



For the Control of Certain Pests in Turf: Ants, Fleas and Ticks in External Surrounds of Buildings and Structures

Ceasefire 2G Insecticide

Technical Brief

Active Ingredient:	2 g/kg bifenthrin
Mode of Action Group:	3A – Pyrethroids (Sodium channel modulators – Nerve action)
Formulation:	Granular (G)
Mode of Action:	Sodium channel modulator. Bifenthrin affects the central and peripheral nervous system of insects causing paralysis. Bifenthrin is a broad-spectrum insecticide that works by interfering with a nerve cell's ability to send a normal signal by jamming open tiny gates on the cell that need to open and close rapidly to carry the message. Bifenthrin is a Type I pyrethroid that affects the central and peripheral nervous system by interfering with sodium channel gating. Pyrethroids delay the closure of the sodium channel. Type I pyrethroids such as bifenthrin tend to hold the channel open for shorter times compared to Type II pyrethroids. In general, exposure to toxic doses of these compounds causes incoordination, convulsions, and paralysis. Contact and stomach action with some residual effect.
Behaviour in Plants:	Bifenthrin is not absorbed by foliage or translocated throughout plants.

Benefits

- Outstanding efficacy – On adults of several species (an Adulticide) and larvae of Lepidoptera species
- Long-term residual control – limits the number of pesticide applications
- Granular formulation – suitable for easy application, specifically designed for turf managers to achieve uniform distribution across the turf surface to enhance the degree of insect control
- Not degraded by sunlight – ideal for application in most situations
- Suitable for use on broad-acre turf areas such as lawns, turf farms, sporting fields, parks, ovals and fairways
- Proven performance
- Broad spectrum control
- Strong residual activity
- Reliable, high quality granular formulation
- Unscheduled (exempt from Poison scheduling)

How to get the most out of your application

- For thatch inhabiting insects, it is advised to use a quality Soil Penetrant Wetting Agent in conjunction with Ceasefire 2G Insecticide, such as Maximiser G Soil Wetting Agent.
- Ceasefire 2G Insecticide has a unique ability to control the adults of the Scarab beetles and Weevil pests of turf. These include the major pests of turf such as African Black Beetle (*Heteronychus arator*) and Billbug (*Sphenophorus brunneipennis*). Using Ceasefire 2G Insecticide in conjunction with a larvicide such as Columbus Insecticide or Tirem 200 SC Insecticide is recommended to control all stages of the insect's life cycle. By using these products in conjunction with each other will control the current population and their residual nature will prevent further insect infestations.
- Ceasefire 2G Insecticide controls the adults of Argentine Stem Weevil adults (*Listronotus bonariensis*) in turf. Using Ceasefire 2G Insecticide in conjunction with a larvicide such as Monarch G Insecticide is recommended to control all stages of the insect's life cycle. This combination will control the current population and their residual nature will prevent further insect infestations.

Restraints

DO NOT apply inside buildings.

DO NOT apply within 2 m of water (ponds, drains, etc)

Application

Application (Turf)

For turf application use a granular spreader that can be calibrated for even output and is capable of giving even application. Use a double application technique i.e. Half rate – half width to achieve a full rate application. Apply under calm conditions, thereby reducing drift to non-target areas and optimising particle distribution for good insect control.

To ensure optimum control, irrigate the treated area with up to 4 mm of water immediately after application.

Inspect treated areas for continuing activity. Re-apply as required.

Residual Pest Control in Turf

Ceasefire 80 SC Insecticide has extended residual activity that controls target insects via contact and ingestion for up to 8 weeks (depending on soil type). The residual nature permits pest control over longer periods when compared to traditional insecticides, this long-term residual control limits the number of pesticide applications required.

Application (External surrounds of buildings and structures)

It is ideal for treating pests that harbour between cracks and crevices such as between pavers and structural cracks. The sand granules are poured or brushed into these cracks where they sit in the treatment zone effectively killing the problem pests and leaving residual protection with little or no site disruption. Ceasefire 2G Insecticide can also be used when extended rain periods limit the use of liquid sprays or in areas where spraying liquid insecticides is not practical or possible.

Crop	Pest	Rate Kg / ha	Rate Kg / 100m ²	Critical Comments
Turf (for example: lawns, commercial turf farms, parks, recreational areas, bowling greens, sports fields)	Lawn armyworm (<i>Spodoptera maurita</i>), Sod webworm (<i>Herpetogramma licarsialis</i>)	60	0.6	Broadcast Ceasefire 2G Insecticide with suitable equipment to ensure uniform coverage over the treated area. To ensure optimum control, irrigate the treated area with up to 4 mm of water immediately after application.
	Argentine Stem Weevil adults (<i>Listronotus bonariensis</i>)	60 - 120	0.6 - 1.2	Inspect treated areas for continuing activity. Re-apply as required. Where a rate range is indicated use lower rates under lower insect pressure and higher rates under higher insect pressure.
	African Black Beetle adults (<i>Heteronychus arator</i>)	120 - 180	1.2 - 1.8	
	Billbug adults (<i>Senophorus</i> sp)	60 - 120	0.6 - 1.2	
	Black ants, Coastal Brown ant, Funnel Ant, Sugar ant, Stinging ant only	60 - 220	0.6 - 2.2	Broadcast Ceasefire 2G Insecticide with suitable application equipment to ensure uniform coverage over the treatment area. Apply granules to areas where ants are active. Where possible apply granules directly to the nests. Use the low rate for maintenance treatments or to control light infestations and the high rate for heavy infestations and for maximum residual control. The elimination of Funnel ants from a particular site will generally require more than one application. Initial applications should be broadcast over the affected areas. As the initial numbers of active colonies is reduced, application should shift to targeting active mounds. Apply granules directly to the mound and in the area immediately surrounding active mounds (300 mm radius).

Note: The above table represents only a modified extract from the full registered label. Always read the full product label before use.

Crop	Pest	Rate Kg / ha	Rate Kg / 100m ²	Critical Comments
External surrounds of buildings and structures	Black ants, Coastal Brown ant, Funnel Ant, Sugar ant, Stinging ant only	60 - 220	0.6 - 2.2	Apply granules in areas where ants are active. Where possible apply granules directly to the nest. Use the low rate for maintenance treatments or to control light infestations. Use the higher rate for heavy infestations and for maximum residual control. PERIMETER APPLICATION. When perimeter pest control is being implemented apply Ceasefire 2G Insecticide in a 2 - 3 m band around and adjacent to the building or structure. PAD MOUNTED ELECTRICAL SITES: To reduce or prevent ant mound building activity on electrical pads, uniformly distribute 60 to 220 g of Ceasefire 2G Insecticide per 10 m ² of mounting pad. When existing transformers are completely or partially filled with soil excavated by resident ants, remove any excess fill and level the remaining soil prior to application.
	Fleas (Adult and larvae) (<i>Cteno-cephalides spp.</i>)	110 - 220	1.1 - 2.2	Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. For optimum results irrigate the treated areas with up to 10mm of water immediately after application. Use higher application rates when treating areas with dense ground cover or heavy leaf litter.
	Ticks (<i>Ixodes spp.</i>)	110 - 220	1.1 - 2.2	Applications should be made in spring to control larvae and nymphs that reside in the soil and leaf litter. DO NOT make spot applications. Treat the entire area where exposure to ticks may occur. Use higher application rate when treating areas with dense ground cover or heavy leaf litter. Ticks may be re-introduced from surrounding areas on host animals. Repeat as necessary to maintain adequate control.

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Packaging

Pack size: 2.5 kg, 15 kg



**FORMULATION
GUARANTEE**

