SAFETY DATA SHEET

Revision date: 01-Jun-2020



Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier	
Product Name	DEFENDER HOME DEFENSE INDOOR + OUTDOOR SURFACE SPRAY PROFESSIONAL GRADE FORMULA
Product Code(s)	00000068025
Other means of identification	
UN number	3082
Recommended use of the chemical	and restrictions on use
Recommended use	Insecticide for use as described on the product label.
Uses advised against	No information available.
Supplier	

Evergreen Garden Care Australia Pty Ltd 31 003 126 162 Building E, Level 2, 24-32 Lexington Drive Bella Vista, NSW, 2153 Australia

Telephone Number: +61 (2) 8602 9000 Facsimile: +61 (2) 8602 9001

Emergency telephone number

Emergency telephone number

1800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

Not classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS)

Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

SIGNAL WORD

Warning

Label elements

Environment



Hazard statements H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Avoid release to the environment Collect spillage

Precautionary Statements - Storage No storage statements

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification None allocated

Poisons Schedule (SUSMP)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical name	CAS No.	Weight-%
Bifenthrin	82657-04-3	<1
Non hazardous component(s)	-	to 100

4. FIRST AID MEASURES

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.	
Emergency telephone number	Poisons Information Center, Australia: 13 11 26 Poisons Information Center, New Zealand: 0800 764 766	
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.	
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.	
Skin contact	Wash with plenty of water. Get medical attention if symptoms occur.	
Ingestion	Rinse mouth thoroughly with water. Get medical attention if symptoms occur.	

Most important symptoms and effects, both acute and delayed			
Symptoms	No information available.		
Indication of any immediate medica	I attention and special treatment needed		
Note to physicians	Treat symptomatically.		
5. FIRE FIGHTING MEASUR Suitable Extinguishing Media	KE5		
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Unsuitable extinguishing media	No information available.		
Specific hazards arising from the ch	nemical		
Specific hazards arising from the chemical	No information available.		
Special protective actions for fire-fig	<u>ghters</u>		
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.		
Hazchem code	•3Z		
6. ACCIDENTAL RELEASE	MEASURES		
Personal precautions, protective eq	uipment and emergency procedures		
Personal precautions	Ensure adequate ventilation. Use personal protective equipment as required.		
Other information	Refer to protective measures listed in Sections 7 and 8.		
For emergency responders	Use personal protection recommended in Section 8.		
Environmental precautions			
Environmental precautions	See Section 12 for additional Ecological Information.		
Methods and material for containment and cleaning up			
Methods for containment	Prevent further leakage or spillage if safe to do so.		
Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.		
7. HANDLING AND STORA	GE		
Precautions for safe handling			

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight.
Incompatible materials	None known based on information supplied
Poisons Schedule (SUSMP)	None allocated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.

Eye/face protection	Glasses.
Skin and body protection	Boots. Overalls.
Hand protection	Wear suitable gloves. Impervious gloves.
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
Environmental exposure controls	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Opaque Liquid	
Appearance	No information available.	
Color	No information available.	
Odor	No information available.	

Odor threshold	No information available.	
<u>Property</u>	<u>Values</u>	Remarks • Method
pH	4.8-6.8	None known
Melting point / freezing point	ca. 0°C	None known
Boiling point / boiling range	ca. 100°C	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air Upper flammability or explosive limits	No data available	None known
Lower flammability or explosive limits Vapor pressure	No data available No data available	None known
Vapor density	No data available	None known
Relative density	0.99-1.01	None known
Water solubility	Miscible in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	Not applicable	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

10. STABILITY AND REACTIVITY

<u>Reactivity</u>		
Reactivity	No information available.	
Chemical stability		
Stability	Stable under normal conditions.	
Explosion data Sensitivity to mechanical impac	t None.	
Sensitivity to static discharge	None.	
Possibility of hazardous reactions		
Possibility of hazardous reactions	None under normal processing.	
Conditions to avoid		
Conditions to avoid	Direct sunlight.	
Incompatible materials		
Incompatible materials	None known based on information supplied	
Hazardous decomposition products	1	
Hazardous decomposition products Carbon oxides. Oxides of silicon.		

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
Inhalation	May cause irritation.
Eye contact	May cause irritation.
Skin contact	May cause irritation.
Ingestion	May cause gastrointestinal discomfort if consumed in large amounts
Symptoms	No information available.

Numerical measures of toxicity - Product Information No information available.

Unknown acute toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Bifenthrin	= 47 mg/kg (Rat) = 54.5 mg/kg (Rat)	= 790 mg/kg (Rat)> 2 g/kg (Rabbit)	= 1010 mg/m³(Rat)4 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Not classified. Classification is based on mixture calculation methods based on component data.		
Serious eye damage/eye irritation	Not classified. Classification is based on mixture calculation methods based on component data.		
Respiratory or skin sensitization	Not classified. Classification is based on mixture calculation methods based on component data.		
Germ cell mutagenicity	No information available.		
Carcinogenicity	No information available.		
Chemical name		Australia	
Bifenthrin - 82657-04-3		Carc. 2	
Reproductive toxicity	No information available.		
STOT - single exposure	No information available.		
STOT - repeated exposure	No information available.		

Chronic effects:

For BIFENTHRIN: SKIN: Non-irritant (rabbit). EYES: Non-irritant (rabbit). Bifenthrin was not genotoxic in a battery of mutagenicity assays. Animals studies have shown that bifenthrin is not teratogenic nor does it cause reproductive toxic effects. ADI (Acceptable Daily Intake) for humans is 0.01 mg/kg bw/day.

Ingestion of large doses of Bifenthrin by laboratory animals produced signs of toxicity which included clonic convulsions, tremors and bloody nasal discharge.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Keep out of waterways. Very toxic to aquatic life with long lasting effects.

Unknown aquatic toxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Bifenthrin	-	LC50: 0.0001 - 0.00019mg/L (96h, Oncorhynchus mykiss) LC50: 0.0003 - 0.00038mg/L (96h, Lepomis macrochirus)	-	EC50: 0.00135 - 0.00195mg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability	No information available.
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Bioaccumulative potential

Bioaccumulation No information available.

<u>Mobility</u>

Mobility in soil

No information available.

Other adverse effects

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Bifenthrin	Group III Chemical	-	-

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused	Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank.
products	Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean
	containers to recycler or designated collection point. If not recycling, break, crush or
	puncture and deliver empty packaging to an approved waste management facility. If an
	approved waste management facility is not available, bury the empty packaging 500 mm

	below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.
Contaminated packaging	Pressurized container: Do not pierce or burn, even after use.

14. TRANSPORT INFORMATION

<u>ADG</u>

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS
	BIFENTHRIN)
Hazard class	9
Packing group	
Hazchem code	•3Z

<u>IATA</u>

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number UN proper shipping name	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BIFENTHRIN)
Transport hazard class(es)	9
Packing group	III

IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number UN proper shipping name	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS BIFENTHRIN)
Transport hazard class(es)	9
Packing group	
IMDG EMS Fire	F-A
IMDG EMS Spill	S-F
Marine pollutant	Yes

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

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Not classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS)

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) None allocated

International Inventories AICS

Contact supplier for inventory compliance status.

Legend: AICS - Australian Inventory of Chemical Substances

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

APVMA Approval Number: 62707.

Reason(s) For Issue: First Issue Primary SDS

Issuing Date: 01-Jun-2020

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section	on 8: EXPOSURE CONTROLS/PERSONAL	- PROTECTION	
TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set RTECS (Registry of Toxic Effects of Chemical Substances) World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since The Supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Supplier representative or The Supplier at the contact details on page 1.

The Supplier's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet