

Safety Data Sheet

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REVISION (see box 16)

Issue : 07 07 : 08 : 2006

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY	
Product Name	DIFENARD 0.01% (with Bitrex®)
Description	A blue ready-to-use, rodenticidal paste bait with no perceptible odour. For use by professional operators for the control of mice.
Company	Rentokil Initial Supplies, Webber Road, Knowsley Industrial Park, Liverpool, L33 7SR. For general enquiries telephone: +44 (0) 151 548 5050. For safety or regulatory enquiries telephone: + 44 (0) 1342 833022.

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):
None expected under normal conditions of handling and use.
This product contains an anticoagulant compound. If ingested symptoms may include nosebleed and bleeding gums. In severe cases there may be bruising, haematomas and blood present in the faeces and urine.
Combustion or thermal decomposition may evolve toxic or irritant vapours.

3 COMPOSITION / INFORMATION ON INGREDIENTS (SEE ALSO BOX 16)		
% w/w	Common*/Chemical Name, Elincs/Einecs & CAS No. of Ingredients	EC 1999/45 Classification
0.01	Difenacoum* / 3-(3-biphenyl-1,2,3,4-tetrahydro-1-naphthyl)-4-hydroxycoumarin EINECS : 259-978-4 CAS : 56073-07-5	T+ : R28 T : R48/25 N : R50/53
>1.0 ≤2.5	Propylene glycol* / propane-1,2-diol EINECS : 200-338-0 CAS : 57-55-6	Not classified.
≤0.1	Bitrex®* / denatonium benzoate EINECS : 223-095-2 CAS : 3734-33-6	Xn : R20/22 Xi : R38 Xi : R41 : R52/53

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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 K ₁ is antidotal.

5 FIRE FIGHTING MEASURES	
Fire Extinguisher Type	Use carbon dioxide, foam, water, or dry powder extinguishers.
Special Fire-Fighting Procedures	Wear self-contained breathing apparatus and suitable personal protective equipment.
Special Exposure Hazards	Combustion or thermal decomposition may evolve toxic or 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)	Gather up spilt material and transfer to a suitable container for subsequent disposal.

7 HANDLING AND STORAGE (SEE ALSO BOX 8)	
Handling	Wear suitable gloves.
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 propylene glycol is 474 mg/m ³ long-term exposure (8 hour Time Weighted Average)
Engineering Controls	Propylene glycol is referred to as propane-1,2-diol in Directive EC/98/24 (1 st IOELV Directive). 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	None necessary during normal handling and use.
Hand Protection	Suitable hand protection such as gloves.
Skin Protection	None necessary during normal handling and use.
Breathing Protection	None necessary during normal handling and use.
Environmental Exposure Controls	Use only in accordance with instructions given.

9 PHYSICAL AND CHEMICAL PROPERTIES			
Appearance and Odour	A blue paste with no perceptible odour.		
pH	Not applicable.	Solubility in Water	Insoluble.
Density	1.0 g/cm ³	Solubility in Other Solvents	Partially soluble.
Flash Point	Not applicable.	Explosive Properties	None.
Flammability	Non-flammable.	Combustibility	Combustible.
Boiling Point/Range	Not applicable.	Oxidising Properties	None.
Vapour Density	Not determined.	Evaporation Rate	Not determined.
Vapour Pressure	Not applicable.	Partition Coefficient	Not applicable.
Viscosity	Not determined.	Other Data	Product may melt in areas where temperatures become elevated.

10 STABILITY AND REACTIVITY

Conditions to avoid	Avoid extremes of temperature, e.g. below 0°C and above 40°C.
Materials to avoid	None known.
Hazardous Breakdown Products	Combustion or thermal decomposition may evolve toxic and irritant vapours.

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

Acute Toxicity	Oral	For Difenard: LD ₅₀ (rat): >2000 mg/kg.
	Inhalation	This route of exposure is not anticipated.
	Dermal	For Difenard: LD ₅₀ (rat): >2000 mg/kg.
Corrosivity/Irritation	Skin	Non irritating to skin.
	Eyes	Slightly irritating to eyes.
	Respiratory tract	Not determined.
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 at concentrations greater than 0.1% w/w known to have a mutagenic effect.
Carcinogenicity		Product does not contain any components at concentrations greater than 0.1% known to have a carcinogenic effect.
Reproductive Toxicity	Fertility Development	Product does not contain any components known to have effects on fertility. Product does not contain any components known to be toxic to the reproductive system.
Other Information		Difenacoum is an indirect anticoagulant. Phytomenadione, Vitamin K ₁ , is antidotal. Determine prothrombin times not less than eighteen hours after consumption. If elevated, administer Vitamin K ₁ until prothrombin time normalises. Continue determination of prothrombin time two weeks after withdrawal of antidote and resume treatment if elevation occurs in that time.

12 ECOLOGICAL INFORMATION

General Information	The difenacoum in this product is classified as very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. The Bitrex [®] in this product is classified as harmful 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	<u>For difenacoum:</u> LC ₅₀ (96hr) Rainbow trout : 0.10 mg/L LC ₅₀ (48hr) <i>Daphnia</i> : 0.52 mg/L <u>For Bitrex[®]:</u> LC ₅₀ (96hr) Rainbow trout : >1000 mg/L EC ₅₀ (48hr) <i>Daphnia magna</i> : 13 mg/L LC ₅₀ (96hr) Shrimp : 400 mg/L Water solubility 45 g/L
Mobility	<u>For Bitrex[®]:</u> Abiotic degradation 10% after 5 days at 50°C at all pH's. Abiotic degradation 10% after 30 days at 25°C at all pH's.
Persistence and Degradability	<u>For difenacoum:</u> Difenacoum is not biodegradable, but the solvents its in are biodegradable.
Bioaccumulative Potential	<u>For Bitrex[®]:</u> Low bioaccumulation potential.
Other Adverse Effects	None known.

13 DISPOSAL CONSIDERATIONS

Disposal of Waste / Containers	Under normal circumstances, waste / empty containers will be disposed of by Rentokil Initial.
Classification (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC))	<u>Hazard Code:</u> Not classified.
Note for Disposal	<u>Components making the waste hazardous</u> Concentrations (%): Not required. 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.	PSD61
ADR 2005 (International Road)	Class Not required.	ADR HIN	Not required.	Labels Not required.
Proper Shipping Name	Not required.			
Limited Quantity Exemptions	Not required.			
Special Requirements	Not required.	Packing Group	Not required.	
IMDG 2004 (Sea)	Class Not required.	IMDG EMS	Not required.	Labels 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	400g in a white polypropylene tube.
Revisions	Changes have been made to the content of boxes 01, 02, 04, 06, 08, 09, 11, 12, 13, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue nn.
Risk phrase text (From box 3 - These refer to the ingredients only. See box 2 for the product risk phrases)	R20/22 : Harmful by inhalation and if swallowed. R28 : Very toxic if swallowed. R38 : Irritating to skin. R41 : Risk of serious damage to eyes. R48/25 : Toxic: danger of serious damage to health by prolonged exposure if swallowed. R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

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