

MATERIAL SAFETY DATA SHEET

Solfac 50 EW Professional Insecticide

Date of Issue: October 15, 2002

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product name: Solfac 50 EW Professional Insecticide
Other names: None
Product code: 66640
Recommended use: Insecticide spray for pest control and mosquito net impregnation.
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: R36 – Irritating to the skin
R38 – Irritating to the eyes
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):
Cyfluthrin	[68359-37-5]	50
Aromatic hydrocarbons	(64742-95-5)	Low
Stabilisers	-	Low
Water	[7732-18-5]	Very high

Proportion (%W/W): Low = 1-9%; 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: Not available

Skin contact: If material is on skin wash off with soap and water

Eye contact: Hold eyes open and flood with water for at least 15 minutes

Ingestion: Not available

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 primary 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

Extinguishing media: Sprayed water jet, foam, extinguishing powder, carbon dioxide, sand.

Hazards from combustion products: In the event of fire, formation of hydrogen chloride, hydrogen cyanide, hydrogen fluoride, carbon monoxide and nitrogen oxides can be anticipated.

Precautions for fire fighters: Fight fire in early stages if safe to do so.
Wear respiratory protection.
Well ventilated areas: wear full face mask with combination filter eg., ABEK-P2 (offers no protection from carbon monoxide)
Enclosed premises: wear 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 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 sealable container.

Spread hydrated lime over the affected area. Do not smoke, eat or drink during clean-up operation.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards: Exposure Standards: NOHSC has not determined exposure standards for cyfluthrin or any of the other ingredients in the product.

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

Personal Protective Equipment: Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin.
When preparing and using the spray wear rubber gloves.
After use and before eating, drinking or smoking, wash hands, arms, and face thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Milky white liquid emulsion
Odour: Aromatic
Vapour pressure: 27 hPa at 20°C, 134 hPa at 50
Vapour density: Not available
Viscosity: Discharge time 16 sec (DIN 53211)
Boiling point: Approx 100°C
Setting point: -1°C
Melting point: Not available
Solubility: Emulsifiable
Density: 1.001 kg/L at 20°C
pH: 2.5 - 3.5

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Flash Point: >100°C Not determinable due to boiling at higher temperatures.
Flammability (explosive) limits: Not relevant
Auto-ignition temperature: >500°C
Octanol/water partition coefficient: log P octanol/water 5.9-6.0 at 20°C.
Formulation: Spray insecticide for pest control and mosquito net impregnation

10. STABILITY AND REACTIVITY

Chemical stability: Product is stable. Product is water based - non flammable
Hazardous polymerisation: Hazardous polymerisation will not occur.
Conditions to avoid: Keep away from heat or moisture
Incompatible materials: Avoid strong oxidising agents.
Hazardous decomposition products: In the event of fire, formation of hydrogen chloride, hydrogen cyanide, hydrogen fluoride, carbon monoxide and nitrogen oxides can be anticipated.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

Inhalation: Not available
Skin contact: Will irritate skin
Eye contact: Will irritate eyes
Ingestion: Not available
Other: None

ANIMAL TOXICITY DATA – PRODUCT:

Acute:

Oral toxicity: LD₅₀ rat: approx 2100 mg/kg
Dermal toxicity: LD₅₀ rat: >5000 mg/kg

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Inhalation toxicity: Not available
Skin irritation: Slightly irritating – rabbit
Eye irritation: Slightly irritating – rabbit
Sensitisation: Not available

Chronic:

Cyfluthrin has been shown in animal tests to be non-carcinogenic and non-mutagenic. The effects of chronic human exposure to this chemical have not been determined.

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: LC₅₀: 0.002 mg/L (96 h) Carp (*Cyprinus carpio*)
LC₅₀: 0.0032 mg/L (96 hours) Golden orfe (*Leuciscus idus*)
LC₅₀: 0.0005 mg/L (96 hours) Rainbow trout (*Salmo gairderi*)
LC₅₀: 0.001 mg/L (96 hours) Bluegill (*Lepomis macrochirus*)
Daphnia toxicity: EC₅₀: 0.016 mg/L (48 hours) Water flea (*Daphnia magna*)

Toxicity to algae: Not available

Bird toxicity: Not available

Bee toxicity: Cyfluthrin is a toxic to bees

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.

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14. TRANSPORT INFORMATION

UN number: Not available
Proper shipping name: Not available
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: 46237

16. OTHER INFORMATION

Trademark information:

Preparation information: Replaces February 15, 2000 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