

Safety Data Sheet

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REVISION (see box 16)

Issue : 05 09 : 04 : 2009

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name	PYRETHRUM FOGGING FLUID
Description	An insecticide for professional use in the control of flying insects by cold or thermal fogging. A clear pale yellow liquid with a mineral-oil type odour.
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 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Adverse Physical, Chemical, Significant Human Health and Environmental Effects (See also box 11):

In the event of ingestion, aspiration into the lungs may result in chemically induced pneumonitis. May cause skin and eye irritation.

No other significant adverse effects expected under normal conditions of handling and use.

3 COMPOSITION / INFORMATION ON INGREDIENTS (SEE ALSO BOX 16)

% w/w	Common*/Chemical Name, ELINCS/EINECS & CAS No. of Ingredients	EC 1999/45 Classification
0.12	Pyrethrum* / Pyrethrins EINECS : 232-319-8 CAS : 8003-34-7	X _n : R20/21/22 N : R50/53
≤1.0	Piperonyl butoxide* / 2-(2-butoxyethoxy)ethyl 6-propylpiperonyl ether EINECS : 200-076-7 CAS : 51-03-6	N : R50/53

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4 FIRST-AID MEASURES (SEE ALSO “ADVERSE EFFECTS” IN BOX 2)	
Inhalation	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	Use carbon dioxide, foam or dry powder extinguishers. Do NOT use a water jet.
Special Fire-Fighting Procedures	Wear suitable personal protective equipment.
Special Exposure Hazards	Combustion may lead to formation of hazardous oxides of carbon and other toxic fumes.

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	Do not breathe fog. In case of insufficient ventilation wear suitable respiratory equipment. Vacate area during treatment. Do not re-enter treated area for 24 hours or until dry.
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 (1st IOELV Directive)	Workplace Exposure Limit (WEL) for pyrethrins is 5 mg/m ³ long-term exposure (8 hour Time Weighted Average) and 10 mg/m ³ short-term exposure (15 minute reference period).
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 goggles.
Hand Protection	Suitable hand protection such as gloves.
Skin Protection	Suitable skin protection such as coveralls.
Breathing Protection	Suitable respiratory protection such as a full face respirator.
Environmental Exposure Controls	Use only in accordance with instructions given.

9 PHYSICAL AND CHEMICAL PROPERTIES			
Appearance and Odour	A clear pale yellow liquid with a mineral-oil type odour.		
pH	Not applicable.	Solubility in Water	Not determined.
Specific Gravity	0.9 at 20°C	Solubility in Other Solvents	Not determined.
Flash Point	Ca. 132°C	Explosive Properties	Not determined.
Flammability	Non-flammable.	Combustibility	Not determined.
Boiling Point/Range	Not applicable.	Oxidising Properties	Not determined.
Vapour Density	Not determined.	Evaporation Rate	Not determined.
Vapour Pressure	Not determined.	Partition Coefficient	Not applicable.
Viscosity	Not determined.	Other Data	None known.

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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 strong oxidising agents.
Hazardous Breakdown Products	Combustion may lead to formation of hazardous oxides of carbon and other toxic fumes.

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

Acute Toxicity	Oral	For pyrethrins: LD ₅₀ : (male rats): 2370 mg/kg LD ₅₀ : (female rats): 1030 mg/kg LD ₅₀ : (mice): 273-796 mg/kg
	Inhalation	For Pyrethrins: LC ₅₀ : (4h) (rats): 3.4 mg/L
	Dermal	For Pyrethrins: Percutaneous LD ₅₀ : (rats): > 1500 mg/kg
Corrosivity/Irritation	Skin	Prolonged contact may cause redness, irritation and dry skin.
	Eyes	Product may be slightly irritating to eyes.
	Respiratory tract	Not determined.
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.
Carcinogenicity		Product does not contain any components known to have a carcinogenic effect.
Reproductive Toxicity	Fertility	Product does not contain any components known to have effects on fertility.
	Development	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 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 Pyrethrins: Fish: LC ₅₀ : (Bluegill sunfish): 10 µg/L LC ₅₀ : (Rainbow trout): 5.2 µg/L Daphnia: LC ₅₀ : 12 µg/L Algae: EC ₅₀ : ≥ 1.27 mg/L Bees: LD ₅₀ (oral): 22 ng/bee LD ₅₀ (contact): 130-290 ng/bee Toxic to bees, but exhibits a repellent effect.
Mobility	For white mineral oil: Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
Persistence and Degradability	Expected to be inherently biodegradable.
Bioaccumulative Potential	Product has the potential to bioaccumulate.
Other Adverse Effects	Dangerous for the environment if discharged into watercourses. Very toxic to aquatic organisms.

13 DISPOSAL CONSIDERATIONS

Disposal of Waste / Containers	This product is dangerous for the environment. Do not discharge waste washings or waste product to sewers, drains or watercourses. This product must be disposed of as hazardous waste. Empty containers may be disposed of as controlled waste in accordance with the appropriate regulations. 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))	Hazard Code: H14 - Ecotoxic						
Note for Disposal	<table border="0"><thead><tr><th><u>Components making the waste hazardous</u></th><th><u>Concentrations (%)</u></th></tr></thead><tbody><tr><td>Pyrethrins</td><td>0.12</td></tr><tr><td>Piperonyl Butoxide</td><td>≤1.0</td></tr></tbody></table> 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.	<u>Components making the waste hazardous</u>	<u>Concentrations (%)</u>	Pyrethrins	0.12	Piperonyl Butoxide	≤1.0
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Pyrethrins	0.12						
Piperonyl Butoxide	≤1.0						

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14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED)			
UN No.	UN3082		RIS Code
Transport Category	3	UK Hazchem EAC	2X PSP18
ADR 2009 (International Road)	Class 9	ADR HIN	90 Labels
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Pyrethrins)		
Limited Quantity Exemptions	Maximum quantity per inner receptacle is 5 litres. Maximum quantity per outer package is 30kg. Combination packs only.		
Special Requirements	Not required. Packing Group III		
IMDG 2008 (Sea)	Class 9	IMDG EMS	F-A, S-F
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Pyrethrins)		
Limited Quantity Exemptions	Maximum quantity per inner receptacle is 5 litres. Maximum quantity per outer package is 30kg. 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. S24/25 : Avoid contact with skin and eyes. S38 : In case of insufficient ventilation wear suitable respiratory equipment. S45 : In case of accident or if you feel unwell seek medical advice immediately (show the label where possible). S60 : This material and its container should be disposed of as hazardous waste. 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	A UN approved, 25 litre steel cylindrical drum.
Revisions	Changes have been made to the content of boxes 01, 02, 03, 04, 05, 06, 08, 09, 10, 11, 12, 13, 14, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 04.
Risk phrase text (From box 3 - These refer to the ingredients only. See box 2 for the product risk phrases)	R20/21/22 : Harmful by inhalation, in contact with skin and if swallowed. R50,53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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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.

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