

1: Identification of the Substance and Supplier

Product Name	PROHIVE
Recommended Use	Insecticide
Suppliers Details	Orion AgriScience Ltd Unit 1, 15 Sir Gil Simpson Drive, Harewood, Christchurch, 8053 PO Box 39 071, Harewood, Christchurch, 8545
Web Address	www.orionagriscience.co.nz
Email Address	orders@orionagriscience.co.nz
Telephone Number	(03) 928 2386 (office hours), 0800 674 6627 (free phone)
Emergency Telephone	0800 CHEMCALL (0800 243 622) (24 hours)
National Poison Centre	0800 POISON (0800 764 766) (24 hours)
Date of Issue/Revision	July 2020

2: Hazards Identification

Hazard Pictograms



Signal Words

Hazard Classes:

- 6.1C Acute Toxicity (Oral Cat. 3)
- 6.1D Acute Toxicity (Inhalation Cat. 4)
- 6.3B Skin Irritation (Cat. 3)
- 6.4A Eye Irritation (Cat. 2)
- 6.5B Skin Sensitisation (Cat. 1)
- 6.9B Target Organ Systemic Toxicity (Oral Cat. 2)
- 9.1A Aquatic Ecotoxicity (Cat. 1)
- 9.3A Terrestrial Vertebrate Ecotoxicity
- 9.4B Terrestrial Invertebrate Ecotoxicity

Precautionary Statements:

Prevention

Danger

Hazard Statements:

- H301 Toxic if swallowed
- H332 Harmful if inhaled
- H316 Causes mild skin irritation
- H319 Causes serious eye irritation
- H317 May cause an allergic skin reaction
- H373 May cause damage to organs through prolonged or repeated exposure
- H410 Very toxic to aquatic life with long lasting effects
- Very toxic to terrestrial vertebrates
- Toxic to terrestrial invertebrates

- P101 If medical advice is needed, have product container or label at hand
 - P102 Keep out of reach of children
 - P103 Read carefully and follow all instructions
 - P264 Wash hands thoroughly after handling
 - P270 Do not eat, drink or smoke when using this product
 - P271 Use only outdoors or in a well ventilated area
 - P280 Wear eye protection / face protection
 - P272 Contaminated work clothing should not be allowed out of the workplace
 - P280 Wear protective gloves
 - P260 Do not breathe dust/fume/gas/mist/vapours/spray
- Avoid contact with eyes and skin. Do not breathe in the dust or spray mist. When mixing or applying, wear personal protection as described in section 8. Take all reasonable steps to ensure that this product does not cause any significant adverse effects to the environment beyond the application area. This product is toxic to bees. Do not apply this substance to plants if bees are foraging, or the plants are in flower or part flower, and are likely to be visited by non-target invertebrate pollinators (including bees). Do not apply directly into or onto water.

Response	<p>P301+P316 IF SWALLOWED: Get emergency medical help immediately</p> <p>P321 Specific treatment (Refer section 4)</p> <p>P330 Rinse mouth</p> <p>P304+P340 IF INHALED: Move person to fresh air and keep comfortable for breathing</p> <p>P317 Get medical help</p> <p>P332+P317 If skin irritation occurs get medical advice</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing</p> <p>P337+P317 If eye irritation persists: Get medical help</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water</p> <p>P333+P317 If skin irritation or rash occurs: Get medical help</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse</p> <p>P319 Get medical help if you feel unwell</p> <p>P391 Collect spillage</p> <p>First aid measures described in section 4. Contain and collect spillage for disposal. In an emergency call 111, Police or Fire Brigade. For specialist advice in an emergency only, call 0800 CHEMCALL (0800 243 6225) (24 hrs).</p>
Storage	<p>P405 Store locked up</p> <p>Keep out of reach of children.</p>
Disposal	<p>P501 Dispose of contents by using it in accordance with this label. Dispose of the container via AgRecovery after triple rinsing (use the rinsate for spraying).</p>

