

Safety Data Sheet

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REVISION (see box 16)

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01:03:2013

SECTION 1 Identification of the substance/mixture and of the company/undertaking. 1.1 Product identifier Insectrol Insect Killer HSE 8459, PCS 95177 1.2 Relevant identified uses of Hand-held insecticidal aerosol spray with a kerosene type odour. For amateur use against fleas, ants bedbugs and other insects in the home. the substance or mixture and uses advised against 1.3 Details of the supplier of Rentokil Initial Supplies, Liverpool, L33 7SR, UK. the safety data sheet Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1342 833 022 E-mail: sds@rentokil.com National contact Rentokil Initial Supplies, Liverpool, L33 7SR, UK Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1342 833 022 E-mail: sds@rentokil.com 1.4 Emergency telephone 0844 892 011 (for use by medical professionals only). number

SECTION 2 Hazards Identification				
2.1 Classification of the substance or mixture				
Classification according to Re	egulation (EC) 1272/2008.			
Not applicable. See section 1	6.			
Classification according to D	Classification according to Directive 1999/45/EC (See section 16)			
F+	Extremely flammable.	R12		
Xn	Harmful	R65		
N Dangerous for the R50/53 environment.				
2.2 Label elements				

R12: Extremely flammable. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65: Harmful: may cause lung damage if swallowed.
 S13: Keep away from food, drink and animal feedingstuffs. 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.

Contains permethrin. May produce an allergic reaction.

WARNING: Keep out of the reach of children. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn even after use. Keep away from sources of ignition - No smoking. Do not spray on a naked flame, electrical equipment or any incandescent material.

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

Safety data sheet available to professional user on request.

2.3 Other hazards

Product is extremely flammable, do not use near sources of ignition (e.g. naked flames). Direct contact with the aerosol spray may cause cold burns to the eyes and skin. 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.

SECTION 3 Composition/Information on Ingredients (See section 16)

	1			r		r	r
% 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
0.46	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
0.13	d-Allethrin*/ (RS)-3-allyl- 2-methyl-4-oxocyclopent- 2-enyl (1R)-cis-trans- chrysanthemate 2-methyl- 4-oxo-3-(2-propenyl)-2- cyclopenten-1-yl 2,2-dimethyl- 3-(2-methyl-1-propenyl) cyclopropanecarboxylate	231937- 89-6	209-542- 4	006-025- 00-3	05-2116453766-34-0000	Xn: R20/22 N: R50/53	Acute Tox. 4 : H302 H332 Aquatic Acute 1 : H400 Aquatic Chronic 1 : H410

>50.0	Distillates (petroleum), hydrotreated light*	64742- 47-8	265-149- 8	649-422- 00-2	-	Xn: R65	Asp. Tox. 1 : H304
>25.0 ≤50.0	Aerosol propellant*/ liquefied petroleum gas	68476- 85-7	270-704- 2	649-202- 00-6	-	F+: R12	

SECTION 4 First-Aid	Measures			
4.1 Description of first aid n	neasure			
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 $\frac{1}{2}$ litre or 1 pint of water to drink. Seek medical attention.			
4.2 Most important sympto	ms and effects both acute and delayed			
Emergency Equipment Suggested	Appropriate first-aid equipment should be provided.			
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 specific antidote known. Treatment is symptomatic.			

SECTION 5 Fire Fighting Measures5.1 Extinguishing mediaSuitable extinguishing mediaUse carbon dioxide, foam or dry powder extinguishers.Unsuitable extinguishing mediaDo NOT use a water jet.5.2 Special hazards arising
from the substance or mixturePolycyclic 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 amounts5.3 Advice for fire fightersWear suitable personal protective equipment conforming to EN469.

SECTION 6 Accidental Release Measures			
6.1 Personal precautions, protective equipment and emergency procedures	Wear suitable personal protective equipment. Remove all sources of ignition. Ensure area is well ventilated.		
6.2 Environmental precautions	This product is classified as dangerous for the environment. Keep undiluted product away from drains, surface and ground waters, and soil.		
6.3 Methods and material for containment and cleaning up	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.		
6.4 Reference to other sections	Please also see sections 8 and 13 for further information.		
Additional information	Clear spills immediately.		

SECTION 7 Handling and Storage

7.1 Precautions for safe handling	Avoid physical damage of cylinders. Store in original container in a cool dry, ventilated place out of the reach of children and away from food, drink and animal feeding stuff.
7.2 Conditions for safe storage, including any incompatibilities	Keep away from sources of ignition – No smoking. Pressurised container: Protect from sunlight and do not expose to temperatures exceeding 50°C. 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.
7.3 Specific end use(s)	Insecticide.

