

Product Name **OSMOSE INSHIELD INSECTICIDE**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name **OSMOSE (AUSTRALIA) PTY LTD**
Address Cafpirco Road, Mount Gambier, SA, AUSTRALIA, 5290
Telephone (08) 8723 1399
Fax (08) 8732 0010
Emergency 1800 088 809
Email customerservices@osmose.com.au
Web Site http://www.osmose.com.au/

Synonym(s) EMULSIFIABLE TERMITICIDE CONCENTRATE • INSHIELD CONCENTRATE • OSMOSE INSHIELD CONCENTRATE • PERMETHRIN EC CONCENTRATE

Use(s) INDUSTRIAL APPLICATIONS • TIMBER PRESERVATIVE

MSDS Date 03 Jun 2009

2. HAZARDS IDENTIFICATION

CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA

RISK PHRASES

R20/22 Harmful by inhalation and if swallowed.
R43 May cause sensitisation by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: May cause lung damage if swallowed.

SAFETY PHRASES

S23 Do not breathe gas/fumes/vapour/spray (where applicable).
S24 Avoid contact with skin.
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

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
PERMETHRIN	C21-H20-Cl2-O3	52645-53-1	50%
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	Not Available	64742-94-5	30-50%
CALCIUM DODECYL BENZENE SULPHONATE	C36-H58-O6-S2.Ca	26264-06-2	4-10%
NONYL PHENOL ETHOXYLATE BLEND	Not Available	63496-57-1	<3%

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.
Ingestion	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).
Advice to Doctor	Treat symptomatically

5. FIRE FIGHTING MEASURES

Flammability	Combustible. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.
Fire and Explosion	Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. 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	Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways.
Hazchem Code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

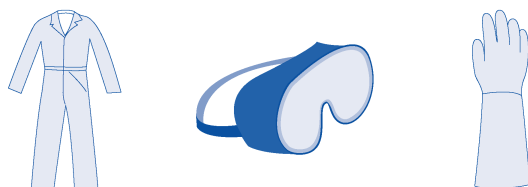
Spillage	Contact emergency services where appropriate. Use personal protective equipment. Clear area of all unprotected personnel. Ventilate area where possible. Contain spillage, then cover / absorb spill with non-combustible absorbant material (vermiculite, sand, or similar), collect and place in suitable containers for disposal. Eliminate all ignition sources. Prevent spill entering drains or waterways. Only trained personnel should undertake clean up.
-----------------	--

7. STORAGE AND HANDLING

Storage	Store in cool, dry, well ventilated area, removed from direct sunlight, heat and ignition sources, oxidising agents (eg. peroxides), acids (eg. nitric acid) and foodstuffs. 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 allocated.
Engineering Controls	Avoid inhalation. Use in well ventilated areas.
PPE	Wear splash-proof goggles, coveralls and full-length nitrile or full-length viton (R) gloves. When using large quantities or where heavy contamination is likely, wear: a PVC apron and rubber boots. Where an inhalation risk exists, wear: a Type A (Organic vapour) respirator. If spraying, wear: a washable hat Head protection and a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	PALE BROWN LIQUID	Solubility (Water)	EMULSIFIES
Odour	MILD AROMATIC ODOUR	Specific Gravity	1.049
pH	NOT AVAILABLE	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	CLASS C1 COMBUSTIBLE
Vapour Density	NOT AVAILABLE	Flash Point	> 65°C

Product Name **OSMOSE INSHIELD INSECTICIDE**

Boiling Point	NOT AVAILABLE	Upper Explosion Limit	NOT AVAILABLE
Melting Point	NOT AVAILABLE	Lower Explosion Limit	NOT AVAILABLE
Evaporation Rate	NOT AVAILABLE		

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended conditions of storage.
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources.
Material to Avoid	Incompatible with oxidising agents (eg. hypochlorites), acids (eg. nitric acid), heat and ignition sources.
Hazardous Decomposition Products	May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.
Hazardous Reactions	Polymerization is not expected to occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Moderate toxicity - irritant. This product has the potential to cause adverse health effects with over exposure. Use safe work practices to avoid eye or skin contact and vapour generation - inhalation. Upon dilution, the potential for adverse health effects may be reduced. Chronic exposure to some solvents may result in central nervous system (CNS), liver and kidney damage. Potential sensitising agent.
Eye	Irritant. Contact may result in irritation, lacrimation, pain, redness and conjunctivitis. May result in burns with prolonged contact.
Inhalation	Irritant - toxic. Over exposure may result in mucous membrane irritation of the respiratory tract, coughing and headache. High level exposure may result in CNS stimulation with nervousness, salivation, dizziness, tremors, breathing difficulties (wheezing) and unconsciousness.
Skin	Irritant - toxic. Contact may result in drying and defatting of the skin, rash and dermatitis. Contact with synthetic pyrethroids may result in stinging, tingling and sensation of numbness. May cause sensitisation in contact with skin.
Ingestion	Moderate toxicity. Ingestion may result in nausea, vomiting, diarrhoea, salivation, breathing difficulties, hyperexcitability, anxiety, lack of coordination and convulsions. Aspiration may result in chemical pneumonitis and pulmonary oedema.
Toxicity Data	PERMETHRIN (52645-53-1) LC50 (Inhalation): 485 mg/m ³ (rat) LD50 (Ingestion): 383 mg/kg (rat) LD50 (Intraperitoneal): 429 mg/kg (mouse) LD50 (Intravenous): 31 mg/kg (mouse) LD50 (Skin): 1750 mg/kg (rat) LD50 (Subcutaneous): 6600 mg/kg (rat) SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC (64742-94-5) LC50 (Inhalation): > 590 mg/m ³ /4 hours (rat) LD50 (Skin): > 2 mL/kg (rabbit) LDLo (Ingestion): 5 mL/kg (rat) CALCIUM DODECYL BENZENE SULPHONATE (26264-06-2) LD50 (Ingestion): 3680 mg/kg (mouse)

12. ECOLOGICAL INFORMATION

Environment	Synthetic pyrethroids have been shown to be highly toxic to fish, aquatic arthropods and bees in laboratory tests. However, in practice no serious adverse effects have been reported with normal use because of low rates of application and low persistence in the environment. Low toxicity to birds and mammals.
--------------------	--

13. DISPOSAL CONSIDERATIONS

Waste Disposal	Dispose of to an approved landfill site. Contact Waste Disposal Authorities in your State for further details and required approvals.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

Product Name **OSMOSE INSHIELD INSECTICIDE**

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 SYNERGISM - ANTAGONISM: Ingredients in this product may act together to aggravate or reduce adverse effects. Accordingly the Exposure Standard provided for single ingredients should be considered as a guide only and all due care exercised when handling.

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.

- ABBREVIATIONS:
- ADB - Air-Dry Basis.
 - BEI - Biological Exposure Indice(s)
 - 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.

Prepared By Risk Management Technologies
5 Ventnor Ave, West Perth

Product Name **OSMOSE INSHIELD INSECTICIDE**

Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmt.com.au

MSDS Date: 03 Jun 2009

End of Report