SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: Cislin® Residual Insecticide
Other names: None
Product code (UVP): NA
Recommended use: Insecticide
Chemical formulation: Suspension Concentrate (=flowable concentrate) (SC)
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

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, 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, Cislin Residual Insecticide is a MARINE POLLUTANT. See Section 14.
SUSMP classification (Poison Schedule): Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Deltamethrin 10 g/L

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltamethrin</td>
<td>52918-63-5</td>
<td>1.00</td>
</tr>
<tr>
<td>1,2-Propanediol</td>
<td>57-55-6</td>
<td>6.00</td>
</tr>
<tr>
<td>Aqueous mixture of 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7]</td>
<td>55965-84-9</td>
<td>~0.25</td>
</tr>
</tbody>
</table>
and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
Other ingredients (non-hazardous) to 100 %

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
Move the victim to fresh air and keep 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 Vit E may be considered. Clean contaminated clothing and shoes before re-use or discard if they cannot be thoroughly cleaned. If signs of poisoning occur, call a physician immediately.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation or redness persist, see an ophthalmologist.

Ingestion
Rinse mouth. Do NOT induce vomiting. Keep patient warm and at rest. If symptoms persist, call a physician. If conscious give immediately one glass of water to drink.

Notes to physician

Symptoms
Burning sensation, burns on skin and mucosal tissues, airway hyperreaction, pulmonary oedema, tachycardia, hypotension, palpitation, 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. ECG - monitoring (Electrocardiogram). There is no specific antidote. Elimination by dialysis (forced alkaline diuresis). Contraindication: atropine. In case of irritation, application of oils or lotions containing vitamin E may be considered. Contraindication: derivatives of adrenaline.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media
Water spray
Carbon dioxide (CO2)
Hazards from combustion products
In the event of fire the following may be released:
Hydrogen cyanide (hydrocyanic acid)
Hydrogen bromide (HBr)
Nitrogen oxides (NOₓ)
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.
Whenever possible, contain fire-fighting water by diking area with sand or earth.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code  •3Z

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid contact with spilled product or contaminated surfaces.
When dealing with spillage do not eat, drink or smoke.
Use personal protective equipment.
Keep unauthorized people away.

Environmental precautions
Contain contaminated water and fire fighting water.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up
Dike area to prevent runoff.
Collect and transfer product into a properly labeled and tightly closed container.

Additional advice
Inform appropriate authorities immediately if contamination occurs.
Information regarding safe handling, see Section 7.
Information regarding personal protective equipment, see Section 8.
Information regarding waste disposal, see Section 13.

SECTION 7. HANDLING AND STORAGE

Handling
Hygiene measures:
Avoid contact with skin, eyes and clothing.
Keep away from food, drink and animal feedingstuffs.

Storage
Requirements for storage areas and containers:
Keep out of the reach of children.
Store in a cool, dry place and in such a manner as to prevent cross contamination with other
crop protection products, fertilizers, food and feed.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep away from direct sunlight.
Protect from frost.

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>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deltamethrin</td>
<td>52918-63-5</td>
<td>0.02 mg/m³</td>
<td></td>
<td>OES BCS</td>
</tr>
<tr>
<td>1,2-Propanediol (Total vapour and particulates)</td>
<td>57-55-6</td>
<td>474 mg/m³ / 150 ppm</td>
<td>08 2005</td>
<td>AU OEL</td>
</tr>
<tr>
<td>1,2-Propanediol (Particulate)</td>
<td>57-55-6</td>
<td>10 mg/m³ (TWA)</td>
<td>08 2005</td>
<td>AU OEL</td>
</tr>
</tbody>
</table>

For further details on the Occupational Exposure Standards, see Section 16.

Personal protective equipment - End user
General advice: Eye wash facility and safety shower should be available.
Hand protection: Elbow-length PVC or nitrile gloves.
Eye protection: Face-shield.
Skin and body protection: Cotton overall buttoned to the neck and wrist. Washable hat.

Engineering controls
Advice on safe handling:
Use only in area provided with appropriate exhaust ventilation.
Avoid contact with skin, eyes and clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: Liquid
Colour: White
Odour: Practically no odour

Safety data
pH: <6 (undiluted)
Flash point: No data available
Ignition temperature: No data available
Upper explosion limit: No data available
Lower explosion limit: No data available
Vapour pressure: As water
Relative vapour density: No data available
Density: ca. 1.01 g/cm³ at 20 °C
Water solubility: Forms a suspension
Partition coefficient: n-octanol/water: No data available

SECTION 10. STABILITY AND REACTIVITY

Materials to avoid: Oxidizing agents
Strong acids
Alkali metals
Hazardous decomposition products:
Hydrogen cyanide (hydrocyanic acid)
Hydrogen bromide (HBr)
Nitrogen oxides (NOx)
Carbon oxides
Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.

SECTION 11. TOXICOLOGICAL INFORMATION

Potential health effects
Inhalation: Inhalation not likely. May cause irritation of the mucous membranes.
Skin: May irritation by skin contact.
Eye: May cause slight irritation.
Ingestion: May be harmful if swallowed.

Animal toxicity studies
Acute oral toxicity: LD₅₀ (rat) >10,000 mg/kg
Acute inhalation toxicity: LC₅₀ (rat) 2.3 mg/L
Exposure time: 4 h
Acute dermal toxicity: LD₅₀ (rat) > 10,000 mg/kg
Skin irritation: Slight irritant (rabbit).
Eye irritation: No eye irritation (rabbit).
Sensitisation: Not sensitising (guinea pig).

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).
Deltamethrin is not mutagenic, carcinogenic or teratogenic.

### SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

**Toxicity to fish:**

$LC_{50}$ (*Oncorhynchus mykiss* (Rainbow trout)) 0.00091 mg/L

Exposure time: 96 h

The value mentioned relates to the active ingredient deltamethrin.

**Toxicity to aquatic invertebrates:**

$EC_{50}$ (*Water flea (Daphnia magna)*) 0.00056 mg/L

Exposure time: 48 h

The value mentioned relates to the active ingredient deltamethrin.

**Toxicity to aquatic plants:**

$EC_{50}$ (Algae) > 9.1 mg/L

Exposure time: 96 h

The value mentioned relates to the active ingredient deltamethrin.

**Bioaccumulation:**

*Lepomis macrochirus* (Bluegill sunfish)

Bioconcentration factor (BCF): 1,400

The value mentioned relates to the active ingredient deltamethrin.

### 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:** 3082
- **Class:** 9
- **Subsidiary Risk:** None
- **Packaging group:** III
- **Description of the goods:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN SOLUTION)
- **Hazchem Code:** •3Z

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:** 3082
- **Class:** 9
- **Subsidiary Risk:** None
- **Packaging group:** III
- **EmS:** F-A, S-F
Marine pollutant: YES

Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN SOLUTION)

IATA

UN-Number: 3082
Class: 9
Subsidiary Risk: None
Packaging group: III
Environm. Hazardous Mark: YES
Description of the goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTAMETHRIN SOLUTION)

SECTION 15. REGULATORY INFORMATION

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

Australian Pesticides and Veterinary Medicines Authority approval number: 32223.

See also Section 2.

SECTION 16. OTHER INFORMATION

Trademark information
Cislin® 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.

Reason for revision: Changed name from Material Safety Data Sheet to Safety Data Sheet.

END OF SDS