

RIC-00005



Rentokil Initial

Products

Safety Data Sheet

DATE : 01 : 10 : 2003
 ISSUE No. : 05

NOT: 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 at the address below by telephone, fax or in writing. In order to confirm the latest version of the SDS for this product see web: www.ri-research.com and click on Technical Information / Product Safety.

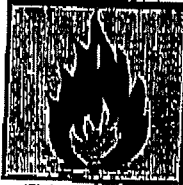
REVISION (see box 16)

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT NAME	FLY AND WASP KILLER
DESCRIPTION	A hand-held aerosol, dispensing a colourless liquid insecticide with a fragrant odour. For ambient use in the control of flying insects.
COMPANY	Rentokil Initial Supplies, Head office: Felcourt, East Grinstead, West Sussex BN19 2JY, United Kingdom. Telephone: +44 (0)1342 833022 Facsimile: +44 (0)1342 326229

HAZARD IDENTIFICATION

CLASSIFICATION AND DANGER SYMBOL (SUPPLY = Lab):		In compliance with EC Directives 1999/45 & 1994/1
F+ Extremely Flammable	R12	Extremely Flammable
Dangerous for the Environment	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.


EXTREMELY FLAMMABLE


ADVERSE PHYSICO-CHEMICAL, HUMAN HEALTH AND ENVIRONMENTAL EFFECTS (See also box 13)

Product is extremely flammable, do not use near sources of ignition (eg. naked flames).
 May cause cold burns to the eyes and skin on direct contact with the aerosol spray. Inhalation of the spray may cause irritation of the nose, throat and respiratory tract. Inhalation of high vapour concentrations may result in drowsiness, nausea, dizziness and ultimately loss of consciousness. Ingestion may cause irritation of the throat, nausea and vomiting. Ingestion of large quantities may lead to neurological symptoms such as ataxia and tremors, nausea, vomiting and loss of consciousness. Inhalation of the vapour whilst swallowing or vomiting may cause lung damage.
 Intentional misuse by deliberately concentrating or inhaling the contents can be harmful or fatal.
 Adverse effects on the environment are unlikely, provided that the product is used as intended.


COMPOSITION / INFORMATION ON INGREDIENTS

% w/w	COMMON / CHEMICAL NAME, EINECS/BINCS AND CAS	EC 1999/45 CLASSIFICATION
0.02	Permethrin* / 3-phenoxybenzyl (1RS, 1RS, 1RS, 3RS)-3-(2,2-dichlorovinyl)-2,2-dimethyl cyclopropane carboxylate EINECS 258-067-9 CAS: 52645-57-1	Xn - Harmful R22 Harmful if swallowed. N - Dangerous for the environment R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
0.25	Tetramethrin* / 3,4,5,6-Tetrahydrophthalimide methyl- (1RS)-cis, trans-dicyanmethane EINECS 231-711-6 CAS 7698-12-0	N - Dangerous for the environment R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
≤ 2.5	Piperonyl butoxide* / 1-(2-Butoxyethoxy)ethyl 6-propylpiperonyl ether EINECS Not known. CAS 31-03-6	N - Dangerous for the environment R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
≤ 2.5	Perflume*	Xi - Irritant R43 May cause sensitisation by skin contact. N - Dangerous for the environment R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
> 10 ≤ 25	Coal-tar Kerosene* / Distillate (Petroleum), Hydrotreated light, kerosene unspecified EINECS 265-149-8 CAS: 64742-47-8	Xn - Harmful R65 Harmful may cause lung damage in swallowed R66 Repeated exposure may cause skin dryness or cracking.
> 25 ≤ 50	Aerosol propellant* / Butane & Propane mixture EINECS 270-704-2 CAS: 68476-85-7	F+ - Extremely Flammable R12 Extremely flammable

14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED)

UN No.	UN1950	TRM CARD (REFERENCE No.)	CEPIC TBC (R) 20G5A	HAZARD
UK CDO/CEP (UK ROAD)	CLASS 2	UK HAZCHEM EAC	Not applicable, aerosols are not allowed to be carried in tanks or in bulk.	
UK CDO/ROAD TRANSPORT CATEGORY	3			
PROPER SHIPPING NAME	AEROSOLS			
LIMITED QUANTITY EXCEPTIONS	Individual aerosols should not exceed 1000ml. The total gross weight of the package must not exceed 30kg.			
SPECIAL REQUIREMENTS	Not required.			
ADR 2003 (INTERNATIONAL ROAD)	CLASS 2	ADR 311	PACKING GROUP Not required.	
PROPER SHIPPING NAME	AEROSOLS			
LIMITED QUANTITY EXCEPTIONS	Individual aerosols should not exceed 1000ml and be carried in combination packages not exceeding 30kg. If carried in shrink-wrapped trays, the total gross mass of the package must not exceed 20kg.			
SPECIAL REQUIREMENTS	Not required.			
IMDG 2002 (SEA)	CLASS 2	IMDG EMS	PACKING GROUP Not required.	
PROPER SHIPPING NAME	AEROSOLS			
LIMITED QUANTITY EXCEPTIONS	Individual aerosols should not exceed 1000ml and be carried in combination packages not exceeding 30kg. If carried in shrink-wrapped trays, the total gross mass of the package must not exceed 20kg.			
SPECIAL REQUIREMENTS	Not required.			
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))

