

Safety Data Sheet

according to WHS Regulations

Printing date 25.05.2017

Revision: 25.05.2017

1 Identification

Product Name: 4FARMERS ALPHA-CYPERMETHRIN 100 EC INSECTICIDE

Recommended Use of the Chemical and Restriction on Use: Agricultural insecticide

Details of Manufacturer or Importer:

4Farmers Pty Ltd
70 McDowell Street
Welshpool WA 6106

Phone Number: +61 8 9356 3446

Emergency telephone number: National Poison Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



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.

Flammable Liquids 4 H227 Combustible liquid.

Signal Word Danger

Hazard Statements

H227 Combustible liquid.

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P210 Keep away from flames and hot surfaces. No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves / eye protection / face protection.

P273 Avoid release to the environment.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

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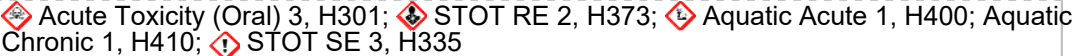

- P314 Get medical advice/attention if you feel unwell.
 P330 Rinse mouth.
 P331 Do NOT induce vomiting.
 P370+P378 In case of fire: Use to extinguish: CO₂, powder or water spray.
 P391 Collect spillage.
 P405 Store locked up.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

| | | |
|------------|--|------|
| 67375-30-8 | α -cypermethrin  | 25% |
| 64742-94-5 | Solvent naphtha (petroleum), heavy arom.  | >70% |

4 First Aid Measures

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, hold eyelids open and flush eye continuously with large amounts of water for at least 15 minutes. Seek medical attention if symptoms persist.

Ingestion:

If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Information for Doctor:

Mammalian toxicity of pyrethrum and synthetic pyrethroids is low, in part because of poor bioavailability and a large first pass extraction by the liver.

The most common adverse reaction results from the potent sensitising effects of pyrethrins.

Clinical manifestations of exposure include contact dermatitis (erythema, vesiculation, bullae), anaphylactoid reactions (pallor, tachycardia, diaphoresis) and asthma.

In cases of skin contact, it has been reported that topical application of vitamin E acetate (alpha-tocopherol acetate) has been found to have high therapeutic value, eliminating almost all skin pain associated with exposure to synthetic pyrethroids.

Symptoms Caused by Exposure:

Inhalation: Inhalation of spray mist likely to cause nausea and possibly vomiting. Symptoms of over exposure through inhalation are the same as those for ingestion.

Skin: May cause skin irritation. Symptoms of overexposure through skin are the same as those for ingestion.

Eye: May cause eye irritation. Symptoms of over exposure are the same as those for ingestion.

Ingestion: Toxic if swallowed. Symptoms of over exposure include tremors, loss of motor control and greater numbing, burning and tingling. These sensations are reversible and usually subside within 12 hours.

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5 Fire Fighting Measures

Suitable Extinguishing Media: Foam, dry chemical powder, water and water fog or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion include oxides of hydrogen chloride, carbon and nitrogen and possibly oxides of phosphorus.

Product is not flammable, but may burn if heated.

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:

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

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear Safe Work Australia approved respiratory protection and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents, strong acids and bases.

8 Exposure controls and personal protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use a Safe Work Australia approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

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Skin Protection:

Elbow-length PVC gloves, cotton overall buttoned to the neck and wrist, safety boots and a washable hat. See Australian Standards AS/NZS 2161, 2210.1 and 2210.2 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

| | |
|---|----------------------------------|
| Form: | Clear liquid |
| Colour: | Pale straw yellow |
| Odour: | Weak characteristic odour |
| Odour Threshold: | No information available |
| pH-Value: | 6 - 8 |
| Melting point/freezing point: | No information available |
| Initial Boiling Point/Boiling Range: | < 100 °C |
| Flash Point: | <100 °C |
| Flammability: | Product is not flammable. |
| Auto-ignition Temperature: | No information available |
| Decomposition Temperature: | No information available |
| Explosion Limits: | |
| Lower: | No information available |
| Upper: | No information available |
| Vapour Pressure: | No information available |
| Relative Density at 20 °C: | 0.92 g/cm ³ |
| Vapour Density: | No information available |
| Evaporation Rate: | No information available |
| Solubility in Water: | Miscible. Emulsifies with water. |
| Partition Coefficient (n-octanol/water): | No information available |
| % Volatiles by Volume: | Low at 100°C % (expected) |

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

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

Conditions to Avoid: Heat, sparks, open flames and other sources of ignition.

