

# MATERIAL SAFETY DATA SHEET

DATE OF ISSUE: 8<sup>th</sup> January 2014

## 1. IDENTIFICATION OF MATERIAL AND SUPPLIER

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|--|---|--|
| <b>PRODUCT NAME:</b><br>Barmac Out of Bounds All Purpose Insecticide & Termiticide | <b>PESTICIDE GROUP:</b><br>Group 3A Pesticide   | <b>APVMA REGISTRATION NUMBER:</b><br>65703   |
| <b>USE:</b><br>Insecticide   | <b>AUSTRALIAN DISTRIBUTOR:</b><br>Barmac, a division of Amgrow Pty Ltd.<br>82 Christensen Road<br>Stapylton, QLD 4207<br>Phone: (07) 3802 5000<br>Fax: (07) 3807 6369 | <b>EMERGENCY PHONE NUMBERS:</b><br>Fire Brigade, Ambulance and Police Services: 000<br>Poisonings: 131 126 POISON INFORMATION CENTRE |
| <b>FORM:</b><br>Emulsifiable Concentrate   |   |  |

## 2. HAZARD IDENTIFICATION

|   |   |   |
|---|---|---|
| <b>CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA.</b><br><b>NOT CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO THE ADG CODE.</b><br><br><b>HAZARD CATEGORY:</b> Xn (Harmful)<br><br><b>POISON SCHEDULE:</b> S6 according to the SUSMP | <b>RISK PHRASES:</b><br>R22, 36/38<br>R61 | <b>SAFETY PHRASES:</b><br>S1/2, S20/21, S22,<br>S23,S24/25, S29, S35. |
|   | <b>HAZCHEM CODE:</b><br>2X                | <b>UN NUMBER:</b><br>Exempt   |

## 3. COMPOSITION INFORMATION ON INGREDIENTS

|  |   |   |
|--|---|---|
| <b>MIXTURE: CHEMICAL IDENTITY:</b><br><br>Bifenthrin<br>Liquid Hydrocarbons<br>N-Methyl;-2- Pyrrolidone<br>Non-hazardous ingredients | <b>PROPORTION:</b><br><br>100g/L<br>567.5g/L<br>50g/L<br>Up to 100% | <b>CAS No:</b><br><br>82657-04-3<br>Various<br>872-50-4<br>Not Applicable |
|--|---|---|

## 4. FIRST AID MEASURES

|  |  |
|--|--|
| <b>SWALLOWED:</b><br>Rinse mouth. Give water to drink if patient is conscious. DO NOT induce vomiting. If vomiting occurs ensure patient can breathe, then give water to drink. Get medical attention. | <b>SKIN:</b><br>Remove contaminated clothing. Wash contaminated skin with soapy water. If skin irritation develops, get medical attention. Wash clothing thoroughly before re-use. |
| <b>EYES:</b><br>Rinse eye(s) with clean running water for 15 mins. Get medical attention.  | <b>INHALED:</b><br>Remove to fresh air. If symptoms persists seek medical attention.   |
| <b>FIRST AID FACILITIES:</b> Provide eye wash and shower facilities in workplace.  |  |

## 5. HEALTH EFFECTS

**SWALLOWED:**

Product is harmful if swallowed. Large doses may cause incoordination, tremor, salivation, vomiting, diarrhoea, and irritability to sound and touch.

**INHALED:**

This product is harmful if inhaled. Inhalation of aromatic hydrocarbon vapours may cause dizziness, disturbances in vision and irritation to the eyes, skin, and Acute inhalation LC<sub>50</sub> (rat) = 4.9 mg/L/4 hrs.

**EYES:**

May be irritating to eyes, but is unlikely to cause anything more than transient mild discomfort.

**SKIN:**

Data indicates that this product is not harmful. Product may be irritating, but is unlikely to cause more than transient, mild discomfort.

## 6. FIRE-FIGHTING MEASURES

**FLAMMABILITY CLASS:** C2

**HAZCHEM CODE:** 2X

**UNUSUAL FIRE & EXPLOSION HAZARDS:**

Product is flammable. Combustion may release carbon dioxide, nitrogen oxides, and/or chlorine compounds.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Wear self contained breathing apparatus if in enclosed space.

**EXPOSURE LIMITS:**

SWA has not set an exposure standard for this product so standard of TWA 5 mg/m<sup>3</sup>

**EXTINGUISHING MEDIA:**

Carbon dioxide, dry chemical, foam, water fog.

## 7. ACCIDENTAL RELEASE MEASURES

**PERSONAL PROTECTION:**

As a minimum, wear cotton overalls buttoned to the neck and wrists and elbow length PVC gloves.

**ENVIRONMENTAL PROTECTION:**

Do not allow into drains or waterways. If contamination of sewers or waterways has occurred advise local emergency services

**CLEAN UP AND DISPOSAL:**

It is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services. Dispose of product as according to the label specifications.

## 8. HANDLING AND STORAGE

**HANDLING:**

When opening container and preparing spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow length PVC, neoprene or nitrile gloves, face shield or goggles and chemical resistant footwear. When using prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow length PVC, neoprene or nitrile gloves, and chemical resistant footwear and half-face respirator with combined dust and gas cartridge. After use and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water.

**STORAGE:**

Store in closed original containers, in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight. Store in a locked room or place away from children, animals, foods, feedstuffs, seed and fertilisers.

