Conforms to the National Code of Practice for the Preparation of Safety Data Sheets 2nd Edition [NOHSC:2011(2003)].

SAFETY DATA SHEET

Mortein Mosquito Coil



1. Identification of the material and supplier

Names	
Product name	: Mortein Mosquito Coil
SDS no.	: 31339
Formulation #	: 126389_4
Supplier	 AUSTRALIA Reckitt Benckiser (Australia) Pty Limited ABN: 17 003 274 655 44 Wharf Road, West Ryde NSW 2114 Tel: +61 (0)2 9857 2000 NEW ZEALAND Reckitt Benckiser (New Zealand) Limited 2 Fred Thomas Drive, Takapuna, Auckland 0622 Tel: + 64 9 484 1400
Emergency telephone number	: (5 pm - 8 am EST Australia): +61 (02) 9857 2444 NewZealand: + 64 9 484 1400
Poison Information contact:	: Australia - 13 11 26 New Zealand - 0800 764 766 or 0800 POISON
Material uses	: Mosquito repellent coil

2. Hazards identification

Statement of hazardous/dangerous nature	:	NON-HAZARDOUS SUBSTANCE. DANGEROUS GOODS.
Classification	:	N; R51/53
Risk phrases	1	R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	:	 S2- Keep out of the reach of children. S13- Keep away from food, drink and animal feeding stuffs. S61- Avoid release to the environment. Refer to special instructions/safety data sheet. S46- If swallowed, seek medical advice immediately and show this container or label.
Hazard symbol or symbols	:	

3. Composition/information on ingredients

Mixture : Yes.		
Ingredient name	CAS number	Proportion % w/w
d-allethrin malachite green hydrochloride	584-79-2 569-64-2	< 1 < 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First-aid measures

First-aid measures	
Inhalation	: Move exposed person to fresh air. Get medical attention if adverse health effects persist or are severe.
Ingestion	: Call medical doctor or poison control centre immediately. Wash out mouth with water.
Skin contact	: Get medical attention if symptoms occur. Wash clothing before reuse.
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Advice to doctor	: Treat symptomatically.

5. Fire-fighting measures

Extinguishing media	
Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Special exposure hazards	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	No specific fire or explosion hazard.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods for cleaning up		
Small spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Refer to special instructions/safety data sheet. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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7. Handling and storage

Storage

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

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<u>Australia</u>		
Occupational exposure limits		: No exposure standard allocated.
New Zealand		
Occupational exposure limits		: No exposure standard allocated.
Recommended monitoring procedures	:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Manufacturer: Exposure cont	tro	<u>ls</u>
Engineering measures	:	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation o other engineering controls to keep worker exposure below any recommended or statutory limits.
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eyes	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists o dusts.
Hands	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Respiratory	:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Skin	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipmen will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Date of issue	: 04/01/2016.	Page: 3/7
Viscosity	: Not available.	
рН	: Not applicable.	
Vapour density	: Not available.	
Flash point	: Not available.	
Density	: Not available.	
Vapour pressure	: Not available.	
Melting point	: Not available.	
Boiling point	: Not available.	
Odour	: Not available.	
Colour	: Opaque. Green.	
Physical state	: Solid.	

9. Physical and chemical properties

Solubility

: Insoluble in the following materials: cold water and hot water.

10. Stability and reactivity

Chemical stability	: The product is stable.	
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	: No specific data. Do not allow to enter drains or watercourses.	
Materials to avoid	: Do not mix with Other Products	
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Components are pyrolized when used as directed.	

