

# Safety Data Sheet

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REVISION (see box 16)

Issue: 08

12:12:2012

## SECTION 1 Identification of the Substance/Mixture and Company

1.1 Product identifier	Fly and Wasp Killer	HSE 4643/PCS 90607
1.2 Relevant identified uses of the mixture and uses advised against	A colourless liquid with a fragranced odour, dispensed from an aerosol for the control of fly and wasps.	
1.3 Details of the supplier of the safety data sheet	Rentokil Initial Supplies, Liverpool, L33 7SR, UK. Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1342 833 022 E-mail: <a href="mailto:sds@rentokil.com">sds@rentokil.com</a>	
National contact	Rentokil Initial Supplies, Liverpool, L33 SR, UK. Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1342 833 022 Email: <a href="mailto:sds@rentokil.com">sds@rentokil.com</a>	
1.4 Emergency telephone number	0844 892 011 (for use by medical professionals only).	

## SECTION 2 Hazards Identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not applicable. See section 16.

Classification according to Directive 1999/45/EC (See section 16)

F+ Highly flammable R12  
N Dangerous to the environment R51/53

### 2.2 Label elements



Extremely flammable  
Dangerous for the Environment

Risk phrase(s) (R), in full / Hazard statement(s) (H), in full.

R12: Extremely flammable  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Hazard statements are a requirement of Regulation (EC) No. 1272/2008 and will be listed when available.

Safety phrase(s) (S), in full / Precautionary Statement(s) (P), in full.	S2	Keep out of the reach of children
	S16	Keep away from sources of ignition – No smoking.
	S23	Do not breathe spray.
	S29	Do not empty into drains
	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
	S61	Avoid release into the environment. Refer to special instructions/safety data sheet.
	Precautionary statements are not required.	

To avoid risks to man and the environment, comply with the instructions for use.

### 2.3 Other hazards

Product is extremely flammable, do not use near sources of ignition – No smoking. Contact with the liquid product may cause cold burns, frost bite or corneal damage. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May ultimately cause loss of consciousness.

## SECTION 3 Composition / Information on Ingredients (see section 16)

### 3.2 Mixtures

% w/w	Common*/Chemical name (IUPAC)	CAS No.	EC No.	Index No.	REACH Registration No.	Directive 67/548/EEC classification	Regulation (EC) No 1272/2008 classification
0.018	Permethrin*/ m-phenoxybenzyl-3-(2,2-dichlorovinyl)-2,2-dimethyl-cyclopropanecarboxylate (cis:trans ratio 25:75)	52645-53-1	258-067-9	613-058-00-2	-	Xn R20/22 R43 N R50/53	Acute Tox 4 H302 H332 Skin Sens 1: H317 Aquatic Acute 1: H400 Aquatic Chronic 1: H410
0.243	Tetramethrin	7696-12-0	231-711-6	-	-	N R50/53	Not available
10-20	Distillates (petroleum) hydrotreated light*	6472-47-8	265-149-8	649-422-00-2	-	Xn R65	Asp Tox 1: H304
<1.0	Sodium benzoate	532-32-1	208-534-8	-	01-21194600683-35	Xi R36	Eye Irrit 2: H319
1-5	Piperonyl butoxide*/ 2-(2-butoxyethoxy ethyl 6-propylpiperonyl ether)	51-03-6	200-076-7	-	01-2119537431-46-0000	N R50/53	Aquatic Acute 1: H400 Aquatic Chronic 1: H410
<1.0	3-7-dimethyl-1,6-octadien-3-ol	78-70-6	201-134-4	-	-	Xi R38	Not available
<1.0	2-(1,1-dimethylethyl)-cyclohexanol acetate	88-41-5	201-828-7	-	-	N R51/53	Not available
<1.0	[3R(3a,3b,7b,8aa)] 1(2.3.4.7.8a-hexahydro-3,6,8,8 tetramethyl 1H3a,7 methanoazulen5yl)ethan 1 one	32388-55-9	251-020-3	-	-	Xi R43 N R50/53	Skin sens 1 H317 Aquatic Acute 1: H400 Aquatic Chronic 1: H410
<1.0	Amyl cinnamal	122-40-7	204-541-5	-	-	Xi R43 N R51/53	Not available
<1.0	4-tert-butylcyclohexylacetate	32210-23-4	250-954-9	-	-	N R51/53	Aquatic Chronic 2: H411
<1.0	3-cyclohexene-1-methanol, alpha, alpha, 4-trimethyl-acetate	80-26-2	201-265-7	-	-	F R10 Xi R38 R43 N R50/53	Flam Liq 3: H226 Acute Tox 1: H400 Skin Irrit 2 H315 Skin sens 1 H317 Aquatic Chronic 1 H410
<1.0	(L) D-limonene	5989-27-5	227-813-5	-	-	F R10 Xi R38 R43 N R50/53	Not available
<1.0	3,7-dimethyl-2,6-octadien-1-ol	106-25-2	203-378-7	-	-	Xi R38	Not available
<1.0	3,7-dimethyl-6-octen-1-ol	106-22-9	203-375-0	-	-	Xi R38 R43 N R50/53	Not available
<1.0	2-(4-methylcyclohex-3-en-1-yl)propan-2-ol	8000-41-7	232-268-1	-	-	Xi R38	Not available

