



# Material Safety Data Sheet

MSDS No.	1036	Issue Date : September 2007	ISSUED by SCOTTS AU
Product Name :	<b>DEFENDER HOME DEFENSE OUTDOOR BARRIER SPRAY</b>		

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name</b>	DEFENDER HOME DEFENSE OUTDOOR BARRIER SPRAY PROFESSIONAL GRADE FORMULA
<b>Product Code</b>	190540
<b>Manufacturer</b>	SCOTTS AUSTRALIA PTY LTD
<b>Address</b>	11 Columbia Way Baulkham Hills NSW 2153 Australia
<b>Emergency Tel.</b>	1800 033 111
<b>Telephone/Fax</b>	Tel:(02) 8853 7300
<b>Number</b>	Fax:(02) 8853 7310
<b>Recommended Use</b>	Insecticide

## 2. HAZARDS IDENTIFICATION

<b>Hazard Classification</b>	Australia: Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia. Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. New Zealand: Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001. Not classified as Dangerous Goods for transport, according to the New Zealand Standard NZS 5433:1999 Transport of Dangerous Goods on Land. HSNO classification: 9.1A Substance that is very ecotoxic to aquatic life 9.4B Substance that is toxic to terrestrial invertebrates  Hazard statement code: H410- very toxic to aquatic life with long lasting effects. H442- Toxic to terrestrial invertebrates  Precautionary statement codes- prevention: P103- Read label before use. P273- Avoid release to the environment  Precautionary statement codes- response: P391- Collect spillage
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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Ingredients</b>	<b>Name</b>	<b>CAS</b>	<b>Proportion</b>	<b>Ingredients</b>
	Bifenthrin	82657-04-3	0.05%	
	Biocide	-	<1%	
	Other ingredients determined not to be hazardous	-	Balance	

## 4. FIRST AID MEASURES

<b>Inhalation</b>	Remove patient to fresh air. Get medical attention if breathing difficulty or discomfort occurs or persists.
<b>Ingestion</b>	Rinse mouth with water. Dilute by giving 1-2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. If poisoning occurs contact a doctor or poisons information centre.
<b>Skin</b>	Wash thoroughly with plenty of soap and water.
<b>Eye</b>	Flush with water. Get medical attention if irritation occurs and persists.

## 5. FIRE FIGHTING MEASURES



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<b>Suitable Extinguishing Media</b>	Soft stream water fog only if necessary, foam, CO2 or dry chemical. Contain all runoff.
<b>Hazards from Combustion Products</b>	Thermal decomposition and burning may produce toxic by-products.
<b>Special Protective Equipment for fire fighters</b>	Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Emergency Procedures</b>	In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter and dispose of waste as indicated below or in accordance to the Australian Standard 2507 - Storage and Handling of Pesticides. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent, bleach or caustic) and add the solutions to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.
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## 7. HANDLING AND STORAGE

<b>Precautions for Safe Handling</b>	Wash hands after use and before eating, drinking or smoking.
<b>Conditions for Safe Storage</b>	Store in a cool, dry and well ventilated location. Avoid excess heat. No smoking, eating or drinking should be allowed where material is used or stored. Keep out of reach of children and animals. Store in original containers only. Do not contaminate food, water or feed by storage or disposal.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>National Exposure Standards</b>	None allocated.
<b>Biological Limit Values</b>	None allocated
<b>Engineering Controls</b>	Ensure adequate ventilation.
<b>Personal Protection</b>	Not required for general use. For large exposures, as in the case of large spills, wear long sleeve uniform or overalls full, chemical resistant shoes and chemical protective gloves.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White coloured liquid
<b>Odour</b>	Slight sweet citronella odour.
<b>Melting Point</b>	Not applicable
<b>Boiling Point</b>	Not available
<b>Solubility in Water</b>	Product forms an emulsion in water. Bifenthrin <0.1ppb
<b>pH Value</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (Air=1)</b>	Not available
<b>Specific gravity</b>	0.992 at 25°C.
<b>Decomposition temperature</b>	Not available
<b>Flashpoint</b>	Not flammable
<b>Flammable Limits</b>	Not flammable

## 10. STABILITY AND REACTIVITY



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<b>Chemical Stability</b>	Stable under normal conditions of storage for more than 2 years.
<b>Conditions to Avoid</b>	Avoid excess heat.
<b>Materials to avoid</b>	Not information available
<b>Hazardous</b>	Carbon monoxide, carbon dioxide, hydrogen chloride, chlorine, fluorine
<b>Decomposition</b>	and hydrogen fluoride.
<b>Products</b>	

## 11. TOXICOLOGICAL INFORMATION

<b>Inhalation</b>	The acute inhalation LC50 for the rat is expected to be >5mg/L/4 hour.
<b>Ingestion</b>	The acute oral LD50 of the product is expected to be >5000 mg/kg.
<b>Skin</b>	The acute dermal LD50 (rat) of the product is expected to be >10,000 mg/kg. May cause skin irritation in susceptible persons.
<b>Eye</b>	Will irritate the eyes.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Toxic to aquatic organisms and terrestrial arthropods.
<b>Persistence / Degradability</b>	The active ingredient, bifenthrin, degrades at a moderate rate in soils (t1/2 = 50 to 205 days), and more rapidly on the surface of bare soils (t1/2 = 7 to 62 days). Bifenthrin is tightly bound in most soils and has extremely low water solubility.
<b>Environ. Protection</b>	Do not contaminate drains, sewers, streams, ponds or other waterways with product or empty container.

## 13. DISPOSAL CONSIDERATIONS

<b>Disposal Considerations</b>	Use product completely. Dispose of empty container by wrapping in paper, placing in a plastic bag and putting in the garbage.
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## 14. TRANSPORT INFORMATION

<b>Transport Information</b>	Not classified as dangerous goods according to the Australian Dangerous Goods Code.
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## 15. REGULATORY INFORMATION

<b>Regulatory Information</b>	APVMA Approval No. 55019
<b>Poisons Schedule</b>	HSNO Approval No. HSR000136.
	Not a scheduled poison.

## 16. OTHER INFORMATION

**Date of preparation or last revision of MSDS** MSDS Created: September 2007

<b>Contact Person/Point</b>	Scotts Australia Pty Ltd 11 Columbia Way Baulkham Hills NSW 2153 Phone (02) 8853 7300 Fax (02) 8853 7310 Emergency phone 1800 033 111 ...End Of MSDS...	New Zealand: 180c Great South Rd Takanini, Auckland Phone (09) 299 6558 Fax (09) 296 0186 Emergency phone 0800 734 607
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