Safety Data Sheet
according to WHS Regulations

Printing date 09.05.2018 Revision: 09.05.2018

1 Identification

Product Name: PY-ZAP INSECTICIDE

Other Means of Identification: Mixture

Product Code: 620

Recommended Use of the Chemical and Restriction on Use: Insecticide concentrate

Details of Manufacturer or Importer:
C.Rudduck Pty Ltd
2/247 Ingles Street
Port Melbourne VIC 3207

Phone Number: 03 9676 4444

Emergency telephone number: 0418 355 009

2 Hazard(s) Identification

Hazardous Nature:
Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).


environment

Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

Acute Toxicity (Dermal) 4	H312	Harmful in contact with skin.
Acute Toxicity (Inhalation) 4	H332	Harmful if inhaled.
Aquatic Acute 2	H401	Toxic to aquatic life.

Signal Word Warning

Hazard Statements
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves / protective clothing.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see on this label).
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/regional/national regulations.

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3 Composition and Information on Ingredients

Chemical Characterization: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
CAS: 51-03-6	Piperonyl butoxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Flammable Liquids 4, H227	16%
CAS: 8003-34-7	Pyrethrins and Pyrethroids Acute Toxicity (Oral) 3, H301; Acute Toxicity (Dermal) 3, H311; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Toxicity (Inhalation) 4, H332	4%

4 First Aid Measures

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:
In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:
In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Ingestion:
If swallowed, do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:
Inhalation: Harmful if inhaled. May cause respiratory irritation.
Skin Contact: Harmful in contact with skin. May cause slight skin irritation.
Eye Contact: May cause slight eye irritation.
Ingestion: May cause irritation of mouth and throat, abdominal pain, dizziness, headache and nausea.

5 Fire Fighting Measures

Suitable Extinguishing Media:
Water fog, foam, dry chemical or carbon dioxide. DO NOT use water jets as they may spread the fire.

Specific Hazards Arising from the Chemical:
Hazardous combustion products include toxic and irritating fumes.
Product is combustible.
Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:
When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:
Wear approved self-contained breathing apparatus and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

Environmental Precautions:
In the event of a major spill, prevent spillage from entering drains or water courses.

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Methods and Materials for Containment and Cleaning Up:
Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a sealable, heavy duty plastic container for disposal. Wash area thoroughly with water and detergent, preventing runoff from entering drains.

7 Handling and Storage

Precautions for Safe Handling:
Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:
Store in a cool, dry and well ventilated area. Keep container tightly closed. Protect from direct sunlight, heat, sparks, open flames, hot surfaces and frost. Keep away from strong oxidising agents.

8 Exposure Controls and Personal Protection

Exposure Standards:	
CAS: 8003-34-7 Pyrethrins and Pyrethroids	
WES	TWA: 5 mg/m³ Sen

Engineering Controls:
Maintain air concentration below occupational exposure standards, providing adequate ventilation. Use explosion-proof ventilating equipment.

Respiratory Protection:
Respiratory protection is not necessary if the ventilation is adequate. Avoid working in and breathing spray mist.
Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:
Impermeable gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.
When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.
Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:
Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Liquid
Colour:	Yellow
Odour:	Characteristic
Odour Threshold:	No information available

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pH-Value:	No information available
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	>61 °C
Flammability:	Combustible liquid
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Relative Density:	0.98
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Miscible
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Direct sunlight, heat, sparks, open flames, hot surfaces and frost.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products: Toxic and irritating fumes.

11 Toxicological Information

Toxicity:

LD_{50}/LC_{50} Values Relevant for Classification:		
CAS: 51-03-6 Piperonyl butoxide		
Oral	LD_{50}	6150 mg/kg (rat)
Dermal	LD_{50}	>7950 mg/kg (rabbit)
Inhalation	LC_{50}/4 h	>5900 mg/m3 (rat)
CAS: 8003-34-7 Pyrethrins and Pyrethroids		
Oral	LD_{50}	200 mg/kg mg/kg (rat)
Dermal	LD_{50}	300 mg/kg mg/kg (rabbit)

Acute Health Effects
Inhalation: Harmful if inhaled. May cause respiratory irritation.
Skin: Harmful in contact with skin. May cause slight skin irritation.
Eye: May cause slight eye irritation.
Ingestion: May cause irritation of mouth and throat, abdominal pain, dizziness, headache and nausea.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

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Carcinogenicity:
Piperonyl butoxide is classified by IARC as a Group 3 - Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure:
Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:
Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:
The Australian Acceptable Daily Intake (ADI) for piperonyl butoxide for a human is 0.1 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 16 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species.
The Australian ADI for pyrethrins (pyrethrum extracts) for a human is 0.04 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 4 mg/kg/day.
(Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2018).

12 Ecological Information

Ecotoxicity: Toxic to bees.

Aquatic toxicity:
Toxic to aquatic life with long lasting effects.

CAS: 51-03-6 Piperonyl butoxide	
LD_{50}	>2,250 mg/kg (bobwhite quail)
LC_{50}/96 h	5.37 ppm (bluegill)
	6.12 ppm (rainbow trout)
LC_{50}/48 h	0.51 ppm (daphnia)
LC_{50}	>5,620 ppm (bobwhite quail) (5 day dietary)
	>5,620 ppm (mallard) (5 day dietary)

Persistence and Degradability: No further relevant information available.

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil:
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.
Other adverse effects: No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers:
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:
Please consult your state Land Waste Management Authority for more information.

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14 Transport Information

UN Number
ADG, IMDG, IATA UN3082

Proper Shipping Name
ADG, IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (piperonyl butoxide, pyrethrins and pyrethroids)

Dangerous Goods Class
ADG Class: 9 Miscellaneous dangerous substances and articles.

Packing Group:
ADG, IMDG, IATA III

Marine pollutant: Yes

EMS Number: F-A,S-F

Hazchem Code: •3Z

Special Provisions: 274, 331, 335, 375, AU01

Limited Quantities: 5L

Packagings & IBCs - Packing Instruction: P001, IBC03, LP01

Packagings & IBCs - Special Packing Provisions: PP1

Portable Tanks & Bulk Containers - Instructions: T4

Portable Tanks & Bulk Containers - Special Provisions: TP1, TP29

15 Regulatory Information

Australian Inventory of Chemical Substances:	
CAS: 51-03-6	Piperonyl butoxide
CAS: 8003-34-7	Pyrethrins and Pyrethroids

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Not Scheduled.

16 Other Information

Date of Preparation or Last Revision: 09.05.2018

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:
ADG: Australian Dangerous Goods
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC_{50}: Lethal concentration, 50 percent
LD_{50}: Lethal dose, 50 percent
IARC: International Agency for Research on Cancer
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)
Flammable Liquids 4: Flammable liquids – Category 4
Acute Toxicity (Oral) 3: Acute toxicity – Category 3

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Acute Toxicity (Inhalation) 4: Acute toxicity – Category 4
Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1
Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - February 2016”
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