

TALSTAR 80SC [®]1

Date of Issue: 21 December 2005

1. SUBSTANCE/PREPARATION AND COMPANY IDENTIFICATION

Chemical name of active ingredient(s): bifenthrin

Recommended use: Insecticide

Supplier: Elliott Technologies Limited
45 Kitchener Road
Pukekohe
Phone 0800 100 325

Emergency telephone number: 0800 Poison (0800 764 766) 24 Hours

2. HAZARDS IDENTIFICATION

Hazard Classification: Toxic - 6.1D, 6.9B,
Ecotoxic - 9.1A, 9.2C, 9.3B, 9.4A
Approved Handler Applies

Required identification Details: ECOTOXIC

May be harmful if swallowed, inhaled or absorbed through the skin.
Presumed to cause damage to the nervous system from repeated oral exposure at high doses.

Very toxic to aquatic organisms.
Toxic to the soil environment.
Toxic to terrestrial vertebrates.
Very toxic to terrestrial invertebrates.
Toxic to bees.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation Information on hazardous ingredients

Common name	CAS No	%
Bifenthrin	82657-04-3	8 (80 g/L)
Inert ingredients		>60

4. FIRST-AID MEASURES

Description of necessary first aid measures:

Effects and symptoms

First-aid measures

Inhalation:

Remove victim from area of exposure. Remove contaminated clothing and loosen remaining clothing. Apply artificial

respiration if required. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

Ingestion:

Rinse mouth with water. If swallowed give a glass of water to drink. If vomiting occurs give further water. Do NOT induce vomiting. For advice, contact the National Poisons Centre 0800 Poison (0800 764 766) or a doctor immediately.

Skin contact:

Wash with plenty of soap and water. Remove contaminated clothing. If irritation occurs seek medical advice. Facial skin contact may cause temporary facial numbness.

Eye contact:

If concentrate is splashed in the eyes, flush with running water for at least 15 minutes. If irritation persists take to Doctor.

Notes to a physician:

Treat symptomatically. In cases of skin contact it has been reported that topical application of Vitamin E cream has a therapeutic value, eliminating almost 100% of the skin pain associated with synthetic pyrethroids.

5. FIRE-FIGHTING MEASURES

HAZCHEM Code:

2Z

Extinguishing media :

Fog, Foam,CO2 or dry chemical.

**Hazardous thermal
(de)composition products:
Protection of fire-fighters:**

Not available

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Wear protective equipment to prevent skin and eye contact. Avoid breathing in vapors. Work up wind or increase ventilation. Contain prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labeled containers for disposal.

Environmental precautions:

Toxic to aquatic life. Do not allow material to enter sewers or bodies of water.

Methods for cleaning up:

Keep unprotected persons and animals out of the area. Soak up with sand, sawdust or other absorbent material, shovel or sweep up and bury in an approved landfill. To clean and neutralize spill area, tools and equipment, wash with a suitable solution of caustic or soda ash, and an appropriate alcohol (i.e., methanol, ethanol or isopropanol). Follow this by washing with a strong soap and water solution. Absorb, as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary.

7. HANDLING AND STORAGE

Handling:

When mixing or applying, avoid contact with skin and eyes.

Storage: Wear protective clothing, gloves and goggles. Do not eat or drink while using. Wash hands and face before meals and after work. Wash protective clothing after work. Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs. This product is classified under HSNO as 6.1D and 9.1A, and storage of certain quantities may require bunding and signage. See the HAZNOTE for further information.

Packaging materials: Fluorinated HDPE Plastic

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Guidelines

Workplace exposure standards: Not Established

**Exposure Standards outside:
The workplace:** Not established

Engineering measures

Exposure control measures: Use in a well ventilated areas. Keep containers closed when not in use.

Personal Protective Equipment

Detail specifications for equipment:

Respiratory system: Avoid inhalation. Work up wind.

Skin and body: Wear long sleeved shirt, long pants worn outside of boots.

