs - Packing Instruction: P001, IBC03, LP01

Packagings & IBCs - Special Packing Provisions: PP1

Portable Tanks & Bulk Containers - Instructions: T4

SECTION 15 - REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:
OHSA 1993 Regulations for Hazardous Chemical Substances.
Relevant information regarding restrictions: None. EU regulation: Regulation EC1272/2008 (EU-GHS/CLP)
Other national regulations: None.
Chemical Safety Assessment carried out? No

SECTION 16 - OTHER INFORMATION

Indication of changes: GHS aligned:
Relevant classification and H statements (number and full text):
STOT RE 1- Specific Target Organ Toxicity repeated exposure (Category 1)
STOT SE-3 Specific Target Organ Toxicity single exposure (Category 3)
Aquatic acute 1: Hazardous to the aquatic environment (Acute 1)
Aquatic chronic 1: Hazardous to the aquatic environment (Chronic 1)
H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation. H318 Causes serious eye damage. H340 May cause genetic defects. H350 May cause cancer.
H335 May cause respiratory irritation. H373 May causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
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.