

# Safety Data Sheet

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Issue : 01 17 : 10 : 2007

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY	
<b>Product Name</b>	<b>RENTOKIL INSECTROL PROFESSIONAL</b>
<b>Description</b>	<b>INSECT KILLER</b> <span style="float: right;"><b>HSE 8458</b></span>
<b>Company</b>	A hand-held, insecticidal aerosol spray with a kerosene type odour. For professional use against cockroaches, fleas, ants, beetles, earwigs, bedbugs, woodlice and other insects. Rentokil Initial Supplies, Liverpool, L33 7SR. Product advice line: 0151 548 5050 Emergency line: 01342 833022 E-mail: <a href="mailto:eurotech.techinfo@rentokil-initial.com">eurotech.techinfo@rentokil-initial.com</a>

2 HAZARD IDENTIFICATION	
<b>Classification (Supply – Use) : In compliance with EC Directive 1999/45.</b>	
<b>F+ Extremely Flammable</b>	R12 Extremely flammable.
<b>N Dangerous for the Environment</b>	R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>X<sub>n</sub> Harmful</b>	R65 Harmful: may cause lung damage if swallowed.
<b>Adverse Physical, Chemical, Significant Human Health and Environmental Effects (See also box 11):</b>	
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.	

3 COMPOSITION / INFORMATION ON INGREDIENTS (SEE ALSO BOX 16)		
% w/w	Common*/Chemical Name, ELINCS/EINECS & CAS No. of Ingredients	EC 1999/45 Classification
0.46	Permethrin* / 3-phenoxybenzyl (1RS, 3RS ; 1RS, 3RS)-3-(2,2-dichlorovinyl)-2,2-dimethyl cyclopropane carboxylate  EINECS : 258-067-9 CAS : 52645-53-1	X <sub>n</sub> : R20/22 : R43 N : R50,53
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  EINECS : 209-542-4 CAS : 231937-89-6	X <sub>n</sub> : R20/22 N : R50,53
>50.0 ≤100.0	Aliphatic hydrocarbon* / naphtha (petroleum)  EINECS : 265-067-2 CAS : 64741-65-7	X <sub>n</sub> : R65
>25.0 ≤50.0	Aerosol propellant* / liquefied petroleum gas  EINECS : 270-704-2 CAS : 68476-85-7	F+ : R12

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<b>4 FIRST-AID MEASURES (SEE ALSO “ADVERSE EFFECTS” IN BOX 2)</b>	
<b>Inhalation</b>	Remove patient to fresh air, keep warm and at rest. Apply supportive measures if necessary and seek medical attention.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Remove and wash contaminated clothing immediately. Wash affected area thoroughly with soap and water. If the patient feels unwell seek medical advice.
<b>Ingestion (Swallowing)</b>	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.
<b>Emergency Equipment Suggested</b>	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”.
<b>Note To Doctor</b>	Further information on all Rentokil Initial formulations is lodged with the National Poisons Information Service in the UK.

<b>5 FIRE FIGHTING MEASURES</b>	
<b>Fire Extinguisher Type</b>	Use carbon dioxide, foam, or dry powder extinguishers.
<b>Special Fire-Fighting Procedures</b>	Wear suitable personal protective equipment.
<b>Special Exposure Hazards</b>	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.

<b>6 ACCIDENTAL RELEASE MEASURES</b>	
<b>Personal Precautions (See also box 8)</b>	Wear suitable personal protective equipment. Remove all sources of ignition. Ensure area is well ventilated.
<b>Environmental Precautions</b>	This product is classified as dangerous for the environment. Keep away from drains, surface and ground water, and soil.
<b>Clean-up Procedure (See also box 13)</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>7 HANDLING AND STORAGE (SEE ALSO BOX 8)</b>	
<b>Handling</b>	Avoid puncturing.
<b>Storage</b>	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.

