1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name: Coopex® Insecticidal Dusting Powder Industrial Strength
Other names: None
Product code: 4208462 (10 kg)
Chemical group: Pyrethroid
Recommended use: A ready-to-use insecticidal dusting powder
Formulation: Dust
Supplier: Bayer Environmental Science – A Business Group of Bayer CropScience Pty Ltd
Address: ABN 87 000 226 022
391 - 393 Tooronga Road, East Hawthorn
Victoria 3123, Australia
Telephone: (03) 9248 6888
Facsimile: (03) 9248 6800
Website: www.bayercropscience.com.au
Contact: Technical Manager (03) 9248 6888
Emergency Telephone Number: 1800 033 111 – Orica SH&E Shared Services

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD
May cause sensitisation by skin contact.

Hazard designation: Hazardous – Irritant
Risk phrases: R43 – May cause sensitisation by skin contact
Safety phrases: See Sections 4, 5, 6, 7, 8, 9, 13
ADG classification: Not classified as dangerous goods.
SUSDP classification: Exempt

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS Number</th>
<th>Concentration (g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin 25:75</td>
<td>[52645-53-1]</td>
<td>10</td>
</tr>
<tr>
<td>Talc</td>
<td>[14807-96-6]</td>
<td>960</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>(non hazardous)</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: Mineral talc is used as the dust carrier for this product – the talc used in manufacture contains no asbestos fibres.
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 Material Safety Data Sheet to a doctor.

Inhalation: Remove person to fresh air. Keep at rest. Seek medical advice if exposure has been more than trivial. Administer artificial respiration if breathing has stopped.

Skin contact: Remove all contaminated clothing and shoes. Wash off skin immediately with soap and plenty of water. Apply vitamin E cream, toilet milks or local anaesthetic creams to reduce irritation if it occurs. Seek medical advice if irritation persists. Launder contaminated clothing before reuse.

Eye contact: Immediately rinse eyes thoroughly, including under eyelids, with running water for at least 15 minutes. Seek immediate medical advice.

Ingestion: Wash out mouth with water. Do not induce vomiting. Keep patient at rest and seek medical advice.

First Aid Facilities: Provide an eyewash station in the workplace.

Symptoms: Burning sensations on the skin, irritation of the mucous membranes, coughing and sneezing may be experienced. Following severe intoxication, respiratory effects can include chest tightness, airway hyperreaction, and pulmonary oedema. Possible circulatory effects include tachycardia, hypotension, and palpitations. Gastrointestinal symptoms may include nausea, vomiting, diarrhoea, abdominal pain, and salivation. Potential Central Nervous System effects are dizziness, blurred vision, headache, listlessness, anorexia, somnolence/coma, seizures/convulsions, tremor, ataxia, and muscle fasciculations.

Medical attention: There is no specific antidote. Treat symptoms.

Treatment
Basic aid, decontamination, symptomatic treatment and if necessary administration of antidote.

Note for physicians
Treat large intakes with gastric lavage, and charcoal administration. Use endotracheal intubation, and artificial respiration (if necessary). Monitor respiratory and cardiac functions. Observe electrocardiograph, and check for pulmonary oedema in event of inhalation. Anticonvulsant therapy with diazepam i.v. No antidote known. Treat symptoms.

Recovery should be spontaneous. Elimination by: dialysis, haemo-perfusion.

Contraindication – adrenergic compounds, atropine. DO NOT confuse with anticholinesterase compounds. Skin contacted by permethrin must be carefully cleaned with cleansing milk. Symptoms can be partially alleviated by the application of a vitamin E or moisturising cream or anaesthetic ointment. For eyes, instil local anaesthetic drops e.g. 1% amethocaine hydrochloride eye drops. Give analgesics as necessary.
5. FIRE FIGHTING MEASURES

Extinguishing media: Foam, dry chemical or water spray. Do not use water jet from fire hose.

Hazards from combustion products: In the event of fire, hydrogen chloride, carbon monoxide and carbon dioxide may be released.

Precautions for fire fighters: Fire fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1716), as toxic and irritating decomposition products may be produced in a fire. If it can be done safely, remove intact containers from the fire. Otherwise, use water spray to cool them. Bund area to prevent contamination of water sources. Dispose of fire control extinguishing agent and spillage later in a safe manner. Do not release contaminated water into the environment.

