SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier
Trade name: Cislin® 25 Professional Insecticide
Product code (UVP): 81677964

1.2 Relevant identified uses of the substance or mixture and uses advised against
Use: Insecticide

1.3 Details of the supplier of the safety data sheet
Supplier: Bayer Cropscience Pty Ltd
ABN 87 000 226 022
Level 1, 8 Redfern Road
3123 Hawthorn East
Victoria
Australia
Telephone: (03) 9248 6888
Telefax: (03) 9248 6800
Responsible Department: 1800 804 479 Technical Information Service
Website: www.environmentalscience.bayer.com.au

1.4 Emergency telephone no.
Emergency telephone no.: 1800 033 111 IXOM Operations Pty Ltd

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification in accordance with Australian GHS Regulation
Skin sensitisation: Category 1
H317 May cause an allergic skin reaction.
Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.
Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements
Hazard label for supply/use required.

Hazardous components which must be listed on the label:
Deltamethrin

Signal word: Warning

Hazard statements
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements

P261 Avoid breathing mist.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves.
P302 + P352 IF ON SKIN: Wash with plenty of water/ soap.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards
No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Deltamethrin 25 g/l  
Chemical nature  Suspension concentrate (=flowable concentrate)(SC)

<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>2.45</td>
</tr>
<tr>
<td>Mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one</td>
<td>55965-84-9</td>
<td>&gt; 0.0015 - &lt; 1.00</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.

4.1 Description of first aid measures

General advice  Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.

Inhalation  Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.

Skin contact  Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.

Eye contact  Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed anaesthetic eye drops. Get medical attention if irritation develops and persists.
Ingestion
Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms
Local:: Skin and eye paraesthesia which may be severe, Usually transient with resolution within 24 hours, Skin, eye and mucous membrane irritation, Cough, Sneezing
Systemic:: discomfort in the chest, Tachycardia, Hypotension, Nausea, Abdominal pain, Diarrhoea, Vomiting, Blurred vision, Headache, anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, Pulmonary oedema, Palpitation, Muscular fasciculation, Apathy, Dizziness

4.3 Indication of any immediate medical attention and special treatment needed
Risks
This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.

Treatment
Systemic treatment: Initial treatment: symptomatic. Monitor: respiratory and cardiac functions. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Keep respiratory tract clear. Oxygen or artificial respiration if needed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not effective, phenobarbital may be used. Contraindication: atropine. Contraindication: derivatives of adrenaline. There is no specific antidote. Recovery is spontaneous and without sequelae.

In case of skin irritation, application of oils or lotions containing vitamin E may be considered.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media
Suitable
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable
High volume water jet

5.2 Special hazards arising from the substance or mixture
Dangerous gases are evolved in the event of a fire.

5.3 Advice for firefighters

Special protective equipment for firefighters
In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information
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.

Hazchem Code
•3Z
SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions
Keep people away from and upwind of spill/leak. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke. Use personal protective equipment.

6.2 Environmental precautions
Retain and dispose of contaminated wash water. Do not allow to get into surface water, drains and ground water. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice
Check also for any local site procedures.

6.4 Reference to other sections
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

7.1 Precautions for safe handling

Advice on safe handling
Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion
Keep away from heat and sources of ignition.

Hygiene measures
Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).
Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. After each day’s use, wash gloves, face shield or goggles and contaminated clothing. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers  Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Store in a place accessible by authorized persons only. Keep away from direct sunlight. Protect from freezing. Keep out of the reach of children. Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Protect from freezing.

Advice on common storage  Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 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 (TWA)</td>
<td></td>
<td>OES BCS*</td>
</tr>
</tbody>
</table>

*OES BCS: Internal Bayer CropScience “Occupational Exposure Standard”

8.2 Exposure controls

Respiratory protection  Respiratory protection is not required under anticipated circumstances of exposure. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer’s instructions regarding wearing and maintenance.

Hand protection  Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Material  Nitrile rubber
Rate of permeability  > 480 min
Glove thickness  > 0.4 mm
Protective index  Class 6
Directive  Protective gloves complying with EN 374.

Eye protection  Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection  Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure, consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully
remove and dispose of as advised by manufacturer.

**General protective measures**
In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

**Engineering Controls**
**Advice on safe handling**
Use only in area provided with appropriate exhaust ventilation.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
- **Form** suspension
- **Colour** white
- **pH** 3.0 - 5.0 at 100 % (23 °C)
- **Density** ca. 1.02 g/cm³ at 20 °C
- **Water solubility** miscible
- **Partition coefficient: n-octanol/water** Deltamethrin: log Pow: 6.4 at 25 °C
- **Viscosity, dynamic** 240 - 400 mPa·s at 20 °C Velocity gradient 20 /s

9.2 Other information
Further safety related physical-chemical data are not known.

### SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity
- **Thermal decomposition** Stable under normal conditions.

