

4FARMERS CYPERMETHRIN 260 EC INSECTICIDE

Chemwatch Independent Material Safety Data Sheet

Issue Date: 16-Jul-2009

C9317EC

CHEMWATCH 3723449

Version No:2.0

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

4FARMERS CYPERMETHRIN 260 EC INSECTICIDE

SYNONYMS

"Cyper 260"

PROPER SHIPPING NAME

PESTICIDE, LIQUID, TOXIC, N.O.S.(contains cypermethrin)

PRODUCT USE

Agricultural Insecticide.

SUPPLIER

Company: 4Farmers Pty Ltd

Address:

70 MCDOWELL ST. A

WELSHPOOL, 6106

AUS

Telephone: 08- 9356 3445

Fax: 08- 9356- 3447

Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

COMBUSTIBLE LIQUID, regulated under AS1940 for Bulk Storage purposes only.



POISONS SCHEDULE

S6

RISK

- Harmful by inhalation in contact with skin and if swallowed.
- Irritating to eyes respiratory system and skin.
- May cause SENSITISATION by skin contact.
- Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment.
- Toxic to bees.

SAFETY

- Do not breathe gas/fumes/vapour/spray.
- Use only in well ventilated areas.
- Keep container in a well ventilated place.
- Avoid exposure - obtain special instructions before use.
- To clean the floor and all objects contaminated by this material use water.

- Cumulative effects may result following exposure*.
- Limited evidence of a carcinogenic effect*.
- Possible respiratory sensitiser*.
- May be harmful to the foetus/ embryo*.

* (limited evidence).

- Keep container tightly closed.
- This material and its container must be disposed of in a safe way.
- Keep away from food drink and animal feeding stuffs.
- In case of contact with eyes rinse with plenty of water and contact Doctor or Poisons Information Centre.
- If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre. (show this container or label).
- Use appropriate container to avoid environmental contamination.
- Avoid release to the environment. Refer to special instructions/Safety data sheets.
- This material and its container must be disposed of as hazardous waste.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
cypermethrin	52315-07-8	26
hydrocarbon solvent		64
emulsifiers/surfactants		10

Section 4 - FIRST AID MEASURES

SWALLOWED

- - IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- For advice, contact a Poisons Information Centre or a doctor.

EYE

- If this product comes in contact with the eyes:
 - Wash out immediately with fresh running water.
 - Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

- If skin contact occurs:
 - Immediately remove all contaminated clothing, including footwear.
 - Flush skin and hair with running water (and soap if available).

INHALED

- - If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

- For chronic or short term repeated exposures to pyrethrum and synthetic pyrethroids:
 - 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.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- - Water spray or fog.
- Foam.

FIRE FIGHTING

- - Alert Fire Brigade and tell them location and nature of hazard.
 - Wear full body protective clothing with breathing apparatus.
- When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 800 metres in all directions.

FIRE/EXPLOSION HAZARD

- - Combustible.
 - Slight fire hazard when exposed to heat or flame.
- Combustion products include: carbon dioxide (CO₂), hydrogen chloride, phosgene, nitrogen oxides (NO_x), other pyrolysis products typical of burning organic material. May emit poisonous fumes.

FIRE INCOMPATIBILITY

- - Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

HAZCHEM: 2X

Personal Protective Equipment

Gas tight chemical resistant suit.

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Environmental hazard - contain spillage.
- Remove all ignition sources.
- Clean up all spills immediately.

MAJOR SPILLS

- Environmental hazard - contain spillage.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.

Personal Protective Equipment advice is contained in Section 8 of the MSDS.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- - DO NOT allow clothing wet with material to stay in contact with skin.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.

SUITABLE CONTAINER

- - Lined metal can, lined metal pail/ can.
- Plastic pail.

For low viscosity materials

- Drums and jerricans must be of the non-removable head type.
- Where a can is to be used as an inner package, the can must have a screwed enclosure.

