

MATERIAL SAFETY DATA SHEET

Product Name **DESERT WATERLESS MICROBIAL URINAL CUBES**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name **DESERT ECO SYSTEMS PTY LTD**
Address 326A Payneham Road, Payneham, SA, AUSTRALIA, 5070
Telephone (08) 8132 0460
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Emergency 0428 337 378
Synonym(s) DESERT WATERLESS MICROBIAL URINAL CUBES

Use(s) SCALE REMOVER • TOILET CLEANER • URINAL CLEANER
MSDS Date 12 Feb 2009

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN No.	None Allocated	DG Class	None Allocated	Subsidiary Risk(s)	None Allocated
Packing Group	None Allocated	Hazchem Code	None Allocated	EPG	None Allocated

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
SODIUM DODECYLBENZENE SULPHONATE	C18-H29-O3-S.Na	25155-30-0	<20%
D-LIMONENE	C10-H16	5989-27-5	0.01-0.1%
CITRAL	C10-H16-O	5392-40-5	0.0010-0.01%
ANIONIC SURFACTANT(S)	Not Available	Not Available	15-30%
PERFUME	Not Available	Not Available	1-5%
CITRONELLOL	C10-H20-O	106-22-9	0.0010-0.01%
DYE	Not Available	Not Available	Not Available
MICRO-ORGANISMS	Not Available	Not Available	Not Available
ADDITIVE(S)	Not Available	Not Available	remainder

4. FIRST AID MEASURES

Eye If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Seek medical attention if irritation develops.

Advice to Doctor Treat symptomatically

5. FIRE FIGHTING MEASURES

Flammability	Non flammable. May evolve carbon oxides when heated to decomposition.
Fire and Explosion	Treat as per requirements for Surrounding Fires: Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
Extinguishing	Prevent contamination of drains or waterways.
Hazchem Code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spillage	If spilt, collect and reuse where possible.
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7. STORAGE AND HANDLING

Storage	Store in cool, dry, well ventilated area, removed from strong acids, alkalis, oxidising agents, foodstuffs, heat and ignition sources. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use.
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Stds	No exposure standard(s) allocated.
Biological Limits	No Biological Limit Value allocated.
Engineering Controls	Avoid inhalation. Use in well ventilated areas.
PPE	Wear PVC or rubber gloves.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	BLUE COLOURED WAXY SOLID	Solubility (Water)	SOLUBLE
Odour	ORANGE ODOUR	Specific Gravity	NOT AVAILABLE
pH	8 (1% solution)	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	> 100°C	Upper Explosion Limit	NOT RELEVANT
Melting Point	60°C	Lower Explosion Limit	NOT RELEVANT
Evaporation Rate	NOT AVAILABLE		

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended conditions of storage. The preparation is not anticipated to pose any environmental hazard. No data on toxicity specifically to soil organisms, plants and terrestrial animals are available.
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources.
Material to Avoid	Incompatible with oxidising agents (eg. hypochlorites, peroxides), alkalis (eg. hydroxides) and acids (eg. hydrochloric acid).
Hazardous Decomposition Products	May evolve carbon oxides when heated to decomposition.
Hazardous Reactions	Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Low toxicity - low irritant. This product contains live microorganisms, which are only anticipated to present a hazard with direct eye contact, prolonged skin contact or contact with broken skin. No chronic effects are anticipated with normal use.
Eye	Irritant. Over exposure may result in lacrimation, pain, redness, blurred vision and conjunctivitis.
Inhalation	Low irritant. Over exposure may result in irritation of the nose and throat, with coughing.
Skin	Irritant. Contact may result in irritation, redness, rash and dermatitis. Contact with broken skin increases the risk of infection.
Ingestion	Low toxicity. Ingestion may result in gastrointestinal irritation, nausea and vomiting. However, due to product form ingestion is considered unlikely. The manufacturer reports that the oral LD50 (rat) is > 5000 mg/kg.
Toxicity Data	SODIUM DODECYLBENZENE SULPHONATE (25155-30-0) LD50 (Ingestion): 438 mg/kg (rat) LD50 (Intravenous): 105 mg/kg (mouse) D-LIMONENE (5989-27-5) LD50 (Ingestion): 4400 mg/kg (rat) LD50 (Intraperitoneal): 600 mg/kg (mouse) LD50 (Intravenous): 110 mg/kg (rat) LD50 (Skin): > 5 gm/kg (rabbit) LD50 (Subcutaneous): 3170 mg/kg (mouse) LDLo (Subcutaneous): 30200 mg/kg (rat) TDLo (Ingestion): 67 g/kg/39 weeks intermittently (mouse) CITRAL (5392-40-5) LD50 (Ingestion): 4960 mg/kg (rat) LD50 (Intraperitoneal): 460 mg/kg (rat) CITRONELLOL (106-22-9) LD50 (Ingestion): 3450 mg/kg (rat) LD50 (Intramuscular): 4000 mg/kg (mouse) LD50 (Skin): 2650 mg/kg (rabbit) LD50 (Subcutaneous): 880 mg/kg (mouse)

12. ECOLOGICAL INFORMATION

Environment	This product is not anticipated to cause adverse effects to animal or plant life if released to the environment in small quantities. Not expected to bioaccumulate.
Persistence / Degradability	The preparation is expected to biodegrade rapidly. However no information on anaerobic biodegradation is available.
Mobility	This preparation has high water solubility. Therefore it is likely to distribute predominantly to the aqueous environment.

13. DISPOSAL CONSIDERATIONS

Waste Disposal	Reuse where possible. No special precautions are required for this product.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name	None Allocated				
UN No.	None Allocated	DG Class	None Allocated	Subsidiary Risk(s)	None Allocated
Packing Group	None Allocated	Hazchem Code	None Allocated	EPG	None Allocated

15. REGULATORY INFORMATION

Poison Schedule	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).
AICS	All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information	ABBREVIATIONS: ADB - Air-Dry Basis. BEI - Biological Exposure Indice(s)
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Product Name **DESERT WATERLESS MICROBIAL URINAL CUBES**

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
CNS - Central Nervous System.
EINECS - European INventory of Existing Commercial chemical Substances.
IARC - International Agency for Research on Cancer.
M - moles per litre, a unit of concentration.
mg/m3 - Milligrams per cubic metre.
NOS - Not Otherwise Specified.
NTP - National Toxicology Program.
OSHA - Occupational Safety and Health Administration.
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm - Parts Per Million.
RTECS - Registry of Toxic Effects of Chemical Substances.
TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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End of Report