



MATERIAL SAFETY DATA SHEET

PRODUCT NAME **BENCHMATE**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name ECOWASH SYSTEMS
Address P.O Box 386, Brookvale, NSW, AUSTRALIA, 2100
Telephone (02) 9938 1800
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Emergency (02) 9938 1800
Web Site <http://www.ecowashsystems.com.au>

Synonym(s)

Use(s) CLEANER • SANITISER

MSDS Date 13 August 2007

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC 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
Pkg Group	None Allocated	Hazchem Code	None Allocated	EPG	None Allocated

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
NON HAZARDOUS INGREDIENTS	Not Available	Not Available	<10%
QUATERNARY AMMONIUM COMPOUND	Not Available	Not Available	<10%
SURFACTANT	Not Available	Not Available	<10%
WATER	H2O	7732-18-5	remainder

4. FIRST AID MEASURES

Eye Hold eyelids apart and flush continuously with water. Continue until advised to stop by the Poisons Information Centre, a doctor, or for at least 15 minutes. Keep patient calm.

Inhalation If over exposure occurs leave exposure area immediately. If irritation persists, seek medical attention.

Skin Gently flush affected areas with water. Seek medical attention if irritation develops.

Ingestion For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor. If swallowed, do not induce vomiting.

Advice to Doctor Treat symptomatically

First Aid Facilities Eye wash facilities and a hand wash basin are recommended.

5. FIRE FIGHTING MEASURES

Flammability	Non flammable. May evolve toxic gases (carbon/ nitrogen oxides, ammonia, chlorides, hydrocarbons) when heated to decomposition.
Fire and Explosion	Non flammable. Evacuate area and contact emergency services. Toxic gases (carbon/ nitrogen oxides, ammonia, hydrocarbons, chlorides) may be evolved when heated. Remain upwind & notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers & nearby storage areas.
Extinguishing	Non flammable. Prevent contamination of drains or waterways, absorb runoff with sand or similar.
Hazchem Code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spillage	If spilt (bulk), wear splash-proof goggles and PVC/rubber gloves. Absorb spill with sand or similar and place in sealed containers for disposal. Wash spill site down with water. For small amounts, dilute with water and flush to sewer. Caution; surfaces may be slippery.
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7. STORAGE AND HANDLING

Storage	Store in cool, dry, well ventilated area, removed from strong oxidising agents (eg. hypochlorites, peroxides, nitrates), anionic detergents (eg. soaps), heat sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.
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 Standards	No exposure standard(s) allocated.
Biological Limit Values	No biological limit allocated.
Engineering Controls	Ensure adequate natural ventilation.
PPE	Wear splash-proof goggles and rubber or PVC gloves. When using large quantities or where heavy contamination is likely, wear a PVC apron, safety boots, coveralls and a faceshield.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	CLEAR COLOURLESS LIQUID	Solubility (water)	SOLUBLE
Odour	ODOURLESS	Specific Gravity	NOT AVAILABLE
pH	NEUTRAL (Approximately)	% Volatiles	96 % (Approximately)
Vapour Pressure	23 hPa @ 20°C	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	100°C	Upper Explosion Limit	NOT RELEVANT
Melting Point	< 0°C	Lower Explosion Limit	NOT RELEVANT
Evaporation Rate	AS FOR WATER	Autoignition Temperature	NOT AVAILABLE
Density	1 g/mL (Approximately)		

10. STABILITY AND REACTIVITY

Material to Avoid	Incompatible with strong oxidising agents (eg. peroxides, nitrates, hypochlorites) and anionic detergents (eg. soaps).
Decomposition	May evolve toxic gases (carbon/ nitrogen oxides, ammonia, chlorides, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	This product has the potential to cause acute and chronic health effects with over exposure. Avoid eye or skin contact and vapour generation - inhalation. Upon dilution, the potential for adverse health effects will be reduced markedly. Potential sensitiser. Those individuals with pre-existing skin, eye or respiratory allergies may be more susceptible to adverse effects.
Eye	Exposure may result in irritation, pain and redness.
Inhalation	Over exposure to vapours/mists may result in respiratory irritation, nausea, and headache. Occupational exposure to quaternary ammonium compounds has been reported to cause asthma, although rare. Due to the low vapour pressure, an inhalation hazard is not anticipated, unless sprayed.
Skin	Prolonged and repeated contact may result in mild skin irritation and possible sensitisation in some individuals.
Ingestion	With large doses ingestion may result in nausea, vomiting and gastrointestinal irritation.
Toxicity Data	No LD50 data available for this product.

12. ECOLOGICAL INFORMATION

Environment	Benzalkonium chloride derivatives/quaternary ammonium compounds are commonly used as disinfectants, indicating toxicity to microorganisms. Benzalkonium chloride is toxic to trout above 2 ppm.
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13. DISPOSAL CONSIDERATIONS

Waste Disposal	For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. For larger amounts, contact the manufacturer for additional information. Prevent contamination of drains or waterways as aquatic life may be threatened and environmental damage may result.
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
Pkg 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	BENZALKONIUM CHLORIDE: Benzalkonium chloride can be a severe eye & skin irritant & corrosive. Contact with concentrated solutions can cause deep injury and ulceration (Wahlberg, 1985). A 0.1% concentration will cause mild discomfort to the eye. Ingestion may cause a burning pain in the mouth, throat and abdomen, salivation, low blood pressure, CNS depression, excitement, confusion and weakness, laboured breathing & cyanosis (blue skin due to lack of oxygen in blood) or circulatory shock. When used in low concentrations there is little local or systemic toxicity.
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RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

PRODUCT NAME BENCHMATE

ABBREVIATIONS:

ADB - Air-Dry Basis.

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

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.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

TWA/ES - Time Weighted Average or Exposure Standard.

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.

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.

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 and Ecowash Systems 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 and Ecowash Systems have 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 and Ecowash Systems 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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MSDS Date: 13 August 2007

End of Report