

SAFETY DATA SHEET



Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 1 of 13

1. PRODUCT AND COMPANY INFORMATION

Product Name:	NO Borer Spray Injector
Synonyms:	Aerosol containing 1 g/kg permethrin
Molecular Formula:	Mixture
Supplier:	Kiwicare Corporation Limited
Street Address:	225 Maces Road, Bromley, Christchurch, 8062 New Zealand
Postal Address:	P.O Box 15050, Aranui, Christchurch, 8643 New Zealand
Telephone	+64 3 389 0778
Email:	info@kiwicare.co.nz
Website:	www.kiwicare.co.nz
Emergency Contact Numbers	
National Poisons Centre:	0800 764 766 (0800 POISON)

2. HAZARDS IDENTIFICATION

Dangerous Goods:	Class 2 Flammable aerosol
Packaging Group:	III, signal word = Danger
Hazardous Substance (HSNO) Codes:	2.1.2A, 6.3B, 6.4A, 6.5A, 6.5B, 6.8B, 6.9B, 9.1A, 9.2A, 9.4C.
Hazard Statements:	H223: Flammable aerosol. H316: Causes mild skin irritation. H319: Causes eye irritation. H334: May cause allergy if inhaled. H317: May cause an allergic skin reaction.

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SAFETY DATA SHEET



Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 2 of 13

2. HAZARDS IDENTIFICATION

H373: May cause damage to organs.

H361: Suspected of damaging fertility or the unborn child

H400/410: Very toxic to aquatic life.

H443: Harmful to terrestrial invertebrates.

H421: Very ecotoxic to the soil environment

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.

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.

P210: Keep away from heat.

P211: Do not spray on an open flame

P251: Pressurized container: Do not burn after use

P281: Use personal protective equipment as required.

P260: Do not breathe spray.

P261: Avoid breathing spray.

P264: Wash 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.

P280: Wear full PPEs.

P285: In case of inadequate ventilation wear respiratory protection.

P273: Avoid release to the environment.

P314: Get medical advice if you feel unwell.

P321: Specific treatment: see label.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

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SAFETY DATA SHEET

The KIWICARE logo is located in the top right corner. It consists of the word "KIWICARE" in a bold, white, sans-serif font, set against a black, rounded rectangular background that has a slight upward curve on its right side.

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 3 of 13

2. HAZARDS IDENTIFICATION

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P304+341: IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

P332+P313: If skin irritation occurs: Get medical advice/ attention.

P337+313: If eye irritation persists: Get medical advice/attention.

P308+313: IF exposed or concerned: Get medical advice/ attention.

P405: Store locked up.

P305+315+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P342+311: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable.

P410+412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C

P501: In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

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SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 4 of 13

HSNO Hazard Classification	Transport of Dangerous Goods Pictogram	GHS Pictogram	Signal word	Hazard statement code	Precautionary statement codes			
					Prevention	Response	Storage	Disposal
2.1.2A ¹			Warning	H223	P103 ^b P210 P211 P251	No response statements	P410 + P412	No disposal statements
6.3B	Not applicable for the UN RTDG Model Regulations	No pictogram	Warning	H316	P103 ^b	P332 + P313	No storage statements	P501
6.4A ¹	Not applicable for the UN RTDG Model Regulations		Warning	H319	P103 ^b P264 P280	P305 + P351 + P338 P337 + P313	No storage statements	P501
6.5A	Not applicable for the UN RTDG Model Regulations		Danger	H334	P103 ^b P261 P285	P304 + P341 P342 + P311	No storage statements	P501
6.5B	Not applicable for the UN RTDG Model Regulations		Warning	H317	P103 ^b P261 P272 P280	P302 + P352 P333 + P313 P321 P363	No storage statements	P501
6.8B	Not applicable for the UN RTDG Model Regulations		Warning	H361	P103 ^b P201 P202 P281	P308 + P313	P405	P501
6.9B (Repeated exposure)	Not applicable for the UN RTDG Model Regulations		Warning	H373	P103 ^b P260	P314	No storage statements	P501
9.1A			Warning	H400/H410 ^m	P103 ^b P273	P391	No storage statements	P501
9.2A	Not applicable for the UN RTDG Model Regulations		Warning	H421	P103 ^b P273	P391	No storage statements	P501
9.4C	Not applicable for the UN RTDG Model Regulations	No Pictogram	No Signal Word	H443	P103 ^b P273	No response statements	No storage statements	P501

