

DATE OF ISSUE: 24TH DECEMBER 2007

BARMAC INDUSTRIES PTY LTD
BOX FLAT ESTATE SWANBANK RD. SWANBANK Q 4306
MATERIAL SAFETY DATA SHEET

PRODUCT NAME: BARMAC DELTA FORCE PLUS INSECTICIDE

PHONE: (07) 3280 3000

EMERGENCY AFTER HOURS NUMBER: (07) 3280 3000

Classified as hazardous by Worksafe Australia Criteria

IDENTIFICATION

OTHER NAMES: Deltamethrin Plus

USE: A liquid insecticide concentrate for spray application

UN NUMBER: N/A

HAZCHEM CODE: N/A

DANGEROUS GOODS CLASS: N/A

POISONS SCHEDULE: S5

PHYSICAL DESCRIPTION/PROPERTIES

APPEARANCE: White liquid.

FLASHPOINT (°C): N/A

BOILING POINT (°C): 100°C

FLAMMABILITY LIMITS (%): N/A

VAPOUR PRESSURE (___):

SOLUBILITY IN WATER (g/L): forms a suspension.

SPECIFIC GRAVITY: 1.014

INGREDIENTS:

<u>CHEMICAL ENTITY</u>	<u>CAS NO</u>	<u>PROPORTION</u>
Deltamethrin	52918-63-5	10g/L
Tetramethrin	7696-12-0	10g/L
Piperonyl Butoxide	51-03-6	80g/L
Water	7732-18-5	VHigh
Other ingredients determined non-hazardous		VLow

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HEALTH HAZARD INFORMATION

HEALTH EFFECTS: This section includes possible adverse effects, which could occur if this material is not handled in the recommended manner.

ACUTE:

SWALLOWED: Product is harmful. Symptoms include headache, dizziness, drowsiness, nausea, diarrhoea and vomiting.

EYES: Can be irritating to eye.

SKIN: Irritating to skin, especially the face. May result in initial stinging or burning sensations followed by numbness which may persist for a few hours.

INHALED: Inhalation of spray may cause transient irritation of mucous membranes (Nose, throat, and respiratory tract) for up to 24 hours.

CHRONIC

SYSTEMIC (other target organ): One reference indicates that exposure to large amounts of piperonyl butoxide may cause blood disorders or kidney damage.

CANCER INFORMATION: Not considered carcinogenic.

TERATOLOGY (birth defects): Not considered teratology.

MUTAGENICITY: Not considered to be mutagenic.

FIRST AID

SWALLOWED: Wash out mouth with water. Do not induce vomiting . Keep patient at rest and seek medical advice.

EYES: Rinse immediately with plenty of water for at least 15 minutes, holding the eye open and taking care to rinse under eyelids as well. If irritation persists seek medical attention.

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SKIN: Wash off skin immediately with soap and plenty of water. Remove all contaminated clothing and shoes. Seek medical advice if irritation persists. Launder contaminated clothing before re-use.

INHALED: Remove victim to fresh air. Seek medical advice if symptoms are experienced.

FIRST AID FACILITIES: If poisoning occurs, immediately contact a doctor or **Poisons Information Centre (telephone 13 11 26)**, and follow the advice given. Show this material safety data sheet to a doctor.

ADVICE TO DOCTOR: Treat symptomatically. Induction of vomiting is preferably performed under trained medical supervision. Skin contacted by Deltamethrin must be carefully cleaned with cleansing milk. Symptoms can be alleviated by the application of a moisturising cream or anaesthetic ointment.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS: Exposure values at the TWA (Time Weighted Average) means the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. A time weight average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Worksafe Australia for any of the ingredients in this product. There is a blanket recommendation of 10mg/m³ for inspirable dusts or mists when limits have not otherwise been established.

ENGINEERING CONTROLS: In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe airborne concentrations of mists, dusts, or vapours are high, you are advised to modify the process or environment to reduce the problem.

PERSONAL PROTECTION:

EYE/FACE: Face and eye protection should be worn. For help in selecting suitable equipment consult AS 1336 and AS/NZS 1337.

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SKIN: Wear chemical resistant PVC or nitrile gloves. Wear cotton overalls and washable cotton hat. Wear boots. For help in selecting suitable gloves consult AS 2161. For help in selecting suitable clothing consult AS 2919. For help in selecting suitable boots consult AS/NZS 2210.

RESPIRATORY: Use in well-ventilated area. For help in selecting suitable equipment consult AS/NZS 1715. After handling this product always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective clothing and other protective equipment before storing or re-using.

