

**PY-T-50 Pale Refined Pyrethrins**

Date of Issue: Jan 2006



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**1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY**

Product Name: **PY-T-50 Pale Refined Pyrethrins**

Product description: Pyrethrum extract (50%)

Product Code: 501, 502

Company: Botanical Resources Australia Pty Ltd  
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Use: Technical Grade Product for Formulation of Insecticides.

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**2 HAZARDS IDENTIFICATION**

**This product is classified as hazardous according the criteria of NOHSC and as a dangerous good according to the ADG code.**

Hazard classification: Harmful (Xn), Dangerous for the environment (N)

Risk phrases: Harmful by inhalation, in contact with skin and if swallowed.  
Very toxic to aquatic organisms, may cause long term adverse effects in aquatic environment.  
May cause lung damage if swallowed.

Safety phrases: Keep out of reach of children.  
Keep away from food, drink and animal feed.  
Do not breath fume, vapour or spray.  
Avoid contact with skin.  
This material and its container must be disposed of as hazardous waste. Avoid release into the environment.  
If swallowed, so not induce vomiting: seek medical advise immediately and show this container or label.

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### 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	CAS Number	Proportion
Pyrethrins	8003 – 34 – 7	48-53%
Distillates (petroleum), hydrotreated light	64742-47-8	32-35%
2,6-Di-tert-butyl-p-cresol	128-37-0	4%
Other components <sup>1</sup>		10-17%

<sup>1</sup>Other components consist of a large number of different plant products originating from *Tanacetum cinerariifolium*. None of the components occurring at >0.1% are currently known to be hazardous by the criteria of NOHCS.

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### 4 FIRST AID MEASURES

For advice contact a doctor or Poisons Information Centre (Phone 131126).

Type of exposure	Acute symptoms	First aid
Inhalation	Headache, nausea, vomiting	Fresh air, rest. Seek medical attention.
Skin	Redness, pain.	Remove contaminated clothes. Rinse and wash skin with soap and water.
Eyes	Redness, pain.	Rinse with plenty of water for several minutes. Seek medical advise.
Ingestion	Numbness of tongue and lips, excitation, convulsions, paralysis. Cough, sore throat, diarrhoea, vomiting.  Vomiting may cause aspiration pneumonia. The symptoms of this may not manifest for a few hours or days.	DO NOT INDUCE VOMITING.  If vomiting occurs spontaneously, keep head below hips to prevent aspiration.  Seek medical attention.

#### Notes to doctor

This product contains pyrethrins and a petroleum distillate. Atropine should NOT be used. Vomiting may cause aspiration pneumonia.

Treatment for pyrethrins poisoning is symptomatic and recovery is normally spontaneous.

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## 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Water Fog, Foam, Carbon Dioxide (CO <sub>2</sub> ), Dry Chemical Powder Extinguishers DO NOT use water jets – may spread fire.
Specific Hazards:	Irritating fumes are produced in fire
Fire fighting advice:	Use self-contained breathing apparatus
Hazchem Code:	2[Z]

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## 6 ACCIDENTAL RELEASE MEASURES

Ventilate area.

Prevent spillage from entering drains or water courses.

Collect leaking and spilled liquid in sealable containers (heavy duty plastic drums).

Absorb remaining liquid in sand or inert absorbent and transfer to sealable containers for disposal.

Wash area thoroughly with water and detergent, preventing runoff from entering drains.

Wear chemical resistant goggles, gloves and boots, light protective clothing and self-contained breathing apparatus if contaminated area is not well-ventilated.

If material enters drains advise emergency services. This material may be suitable for landfill disposal. Dispose of only in compliance with appropriate regulations.

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## 7 HANDLING AND STORAGE

### Precautions for Safe Handling:

PREVENT GENERATION OF MISTS.

Open and handle containers with care, avoid contact with skin and eyes. Ensure the work area is well ventilated. Do not eat, drink or smoke or apply cosmetics in work area. Always wash after handling product.

Avoid contamination of drains or bodies of water.

Retained residues may make empty containers hazardous – use caution when handling unrinsed empty containers.

### Precautions For Safe Storage:

DO NOT ALLOW CONTACT WITH OPEN FLAMES OR OXIDANTS.

EXPLOSIVE VAPOUR/AIR MIXTURES MAY BE FORMED ABOVE 68°C

Store in tightly closed containers. Store in a cool, well ventilated, bunded area.

Combustible liquid: keep away from heat and ignition sources such as smoking and open flames. Keep away from direct sunlight and protect against frost.

Store away from oxidizing agents (e.g. perchlorates, peroxides, permanganates, chlorates, nitrates, chlorine, bromine and fluorine).

Store away from food and animal feed.

