

# Safety Data Sheet

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**REVISION (see box 16)**

Issue : 10 04 : 02 : 2009

## 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

<b>Product Name</b>	<b>RAT KILLER</b>	<b>HSE 6711</b>
<b>Description</b>	A rodenticide for amateur use. A blue ready-to-use whole grain bait with no perceptible odour. Contains Bitrex <sup>®</sup> , a bittering agent.	
<b>Company</b>	Rentokil Initial Supplies, Liverpool, L33 7SR. Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1293 858 000 E-mail: <a href="mailto:sds@rentokil.com">sds@rentokil.com</a>	

## 2 HAZARD IDENTIFICATION

**Classification (Supply – Use) : In compliance with EC Directive 1999/45.**

**Not classified**

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

This product contains an anticoagulant compound. If ingested, symptoms may include nosebleed and bleeding gums. In severe cases there may be bruising, haematomas of the joints and blood present in the faeces and urine. Phytomenadione, Vitamin K1, is antidotal.

None 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
0.005	Bromadiolone*/3-[3-(4'-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxycoumarin EINECS : 249-205-9 CAS : 28772-56-7	T+ : R26/27/28 R52,53
>2.5 ≤10.0	Propylene glycol*/propane-1,2-diol EINECS : 200-338-0 CAS : 57-55-6	Not classified. Substance with a Community Workplace Exposure Limit (refer to box 8).

**RAT KILLER**

<b>4 FIRST-AID MEASURES (SEE ALSO “ADVERSE EFFECTS” IN BOX 2)</b>	
<b>Inhalation</b>	This route of exposure is not anticipated.
<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. Vitamin K1 is antidotal.

<b>5 FIRE FIGHTING MEASURES</b>	
<b>Fire Extinguisher Type</b>	Use carbon dioxide, foam, water, or dry powder extinguishers.
<b>Special Fire-Fighting Procedures</b>	Wear suitable personal protective equipment.
<b>Special Exposure Hazards</b>	Combustion or thermal decomposition may evolve toxic and irritant vapours.

<b>6 ACCIDENTAL RELEASE MEASURES</b>	
<b>Personal Precautions (See also box 8)</b>	Wear suitable personal protective equipment.
<b>Environmental Precautions</b>	Keep away from drains, surface and ground water, and soil.
<b>Clean-up Procedure (See also box 13)</b>	Collect up spilt material and transfer to a suitable container for re-use or subsequent disposal.

<b>7 HANDLING AND STORAGE (SEE ALSO BOX 8)</b>	
<b>Handling</b>	No specific handling requirements.
<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.

<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 propane-1,2-diol, for long-term exposure is 10 mg/m <sup>3</sup> (particulates) (8 hour Time Weighted Average).
<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. An ecological hazard assessment indicates no specific restrictions on environmental release.

<b>9 PHYSICAL AND CHEMICAL PROPERTIES</b>			
<b>Appearance and Odour</b>	A blue ready-to-use whole grain bait with no perceptible odour.		
<b>pH</b>	Not applicable.	<b>Solubility in Water</b>	Insoluble.
<b>Bulk Density</b>	0.72 g/cm <sup>3</sup>	<b>Solubility in Other Solvents</b>	Not determined.
<b>Flash Point</b>	Not applicable.	<b>Explosive Properties</b>	None.
<b>Flammability</b>	Non-flammable.	<b>Combustibility</b>	Combustible.
<b>Boiling Point/Range</b>	Not applicable.	<b>Oxidising Properties</b>	None.
<b>Vapour Density</b>	Not applicable.	<b>Evaporation Rate</b>	Not applicable.
<b>Vapour Pressure</b>	Not applicable.	<b>Partition Coefficient</b>	Not applicable.
<b>Viscosity</b>	Not applicable.	<b>Other Data</b>	None known.