### Fly and Wasp Killer

<1.0	Benzyl salicylate	118-58-1	204-262-9	-	-	Xi R43 N R51/53	Not available
<1.0	4 diastereoisomers of 2,7-dimethyl-10-(1-methylethyl)-1-oxaspirol(4,5)deca-3,6-diene	89079-92-5	412-460-3	-	-	Xi R38 N R51/53	Skin Irrit 2 H315 Aquatic chronic 2 H411
<1.0	Hexyl Cinnamal	106-86-0	202-983-3	-	-	Xi R43 N R50/53	Not available
<1.0	Butylphenyl methylpropional	80-54-6	201-289-8	-	-	Xi R43 Xn R22 R62 N R51/53	Not available
<1.0	Hexyl acetate	142-92-7	205-572-7	-	-	F R10 N R51/53	Not available
<1.0	4-Undecanolide	104-67-6	203-225-4	-	-	N R51/53	Not available
<1.0	4-(2,6,6-trimethylcyclohex-1-en-1-yl)but-3-en-2-one	14901-07-6	238-969-9	-	-	N R51/53	Aquatic chronic 2 H411
<1.0	Eugenol	97-53-0	202-589-1	-	-	Xn R22 Xi R36/37/38 R42/43	Not available
<1.0	2,4-dimethylcyclohex-3-ene-1-carbaldehyde	28039-49-6	268-264-1	-	-	Xi R36/38 R43 R52/53	Not available

## SECTION 4 Section First-Aid Measures

### 4.1 Description of first aid measures

Inhalation	Remove patient to fresh air, keep warm and at rest. Apply supportive measures if necessary and seek medical advice.
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.

### 4.2 Most important symptoms and effects both acute and delayed

Emergency Equipment Suggested	Appropriate first-aid equipment should be provided.
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### 4.3 Indication of any immediate medical attention and special treatment needed

Note To Doctor	Further information on all Rentokil Initial formulations is lodged with the local National Poisons Information Service.
Antidote	No known antidote.

## SECTION 5 Fire Fighting Measures

### 5.1 Extinguishing media

Suitable extinguishing media	Use carbon dioxide, foam or dry powder extinguishers.
Unsuitable extinguishing media	Do NOT use a water jet.

<b>5.2 Special hazards arising from the mixture</b>	Polycyclic aromatic compounds, 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 .
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<b>5.3 Advice for fire fighters</b>	Wear suitable personal protective equipment conforming to EN469.
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## SECTION 6 Accidental Release Measures

### Fly and Wasp Killer

<b>6.1 Personal precautions, protective equipment and emergency procedures</b>	Wear suitable personal protective equipment. Remove all sources of ignition. Ensure area is well ventilated.
<b>6.2 Environmental precautions</b>	This product is classified as dangerous for the environment. Keep away from drains, surface and ground water, and soil.
<b>6.3 Methods and material for containment and cleaning up</b>	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.
<b>6.4 Reference to other sections</b>	Please also see sections 8 and 13 for further information.
Additional information	None.

