

## Section 1 - Identification of the Material and Supplier

FMC New Zealand Limited  
6 Clayton Street  
Newmarket, Auckland 1023

24 Hour Medical Emergency: 0800 111 174  
Transport Emergency: 0800 387 668  
Technical Query & Customer Service: 0800 658 080  
(business hours)  
[www.fmccrop.nz](http://www.fmccrop.nz)

**Chemical nature:** Bifenthrin in a suitable solvent system.  
**Trade Name:** Talstar® 100 EC  
**Product Use:** Insecticide  
**Creation Date:** 21 December 2005  
**This version issued:** May, 2021 and is valid for 5 years from this date.  
**Poisons Information Centre: Phone 0800 764766 from anywhere in New Zealand**

## Section 2 - Hazards Identification



### HAZARD CLASSIFICATION

3.1D, 6.1D, 6.3A, 6.4A, 6.9A, 9.1A, 9.2B, 9.3B, 9.4A

Approved Handler Applies

**GHS Signal word: WARNING, ECOTOXIC, COMBUSTIBLE LIQUID – KEEP AWAY FROM SOURCES OF IGNITION**

### HAZARD STATEMENT:

- H227: Combustible liquid.
- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H320: Causes eye irritation.
- H410: Very toxic to aquatic life with long lasting effects.

### PREVENTION

- P102: Keep out of reach of children.
- P261: Avoid breathing fumes, mists, vapours or spray.
- P262: Do not get in eyes, on skin, or on clothing.
- P264: Wash contacted areas thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
- P280: Wear protective gloves, protective clothing and eye or face protection.

### RESPONSE

- P362: Take off contaminated clothing and wash before reuse.
- P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333+P313: If skin irritation or rash occurs: Get medical advice.
- P337+P313: If eye irritation persists: Get medical advice.

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P391: Collect spillage.

P370+P378: Not combustible. Use extinguishing media suited to burning materials. Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal foam can be used.

#### STORAGE

P405: Store locked up.

P410: Protect from sunlight.

P402+P404: Store in a dry place. Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

#### DISPOSAL

P501: Dispose of contents and containers as specified on the registered label.

### Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	%
Bifenthrin	82657-04-3	100 g/L
Liquid hydrocarbons	64742-94-5	30-60% w/w
Other ingredients deemed not to be hazardous mixture		1-10% w/w

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

### Section 4 - First Aid Measures

#### Description of necessary first aid measures:

#### Effects and symptoms

#### First-aid measures

Harmful if swallowed or inhaled. Ingested in large doses by laboratory animals produced convulsions, tremors and bloody nasal discharge. This formulation also contains aromatic hydrocarbons which, if inhaled, may cause central nervous system depression, dizziness, disturbances in vision and respiratory irritation. Moderately irritating to the eyes and skin. Dermal sensitization may occur.

#### Inhalation:

Remove victim to fresh air. Apply artificial respiration if necessary.

#### Ingestion:

Call the National Poison Centre 0800 poison (0800 764 766). Have a person sip a glass of water if able to swallow. Do not induce vomiting.

#### Skin contact:

Take off contaminated clothing. Rinse skin immediately for 15-20 minutes. If skin surface damaged, apply a clean dressing and seek medical attention. If skin not damaged, wash with soap and water. If irritation persists see a doctor.

#### Eye contact:

If concentrate is splashed in the eyes, flush with running water for at least 15 minutes. Get medical attention if irritation persists.

#### Notes to a physician:

Bifenthrin the active ingredient in this product is a pyrethroid insecticide. The formulation also contains petroleum distillates that can cause severe pneumonitis or fatal pulmonary edema if aspired. Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise symptomatic and supportive.

### Section 5 - Fire Fighting Measures

#### HAZCHEM Code:

3XE

#### Extinguishing media :

Soft stream water fog, foam, carbon dioxide or dry chemical

#### Hazardous thermal (de)composition products:

Carbon monoxide, carbon dioxide, hydrogen chloride, chlorine, fluorine and hydrogen fluoride.

#### Protection of fire-fighters:

Wear full protective clothing and self contained breathing apparatus. Do not breath smoke or gases.

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## Section 6 - Accidental Release Measures

<b>Personal precautions:</b>	Avoid contact with skin and eyes. Do not inhale spray. Wear long sleeved shirt, long pants, waterproof gloves and safety goggles or face shield. Do not eat, drink or smoke when using. Wash hands and face before meals and after work.
<b>Environmental precautions:</b>	sewers, drains, dams, creeks or any other waterways.
<b>Methods for cleaning up:</b>	In the case of spillage, contain and absorb spilled material with absorbent material such as sand clay or cat litter. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (ie organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected. Label for contents. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local Authorities

## Section 7 - Handling and Storage

<b>Handling:</b>	When mixing or applying, avoid contact with skin and eyes. 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.
<b>Storage:</b>	Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs. Keep away from sparks and flames. Keep out of reach of children.
<b>Packaging materials:</b>	Fluorinated HDPE Plastic

## Section 8 - Exposure Controls and Personal Protection

### Workplace Exposure Guidelines

**Workplace exposure standards:** Not established

**Exposure Standards outside:** Not established

### The workplace:

#### Engineering measures

**Exposure control measures:** Ensure ventilation is adequate, generally natural ventilation is adequate.

#### Personal Protective Equipment

##### Detail specifications for equipment:

**Respiratory system:** Do not inhale spray mist.

**Skin and body:** When opening the container, preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length and PVC gloves and goggles.