HAZARD SYMBOLS		
CLASSIFICATION	F+ - EXTREMELY FLAMMABLE	DANGEROUS FOR THE ENVIRONMENT
RISK PHRASES	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
SAFETY PHRASES	S2	Keep out of the reach of children.
	S16	Keep away from sources of ignition - No smoking.
	S23	Do not breathe spray.
	S35	This material and its container must be disposed of in a safe way.
	S46	If swallowed, seek medical advice immediately and show this container or label.
	S51	Use only in well-ventilated areas.
LEGISLATION	Labelling is according to UK regulations implementing the EC Directive 1999/45 & 1994/71. Additional labelling requirements may be necessary in accordance with local legislation. Specific legislation used within this Safety Data Sheet is listed in the above boxes.	

16 OTHER INFORMATION and indication of revisions

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.

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

Outside the UK, the registration of this product may be necessary before use and any additional local requirements must be observed at all times.

Changes have been made to the content of boxes 1, 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 04

SDS No. 070

FLY AND WASP KILLER

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 notify him/herself as to the suitability in completeness of such information for his/her own particular use.

10 STABILITY AND REACTIVITY

CONDITIONS TO AVOID	Avoid exposure to direct sunlight or temperatures exceeding 50°C. Do not pierce or burn even after use.
MATERIALS TO AVOID	Do not spray on naked flame, electrical equipment or any incandescent material.
HAZARDOUS BREAKDOWN PRODUCTS	Polycyclic aromatic hydrocarbons, unburnt hydrocarbons, unidentified organic and inorganic compounds and oxides of nitrogen and carbon may be produced in the event of a fire. Large amounts of propane released in a fire may act as an asphyxiant.

11 TOXICOLOGICAL INFORMATION (see also box 2)

ACUTE TOXICITY	ORAL	Permethrin LD ₅₀ (rat) : 1475 mg/kg. Tetramethrin LD ₅₀ (rat) : >2000 mg/kg.
	INHALATION	Permethrin LC ₅₀ (rat) : 25 mg/l air/4 hr Tetramethrin LC ₅₀ (rat) : > 3.33 mg/l
	DERMAL	Permethrin LD ₅₀ (rat) : >2000 mg/kg. Tetramethrin LD ₅₀ (rat) : >2000 mg/kg.
CORROSIVITY/ IRRITATION	SKIN	Contact with the aerosol mist may cause cold burns. Prolonged skin contact with the liquid product may de-fat the skin and produce dermatitis.
	EYES	Contact with the aerosol mist may cause cold burns. Contact with the liquid product will cause intense stinging and irritation.
	RESPIRATORY TRACT	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May ultimately cause loss of consciousness.
SENSITISATION	SKIN	Contains less than 1% skin sensitizers in the form of amyl cinnamat, benzyl salicylate, citronellol and geraniol.
	RESPIRATORY	Contains no known respiratory sensitizers
REPEATED-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	Female/Fertility	Product does not contain any components known to be toxic to the reproductive system, and having effects on fertility
	Development	Product does not contain any components known to be toxic to the reproductive system, and having effects on development
OTHER INFORMATION		Atropine can be administered as an antidote. Permethrin : Human ADI (Acceptable Daily Intake) : 0.05 mg/kg.

12 ECOLOGICAL INFORMATION

GENERAL INFORMATION	The full ecotoxicological profile of this product has not been evaluated. Do not contaminate the environment.
ECOTOXICITY DATA	Permethrin: Fish: LD ₅₀ (96h): 0.0054 mg/l (Brown trout) Tetramethrin: Fish: LC ₅₀ (96h): 0.0037 mg/l (<i>Oncorhynchus mykiss</i>) Piperonyl butoxide: Fish: LC ₅₀ (96h): 5.37 mg/l (<i>Lepomis macrochirus</i>)
MOBILITY (OF APPROPRIATE CONSTITUENTS)	The kerosene and propellant in the product will evaporate quickly.
PERSISTENCE AND DEGRADABILITY (OF APPROPRIATE CONSTITUENTS)	Product is likely to degrade over several days.
BIOACCUMULATIVE POTENTIAL (OF APPROPRIATE CONSTITUENTS)	Product is not likely to bioaccumulate.
ENVIRONMENTAL CONSIDERATIONS	Do NOT contaminate watercourses or ground. This product is classified as harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Thus, every care must be taken to avoid its release and the subsequent contamination of the aquatic environment
OTHER ADVERSE EFFECTS	None known.

