

**CERTIFICATE OF REGISTRATION OF PESTICIDE/VECTOR
REPELLENT**

**ISSUED UNDER SECTION 8 OF THE CONTROL OF VECTORS AND PESTICIDES
ACT 1998**

Registration Number : SINNEAI-MicEW/012/0364

This is to certify that

Name of Registrant : RENTOKIL INITIAL SINGAPORE PRIVATE
LIMITED

Address of Principal : 16 & 18 JALAN MESIN
Place of Business : SINGAPORE 368815

Company/Business Certificate No : 195900145N

**has been granted registration of the following pesticide for advertisement, sale
and supply in Singapore.**

Product Name : PYGO

Active Ingredient : D-PHENOTHRIN

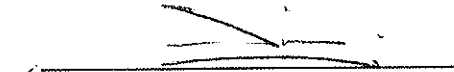
Content : D-PHENOTHRIN 10.00% W/W

Formulation : MICRO EMULSION

Manufacturer : RENTOKIL INITIAL PLC
FELCOURT
EAST GRINSTEAD, WEST SUSSEX
RH19 2JY
UNITED KINGDOM

The Certificate of Registration is issued subject to the conditions stated overleaf.

4 January 2005
Date of Registration


Director General of Public Health
Registration Authority

Safety Data Sheet

NOTE: Access to a copy of this Safety Data Sheet (SDS) via our Website does not constitute the issue of a controlled Copy under EU legislation. To be issued with such a copy please contact Rentokil Initial using the details below. In order to confirm the latest version of the SDS for this product visit <http://www.rentokil-initial.com/sds>

REVISION (see box 16)

Issue : 03 16 : 12 : 2008

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY	
Product Name	PyGo
Description	An off-white, liquid with a slight odour. Insecticide for professional use against crawling insects.
Company	Rentokil Initial Supplies, Liverpool, L33 7SR. Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1293 858 000 E-mail: sds@rentokil.com

2 HAZARD IDENTIFICATION	
Classification (Supply – Use) : In compliance with EC Directive 1999/45.	
N Dangerous for the Environment	R50/53 Very Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R66 Repeated exposure may cause skin dryness or cracking.
Adverse Physical, Chemical, Significant Human Health and Environmental Effects (See also box 11):	
Combustion may result in the formation of the oxides of carbon, nitrogen and ammonia. Ingestion may cause nausea, vomiting and irritation of the respiratory and digestive systems. Inhalation may lead to irritation of the respiratory system. Inhalation of high concentrations may cause drowsiness and dizziness. Repeated or prolonged contact with skin may cause slight irritation, skin dryness and cracking.	
Adverse effects on the environment are unlikely, provided that the product is used as intended.	

3 COMPOSITION / INFORMATION ON INGREDIENTS (SEE ALSO BOX 16)		
% w/w	Common*/Chemical Name, ELINCS/EINECS & CAS No. of Ingredients	EC 1999/45 Classification
10.0	d-Phenothrin*/(3-phenoxyphenyl)methyl-2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate EINECS : 247-404-5 CAS : 188023-86-1	N: R50/53
≥ 10.0 ≤ 25.0	Proylene Glycol*/ Propane-1-2-diol EINECS : 200-338-0 CAS : 57-55-6	Not classified. Substance with a Community Workplace Exposure Limit (refer to box 8).
>1.0 ≤ 2.5	Pseudocumene*/ 1,2,4-trimethylbenzene EINECS : 202-436-9 CAS : 95-63-6	R10 Xn: R20 Xi : R36/37/38 N: R51/53
>1.0 ≤ 2.5	Xylene*/ dimethylbenzene EINECS : 215-535-7 CAS : 1330-20-7	R10 Xn: R20/21 Xi: R38
≤1.0	Mesitylene*/ 1,3,5-trimethylbenzene EINECS : 203-604-4 CAS : 108-67-8	R10 Xi: R37 N: R51/53
≤1.0	Isocumene*/ N-Propyl Benzene EINECS : 203-132-9 CAS : 103-65-1	R10 Xn: R65 Xi: R37 N: R51/53

PyGo

4 FIRST-AID MEASURES (SEE ALSO "ADVERSE EFFECTS" IN BOX 2)	
Inhalation	This route of exposure is not anticipated. However, remove patient to fresh air, keep warm and at rest. Apply supportive measures if necessary and seek medical attention.
Eye Contact	Rinse affected eye with clean running water, or eyewash solution, for at least 15 minutes holding eyelids well apart. Rinse entire surface and do not allow run-off to contaminate unaffected eye. Seek medical attention.
Skin Contact	Remove and wash contaminated clothing immediately. Wash affected area thoroughly with soap and water. If the patient feels unwell seek medical advice.
Ingestion (Swallowing)	Do NOT induce vomiting. If unconscious place in the recovery position and apply supportive measures if necessary. If conscious give patient up to ½ litre or 1 pint of water to drink. Seek medical attention.
Emergency Equipment Suggested	Appropriate first-aid equipment should be provided. For the UK this should be in accordance with the Health & Safety (First-Aid) Regulations 1981. See also the Approved Code of Practice "First-aid at Work".
Note To Doctor	Further information on all Rentokil Initial formulations is lodged with the National Poisons Information Service in the UK.

