

MATERIAL SAFETY DATA SHEET

Responсар Beta SC Professional Insecticide

Date of Issue: October 15, 2002

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name: Responсар Beta SC Professional Insecticide
Other names: None
Product code: 66696
Recommended use: Insecticide spray for general pest control use
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
Contact: Technical Manager (03) 9248 6854
Emergency Telephone Number: 1800 033 111 – Orica SH&E Shared Services

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE - NON-DANGEROUS GOOD

Will irritate eyes and skin. Not flammable.

Hazard designation: Hazardous according to criteria of Worksafe Australia
Risk phrases: R22 – Harmful if swallowed
R36 – Irritating to the eyes
R38 – Irritating to the skin
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 6 (Standard for the Uniform Scheduling of Drugs and Poisons)

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredients: | CAS Number: | Concentration (g/L): |
|----------------|--------------|----------------------|
| Betacyfluthrin | [68359-37-5] | 125 |
| Emulsifiers | - | Med |
| Sulphuric acid | (7664-93-9) | Very low |
| Water | [7732-18-5] | Very high |

Proportion (%w/v): V. low = <1%; Med = 10-29%; V. high = >60%

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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: | Seek medical advice. |
| Skin contact: | Remove any contaminated clothing and wash skin area thoroughly with soap and water. |
| Eye contact: | Hold eye open and flood with water for at least 15 minutes and see a doctor. |
| Ingestion: | Seek medical advice. Remove from contaminated area. Apply artificial respiration if not breathing. |
| First Aid Facilities: | Provide washing facilities in the workplace. |
| Symptoms: | No specific symptoms of overexposure. Tingling sensations may be felt in skin and mucous membranes exposed to the chemical. Exposure to spray mist may cause nasal irritation. |
| Medical attention: | Apply basic aid and decontamination procedures. Treat symptomatically. There is no specific antidote. The presenting signs of overexposure usually relate to hyperaesthesia of nerve endings in skin and mucous membranes exposed to the chemical. These signs can only be treated symptomatically and resolve spontaneously within 24-48 hours. The skin and mucous membrane hyperaesthesia results from direct contact, not from systemic distribution of the chemical. |

5. FIRE FIGHTING MEASURES

| | |
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| Extinguishing media: | Sprayed water jet, foam, extinguishing powder, CO ₂ , sand. |
| Hazards from combustion products: | None |
| Precautions for fire fighters: | Fight fire in the early stages if safe to do so. Wear respiratory protection. In well ventilated areas wear full face mask with combination filter, eg., ABEK-P2 (offers no protection from carbon monoxide). In enclosed premises use a respirator with independent air supply. Contain firefighting water. |

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6. ACCIDENTAL RELEASE MEASURES

After spillage/leakage/gas leakage:

Prevent spillage from spreading or entering waterways and underground drains. Take up with absorbent material such as sawdust, peat, or chemical binding agent. Fill material, along with any contaminated soil etc., into sealable containers. Clean affected area with an aqueous detergent and a small amount of water. Absorb this with hydrated lime and place in a sealable container. Spread hydrated lime over the affected area. Do not smoke, eat or drink during clean-up operations.

7. HANDLING AND STORAGE

Handling: Keep out of reach of children.

Storage: Store away from food, drink or animal feeding stuffs. Store below 30°C. Keep away from heat or moisture. To protect the quality of the product, avoid temperatures below minus 10°C and above 40°C. Store so that unauthorised persons do not have access.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards: NOHSC has not determined exposure standards for betacyfluthrin or any of the other ingredients in the formulation except:
Sulphuric acid TWA 1 mg/cu metre (ACGIH)
STEL 3 mg/cu metre (ACGIH)
Sulphuric acid is present in the product only at extremely low levels as a pH adjuster.

Engineering controls: No engineering controls are required for the normal use of this product according to label.

Personal Protective Equipment: Harmful if absorbed by skin contact, inhaled or swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Do not inhale vapour and spray mist. When preparing the spray, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow length PVC gloves and half-facepiece respirator. When using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat, and rubber gloves. After use and before eating, drinking or smoking, wash hands, arms, and face thoroughly with soap and water. After each day's use wash gloves, respirator or face piece, and contaminated clothing.

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9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|------------------------------|
| Appearance: | Beige liquid suspension |
| Odour: | Slight characteristic smell |
| Vapour pressure: | Not relevant |
| Vapour density: | Not available |
| Viscosity: | 600-900 mPa.s DIN 53211 |
| Boiling point: | Approx 100°C |
| Freezing/melting point: | Not available |
| Solubility: | Miscible |
| Density: | Approx 1.06 kg/litre at 20°C |
| pH: | 3.0-7.0 undiluted |
| Flash Point: | Not relevant |
| Flammability | Not relevant |
| (explosive) limits: | |
| Auto-ignition temperature: | Not relevant |
| Octanol/water partition coefficient: | Not relevant |
| Formulation: | Suspension concentrate |

10. STABILITY AND REACTIVITY

| | |
|--|---|
| Chemical stability: | Product is stable and not flammable. |
| Hazardous polymerisation: | Hazardous polymerisation is unlikely to occur. |
| Conditions to avoid: | Avoid temperatures below minus 10°C and above 40°C. |
| Incompatible materials: | Not available |
| Hazardous decomposition products: | Not relevant |

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

| | |
|----------------------|--|
| Inhalation: | Exposure to spray mist may cause nasal irritation. |
| Skin contact: | Will irritate the skin. |
| Eye contact: | Will irritate the eyes. |

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Ingestion: Harmful if swallowed.

Other: None

ANIMAL TOXICITY DATA – PRODUCT:

Acute:

Oral toxicity: LD₅₀ rat: 776 mg/kg (females), 941 mg/kg (males)

Dermal toxicity: LD₅₀ rat: >5000 mg/kg

Inhalation toxicity: LC₅₀ rat: >1761 mg/cu metre

Skin irritation: Not irritating – rabbit

Eye irritation: Not available

Sensitisation: Not available

Chronic:

The effects of chronic human exposure to this chemical have not been determined, however betacyfluthrin has been shown to be non-carcinogenic, non-mutagenic, and non-teratogenic in laboratory species.

12. ECOLOGICAL INFORMATION

DO NOT feed treated seed or otherwise expose to wildlife or domestic birds. DO NOT contaminate streams, rivers, or waterways with the chemical, used containers, treated seed or bags which have held treated seed.

Fish toxicity: Not available

Daphnia toxicity: EC₅₀ (48 h) approx 0.002 mg/L
EC₅₀ (24 h) >0.002 mg/L

Toxicity to algae: EC₅₀ (increase in the biomass) >0.01 mg/L (72, 96 h)
EC₅₀ (growth rate) >0.01 mg/L (72, 96 h)

Bird toxicity: Not available

Bee toxicity: Not available

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Other: None

Environmental fate, persistence and degradation: Not available

13. DISPOSAL CONSIDERATIONS

- 1) After intended use: Triple rinse containers before disposal and add rinsings to the tank mix or dispose of in a disposal pit away from waterways. Destroy empty containers by breaking, crushing or puncturing them. Bury containers at a depth of 500 mm or more at a safe disposal site, or take them to a dump that does not burn its refuse. Do not burn empty containers or product.
- 2) After spill or accident: Dispose of sealed containers at an approved local waste disposal site.

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: 52198

16. OTHER INFORMATION

Trademark information: Responсар is a Registered Trademark of Bayer.

Preparation information: Replaces July 01 1999 edition.
Reason for update: Conversion to 16 heading format.

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

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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