13 DISPOSAL CONSIDERATIONS

DISPOSAL OF WASTE	Waste should be disposed of in accordance with local, State or National requirements.
DISPOSAL OF CONTAINERS	Empty containers should be disposed of in accordance with local, State or National requirements.
CLASSIFICATION OF INGREDIENTS COUNCIL DIRECTIVE 91/689/EEC COMMISSION DECISION 2000/532/EC (AMENDED) COMMISSION DECISION 2001/118/EC	Hazard Code: H3A(1) - Highly flammable ; H14 - Ecotoxic Components making the waste hazardous Concentrations (%): Permethrin 0.02 Tetramethrin 0.25 Aerosol propellant > 25 & 50
NOTE FOR DISPOSAL	Disposal should be in accordance with local, State or National requirements. 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: 0845 9533111.

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 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 chemical initial formulations is lodged with the National Poisons Information Service in the UK. Telephone +44 (0) 870 600 6266 - 24 hours.

5 FIRE FIGHTING MEASURES

FIRE EXTINGUISHER TYPE	Use dry powder, carbon dioxide or foam extinguishers.
SPECIAL FIRE-FIGHTING PROCEDURES	Wear suitable personal protective equipment.
SPECIAL EXPOSURE HAZARDS	Polycyclic aromatic hydrocarbons, unburnt hydrocarbons, unidentified organic and inorganic compounds and oxides of nitrogen and carbon may be produced in the event of a fire. Large amounts of propane released in a fire may act as an asphyxiant.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS (See also box 8)	Wear suitable personal protective equipment. Remove all sources of ignition. Ensure area is well-ventilated.
PROCEDURE (See also box 3)	If the aerosol container is damaged or pierced, allow the propellant to vent-off. If possible in a well-ventilated area, then place in a suitable container for subsequent disposal or recycling. DO NOT contaminate watercourses or ground.

7 HANDLING AND STORAGE

HANDLING	Avoid contact with skin. Do not spray on a naked flame, electrical equipment or any incandescent material.
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. Pressurised container. Protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from sources of ignition. No smoking.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION (See also box 7)

EXPOSURE STANDARD (Directive EC/98/24 (P) OELVD Directive)	OES for aerosol propellant (liquefied petroleum gas) is 1750 mg/m ³ long-term exposure (8 hour Time Weighted Average) and 2180 mg/m ³ short-term exposure (15 minute reference period), for butane is 450 mg/m ³ long-term exposure (8 hour TWA) and 1810 mg/m ³ short-term exposure (15 minute reference period). Propane is listed as an asphyxiant where the oxygen content of air should never be allowed to fall below a minimum of 19% by volume under normal atmospheric pressure.
ENGINEERING CONTROLS	Where prevention of exposure is not reasonably practicable, adequate control of exposure should be achieved by engineering controls rather than the provision of personal protective equipment and clothing. More specific details cannot be given without carrying out a full risk assessment for each and every use scenario. Suitable and approved personal protective equipment and clothing may include the following item(s):
EYE PROTECTION	None necessary under normal working conditions.
HAND PROTECTION	None necessary under normal working conditions. However, wash hands and exposed skin before meals and after use.
SKIN PROTECTION	None necessary under normal working conditions. However, keep off skin and wash hands and exposed skin before meals and after use.
RESPIRATORY PROTECTION	None necessary under normal working conditions. However, do not breathe spray and use only in well-ventilated areas.
ENVIRONMENTAL EXPOSURE CONTROLS	Product should be used in accordance with instructions on the label 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	A hand-held aerosol, dispensing a colourless liquid insecticide with a fragranced odour.		
REF	Not applicable.	SOLUBILITY IN WATER	Miscible.
SPECIFIC GRAVITY	0.773 at 20°C	SOLUBILITY IN FAT	Miscible.
FLASH POINT	-104°C (aerosol propellant)	EXPLOSIVE PROPERTIES	Pressurised container: may explode if exposed to direct sunlight or temperatures exceeding 50°C.
FLAMMABILITY	Extremely flammable.	BOILING POINT/RANGE	Starts at ca. -0.5°C (aerosol propellant)
AUTOFLAMMABILITY	Not determined.	MELTING POINT/RANGE	Not applicable.
VAPOUR DENSITY	Not determined.	EVAPORATION RATE	Not determined.
VAPOUR PRESSURE	Not determined.	PARTICTION COEFFICIENT	Not applicable.
VISCOSITY	Not applicable.	OXIDISING PROPERTIES	None known.
OTHER DATA	None known.		