## RAT KILLER

<b>10 STABILITY AND REACTIVITY</b>	
<b>Conditions to avoid</b>	Avoid extremes of temperature, e.g. below 0°C and above 40°C.
<b>Materials to avoid</b>	Oxidising agents.
<b>Hazardous Breakdown Products</b>	Combustion or thermal decomposition may evolve toxic and irritant vapours.
<b>11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)</b>	
<b>Acute Toxicity</b>	Oral LD <sub>50</sub> (rat) (calculated): >2000 mg/kg Inhalation This route of exposure is not anticipated. Dermal Not hazardous.
<b>Corrosivity/Irritation</b>	Skin No skin irritation potential expected. Eyes No eye irritation potential expected. Respiratory tract No respiratory tract irritation potential expected.
<b>Sensitisation</b>	Skin Contains no known skin sensitisers. 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>	Bromadiolone is an indirect anticoagulant. Phytomenadione, Vitamin K1, is antidotal. Determine prothrombin times not less than eighteen hours after consumption. If elevated, administer Vitamin K1 until prothrombin time normalises. Continue determination of prothrombin time for two weeks after withdrawal of antidote and resume treatment if elevation occurs in that time.
<b>12 ECOLOGICAL INFORMATION</b>	
<b>General Information</b>	This product does not contain any substances that are classified as dangerous to the environment present above the lower limits of concentration as specified in EC Directive 1999/45. Controlled release of this product is not expected to cause environmental contamination. Use only in accordance with instructions given.
<b>Ecotoxicity Data</b>	<u>For bromadiolone:</u> LC <sub>50</sub> ( <i>O. mykiss</i> ): >1.4 mg/L IC <sub>50</sub> ( <i>S. subspicatus</i> ) (72h): 0.17 mg/L EC <sub>50</sub> ( <i>Daphnia magna</i> ): 2.0 mg/L Acute NOEC ( <i>E. foetida</i> ) (14 days): >9.48 mg/kg soil Acute LOEC ( <i>E. foetida</i> ) (14 days) : >9.48 mg/kg soil Acute LD <sub>50</sub> ( <i>E. foetida</i> ) (14 days) : >9.48 mg/kg soil Acute oral: NOEC (Bobwhite quail): 50 mg/kg (Mallard duck): 500 mg/kg LD/C <sub>50</sub> (Bobwhite quail): 138 mg/kg (Mallard duck): 1293 mg/kg Short-term dietary: NOEC (Bobwhite quail) (30 days): <10 mg/kg (Mallard duck) (35 days): <19 mg/kg LD/C50 (Bobwhite quail) (30 days): 62 mg/kg (Mallard duck) (35 days): 110 mg/kg
<b>Mobility</b>	<u>For bromadiolone:</u> Bromadiolone and any potential degradation products, even if released indirectly to soil in small quantities, are not likely to move through the soil profile and are unlikely to reach groundwater in significant quantities.
<b>Persistence and Degradability</b>	<u>For bromadiolone:</u> Bromadiolone is not considered volatile and is not expected to volatilise to air in significant quantities.
<b>Bioaccumulative Potential</b>	<u>For bromadiolone (1%):</u> The log Pow is greater than 3, which indicates a potential to bioaccumulate.
<b>Other Adverse Effects</b>	None known.
<b>13 DISPOSAL CONSIDERATIONS</b>	
<b>Disposal of Waste / Containers</b>	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.
<b>Classification</b> (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	<u>Hazard Code:</u> Not classified. <u>Components making the waste hazardous</u> Concentrations (%): Not required.
<b>Note for Disposal</b>	The best means of disposal of any product is through proper use according to the label. 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.

## RAT KILLER

<b>14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED)</b>				
<b>UN No.</b>	Not classified.	<b>Tremcard Reference No.</b>	Not required.	<b>RIS Code</b>
<b>Transport Category</b>	Not required.	<b>UK Hazchem EAC</b>	Not required.	PSBN803 PSBN804 PSR98 0309
<b>ADR 2009 (International Road) Proper Shipping Name</b>	<b>Class</b> Not required.	<b>ADR HIN</b> Not required.		<b>Labels</b>  Not required.
<b>Limited Quantity Exemptions</b>	Not required.			
<b>Special Requirements</b>	Not required.	<b>Packing Group</b> Not required.		
<b>IMDG 2008 (Sea) Proper Shipping Name</b>	<b>Class</b> Not required.	<b>IMDG EMS</b> Not required.		
<b>Limited Quantity Exemptions</b>	Not required.			
<b>Special Requirements</b>	Not required.	<b>Packing Group</b> Not required.		
<b>Note for Transport</b>	Local, State or National requirements may apply to the carriage of this product.			

<b>15 REGULATORY INFORMATION (HEALTH AND SAFETY INFORMATION (SEE ALSO BOX 2))</b>	
<b>Safety Phrases</b>	Safety phrases are not required.
<b>Additional Label Phrases</b>	To avoid risks to man and the environment, comply with the instructions for use.
<b>Legislation</b>	<p>Labelling is in accordance with UK regulations implementing the EC Directive 1999/45.</p> <p>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.</p> <p>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.</p>

<b>16 Other Information and indication of revisions</b>	
Bitrex <sup>®</sup> is a registered trademark of Macfarlan Smith Ltd.	
<b>Packaging Information</b>	400g plastic tube with a child-resistant screw top. 5 kg and 1kg round plastic tub with a snap-on plastic lid.
<b>Revisions</b>	Changes have been made to the content of boxes 01, 03, 04, 08, 10, 11, 12, 13, 14 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 09.
<b>Risk phrase text</b> (From box 3 - These refer to the ingredients only. See box 2 for the product risk phrases)	R26/27/28 : Very toxic by inhalation, in contact with skin and if swallowed. R52,53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## RAT KILLER

SDS No. 013

Issue : 10

04 : 02 : 2009

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

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