<b>8 EXPOSURE CONTROLS/PERSONAL PROTECTION</b>	
<b>Exposure Standard - Directive EC/98/24 (1<sup>st</sup> IOELV Directive)</b>	Workplace Exposure Limit (WEL) for aerosol propellant is 1750 mg/m <sup>3</sup> long-term exposure (8 hour Time Weighted Average) and 2180 mg/m <sup>3</sup> short-term exposure (15 minute reference period). Aerosol propellant is referred to as liquefied petroleum gas in Directive EC/98/24 (1 <sup>st</sup> IOELV Directive).
<b>Engineering Controls</b>	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:
<b>Eye Protection</b>	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.
<b>Hand Protection</b>	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.
<b>Skin Protection</b>	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.
<b>Breathing Protection</b>	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.
<b>Environmental Exposure Controls</b>	Use only in accordance with instructions given.

<b>9 PHYSICAL AND CHEMICAL PROPERTIES</b>			
<b>Appearance and Odour</b>	An aerosol spray with a kerosene type odour.		
<b>pH</b>	Not applicable.	<b>Solubility in Water</b>	Immiscible.
<b>Density</b>	Not determined.	<b>Solubility in Other Solvents</b>	Miscible.
<b>Flash Point</b>	<-40°C (aerosol propellant)	<b>Explosive Properties</b>	Pressurised container: do not puncture or expose to high temperatures.
<b>Flammability</b>	Extremely flammable.	<b>Combustibility</b>	Combustible.
<b>Boiling Point/Range</b>	-2.0 - -45°C (aerosol propellant)	<b>Oxidising Properties</b>	None known.
<b>Vapour Density</b>	Not determined.	<b>Evaporation Rate</b>	Not determined.
<b>Vapour Pressure</b>	Not determined.	<b>Partition Coefficient</b>	Not applicable.
<b>Viscosity</b>	Not determined.	<b>Other Data</b>	None known.

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## 10 STABILITY AND REACTIVITY

<b>Conditions to avoid</b>	Avoid exposure to direct sunlight or temperatures exceeding 50°C. Do not pierce or burn even after use.
<b>Materials to avoid</b>	Do not spray on naked flame, electrical equipment or any incandescent material.
<b>Hazardous Breakdown Products</b>	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)

<b>Acute Toxicity</b>	Oral	For permethrin : LD <sub>50</sub> (rat) : 6620 mg/kg For d-allethrin : LD <sub>50</sub> (rat) : 1000 mg/kg
	Inhalation	For permethrin : LD <sub>50</sub> (rat) : > 4.638 mg/L For d-allethrin : LD <sub>50</sub> (rat) (2hr) : 2000 mg/m <sup>3</sup>
	Dermal	For permethrin : LD <sub>50</sub> (rat) : >4000 mg/kg For d-allethrin : LD <sub>50</sub> (rat) : 2150 mg/kg
<b>Corrosivity/Irritation</b>	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	May cause irritation to respiratory tract.
<b>Sensitisation</b>	Skin	Contains less than 1% skin sensitisers in the form of permethrin.
	Respiratory	Contains no known respiratory sensitisers.
<b>Repeat-Dose Toxicity</b>		Product does not contain any components known to have any effects relating to repeated-dose toxicity.
<b>Mutagenicity</b>		Product does not contain any components known to have a mutagenic effect.
<b>Carcinogenicity</b>		Product does not contain any components known to have a carcinogenic effect.
<b>Reproductive Toxicity</b>	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.
<b>Other Information</b>		None known.