## SECTION 7 Handling and Storage

<b>7.1 Precautions for safe handling</b>	Avoid physical damage of aerosols.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	Store in original flask in a cool dry, ventilated place out of reach of children and away from food, drink and animal feeding stuffs.
<b>7.3 Specific end use(s)</b>	Insecticide

## SECTION 8 Exposure Controls/Personal Protection

<b>8.1 Control Parameters</b>		
Exposure standard - Directive 98/24/EC (1st IOELV Directive)	<b>Workplace Exposure Limit (WEL) long-term exposure (8 hour Time Weighted Average)</b>	Not applicable
	<b>Workplace Exposure Limit (WEL) short-term exposure (15 minute reference period)</b>	Not applicable
	<b>Substance name used in Directive EC/98/24 (1st IOELV Directive)</b>	Not applicable.
<b>8.2 Exposure controls</b>		
Appropriate 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.	
Individual Protection Measures		
Eye/face protection	Label advice indicates none necessary under normal conditions of handling and use. However consider other precautionary requirements.	
Hand protection	Label advice indicates none necessary under normal conditions of handling and use. However consider other precautionary requirements.	
Skin/body protection	Label advice indicates none necessary under normal conditions of handling and use. However consider other precautionary requirements.	
Respiratory protection	Label advice indicates none necessary under normal conditions of handling and use. However consider other precautionary requirements.	
Environmental Exposure Controls	Use only in accordance with instructions given.	

## SECTION 9 Physical and Chemical Properties

<b>9.1 Information on basic physical and chemical properties</b>			
<b>Appearance, odour and physical state</b>	A colourless liquid with a fragranced odour, dispensed from an aerosol for the control of flies and wasps.		
pH	Not applicable.	Solubility in water	Miscible.
Density	Not determined.	Solubility in other solvents	Miscible.

### Fly and Wasp Killer

Specific gravity	0.773 at 20°C	Explosive properties	No known explosive properties
Flash point	-104°C	Combustibility	Combustible
Flammability	Extremely flammable.	Oxidising properties	None known
Boiling Point / Range	Starts at ca. -0.5°C	Evaporation rate	Not determined
Vapour Density	Not determined	Partition coefficient	Not applicable.
Vapour pressure	Not determined	Decomposition temperature	Not determined.
Melting point / Freezing point	Not determined.	Auto-ignition temperature	Not determined.
<b>9.2 Other information</b>			
Upper/lower flammability or explosive limits	Not determined.	Other safety information	Discharge rate 1.7 g/sec at 20°C Net fill weight (for aerosols): 232g
Viscosity	Not applicable		

## SECTION 10 Stability and Reactivity

<b>10.1 Reactivity</b>	None expected under normal conditions of handling and use.
<b>10.2 Chemical stability</b>	Avoid extremes of temperature e.g. below 0°C and above 40°C.
<b>10.3 Possibility of hazardous reactions</b>	None expected under normal conditions of handling and use.
<b>10.4 Conditions to avoid</b>	Avoid exposure to direct sunlight or temperatures exceeding 50°C. Do not pierce or burn even after use.
<b>10.5 Incompatible materials</b>	Do not spray on naked flame, electrical equipment or any incandescent material.
<b>10.6 Hazardous decomposition products</b>	Polycyclic aromatic compounds, 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.

## SECTION 11 Toxicological Information (see also box 2)

### 11.1 Information on toxicological effects

Acute Toxicity	Oral	For Permethrin LD <sub>50</sub> (rat): 554 mg/kg For Tetramethrin: LD <sub>50</sub> (rat): >5000 mg/kg
	Inhalation	For Permethrin: LC <sub>50</sub> (rat): >4.638 mg/L For Tetramethrin: LC <sub>50</sub> (rat): >2.73mg/L
	Dermal	For Permethrin LD <sub>50</sub> (rat): >2000 mg/kg For Tetramethrin: LD <sub>50</sub> (rat): >2000 mg/kg
Corrosivity/ Irritation	Skin	Direct contact of liquid or cold vapour with the skin may result in cold burns.
	Eyes	Direct contact of liquid or cold vapour with the skin may result in corneal damage
	Respiratory tract	Not determined.
Sensitisation	Skin	For tetramethrin: Non sensitiser to guinea pigs. Contains less than 1% Skin sensitisers in the form of 2-methyl-3-(4-tert butyl phenyl) propanal, amyl cinnamal benzyl salicylate, citronellol, geraniol and limonene.
	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.
	Developmental	Product does not contain any components known to be toxic to the reproductive system.
Other data	Contact with the liquid product may cause cold burns, frost bite or corneal damage. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. May ultimately cause loss of consciousness.	

