

MATERIAL SAFETY DATA SHEET

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Date of Issue: July 2007
MSDS No. FMC/HGCollars /1

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **HOMEGUARD® COLLARS**

Other Names: Bifenthrin.
Use: Termite protection for pre-construction use in buildings and other structures.
Company: FMC Australasia Pty Ltd.
Address: Unit 6, 9 Archimedes Place, Murarrie, Qld 4172
Telephone Number: 07 3908 9222 **Fax Number:** 07 3908 9221
Emergency Telephone Number: 1800 033 111 (All hours - Australia wide).

SECTION 2 HAZARDS IDENTIFICATION

**Not classified as hazardous according to criteria of NOHSC Australia.
Not classified as a Dangerous Good according to the ADG Code.**

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

<i>CHEMICAL</i>	<i>CAS NUMBER</i>	<i>PROPORTION</i>
Bifenthrin	82657-04-3	1 g/kg
Other ingredients determined not to be hazardous	mixture	To 100 %

SECTION 4 FIRST AID MEASURES

FIRST AID

Swallowed: If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia (13 11 26).

Eye: Particulates may scratch eye surfaces and/or cause mechanical irritation. Remove from eye as for any foreign object. If irritation persists, obtain medical attention.

Skin: After handling, and before eating, drinking, smoking or going to the toilet wash with soap and water.

Inhaled: In case of adverse exposure to vapours that may be formed at elevated temperatures, remove patient to fresh air. If breathing discomfort occurs, obtain medical attention.

Advice to Doctors: Concern should be taken of the physical damage that the collars may cause if ingested. The plastic granule is polymer, which is considered non-toxic. Bifenthrin, the active ingredient in this product, is a pyrethroid insecticide. The level of bifenthrin in the sheeting (0.1%) is considered to be so low as to not be toxic, and tests have shown that the bifenthrin is not available for release from the collars. Treatment is otherwise symptomatic and supportive.

SECTION 5 FIRE FIGHTING MEASURES

Specific Hazard: Thermal decomposition and burning may produce toxic byproducts.

Extinguishing media: Foam, CO₂ or dry chemical. Soft stream water fog if no alternatives. Contain all runoff.

Hazards from combustion products: On burning, will emit toxic fumes of carbon monoxide, carbon dioxide, hydrogen chloride, chlorine, fluorine and hydrogen fluoride etc.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures: Pick up Collars. If unable to use as directed on the label, put collars back into their original container. Wash hands and arms with soap and water after handling collars.

Material and methods for containment and cleanup procedures: Not applicable to this product.

Do NOT allow collars to enter sewers, drains, dams, creeks or any other waterways.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling: Generally no special precautions are required. Wash hands after use.

Conditions for Safe Storage: Store in closed original packaging, in a cool, well ventilated area away from children, animals, food and feedstuffs. Do not store for prolonged periods in direct sunlight. Do not use or store near heat, open flame or hot surfaces. Do NOT allow product to enter sewers, drains, creeks or any other waterways.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**National Exposure Standards:**

No exposure standard for bifenthrin has been established by NOHSC Australia.

Biological Limit Values:

No biological limit allocated.

Engineering controls:

Use in ventilated areas.

Personal Protective equipment (PPE):

Work Clothing: No special protective clothing is required. As a good work practice, wear clothing that minimises skin contact with collars.

Personal Hygiene: Wash hands and arms before eating, drinking or smoking.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light Blue Circular Collars (40, 50, 80 & 100mm inner diameter).

Odour: No odour.

Boiling point: Not relevant - solid at ambient temperatures.

Freezing point: Not relevant - solid at ambient temperatures.

Bulk Density: 360 g/m³.

pH: Not available.

Solubility in Water: Not soluble.

Flammability: This material may support combustion at elevated temperatures.