FLAMMABILITY: N/A

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT: Store in a cool dry place away from direct sunlight. Store away from food and food stuffs for animal or human consumption. Store in its original container well sealed. Protect from frost. Avoid alloys and iron.

ROAD AND RAIL TRANSPORT: Not classified as Dangerous Goods by the criteria of the Australian dangerous goods code (ADC) for the transport by Road and Rail.

MARINE TRANSPORT: Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods codes (IMDG Code) for transport by sea.

AIR TRANSPORT: Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for the transport by sea.

SPILLS AND DISPOSAL: In case of spills it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways.

Keep all bystanders away. Wear full length clothing and PVC gloves. Reposition any leaking containers so as to minimise further leakage. Dam and absorb spill with an absorbent material (e.g sand or soil). Shovel the absorbed spill into drums and top with hydrated lime. Disposal of the absorbent material will depend on the extent of the spill.

- For quantities up to 50L of product bury in a secure land fill site.
- For quantities greater than 50L seek advice from the manufacturer before attempting disposal.

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Contain in a secure location until disposal method is established.

DISPOSAL: Dispose of empty, used containers by,

- (a) Triple rinsing with water. Add the rinsings to the tank mix or dispose of rinsate in a disposal pit away from desirable plants and roots, and watercourses. On-site disposal of undiluted product is unacceptable.
- (b) Breaking, crushing or puncturing the containers to prevent reuse.
- (c) Disposing of in a local authority, bury land fill site that does not burn it's refuse. If there is no local authority land fill readily available in your area, bury the containers under at least 50cm of soil at a licensed / approved disposal site. DO NOT burn empty containers or product.

Decontaminate spill area with hydrate lime scattered over the spill prior to rinsing off with water.

FIRE/EXPLOSION HAZARD: Heating / combustion will generate oxides of carbon and nitrogen, and other irritant and toxic fumes. Fire fighters should wear full protective clothing and self contaminated breathing apparatus.

STABILITY: Stable under normal conditions. React with oxidising agents.

INCOMPATIBILITY: Avoid strong oxidising agents, strong acids, alkalis, alloys and iron.

HAZARDOUS DECOMPOSITION PRODUCTS: This product is unlikely to spontaneously decompose.

HAZARDOUS POLYMERIZATION: This product is unlikely to spontaneously polymerise.

ENVIRONMENTAL DATA: Deltamethrin is not persistent in the environment. It is destroyed by soil micro-organisms and does not leave residues in the environment or build up in the food chain.

ECOTOXICITY: Deltamethrin is highly toxic to fish and aquatic organisms. Deltamethrin is not persistent in the environment. It is destroyed by soil microorganisms and does not leave residue in the environment, or build up in the food chain. Tetramethrin and piperonyl butoxide are not toxic

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Deltamethrin:

LC₅₀(96h) fish: 0.001-0.01 mg/L

LC₅₀ duck: >5 000 mg/kg

LC₅₀ quail: > 10 000 mg/kg

Tetramethrin:

LD₅₀ 8 day dietary (Mallard duck) >1 000 mg/kg

LD₅₀ 8 day dietary (Bobwhite quail) >1 000 mg/kg

Piperonyl butoxide:

LC₅₀ (24hour) carp: 5.3 mg/L

Acute oral LD₅₀ starlings: >100mg/kg

Note: Do not release contaminated water into the environment. Keep intact containers cool by spraying with water.

TOXICOLOGY INFORMATION

Deltamethrin:

Oral LD₅₀ (rat): 130 mg/kg

Dermal LD₅₀ (rabbit): >2 000 mg/kg

Inhalation LC₅₀ (rat): 2.2 mg/L (4hr)

Eye irritation (rabbit): slight irritant

Tetramethrin:

Oral LD₅₀ (rat): >5 000 mg/kg

Dermal LD₅₀ (rat): > 5 000 mg/kg

Inhalation LC₅₀ (rat): >1 180 mg/L

Piperonyl butoxide: (3 hr)

Oral LC₅₀ (rat): 5 630 mg/kg

Dermal LD₅₀ (rabbit): >2 000mg/kg

Inhalation LC₅₀ (rat): >5.9 mg/L

REGULATORY INFORMATION

POISONS SCHEDULE: S5

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NOTICE: Information for this product is believed to be reliable, however buyer and user assume all risk of use, handling and storage whether in accordance with directions or not. Barmac Industries Pty Ltd and its agents give no guarantee or warranty of any kind express or implied concerning the use of this product and will not accept any responsibility whatsoever whether in contract or tort for any loss including consequential loss arising out of the use of this product or caused by this product.