5 FIRE FIGHTING MEASURES	
Fire Extinguisher Type	Small fire: Use dry chemical powder. Large fire: Use water spray or fog. Cool containing vessels with water spray in order to prevent pressure build-up, auto-ignition or explosion.
Special Fire-Fighting Procedures	Wear suitable personal protective equipment.
Special Exposure Hazards	Hazardous thermal decomposition products: carbon oxides (CO, CO ₂).

6 ACCIDENTAL RELEASE MEASURES	
Personal Precautions (See also box 8)	Wear suitable personal protective equipment.
Environmental Precautions	This product is classified as dangerous for the environment. Keep away from drains, surface and ground water, and soil.
Clean-up Procedure (See also box 13)	Absorb spill with an inert material such as sand, earth or sawdust. Transfer to a suitable container for subsequent disposal.

7 HANDLING AND STORAGE (SEE ALSO BOX 8)	
Handling	No specific handling requirements.
Storage	Store in original container in a cool, dry, ventilated place out of the reach of children and away from food, drink and animal feeding stuffs.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION	
Exposure Standard - Directive EC/98/24 (1 st IOELV Directive)	WEL for propylene glycol is 474 mg/m ³ long-term exposure (8 hour Time Weighted Average) (total vapours and particulates) and 10 mg/m ³ short-term exposure (15 minute reference period) (for particulates). Propylene glycol is referred to as Propane 1-2-diol in Directive EC/98/24 (1 st IOELV Directive). WEL for Xylene is 220 mg/m ³ long-term exposure (8 hour Time Weighted Average) and 441 mg/m ³ short-term exposure (15 minute reference period). Can be absorbed through the skin.
Engineering Controls	Where exposure may occur, engineering controls, rather than the provision of Personal Protective Equipment (PPE) should be employed. On completion of a risk assessment, the following PPE may be required:
Eye Protection	Suitable eye protection such as face visor or goggles.
Hand Protection	Suitable gloves.
Skin Protection	Suitable skin protection such as coveralls.
Breathing Protection	Do not breathe spray mist. Otherwise wear suitable respiratory equipment.
Environmental Exposure Controls	Product should be used in accordance with instructions given and any spillage should be dealt with as a priority in order that contamination of watercourses or ground is avoided.

9 PHYSICAL AND CHEMICAL PROPERTIES			
Appearance and Odour	An off-white, liquid with a slight odour.		
pH	8.34 at 20°C	Solubility in Water	Miscible.
Specific Gravity	Approx 1.0 at 20°C	Solubility in Other Solvents	Not determined.
Flash Point	69.5°C	Explosive Properties	None.
Flammability	Non-flammable.	Combustibility	Combustible.
Boiling Point/Range	Starts at ca. 180°C	Oxidising Properties	None.
Vapour Density	Not determined.	Evaporation Rate	Not determined.
Vapour Pressure	Not determined.	Partition Coefficient	Not determined.
Viscosity	Not determined.	Other Data	None known.

10 STABILITY AND REACTIVITY

Conditions to avoid	Avoid extremes of temperature, e.g. below 0°C and above 40°C.
Materials to avoid	Avoid contact with oxidising agents and other reactive materials.
Hazardous Breakdown Products	Hazardous thermal decomposition products: carbon oxides (CO, CO ₂).

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

Acute Toxicity	Oral	Ingestion may cause nausea, vomiting and irritation of the respiratory and digestive systems. For (d-phenothrin): LD ₅₀ (rat) : 5000 mg/kg.
	Inhalation	Inhalation may lead to irritation of the respiratory system. Inhalation of high concentrations may cause drowsiness and dizziness. For (d-phenothrin): LC ₅₀ (rat) (4hr) : > 2000 mg/kg.
	Dermal	No adverse side effects expected. For (d-phenothrin) LD ₅₀ dermal (rat) : >2000mg/kg
Corrosivity/Irritation	Skin	May cause slight irritation, skin dryness and cracking especially with repeated or prolonged exposure.
	Eyes	May cause some irritation, which should cease on removal of the product.
	Respiratory tract	May cause some irritation to the respiratory system if mists or sprays are swallowed.
Sensitisation	Skin	Contains no known skin sensitisers.
	Respiratory	Contains no known respiratory sensitisers.
Repeat-Dose Toxicity		Product does not contain any components known to have any effects relating to repeated-dose toxicity.
Mutagenicity		Product does not contain any components known to have a mutagenic effect above the lower limits of concentration as specified in EC Directive 1999/45.
Carcinogenicity		Product does not contain any components at concentrations known to have a carcinogenic effect above the lower limits of concentration as specified in EC Directive 1999/45.
Reproductive Toxicity	Fertility Development	Product does not contain any components known to have effects on fertility. Product does not contain any components known to be toxic to the reproductive system.
Other Information		None known.

