



4 Farmers ... For Farmers
Printing date 30.11.2016

SAFETY DATA SHEET

According to Safe Work Australia

Revision: 30.11.2016

1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Name: 4FARMERS BIFENTHRIN INSECTICIDE

Other Means of Identification: Mixture

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

Details of Manufacturer or Importer:

4Farmers Australia 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. HAZARDS 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

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



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.

H304 May be fatal if swallowed and enters airways.

Precautionary Statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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.

P330 Rinse mouth.

P331 Do NOT induce vomiting.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

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.

(Contd. on page 2)

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(Contd. of page 1)

Hazardous Components:			
64742-94-5	Solvent naphtha (petroleum), heavy arom.	 Aspiration Hazard 1, H304	65.9%
82657-04-3	Bifenthrin (ISO)	 Acute Toxicity (Oral) 3, H301	10.3%

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

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.

Symptoms Caused by Exposure:

Inhalation: High concentrations of vapour can cause irritation of the nose, throat and respiratory tract with burning or itching sensation, CNS depression, nausea and vomiting.

Skin Contact: May cause tingling sensation especially in the face.

Eye Contact: May cause eye irritation.

Ingestion: Harmful if swallowed. Large doses may cause incoordination, tremor, salivation, vomiting, diarrhoea, and irritability to sound and touch. May be fatal if swallowed and enters airways.

5 . FIRE FIGHTING MEASURES

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

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen, hydrogen chloride, phosgene, and other pyrolysis products.

Combustible liquid.

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.

(Contd. on page 3)

SAFETY DATA SHEET

According to Safe Work Australia

Printing date 30.11.2016

Revision: 30.11.2016

Product Name: 4FARMERS BIFENTHRIN INSECTICIDE

(Contd. of page 2)

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 (i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc.).

8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards:**8003-34-7 Pyrethrins and Pyrethroids**

NES	TWA: 5 mg/m ³ Sen
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Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

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.

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:	Liquid
Colour:	Clear straw to brown
Odour:	Strong characteristic odour
Odour Threshold:	No information available
pH-Value:	6-7
Melting point/Melting range:	Not determined
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	69 °C
Flammability:	Combustible liquid
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available

(Contd. on page 4)

SAFETY DATA SHEET

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Printing date 30.11.2016

Revision: 30.11.2016

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(Contd. of page 3)

Upper:	No information available
Vapour Pressure:	No information available
Relative Density at 20 °C:	0.97 g/cm ³
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Emulsifies in water.
Partition Coefficient (n-octanol/water):	Not determined.
VOC:	66 %

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.

Hazardous Decomposition Products: Oxides of carbon and nitrogen, hydrogen chloride and phosgene.

11 . TOXICOLOGICAL INFORMATION

Toxicity:

LD₅₀/LC₅₀ Values Relevant for Classification:

82657-04-3 Bifenthrin (ISO)

Oral	LD50	54.5 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)

Acute Health Effects

Inhalation:

High concentrations of vapour can cause irritation of the nose, throat and respiratory tract with burning or itching sensation, CNS depression, nausea and vomiting.

Skin: May cause tingling sensation especially in the face.

Eye: May cause eye irritation.

Ingestion:

Harmful if swallowed. Large doses may cause incoordination, tremor, salivation, vomiting, diarrhoea, and irritability to sound and touch. May be fatal if swallowed and enters airways.

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: No sensitising effects known.

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:

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

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

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

Aspiration Hazard: May be fatal if swallowed and enters airways.

(Contd. on page 5)

SAFETY DATA SHEET

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(Contd. of page 4)

Chronic Health Effects:

Repeated or prolonged skin exposure may cause de-fatting of the skin, dermatitis and possible sensitisation. Inhalation of very high vapour concentrations or prolonged exposure may cause CNS depression.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for bifenthrin for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOEL of 1 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: Comm. Dept. of Health and Ageing Office of Chemical Safety, 'ADI List', March 2016).

12 . ECOLOGICAL INFORMATION

Ecotoxicity: Bifenthrin is moderately toxic to birds and bees.

Aquatic toxicity:

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

Persistence and Degradability:

Half-life in soil is 7 days to 8 months depending on the soil type and the amount of air in the soil.

Bioaccumulative Potential: Bifenthrin is relatively insoluble in water. It has low bioaccumulative potential.

Mobility in Soil: Bifenthrin has a low mobility in soils.

13 . DISPOSAL CONSIDERATIONS

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

Special Precautions for Landfill or Incineration:

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

14 . TRANSPORT INFORMATION

UN Number Not regulated

Proper Shipping Name Not regulated

Dangerous Goods Class Not regulated

Packing Group: Not regulated

15 . REGULATORY INFORMATION

Australian Inventory of Chemical Substances:

64742-94-5	Solvent naphtha (petroleum), heavy arom.
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Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

16 . OTHER INFORMATION

Date of Preparation or Last Revision: 30.11.2016

Abbreviations and acronyms:

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

VOC: Volatile Organic Compounds

LC₅₀: Lethal concentration, 50 percent

LD₅₀: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

(Contd. on page 6)

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(Contd. of page 5)

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

Aspiration Hazard 1: Aspiration hazard – Category 1

Data compared to the previous version altered:

Previous version 23.01.2016.

Altered:

Section 2 "Hazards Identification" - Heading "Hazardous Nature"

Section 14 "Transport Information" - Headings "UN Number", "Proper Shipping Name", "Dangerous Goods Class", "Packing group"

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 - December 2011"

The information contained in this material safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. 4Farmers Australia Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.