3. COMPOSITION/INFORMATION ON INGREDIENTS

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SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 5 of 13

3. COMPOSITION/INFORMATION ON INGREDIENTS

Recommended Use: Insecticide

Appearance: Aerosol vapour

Ingredients

Ingredients	CAS #	Content % w/w or w/v
Permethrin	52645-53-1	<1% w/w
Aliphatic hydrocarbon	64741-65-7	<75% w/w
Butane	106-97-8	<20% w/w
Propane	74-98-6	<20% w/w

4. FIRST AID MEASURES

Ingestion:	If swallowed, this product may cause gastrointestinal tract irritation. If ingestion occurs, do not induce vomiting. To dilute the ingested product, give affected person one or two glasses of water or milk. Never give an unconscious person anything by mouth. Place in recovery position. Obtain medical advice immediately.
Eye Contact:	Causes eye irritation. Check for and remove any contact lenses if easy to do so. Do not use an eye ointment. Flush eyes with running water for 15 minutes holding eyelids open if necessary. Seek medical advice.
Skin Contact:	Mild skin irritant and may cause skin sensitisation. Avoid contact with skin. If skin contact occurs wash off with soap and water. If skin irritation occurs get medical advice.
Inhalation:	Can cause irritation of upper respiratory tract. If ill effects persist call a doctor. Seek immediate medical attention.
Notes to Physician:	None allocated.

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SAFETY DATA SHEET



Product Name: NO Borer Spray Injector

Issue Date:19/06/2018

Page 6 of 13

5. FIRE FIGHTING MEASURES

Specific Hazards:	Flammable aerosol containing liquefied petroleum gas (LPG).
Suitable Extinguishing Media:	Extinguishing media Water spray foam, dry chemical or Carbon Dioxide.
Fire Fighting Advice:	<p>For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. Equipment should be thoroughly cleaned after use. Read the entire document. Clear fire area of all non-emergency personnel. Follow procedures to avoid static discharges. Use only intrinsically safe communication equipment (e.g. do not use mobile phones and pagers).</p> <p>Use non-spark generating tools and flameproof (intrinsically safe) equipment.</p> <p>Fire fighters should wear a full set of protective clothing, including self-contained breathing apparatus.</p> <p>Toxic fumes may be emitted including but not limited to, Chlorine, Hydrogen Chloride, Oxides of Carbon and Aldehydes.</p>

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-up

Minor Spills (Up to 20 L):	<p>Eliminate all ignition sources and naked lights. Use non sparking equipment. Wear protective clothing. Clear area of unprotected personnel. Ventilate area. Floor may be slippery if wet. Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with Sand, Soil or absorbent granules. Do not allow product or washings to enter the waterways or sewer.</p>
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We are Kiwis providing expert local solutions that keep your place pest free and your garden healthy.

SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 7 of 13

6. ACCIDENTAL RELEASE MEASURES

Major Spills (more than 20 L):

Eliminate all ignition sources and naked lights. Use non sparking equipment. Wear protective clothing. Clear area of unprotected personnel.

Follow procedures to avoid static discharges. Use only intrinsically safe communication equipment (e.g. do not use mobile phones and pagers).

Use non-spark generating tools and flameproof (intrinsically safe) equipment.

Floor may be slippery if wet. Eliminate all ignition sources and naked lights. Wear protective clothing. Clear area of unprotected personnel. Contain spill and absorb with Sand, Soil or absorbent granules. Do not allow product or washings to enter the waterways or sewer. If spill does enter waterway contact local authority. Contaminated absorbent and wash water should be disposed of according to local and national regulations.