12 ECOLOGICAL INFORMATION

General Information	This product is classified as very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. However, when used in accordance with instructions given, controlled release of this product is not expected to cause environmental contamination.
Ecotoxicity Data	For (d-phenothrin) : LC ₅₀ (fish) (96hr) : 0.0027 mg/L, EC ₅₀ (daphnia) (48h) 4.3 µg/L
Mobility	Not determined.
Persistence and Degradability	d-phenothrin is not readily degradable in water. Log P _{ow} : 6.76 (25°C)
Bioaccumulative Potential	The bioaccumulation potential of this product and its constituents has not been evaluated.
Other Adverse Effects	None known.

13 DISPOSAL CONSIDERATIONS

Disposal of Waste / Containers	Under normal circumstances, waste / empty containers will be disposed of by Rentokil Initial.	
Classification (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	<u>Hazard Code:</u> H14 - Ecotoxic	
Note for Disposal	<u>Components making the waste hazardous</u>	<u>Concentrations (%):</u>
	d-phenothrin	10.0
	For further advice about disposal, in the UK, contact the local office of the Environment Agency (England and Wales) or Scottish Environment Protection Agency. Local rate from anywhere in the UK: +44 (0) 870 850 6506.	

14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED)				
UN No.	UN3082	Tremcard Reference No.	CEFIC TEC (R)- 90GM6-III	RIS Code
Transport Category	3	UK Hazchem EAC	2X	PSP87
ADR 2007 (International Road)	Class 9 ADR HIN 90			Labels
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (contains d-phenothrin).			UN3082
Limited Quantity Exemptions	Maximum quantity per inner receptacle is 5 litres. Maximum quantity per outer package is 30 Kg. Combination packs only.			
Special Requirements	Not required. Packing Group III			
IMDG 2006 (Sea)	Class 9 IMDG EMS F-A, S-F			UN3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (contains d-phenothrin).			
Limited Quantity Exemptions	Maximum quantity per inner receptacle is 5 litres. Maximum quantity per outer package is 30 Kg. Combination packs only.			
Special Requirements	Not required. Packing Group III			
Note for Transport	Local, State or National requirements may apply to the carriage of this product.			

15 REGULATORY INFORMATION (HEALTH AND SAFETY INFORMATION (SEE ALSO BOX 2))	
Safety Phrases	S23 Do not breathe fog or spray mist. S35 This material and its container must be disposed of in a safe way. S61 Avoid release to the environment. Refer to special instructions/safety data sheet.
Additional Label Phrases	To avoid risks to man and the environment, comply with the instructions for use.
Legislation	Labelling is in accordance with UK regulations implementing the EC Directive 1999/45. Additional labelling requirements may be necessary in accordance with other National legislation. Outside the UK, the registration of this product may be necessary before use and any additional local requirements must be observed at all times. The information given on this Safety Data Sheet (SDS) does not constitute an assessment in accordance with Control of Substances Hazardous to Health (COSHH) Regulations 2002, in the UK. Other National measures or guidance should be followed where appropriate.

16 Other Information and indication of revisions	
Packaging Information	500ml Fluorinated HDPE twin neck bottle with built in dispenser and child resistant caps supplied in an outer cardboard box.
Revisions	Changes have been made to the content of boxes 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 14, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 02.
Risk phrase text (From box 3 - These refer to the ingredients only. See box 2 for the product risk phrases)	R10: Flammable. R20: Harmful by inhalation. R20/21: Harmful by inhalation and in contact with skin. R36/37/38: Irritating to eyes, respiratory system and skin. R37: Irritating to respiratory system. R38: Irritating to skin. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65: Harmful: may cause lung damage if swallowed.

PyGo

SDS No. 815

Issue : 03

16 : 12 : 2008

Page 4 of 4

Before using any product, ensure that you read and understand its label.

The information contained in this safety data sheet is, to the best of our knowledge and belief, accurate and reliable at the time of publication. The information relates only to the specific material designated in this safety data sheet and may not be valid for such material if it is used in combination with any other material(s) or any other use than that specified herein. Rentokil Initial UK Ltd is not liable for the use of this product for any other purpose than that described in this safety data sheet. This does not affect your statutory rights. It is the user's responsibility to satisfy him/herself as to the suitability in completeness of such information for his/her own particular use.

Copyright © (2008) Rentokil Initial plc, European Technical Centre, Units 7 & 8 Foundry Court, Foundry Lane, Horsham, West Sussex. RH13 5PY. United Kingdom.

Telephone: +44 (0) 1293 858000 Fax: +44 (0) 1403 214101 Web: <http://www.ri-research.com>