

PRODUCT SAFETY DATA SHEET

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1. PRODUCT AND COMPANY IDENTIFICATION

Commercial Product Name	Aerogard Tropical Strength Insect Repellent Aerosol		
Recommended / Intended Use:	Personal Insect Repellent		
Customer Product Codes:	0050478 100g 0050480 150g 0050479 250g 0220270 300g		
Supplier:	AUSTRALIA Reckitt Benckiser (Australia) Pty Limited 44 Wharf Road, West Ryde NSW 2114 TEL: (02) 9857 2000		
	NEW ZEALAND Reckitt Benckiser (New Zealand) Limited Lincoln Manor 289 Lincoln Road Henderson, Auckland 1231 TEL: (09) 839 0200		
Emergency Telephone Number:	After Hours (5 pm to 8 am EST Australia): (02) 9857 2444		
POISONS CENTRE INFORMATION	Australia - 13 1126 New Zealand - 0800 764 766 or 0800 POISON		
	2. HAZARDS IDENTIFICATION		

HAZARDOUS SUBSTANCE ACCORDING TO CRITERIA OF NOHSC AUSTRALIA DANGEROUS GOOD ACCORDING TO ADG CODE

R -phrase(s)

R12 - Extremely flammable R36 - Irritating to eyes

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Proportion (% w/w)
Ethanol	64-17-5	30 - 60 %
n-butane	106-97-8	15 - 30 %
N.N-diethyl-3-methylbenzamide	134-62-3	15 - 30 %
Isopropyl myristate	110-27-0	5 - 10 %
N-octyl bicycloheptene dicarboximide	113-48-4	1 - 5 %
Propane	74-98-6	1 - 5 %

The other ingredients to 100%w/w are classified as not hazardous according to NOHSC (Australia)

Our supplier of butane has provided documentation stating that the butane component contains less than 0.1%w/w 1,3 butadiene.

4. FIRST AID MEASURES

General Advice	Show the container and / or this safety data sheet to the doctor in attendance.		
Skin Contact	Wash off with soap and water. If skin irritation persists, call a physician		
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.		
Inhalation	Move to fresh air If breathing difficulties are experienced, contact a doctor.		
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting. Call a doctor or Poisons Control Centre.		
Notes to Physician	Treat symptomatically.		
	5. FIRE-FIGHTING MEASURES		

Flash point:	See chapter 9
Suitable Extinguishing Media:	Carbon dioxide (CO2). Dry chemical. Foam.
Specific Hazards Arising from the Chemical:	Extremely flammable May be ignited by heat, sparks or flames Keep product and empty container away from heat and sources of ignition.
Precautions for fire-fighting	Standard procedure for chemical fires.

Emergency and Evacuation Procedures:	Ensure adequate ventilation. Contain and signpost spill. Depending on spill size, collect spill according to instructions below.
Personal Precautions:	Avoid contact with skin, eyes and clothing Use personal protective equipment. Remove all sources of ignition.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains or natural waterways.
Methods for Cleaning up:	Mop up spill and wash area with detergent and water.
Methods for Containment:	Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

7. HANDLING AND STORAGE

Handling:	Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans.	
Precautions for Safe Handling:	Keep away from heat and sources of ignition.	
Storage:	Keep containers tightly closed in a cool, well-ventilated place.	
8. EXPOSURE CONTROLS / PERSONAL PROTECTION		

National Exposure Standards: Exposure Standards have been set for the following ingredients:

Chemical Name	Australian Workplace Exposure Standards	New Zealand Workplace Exposure Standards
Ethanol	TWA: 1000 ppm	TWA: 1000 ppm
64-17-5	TWA: 1880 mg/m³	TWA: 1880 mg/m³
n-butane	TWA: 1900 mg/m ³	TWA: 1900 mg/m ³
106-97-8	TWA: 800 ppm	TWA: 800 ppm

TWA - The Time-Weighted Average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life. According to current know ledge this concentration should neither impair the health or, not cause undue discomfort to, nearly all workers. STEL (Short Term Exposure Limit) – the average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight hour work day. According to current know ledge this concentration should neither impair the health or, not cause undue discomfort to, nearly all workers

Biological Limit Values		No biological limit values allocated.	
Engi	neering Controls:	Ensure adequate ventilation, especially in confined areas.	
Pers	onal Protection		
	Eye Protection:	Safety glasses.	
	Hand Protection:	Impervious butyl rubber gloves	
	Hygiene Measures:	Handle in accordance with good industrial hygiene and safety practice.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Aerosol.
Appearance:	Fine, mist
Odour:	Floral.
рН	No information available
Vapour Pressure:	240 kPa @16°C (Butane)
Vapour Density	2.046 (air =1) (butane gas)
Boiling Point/Range:	0°C / 32°F
Specific Gravity / Density [g/L]:	0.0085 - 0.0087 at 25°C
Flash Point:	-60°C(Butane) / -76°F

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid:	Pressurised container. Protect from the sunlight and do not expose to temperatures exceeding 50° C (120° F). Extremes of temperature can occur in cars and near ovens and fireplaces. Do not place in contact with hot surfaces or near naked flames. Do not pierce or burn even after use. Do not spray on a naked flame, onto or near fire, or any incandescent material such as an electric fire.
Hazardous Decomposition Products:	Oxides of carbon and unknown organic compounds.
Polymerization:	No information available.

11. TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY DATA

LD ₅₀ Oral:	No information available
LD50 Dermal: LC50 Inhalation (Dust):	No information available No information available
LC_{50} Inhalation (Vapor):	No information available
Acute Effects:	
Eye Irritation	Irritating to eyes.
Skin Irritation	May cause skin irritation.
Inhalation	Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	May cause irritation to the upper gastrointestinal tract.
Sensitization	Not expected to be a skin sensitiser.
Chronic Effects:	No information available.
Specific Effects	
Carcinogenic Effects:	Not listed as carcinogenic by OSHA, NTP or IARC.
Mutagenic Effects	No information available.
Reproductive Toxicity:	No information available.
Additional Toxicity Information:	Information given is based on data on the components and the toxicology of similar products.

COMPONENT TOXICITY DATA

Chemical Name	CAS#	LD50 Oral - With Units - Rat - mg/kg	LD50 Dermal - With Units - Rat/Rabbit - mg/kg	LC50 Inhalation - With units - Rat/Rabbit
Ethanol	64-17-5	7060 mg/kg (Rat)		
n-butane	106-97-8			658 mg/L (Rat) 4 h
N,N-diethyl-3-methylbenzamide	134-62-3	1892 mg/kg (Rat)	5 g/kg (Rat) 3180 µL/kg (Rabbit)	
lsopropyl myristate	110-27-0	10000 mg/kg (Rat)	5000 mg/kg (Rabbit)	41 mg (Rat)
N-octyl bicycloheptene dicarboximide	113-48-4	2800 mg/kg (Rat)	470 mg/kg (Rat)	
Propane	74-98-6			658 mg/L (Rat)4 h

12. ECOLOGICAL INFORMATION

Ecotoxicity:

The ecotoxicity of this product has not been determined. However, the following component information is available.

COMPONENT ECOTOXICITY DATA

The following component ecotoxicity data was considered to determine the overall ecotoxicity of this product.

Ethanol - 64-17-5 Freshwater Fish

LC50 = 14.2 mg/L Pimephales promelas 96 h

Ethanol - 64-17-5	
Microtox	EC50 = 35470 mg/L 5 min
Water Flea	EC50 = 9268 mg/L 48 h

N-octyl bicycloheptene dicarboximide - 113-48-4

Fish Rainbow Trout	LC50 (96 h) 1.4mg/L
Daphnia	LC50 (48 h) 2.3 mg/l.
Bird	LC50 (8 d) for mallard ducks and bobwhite quail >5620 mg/kg diet.
Fish (Other)	LC50 (96 h) bluegill sunfish 2.4 mg/L.
Data Source	Pesticide Manual 14 edition

SUMMARY OF PRODUCT ECOTOXICITY DATA

Ecotoxicity:	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
Biodegradability and Persistence:	No information available.
Mobility:	No information available
	13. DISPOSAL CONSIDERATIONS

Disposal Methods and Containers: Special Precautions for Landfill or Incineration:	Bulk quantities of product must be disposed of according to Local, State and Federal regulations. Not suitable for incineration.
Contaminated Packaging:	DO NOT PUNCTURE OR INCINERATE! Wrap in newspaper and place in trash. For bulk quantities dispose of in accordance with local, regional or national requirements. For further information contact your local waste authority.
Further information:	Packaging and container to be recycled only if emptied completely!

14. TRANSPORT INFORMATION

IATA

UN-No: Proper shipping name:	UN 1950 Aerosols, Flammable
Hazard Class	2.1
Subsidiary Class	None Allocated
ERG Code	10L

IMDG/IMO

Proper Shipping Name	Aerosols
Hazard Class	2
UN-No	UN 1950
Packing Group	None Allocated
EmS:	F-D, S-U
Special Provisions	63, 190, 277
Marine Pollutant	Not a marine pollutant

ADG (Australian Road and Rail)

Proper Shipping Name	Aerosols
Hazard Class	2.1
Packing Group	None Allocated
UN-No	UN 1950
Australia Hazchem Code	None Allocated

15. REGULATORY INFORMATION

Hazard Statements

HAZARDOUS SUBSTANCE ACCORDING TO CRITERIA OF NOHSC AUSTRALIA

Labelling

IRRITANT KEEP OUT OF REACH OF CHILDREN.

R -phrase(s)	R12 - Extremely flammable R36 - Irritating to eyes
Risk Combination Phrases	R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
S -phrase(s)	S 2 - Keep out of the reach of children S16 - Keep away from sources of ignition - No smoking S23 - Do not breathe spray S25 - Avoid contact with eyes

Poisons Schedule No. (SUSDP) Not scheduled Australia:

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Regulatory Approvals:	This product has been registered by the Australian Pesticides and Veterina Medicines Authority (APVMA) Australia	ary
Regulatory Approval Numbers:	APVMA No 60098	
NZ Toxic Substances (HSNO):	This product has been approved under HSNO covered by Cosmetics Group 2006 HSR002552.	Standard
AICS Additional Comment	Not all the constituents of this material are listed on the Australian Inventor Chemical Substances (AICS). The ingredients not listed on AICS are exer are included by Australian Pesticides and Veterinary Medicines Authority (legislation.	pt as they

16. OTHER INFORMATION

Кеу:	ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail AICS = Australian Inventory of Chemical Substances EC50 = median effective concentration IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods IMO = International Maritime Organization LC50 = concentration required to kill 50% of test organisms. LD50 = dose required to kill 50% of test organisms. NOHSC = National Occupational Health and Safety Commission (Australia)
Reason for revision:	Addition of product code.

Validation/Revision Date 07-May-2009

This MSDS has been prepared according to the National Code of Practice for the Preparation of Safety Data Sheets 2nd Edition [NOHSC:2011(2003)].

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End of Safety Data Sheet