

# Sundew Solutions Safety Data Sheet

## Starrdust®PRO Insecticidal Dusting Powder Industrial Strength

Version 1 / AUS

Revision Date: 29/04/2015

### SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: **Starrdust®PRO Insecticidal Dusting Powder Industrial Strength**  
 Other names: None  
 Product code (UVP): SUN309  
 Recommended use: Insecticide  
 Chemical formulation: Dustable powder (DP)  
 Company: Sundew Solutions Pty. Ltd.  
 ABN 37 135 400 261  
 Unit 11, 4 Dunlop Court, Bayswater  
 Victoria 3153, Australia  
 Telephone: Sundew (03) 9722 1102  
 Technical Information Service: Sundew 1800 786 339  
 Facsimile: (03) 9729 7223  
 Website: www.sundewsolutions.com.au  
 Contact: (03) 9729 6227 Technical Manager  
 Emergency telephone no.: Poisons Information 13 11 26

### SECTION 2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE	Emergency Overview	DANGEROUS GOODS
Hazardous Classification:	Hazardous (National Occupational Health and Safety Commission - NOHSC)	
R-phrases(s):	R43 - May cause sensitization by skin contact. R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.	
S-phrases(s):	See sections 4, 5, 6, 7, 8, 10, 12, 13.	
ADG Classification:	Not a "Dangerous good" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. For transport by sea, Starrdust PRO Insecticidal Dusting Powder is a MARINE POLLUTANT. See Section 14.	
SUSMP classification (Poison Schedule):	Exempt (Standard for the Uniform Scheduling of Medicines and Poisons).	

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Permethrin 40:60 20 g/kg

Chemical Name	CAS-No.	Concentration [%]
Permethrin	52645-53-1	2.0
Triflumuron	64628-44-0	0.5
Talc	14807-96-6	96
Other ingredients (non-hazardous) to 100 %		1.5

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### SECTION 4. FIRST AID MEASURES

**If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.**

#### Inhalation

Keep patient warm and at rest. If symptoms persist, call a physician. Oxygen or artificial respiration if needed.

#### Skin contact

Take off contaminated clothing and shoes immediately. Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned.

#### Ingestion

Rinse mouth. Do NOT induce vomiting. Keep patient warm and at rest. Obtain medical attention.

#### Notes to physician

#### Symptoms

The following symptoms may occur: Prolonged and repeated contact with skin, eyes or mucous membranes may cause irritation. Burning sensation, cough, sneezing, respiratory disorder, pulmonary oedema, nausea, vomiting, diarrhoea, abdominal pain, salivation, dizziness, blurred vision, headache, anorexia, somnolence, coma, seizures, convulsions, tremors, ataxia, muscular fasciculation.

#### Treatment

Treat symptomatically. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. There is no specific antidote. Monitor: respiratory and cardiac functions. ECG - monitoring (Electrocardiogram).  
Contraindication: atropine.

### SECTION 5. FIRE FIGHTING MEASURES

#### Suitable extinguishing media

Foam  
Dry powder  
Water spray

#### Extinguishing media which should not be used for safety reasons

High volume water jet

#### Hazards from combustion products

In the event of fire the following may be released:  
Hydrogen chloride (HCl)  
Carbon monoxide (CO)  
Carbon dioxide (CO<sub>2</sub>)

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### Precautions for fire-fighting

Wear self-contained breathing apparatus and protective suit. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Whenever possible, contain fire-fighting water by diking area with sand or earth.

**Hazchem Code 2Z**

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment.  
Avoid contact with spilled product or contaminated surfaces.  
Keep unauthorized people away.  
An emergency shower must be readily accessible to the work area.

### Environmental precautions

Do not allow to get into surface water, drains and ground water.  
If the product contaminates rivers and lakes or drains inform respective authorities.

## SECTION 7. HANDLING AND STORAGE

### Handling

Hygiene measures: Avoid contact with skin, eyes and clothing.

