

# MATERIAL SAFETY DATA SHEET

## Solfac® Pro Residual Insecticide



Date of Issue: June 27<sup>rd</sup>, 2011

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

Product name: **Solfac® Pro Residual Insecticide**  
Other names: None  
UVP: 05113962  
Chemical group: Pyrethroid  
Recommended use: Insecticide  
Formulation: Suspension Concentrate (SC)  
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  
Technical  
Information Service: 1800 804 479  
Facsimile: (03) 9248 6800  
Website: [www.bayeres.com.au](http://www.bayeres.com.au)  
Contact: Technical Manager (03) 9248 6888  
Emergency  
Telephone Number: 1800 033 111 – Orica SH&E Shared Services

### 2. HAZARDS IDENTIFICATION

#### HAZARDOUS SUBSTANCE - DANGEROUS GOOD

Toxic by inhalation and if swallowed. May cause sensitisation by skin contact.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard designation: Hazardous (National Occupational Health and Safety Commission - NOHSC)

Risk phrases: R23/25 – Toxic by inhalation and if swallowed.  
R43 – May cause sensitisation by skin contact.

Safety phrases: 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, Solfac Pro Residual Insecticide is a MARINE POLLUTANT. See Section 14.

SUSMP  
classification: Schedule 5 (Standard for the Uniform Scheduling of Medicine and Poisons)

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Concentration (g/L):
Betacyfluthrin	[68359-37-5]	25
Sulphuric acid	[7664-93-9]	0.5
Aqueous mixture of 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-	[55965-84-9]	2.3

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Date of Issue: June 27<sup>rd</sup>, 2011

methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)		
Other ingredients	Non-hazardous	1112.2

#### 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:** Move the patient to fresh air and keep at rest. Seek medical advice
- Skin contact:** Wash off thoroughly with plenty of water and soap, if available with polyethyleneglycol 400, subsequently rinse with water. After skin contact: Apply Vitamin E cream or a simple body milk.
- 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. Get medical attention if irritation develops and persists.
- Ingestion:** Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.
- First Aid Facilities:** Provide eyewash and washing facilities in the workplace.
- Medical attention:** Symptoms  
Local: Skin and eye paraesthesia which may be severe, usually transient with resolution within 24 hours, eye and mucous membrane irritation, cough.  
Systemic: Discomfort in the chest, bronchial hypersecretion, pulmonary oedema, tachycardia, low blood pressure, palpitation, vomiting, diarrhoea, abdominal pain, nausea, salivation, dizziness, blurred vision, headache, apathy, anorexia, somnolence, coma, spasm, convulsions, tremors, ataxia, muscular fasciculation.

#### Risks

This product contains a pyrethroid.  
Must NOT be confused with organophosphorus compounds!

#### Treatment:

Local treatment: After eye contact: Instillation of local anaesthetic drops e.g. 1 % Amethocaine Hydrochloride eye drops. Give Analgesics as necessary.  
Systemic treatment: Endotracheal intubation and gastric lavage, followed by administration of charcoal and sodium sulphate.  
Monitoring of respiratory and cardiac functions.  
Anti-convulsive therapy: Diazepam i.v. is the remedy of choice; barbiturates, e.g. phenobarbital and calcium gluconate, may also be used.  
There is no specific antidote.  
Contraindication: derivatives of adrenaline.  
Contraindication: atropine.  
Spontaneous recovery.



Date of Issue: June 27<sup>rd</sup>, 2011

#### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Water spray, foam, CO<sub>2</sub>, sand.

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

**Further information:** Contain the spread of the fire-fighting media.  
Do not allow run-off from fire fighting to enter drains or water courses.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid contact with spilled product or contaminated surfaces.  
Use personal protective equipment.

**Environmental precautions:** Do not allow to get into surface water, drains and ground water.

**Methods for cleaning up:** Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material).  
Clean contaminated floors and objects thoroughly, observing environmental regulations.  
Keep in suitable, closed containers for disposal.

**Additional advice:** Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

#### 7. HANDLING AND STORAGE

**Handling:** Use only in area provided with appropriate exhaust ventilation.

**Storage:** Requirements for storage areas and containers:  
Store in original container.  
Keep container tightly closed in a dry and well-ventilated place.  
Store in a place accessible by authorized persons only.

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

**Storage stability:**  
**Storage temperature:** < 50 °C  
**Other data:** Do not store at temperatures below -10 °C.

**Suitable materials:** HDPE (high density polyethylene)

# MATERIAL SAFETY DATA SHEET

## Solfac® Pro Residual Insecticide



Date of Issue: June 27<sup>rd</sup>, 2011

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters:

Components	CAS-No.	Control parameters	Update	Basis
Glycerine (Mist.)	56-81-5	10 mg/m <sup>3</sup> (TWA)	2005	OEL (IT)

Personal protective equipment:

**In normal use and handling conditions:** When preparing the spray, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow length PVC gloves. When using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat, and rubber gloves.

