

CAUTION
KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING



Monarch 100 Insecticide

ACTIVE CONSTITUENT: 100 g/L FIPRONIL

| | | |
|--------------|-----------|--------------------|
| GROUP | 2B | INSECTICIDE |
|--------------|-----------|--------------------|

**For the Control of Argentine Stem Weevil, Funnel Ant and Mole
Crickets in Recreational, Domestic and Commercial Turf**

**For the Control of Ants, Domestic Cockroaches, Earwigs,
Houseflies, Web-Spinning Spiders, Daddy-Long-Legs Spiders,
Millipedes, Pill Bugs, and House Crickets Around Domestic and
Commercial Structures**

IMPORTANT: READ THIS LEAFLET BEFORE USING THIS PRODUCT

APVMA Approval No.: 84556/124548



Turf Culture Pty Ltd
ACN: 117 986 615
43 Gap Road
Sunbury Vic 3429
Ph: 1300 11 8873
(Ph: 1300 11 TURF)
www.turfculture.com.au

DIRECTIONS FOR USE

Restraints (Turf)

DO NOT apply with aircraft or through any type of irrigation equipment.

DO NOT apply this product using hand-held equipment.

DO NOT apply more than twice a year.

Restraints (Urban Uses)

Avoid runoff. **DO NOT** apply to excessively wet soils, immediately after or during heavy rain.

DO NOT apply at less than label rates.

DO NOT apply to internal surfaces.

1) TURF

| Situation | Pest | Rate per ha | Rate per 100 m ² | Critical Comments |
|--|--|-------------|-----------------------------|--|
| Recreational Turf (including bowling greens, golf courses, parks and playing fields), domestic turf and commercial turf farms | Argentine Stem Weevil (<i>Listronotus bonariensis</i>) | 750 mL | 7.5 mL | Spray evenly over the turf surface at the first sign of pest activity. Ensure incorporation with at least 6 mm of rainfall or overhead irrigation immediately after application. |
| | Nuisance Ants, Nesting Ants, Funnel Ants (<i>Aphaenogaster pythia</i>) | 600 mL | 6 mL | The most likely application timings are one application in October/November and a further application in January/February. # Domestic Turf: For use by authorised lawn-care specialist only. |
| | Mole Cricket # (<i>Sapteriscus didactylus</i> and <i>Gryllotalpa spp.</i>) | 300 mL | 3 mL | |

2a) URBAN USES - Nesting & Nuisance Ants

| Situation | Pest | Rate | Critical Comments |
|---|--|----------------------|--|
| External areas and surrounds of domestic, commercial, public and industrial buildings and structures. | Nuisance Ants Including, but not limited to: Argentine Ant (<i>Linepithema humile</i>), Black House Ant (<i>Ochetellus glaber</i>), Pedicel Ant / Odorous House Ant (<i>Tapinoma spp.</i>), Pharaoh's Ant (<i>Monomorium pharanonis</i>), Whitefooted Ant (<i>Technomyrmex albipes</i>) | 6 mL in 1 L of water | Mix the required volume of Monarch 100 Insecticide in water. Treat surfaces 300 mm up and 300 mm out from where the building or structure touches the ground. Apply at the rate of 1 L of prepared suspension per 25 lineal metres. Pay particular attention to potential entry points, such as weep holes, cracks and crevices. Also apply to ant trails and where ants are active away from the nest. Structures may include retaining walls, fences, garden beds, sheds etc. |
| Spot application to nests in domestic situations. | Nesting Ants Including, but not limited to: Funnel Ant (<i>Aphaenogaster pythia</i>), Greenhead Ants (<i>Rhytidoponera spp.</i>), Meat Ants (<i>Iridomyrmex spp.</i>), Red Imported Fire Ant (<i>Solenopsis invicta</i>), Yellow Crazy Ant (<i>Anoplolepis gracilipes</i>) | | Mix the required volume of Monarch 100 Insecticide in water. Treat the nest entrance or mound, and where ants are active away from the nest. Apply at the rate of 1 L of prepared suspension per 16 m ² , or 60 mL per m ² . |

2b) URBAN USES - Cockroach & House Flies

| Situation | Pest | Rate | Critical Comments |
|---|---|----------------------|---|
| External areas and surrounds of domestic, commercial, public and industrial buildings and structures. | Domestic Cockroaches American Cockroaches (<i>Periplaneta americana</i>), Australian Cockroaches (<i>Periplaneta australasiae</i>), Oriental Cockroaches (<i>Blattella orientalis</i>), Smokybrown Cockroaches (<i>Periplaneta fuliginosa</i>) | 6 mL in 1 L of water | Treat external surfaces 300 mm up and 300 mm out from where the building or structure touches the ground. Apply at the rate of 1 L of prepared suspension per 25 lineal metres. Pay particular attention to potential entry points, such as weep holes, cracks and crevices. Also apply to where pest(s) may be active away from the building including retaining walls, fences, garden beds, sheds etc. Apply at the rate of 1 L of prepared suspension per 16 m ² . |
| | Web-spinning Spiders Including: Black House Spider (<i>Baduma insignis</i>), Redback Spider (<i>Lacrodectus hasseltti</i>) | | Spray spiders, their webbing and areas where spiders may hide at the rate of 1 L of prepared suspension per 16 m ² . |
| | Daddy-long-legs Spiders (<i>Pholcus phalangioides</i>), Millipedes (<i>Julus herperus</i>), Pill Bugs (<i>Armadillidium vulgare</i>), House Crickets (<i>Acheta domesticus</i>), Earwigs (<i>Forficula auricularia</i>) | | Apply directly onto spiders, millipedes, pill bugs, house crickets and earwigs as a spot treatment. |
| External covered areas and surrounds of domestic, commercial, public and industrial buildings and structures. | Houseflies (<i>Musca domestica</i>) | | Apply to external surfaces where flies are likely to rest at the rate of 1 L of prepared suspension per 16 m ² . |

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

WITHHOLDING PERIOD

DO NOT graze treated turf or feed turf clippings from any treated area to poultry or livestock.

