Material Safety Data Sheet

Botanical Resources Australia Pty Ltd

PY-ZAP Insecticide

Version 3:

Date of Issue: Nov 2009, Date of review: Oct 2012.



1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product Name: PY-ZAP INSECTICIDE WITH NATURAL

PYRETHRUM

Synonyms: WEBCOT S-PY INSECTICIDE WITH NATURAL PYRETHRUM

PYZAP INSECTICIDE BY C RUDDUCK

Product Code: 620

Company: Botanical Resources Australia Pty Ltd

A.C.N. 072 872 201

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Use: Insecticide concentrate

2 HAZARDS IDENTIFICATION

This product is not classified as hazardous according to the criteria of NOHSC.

This product is classified as dangerous to the environment.

May be slightly irritating to the eyes and skin.

Risk phrases

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

Safety Phrases

This material and its container must be disposed of in a safe way.

Use appropriate containment to avoid environmental contamination.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	CAS Number	Proportion
Pyrethrins	8003 – 34 – 7	40 g/L
Piperonyl butoxide	51-03-6	160 g/L
Other components which are not classified as hazardous or dangerous goods	-	balance

4 FIRST AID MEASURES

For advice contact a doctor or Poisons Information Centre.

Type of exposure	Acute symptoms	First aid
Inhalation	Irritation	Remove to well ventilated area. Seek medical advice if symptoms persist.
Skin	Irritation	Remove any contaminated clothes, wash thoroughly with soap and water
Eyes	Irritation	Flush with water.
Ingestion	Low toxicity, may cause irritation of mouth and throat, abdominal pain. Symptoms of pyrethrins poisoning include dizziness, headache, nausea.	Seek medical advice. Do not induce vomiting.

Notes to doctor

This product contains pyrethrins. There is no specific antidote and treatment is symptomatic. Recovery is spontaneous.

Must NOT be confused with organophosporous products. Do NOT give atropine or derivatives of adrenaline.

5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water Fog, Foam, Carbon Dioxide (CO₂), 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]

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.

7 HANDLING AND STORAGE

Precautions for Safe Handling:

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.

Keep away from direct sunlight and protect against frost. Store away from food and animal feed.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards:

Pyrethrins $TWA - 5 \text{ mg/m}^3$

Biological Limit Values: No biological limit allocated.

Engineering Controls: Ensure adequate ventilation.

Personal Protective Equipment

Impermeable gloves and goggles are recommended for mixing and application. Nose and mouth protection are advisable during application. Personal respiratory protective equipment is not usually required.

Normal good hygiene standards should be observed – do not eat, drink, smoke or apply cosmetics while handling this product, wash hands and any exposed skin after use.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical Description/Properties

Appearance: Yellow Coloured Liquid
pH: 4.66 (1% solution)
Boiling Point/Melting Point: Not available
Vapour Pressure: Not available

Specific Gravity: 0.98

Flashpoint: >61°C (Closed Cup ASTM D3278-96)

Flammability Limits: Not available

Solubility in Water: Miscible/Dispersible in water

10 STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended storage conditions.

Conditions to avoid: Avoid extremes of temperature and direct sunlight. Pyrethrins

are unstable in sunlight and alkaline conditions.

Incompatible materials: Incompatible with oxidizing agents.

Hazardous decomposition products: Does not normally decompose.

Hazardous reactions: Hazardous polymerisation will not occur.

11 TOXICOLOGICAL INFORMATION

Pyrethrins:

Acute LD_{50} rat (oral) 1030-2370mg/kg. Acute LD_{50} rat (dermal) >2000mg/kg. Acute LD_{50} rat (inhalation) 3.4mg/L(4h)

Piperonyl butoxide

Low mammalian toxicity (LD₅₀-oral rat >2000 mg/kg)

12 ECOLOGICAL INFORMATION

Pyrethrins

Acute LDC₅₀ (bobwhite quail) >2000 mg/kg Acute LC₅₀ (flowthrough, bluegill sunfish) $10 \mu g/L$ (96h) Acute LC₅₀ (flowthrough, *Daphnia*) $12 \mu g/L$ (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.

Toxic to bees.

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

Piperonyl butoxide

Highly toxic to fish and other aquatic animals.

13 DISPOSAL CONSIDERATIONS

Solid absorbent material collected from spillage incidents should be disposed of at approved landfill sites. Do not wash product or spillages into waterways, drains or sewers.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. 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 re-use containers.

14 TRANSPORT INFORMATION

UN No: 3082

Class: 9 (Miscellaneous Dangerous Goods)

Packing Group:

Proper Shipping Name: Environmentally Hazardous Substance, liquid, N.O.S. (pyrethrins) 9 UN3082

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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

15 REGULATORY INFORMATION

SUSDP classification: This product is not classified as a scheduled poison.

APVMA Approval numbers: 60610, 60876 and 61779

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

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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