Collect in an appropriate sealable container for disposal in an approved landfill or incinerate at an authorised installation.

7. HANDLING AND STORAGE

Handling:

Handle only as directed in instructions. Use this product only as directed.

Storage:

Keep out of reach of children. Keep in a cool place out of the sun. Avoid breathing fumes and contact with the skin.

Do not store where food is prepared.

All aspects of storage, handling, use and record keeping must be in accordance with NZS 8409-2004 "Management of Agrichemicals" and local and regional council.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 8 of 13

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards:	Workplace Exposure Standard for propane and butane. See 'Exposure limits' below (Workplace Exposure Standards and Biological Exposure Indices 8 th edition)
Engineering Controls:	Always use with adequate ventilation. Use non-spark generating tools and flameproof (intrinsically safe) equipment. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.
Hand protection:	Suitable chemical resistant gloves are recommended for applicants.
Eye protection:	Wear safety glasses or full face shield if splashes are likely to occur.
Body protection:	Body protection must be chosen depending on activity and possible exposure, for example. Wear approved mask/respirator, apron, protecting boots. Skin protection not ordinarily required beyond standard issue work clothes. It is good practice to wear chemical resistant gloves.
General safety and hygiene measures:	Handle in accordance with good hygiene and safety practice. Wearing of closed work clothing is recommended. Avoid contact with the skin, eyes and clothing. Store work clothing separately.
Environmental Exposure Controls:	Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

P Substance	CAS #	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Propane	[74-98-6]	Simple asphyxiant – may present an explosion hazard			
Butane	[106-97-8]	800	1,900		

9. PHYSICAL AND CHEMICAL PROPERTIES

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SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 9 of 13

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odour:	Clear vapour on release. Faint kerosene odour. Clear to light yellow liquid. Characteristic pungent odour.
Solubility:	75 ml/L (propane), 88 mg/L (butane)
Specific Gravity:	~0.5 (Liquid - ~1.0 @ 20°C)
Boiling Point:	-42°C (propane), 0°C (butane)
Vapour Pressure:	593 kPa (LPG)
Flash Point:	-105°C (propane), -60°C (butane); but substance is >93 °C (EPA calculation)
Auto-ignition Temperature:	468°C (propane), 430°C (butane)
Flammable Limits:	2-10%
Formula:	Mixture
Oxidising Agents:	Not an oxidant
Exposure Standards (TLV-TW):	See section 8
Engineering Controls:	See section 8

10. STABILITY AND REACTIVITY

Stability:	Stable under normal ambient conditions of storage and use. Avoid heat sources.
Incompatibility:	Can react violently with oxidising agents – Chlorine, pool chlorine or nitric acid.
Corrosive Properties:	Not corrosive
Thermal Decomposition:	None allocated

11. TOXICOLOGICAL INFORMATION

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SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 10 of 13

11. TOXICOLOGICAL INFORMATION

Active ingredient:

Permethrin (52645-53-1): 6.1C; 6.3B; 6.4A; 6.5A&B; 6.9B; 9.1A; 9.3B; 9.4A

Substance:

2.1.2A, 6.3B, 6.4A, 6.5A&B, 6.8B, 6.9B.

Acute Effects (Acute Toxicity)

Oral LD₅₀ > 5000 ppm

Ingestion:

Unlikely to cause any acute toxicity.

Eye Contact:

Likely to cause eye irritation.

Skin Contact:

Mild skin irritant and skin sensitiser.

Inhalation:

Respiratory sensitizer. May cause light-headedness, dizziness and drowsiness. Excessive exposure may cause unconsciousness or even death, due to asphyxiation (refers to vapour not liquid).

Long Term Effects:

May be harmful to human target organs via repeated exposure.

Mutagenicity:

Not mutagenic

Carcinogenicity:

Not carcinogenic

Reproductivity:

Suspected human reproductive toxicant

Chronic Toxicity:

May cause chronic toxicity via repeated exposure

12. ECOTOXICITY INFORMATION

We are Kiwis providing expert local solutions that keep your place pest free and your garden healthy.

SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 11 of 13

12. ECOTOXICITY INFORMATION

Environmental Effects:	Substance: 9.1A, 9.2A, 9.4C. $LC_{50} \leq 1$ mg/L; $EC_{50} \leq 1$ ppm; $11 \leq LD_{50}$ /terrestrial invertebrate < 25 μ g Contains Pyrethroids which are toxic to fish and other aquatic invertebrates. Avoid contaminating waterways and fishponds. Do not allow spray to drift onto aquatic environments. Keep children, pets, terrestrial vertebrates and any non-target terrestrial invertebrates like bees off treated areas. Contaminated absorbent and wash water should be disposed of according to local, national regulations.
Rapid degrade & Bioaccumulative:	Permethrin is rapid degradable and bioaccumulative
Soil toxicity:	Highly ecotoxic to the soil environment.

13. DISPOSAL CONSIDERATIONS

Product Disposal:	Contact an LPG disposal company if disposal of LPG is required.
Container Disposal:	Do NOT incinerate LPG aerosols.

14. TRANSPORT INFORMATION

Road, Rail, Marine and Air:

UN Number:	UN1950
Dangerous Goods Class:	2.1.2A Flammable aerosol
Hazchem Code:	2YE
Packaging Group:	III
Proper Shipping Name:	Aerosols flammable n.o.s.
Segregation:	The Segregation Groups have been reproduced in NZS 5433:2007

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SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 12 of 13

15. N.Z. REGULATORY INFORMATION

EPA HSNO Number:	HSR000266
HSNO Classifications:	2.1.2A, 6.3B, 6.4A, 6.5A, 6.5B, 6.8B, 6.9B, 9.1A, 9.2A, 9.4C.
HSNO Controls:	See HSR000266 controls
HSNO Approved codes of Practice:	See HSR000266 controls

To avoid risks to man and the environment, comply with the instructions for use.

This information should be considered when making any hazard assessment.

Classification and labelling according to Regulation:

(EC) No 1272/2008 [EU-GHS/CLP]

16. OTHER INFORMATION

SDS date of preparation:	12 / 03 / 2018
SDS date of revision:	12 / 13 / 2023
Emergency Contact	24 Hours
Work Hours	National Poisons Centre
Kiwicare Corporation	PO Box 913
225 Maces Road	Dunedin
PO Box 15050	Tel: 0800 764 766 (POISON)
Christchurch	
Tel: (03) 389 0778	
Fax: (03) 389 0669	

We are Kiwis providing expert local solutions that keep your place pest free and your garden healthy.

SAFETY DATA SHEET

Product Name: NO Borer Spray Injector

Issue Date: 19/06/2018

Page 13 of 13

16. OTHER INFORMATION

All Safety Data Sheets are subject to review and should not be left longer than five years before and update is obtained.

For further information visit the Kiwicare web site, www.kiwicare.co.nz, or contact the supplier.

The information in this document should be made available to all who may handle the product. For proper and safe use of this product, please refer to the product label.

This information is based on data believed by Kiwicare Corporation Limited to be accurate at the time of writing. It is given in good faith but no warranty expressed or implied is made as to its accuracy, completeness or otherwise. Every person dealing with the materials referred herein does so at their own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.

Attention is drawn to the application and safety instructions set out on the label. This sheet is not a substitute for safety, hazard or application instructions set out on the label. As Kiwicare Corporation Limited and their distributors have no control over storage or use of this product no liability for accident or damage will be accepted.

Abbreviations:

ADR: European agreement concerning the international carriage of dangerous goods by Road.

CLP: Classification, Labelling and Packaging

IMDG: International Maritime Dangerous Goods.

IATA: International Air Transport Association.

ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

GHS: Global Harmonized System

EU: European Union

EC: European Commission

TLV: Threshold Limit Value

TWA: Time Weighted Average

STEL: Short-Term Exposure Limit

H Phrase: Hazard phrase

P Phrase: Precautionary phrase

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