Hands: Waterproof gloves

Eyes: Goggles or face shield

General hygiene: Wash hands and face before meals and after work. Wash protective clothing after work. Do not smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Colour: Beige to white

Odour: Mild

pH: Not Available

Vapour Pressure: Not available

Melting Point: Not available

Solubility: Not available

Specific gravity or density: 1.024

Flashpoint 68°C (closed cup)

Auto – ignition Temperature:	Not available
Octanol/water partition coefficient:	>6 LogPow (Bifenthrin)
Explosion properties:	Not explosive
Oxidation properties:	Not an oxidizing agent

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions
Conditions to avoid:	Extremes of heat
Materials to avoid:	Oxidising agents
Hazardous decomposition Products:	<i>Fire</i> - Carbon monoxide, carbon dioxide, chlorine, fluorine, hydrogen chloride and hydrogen fluoride.
Hazardous polymerization:	Will not occur
Specific Data:	
Hazardous reactions :	None specific

11. TOXICOLOGICAL INFORMATION

This product has moderate inhalation, and low oral and dermal toxicity. It is practically non-irritating to the eyes and non-irritating to the skin. Large doses of bifenthrin ingested by laboratory animals produced signs of toxicity including convulsions, tremors and bloody nasal discharge. Bifenthrin does not cause acute delayed neurotoxicity. Experience to date indicates that contact with bifenthrin may occasionally produce skin sensations such as rashes, numbing, burning or tingling. These sensations are reversible and usually subside within 12 hours. These sensations are reversible and usually subside within 12 hours. In humans, ingestion of large amounts of propylene glycol has resulted in breathing and heartbeat, profuse sweating and seizures.

Acute toxicity – Oral : LD 50	632mg/kg (Rat)
Acute toxicity - Dermal : LD 50	>2,000 mg/kg (Rabbit)
Acute toxicity – Inhalation: LC 50	
Skin irritation :	For Bifenthrin - Non-irritant (Rabbit)
Eye irritation:	For Bifenthrin - Non-irritating (Rabbits)
Sensitization :	For Bifenthrin - Not a skin sensitiser (Guinea Pig)
Chronic toxicity	
Carcinogenicity:	IARC : Not listed NTP : Not Listed OSHA : Not Listed Other : Not Listed (ACGIH)
Mutagenicity:	Bifenthrin was not genotoxic in a battery of mutagenicity assays.

Reproduction toxicity: Animals studies have shown that bifenthrin is not teratogenic nor does it cause reproductive toxic effects. ADI (Acceptable Daily Intake) for humans is 0.01 mg/kg bw/day.

Other information :

12. ECOLOGICAL INFORMATION

E.E.L. Water: 0.05 ng/litre (bifenthrin)

T.E.L. Not Established

Ecotoxicity
Fish
Daphnia magna Toxic to aquatic organisms.. Log Octanol/ Water Partition Coefficient: >6
48 hr LC50 (Daphnia magna): 0.00016 mg/L
96 hr LC50 (Rainbow trout): 0.00015 mg/L
96 hr LC50 (Blungell sunfish): 0.00035 mg/L

Bees Harmful to bees
Oral LD50 (µg/bee): 0.1 µg/bee
Contact LD50 (µg/bee): 0.0146 µg/bee.

Soil Persistence/degradability Soil Bifenthrin is moderately stable in soil under aerobic conditions, with a half life ranging from 65 – 125 days (depending upon soil type). It has a high affinity for organic matter and is not mobile. There is a potential for bioconcentration up the food chain.

Water Avoid contaminating waterways

Bioaccumulative potential : Risk of bioaccumulation in an aquatic species is high

Avian Harmful to terrestrial species.
Oral LD50 (mallard duck): 2,150 mg/kg
Oral LD50 (bobwhite quail): 1,800 mg/kg

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Triple or preferably pressure rinse containers before disposal. Add rinsing 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.

14. TRANSPORT INFORMATION - International transport regulations

UN number: UN 3082
Class or Division: 9
Classification Code: M6
Packing Group: III

Marine Pollutant:

This material is classified as a severe Marine Pollutant (PP) according to the International Maritime Dangerous Goods Code.

Proper shipping name :

Environmentally Hazardous, substance, Liquid, N.O.S (Bifenthrin)

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION**ACVM Registered Number:****P4139****HSNO Approval Code:****HSR000278**

16. OTHER INFORMATION**Additional information:****Original Issue Date:** 21 December 2005**Revision Date:** N/A**Replaces:** N/A**Disclaimer EXCLUSION OF LIABILITY: PLEASE READ**

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