In all other cases the following recommendations would apply.

**Hand protection:** Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

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

**Hygiene measures:** Avoid contact with skin, eyes and clothing.  
Keep working clothes separately.  
Wash hands before breaks and at the end of workday.  
Remove soiled clothing immediately and clean thoroughly before using again.  
Garments that cannot be cleaned must be destroyed (burnt).

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance :**

**Form:** Liquid, suspension  
**Colour:** Grey white  
**Odour:** Weak, characteristic

**Safety data:**

**pH:** 3 - 7 at 100 %

**Flash point:** > 100 °C  
No flash point - Determination conducted up to the boiling point.

**Density:** Approx. 1,14 g/cm<sup>3</sup> at 20 °C

**Water solubility:** Miscible



Date of Issue: June 27<sup>rd</sup>, 2011

## 10. STABILITY AND REACTIVITY

Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.

## 11. TOXICOLOGICAL INFORMATION

### POTENTIAL HEALTH EFFECTS

Inhalation: Toxic by inhalation. May irritate mucous membranes of nose and mouth.  
Skin contact: May irritate the skin.  
Eye contact: May irritate eyes.  
Ingestion: Toxic if swallowed.  
Other: None

### ANIMAL TOXICITY DATA – PRODUCT:

Acute oral toxicity: LD<sub>50</sub> rat:: >2500 mg/kg  
Acute dermal toxicity: LD<sub>50</sub> rat:: >4000 mg/kg  
Acute inhalation toxicity: LC<sub>50</sub> >4524 mg/m<sup>3</sup>, aerosol (4 hr)  
Highest attainable concentration  
Skin irritation: Not irritating – rabbit  
Eye irritation: Not irritating – rabbit  
Sensitisation: Not sensitising - guinea pig  
OECD Test Guideline 406, Magnusson & Kligman test

### Other information:

Non-carcinogenic, non-mutagenic, and non-teratogenic in laboratory species.

## 12. ECOLOGICAL INFORMATION

Fish toxicity: LC<sub>50</sub> (96 h): 0.33 µg/L; Golden orfe (*Leuciscus idus*)  
The value mentioned relate to the active ingredient.  
LC<sub>50</sub> (96 h): 0.089 µg/L; Rainbow trout (*Oncorhynchus mykiss*)  
The value mentioned relate to the active ingredient.  
LC<sub>50</sub> (96 h): 0.028 µg/L; Bluegill sunfish (*Lepomis macrochirus*)  
The value mentioned relate to the active ingredient.

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## Solfac® Pro Residual Insecticide



Date of Issue: June 27<sup>rd</sup>, 2011

Daphnia toxicity:	EC <sub>50</sub> (48 h): 0.29 µg/L; Water flea ( <i>Daphnia magna</i> ) The value mentioned relate to the active ingredient.
Toxicity to algae:	EC <sub>50</sub> (96 h) >10 µg/L; Green algae ( <i>Scenedesmus subspicatus</i> ) The value mentioned relate to the active ingredient.
Bird toxicity:	LD <sub>50</sub> >2000 mg/kg; Japanese quail
Bee toxicity:	LD <sub>50</sub> <0.1 µg/bee
Other:	None
Environmental fate, persistence and degradation:	Degradation in soil is rapid. Leaching behaviour: is classified as immobile.

### 13. DISPOSAL CONSIDERATIONS

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.
After spill or accident:	Dispose of sealed containers at an approved local waste disposal site.

### 14. TRANSPORT INFORMATION

#### ADG

According to AU01, Environmentally Hazardous Substances in packagings, IBCs or any other receptacle not exceeding 500 kg or 500 L are not subject to the ADG Code.

#### IMDG

UN-Number	3082
Labels	9
Packaging group	III
EmS	F-A , S-F
Marine pollutant	Marine Pollutant
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-CYFLUTHRIN MIXTURE)

#### IATA

UN-Number	3082
Labels	9
Packaging group	III
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-CYFLUTHRIN, MIXTURE)

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Date of Issue: June 27<sup>rd</sup>, 2011

**15. REGULATORY INFORMATION**

Registered according to the Agricultural and Veterinary Chemicals Act 1994.

Australian Pesticides and Veterinary Medicines Authority Approval Number: 59424

**16. OTHER INFORMATION**

**Trademark information:** Solfac® is a Registered Trademark of Bayer.

**Preparation information:** Replaces August 29<sup>th</sup>, 2006 edition.  
Reasons for update: Renewal due.

**Data sources:** Bayer CropScience European product safety data sheet.

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