3: Composition/ Information on Ingredients

Ingredient	CAS No	Content (% w/w)
Pirimicarb (active ingredient)	23103-98-2	50
Other ingredients	Proprietary	Remainder

4: First Aid Measures

If medical advice is needed, have product container or label at hand. For advice call the National Poisons Centre or a Doctor

Ingestion:	Rinse mouth. Seek medical advice immediately
Skin Contact:	Wash with plenty of soap and water. Seek medical advice if feeling unwell, or if skin irritation or rash occurs
Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if easy to do so. Continue rinsing. Seek medical advice if irritation persists.
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Seek medical advice if feeling unwell.
Workplace Facilities:	Hand wash facility. Eye wash facility
Advice to Doctor:	Prohive is a carbamate insecticide, which inhibits cholinesterase activity, and interferes in nerve pulse transmission. On set of symptoms may be delayed for several hours. Atropine is the specific antidote and may be given immediately by qualified staff, at a level of 2 - 4mg (intravenously or intramuscularly), every 15 minutes until atropinisation occurs. Cholinesterase reactivators (Pralidoxime) are of limited value and may be harmful. Following ingestion, adsorbents such as charcoal may be of value.
National Poison Centre	0800 POISON (0800 764 766) (24 hours)

Symptoms of Exposure which could occur if this material is not handled in accordance with instructions:

Ingestion:	Excessive sweating, salivation, headache, weakness, nausea, diarrhoea, vomiting, small pupils, blurred vision, muscle twitching, slurred speech.
Skin Contact:	Irritation. Contact may induce an allergic response in susceptible individuals. Can be absorbed via the skin (see symptoms under 'swallowed' above).
Eye Contact:	Irritation. May cause constriction of the pupil

Inhalation: Irritation. Can be absorbed via the lungs (see symptoms under 'swallowed' above).

Note: Symptoms may be delayed for up to 24 hours or more following exposure

5: Fire-Fighting Measures

Fire/Explosion Hazard	Non-flammable. As with many dusts, an explosive air/dust mixture may be formed if rough handling liberates dust from the granules in enclosed or poorly ventilated areas.
HAZCHEM Code	2X
ERP Guide No	34
Extinguishing Media	Water spray, foam, dry chemical or CO2. Avoid water jet.
Fire Fighting Instructions	During a fire, toxic fumes may be emitted. Wear self-contained breathing apparatus. Contain runoff.
Specific Hazards Arising from Fire	No data available

6: Accidental Release Measures

Personal Precautions	Wear protective clothing as described in section 8. Do not inhale dust. Exclude non-essential people from the area.
Environmental Precautions	Prevent further spillage or leakage. Prevent material from entering drains, waterways, etc.
Clean Up	Keep bystanders away. Do not inhale dust. If dust is generated, wear respiratory protection (with organic vapour cartridge). Moisten to prevent dusting and carefully sweep up. Place spilled product in a sealable container. Dispose of to a suitable landfill.

7: Handling and Storage

Storage:	Keep out of reach of children. Store in the original tightly closed container in a locked and secure area.
Handling and Use:	Keep out of reach of children. Refer to Prevention statements in section 2 above. Keep people and animals away from the area while spraying and for the duration of the REI.
REI	24 hours

8: Exposure Controls / Personal Protection

Tolerable Exposure Limit	None established
Workplace Exposure Standards	None established
Engineering Controls	Select application equipment to minimize exposure to operator and bystanders
Personal Protection:	
Eye	Safety glasses/goggles (or full face respirator incorporating visor) when mixing or applying
Skin	Chemical resistant coveralls with hood tightly fitting at head, wrists and ankles (e.g., Tychem F suit), chemical resistant boots and chemical resistant gloves (barrier multilayer, nitrile, neoprene, butyl).
Respiratory	Not required where dust or spray mist is not inhaled. Otherwise, respirator (organic vapour and particulate matter) is required.

