

SAFETY DATA SHEET

FICAM W INSECTICIDE

1/11

Revision Date: 24.02.2023

Version 1 / NZ

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name FICAM W INSECTICIDE
Product code (UVP) 05935598

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use Insecticide
EPA Approval HSR000451

1.3 Details of the supplier of the safety data sheet

Importer/distributor Garrards (NZ) Ltd
Unit 4/27B Cain Road
Penrose
Auckland 0627
New Zealand
Telephone: 09 526 5232
www.garrards.co.nz

1.4 Emergency telephone numbers

Emergency Number **For specialist advice in an emergency call +64 9801 0034 or 0800 425 459 toll free.**
The toll free phone number is possibly accessible, but not guaranteed from payphones within New Zealand and is not accessible from outside of New Zealand.

National Poisons Centre 0800 764 766 [0800 POISON]

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classified as hazardous according to the criteria in the Hazardous Substances (Hazard Classification) Notice 2020

Acute oral toxicity Category 2

H300 Fatal if swallowed.

Acute inhalation toxicity Category 3

H331 Toxic if inhaled.

Acute dermal toxicity Category 4

H312 Harmful in contact with skin.

Specific target organ toxicity, repeated exposure Category 1

H372 Causes damage to organs through prolonged or repeated exposure if inhaled or swallowed.

Hazardous to the aquatic environment, acute Category 1

H400 Very toxic to aquatic life.

Hazardous to terrestrial vertebrates.

Hazardous to terrestrial invertebrates.

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2.2 Label elements

Labelling in accordance with Hazardous Substances (Labelling) Notice 2017

Pictograms



Signal word: DANGER

Hazard statements

H300	Fatal if swallowed.
H312	Harmful in contact with skin.
H331	Toxic if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure if inhaled or swallowed.
H400	Toxic to aquatic life. Hazardous to terrestrial vertebrates. Hazardous to terrestrial invertebrates.

Precautionary statements

P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe dust/mist/spray.
P264	Wash hands and exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in well-ventilated place.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing.
P101	If medical advice is needed, have product container or label at hand.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P330	Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P322	If available wash with polyethylene glycol 400, then rinse with water.
P312	Call a POISON CENTRE or doctor if you feel unwell.
P304+P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P363	Wash contaminated clothing before re-use.
P311	Call a POISON CENTRE or doctor. Get medical advice/attention if you feel unwell.
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 regulation.

2.3 Other hazards

Dust may form explosive mixture in air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical nature

Wettable powder (WP) containing Bendiocarb 800 g/kg

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Hazardous components

Name	CAS-No.	Conc. [%]
Bendiocarb	22781-23-3	80.0
Naphthalenesulfonic acid, butyl-,Me derivs, sodium salts	68909-83-1	<1.0 - <5.0
Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensates, sodium salt	68425-94-5	<1.0 - <5.0
Other ingredients	Proprietary	To balance

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice	If medical advice is needed, have product container or label at hand. Contact the National Poisons Centre 0800 764 766 (0800 POISON]. Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a Poison Centre or doctor for advice.
Skin contact	Immediately wash with plenty of soap and water, and if available with polyethylene glycol 400, then rinse with water. Get medical advice if person feels unwell. .
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Immediately call a doctor or National Poisons Centre for advice. Do NOT induce vomiting unless advised to do so. If vomiting is advised then ensure (1) patient is fully conscious, (2) medical aid is not immediately available, (3) a significant amount (more than a mouthful) has been ingested, and (4) time since ingestion is less than 1 hour. Ensure vomit is not aspirated into lungs.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	Local: Causes irritation of eyes, skin and mucous membranes. Systemic: Bradycardia, Sweating, Convulsions, Nausea, Lachrymation, Salivation, Vomiting, Diarrhoea, Miosis, Hypotension, Bronchial hypersecretion, Myoclonus, Respiratory paralysis, Somnolence, Coma, Respiratory failure, Hypothermia, Fibrillation, Spasm
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4.3 Indication of any immediate medical attention and special treatment needed

Risks	This product is a cholinesterase inhibitor carbamate.
Treatment	Treat symptomatically. In case of ingestion a gastric lavage within the first hour after ingestion and after intubation only with consecutive application of activated charcoal and sodium sulphate should be performed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. Keep respiratory tract clear. Oxygen or artificial respiration if needed.

