RUDDUCK

MATERIAL SAFETY DATA SHEET

RUDCHEM PY MIST

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	Rudchem Py Mist
Product Code	-
Other Names	-
Product Use	Broad spectrum insecticide
Supplier Name	C.Rudduck Pty Ltd
Address	2/247 Ingles Street Port Melbourne VIC 3207
Telephone Number	03 9676 4444
Emergency Telephone	0418 355 009

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
Classified as hazardous according to the criteria of ASCC.

Hazards	Xn – Hazardous
Risk Phrases	R65 - Harmful: May cause lung damage if swallowed.
Safety Phrases	S2 - Keep out of reach of children. S23 - Do not breathe gas/fumes/vapour/spray S24 - Avoid contact with skin. S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient (common name)	CAS Number	Proportion by weight
Pyrethrum	8003-34-7	0-1%
Piperonyl butoxide	51-03-6	1-2%
Liquid hydrocarbons	64742-88-7	>95%

4. FIRST AID MEASURES

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek immediate medical attention.
Ingestion	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if

	possible) to maintain open airway and prevent aspiration. Give the victim water to rinse out mouth and a glass or two to drink. Seek immediate medical attention.
Skin	Remove contaminated clothing and wash affected areas with soap and water. Seek medical attention if irritation develops. Launder clothing before reuse.
Eyes	In case of eye contact, check for and remove any contact lenses. Immediately irrigate eyes with plenty of running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

	For major fires call the Fire Brigade. Ensure that an escape path is available from any fire.
Suitable Extinguishing Media	Water, water fog, foam, carbon dioxide (CO_2) or dry chemical.
Hazardous Combustion Products	Toxic fumes of carbon monoxide (CO).
Firefighting Equipment	Wear ASCC approved self-contained breathing apparatus and full protective clothing.
Unusual Fire or Explosion Hazards	Moderate fire hazard when exposed to heat or flame. Vapour forms an explosive mixture with air. Vapour may travel a considerable distance to source of ignition. Heating may cause expansion or decomposition leading to violent rupture of containers. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
Hazchem Code	3[Y]

6. ACCIDENTAL RELEASE MEASURES

Spills	Clear area of personnel and move upwind. Remove all ignition sources. Wear ASCC approved self-contained breathing apparatus and full protective clothing. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Use only spark-free shovels and explosion proof equipment. Collect recoverable product into labeled containers for recycling. Wash area and prevent runoff into drains. Prevent spilled material from contaminating soil and entering waterways, drains or sewers.

7. HANDLING AND STORAGE

Handling	Use of safe work practices are recommended to avoid eye or skin

	contact and inhalation. Observe good personal hygiene, including washing hands before eating. Use in a well-ventilated area Use spark-free tools when handling.
Storage	Store in a cool, dry, well-ventilated area. Protect containers against physical damage and check regularly for leaks. Keep containers tightly closed when not in use. Store away from incompatible materials, naked lights and heat or ignition sources.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards (ASCC)	**Pyrethrum:** TWA: - ppm / 5 mg/m^3 STEL: - ppm / - mg/m^3
Engineering Controls	Local exhaust ventilation is recommended when vapours can be released in excess of established airborne exposure limits.
Respiratory Protection	Respiratory protection is not necessary if the ventilation is adequate. Avoid working in and breathing spray mist.
Eye Protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin Protection	Wear protective gloves and protective clothing appropriate for the risk of exposure.
Hygienic Practices	Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating or drinking. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber colour
Odour	Insecticidal odour
Solubility in water	Immiscible
Boiling Point / Range	185-215°C
Vapour Pressure	0.14kPa @ 20°C
Percentage Volatiles	98%
Flash Point	50°C - 354°C
Flammable Limit – Lower	No information available
Flammable Limit – Upper	No information available
Flammability	1-6%

10. STABILITY AND REACTIVITY

Chemical Stability	Stable at ambient temperature and under normal conditions of use.
Incompatible Materials	Oxidizers.
Hazardous Decomposition Products	Toxic fumes of carbon monoxide (CO).
Hazardous Polymerization	Will not occur.
Conditions to Avoid	Do not puncture or incinerate can. Highly flammable. Keep away from naked flame. Do not spray uninterrupted for more than 10 seconds in confined spaces.

11. TOXICOLOGICAL INFORMATION

Toxicity

Piperonyl butoxide:
Oral LD_{50} (rat) = 6150mg/kg
Oral LD_{50} (mouse) = 3800mg/kg
Skin LD_{50} (rabbit) = 200mg/kg
Oral LD_{50} (rabbit) = 7500mg/kg

Solvent naphtha (petroleum), medium aliphatic:
Oral LD_{50} (rat) =25mL/kg
Skin LD_{50} (rabbit) > 4mL/kg

Routes of Exposure
Inhalation, ingestion, eye and skin

Health effects from likely routes of exposure

Inhalation: Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and incoordination.

Ingestion: Considered an unlikely route of entry. Ingestion may result in nausea, pain, vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Effects of Overexposure
Prolonged exposure to high concentrations may lead to narcosis, unconsciousness, even coma and possible death.
Prolonged or continuous skin contact with the liquid may cause defatting with drying, cracking, irritation and dermatitis.
Repeated or prolonged eye exposure to irritants may cause conjunctivitis.

Existing Conditions Aggravated by Exposure
Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes.

Carcinogenicity
No (ACGIH, IARC, NIOSH, ASCC)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Piperonyl butoxide:
LC_{50} (Rainbow trout) = 6.12ppm (96 hour)
LC_{50} (Bluegill sunfish) = 5.37ppm (96 hour)
LC_{50} (Daphnia magna) = 0.51ppm (48 hour)
Oral LD_{50} (Bobwhite quail) > 2,250 mg/kg
Bobwhite 5 day dietary LC_{50} > 5,620 ppm
Mallard 5 day dietary LC_{50} > 5,620 ppm
Eco-Chronic Toxicity:
Fish (Fathead Minnow) Early life stage MATC >0.18 mg/L - <0.42 mg/L
Invertebrate (Daphnia Magna) life cycle MATC >30 µg/L - <47 µg/L
Piperonyl Butoxide is highly toxic to fish and aquatic organisms.
Honeybee Acute >25 µg/bee

Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods and containers 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

14. TRANSPORT INFORMATION

Classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail.

UN Number	1993
Proper Shipping Name	FLAMMABLE LIQUID, N.O.S.
Dangerous Goods Class	3
Hazchem Code	3[Y]
Packing Group	III
Special Precautions	Not applicable

15. REGULATORY INFORMATION

Pyrethrum, piperonyl butoxide and liquid hydrocarbons are listed in the Australian Inventory of Chemical Substances (AICS).

Poisons Schedule: 5

16. OTHER INFORMATION

Last Revision of MSDS	Rev 1.0 (06/08/2008)
Prepared by	MSDS.COM.AU Pty Ltd www.msds.com.au
Abbreviations Used	IARC: International Agency for Research on Cancer ASCC: Australian Safety and Compensation Council NTP: National Toxicology Program (U.S.) OSHA: Occupational Safety and Health Administration (U.S.) STEL: Short term exposure limit TWA: Time weighted average

Emergency Contacts

C.Rudduck Pty Ltd	**03 9676 4444**
C.Rudduck Pty Ltd – Emergency Number	**0418 355 009**
Police and Fire Brigade	**000**
Poisons Information Centre	**13 11 26**

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Please read instructions / label before using product.