GENERAL INSTRUCTIONS

Monarch 100 Insecticide contains 100 g/L fipronil in the form of a suspension concentrate (SC).

1) TURF**Mixing**

Prior to pouring, shake container vigorously then add the required quantity of Monarch 100 Insecticide to water in the spray vat while stirring or with agitators in motion.

Application

Apply Monarch 100 Insecticide evenly over the turf surface at the first sign of pest activity. Ensure incorporation with at least 6 mm of rainfall or overhead irrigation immediately after application. Total application volume should not be less than 400 L/ha.

Apply with suitable low set boom spray equipment.
Ensure that equipment is properly calibrated to give an even distribution at the correct volume.
Avoid conditions when spray drift may occur.

Compatibility

DO NOT mix with products or fertiliser with high salt content, i.e. ferrous sulphate or ammonium sulphate. To avoid hydrolysis Monarch 100 Insecticide needs the spray tank water to be within a pH range of 5 to 7. As formulations of other manufacturers' products are beyond the control of Turf Culture Pty Ltd, all mixtures should be tested prior to mixing commercial quantities, compatibility testing should consist of assessing both; uniformed mixtures (i.e. no separation) and no rapid sediment build up (i.e. no flocculation).

2) URBAN USES

Monarch 100 Insecticide will control ants, domestic cockroaches, web-spinning spiders and houseflies by direct contact. Monarch 100 Insecticide will control earwigs, daddy-long-leg spiders, millipedes, pill bugs and house crickets by direct contact (spot treatment) only.

Mixing

Half fill the spray tank with water then add the required quantity of Monarch 100 Insecticide. Stir then top up the spray tank to the required volume. The use of this product in a tank mix with other insecticides is not recommended as the behaviour and efficacy of the product may be affected. Ensure equipment is free of leaks and clean from residues of other chemicals before mixing.

INSECTICIDE RESISTANCE WARNING

| | | |
|-------|-----------|-------------|
| GROUP | 2B | INSECTICIDE |
|-------|-----------|-------------|

For insecticide resistance management Monarch 100 Insecticide is a Group 2B insecticide. Some naturally occurring insect biotypes resistant to Monarch 100 Insecticide and other Group 2B insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Monarch 100 Insecticide or other Group 2B insecticides are used repeatedly. The effectiveness of Monarch 100 Insecticide on resistant individuals could be significantly reduced.

Since the occurrence of resistant individuals is difficult to detect prior to use, Turf Culture Pty Ltd accepts no liability for any losses that may result from the failure of this product to control resistant insects.

Monarch 100 Insecticide may be subject to specific resistance management strategies. For further information contact your local supplier or Turf Culture Pty Ltd representative or local agricultural department agronomist.

PRECAUTIONS

Urban Uses

Avoid application around edible plants.

Re-Entry Period (All Uses)

Public

DO NOT allow public access until the spray has dried.

Workers

DO NOT allow entry into treated areas until spray has dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing). Clothing must be laundered after each day's use.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Highly toxic to fish and aquatic organisms. DO NOT apply to areas where surface water is present. Rinse waters and run-off from treated areas MUST be prevented from entering drains or waterways. DO NOT apply if heavy rains are expected to occur within 48 hours of application. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

PROTECTION OF LIVESTOCK

DO NOT graze treated turf or feed turf clippings from any treated area to poultry or livestock. Highly toxic to bees foraging in the crop to be treated or in hives, which are over-sprayed or reached by spray drift. Residues may remain toxic to bees for several days after application.

Before spraying remove animals and pets from the areas to be treated. Cover or remove any open food and water containers. Cover or remove (as applicable) fishponds, aquariums etc. before spraying.

STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area, out of direct sunlight. Triple-rinse containers before disposal. Add rinsings to spray tank. **DO NOT** dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. **DO NOT** burn empty containers or product.

SAFETY DIRECTIONS

Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. Wash hands after use. When opening the container and preparing spray and using the prepared spray, wear chemical resistant clothing buttoned to the neck and wrist and a washable hat, half-facepiece respirator with combined dust and gas cartridge and elbow-length PVC or nitrile gloves. After each day's use wash gloves, contaminated clothing and respirator and if rubber wash with detergent and warm water.

FIRST AID INSTRUCTIONS

If poisoning occurs contact a doctor or Poisons Information Centre. *Phone Australia 13 11 26.*

SAFETY DATA SHEET

For further information refer to the Safety Data Sheet (SDS), which is available from the supplier or from the manufacturer's website: www.turfculture.com.au

CONDITIONS OF SALE

The use of Monarch 100 Insecticide being beyond the control of the manufacturer, no warranty expressed or implied is given by Turf Culture Pty Ltd regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Turf Culture Pty Ltd accepts with no responsibility for any consequences whatsoever resulting from the use of this product.

In a Transport Emergency Dial 000 Police or Fire Brigade