SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: Coopex® Insecticidal Dusting Powder Industrial Strength
Other names: None
Product code (UVP): 06068847
Recommended use: Insecticide

Chemical formulation: Dustable powder (DP)
Company: Bayer CropScience Pty. Ltd.
ABN 87 000 226 022
391-393 Tooronga Road, East Hawthorn
Victoria 3123, Australia

Telephone: (03) 9248 6888
Technical Information Service: 1800 804 479
Facsimile: (03) 9248 6800
Website: www.bayeres.com.au
Contact: (03) 9248 6888 Technical Manager
Emergency telephone no.: 1800 033 111 Orica SH&E Shared Services

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

HAZARDOUS SUBSTANCE DANGEROUS GOODS

R-phrase(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-phrase(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, Coopex 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 25:75 10 g/kg

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>52645-53-1</td>
<td>1.06</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>0.88</td>
</tr>
<tr>
<td>Other ingredients (non-hazardous) to 100 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 polyethylene glycol 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 (CO₂)
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 with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>52645-53-1</td>
<td>10 mg/m³ (TWA)</td>
<td>OES BCS</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>2.5 mg/m³ (TWA)</td>
<td>AU OEL</td>
</tr>
</tbody>
</table>

Personal protective equipment - End user
Respiratory protection: Disposable dust mask.
Hand protection: Rubber gloves.
Skin and body protection: Long-sleeved shirt and long pants.
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: No data available
- Odour: No data available

**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-octanol/water: No data available

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

**Potential health effects**
- Inhalation: Dusts may cause upper respiratory tract irritation, coughing.
- Skin: May cause irritation. Avoid contact with skin.
Eye: May cause mild irritation to eyes.
Ingestion: Low acute oral toxicity.

**Animal toxicity studies**

**Acute oral toxicity:** LD₅₀ (rat): 1479 mg/kg
The value mentioned relates to the active ingredient permethrin.

**Acute dermal toxicity:** LD₅₀ (rabbit): > 2000 mg/kg
The value mentioned relates to the active ingredient permethrin.

**Inhalation toxicity:** LC₅₀ (3 hr) (mice and rats) >685 mg/m³ air
The value mentioned relates to the active ingredient permethrin.

**Skin irritation:** Mild irritant (rabbit).
The value mentioned relates to the active ingredient permethrin.

**Eye irritation:** Mild irritant (rabbit).
The value mentioned relates to the active ingredient permethrin.

**Sensitisation:** Not a skin sensitiser.
The value mentioned relates to the active ingredient permethrin.

**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.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity effects**

**Toxicity to fish:** LC₅₀ (Guppy (*Poecilia reticulata*)) 0.0076 mg/L
Exposure time: 96 h
The value mentioned relates to the active ingredient permethrin.

**Toxicity to aquatic invertebrates:** EC₅₀ (Water flea (*Daphnia magna*)) 0.00017 mg/L
Exposure time: 48 h
The value mentioned relates to the active ingredient permethrin.

**Toxicity to aquatic plants:** EC₅₀ (*Selenastrum capricornutum*) 0.497 mg/L
Exposure time: 96 h
The value mentioned relates to the active ingredient permethrin.

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

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

IMDG

UN-Number: 3077
Class: 9
Subsidiary Risk: None
Packaging group: III
EmS: F-A, S-F
Marine pollutant: YES
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE)

IATA

UN-Number: 3077
Class: 9
Subsidiary Risk: None
Packaging group: III
Environm. Hazardous Mark: YES
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PERMETHRIN MIXTURE)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994.

Australian Pesticides and Veterinary Medicines Authority approval number: 33210.

See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information

Coopex® is registered trademark of the Bayer Group.

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 should read this SDS 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 BCS**: Internal Bayer CropScience "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 SDS