

**Product Name**      **OSMOSE DETERMITE ULTRA LOW ODOUR TIMBER FRAMING INSECTICIDE**

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier Name**      **OSMOSE (AUSTRALIA) PTY LTD**  
**Address**              Cafpirco Road, Mount Gambier, SA, AUSTRALIA, 5290  
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**Web Site**              <http://www.osmose.com.au/>

**Synonym(s)**         BIFENTHRIN 100EC • DETERMITE 100EC • DETERMITE CONCENTRATE • EMULSIFIABLE TERMITICIDE CONCENTRATE • OSMOSE DETERMITE 100EC

**Use(s)**                 TIMBER INSECTICIDE SPRAY

**SDS Date**            04 Mar 2010

### 2. HAZARDS IDENTIFICATION

**CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA**

**RISK PHRASES**

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**

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

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	Not Available	64742-94-5	>60%
BIFENTHRIN	C23-H22-Cl-F3-O2	82657-04-3	5-10%
ADDITIVE(S)	Not Available	Not Available	10-30%

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#### 4. FIRST AID MEASURES

<b>Eye</b>	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.
<b>Inhalation</b>	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
<b>Skin</b>	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.
<b>Ingestion</b>	For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).
<b>Advice to Doctor</b>	Treat symptomatically
<b>First Aid Facilities</b>	Eye wash facilities and safety shower are recommended.

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#### 5. FIRE FIGHTING MEASURES

<b>Flammability</b>	Combustible. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.
<b>Fire and Explosion</b>	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.
<b>Extinguishing</b>	Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways.
<b>Hazchem Code</b>	None Allocated

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#### 6. ACCIDENTAL RELEASE MEASURES

<b>Spillage</b>	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.
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#### 7. STORAGE AND HANDLING

<b>Storage</b>	Store in a cool, dry, well ventilated area, removed from fertilizers, moisture, seeds, acids, oxidising agents, alkalis, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Non corrosive- compatible with aluminium, HDPE, glass and phenolic-lined steel containers.
<b>Handling</b>	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.

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#### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

<b>Exposure Stds</b>	No exposure standard(s) allocated.
<b>Biological Limits</b>	No biological limit allocated.
<b>Engineering Controls</b>	Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical explosion proof extraction ventilation is recommended.
<b>PPE</b>	Wear splash-proof goggles, viton (R) or PVA gloves and coveralls. Where an inhalation risk exists, wear: a Type A (Organic vapour) respirator. If spraying, wear: an Air-line or a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.



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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	CLEAR AMBER LIQUID	<b>Solubility (Water)</b>	EMULSIFIES
<b>Odour</b>	HYDROCARBON ODOUR	<b>Specific Gravity</b>	0.88 - 0.92

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<b>pH</b>	6.5 - 7.5	<b>% Volatiles</b>	NOT AVAILABLE
<b>Vapour Pressure</b>	NOT AVAILABLE	<b>Flammability</b>	CLASS C1 COMBUSTIBLE
<b>Vapour Density</b>	NOT AVAILABLE	<b>Flash Point</b>	> 80°C
<b>Boiling Point</b>	100°C (Approximately)	<b>Upper Explosion Limit</b>	NOT AVAILABLE
<b>Melting Point</b>	< 0°C	<b>Lower Explosion Limit</b>	NOT AVAILABLE
<b>Evaporation Rate</b>	AS FOR WATER		

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## 10. STABILITY AND REACTIVITY

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

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## 11. TOXICOLOGICAL INFORMATION

<b>Health Hazard Summary</b>	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 inhalation. Chronic exposure to some solvents may result in central nervous system (CNS), liver and kidney damage. This product may be diluted with water before application, which may reduce toxicity. Do not allow contamination of drains and waterways.
<b>Eye</b>	Irritant. Contact may result in irritation, lacrimation, pain and redness.
<b>Inhalation</b>	Irritant. Over exposure may result in irritation of the nose and throat, coughing and headache. High level exposure may result in nausea, dizziness and drowsiness.
<b>Skin</b>	Irritant. Contact may result in drying and defatting of the skin, rash and dermatitis. May be absorbed through skin with harmful effects.
<b>Ingestion</b>	Moderate toxicity. Ingestion may result in nausea, vomiting, abdominal pain, diarrhoea, fatigue, dizziness and unconsciousness. Aspiration may result in chemical pneumonitis and pulmonary oedema.
<b>Toxicity Data</b>	SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC (64742-94-5) LC50 (Inhalation): > 590 mg/m <sup>3</sup> /4 hours (rat) LD50 (Skin): > 2 mL/kg (rabbit) LDLo (Ingestion): 5 mL/kg (rat) BIFENTHRIN (82657-04-3) LC50 (Inhalation): 4.9 mg/l/4 hours (rat) LD50 (Ingestion): 54.5 mg/kg (rat) LD50 (Skin): 2 g/kg (rabbit)

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## 12. ECOLOGICAL INFORMATION

<b>Environment</b>	Hazardous to the environment.
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## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal</b>	Absorb with sand or similar and dispose of to an approved landfill site. Contact the manufacturer for additional information. Do not dispose of in such a way that ground water, roots, turf or other desirable plants may become contaminated.
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

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## 14. TRANSPORT INFORMATION

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

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

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**IATA**

**Shipping Name**                      ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**UN No.**                                      3082                      **DG Class**                      9                      **Subsidiary Risk(s)**      None Allocated  
**Packing Group**                      III

**IMDG**

**Shipping Name**                      ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
**UN No.**                                      3082                      **DG Class**                      9                      **Subsidiary Risk(s)**      None Allocated  
**Packing Group**                      III

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**15. REGULATORY INFORMATION**

**Poison Schedule**      Classified as a Schedule 6 (S6) Poison 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).

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**16. OTHER INFORMATION**

**Additional Information**      **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.

**HERBICIDES:** Herbicides are classed as selective when they are used to kill weeds without harming the crop and as non-selective when the purpose is to kill all vegetation. Herbicides can affect plants either by contact or translocation. Contact herbicides kill the plant parts to which the chemical is applied, while translocated herbicides are absorbed either by roots or above-ground parts of plants and then move within the plant system to distant tissues.

**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/m<sup>3</sup> - 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 Safety Data Sheet ('SDS').

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

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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 SDS, 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 SDS.

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**End of Report**