MATERIAL SAFETY DATA SHEET

EnviroMax Deltamethrin 10SC Residual Insecticide

Section 1: Identification of the Product and Company

Product name:	**EnviroMax Deltamethrin 10SC Residual Insecticide**
Other names:	Deltamethrin 10 g/L Suspension Concentrate
Use:	A liquid synthetic pyrethrioid insecticide concentrate suitable for a broad range of applications as described by the label.
Company name & Contact details	EnviroMax Technologies Pty Ltd Level 3 549 Queen Street, Brisbane QLD 4000 **AUSTRALIA** Tel.: +61-409926561
Other information:	All reasonable care has been taken to ensure the information and advice contained in this data sheet is accurate at the time of printing. However, the manufacturer accepts no liability for any loss or damages suffered as a consequence of reliance upon the information contained herein.

Section 2: Hazards Identification

Safety Phrases:	S20: When using do not eat or drink. S36/37: Wear Suitable protective clothing
Risk Phrases:	May cause sensitisation by skin contact. Harmful to aquatic organisms.
SUSDP Classification:	S5
ADG classification:	Non allocated. Not a Dangerous Good for transportation by road or rail within Australia.
UN Number:	UN 3082 (Packing Group III)

Section 3: Composition / Information on Ingredients

Chemical entity	**CAS N^{o}**	**Proportion**	**TWA (mg/m^3)**	**STEL (mg/m^3)**
Deltamethrin	52918-63-5	10g/L	not set	not set
Propylene Glycol	57-55-6	< 9%	474	not set
Other non hazardous ingredients (Mostly water)		To 100%	not set	not set

This is a commercial product whose exact ratio of components may vary slightly.

Section 4: First Aid Measures

FIRST AID:
You should call the Poisons Information Centre if you feel you may have been poisoned, burned or irritated by this product. The number is 13 11 26 from anywhere in Australia and is available at all times. Have this MSDS with you when you call.

Eye:
Quickly and gently blot or brush away product. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water until the product is removed or until a few minutes after irritation has ceased, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face.

Ingestion:
If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

Inhalation:
No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin:
Blot or brush away excess chemical. Wash gently and thoroughly with water (use non-abrasive soap) for 10 minutes or until chemical is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts). If irritation persists, repeat flushing and obtain medical advice.

ADVICE TO DOCTOR -
Treat symptomatically

Section 5: Fire Fighting Measures

Fire/Explosion Hazard:

Extinguishing Media - Not Combustible. Use extinguishing media suited to burning materials

Degree of Hazard - There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids.

Special Fire Fighting Procedures - When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus.

Hazardous Decomposition Products - This product is likely to decompose only after heating to dryness, followed by further strong heating.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Section 6: Accidental Release Measures

In the event of a major spill, prevent spillage from entering drains or water courses. Contain and absorb spilled material with absorbent material such as sand clay or cat litter and dispose of waste as indicated below or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Immediately call the fire brigade. Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered. Suitable materials for protective clothing include rubber, PVC, Viton. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Section 7: Handling and Storage

Safe handling practices:	Exercise safe handling practices at all times
Storage:	Store in a cool, dry, well ventilated location. Avoid excess heat. No smoking eating or drinking should be allowed where material is used or stored. Keep out of the reach of children and animals. Store in original containers only. Do not locate near or contaminate food or feed by storage or disposal. Wash all exposed skin surfaces prior to smoking drinking or eating. All workers should shower at the end of each work day after handling this product. Wash all clothing after each use.
Other information:	Nil

Section 8: Exposure Controls and Personal Protection

Engineering controls: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

Personal protection: ***Work Clothing***: For normal handling wear long sleeve uniform or overalls and head covering. For larger exposures, as in the case of spills, wear full body cover barrier suit, such as rubber rain suit.
Eye protection*:* Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.
Skin protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling the concentrated product.
Respirator: Usually, no respirator is necessary when using this product.
Eyebaths or eyewash stations should be provided near to where this product is being used.

Section 9: Physical and Chemical Properties

Chemical:	Deltamethrin
Appearance:	Beige to white, slight odour.
Flashpoint:	>100 Deg C Not Flammable
Solubility In Water:	Insoluble. Active suspended in water
Corrosive Hazard:	Non corrosive; compatible with aluminum, HDPE, glass and phenolic lined steel containers.
Specific Gravity:	1.01 approx at 20°C
Flammability:	Not flammable - Combustible
Poisons Schedule:	S5

Section 10: Chemical Stability and Reactivity Information

Chemical stability: Stable at normal temperature and pressure

Conditions to avoid: Excess heat, ignition sources

Incompatibility: Strong acids, strong bases, strong oxidising agents.

Hazardous decomposition products: This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by com and death.

Hazardous polymerisation: This product is unlikely to undergo polymerisation processes

Section 11: Toxicological Information

(Deltamethrin)

Oral LD50 (mg/kg) ~130 Species: Rat
Dermal LD50 (mg/kg) >2,000 Species: Rabbit
Inhalation LC50 (mg/L) 2.2 (4 hour) Species: Rat
Eye irritation Slight irritant Species: Rabbit Skin irritation Non irritating Species: Rabbit Sensitisation Not a sensitiser Species: Guinea Pig

Section 12: Environmental / Ecological Information

***Effects on Birds*:** The reported 8-day LC_{50} for detamethrin for ducks was greater than 4,640 mg/kg diet; and greater than 10,000 mg/kg diet for quail.

***Effects on Aquatic Organisms*:** As is common with all pyrethroids, deltamethrin has a high toxicity to fish under laboratory conditions. However, in field conditions under normal conditions of use, fish are not harmed. Deltamethrin had an impact on aquatic herbivorous insects. This impact led to an increase of algae. Although the fish (fathead minnows) accumulated the deltamethrin, no mortality could be observed. In laboratory trials, the LC_{50} for fish was 1-10 micrograms/l. Aquatic fauna, particularly crustacean, may be affected, but fish are not harmed under normal conditions of use.

***Effects on Other Animals (Non-target species)*:** Deltamethrin is considered toxic to bees. The 24 hour oral LD_{50} for technical detamethrin fed to bees was 0.079 µg/bee.

ENVIRONMENTAL FATE

***Breakdown of Chemical in Soil and Groundwater*:** In soil, degradation occurs within 1-2 weeks.

***Breakdown of Chemical in Surface Water*:** Deltamethrin in pond water was rapidly adsorbed, mostly by sediment, in addition to uptake by plants and evaporation into the air.

***Breakdown of Chemical in Vegetation*:** About 10 days after use, there are no deltamethrin residues observed on plants. There is no known phytotoxicity to crops.

Section 13: Disposal Considerations

***Drum Disposal*:** Triple or preferably pressure rinse containers before disposal. Add rinsed materials to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. Do not re-use empty containers.

Section 14: Transport Information

Road or Rail Transportation

This product is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Marine and Air Transportation

EnviroMax Deltamthrin 10SC Residual Insecticide is a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:-

UN 3082,
Class 9 (Miscellaneous Dangerous Goods),
Packing Group III,
Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains 1% Deltamethrin W/V).

Section 15: Regulatory Information

Poison Schedule	S5
Agricultural or veterinary chemicals legislation	This product is registered for use by the APVMA. AUSTRALIA APVMA Registration No. 63673

Section 16: Other Information

Distributed by;
Australasian Wholesale Chemical Technologies Pty Ltd
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Tel.: +61-409 926 561
www.awct.com.au

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END OF MSDS