SECTION 8 Exposure Controls/Personal Protection

8.1 Control Parameters					
Exposure standard - Directive 98/24/EC (1st IOELV Directive)	Workplace Exposure Limit (WEL) long-term exposure (8 hour Time Weighted Average)	For: Aerosol propellant is 1750 mg/m ³ For: Aerosol propellant is 2180 mg/m ³ .			
	Workplace Exposure Limit (WEL) short-term exposure (15 minute reference period)				
	Substance name used in Directive EC/98/24 (1st IOELV Directive)	Aerosol propellant is referred to as liquefied petroleum gas in Directive EC/98/24 (1st IOELV Directive).			
8.2 Exposure Controls					
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 handling and use. However, consider other precautionary requirements.				
Hand protection	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.				
Skin/body protection	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.				
Respiratory protection	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.				
Environmental Exposure Controls	Use only in accordance with instructions given.				

SECTION 9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance, odour and physical state	A colourless liquid with a kerosen	e type odour.	
рН	Not applicable.	Solubility in water	Immiscible
Density	Not determined.	Solubility in other solvents	Miscible
Relative density	Not determined.	Explosive properties	Pressurised container: do not puncture or expose to high temperatures.
Flash point	<-40°C (closed cup) for aerosol propellant.	Combustibility	Combustible.
Flammability	Extremely flammable.	Oxidising properties	None known.
Initial boiling Point and boiling range	-2 to -45°C for aerosol propellant.	Evaporation rate	Not determined.
Vapour Density	Not determined.	Partition coefficient: n-octanol/water	Not applicable.
Vapour pressure	Not determined.	Decomposition temperature	Not applicable.

Melting point / Freezing point	Not applicable.	Auto-ignition temperature	Not determined.	
9.2 Other Information	9.2 Other Information			
Upper/lower flammability or explosive limits	Not determined.	Other safety information	None known.	
Viscosity	Not determined.			

SECTION 10 Stability a	SECTION 10 Stability and Reactivity			
10.1 Reactivity	This product is stable under normal conditions of handling and use.			
10.2 Chemical stability	his product is stable under normal conditions of handling and use.			
10.3 Possibility of hazardous reactions	None expected under normal conditions of handling and use.			
10.4 Conditions to avoid	Avoid exposure to direct sunlight or temperatures exceeding 50°C. Do not pierce or burn even after use.			
10.5 Incompatible materials	Do not spray on naked flame, electrical equipment or any incandescent material.			
10.6 Hazardous decomposition 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.			

SECTION 11 Toxicological Information (see also box 2)

11.1 Information on toxicological effects				
Acute Toxicity	Oral	For permethrin LD50 (rat) > 2000 mg/kg. For d-Allethrin LD50 (rat) > 1000 mg/kg.		
	Inhalation	For permethrin LC_{so} (rat) > 0.45 mg/L. For d-Allethrin LC_{so} (rat) > 5.77 mg/L (4 h).		
	Dermal	For permethrin LD_{50} (rat) > 2000 mg/kg. For d-Allethrin LD_{50} (rat) > 2000 mg/kg.		
Corrosivity/ Irritation	Skin	-		
	Eyes	Direct contact of liquid or cold vapour with the eyes may result in corneal damage.		
	Respiratory tract	May be irritating to respiratory tract.		
Sensitisation	Skin	Contains less than 1% skin sensitisers in the form of permethrin.		
	Respiratory	Contains no known respiratory sensitisers.		
Repeated dose toxicity;	Product does not contain a	any components known to have any effects relating to repeated-dose toxicity.		
Mutagenicity	Product does not contain a	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	None known.			

SECTION 12 Ecological Information		
12.1 Toxicity		
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 permethrin: Fish (<i>Poecilia reticulata</i>) LC_{50} (96 h) 8.9 µg/L Fish (<i>Cyprinus carpio</i>) LC_{50} (96 h) 0.145 mg/L Aquatic invertebrates (<i>Daphnia magna</i>) EC_{50} (24 h) 0.020 mg/L Algae (<i>Scenedesmus subspicatus</i>) EC_{50} (72 h) > 0.022 mg/L Bacteria (Activated sludge) EC_{50} (3 h) > 1000 mg/L Terrestrial invertebrates (<i>Lampito mauritii</i>) LC_{50} > 1200 mg/L Toxic to bees For d-allethrin: Fish (<i>Brachydanio rerio</i>) LC_{50} (96 h) 0.0708 mg/L Aquatic invertebrate (<i>Daphnia magna</i>) EC_{50} (48 h) 0.061 mg/L Algae (<i>Scenedesmus subspicatus</i>) IC_{50} (72 h) 1.1 mg/L
12.2 Persistence and degradability	Permethrin is moderately persistent in aquatic environments. DT50 > 1 year (water) at pH 4, 25°C. d-Allethrin is not readily biodegradeable and shows a slight inhibiting effect on microorganisms. Aerosol propellant is biodegradable and photochemical degradation in air will proceed at a moderate rate. Hydrocarbon solvent is expected to be readily biodegraded.
12.3 Bioaccumulative potential	Hydrocarbon solvent has the potential to bioaccumulate.
12.4 Mobility in soil	Permethrin and d-allethrin are expected to be adsorbed to soil particles and therefore immobile. Aerosol propellant will disperse rapidly in air and rapidly evaporates from water and soil surfaces. Hydrocarbon solvent floats on the surface of water and is only slightly soluble. In soil it is expected to partially evaporate and be slightly mobile.
12.5 Results of PBT and vPvB assessment	Not determined.
12.6 Other Adverse Effects	None known.