## SECTION 12 Ecological Information

### 12.1 Toxicity

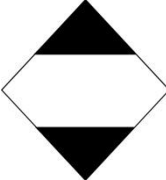
General information	This product is classified as toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. However when used in accordance with instructions given, controlled release of this product is not expected to cause environmental contamination.
Ecotoxicity data	For permethrin Fish ( <i>Poecilla reticulata</i> ) LC <sub>50</sub> (96h) 0.0089 mg/L Fish ( <i>Cyprinus carpio</i> ) LC <sub>50</sub> (96h) 0.145 mg/L Daphnia ( <i>Daphnia magna</i> ): EC <sub>50</sub> (24h) 0.020 mg/L Algae ( <i>Scenedesmus subspicatus</i> ): EC <sub>50</sub> (72h) 0.022 mg/L Other ( <i>Lampito mauritii</i> ) LC <sub>50</sub> >1200 mg/L Toxic to bees.
12.2 Persistence and degradability	For permethrin: DT50 pH4 at 25°C: >1 year (water). For tetramethrin: Photodegradable. Not readily biodegradable.
12.3 Bioaccumulative potential	For tetramethrin: Log Pow 4.58
12.4 Mobility in soil	Permethrin is strongly absorbed to soil particles with no risk of leaching.
12.5 Results of PBT and vPvB Assessment	Not determined.
12.6 Other Adverse Effects	Toxic to bees.

## Fly and Wasp Killer

## SECTION 13 Disposal Considerations

<b>13.1 Waste treatment methods</b>	The best means of disposal of any product is through proper use according to the label. Disposal must be in accordance with Local, State or National Requirements.	
Product/packaging disposal	This product is for amateur use and can be disposed of as normal Household waste. However if used in a place of work, any product and empty container must be disposed of as controlled waste.	
Classification (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	Hazard Code: EWC – 20 01 19 H14 – Ecotoxic H3A(i) – Highly flammable	
	Substances making the waste hazardous:	Concentrations (%)
	Permethrin	0.018
	Piperonyl butoxide	>1<5
	Aerosol propellant	>25<50
Note for Disposal	The best means of disposal of any product is through proper use according to the label. Disposal must be in accordance with Local, State or National Requirements.	

## SECTION 15 Transport Information (International unless otherwise indicated)

<b>ADR 2011 (International Road) / IMDG 2010 (Sea)</b>			
<b>14.1 UN No.</b>	UN1950	RIS Code	PSF126
<b>14.2 Proper Shipping Name</b>	AEROSOLS		
<b>14.3 Class</b>	2		
ADR HIN	Not required		
UK Hazchem EAC	Not required		
IMDG EMS	F-D, S-U		
<b>14.4 Packing Group</b>	Not applicable		<b>Labels</b>  
Transport category	3		
<b>14.5 Environmental hazards</b>	-		
Marine pollutant	Yes		
Additional precautions	Not applicable.		
<b>14.6 Special precautions for user</b>	Not applicable.		
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code</b>	Not applicable.		
Limited Quantity Exemptions	Maximum quantity per inner receptacle is 1 litre. Maximum quantity per outer package is 30 kg. Combination packs only.		
Note for transport	Local, State or National requirements may apply to the carriage of this product.		

## SECTION 15 Regulatory Information

### 15.1 Safety, Health and environmental regulations/legislation specific for the substance or mixture

Authorisations and/or restrictions on use	Information to be made available according to ECHA review programme.
Other EU regulations	This safety data sheet was prepared in accordance with EC Directive 1907/2006. Labelling is in accordance with EC Directive 1999/45. Additional labelling requirements may be necessary in accordance with other National legislation. The registration of this product may be necessary before use and any additional local requirements must be observed at all times. Other National measures or guidance should be followed where appropriate.
15.2 Chemical safety assessment	Information to be made available according to ECHA review programme.