11. Toxicological information

Acute toxicity

Product/ingredient name	Result		Species	Dose	Exposure
d-allethrin	LC50 Inhalation Du LD50 Dermal LD50 Dermal	sts and mists	Rat Rabbit Rabbit - Female	2.5 mg/l >3000 mg/kg >4390 mg/kg	4 hours - -
	LD50 Dermal		Rat	2500 mg/kg	-
	LD50 Oral LD50 Oral		Rat Rat - Male	685 mg/kg 709 mg/kg	-
	LD50 Oral		Rat - Female	1042 mg/kg	-
Conclusion/Summary	: Not classified Ha	rmful. Informa	ition is based on	toxicity test res	ult of a similar product.
Irritation/Corrosion					
Skin	: Non-irritant to ski	in. Information	is based on tox	city test result of	of a similar product.
Eyes	: Non-irritating to the product.	he eyes. Infor	mation is based	on toxicity test r	esult of a similar
Respiratory	: Not available.				
<u>Sensitiser</u>					
Skin	: Non-sensitiser to	skin. Informa	tion is based on	toxicity test res	ult of a similar product.
Respiratory	: Not available.				
Mutagenicity					
Conclusion/Summary	: Not available.				
Carcinogenicity					
Conclusion/Summary	: Not available.				
Reproductive toxicity					
Conclusion/Summary	: Not available.	1			
Product name	Carcinogenic effects	Mutagenic e	effects Develo effects	opmental S	Fertility effects
malachite green hydrochloride	-	-	Repr.	Cat. 3; R63	-
Teratogenicity			·		
Conclusion/Summary	: Not available.				
Potential acute health effec	<u>ts</u>				
Inhalation	: No known signific	cant effects or	critical hazards.		
Ingestion	: No known significant effects or critical hazards.				
Skin contact	: No known signific	cant effects or	critical hazards.		
Eye contact	: No known significant effects or critical hazards.				
Potential chronic health effe	<u>ects</u>				
Chronic toxicity					
Conclusion/Summary	: Not available.				
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11. Toxicological information

Chronic effects	: No known significant effects or critical hazards.		
Carcinogenicity	: No known significant effects or critical hazards.		
Mutagenicity	: No known significant effects or critical hazards.		
Teratogenicity	: No known significant effects or critical hazards.		
Developmental effects	: No known significant effects or critical hazards.		
Fertility effects	: No known significant effects or critical hazards.		
<u>Over-exposure signs/symptoms</u>			

12. Ecological information

 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic ecotoxicity

Ecotoxicity

Product/ingredient name	Result	Species	Exposure
d-allethrin	Acute EC50 21 ug/L Fresh water	Daphnia - Daphnia pulex - Larvae	48 hours
	Acute LC50 20 ug/L Fresh water	Crustaceans - Gammarus Iacustris - 2 months	48 hours
	Acute LC50 2.6 ug/L Fresh water	Fish - Oncorhynchus kisutch - Fingerling	96 hours
	Acute LC50 0.0356 mg/l	Fish	96 hours
malachite green hydrochloride	Acute LC50 30.61 ug/L Marine water	Crustaceans - Penaeus monodon - Zoea	48 hours
-	Acute LC50 30.5 ug/L Fresh water	Fish - Lepomis macrochirus - Fingerling - 0.5 to 1.5 g	96 hours

Other ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
d-allethrin malachite green hydrochloride	4.78 0.62	-	high Iow

Other adverse effects

: No known significant effects or critical hazards.

13. Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product	
Methods of disposal	: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Waste packaging should be recycled.
Hazardous waste	 Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.
Packaging	
Methods of disposal	 The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

31339 14. Transport information						
						Regulation
ADG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (d-allethrin)	9			Hazchem code 2Z GdYVJU Dfcj]g]cbg. Packagings;IBCs; or any other receptacle not exceeding 500kg(L) is not subject to this code.
IMDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (d-allethrin). Marine pollutant (d-allethrin)	9	111		<u>Emergency schedules</u> (<u>EmS)</u> F-A, S-F
ΙΑΤΑ	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (d-allethrin)	9			Passenger and Cargo AircraftQuantity limitation: 400 kg Packaging instructions: 956 Cargo Aircraft Only Quantity limitation: 400 kg Packaging instructions: 956 Limited Quantities - Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: Y956

PG* : Packing group

15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons				
Poison schedule (Australia)	: Not scheduled			
Australian Pesticides and Veterinary Medicines Authority (APVMA)	: 48228			
Australia inventory (AICS)	: Not applicable			
New Zealand Inventory of Chemicals (NZIoC)	: Not applicable			

16. Other information

Date of issue	: 04/01/2016. Page: 6/			
Revision comments	: Update NZ new address & phone number.			
Version	: 8			
Date of issue / Date of revision	: 04/01/2016.			
Abbreviations and acronyms	 ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail HSNO = Hazardous Substances and New Organisms Act 1996 (New Zealand) IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods N.O.S. = Not otherwise specified NOHSC = National Occupational Health and Safety Commission (Australia) 			

16. Other information

<u>Disclaimer</u>

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.