## 9. EXPOSURE CONTROL/PERSONAL PROTECTION

**EYE PROTECTION:**

Goggles or glasses to AS 1366, AS/NZS1337

**PROTECTIVE MATERIAL TYPES:**

No specific measures.

**SKIN PROTECTION:**

Overalls, PVC gloves and apron, face shield.

**RESPIRATOR:**

Should not be necessary under normal conditions. If spray mist may be encountered, a particulate filter to AS/NZS 1715 should be worn.

**EXPOSURE LIMITS (TWA):**

SWA has set the not set an exposure standard for this product so standard of TWA 5 mg/m<sup>3</sup>

**VENTILATION:** This product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan or mask.

## 10. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:**

Light brown liquid with aromatic hydrocarbon odour.

**BOILING POINT:**

No data

**SPECIFIC GRAVITY**

**(20°C):**  
No data

**FLAMMABILITY:**

Not Flammable

**FLASH POINT:**

68°C (closed cup)

**VAPOUR DENSITY:**

No data

**VAPOUR PRESSURE**

**(20°C):**  
No data

**SOLUBILITY:**

No data

## 11. STABILITY AND REACTIVITY

**STABILITY:**

Stable if stored in original container under normal ambient conditions. Slowly decomposes by light, heat and moisture.

**INCOMPATIBILITY/ CONDITIONS TO AVOID:**

Strong, acids, strong bases and strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke.

## 12. TOXICOLOGICAL INFORMATION

The following refers to Bifenthrin –the active ingredient:

**ROUTE OF EXPOSURE:**

Bifenthrin is absorbed through intact skin when applied topically. It undergoes similar modes of breakdown within animal systems as other pyrethroid insecticides. In mammals, Bifenthrin is rapidly broken down and promptly excreted. Rats treated with 4 to 5 mg/kg, excreted 70 % in the urine and 20% in the faeces within 7 days. After 7 days, the remaining Bifenthrin was found accumulated in tissues with high fat content such as the skin and fat in males and females and the ovaries of females. Bifenthrin is less toxic to warm-blooded animals, such as mammals, than to cold-blooded animals. There is no data to hand indicating any particular target organs.

**ACUTE TOXICITY:**

Bifenthrin is harmful to mammals when ingested. Large doses may cause incoordination, tremor, salivation, vomiting, diarrhoea, and irritability to sound and touch. LD50, for Bifenthrin is about 54 mg/kg in female rats and 70 mg/kg in male rats. The LD50 for rabbits whose skin is exposed to Bifenthrin is greater than 2,000 mg/kg. Bifenthrin does not sensitize the skin of guinea pigs. Although it does not cause inflammation or irritation on human skin, it can cause a tingling sensation which lasts about 12 hours. It is virtually non-irritating to rabbit eyes.

## 13. ECOLOGICAL INFORMATION

The following refers to Bifenthrin –the active ingredient:

### Effects on Birds:

Bifenthrin is moderately toxic to many species of birds. The dietary concentration (8 day) at which half of the test animals die, the LC50, is 1,280 ppm for mallard ducks and 4,450 ppm for bobwhite quail. The acute oral LD50 is 1,800 mg/kg for bobwhite quail and 2,150 mg/kg for mallard ducks. There is concern about possible bioaccumulation in birds.

### Effects on Aquatic Organisms:

Bifenthrin is very highly toxic to fish, crustaceans and aquatic animals. The LC50 after a 96-hour exposure is 0.00015 mg/l for rainbow trout, 0.00035 mg/l for bluegill, and 0.0016 mg/l for Daphnia. Because of its low water solubility and high affinity for soil, Bifenthrin is not likely to be found in aquatic systems.

### Effects on Other Animals (Non-target species):

Bifenthrin is toxic to bees.

### ENVIRONMENTAL FATE

#### Breakdown of Chemical in Soil & Groundwater:

Bifenthrin does not move in soils with large amounts of organic matter, clay and silt. It also has a low mobility in sandy soils that are low in organic matter. Bifenthrin is relatively insoluble in water, so there are no concerns about groundwater contamination through leaching. It's half-life in soil, the amount of time it takes to degrade to half of its original concentration, is 7 days to 8 months depending on the soil type and the amount of air in the soil.

#### Breakdown of Chemical in Vegetation:

Bifenthrin is not absorbed by plant foliage, nor does it translocate in the plant.

## 14. DISPOSAL

### WASTE DISPOSAL METHOD:

Dispose according to applicable local and state government regulations.

## 15. TRANSPORT INFORMATION

UN NO: Exempt

SPECIAL PROVISIONS: Not Allocated

SHIPPING NAME: Not Allocated

## 16. REGULATORY INFORMATION

POISONS SCHEDULE: S6

PACKAGING AND LABELLING: Not Allocated

HAZARD CATEGORY: Xn (Harmful)

ADG CLASSIFICATION: Exempt

## 16. OTHER INFORMATION

This MSDS contains only safety-related information. For other data see product literature.

### Acronyms:

**ADG Code:** Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

**SWA** Safe Work Australia, formerly ASCC and NOHSC

**CAS Number** Chemical Abstracts Service Registry Number

**SUSMP** Standard for the Uniform Scheduling of Medicines & Poisons

**UN:** United Nations Number

**TWA:** Time weight average.

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