Corrosive hazard: Non corrosive; compatible with stainless steel, polyethylene etc.
Flashpoint (°C): > 215°C (estimated).
Flammability Limits (%): Not established.
Poisons Schedule: Product is not a scheduled poison.

SECTION 10 STABILITY AND REACTIVITY

Product is considered stable in ambient conditions.

SECTION 11 TOXICOLOGICAL INFORMATION***Potential Health Effects:***

This product is expected to have low toxicity, and if swallowed the mechanical effects are expected to be of greater concern. Bifenthrin, the active ingredient in this product is present at 0.1%. Ingestion of large doses of bifenthrin by laboratory animals produced signs of toxicity which included clonic convulsions, tremors and bloody nasal discharge. But it is not likely to be physically possible to consume large quantities of bifenthrin by ingesting collars.

Acute

Swallowed: Not expected to be toxic.

Eye: May produce mechanical irritation to the eye.

Skin: This product has a low dermal toxicity.

Inhaled: Unlikely to cause inhalation toxicity unless the product is at elevated temperatures or is burned. Vapours and gases released under thermal decomposition may be toxic.

Chronic: No data available on this product. Bifenthrin the active ingredient in this product is present at 0.1%. In studies with laboratory animals, Bifenthrin did not cause teratogenicity or reproductive toxicity. Tremors were associated with repeated exposure of dogs, rats, rabbits and mice to Bifenthrin. The overall results from a battery of genotoxicity studies indicate that Bifenthrin is not considered to be genotoxic. Ames test results were negative.

SECTION 12 ECOLOGICAL INFORMATION

Environmental Toxicology: The active ingredient, Bifenthrin, is highly toxic to fish and aquatic arthropods with LC₅₀ values ranging from 0.0038 µg/L to 17.8 µg/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on molluscs at its limit of water solubility. Bifenthrin is only slightly toxic to both waterfowl and upland game birds with LC₅₀ values range from 1800 mg/kg to > 2,150 mg/kg. Do not contaminate sewers, drains, dams, creeks or any other waterways with product.

Environmental Properties: The active ingredient, Bifenthrin, degrades at a moderate rate in agricultural soils (t_{1/2} = 50 to 205 days), and more rapidly on the surface of bare soils (t_{1/2} = 7 to 62 days). Bifenthrin is tightly bound in most soils and has extremely low water solubility.

SECTION 13 DISPOSAL CONSIDERATIONS

Spills & Disposal: In the case of spillage, pick up the spilled material and place in sealed plastic bags and dispose of waste as indicated below. Keep material out of streams and sewers. Dispose of wastes in accordance with the requirements of Local or State Waste Management Authorities via an approved industrial waste disposal site.

Always put unused collars back into its original packaging for re-use.

Dangerous to Fish: Do NOT allow product to enter sewers, drains, dams, creeks or any other waterways.

SECTION 14 TRANSPORT INFORMATION

Homeguard Collars are not classified as a Dangerous Goods.

SECTION 15 REGULATORY INFORMATION

Not classified as a hazardous substance according to criteria of NOHSC Australia.

Under the Standard for Uniform Scheduling of Drugs and Poisons (SUSDP No. 19), this product is not a scheduled poison.

Product is not classified as a Dangerous Good according to the ADG Code (6th Ed), the International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

SECTION 16 OTHER INFORMATION

Issue Date: 27 July 2007 (first issue).

Key to abbreviations and acronyms used in this MSDS:

ADG Code Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).

Genotoxic Capable of causing damage to genetic material, such as DNA.

NOHSC National Occupational Health and Safety Commission.

PPE Personal protective equipment.

Teratogenic Capable of causing abnormalities in a developing foetus (causing birth defects).

References

1. "National Exposure Standards for Atmospheric Contaminants in the Occupational Environment". NOHSC Australia, Guidance Note NOHSC:3008(1995).
2. "List of Designated Hazardous Substances". NOHSC Australia. NOHSC:10005(1999).
3. "Draft Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2003)]. April 2003.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

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

End of MSDS