Clean protective equipment after use

9: Physical and Chemical Properties

Appearance	Grey granules
Odour	Pungent
Odour Threshold	No data available
pH	Not applicable
Melting Point/Freezing Point	No data available
Boiling Point	No data available
Flash Point	Not applicable
Flammability	Not flammable
Upper/Lower Flammability Limits	Not available. As with many dusts, an explosive air/dust mixture may be formed if rough handling liberates

	dust in enclosed or poorly ventilated areas
Vapour Pressure	No data available
Vapour Density	No data available
Relative Density	No data available
Solubility in Water	Dispersible
Partition Coefficient: n-octanol/water	See section 12
Auto ignition Temperature	Not applicable
Decomposition Temperature	No data available
Kinematic Viscosity	No data available

10: Stability and Reactivity

Stability	Stable under normal conditions
Hazardous Reactions	None Expected
Incompatibility	Do not mix with fertilizers
Hazardous Decomposition Products	None Known

11: Toxicological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

Acute Oral Toxicity	LD50 > 50 mg/kg
Acute Dermal Toxicity	LD50 > 5000 mg/kg
Acute Inhalation Toxicity	LD50 > 1 mg/L
Skin Irritant/Corrosive	Irritation
Eye Irritant/Corrosive	Irritation
Sensitisation Effects	May cause an allergic skin reaction in susceptible individuals
Mutagenic Effects	None
Carcinogenic Effects	None
Reproductive Effects	None
Specific Organ Toxicity	Pirimicarb is a carbamate, and interferes with cholinesterase, an enzyme essential for the correct functioning of the nervous system.

12: Ecological Information

This section describes effects which could occur if this material is not handled in accordance with this data sheet and label instructions

The following information is presented in respect of the active ingredient:

Ecotoxicity	<ul style="list-style-type: none"> • Acute Oral LD50 (Bobwhite quail) 21 mg/kg • LC50 (96 hr) (Rainbow trout) 79 mg/l • LC50 (48 hr) (Daphnia) 0.017 mg/l • Algae EC50 (96 hr) 140 mg/l • Acute Oral LD50 (Bee) 4 µg/bee
Persistence/degradability	Biodegradable DT50 (soil) 73 days (typical)
Bioaccumulative Potential	Octanol-water partition coefficient LogP = 1.7 (low)
Soil Mobility	Soil organic carbon water partitioning coefficient No data available
Environmental Exposure Limit:	None established

13: Disposal Considerations

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Product	Dispose of product by using it in accordance with the label. Waste product should be disposed of to a suitable landfill. For disposal of large quantities contact Orion AgriScience Ltd.
Container	Dispose of to a suitable landfill or via AgRecovery. Do not burn. Do not use packaging for any other purpose.

14: Transport Information

Dangerous Goods	
UN Number	2757
Proper Shipping Name	CARBAMATE PESTICIDE, SOLID, TOXIC (PIRIMICARB 50%)
Class	6.1
Subsidiary Class	None
Packing Group	III
Additional Information	MARINE POLLUTANT
MTQ (Non-Commercial)	250 Kg
Passenger Service Vehicle	3 Kg maximum

15 Regulatory Information

EPA Approval No	HSR000709
ACVM Registration No	P5948
Qualified Person	Required
Certified Handler	Not required
Workplace Only	Yes
Tracking	Not required
Record Keeping	Required. Mitigation measures must be recorded as part of the application records
Site Requirements under EPA Notice and HSWHS Regs:	<ul style="list-style-type: none"> • A hazardous substance location compliance certificate is required • A hazardous area is not required • Separation distances for class 3 and class 6 substances to protected places and public places is applicable • Fire extinguishers are not required • Signage is required for more than 100 Kg • An emergency response plan is required for more than 100 Kg • Secondary containment is not required • Segregation from incompatible substances (Classes 1 and 5) is required
Additional Requirements	Refer to NZS 8409:2004 'Management of Agrichemicals', and relevant local and regional council plans