## SECTION 16 Other Information

Revisions	Changes have been made to the contents of boxes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 & 16 compared with issue 08
Abbreviations and acronyms	<p>Typical standard abbreviations and acronyms used in Rentokil Initial Safety Data Sheets are as follows:</p> <p>ADR 2011 - International Carriage of Dangerous Goods by Road (ADR) ADR HIN - ADR Hazard Identification Number (HIN) Annex I DNEL or PNEC - Derived No Effect Level / Predicted No Effect Concentration CAS No - Chemicals Abstract Service Registry Number COSHH assessments - Control of Substances Hazardous to Health ECHA - European Chemicals Agency EC No - European Commission number EN469 - European standard for Personal Protective Equipment used for fire fighting EN standards for PPE - European Standards for Personal Protective Equipment EWC - European Waste Catalogue Code IMDG 2010 - International Maritime Dangerous Goods (IMDG) Code IUPAC - International Union of Pure and Applied Chemistry LD50 - Median lethal dose LC50 - Lethal concentration REACH - Registration, Evaluation, Authorisation and restriction of Chemicals RIS Code - Internal manufacturing code number WEL - Workplace Exposure Limit UK Hazchem EAC - UK Hazchem Emergency Action Code</p> <p>Typical Directives and Regulations referred to Rentokil Initial Safety Data Sheets are as follows:</p> <p>Commission Decision 95/320/EC - Scientific Committee for Occupational Exposure Limits to Chemical Agents Commission Decision 2000/532/EC - List of wastes Commission Decision 2001/118/EC - Amendment to 2000/532/EC with regards to List of wastes Directive 67/548/EEC - Dangerous Substances Directive Directive 76/768/EC (as amended) - The Cosmetics Directive Directive 89/686/EEC - The Personal Protective Equipment (PPE) Directive Directive 91/689/EC - Directive on Hazardous waste Directive 98/24/EC (1st IOELV Directive) - Chemical Agents Directive 98/24/EC Protection of the Health and Safety of Workers from the Risks from Chemical Agents IOELV Directive: Indicative Occupational Exposure Limit Values Directive 1907/2006 - REACH (Registration, Evaluation, Authorisation and restriction of Chemicals) Directive 1999/45/EC - Dangerous Preparations Directive Directive 2004/37/EC - Carcinogens and Mutagens Directive Regulation (EC) No. 648/2004 - Detergents Regulation Regulation (EC) No 1272/2008 - Classification, Labelling and Packaging</p>



<b>Key literature references and sources for data</b>	For details of the data and information sources used, please contact Rentokil Initial using the details in Section 1.	
<b>Classification and used classification procedure for mixtures labelled to Directive 1999/45/EC according to Regulation (EC) No 1272/2008</b>	Not currently classified to Regulation (EC) No. 1272/2008 until 31/05/2015.	
<b>Risk phrase/Hazard statement text</b> (From section 3 - These refer to the ingredients only. See section 2 for the product risk phrases)	R10 R20/R22 R22 R36 R36/37/38 R36/38 R38 R42/43 R43 R50/53  R51/53  R52/53  R62 R65 H226 H302 H304 H315 H317 H332 H400 H410 H411	Flammable Harmful by inhalation and if swallowed Harmful if swallowed Irritating to eyes Irritating to eyes, respiratory system and skin Irritating to eyes and skin Irritating to skin May cause sensitisation by inhalation and skin contact May cause sensitisation by skin contact Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment Possible risk of impaired fertility Harmful: may cause lung damage if swallowed Flammable liquid and vapour Harmful if swallowed May be fatal if swallowed and enters airways Causes skin irritation May cause an allergic skin reaction Harmful if inhaled Very toxic to aquatic life Very toxic to aquatic life with long lasting effects Toxic to aquatic life with long lasting effects
<b>Training advice</b>	Always read the label and product information before use.	
<b>Further Information</b>	A hand-held aerosol with plastic actuator and a plastic cap supplied as 6 x 300 ml in an outer pack	

## Fly and Wasp Killer

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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. Neither Rentokil Initial plc nor any of its subsidiaries accepts any liability 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.