Safety Data Sheet

NOTE: 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 using the details below. In order to confirm the latest version of the SDS for this product visit http:/www.rentokil-initial.com/sds/rentokil-products/

REVISION (see box 16)

Issue : 10 04 : 02 : 2009

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name	**DEADLINE** **HSE 6721**
Description	A rodenticide for professional use. A blue ready-to-use whole grain bait with no perceptible odour. Contains Bitrex®, a bittering agent.
Company	Rentokil Initial Supplies, Liverpool, L33 7SR. Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1293 858 000 E-mail: sds@rentokil.com

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).

4 FIRST-AID MEASURES (SEE ALSO "ADVERSE EFFECTS" IN BOX 2)

Inhalation	This route of exposure is not anticipated.
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.
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 Rentokil Initial formulations is lodged with the National Poisons Information Service in the UK. Vitamin K1 is antidotal.

5 FIRE FIGHTING MEASURES

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

6 ACCIDENTAL RELEASE MEASURES

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

7 HANDLING AND STORAGE (SEE ALSO BOX 8)

Handling	No specific handling requirements.
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.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standard - Directive EC/98/24 (1St IOELV Directive)	Workplace Exposure Limit (WEL) for propane-1,2-diol, for long-term exposure is 10 mg/m^3 (particulates) (8 hour Time Weighted Average).
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:
Eye 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 Protection	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.
Breathing 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. An ecological hazard assessment indicates no specific restrictions on environmental release.

9 PHYSICAL AND CHEMICAL PROPERTIES

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

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10 STABILITY AND REACTIVITY

Conditions to avoid	Avoid extremes of temperature, e.g. below 0°C and above 40°C.
Materials to avoid	Oxidising agents.
Hazardous Breakdown Products	Combustion or thermal decomposition may evolve toxic and irritant vapours.

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

Acute Toxicity	**Oral**	LD_{50} (rat) (calculated): >2000 mg/kg
	Inhalation	This route of exposure is not anticipated.
	Dermal	Not hazardous.
Corrosivity/ Irritation	**Skin**	No skin irritation potential expected.
	Eyes	No eye irritation potential expected.
	Respiratory tract	No respiratory tract irritation potential expected.
Sensitisation	**Skin**	Contains no known skin sensitisers.
	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.
	Development	Product does not contain any components known to be toxic to the reproductive system.
Other Information		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.

12 ECOLOGICAL INFORMATION

General Information	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.
Ecotoxicity Data	For bromadiolone: LC_{50} (*O. mykiss*): >1.4 mg/L IC_{50} (*S. subspicatus*) (72h): 0.17 mg/L EC_{50} (*Daphnia magna*): 2.0 mg/L Acute NOEC (*E. foetida*) (14 days): >9.48 mg/kg soil Acute LOEC (*E. foetida*) (14 days) : >9.48 mg/kg soil Acute LD_{50} (*E. foetida*) (14 days) : >9.48 mg/kg soil Acute oral: NOEC (Bobwhite quail): 50 mg/kg (Mallard duck): 500 mg/kg LD/C_{50} (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
Mobility	For bromadiolone: 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.
Persistence and Degradability	For bromadiolone: Bromadiolone is not considered volatile and is not expected to volatise to air in significant quantities.
Bioaccumulative Potential	For bromadiolone (1%): The log Pow is greater than 3, which indicates a potential to bioaccumulate.
Other Adverse Effects	None known.

13 DISPOSAL CONSIDERATIONS

Disposal of Waste / Containers	This product and its empty container must be disposed of as controlled waste.
Classification	Hazard Code: Not classified.
(Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	Components making the waste hazardous — Concentrations (%): Not required.
Note for Disposal	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.

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14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED)

UN No.	Not classified.	**Tremcard Reference No.**	Not required.	**RIS Code**
Transport Category	Not required.	**UK Hazchem EAC**	Not required.	PSD12, PSD52, PSD64, PSD63, 0309
ADR 2009 (International Road)	**Class** Not required.	**ADR HIN**	Not required.	**Labels**
Proper Shipping Name	Not required.			Not required.
Limited Quantity Exemptions	Not required.			
Special Requirements	Not required.	**Packing Group**	Not required.	
IMDG 2008 (Sea)	**Class** Not required.	**IMDG EMS**	Not required.	
Proper Shipping Name	Not required.			
Limited Quantity Exemptions	Not required.			
Special Requirements	Not required.	**Packing Group**	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	Safety phrases are not required.
Additional Label Phrases	Safety data sheet available for professional user on request. To avoid risks to man and the environment, comply with the instructions for use.
Legislation	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) **does not** 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

Bitrex® is a registered trademark of Macfarlan Smith Ltd.

Packaging Information	A round, high density polyethylene bucket with a snap-on lid containing 12.5 kg. A plastic lined paper sack containing 12.5 kg, 20 kg and 25 kg.
Revisions	Changes have been made to the content of boxes 01, 03, 04, 08, 10, 11, 12, 13, 14, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 09.
Risk phrase text (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.

DEADLINE

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