### Storage

Requirements for storage areas and containers:  
Keep out of the reach of children.  
Keep containers tightly closed in a dry, cool and well-ventilated place.  
Keep away from direct sunlight.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	CAS-No.	Control parameters	Basis
Permethrin	52645-53-1	20 mg/m <sup>3</sup> (TWA)	OES Sundew
Triflumuron	64628-44-0	No Exposure Standard has been assigned by National Occupational Health and Safety commission for this ingredient	
Talc	14807-96-6	2.5 mg/m <sup>3</sup> (TWA)	AU OEL

### Components with workplace control parameters

#### Personal protective equipment - End user

Respiratory protection: Disposable dust mask.  
Hand protection: Rubber gloves.  
Skin and body protection: Long-sleeved shirt and long pants.

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### Engineering controls

Advice on safe handling:

Ensure adequate ventilation.

Avoid contact with skin, eyes and clothing.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form: Powder  
Colour: White  
Odour: Slight pleasant smelling cleaning product fragrance

### Safety data

pH: No data available  
Flash point: No data available  
Ignition temperature: No data available  
Upper explosion limit: No data available  
Lower explosion limit: No data available  
Vapour pressure: No data available  
Relative vapour density: No data available  
Density: No data available  
Water solubility: No data available  
Partition coefficient: n- No data available  
Octanol/water:

## SECTION 10. STABILITY AND REACTIVITY

Materials to avoid: Iron  
Oxidizing agents  
Strong acids  
Halogenated compounds

Hazardous decomposition products: Thermal decomposition can lead to release of:  
Hydrogen chloride (HCl) Carbon oxides

## SECTION 11. TOXICOLOGICAL INFORMATION

### **PERMETHRIN**

#### **Potential Health Effects:**

Permethrin has low oral and inhalation toxicity. Permethrin has been reviewed in the Australian Pesticides and Veterinary Medicine Authority (APVMA) program for agricultural and veterinary chemicals and classified as an irritant when present at concentrations such as those found in this product, and may cause sensitisation by skin contact.

The talc used in this formulation contains no asbestos fibre but may be irritating to the eyes and respiratory system.

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### **Acute**

**Swallowed:** This product has low oral toxicity.

**Eye:** This product is a mild irritant if dust enters the eyes.

**Skin:** Mildly irritating. Avoid contact with skin. This product may cause sensitisation by skin contact. These sensations are reversible and usually subside within 12 hours.

**Inhaled:** Dust is harmful if inhaled with effects similar to those observed if swallowed. This product may cause respiratory irritation if inhaled.

**Chronic:** No data available on this formulation. Permethrin is not known to be carcinogenic, genotoxic, teratogenic or mutagenic. Permethrin is efficiently metabolized by mammalian livers. Breakdown products, or metabolites of Permethrin are quickly excreted and do not persist significantly in body tissues. Permethrin may persist in fatty tissues, with half-lives of 4 to 5 days in brain and body fat.

### **Further Information**

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours). Permethrin is not mutagenic, teratogenic or carcinogenic.

### **TRIFLUMURON**

#### **POTENTIAL HEALTH EFFECTS**

Inhalation:	May cause irritation to respiratory tract
Skin contact:	Irritating to skin
Eye contact:	Irritating to the eyes
Ingestion:	Not available
Other:	None

**ANIMAL TOXICITY DATA – ACTIVE INGREDIENT:** No data available for the product.

#### **Acute:**

Oral toxicity:	LD <sub>50</sub> rat: >5000 mg/kg
Dermal toxicity:	LD <sub>50</sub> rat: >5000 mg/kg
Inhalation toxicity:	Not irritating to mucous membrane – rabbit
Skin irritation:	Slightly irritating – rabbit
Eye irritation:	Not irritating – rabbit
Sensitisation:	Not available

#### **Chronic:**

The effects of long-term exposure to this formulation are not known. The active constituent has been shown to be non-mutagenic and non-carcinogenic in laboratory tests. There are no specific symptoms of triflumuron toxicity.

