SAFETY DATA SHEET

According to HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Restriction of Use:	Refer to Section 15
New Zealand Supplier: Address:	**Merchento Ltd** 27B Forest Road Stoke Nelson, 7011
Telephone: **Emergency No:**	+64 3 539 0508 **0800 764 766 (National Poison Centre)**
Date of SDS Preparation: Product: Product Use:	01 March 2024 **VESPEX®** Ready-to-use insecticide bait.

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: HSR002434

Pictograms

Signal Word: **Warning**

GHS Classification and Category	Hazard Code	Hazard Statement
Hazardous to the aquatic environment chronic Cat. 2	H411	Toxic to aquatic life with long lasting effects.
Hazardous to terrestrial invertebrates.	H442	Hazardous to terrestrial invertebrates.

Prevention Code	Prevention Statement
P273	Avoid release to the environment [if this is not the intended use].

Response Code	Response Statement
P391	Collect spillage.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Fipronil	0.1	120068-37-3
Non hazardous	To bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — Rinse cautiously with water for 15 minutes. If eye irritation persists: Get medical advice.

If on Skin — Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.

If Swallowed — Rinse mouth immediately and then drink plenty of water. Never give anything to the mouth of an unconscious person. Seek medical attention if needed.

If Inhaled — Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed
Symptoms: None known.

Notes to Doctor: Treat according to symptoms (decontamination, vital functions).

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	Carbon monoxide, Carbon dioxide, hydrogen chloride, hydrogen fluoride, nitrogen oxides, sulfur oxides, organochloric compounds. The substances/groups of substances mentioned can be released in case of fire.
Suitable Extinguishing media	Water spray, carbon dioxide, foam, dry powder.
Precautions for firefighters and special protective clothing	Wear self-contained breathing apparatus and chemical-protective clothing. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.
HAZCHEM CODE	**2Z**

Section 6. Accidental Release Measures

For emergency responders:
Wear protective gear as detailed in Section 8. Avoid contact with skin, eyes and clothing.

Environmental precautions:
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up:
For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder).
For large amounts: Contain spillage.
Collect waste in suitable containers, labeled for disposal. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Absorb and collect washings and place in same sealable container. Dispose of the waste safely as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- No special measures necessary if stored and handled correctly.
- Ensure thorough ventilation of stores and work areas.
- When using do not eat, drink or smoke.
- Hands and/or face should be washed before breaks and at the end of the shift.
- Remove contaminated clothing and protective equipment before entering eating areas.
- Refer to the product label for handling precautions and directions for use.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store in freezer in original container, tightly closed, and segregated from foodstuffs and animal feeds.
- Storage stability: Stable
- Storage duration: 36 Months
- Protect from temperatures above: 0 °C
- Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.
- Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA		STEL	
Substance	**ppm**	**mg/m³**	**ppm**	**mg/m³**

None of the components have assigned exposure limits.

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

Engineering Controls
Ensure adequate ventilation.

Personal Protection Equipment

Eyes	Safety glasses with side-shields (frame goggles) (e.g. EN 166).
Hands	Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other.
Skin	Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).
Respiratory	Respiratory protection not required.
General	Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

Section 9 Physical and Chemical Properties

Appearance	Bait Paste
Colour	Green
Odour	Meaty
Odour Threshold	Not available
pH	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Non flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	Not available
Water Solubility	Not available
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	The product is stable if stored and handled as prescribed/indicated.
Possibility of hazardous reactions	No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to Avoid	Protect from temperatures above: 0 °C (in storage)
Incompatible Materials	Strong acids, strong bases, strong oxidizing agents.
Hazardous Decomposition Products	No hazardous decomposition products if stored and handled as prescribed/indicated.

Section 11 Toxicological Information

Acute Effects:

Swallowed	This product is not classified as acutely toxic.
Dermal	This product is not classified as acutely toxic.
Inhalation	This product is not classified as acutely toxic.
Eye	This product is not classified an eye irritant/corrosive.
Skin	This product is not classified as a skin irritant/corrosive.

Chronic Effects:

Carcinogenicity	This product is not classified as carcinogenic.
Reproductive Toxicity	This product is not classified as toxic for reproduction.
Germ Cell Mutagenicity	This product is not classified as mutagenic.
Aspiration	This product is not classified as Asp Tox.
STOT/SE	This product is not classified as STOT SE.
STOT/RE	This product is not classified as STOT RE.

