

# MATERIAL SAFETY DATA SHEET

## Cislin Residual Insecticide

Date of Issue: October 9, 2002

### 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

**Product name:** Cislin<sup>®</sup> Residual Insecticide  
**Other names:** K-Obiol<sup>®</sup>  
**Product code:** AE F032640 00 SC01 B1  
**SAP product code:** 131512 (2.5 L), 195499 (5 L), 998429 (10 L)  
**Recommended use:** A liquid insecticide concentrate for use as a general purpose pest control spray  
**Supplier:** Bayer Environmental Science – A Business Group of Bayer CropScience Pty Ltd ABN 87 000 226 022  
**Address:** 391 - 393 Tooronga Road, East Hawthorn Victoria 3123, Australia  
**Telephone:** (03) 9248 6888  
**Facsimile:** (03) 9248 6800  
**Website:** [www.bayercropscience.com.au](http://www.bayercropscience.com.au)  
**Contact:** Technical Manager (03) 9248 6854  
**Emergency Telephone Number:** 1800 033 111 – Orica SH&E Shared Services

### 2. HAZARDS IDENTIFICATION

#### NON-HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD

Will irritate eyes and skin. Not flammable.

**Hazard designation:** Not classified as hazardous according to criteria of Worksafe Australia.  
**Risk phrases:** Not applicable  
**Safety phrases:** Not applicable  
**ADG classification:** Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.  
**SUSDP classification:** Schedule 5 (Standard for the Uniform Scheduling of Drugs and Poisons)

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Concentration (g/L):
Deltamethrin	[52918-63-5]	10
Propylene glycol	[57-55-6]	60
Other ingredients	(non hazardous)	940

### 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:** If inhaled, remove to fresh air and keep at rest. Loosen clothes. Obtain medical advice if at all worried. Restore and/or support breathing as

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required.

In extreme cases of exposure; if breathing stops or shows signs of failing, start artificial respiration.

**Skin contact:** Carefully remove contaminated clothing and footwear. Wash affected areas with soap and water. Apply vitamin E cream, toilet milks or local anaesthetic creams to reduce irritation if it occurs. Seek medical advice if at all worried. Launder contaminated clothing before re-use.

**Eye contact:** Rinse immediately with plenty of water for at least 15 minutes, holding eye open. Seek advice from an ophthalmologist.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. Keep patient at rest and seek medical advice as above. Do not apply mouth to mouth resuscitation if the material has been ingested.

**First Aid Facilities:** Ensure eye wash and safety shower are available when handling this product.

**Symptoms:** Symptoms include burning sensations in the mouth, headache, dizziness, drowsiness, diarrhoea, nausea, vomiting, listlessness, stomach pain, muscular twitching or arms or legs, unconsciousness, convulsions and coma (very high doses).

**Medical attention:** 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 deltamethrin 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:** Water spray, carbon dioxide, foam, dry chemical. Do not use a water jet from a fire hose.

**Hazards from combustion products:** Not known to produce hazardous reactions.

**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

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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

Avoid contact with spilled material or contaminated surfaces. When dealing with the spillage do not eat, drink or smoke and wear personal protective clothing and equipment as detailed in 'Personal Protection' section. Keep people and animals away. Prevent spillage from entering drains, sewers or watercourses. Contain/absorb spillage in sand/earth or other suitable inert material. Transfer collected material to sealable containers. Seal and label containers ready for disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.

### 7. HANDLING AND STORAGE

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

**Storage:** Store in original container in a cool, dry, well-ventilated area. Keep away from food, drink and animal feeds. Keep out of direct sunlight and avoid frosts.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure standards:** No exposure standard has been assigned by the National Occupational Health and Safety Commission (Worksafe Australia). Bayer recommends an Occupational Exposure Standard for deltamethrin of 0.28 mg/m<sup>3</sup>. The manufacturer of propylene glycol recommends a TWA exposure limit of 10 mg/m<sup>3</sup> mist (400 ppm vapour).

**Engineering controls:** No special ventilation is required, as this product is not volatile. Control process conditions to avoid contact. Use local exhaust ventilation while spraying, if possible.

