

Section 1 - Identification of Chemical Product and Company

Norbrook NZ Ltd
KPMG Centre, 18 Viaduct Harbour Ave
Auckland, New Zealand

Freecall: 0800 224 022

Trade Name: Moxiclear (for kittens/cats)
Product Use: For the treatment and control of fleas and worms for cats.
This version issued: June, 2021 and is valid for 5 years from this date.
Poisons Information Centre: Phone 0800 764 766 from anywhere in New Zealand

Section 2 - Hazards Identification

HSNO classification	Class	GHS Category
6.1D (oral)	Acute toxicity: Oral	Category 4
6.1E (dermal)	Acute toxicity: Dermal	Category 5
6.4A	Eye irritation	Category 2
6.5B	Skin sensitization	Category 1
6.8B	Reproductive toxicity	Category 2
6.8C	Reproductive toxicity	Effects on or via lactation
6.9B	Specific target organ toxicity (repeated exposure)	Category 2
9.1A	Aquatic toxicity (acute)	Category 1
	Aquatic toxicity (chronic)	
9.2B	Ecotoxic to soil environment	Do not form part of the GHS
9.3B	Ecotoxic to terrestrial vertebrates	Do not form part of the GHS
9.4B	Ecotoxic to terrestrial invertebrates	Do not form part of the GHS

Signal word Warning

GHS Pictogram



Hazard statement code	GHS Hazard Statement
H302:	Harmful if swallowed.
H312:	Harmful in contact with skin.
H320:	Causes eye irritation.
H317:	May cause an allergic skin reaction.
H361:	Suspected of damaging fertility or the unborn child ...
H362:	May cause harm to breast-fed children.
H373:	May cause damage to organs through prolonged or repeated exposure.
H400/H410:	Very toxic to aquatic life/Very toxic to aquatic life with long lasting effects.
H422:	Toxic to the soil environment.
H432:	Toxic to terrestrial vertebrates.
H442:	Toxic to terrestrial invertebrates.

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GHS Prevention

P102:	Keep out of reach of children.
P103:	Read label before use.
P201:	Obtain special instructions before use.
P202:	Do not handle until all safety precautions have been read and understood.
P260:	Do not breathe vapours.
P261:	Avoid breathing vapours.
P263:	Avoid contact during pregnancy/while nursing.
P264:	Wash contacted areas thoroughly after handling.
P270:	Do not eat, drink or smoke when using this product.
P272:	Contaminated work clothing should not be allowed out of the workplace.
P273:	Avoid release to the environment.
P280:	Wear protective gloves/protective clothing/eye protection/face protection*.
P281:	Use personal protective equipment as required.

GHS Response

P101:	If medical advice is needed, have product container or label at hand.
P312:	Call a POISON CENTER or doctor/physician if you feel unwell.
P314:	Get medical advice/attention if you feel unwell.
P321:	See first aid instruction on the label.
P322:	See first aid instruction on the label.
P301 + P312:	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330:	Rinse mouth.
P302 + P352:	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313:	IF exposed or concerned: Get medical advice/ attention.
P333 + P313:	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313:	If eye irritation persists: Get medical advice/attention.
P363:	Wash contaminated clothing before reuse.
P391:	Collect spillage.

Storage

P405:	Store locked up.
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Disposal

P501:	Dispose of contents and containers as specified on the registered label.
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Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Concentration
Imidacloprid	138261-41-3	100 g/L
Moxidectin	113507-06-5	10 g/L
Other ingredients	secret	Balance

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Section 4 - First Aid Measures

General Information: For advice contact the National Poisons Centre, the number is 0800 POISON (0800 764 766) in New Zealand and is available at all times. Have this SDS with you when you call.

Inhalation: If inhalation has occurred, and irritation has developed, remove from contaminated area to fresh air and observe until recovered. Do not allow victim to move about unnecessarily. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin Contact: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for several minutes or until chemical is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard.

Eye Contact: Flush contaminated eye(s) with lukewarm, gently flowing water for several minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

Section 5 - Fire Fighting Measures

Flash point: 107 °C

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Fire Fighting Equipment: Use self-contained breathing apparatus and full protective clothing.

Extinguishing Media: Use extinguishing media suited to burning materials, preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Section 6 - Accidental Release Measures

Personal Precautions: Use appropriate protective clothing.

Environmental Precautions: Prevent spilled material from entering water ways. Avoid release to the environment.

Methods and Materials for Containment and Cleaning up: For minor spills, clean up and absorb spills with inert material and place in waste containers, labelled for disposal. Contain in a secure location until disposal method is established. Dispose of waste safely. In the event of a major spill, prevent spillage from entering drains or water ways and call emergency services.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Store below 25°C, protect from light, in a dry well ventilated area, out of direct sunlight. Check packaging, there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limits:

SWA Exposure Limits

TWA (mg/m³)

STEL (mg/m³)

Exposure limits have not been established for any of the significant ingredients in this product.

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The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

The following Australian Standards will provide general advice regarding safety clothing and equipment:
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**.

Engineering Controls: Use in a well-ventilated area or other engineering controls to keep airborne levels below recommended exposure limits. Prevent exposure by using personal protective equipment and work practices that prevent skin and eye contact.

Ventilation: Make sure that the work environment remains clean and that vapours are minimised.

Eye Protection: Prevent eye contact, wear suitable protective glasses or goggles. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

Skin Protection: Prevent skin contact by wearing impervious gloves and clothes. Make sure that all skin areas are covered.