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## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Standards:

Pyrethrins	ES-TWA – 5 mg/m <sup>3</sup>
2,6-Di-tert-butyl-p-cresol	ES-TWA – 10 mg/m <sup>3</sup>
Petroleum distillates:	none set, manufacturer recommends 525 mg/m <sup>3</sup>

**Biological Limit Values:** No biological limit allocated.

**Engineering Controls:** Ensure adequate ventilation.

### Personal Protective Equipment

Wear solvent resistant gloves, boots and clothing, and tightly sealed impact and splash resistant goggles. All protective clothing should be clean and available each day.

If adequate ventilation is not possible, use a respirator with a filter suitable for organic gases and vapors. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

### Physical Description/Properties

Appearance:	Amber Coloured Liquid
Boiling Point/Melting Point:	N/E
Vapour Pressure:	N/E
Flashpoint:	>61°C (Closed Cup ASTM D3778-96)
Flammability Limits:	LEL – 0.6 UEL – 7.0
Solubility in Water:	Insoluble
Density	0.90 – 0.95 g/mL
Other Properties:	Soluble in Oils Cloud Point 10°C - 20°C Slight Odour

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## 10 STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage conditions.
Conditions to avoid:	Avoid extremes of temperature and direct sunlight.
Incompatible materials:	Incompatible with oxidizing agents.
Hazardous decomposition products:	Does not normally decompose.
Hazardous reactions:	Hazardous polymerisation will not occur.

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## 11 TOXICOLOGICAL INFORMATION

### Pyrethrins:

Acute LD <sub>50</sub> rat (oral)	1030-2370mg/kg.
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Acute LD<sub>50</sub> rat (dermal) >2000mg/kg.  
Acute LD<sub>50</sub> rat (inhalation) 3.4mg/L(4h)

**Petroleum distillates:**

Eye irritation index (rabbit): Average score 5.0 after 1 hr (maximum score 110)  
Primary skin irritation index (rabbit): 4.2 (maximum score is 8)  
Acute oral LD<sub>50</sub> (rat): >39.9 g/kg  
Acute dermal LD<sub>50</sub> (rabbit): 2 – 4 g/kg  
Acute inhalation LC<sub>50</sub> >3.62 mg/l

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**12 ECOLOGICAL INFORMATION**

**Pyrethrins**

Acute LDC<sub>50</sub> (bobwhite quail) >2000 mg/kg  
Acute LC<sub>50</sub> (flowthrough, bluegill sunfish) 10 µg/L (96h)  
Acute LC<sub>50</sub> (flowthrough, *Daphnia*) 12 µg/L (48h)  
Bioaccumulation (Bluegill sunfish) Bioconcentration factor (BCF): 471

Pyrethrins are relatively immobile in soil and have low persistence in the environment due to rapid breakdown in presence of UV light.

Pyrethrins are very toxic to aquatic organisms.

**Petroleum distillates**

Floats on water. Not expected to be toxic at limit of water solubility. Low soil mobility. The amount of biodegradation is expected to be small due to low solubility in water.

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**13 DISPOSAL CONSIDERATIONS**

Solid absorbent material collected from spillage incidents should be disposed of at approved landfill sites.

Triple or preferably pressure rinse containers before disposal. 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.

Do not wash product or spillages into waterways, drains or sewers.

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**14 TRANSPORT INFORMATION**

**UN No:** 3082  
**Class:** 9 (Miscellaneous Dangerous Goods)  
**Packing Group:** III  
**Proper Shipping Name:** Environmentally Hazardous Substance, Liquid, N.O.S. (pyrethrins) 9 UN3082  
**Marine pollutant:** yes  
**Hazchem Code:** 2[Z]

**ADG/RID/IMDG:** Classified as Dangerous Goods for transport by road, rail and sea.  
**ICAO/IATA** Classified as Dangerous Goods for transport by air, packing must comply with IATA packing instruction 914 or Y914

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## 15 REGULATORY INFORMATION

SUSDP classification: S5.

Pyrethrins are on the list of active substances which are excluded from requirements of AVPMA approval.

Pyrethrins and petroleum distillates are listed in the AIC inventory but have not been assessed by NICNAS.

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## 16 OTHER INFORMATION

Abbreviations used:

APVMA: Australian Pesticide and Veterinary Medicines Authority  
ADG: Australian Code for the Transport of Dangerous Goods by Road and Rail  
ADR: International Regulations Concerning the Carriage of Dangerous Goods by Road.  
AIC: Australian Inventory of Chemical substances  
ES-TWA: Exposure Standard Time Weighted Average  
IATA: International Air Transport Regulations  
ICAO: International Civil Aviation Code  
MSDS: Material Safety Data Sheet  
NOHSC: National Occupational Health and Safety Commission  
NICNAS: National Industrial chemical Notification and Assessment Scheme  
N/E: Not evaluated  
RID: European Agreements Concerning the International Carriage of Goods by Rail  
IMDG: International Maritime Organization Rules  
SUSDP: Standard for Uniform Scheduling of Drugs and Poisons

The information contained in this MSDS is based on data believed to be complete and correct. It is intended to describe the product for the purposes of health, safety and environmental requirements only and should not be construed as guaranteeing any specific property of the product.

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