

MATERIAL SAFETY DATA SHEET**SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER****PRODUCT NAME: BIOFILM**

Other Names: Bifenthrin

Use: Termite barrier for pre-construction use in buildings and other structures.

Company: PC Plastics Pty Ltd

Address: 7 Technology Drive, Arundel QLD 4214

Phone No: 07 5563 1242

Emergency: 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:**

CHEMICAL	CAS NUMBER	PROPORTION
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: Particulars may scratch eye surfaces and/or cause mechanical irradiation. 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 sheeting may cause if ingested. The plastic sheeting is polymer, which is considered non-toxic. Bifenthrin, the active ingredient in the product, is a pyrethroid insecticide. The level of bifenthrin in the sheeting (0.01%) 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 sheeting. Treatment is otherwise symptomatic and supportive.

SECTION 5	FIRE FIGHTING MEASURES
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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
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Emergency procedures: Pick up spilled sheeting. If unable to use as directed on the label, seal sheeting in a plastic bag. Wash hands and arms with soap and water after handling sheeting.

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

DO NOT allow product to enter sewers, drains, dams, creeks or any other waterways.

SECTION 7	HANDLING & STORAGE
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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, dams, creeks or any other waterways.

SECTION 8	EXPOSURE CONTROLS/PERSONAL PROTECTION
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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 minimizes skin contact with the sheeting.

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

SECTION 9

PHYSICAL & CHEMICAL PROPERTIES

- Appearance:** Sheeting.
- Odour:** No odour.
- Boiling point:** No relevant – solid at ambient temperatures.
- Freezing point:** Not relevant – solid at ambient temperatures.
- Bulk density:** 0.93g/m³.
- PH:** Not available.
- Solubility in water:** Not soluble. Provides a barrier to water.
- Flammability:** This material may support combustion at elevated temperatures.
- Corrosive hazard:** Non corrosive; compatible with stainless steel, polyethylene etc.
- Flashpoint:** > 215°C (estimated).
- Flammability limits:** Not established.
- Poisons schedule:** Product is not a scheduled poison.

SECTION 10

STABILITY & 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 the plastic sheet.

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 the 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. 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 mollusk 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 another 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.

When installing Biofilm it is likely there will be some off-cut material. Wherever possible use these off-cuts for patches, repairs, collars etc. If pieces cannot be used they may be placed under the slab prior to pouring or within the cavity. If this is not possible, Biofilm off cuts should be placed in a sealed plastic bag and disposed of via an approved industrial waste disposal site.

Dangerous to fish: DO NOT allow product to enter sewers, drains, dams, creeks or another other waterways.

SECTION 14**TRANSPORT INFORMATION**

Biofilm is not classified as Dangerous Goods.

SECTION 15**REGULATORY INFORMATION**

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

Under the Standard Uniform Scheduling of Drugs and Poisons (SUSDP No 19), this products 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:**

Key to abbreviations and acronyms used in this MSDS.

ADG Code: Australian Dangerous Goods Code (for 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 fetus (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 summarizes 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.