Incompatible Materials: Strong oxidising agents, strong acids and bases.

Hazardous Decomposition Products:

Hazardous combustion include oxides of hydrogen chloride, carbon and nitrogen and possibly oxides of phosphorus.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****67375-30-8 α -cypermethrin**

| | | |
|--------|------------------|-------------------|
| Oral | LD ₅₀ | 1360 mg/kg (rat) |
| Dermal | LD ₅₀ | >2000 mg/kg (rat) |

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Acute Health Effects**Inhalation:**

Inhalation of spray mist likely to cause nausea and possibly vomiting. Symptoms of over exposure through inhalation are the same as those for ingestion.

Skin: May cause skin irritation. Symptoms of overexposure through skin are the same as those for ingestion.

Eye: May cause eye irritation. Symptoms of over exposure are the same as those for ingestion.

Ingestion:

Toxic if swallowed. Symptoms of over exposure include tremors, loss of motor control and greater numbing, burning and tingling. These sensations are reversible and usually subside within 12 hours.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure: May cause respiratory irritation.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard:

May be fatal if swallowed and enters airways.

Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for alpha-cypermethrin for a human is 0.05 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 4.7 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.

(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2017).

12 Ecological Information

Ecotoxicity: Alpha-cypermethrin is practically non toxic to birds. It is highly toxic to bees.

Aquatic toxicity:**67375-30-8 α -cypermethrin**

| | |
|------------------------|-----------------------------|
| LC ₅₀ /96 h | 0.0028 mg/l (rainbow trout) |
|------------------------|-----------------------------|

Very toxic to aquatic life with long lasting effects.

Persistence and Degradability:

Moderately persistent in soil. Degrades with a half-life measured in weeks to months.

Bioaccumulative Potential: No information available

Mobility in Soil: No information available

13 Disposal considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

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Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport information

| | |
|---|---|
| UN Number ADG | Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail in packaging, including IBCs not greater than 3000 L each. |
| IMDG, IATA | UN3082 |
| Proper Shipping Name ADG IMDG | Not regulated ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT (Alpha-cypermethrin) |
| IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alpha-cypermethrin) |
| Dangerous Goods Class ADG Class: IMDG Class: | Not regulated 9 Miscellaneous dangerous substances and articles. |
| Packing Group: ADG IMDG, IATA | Not regulated III |
| Marine pollutant: | Yes Symbol (fish and tree) |
| Hazchem Code: | •3Z |
| Special Provisions: | 274, 331, 335, 375, AU01 |
| Limited Quantities: | 5L |
| Packagings & IBCs - Packing Instruction: | P001, IBC03, LP01 |
| Packagings & IBCs - Special Packing Provisions: | PP1 |
| Portable Tanks & Bulk Containers - Instructions: | T4 |
| Portable Tanks & Bulk Containers - Special Provisions: | TP1, TP29 |

15 Regulatory information**Australian Inventory of Chemical Substances:**

| | |
|------------|--|
| 67375-30-8 | α -cypermethrin |
| 64742-94-5 | Solvent naphtha (petroleum), heavy arom. |

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

16 Other information**Date of Preparation or Last Revision:** 25.05.2017**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

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IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC₅₀: Lethal concentration, 50 percentLD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable Liquids 4: Flammable liquids – Category 4

Acute Toxicity (Oral) 3: Acute toxicity – Category 3

Acute Toxicity (Oral) 4: Acute toxicity – Category 4

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aspiration Hazard 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Data compared to the previous version altered:

Section 5 - Fire Fighting Measures, heading "Specific Hazards Arising from the Chemical".

Section 9 - Physical and Chemical Properties, heading "Flammability".

Section 11 - Toxicological Information, heading "Additional toxicological information".

Section 14 - Transport Information, heading "Special Provisions".

Section 14 - Transport Information, heading "Proper Shipping Name".

Section 15 - Regulatory Information, heading "Australian Inventory of Chemical Substances".

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016"

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