Protective Material Types: Use chemical protection gloves.

Respirator: In case of inadequate ventilation wear respiratory protection.

Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties

Appearance:	Clear colourless to yellow solution
Odour:	No information available
Odour threshold:	Not applicable
pH:	Not applicable
Melting Point/Freezing point:	Not applicable
Initial boiling point and boiling range:	211 °C
Flash point:	107 °C
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits:	No information available
Vapour pressure:	6 Pa at 20 °C
Vapour density:	No information available
Relative density:	1.095
Solubility (ies):	No information available
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature:	345 °C
Decomposition temperature:	No information available
Kinematic viscosity:	6.86 cSt
Particle characteristics:	No information available

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

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Conditions to Avoid: Protect this product from light. Store in the closed original container in a dry, cool, well ventilated area out of direct sunlight.

Incompatibilities: Strong acids, strong bases, strong oxidising agents.

Fire Decomposition: Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide, carbon monoxide and other organic compounds.

Section 11 - Toxicological Information

Acute toxicity:	Moxidectin: oral (Mouse) Oral LD50: 42mg/kg Moxidectin: inhalation (Rat) LC50 (4hr)= 4.1mg/l Imidacloprid: (Mouse) Oral LD50: 130mg/kg
Skin corrosion/irritation:	Moxidectin: Mildly irritating to the skin
Serious eye damage/eye irritation:	Moxidectin: Irritating to the eye
Respiratory or skin sensitisation:	No information available
Germ cell mutagenicity:	No information available
Carcinogenicity:	No information available
Reproductive toxicity:	Moxidectin: Suspected human reproductive or developmental toxicants Produce toxic human reproductive or developmental effects on or via lactation
Specific target organ toxicity- single exposure:	No information available
Specific target organ toxicity- repeated exposure:	Moxidectin: oral Toxic to human target organs or systems (Neurotoxicity (nervous system) Imidacloprid: oral Harmful to human target organs or systems (Hepatotoxicity (liver)
Aspiration hazard:	Moxidectin: oral (Mouse) Oral LD50: 42mg/kg

Section 12 - Ecological Information

Ecotoxicity/Aquatic:	Moxidectin: Very ecotoxic in the aquatic environment (Fish) Rainbow trout 96 hr LC50 0.16 ppb (= 0.00016 mg/l) (Crustacean) Daphnia magna 48 hr EC50 30 ppt (= 0.00003 mg/l) Imidacloprid: Harmful in the aquatic environment Acute: (Fish) Rainbow trout 96 hr LC50 83 ppm (= 83 mg/l) Chronic: NOEL < 1.2 ppm = < 1.2 mg/l Imidacloprid: (Crustacean) Mysid 96 hr LC50 0.038 PPM (= 0.038 mg/l)
Ecotoxicity/Terrestrial:	Moxidectin: Very ecotoxic to terrestrial vertebrates

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(Mouse) Oral LD50: 42mg/kg
Moxidectin: Very ecotoxic to terrestrial invertebrates
LD50 (contact) 0.025 ug/bee
Imidacloprid: Very ecotoxic to terrestrial vertebrates
Acute:
Japanese quail LD50 31 mg/kg bw
Chronic:
Rat NOAEL 5.7 mg/kg bw per day
Imidacloprid: Very ecotoxic to terrestrial invertebrates
Honey bee 48 hr LD50 0.0037 ug/bee
Honey bee (apis mellifera) 48 hr LD50 0.0039 ug/bee

Persistence and degradability:

Moxidectin: ND

Imidacloprid: No

The potential to be Bioaccumulative:

Moxidectin: Yes Log Kow = 4.766

Imidacloprid: No

Mobility in soil:

Moxidectin: Very ecotoxic in the soil environment

Soil DT 50 > 30 days: yes

Imidacloprid: Very ecotoxic in the soil environment

Soil DT 50 > 30 days: yes

Other adverse effects:

No information available

Section 13 - Disposal Considerations

Disposal: Dispose of used pipettes by wrapping in paper and placing in garbage. Do not empty into waterways or stormwater.

Section 14 - Transport Information

UN Number: 3082
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Imidacloprid and Moxidectin).
UN Dangerous Goods Class and subsidiary risk: 9
UN Packaging Group: III
Environmental Hazards: Marine Pollutant
Special precautions when transporting the substance: Physical and Chemical properties, see section 9
Transport of Dangerous Goods Pictogram:



Section 15 - Regulatory Information

HSNO Approval number: HSR100757 (Veterinary Medicines (Limited Pack Size, Finished Dose) Group Standard 2020.)

ACVM number: A011873

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Certified handler: Not applicable

Tracking: Not applicable

Section 16 - Other Information

Date of preparation: June, 2021

Abbreviations and Acronyms:

GHS:	Globally Harmonized System
CAS number:	Chemical Abstracts Service Registry Number
SWA:	Safe Work Australia
TWA:	Time Weighted Average
STEL:	Short Term Exposure Limit
UN Number:	United Nations Number
LD50:	Lethal Dose for 50% of test organisms
LC50:	Lethal Concentration in air or water for 50% of test organisms
EC50:	Median effective concentration
NOAEL:	No Observed Adverse Effect Level

Please read all labels carefully before using product.

This Safety Data Sheet contains only safety-related information. For other data see product literature.

THIS SAFETY DATA SHEET SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

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