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The following antidotes are generally accepted: atropin and oximes.
Recovery is spontaneous and without sequelae.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical, carbon dioxide.

Unsuitable High volume water jet

5.2 Special hazards arising from the substance or mixture

In the event of a fire, hazardous compounds/gases may be released. In common with all other methyl carbamates, bendiocarb will liberate strongly lachrymatory and very toxic methyl isocyanate when heated above its decomposition temperature which for bendiocarb is > 125 deg C. Methyl isocyanate has a very low flash point and will be readily consumed in a fire. Since methyl isocyanate readily decomposes in contact with water, all decompositions are best extinguished with water.

5.3 Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Avoid dust formation. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke. Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions Contain spillage. Do not allow to get into surface water, drains and ground water.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect and transfer the product into a properly labelled and tightly closed container for disposal. Clean floors and contaminated objects with plenty of water observing environmental regulations.

Additional advice Comply with any local regulations.

6.4 Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling Read label before use. Wear protective clothing and equipment. Avoid dust formation. Use only outdoors and in well-ventilated area, if necessary provided with appropriate exhaust ventilation. Certified handler required. Product is a Tracked substance.

Advice on protection against fire and explosion Dust may form explosive mixture in air.

Hygiene measures Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Remove soiled clothing immediately and clean thoroughly before using again. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Wash hands immediately after work, if necessary take a shower.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Keep out of reach of children. Store locked up and accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Store in a place Keep away from direct sunlight. Protect from freezing. Storage of more than 100 kg requires signage, secondary containment and an emergency response plan. Storage of more than 250 kg requires a Location compliance certificate.

Advice on common storage Keep away from food, drink and animal feeding stuffs.

Suitable materials Polypropylene film within outer package.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	CAS-No.	Control parameters	Exposure	Basis
Bendicarb	22781-23-3	0.2 mg/m ³ (TWA)	Inhalation	OES BCS*
Respirable dust (not otherwise classified)		3 mg/m ³ (2) (TWA)	Inhalation	NZ TWA**

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

** NZ Workplace exposure standards and biological exposure indices, WORKSAFE, ed. 13, April 2022

8.2 Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection Wear a compressed air respiratory (continuous flow) or a particle filter mask, conforming to national standards. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

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Hand protection	<p>Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.</p> <p>Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.</p> <table><tr><td>Material</td><td>Nitrile rubber</td></tr><tr><td>Rate of permeability</td><td>> 480 min</td></tr><tr><td>Glove thickness</td><td>> 0.4 mm</td></tr><tr><td>Protective index</td><td>Class 6</td></tr><tr><td>Directive</td><td>Protective gloves complying with relevant standard</td></tr></table>	Material	Nitrile rubber	Rate of permeability	> 480 min	Glove thickness	> 0.4 mm	Protective index	Class 6	Directive	Protective gloves complying with relevant standard
Material	Nitrile rubber										
Rate of permeability	> 480 min										
Glove thickness	> 0.4 mm										
Protective index	Class 6										
Directive	Protective gloves complying with relevant standard										
Eye protection	Wear chemical goggles.										
Skin and body protection	<p>Wear standard coveralls and protective chemical suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.</p> <p>If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.</p>										
General information	<p>The following Standards provide general advice regarding safety clothing and equipment:</p> <p>Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Occupational Protective Clothing: AS/NZS 4501, Industrial Eye Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210</p>										

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Beige powder
Odour	Weak, characteristic
Odour threshold	No information
pH	4.5 - 7.0 (1% aqueous) (23 °C)
Freezing point	No information
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Flammability (solid, gas)	Non-flammable
Upper/lower flammability or explosive limits	30 g/m3 (lower explosion limit)
Vapour pressure	No information
Vapour density	No information
Bulk density	ca. 0.25 g/ml (loose)
Solubility	Miscible in water.