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### SECTION 12. ECOLOGICAL INFORMATION

#### **PERMETHRIN**

##### **Physical/Environmental Properties:**

Permethrin is of low to moderate persistence in the soil environment, with reported half-lives of 30 - 38 days. Permethrin is readily degraded in most soils except organic types. Soil microorganisms play a large role in the degradation of Permethrin in the soil and it has also been observed that the availability of sodium and phosphorous decreases when Permethrin is added to the soil. Permethrin is tightly bound by soils, especially by organic matter. Very little leaching of Permethrin has been reported. It is not very mobile in a wide range of soil types. Because Permethrin binds very strongly to soil particles and is nearly insoluble in water, it is not expected to leach or to contaminate groundwater.

##### **Environmental Toxicology:**

Permethrin is practically non-toxic to birds. LD<sub>50</sub> = 9900 mg/kg mallard ducks, >13,500 mg/kg in pheasants, and >15,500 mg/kg in Japanese quail. Permethrin is toxic to aquatic organisms. 48-hour LC<sub>50</sub> = 0.0125 mg/L rainbow trout; 48-hour LC<sub>50</sub> = 0.0018 mg/L bluegill sunfish and salmon. Toxic to daphnia magna 48 hour LC<sub>50</sub> = 0.006 mg/L. Bioconcentration factor for Permethrin in bluefish is 715 and 703 in catfish. This indicates that permethrin has a low to moderate potential to accumulate in these fish. Permethrin is extremely toxic to bees. Severe losses may be expected if bees are present at treatment time, or within a day thereafter. Permethrin is also toxic to some wildlife. It should not be applied or allowed to drift, to crops or weeds in which active foraging takes place.

#### **TRIFLUMURON**

Fish toxicity:	LC <sub>50</sub> : > 320 mg/L (96 h) rainbow trout (triflumuron) LC <sub>50</sub> : >100 mg/L (96 h) golden orfe (triflumuron)
Daphnia toxicity:	EC <sub>50</sub> : 0.23 mg/L (48 hours) daphnia magna (triflumuron)
Toxicity to algae:	LC <sub>50</sub> : >25 mg/L (96 hours, growth rate) Scenedesmus (triflumuron)
Bird toxicity:	LD <sub>50</sub> : 561 mg/kg bobwhite quail (triflumuron)
Bee toxicity:	Triflumuron is toxic to bees
Other:	Triflumuron is a toxic hazard to juvenile aquatic and terrestrial arthropods
Environmental fate, persistence and degradation:	Degradation of active constituent – half life: t 1/2: 960 days at pH4 (220C) t 1/2: 580 days at pH7 (220C) t 1/2: 11 days at pH9 (220C)

### SECTION 13. DISPOSAL CONSIDERATIONS

**Metal drums and plastic containers** Triple or preferably pressure rinse containers before disposal. Add rinsings 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.

### SECTION 14. TRANSPORT INFORMATION

#### **ADG**

UN-Number:	3077
Class:	9
Subsidiary Risk:	None
Packaging group:	III

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Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,  
N.O.S.  
(PERMETHRIN MIXTURE)  
Hazchem Code: 2Z

According to AU01, Environmental Hazardous Substances in packagings, IBC or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

### SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994. Australian Pesticides and Veterinary Medicines Authority approval number: 69956/62168. See also Section 2.

### SECTION 16. OTHER INFORMATION

#### Trademark information

® Starrdust is a registered trademark of Sundew Solutions Pty Ltd.

This MSDS 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 should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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.

#### Further details on the Occupational Exposure Standards mentioned in Section 8

CEILING: Ceiling Limit Value

OES Sundew Solutions: Internal Sundew Solutions "Occupational Exposure Standard"

PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.

SKIN\_DES: Skin notation: Absorption through the skin may be a significant source of exposure.

TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

END OF MSDS