SECTION 13 Disposal Considerations		
13.1 Waste treatment methods	This product should be disposed in accordance with the information given on the product label.	
Product/packaging disposal	This aerosol is for amateur use and can be disposed of as normal household waste. However, if used in a place of work, it must be disposed of as hazardous waste.	
Classification (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	Hazard Code: H14 - Ecotoxic. H3 - Flammable. H5 - Harmful.	
	Substances making the waste hazardous:	Concentrations (%):
	Permethrin*/ m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethyl- cyclopropanecarboxylate (cis:trans ratio 25:75)	0.46
	d-Allethrin*/ (RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1R)-cis-trans-chrysanthemate 2-methyl-4-oxo-3-(2-propenyl)-2-cyclopenten-1-yl 2,2-dimethyl-3-(2-methyl-1-propenyl) cyclopropanecarboxylate	0.13
	Distillates (petroleum), hydrotreated light*	>50.0 ≤100.0
	Aerosol propellant*/ liquefied petroleum gas	>25.0 ≤50.0
Note for Disposal	The best means of disposal of any product is through proper use accord accordance with Local, State or National Requirements.	ling to the label. Disposal must be in

SECTION 14 Transport Information (International unless otherwise indicated)			
ADR 2011 (International Road) / IMDG 2010 (Sea)			
14.1 UN number	UN1950	RIS Code	PSD89

				5 x 400mL, 6 x 250mL
14.2 UN Proper Shipping Name	AEROSOLS.			
14.3 Transport hazard class(es)	2			
ADR HIN	Not applicable, aer	osols are not allowed to be carried	in tanks or in bulk.	
UK Hazchem EAC	Not applicable, aer	Not applicable, aerosols are not allowed to be carried in tanks or in bulk.		
IMDG EMS	F-D, S-U	F-D, S-U		
14.4 Packing Group	Not applicable.			Labels
Transport Category	2			
14.5 Environmental hazards	Not applicable.			\neg \langle \rangle
Marine pollutant	Not applicable.			
Additional precautions	Not applicable.			
14.6 Special precautions for Not required. user				
14.7 Transport in bulk according to Annex II of MA		RPOL 73/78 and the IBC Code	Not applicable.	
Limited Quantity Exemptions		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.		ed
Note for Transport		Local, State or National requireme carriage of this product.	nts may apply to the	

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.	

Devisions	
Revisions	Changes have been made to the content of boxes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, compared with issue 1.
Abbreviations and acronyms	Typical standard abbreviations and acronyms used in Rentokil Initial Safety Data Sheets are as follows:
	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
	LD ₅₀ - Median lethal dose
	LC ₅₀ - 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
	Typical Directives and Regulations referred to Rentokil Initial Safety Data Sheets are as follows:
	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

Key literature references and sources for data	For details of the data and information sources used, please contact Rentokil Initial using the details in Section 1.	
Classification and used classification procedure for mixtures labelled to Directive 1999/45/EC according to Regulation (EC) No 1272/2008	Not currently classified to Regulation (EC) No. 1272/2008 until 31/05/2015.	
Risk phrase/Hazard statement text (From section 3 - These refer to the ingredients only. See section 2 for the product risk phrases)	 R12: Extremely flammable. R20/22: Harmful by inhalation and if swallowed. R43: May cause sensitisation by skin contact. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R65: Harmful: may cause lung damage if swallowed. R66: Repeated exposure may cause skin dryness or cracking. H332: Harmful if inhaled. H302: Harmful if swallowed. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. 	
Training advice	Use biocides safely. Always read the label and product information before use. Ensure you have received adequate training and/or instructions before use.	
Further Information	A 250mL and 400mL aerosol can. Supplied in shrink-wrapped packs of six.	

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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.