

# MATERIAL SAFETY DATA SHEET

## Perigen® Defence Residual Insecticide

Date of Issue: January 5th, 2004

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

**Product name:** Perigen® Defence Residual Insecticide  
**Other names:** None  
**Product code:** Not available  
**Recommended use:** A liquid insecticide concentrate for use in general purpose pest control and fabric and bed-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](http://www.bayercropscience.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

Will irritate eyes and skin. Not flammable.

**Hazard designation:** Hazardous according to criteria of Worksafe Australia.  
**Risk phrases:** R65 – Harmful: May cause lung damage if swallowed  
**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):
Permethrin 25:75	[52645-53-1]	500
Hydrocarbon solvent	[64742-94-5]	335
Other ingredients	(non hazardous)	225

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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:** Remove person to fresh air. Keep at rest. Seek medical advice if exposure has been more than trivial. Administer artificial respiration if breathing has stopped.
- Skin contact:** Remove all contaminated clothing and shoes. Wash off skin immediately with soap and plenty of water. Seek medical advice if irritation persists. Launder contaminated clothing before re-use.
- Eye contact:** Immediately rinse eyes thoroughly, including under eyelids, with running water for at least 15 minutes. Seek immediate medical advice.
- Ingestion:** Seek immediate medical advice.
- First Aid Facilities:** Provide an eyewash station in the workplace.
- Symptoms:** Perigen contains the synthetic pyrethroid permethrin and a hydrocarbon solvent, symptoms are likely to be limited to irritation associated with permethrin and effects of the solvent.
- Medical attention:** There is no specific antidote. Treat symptoms. This product contains a hydrocarbon solvent. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema.

### 5. FIRE FIGHTING MEASURES

- Extinguishing media:** Foam, dry chemical or water spray. Do not use a water jet from a fire hose.
- Hazards from combustion products:** No data available.
- Precautions for fire fighters:** This product is a combustible liquid. Fire fighters should wear full protective clothing and self-contained breathing apparatus. Do not release contaminated water into the environment. Keep intact containers cool by spraying with water.

### 6. ACCIDENTAL RELEASE MEASURES

Wear suitable protective clothing and boots. Prevent spill from entering drains, sewers or any body of water. Contain and absorb with sand, earth or inert absorbent. Scoop or shovel into sealable containers for disposal in accordance with applicable local, state and federal regulations.

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### 7. HANDLING AND STORAGE

**Handling:** Keep out of reach of children. Avoid contact with skin and eyes and do not inhale spray mist. Use only in a well-ventilated area. Do not apply in the presence of naked flames, hot surfaces or unprotected electrical equipment. Use proper grounding procedures.

**Storage:** Store product in the closed, original container in a cool, well-ventilated area away from direct sunlight.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure standards:** No exposure standard has been assigned by the National Occupational Health and Safety Commission (Worksafe Australia). The manufacturer of the hydrocarbon solvent recommends an occupational exposure limit of 100 ppm total hydrocarbons.

**Engineering controls:** Control process conditions to avoid contact. Use local exhaust ventilation. Keep product away from sources of ignition.

**Personal Protective Equipment:**

- Eyes:** Avoid contact with the eyes. Wear safety goggles. Wear a face shield if splashing is possible.
- Clothing:** Wear suitable protective clothing. Protective clothing must be stored separately from private clothing.
- Gloves:** Avoid contact with the skin. Wear elbow-length PVC or nitrile gloves.
- Respiratory:** Wear an approved respirator to prevent inhalation, if other control measures are inadequate.
- Other:** Do not eat, drink or smoke until after washing. Wash thoroughly after handling. After each day's use wash gloves, goggles and contaminated clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear yellow limpid liquid

**Odour:** Aromatic solvent odour

**Vapour pressure:** No data

**Boiling point:** 184°C

**Freezing/melting point:** Not available

**Solubility:** Emulsifies

**Density:** 1.06 at 20°C

**Flash Point:** 72°C

**Flammability (explosive) limits:** 0.6 - 7.0% (solvent)

**Auto-ignition temperature:** > 450°C (solvent)

**Percent volatiles:** ~38

**Octanol/water partition coefficient:** Not available

**Formulation:** Emulsifiable concentrate

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### 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Not available
<b>Hazardous polymerisation:</b>	Not available
<b>Conditions to avoid:</b>	Not available
<b>Incompatible materials:</b>	Incompatible with strong oxidising agents
<b>Hazardous decomposition products:</b>	Not available

### 11. TOXICOLOGICAL INFORMATION

#### POTENTIAL HEALTH EFFECTS

<b>Inhalation:</b>	Avoid breathing vapour / spray / fumes. Inhalation of spray may produce respiratory irritation and can result in headaches, dizziness, drowsiness, and possibly nausea.
<b>Skin contact:</b>	Mild irritant and drying to the skin. The material should not be allowed to come into contact with the skin.
<b>Eye contact:</b>	Irritating. The material should not be allowed to contact the eyes.
<b>Ingestion:</b>	Harmful if swallowed.
<b>Other:</b>	None

ANIMAL TOXICITY DATA – PRODUCT: No data available for the product.

#### ANIMAL TOXICITY DATA – INDIVIDUAL INGREDIENTS:

##### Acute:

<b>Oral toxicity:</b>	LD <sub>50</sub> rat: 1479mg/kg (permethrin 25:75 in corn oil)
<b>Dermal toxicity:</b>	LD <sub>50</sub> rabbit: >2000mg/kg (permethrin)
<b>Inhalation toxicity:</b>	Not available
<b>Skin irritation:</b>	Mild irritant – rabbit (permethrin)
<b>Eye irritation:</b>	Mild irritant – rabbit (permethrin)
<b>Sensitisation:</b>	Non-sensitiser

##### Chronic:

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Permethrin is not mutagenic, teratogenic or carcinogenic. Skin sensitisation tests carried out by Bayer CropScience indicate that permethrin active ingredient was not a skin sensitiser. At high doses, the solvent caused reversible damage to the liver and kidney of male rats. These effects are not relevant to humans at occupational levels of exposure.

### 12. ECOLOGICAL INFORMATION

<b>Fish toxicity:</b>	Permethrin is toxic to fish
<b>Daphnia toxicity:</b>	Data not available
<b>Toxicity to algae:</b>	Data not available
<b>Bird toxicity:</b>	Data not available
<b>Bee toxicity:</b>	Permethrin is toxic to bees
<b>Other:</b>	NO data available
<b>Environmental fate, persistence and degradation:</b>	Permethrin degrades rapidly in soil and water.

### 13. DISPOSAL CONSIDERATIONS

Follow Avcare guidelines. Do not discharge into drains. Do not incinerate. Dispose of waste material via a licensed waste disposal contractor to a regulated landfill.

### 14. TRANSPORT INFORMATION

<b>UN number:</b>	Not applicable
<b>Proper shipping name:</b>	Not applicable
<b>Class and Subsidiary Risk:</b>	Not "dangerous goods" for transport by road or rail according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.
<b>Packing Group:</b>	Not applicable
<b>EPG:</b>	Not applicable
<b>Hazchem code:</b>	Not applicable

### 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Act 1988

Australian Pesticides and Veterinary Medicines Authority Approval Number: 57184

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### 16. OTHER INFORMATION

**Trademark information:** Perigen® is a Registered Trademark of Bayer

**Preparation information:** Replaces July 16, 2001 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