**Personal Protective Equipment:** Eyes: Wear face shield.  
Clothing: When preparing spray and using the prepared spray wear cotton overalls buttoned to the neck and wrist and a washable hat.  
Gloves: Elbow-length PVC gloves.  
Respiratory: Wear a suitable respiratory mask (eg. with Class P1 particulate filter) while spraying.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White liquid.  
**Odour:** Practically no odour  
**Vapour pressure:** As water

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**Vapour density:** Not available  
**Boiling point:** 100°C  
**Solubility:** Forms a suspension  
**Density:** 1.01 at 20°C  
**pH:** Not available  
**Flash Point:** Not applicable  
**Flammability (explosive) limits:** Not applicable

**Auto-ignition temperature:** Not applicable  
**Octanol/water partition coefficient:** Not available  
**Formulation:** Liquid concentrate insecticide

### 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions of use.  
**Hazardous polymerisation:** Not available

**Conditions to avoid:** Not available

**Incompatible materials:** Avoid oxidising agents, strong acids and alkalis.  
**Hazardous decomposition products:** Not Available

### 11. TOXICOLOGICAL INFORMATION

#### POTENTIAL HEALTH EFFECTS

**Inhalation:** Inhalation of the product is unlikely to occur because of its low volatility. However, inhalation of spray may cause transient irritation of mucous membranes (nose, throat and respiratory tract) for up to 24 hours.

**Skin contact:** Irritating. Contact with the skin, especially the face, may result in initial stinging or burning sensations followed by numbing which may persist for a few hours. (Although skin irritation tests in animals show deltamethrin to be non-irritating, experience has shown it to cause these symptoms on human skin.)

**Eye contact:** Irritant.

**Ingestion:** Product is harmful if swallowed.

**Other:** None

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### ANIMAL TOXICITY DATA – PRODUCT AND ACTIVE INGREDIENT:

#### Acute:

<b>Oral toxicity:</b>	LD <sub>50</sub> rat: > 10,000 mg/kg (product) LD <sub>50</sub> rat: 130 (deltamethrin)
<b>Dermal toxicity:</b>	LD <sub>50</sub> rat: > 10,000 mg/kg (product) LD <sub>50</sub> rabbit: > 2,000 mg/kg (deltamethrin)
<b>Inhalation toxicity:</b>	LC <sub>50</sub> (4 h) rat: 2.2 mg/L (deltamethrin)
<b>Skin irritation:</b>	Non-irritating – rabbit (deltamethrin)
<b>Eye irritation:</b>	Slight irritant – rabbit (deltamethrin)
<b>Sensitisation:</b>	Not sensitising - guinea pig (deltamethrin)

#### Chronic:

Deltamethrin is not mutagenic, carcinogenic or teratogenic.

## 12. ECOLOGICAL INFORMATION

Deltamethrin is highly toxic to fish, aquatic organisms and bees in laboratory studies, but considered less toxic under natural conditions.

<b>Fish toxicity:</b>	Deltamethrin: LC <sub>50</sub> : 0.001 – 0.01 mg/L (96 h) fish.
<b>Daphnia toxicity:</b>	Not available
<b>Toxicity to algae:</b>	Not available
<b>Bird toxicity:</b>	Deltamethrin: LD <sub>50</sub> : > 5,000 mg/kg duck Deltamethrin: LD <sub>50</sub> : > 10,000 mg/kg quail
<b>Bee toxicity:</b>	Deltamethrin found to be highly toxic in lab studies but considered less toxic under natural conditions.
<b>Other:</b>	None
<b>Environmental fate, persistence and degradation:</b>	Deltamethrin is not persistent in the environment. It is destroyed by soil micro-organisms and does not leave residues in the environment or build up in the food chain. Do not contaminate streams, rivers or waterways with the product or used containers.

## 13. DISPOSAL CONSIDERATIONS

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Triple or preferably pressure rinse containers before disposal. Add rinsings to treatment mixture. 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. Dispose of waste product through a reputable waste contractor. If disposal of unwanted treated seed is necessary, bury seed below 500 mm in a disposal pit, specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots.

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### 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

### 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988

National Registration Authority approval number: 32223

### 16. OTHER INFORMATION

**Trademark information:** Cislin<sup>®</sup> and K-Obiol<sup>®</sup> and are Registered Trademarks of Bayer.

**Preparation information:** Replaces January 2, 2002 edition.  
Reason for update: Conversion to 16 heading format.

**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