16: Other Information

Glossary	
ADE	Acceptable Daily Exposure – A daily dose, received via any route, below which no adverse effects are expected over a lifetime of exposure
ACVM	Agricultural Compounds and Veterinary Medicines group of the Ministry of Primary Industries
Cat.	GHS category
Ceiling	A concentration that should not be exceeded at any time during any part of the working day
Certified Handler	A qualification issued by a Compliance Certifier to handle and use particularly toxic substances (6.1A and 6.1B)
DT50	Time (days) for 50% reduction in concentration
EC50	Concentration required to produce an effect in 50% of organisms
Environmental Exposure Limit	Maximum concentration limit of a substance in an environmental medium, e.g., water, soil.
EPA Notice	Hazardous Property Controls Notice 2017

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ERP Guide	Dangerous Goods – Initial Emergency Response Guide SNZ HB 76:2008
GHS	Globally harmonized system of classification and labelling of chemicals
Hazardous Substance Location	For locations storing hazard substances of certain classes above threshold quantities
Compliance Certificate	
Hazardous Area	A designated area designed for the presence of flammable substances - Refer AS/NZS 60079.10.1:2009
HAZCHEM Code	Emergency action code for emergency services
HSWHS Regs	Health and Safety at Work (Hazardous Substances) Regulations 2017
LC50	Concentration that will kill 50% of organisms
LD50	Dose that will kill 50% of organisms
MTQ	Maximum Transport Quantity. The maximum amount of dangerous goods that can be transported by road by the user
Notification	Advance notice given to neighbours and other affected parties, of details of proposed application, and other details as described
Octanol-Water Partition Coefficient	The partition coefficient of a substance between n-octanol and water, used as the Logarithm base 10 form, as an indicator that a substance may bioaccumulate
PDE	Permitted Daily Exposure - A daily dose below which no adverse effects are expected over a lifetime of exposure
Protected Place	Residential properties, schools, hospitals, kindys, factories, shops, warehouses, etc., and other places where people assemble
Public Place	A place frequented by the public, including roads (does not include private property)
Qualified Person	A requirement for the loader, contractor or person applying the product to hold a qualification such as a GROWSAFE Certificate, Unit Standard 21563, etc.
Record Keeping	Includes a spray diary or other record of application
REI	Restricted Entry Interval – The length of time after application before entry into the treated area is permitted without the use of protective equipment. For indoor environments, this time period commences once ventilation after treatment begins.
Segregation	Certain classes of substances must not be in contact with, and must be stored separately from, certain other classes as specified in HSWHS Regs
Separation Distances	The distances specified in Part 11 and Part 13 of HSWHS Regs between storage and/or use of hazardous substances and protected places and/or public places
Signage	Positioned at entrances to commercial premises providing information on the hazardous substances present
Soil Adsorption Coefficient (Kd)	The ratio of the concentrations of a substance adsorbed onto a solid sorbent to that dissolved in a liquid phase. The higher the value the less mobile the chemical is in soil
Soil Organic Carbon-Water Partitioning Coefficient (Koc)	The ratio of the mass of a chemical that is adsorbed in the soil per unit mass of organic carbon in the soil.
STEL	Short term exposure level – 15 minute time weighted average
Tolerable Exposure Limit	Maximum concentration limit of a substance above which persons must not be exposed
Tracking	For some particularly hazardous substances, a record must be kept of the transport, storage, sale and use of the product
TWA	Time weighted average calculated over an 8 hour working day
Workplace Exposure Standard	An occupational health standard limiting concentrations of specified substances to which persons are exposed
Workplace Only	A product that is restricted to a workplace only and under the supervision of a certified handler
Please Note	

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Users must ensure that the most up to date version of this safety data sheet is used.

This Safety Data Sheet summarises information on this product, and how to safely handle and use the product. Each user should familiarise themselves with the product label and Safety Data Sheet, and consider the information in the context of how the product will be handled and used, including in conjunction with other products. Orion AgriScience Ltd assumes no responsibility for the accuracy, completeness or suitability of this information. The user is responsible for determining the suitability and accuracy of this information for their particular purposes.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.