Acute toxicity

Assessment of acute toxicity:

Of low toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 60 < 400 g/kg (OECD Guideline 423)

LD50 rat (dermal): > 1,000 g/kg (OECD Guideline 402)

The product has not been tested. The statements have been derived from the properties of the individual components.

Information on: Fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile

Experimental/calculated data:

LC50 rat (by inhalation): 0.36 mg/l 4 h (OECD Guideline 403). Tested as dust aerosol.

Section 12. Ecotoxicological Information

Toxic to aquatic life with long lasting effects.
Hazardous to terrestrial invertebrates.

Product:	
Persistence and degradability	No data available on product. Information on: Fipronil Assessment biodegradation and elimination (H2O): Not readily biodegradable (by OECD criteria).

Bioaccumulation	No data available on product. Information on: Fipronil Bioaccumulation potential: Bioconcentration factor: 321, Lepomis macrochirus Accumulation in organisms is not to be expected.
Mobility in Soil	No data available on product. Information on: Fipronil Assessment transport between environmental compartments: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.
Other adverse effects	No data available

Information on: Fipronil
Toxicity to fish:
LC50 (96 h) 0.0852 mg/l, Lepomis macrochirus
Aquatic invertebrates:
LC50 (48 h) 0.19 mg/l, Daphnia magna
LC50 (96 h) 0.00014 mg/l, Mysidopsis bahia

Aquatic plants:
EC50 (96 h) 0.068 mg/l (growth rate), Scenedesmus subspicatus
EC50 (7 d) > 0.16 mg/l (growth rate), Lemna gibba

Chronic toxicity to fish:
No observed effect concentration 0.0029 mg/l, Cyprinodon variegatus

Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), 0.0098 mg/l, Daphnia magna
No observed effect concentration, 0.000008 mg/l, Mysidopsis bahia

Microorganisms/Effect on activated sludge:
No observed effect concentration > 1,000 mg/l
No effects at the highest test concentration.

Terrestrial plants:
No effects at the highest test concentration.

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:
Ensure disposal is conducted in accordance with all relevant National, Regional, and Local Regulations. Disposal of waste product, used containers, and contaminated items into an approved landfill is a recommended method. However, it is important to note that waste management regulations may vary depending on location.

Ensure any container holding waste product or contaminated spill media is labelled with the appropriate waste type identifiers and contact details. It is the responsibility of the waste generator to assess the toxicity and properties of the waste material, determining appropriate waste identification and disposal methods that comply with applicable regulations.

Precautions or methods to avoid: Do not burn. Avoid release into the environment.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2020 and SNZ HB 5433:2021

Road, Rail, Sea and Air Transport

UN No	3077
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (contains FIPRONIL 0.1%)
Marine Pollutant	Yes
Special Provisions	This product may be transported as non-hazardous in suitable single or combination packaging containing a net mass of 5kg or less, as provided in section 2.10.2.7 of IMDG code and IATA special provision A197. If the product and its packaging meet these special provisions, it may be transported in New Zealand as non-dangerous goods under provisions of NZS 5433 code, which accepts IMDG and IATA classification.

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR002434

HSW (HS) Regulations 2017 and EPA Notices	**Trigger Quantity**
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	Not required
Emergency Response Plan	1000kg
Secondary Containment	1000kg
Restriction of Use	Refer to Controls Document on: www.epa.govt.nz
Additional Controls: HPC Notice Part 4 Subpart B	The maximum application rate for this substance by ground-based equipment is: 180 g ai/L at 14 day intervals, to a maximum of four applications per season.

Section 16 Other Information

Glossary

Cat	Category
EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices April 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

Merchento Limited strongly advises every recipient of this Safety Data Sheet (SDS) to thoroughly review its contents and seek appropriate expertise as needed to comprehend the information and potential hazards associated with the product. The data presented herein is believed to be accurate as of the effective date. Nonetheless, no explicit or implied warranty is extended. The regulatory requirements can undergo revision and may vary across different jurisdictions. It remains the responsibility of the buyer/user of this product to ensure full compliance with all relevant federal, state, provincial, or local regulations governing their activities.

The information provided pertains solely to the product in its shipped state. Given that the conditions of product use are beyond the manufacturer's control, it is incumbent upon the buyer/user to ascertain the requisite conditions for the safe utilisation of this product.

We cannot assume responsibility for SDSs obtained from any entity other than ourselves. If you have acquired an SDS from an alternate source or have any uncertainty regarding the currency of the SDS in your possession, we encourage you to reach out to us for the most up-to-date version.

Issue Date: 01 March 2024 Review Date: 01 March 2029