10.2 Chemical stability
- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
- No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid
- Extremes of temperature and direct sunlight.

10.5 Incompatible materials
- Store only in the original container.

10.6 Hazardous decomposition products
- No decomposition products expected under normal conditions of use.

### SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
- **Acute oral toxicity** LD50 (Rat) > 15,000 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  
No skin irritation (Rabbit)

Eye irritation  
No eye irritation (Rabbit)

Sensitisation  
Non-sensitizing. (Guinea pig)

Assessment mutagenicity  
Deltamethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity  
Deltamethrin was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction  
Deltamethrin did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity  
Deltamethrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Deltamethrin are related to maternal toxicity.

Assessment STOT Specific target organ toxicity – repeated exposure  
Deltamethrin caused neurobehavioral effects and/or neuropathological changes in animal studies. The toxic effects of Deltamethrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Aspiration hazard  
Based on available data, the classification criteria are not met.

Information on likely routes of exposure  
Inhalation not likely. May cause irritation of the mucous membranes.  
May cause sensitisation by skin contact.  
May cause slight irritation.  
May be harmful if swallowed.

Early onset symptoms related to exposure  
Refer to Section 4

Delayed health effects from exposure  
Refer to Section 11

Exposure levels and health effects  
Refer to Section 4

Interactive effects  
Not known

When specific chemical data is not available  
Not applicable

Mixture of chemicals  
Refer to Section 2.1

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).
The toxicological data refer to a similar formulation.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish
LC50 (Oncorhynchus mykiss (rainbow trout)) 0.15 µg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient deltamethrin.

Toxicity to aquatic invertebrates
EC50 (Daphnia magna (Water flea)) 0.0131 µg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient deltamethrin.

Toxicity to aquatic plants
EC50 (Algae) > 9.1 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient deltamethrin.

12.2 Persistence and degradability

Biodegradability
Deltamethrin: Not rapidly biodegradable

Koc
Deltamethrin: Koc: 10240000

12.3 Bioaccumulative potential

Bioaccumulation
Deltamethrin: Bioconcentration factor (BCF) 1,400
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil
Deltamethrin: Immobile in soil

12.5 Other adverse effects

Additional ecological information
No further ecological information is available.

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
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTA METHRIN SOLUTION)

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
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Marine pollutant YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTA METHRIN SOLUTION)

IATA
UN number 3082
Transport hazard class(es) 9
Subsidiary Risk None
Packaging group III
Environm. Hazardous Mark YES
Description of the goods ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DELTA METHRIN SOLUTION)

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 62147

SUSMP classification (Poison Schedule)
Schedule 5 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 16. OTHER INFORMATION

Trademark information Cislin® is a 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.

Abbreviations and acronyms

- **ADN**: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- **ADR**: European Agreement concerning the International Carriage of Dangerous Goods by Road
- **ATE**: Acute toxicity estimate
- **AU OEL**: Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)
- **CAS-Nr.**: Chemical Abstracts Service number
- **CEILING**: Ceiling Limit Value
- **Conc.**: Concentration
- **EC-No.**: European community number
- **ECx**: Effective concentration to x %
- **EINECS**: European inventory of existing commercial substances
- **ELINCS**: European list of notified chemical substances
- **EN**: European Standard
- **EU**: European Union
- **IATA**: International Air Transport Association
- **IBC**: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
- **ICx**: Inhibition concentration to x %
- **IMDG**: International Maritime Dangerous Goods
- **LCx**: Lethal concentration to x %
- **LDx**: Lethal dose to x %
- **LOEC/LOEL**: Lowest observed effect concentration/level
- **MARPOL**: MARPOL: International Convention for the prevention of marine pollution from ships
- **N.O.S.**: Not otherwise specified
- **NOEC/NOEL**: No observed effect concentration/level
- **OECD**: Organization for Economic Co-operation and Development
- **OES BCS**: OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"
- **PEAK**: 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.
- **RID**: Regulations concerning the International Carriage of Dangerous Goods by Rail
- **SK-SEN**: Skin sensitiser
- **SKIN_DES**: SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.
- **STEL**: 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.
- **TWA**: 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.
- **UN**: United Nations
- **WHO**: World health organisation