STORAGE INCOMPATIBILITY

- Pyrethrins and permethrins:
 - are unstable in the presence of light, heat, moisture and air
 - are hydrolysed by oxygen and/ or sunlight.
 - Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- - Store in original containers.
- Keep containers securely sealed.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

- cypermethrin: CAS:52315-07-8 CAS:69865-47-0 CAS:86752-99-0 CAS:86753-92-6
CAS:88161-75-5 CAS:97955-44-7 CAS:137497-61-1 CAS:139203-31-9
CAS:142443-95-6 CAS:146909-55-9 CAS:186554-45-0 CAS:67375-30-8
CAS:65731-84-2 CAS:71697-59-1

PERSONAL PROTECTION

RESPIRATOR

Type ANO Filter of sufficient capacity

EYE

- - Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

- - Wear chemical protective gloves, eg. PVC.
- Wear safety footwear or safety gumboots, eg. Rubber.

NOTE:

- The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

Suitability and durability of glove type is dependent on usage. Factors such as:

- frequency and duration of contact,
- chemical resistance of glove material,

OTHER

- - Overalls.
- Eyewash unit.

ENGINEERING CONTROLS

- Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Pale straw coloured liquid with hydrocarbon solvent; mixes with water.

PHYSICAL PROPERTIES

Mixes with water.

Molecular Weight: Not Applicable

Boiling Range (°C): >130

Melting Range (°C): <0
Solubility in water (g/L): Miscible
pH (1% solution): Not Available
Volatile Component (%vol): Not Available
Relative Vapour Density (air=1): Not Available
Lower Explosive Limit (%): Not Available
Autoignition Temp (°C): Not Available
State: LIQUID

Specific Gravity (water=1): 0.9
pH (as supplied): Not Available
Vapour Pressure (kPa): Not Available
Evaporation Rate: Not Available
Flash Point (°C): >61
Upper Explosive Limit (%): Not Available
Decomposition Temp (°C): Not Available
Viscosity: Not Available

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- - Presence of incompatible materials.
 - Product is considered stable.
- For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

- Harmful by inhalation, in contact with skin and if swallowed.
- Irritating to eyes, respiratory system and skin.

CHRONIC HEALTH EFFECTS

- May cause SENSITISATION by skin contact.
- Possible respiratory sensitiser*.
- Limited evidence of a carcinogenic effect*.
- May be harmful to the foetus/ embryo*.
- Cumulative effects may result following exposure*.
- * (limited evidence).

TOXICITY AND IRRITATION

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

- Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.

For cypermethrin:

Toxicological Effects:

Acute toxicity: Cypermethrin is a moderately toxic material by dermal absorption or ingestion . Symptoms of high dermal exposure include numbness, tingling, itching, burning sensation, loss of bladder control, incoordination, seizures, and possible death .

CYPERMETHRIN:

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (Rat) LD50: 57 mg/kg
Inhalation (Rat) LC50: 7889 mg/m³/4h
Dermal (Rat) LD50: >1600 mg/kg *[EPA Report]
Intraperitoneal (Rat) LD50: 404 mg/kg
Oral (Mouse) LD50: 245.7 mg/kg
Intraperitoneal (Mouse) LD50: 25 mg/kg

IRRITATION

Skin (rabbit): non irritating*
Eye (rabbit): mild*

Oral (Rabbit) LD50: 1500 mg/kg
 Dermal (Rabbit) LD50: >2400 mg/kg
 Oral (Guinea pig) LD50: 500 mg/kg
 Intraperitoneal (Rat) LD50: 43 mg/kg
 Dermal (Rabbit) LD50: 2460 mg/kg
 Oral (Rat) LD50: 86 mg/kg

■ Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.

Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound.

For cypermethrin:

Toxicological Effects:

Acute toxicity: Cypermethrin is a moderately toxic material by dermal absorption or ingestion. Symptoms of high dermal exposure include numbness, tingling, itching, burning sensation, loss of bladder control, incoordination, seizures, and possible death.

Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).

NOTE: Substance has been shown to be mutagenic in at least one assay, or belongs to a family of chemicals producing damage or change to cellular DNA.