6. ACCIDENTAL RELEASE MEASURES

Dealing with spills and disposals may result in the potential for increased personal exposure. Protective clothing and equipment as described in the PERSONAL PROTECTION section should be worn. Avoid contact with spilled material or contaminated surfaces. Keep people and animals away. Prevent spill from entering drains, sewers or any body of water. Sweep up into sealable containers for disposal in accordance with applicable local, state and federal regulations.

7. HANDLING AND STORAGE

Handling: Keep out of reach of children. Avoid contact with eyes and skin.

Storage: Store product in the closed, original container in a cool, well-ventilated area away from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards: No exposure standard has been assigned by the National Occupational Health and Safety Commission (Worksafe Australia).

Engineering controls: Control process conditions to avoid contact. Use local exhaust ventilation.

Personal Protective Equipment: Eyes: Avoid contact with the eyes. Clothing: Avoid contact with skin. Wear suitable protective clothing. Protective clothing must be stored separately from private clothing. Gloves: Avoid contact with skin. Wear rubber gloves. Respiratory: Do not inhale dust. Wear an approved respirator to prevent inhalation, if other control measures are inadequate. Other: Wash thoroughly after handling. Do not eat, drink or smoke until after washing. After each day’s use wash gloves and contaminated clothing.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White powder</td>
</tr>
<tr>
<td>Odour</td>
<td>No detectable odour</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Negligible</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing/melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Practically insoluble</td>
</tr>
<tr>
<td>Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Octanol/water partition coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Formulation</td>
<td>DP – Dustable Powder</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

- **Chemical stability:** Stable under normal conditions of use.
- **Conditions to avoid:** Avoid iron, alloys, oxidisers, strong acids and halogens.
- **Incompatible materials:** Iron, alloys, oxidisers, strong acids and halogens.
- **Hazardous decomposition products:** In the event of fire, hydrogen chloride, carbon monoxide and carbon dioxide may be released.
11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation: Inhalation of dust may produce respiratory irritation.

Skin contact: May irritate the skin. The material should not be allowed to come into contact with the skin.

Eye contact: Mildly Irritating. The material should not be allowed to contact the eyes.

Ingestion: The product is of low toxicity.

ANIMAL TOXICITY DATA - ACTIVE INGREDIENT:

Acute:

Oral toxicity: LD₅₀ rat: 1479 mg/kg (Permethrin 25:75 in corn oil)

Dermal toxicity: LD₅₀ rabbit: > 2000 mg/kg (Permethrin)

Inhalation toxicity: LC₅₀ (3 hr) for mice and rats >685 mg/m³ air (permethrin)

Skin irritation: Mild irritant – rabbit (Permethrin)

Eye irritation: Mild irritant – rabbit (Permethrin)

Sensitisation: Studies carried out by Bayer on Permethrin technical material indicate that it is not a skin sensitiser.

Chronic:

Permethrin is not mutagenic, teratogenic or carcinogenic.
12. ECOLOGICAL INFORMATION

DO NOT contaminate streams, rivers, or waterways with the chemical or used containers.

Fish toxicity: \( LC_{50} \) (96h): 2.5 \( \mu \)g/L rainbow trout (permethrin)
\( LC_{50} \) (48h): 1.8 \( \mu \)g/L bluegill sunfish (permethrin)

Daphnia toxicity: \( LC_{50} \) (48h): 0.6 \( \mu \)g/L (permethrin)

Toxicity to algae: Data not available

Bird toxicity: \( LD_{50} \): >3000 mg/kg chickens (permethrin)
\( LD_{50} \): >9800 mg/kg mallard ducks (permethrin)
\( LD_{50} \): >13500 mg/kg Japanese quail (permethrin)

Bee toxicity: \( LD_{50} \) (24h) (oral): 0.098 \( \mu \)g/bee; (contact): 0.029 \( \mu \)g/bee

Environmental fate, persistence and degradation:
Permethrin degrades rapidly in soil and water.

13. DISPOSAL CONSIDERATIONS

Single rinse before disposal. Dispose of rinsings in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. 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

UN number: Not applicable
Proper shipping name: Not applicable
Class and Subsidiary Risk: Not “dangerous goods” for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
Packing Group: Not applicable
EPG: Not applicable
Hazchem code: Not applicable
Marine pollutant: No
15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988
Australian Pesticides and Veterinary Medicines Authority approval number: 33210

16. OTHER INFORMATION

Trademark information: Coopex® is a Registered Trademark of Bayer.

Data sources: Bayer CropScience Pty Ltd product safety data and published data

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.

END OF MSDS