**Hands:** Elbow-length and PVC gloves

**Eyes:** Wear chemical goggles.

**General hygiene:** After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

After each day's use, wash contaminated clothing and safety equipment.

## Section 9 - Physical and Chemical Properties:

<b>Physical State:</b>	Liquid
<b>Colour:</b>	Clear
<b>Odour:</b>	Slight citronella odour
<b>pH:</b>	N/A

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Vapour Pressure:	0.024 mPa @ 25OC
Boiling Point:	N/A
Flash Point:	68oC
Solubility:	0.1mg/litre
Specific gravity or density:	0.903@20oC

**Information for flammable material including:**

Octanol/water partition coefficient:	Not available
Explosion properties:	Not an explosive
Oxidation properties:	Not an oxidizer

**Section 10 - Stability and Reactivity**

<b>Stability:</b>	Stable under normal conditions. Do not store below 4°C.
<b>Conditions to avoid:</b>	Excessive heat and sparks.
<b>Materials to avoid:</b>	Oxidising agents
<b>Hazardous decomposition Products:</b>	<i>Fire</i> - Carbon monoxide, carbon dioxide, chlorine, fluorine, hydrogen chloride and hydrogen fluoride.
<b>Hazardous polymerization:</b>	Will not occur
<b>Specific Data:</b>	
<b>Hazardous reactions :</b>	None known

**Section 11 - Toxicological Information**

<b>Acute toxicity – Oral :</b>	531mg/kg (Rat)
<b>LD50</b>	
<b>Acute toxicity - Dermal :</b>	>2,000mg/kg (Rabbit)
<b>LD50</b>	
<b>Acute toxicity – Inhalation: LC50</b>	= 4.9mg/kg, 4 hrs (Rat)
<b>Skin irritation :</b>	May cause eye irritant
<b>Eye irritation:</b>	May cause eye irritant.
<b>Sensitization :</b>	Not a known sensitizer.
<b>Chronic toxicity</b>	IARC : Not listed NTP : Not Listed OSHA : Not Listed Other : Not Listed (ACGIH)
<b>Carcinogenicity:</b>	Not applicable

**Section 12 - Ecological Information**

<b>Ecotoxicity</b>	Very toxic to aquatic organisms. LC50 = 0.00015mg/litre (Rainbow trout) LC50=0.00035mg/litre (Bluegill sunfish) LD50=1,800 mg/kg (Quail)
<b>Bees</b>	LC50=0.146ug/bee
<b>Earthworms</b>	None available
<b>Soil</b>	Degrades at a moderate rate in soils, half life 65-125 days. Log Pow >6.0. Is tightly bound in most soils and is of extremely low water solubility.
<b>Bioaccumulative potential</b>	Not available
<b>:</b>	
<b>Birds</b>	None available

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## Section 13 - Disposal Considerations

**Methods of disposal :** Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, follow the recommendations in NZS 8409.  
**CONTAINER DISPOSAL:** Triple rinse container and add residue to spray tank. Burn if permitted and circumstances, especially wind direction allow, otherwise bury in landfill.

## Section 14 - Transport Information

### NZS 5433\*

UN number 3082  
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(contains bifenthrin)  
Class 9  
Packing group III  
Matters needing attention for transportation: Talstar® 1 and 5 L can be shipped under Limited Quantity provisions in NZS 5433 as a non-dangerous good.

### IMDG\*

UN number 3082  
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(contains bifenthrin)  
Class 9  
Packing group III

### IATA\*

UN number 3082  
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(contains bifenthrin)  
Class 9  
Packing group III

**\* Matters needing attention for transportation:** Marine Pollutants in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code and IATA special provision A197. If the product meets these special provisions, it may be shipped in New Zealand as a non-dangerous goods under provisions in NZS 5433 code which accepts IMDG and IATA classification and/or Limited quantity volumes.

## Section 15 - Regulatory Information

**ACVM Registered Number:** P4140  
**HSNO Approval Code:** HSR000277  
**Animal products Approval:**  
NZFSA Approved Type B (Animal Products except Dairy)  
AgriQuality New Zealand Limited approved  
15 March 2001 for use in Dairy Factories Category B

## Section 16 - Other Information

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

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**Acronyms:**

<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons
<b>UN Number</b>	United Nations Number

THIS SDS SUMMARISES 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 MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

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