ADI: 0.05 mg/kg/day

NOEL: 4.7 mg/kg/day

Somnolence, convulsions, tremor, spasticity, muscle weakness, respiratory obstruction, lachrymation, normocytic anaemia, leukopenia, ataxia, microcytosis without anaemia, changes in erythrocyte/ leucocyte (WBC), allergic disease in cellular and humoral immune response, proteinuria, hypoglycaemia, cutaneous sensitisation, delayed hypersensitivity, tumours, effects on newborn, effects on embryo/ foetus, paternal effects, specific developmental abnormalities (urogenital system, blood and lymphatic systems, immune and reticuloendothelial system) recorded.

Tumourigenic/ neoplastic by RTECS criteria (facilitates the action of a known carcinogen)

CARCINOGEN

Non-arsenical insecticides (occupational exposures in spraying and application of)	International Agency for Research on Cancer (IARC) Carcinogens	Group	2A
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Section 12 - ECOLOGICAL INFORMATION

Toxic to bees.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment.

Refer to special instructions/ safety data sheets.

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
4Farmers Cypermethrin 260 EC Insecticide cypermethrin		No data		
		No data		

Section 13 - DISPOSAL CONSIDERATIONS

- - Containers may still present a chemical hazard/ danger when empty.
 - Return to supplier for reuse/ recycling if possible.
- Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
 - It may be necessary to collect all wash water for treatment before disposal.
 - Recycle wherever possible or consult manufacturer for recycling options.
 - Consult State Land Waste Authority for disposal.

Section 14 - TRANSPORTATION INFORMATION



Labels Required: TOXIC
HAZCHEM: 2X (ADG7)

ADG7:

Class or division:	6.1	Subsidiary risk:	None
UN No.:	2902	UN packing group:	III
Special provisions:	61, 223, 274	Packing Instructions:	None
Notes:	None	Limited quantities:	5 L
Portable tanks and bulk containers - Instructions:	T7	Portable tanks and bulk containers - Special provisions:	TP2, TP28
Packagings and IBCs - Packing instruction:	P001, IBC03, LP01	Packagings and IBCs - Special packing provisions:	None

Shipping Name: PESTICIDE, LIQUID, TOXIC, N.O.S. (contains cypermethrin)

Land Transport UNDG:

Class or division:	6.1	Subsidiary risk:	None
UN No.:	2902	UN packing group:	III

Shipping Name: PESTICIDE, LIQUID, TOXIC, N.O.S. (contains cypermethrin)

Air Transport IATA:

ICAO/IATA Class:	6.1	ICAO/IATA Subrisk:	None
UN/ID Number:	2902	Packing Group:	III
Special provisions:	A3 A4		

Shipping Name: PESTICIDE, LIQUID, TOXIC, N.O.S. *(CONTAINS CYPERMETHRIN)

Maritime Transport IMDG:

IMDG Class:	6.1	IMDG Subrisk:	None
UN Number:	2902	Packing Group:	III
EMS Number:	F-A,S-A	Special provisions:	61 223 274 944
Limited Quantities:	5 L	Marine Pollutant:	Not Determined

Shipping Name: PESTICIDE, LIQUID, TOXIC, N.O.S.(contains cypermethrin)

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE: S6

REGULATIONS

Regulations for ingredients

cypermethrin (CAS: 52315-07-8,69865-47-0,86752-99-0,86753-92-6,88161-75-5,97955-44-7,137497-61-1,139203-31-9,142443-95-6,146909-55-9,186554-45-0,67375-30-8,65731-84-2,71697-59-1) is found on the following regulatory lists;

"Australia Hazardous Substances", "Australia Inventory of Chemical Substances (AICS)", "Australia New Zealand Food Standards Code - Maximum Residue Limits (Australia only) - Schedule 3 - Chemical Groups", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6", "Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 7", "OSPAR Substances removed from the List of Substances of Possible Concern", "WHO Guidelines for Drinking-water Quality - Chemicals excluded from guideline value derivation"

No data for 4Farmers Cypermethrin 260 EC Insecticide (CW: 3723449)

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
cypermethrin	52315-07-8, 69865-47-0, 86752-99-0, 86753-92-6, 88161-75-5, 97955-44-7, 137497-61-1, 139203-31-9, 142443-95-6, 146909-55-9, 186554-45-0, 67375-30-8, 65731-84-2, 71697-59-1

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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This is the end of the MSDS.