## 12 ECOLOGICAL INFORMATION

<b>General Information</b>	This product is classified as very 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.
<b>Ecotoxicity Data</b>	For permethrin : LC <sub>50</sub> (common carp) (96hr) : 0.145 mg/L EC <sub>50</sub> ( <i>Daphnia magna</i> ) (48hr) : 0.02 µg/L LC <sub>50</sub> (Japanese quails) : >11.275 g/kg EC <sub>50</sub> (Algae) (72hr) : 0.5 mg/L For d-allethrin : LC <sub>50</sub> ( <i>Oryzias latipes</i> ) (48hr) : <1 mg/L EC <sub>50</sub> ( <i>Daphnia sp</i> ) (96hr) : 35.6 µg/L E <sub>b</sub> C <sub>50</sub> ( <i>Scenedesmus subspicatus</i> ) (72hr) : 1.1 mg/L LC <sub>50</sub> ( <i>Colinus virginianus</i> ) (8d) : 5620 mg/kg diet LC <sub>50</sub> ( <i>Apis mellifera</i> ) (48hr) : 3.4 µg/bee
<b>Mobility</b>	d-Allethrin is expected to be mobile and bind to soil. Aerosol propellant will disperse rapidly in air and rapidly evaporate if released to water or soil.
<b>Persistence and Degradability</b>	Permethrin is moderately persistent in aquatic organisms. d-Allethrin will biodegrade by up to 28% after 28 days and is photolytically unstable. Photochemical degradation of aerosol propellant in air will proceed at a moderate rate.
<b>Bioaccumulative Potential</b>	Hydrocarbon solvent has a high potential to bioaccumulate.
<b>Other Adverse Effects</b>	None known.

## 13 DISPOSAL CONSIDERATIONS

<b>Disposal of Waste / Containers</b>	This product is for amateur use only and can therefore be disposed of as normal household waste. However, if used in a place of work, ensure this product is disposed of as hazardous waste, in accordance with the appropriate regulations.										
<b>Classification</b> (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	<b>Hazard Code:</b> H3A(i) – Highly flammable; H5 – Harmful; H14 - Ecotoxic <table border="0"><thead><tr><th><u>Components making the waste hazardous</u></th><th><u>Concentrations (%)</u></th></tr></thead><tbody><tr><td>Permethrin</td><td>0.46</td></tr><tr><td>d-Allethrin</td><td>0.13</td></tr><tr><td>Hydrocarbon solvent</td><td>&gt;50 ≤100.0</td></tr><tr><td>Aerosol propellant</td><td>&gt;25.0 ≤50.0</td></tr></tbody></table>	<u>Components making the waste hazardous</u>	<u>Concentrations (%)</u>	Permethrin	0.46	d-Allethrin	0.13	Hydrocarbon solvent	>50 ≤100.0	Aerosol propellant	>25.0 ≤50.0
<u>Components making the waste hazardous</u>	<u>Concentrations (%)</u>										
Permethrin	0.46										
d-Allethrin	0.13										
Hydrocarbon solvent	>50 ≤100.0										
Aerosol propellant	>25.0 ≤50.0										
<b>Note for Disposal</b>	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.	UN1950	Tremcard Reference No.	CEFIC TEC (R)- 20G5F	RIS Code
Transport Category	2	UK Hazchem EAC	Not applicable, aerosols are not allowed to be carried in tanks or in bulk.	PSI38
ADR 2007 (International Road) Proper Shipping Name	Class 2 AEROSOLS	ADR HIN	Not applicable, aerosols are not allowed to be carried in tanks or in bulk.	<div style="border: 1px solid black; width: 100px; height: 100px; margin: auto; display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 80%; height: 80%; margin: auto; display: flex; align-items: center; justify-content: center;"> UN1950 </div> </div>
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.			
Special Requirements	Not required. <b>Packing Group</b> Not required.			
IMDG 2006 (Sea) Proper Shipping Name	Class 2 AEROSOLS	IMDG EMS	F-D, S-U	
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.			
Special Requirements	Not required. <b>Packing Group</b> 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))	
Safety Phrases	S13 : Keep away from food, drink and animal feeding stuffs. 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.
Additional Label Phrases	Contains permethrin. May produce an allergic reaction.
Legislation	To avoid risks to man and the environment, comply with the instructions for use. 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) <b>does not</b> 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 400 mL aerosol can.
Revisions	Not applicable.
Risk phrase text (From box 3 - These refer to the ingredients only. See box 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.

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

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