FMC

Tech Note

BRIGADE®
GRANULAR INSECTICIDE

AUSTRALIAN FIRST

What is Brigade Granular Insecticide ?

Brigade Granular Insecticide is a tan, sand based granule that contains 2 g/kg of bifenthrin. The product has now been approved by the National Registration Authority for use throughout Australia in all States and Territories (NRA Approval Number: 52791).

What is Bifenthrin ?

Bifenthrin is a synthetic pyrethroid insecticide/acaracide that is classified as a non-cyano pyrethroid. The active ingredient is efficacious to target pests through both contact and stomach action. As with most synthetic pyrethroids bifenthrin is active against a wide range of pests including Coleoptera, Diptera, Heteroptera, Hymenoptera, Isoptera, Lepidoptera, Orthoptera as well as a number of species of Acarina. Bifenthrin is currently registered in a number of countries throughout the world on a wide range of pests.

The key to the excellent performance of Brigade Granular Insecticide against general pests is the active ingredient bifenthrin. Bifenthrin has a number of physical characteristics that are highly desirable for the control of pests in an exposed environment. These characteristics include low water solubility (0.0001 mg/L), high soil binding co-efficient (Koc 230 000), stability over a wide range of soil pH's (5 - 9.5) and relatively long half life when exposed to natural sunlight (DT_{50} > 100 days). collectively these physical characteristics result in an active ingredient that when applied to a range of external surfaces, won't leach and is not susceptible to accelerated degradation by variations in soil pH or UV irradiation. Consequently when applied in such situations and effectively delivered to the site of pest activity, bifenthrin results in reliable and consistent control of the target pests.

On Which Pests Can It Be Used ?

Brigade Granular Insecticide has been registered for the control of a range of pests encountered in the urban environment. These pests include ants, lawn armyworm and sod webworm in turf and ants, fleas and ticks in the external surrounds of buildings and structures. The reference to turf includes lawns, commercial turf farms, parks, recreational areas, golf courses, bowling greens and sports fields. The reference to ants includes black ants, coastal brown ants, funnel ants, meat ants, sugar ants and stinging ants only. Registration has not been approved on the Argentine Ant as local testing has yet to be conducted.

Table 1: Summary of the Directions For Use Table For Brigade Granular Insecticide

Situation	Pest	Rate (kg/100 m²)
Turf	Lawn Armyworm	0.6
	Sod Webworm	0.6
	Ants	0.6-2.2
External Surrounds of Buildings	Ants	0.6-2.2
& Structures	Fleas	1.1-2.2
	Ticks	1.1-2.2

* Note: This table has been included as a reference only. Prior to using the product it is imperative that Pest Managers read the actual product label in its entirety.

Application

Brigade Granular Insecticide may be applied via a shaker pack or by using a hand held granule spreader. It is important that spreaders are calibrated prior to being used and that the product is applied accurately and evenly over the area to be treated. For optimum results against fleas, lawn armyworm and sod webworm the area should be irrigated with between 4mm and 10 mm of water following application.

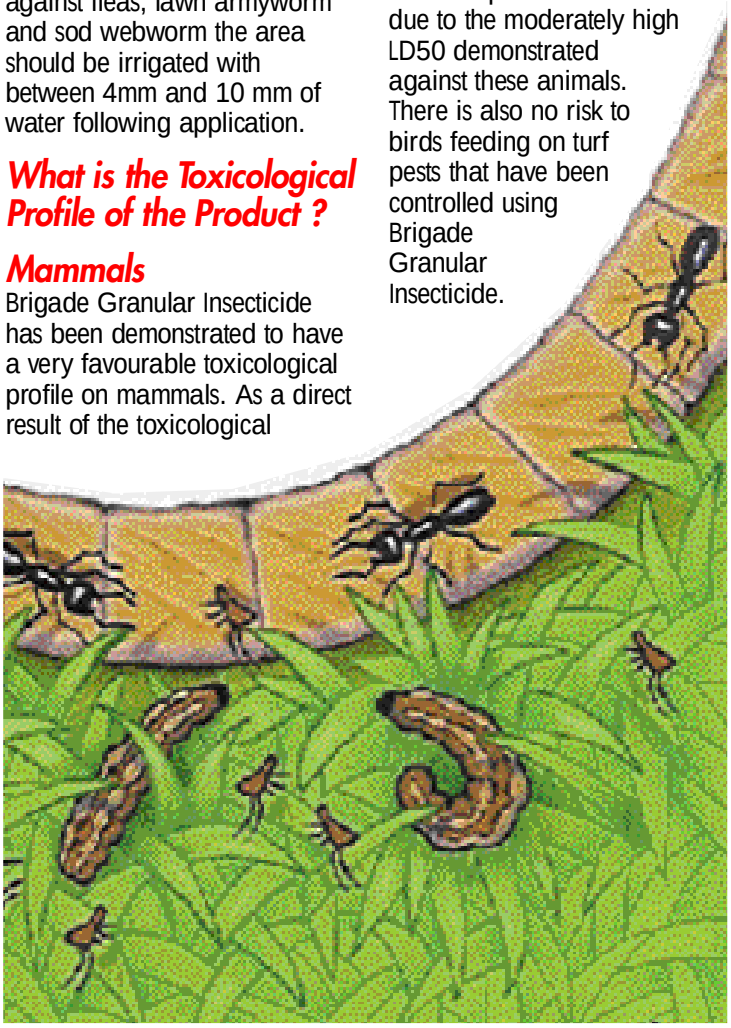
What is the Toxicological Profile of the Product ?

Mammals

Brigade Granular Insecticide has been demonstrated to have a very favourable toxicological profile on mammals. As a direct result of the toxicological profile the product has no poison scheduling and no safety directions are included on the label. The product is practically odourless and allows for easy application in domestic situations.

Birds

Brigade Granular Insecticide does not pose a risk to birds due to the moderately high LD50 demonstrated against these animals. There is also no risk to birds feeding on turf pests that have been controlled using Brigade Granular Insecticide.



Fish

As with all synthetic pyrethriods, bifenthrin is highly toxic to aquatic organisms. Do not contaminate dams, rivers, streams, waterways or drains with product or the used container. Do not apply Brigade within 2 metres of a fishpond or water containing fish or aquatic organisms.

Supporting Literature

A Material Safety Data Sheet and AQIS Instrument of Approval are available for Brigade Granular Insecticide. The product is approved by AQIS under category 16 as a Pesticide Type D.

Features of Brigade Granular Insecticide

- Unobtrusive on most surfaces
- Registered on a range of pests
- Not classified as a scheduled poison
- Requires no mixing (Quick and Convenient)
- Virtually odourless
- Relatively safe to mammals and birds
- First granular synthetic pyrethroid in australia
- Can be used with minimal site disruption
- Can be applied in wet weather

Acute Oral LD50		> 5000 mg/kg
Acute Dernmal LD50		> 2000 mg/kg
Primary Eye Irritation	Test	Non-irritating
Skin Irritation	Test	Non-irritating
Skin Sensitisation	Test	Non-sensitising

FMC (Chemicals) Pty Ltd A.B.N. 45 095 326 891
Crop & Specialty Products Division

PO Box 526, Cannon Hill QLD 4170 • Phone: (07) 3908 9222 • Fax: (07) 3908 9221 • Web: www.fmc-chemicals.com.au

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