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Partition coefficient: n-octanol/water	Bendiocarb: log Pow 1.7 (25 °C)
Auto-ignition temperature	No information
Decomposition temperature	No information
Viscosity, dynamic	Not applicable
Particle characteristics	No information

9.2 Other information

Minimum ignition energy	<3 mJ (23 °C) Further safety related physical-chemical data are not known.
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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition	From 150°C: Heating rate 3 K/min Decomposition energy: 450 KJ/kg Exothermic decomposition
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	From 120°C: Heating rate 0.05 K/min Exothermic decomposition
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10.2 Chemical stability	Stable under recommended storage conditions.
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10.3 Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
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10.4 Conditions to avoid	Extremes of temperature and direct sunlight.
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10.5 Incompatible materials	Store only in original container.
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10.6 Hazardous decomposition products	No decomposition products expected under normal conditions of use.
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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity	Fatal if swallowed.
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Acute inhalation toxicity	Toxic if inhaled.
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Acute dermal toxicity	Harmful in contact with skin.
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Skin irritation	Non-irritating.
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Eye irritation	Non-irritating.
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Respiratory sensitisation	Not classified
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Skin sensitisation	Non-sensitizing (Buehler, and Magnusson & Kligman tests)
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Aspiration hazard	Based on available data, the classification criteria are not met.
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Assessment mutagenicity

Bendiocarb is not mutagenic nor genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

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Bendiocarb was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Bendiocarb did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Bendiocarb did not cause developmental toxicity in rats and rabbits.

Assessment of toxicity by lactation

Not classified.

Assessment STOT Specific target organ toxicity – single exposure

Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Bendiocarb caused reversible cholinesterase inhibition without long term effects in animal studies.

Toxicological data

Oral LD50 (Rat) 50 mg/kg

Dermal LD50 (Rat) > 2,000 mg/kg

Inhalation LC50 (Rat) 6 h 0.313 mg/L (as respirable fine dust)

Further information

Not available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Hazard classification	Very toxic to aquatic life, terrestrial vertebrates and to terrestrial invertebrates.
Toxicity to fish	LC50 (<i>Cyprinodon variegatus</i> (Sheephead minnow)) 0.86 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient Bendiocarb.
Toxicity to aquatic invertebrates	EC50 (<i>Daphnia magna</i> (Water flea)) 0.0377 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient Bendiocarb.
Toxicity to aquatic plants	EC50 (<i>Raphidocelis subcapitata</i> (freshwater green algae)) 0.408 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient Bendiocarb.

12.2 Persistence and degradability

Biodegradability Bendiocarb:
Not rapidly biodegradable.

Koc Bendiocarb: 33

12.3 Bioaccumulative potential

Bioaccumulation Bendiocarb: BCF 6.0
Does not bioaccumulate

12.4 Mobility in soil

Mobility in soil Bendiocarb : Mobile in soil.

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12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment Bendiocarb: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Additional ecological information No further ecological information is available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.

Contaminated packaging Triple rinse containers. Recycle if possible. If allowed under local authority, burn if circumstances, especially wind direction permit, otherwise crush and bury in an approved local authority facility. Do not use container for any other purpose.

SECTION 14: TRANSPORT INFORMATION

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

ADR/RID/ADN

14.1 UN number	2757
14.2 Proper shipping name	CARBAMATE PESTICIDE, SOLID, TOXIC (BENDIOCARB MIXTURE)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	II
14.5 Environm. Hazardous Mark	YES
Hazchem Code	2X

IMDG

14.1 UN number	2757
14.2 Proper shipping name	CARBAMATE PESTICIDE, SOLID, TOXIC (BENDIOCARB MIXTURE)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	II
14.5 Marine pollutant	YES
	2X

IATA

14.1 UN number	2757
14.2 Proper shipping name	CARBAMATE PESTICIDE, SOLID, TOXIC (BENDIOCARB MIXTURE)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	II
14.5 Environ. Hazardous Mark	YES
	2X

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14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No transport in bulk according to the IBC Code.

SECTION 15: REGULATORY INFORMATION

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

HSNO Act 1996

HSNO substance No. HSR000451
HSNO Controls See www.epa.govt.nz

ACVM Act 1996

ACVM registration No. Exempt
ACVM conditions See www.foodsafety.govt.nz

Other product approvals Approved Maintenance Compound Type B

SECTION 16: OTHER INFORMATION

Date issued: 24th February 2023
Reason for issue: Change in supplier and 5-yearly review, update to GHS
Replaces:

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC _x	Effective concentration to x %
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
IC _x	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LC _x	Lethal concentration to x %
LD _x	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TWA	Time weighted average
UN	United Nations

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WHO World Health organisation

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.