

# Safety Data Sheet

Issue : 02 09 : 05 : 2014

<b>1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY</b>	
<b>Product Name</b>	<b>BROMATROL CONTACT DUST (with BITREX<sup>®</sup>) L6151</b>
<b>Description</b>	A blue ready-to-use rodenticidal contact dust with no perceptible odour and a taste aversive agent. For use by professional operators in the control of rats and mice.
<b>Company</b>	Rentokil SA (Pty) Ltd, 2 Stigant Road Claremont, 7708 South Africa Telephone: +27 21 670 4700 Fax: 086 777 1132
<b>Manufacturer</b>	Rentokil Initial Supplies, Liverpool, L33 7SR. Product advice line: +44 (0)151 548 5050 Emergency line: +44 (0)1342 833 022 E-mail: <a href="mailto:sds@rentokil.com">sds@rentokil.com</a>

<b>2 HAZARD IDENTIFICATION</b>	
<b>Classification (Supply – Use) : In compliance with the Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 1947 (Act No. 36 of 1947)</b>	
<b>RSA GROUP III : SLIGHTLY HAZARDOUS</b>	<b>CAUTION/VERSIGTIG</b>
<b>Adverse Physical, Chemical, Significant Human Health and Environmental Effects (See also box 11):</b>	
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.	
No other significant adverse effects expected under normal conditions of handling and use.	

<b>3 COMPOSITION / INFORMATION ON INGREDIENTS (SEE ALSO BOX 16)</b>	
% w/w	Common*/Chemical Name, ELINCS/EINECS & CAS No. of Ingredients
0.15	Bromadiolone*/3-[3-4(4-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxycoumarin <span style="float: right;">EINECS : 249-205-9 CAS : 28772-56-7</span>
≤ 1.0	Bitrex <sup>®</sup> Powder*/Denatonium benzoate <span style="float: right;">EINECS : 223-9-52 CAS : 3734-33-6</span>
>50.0 ≤ 100.0	Kaolin <span style="float: right;">EINECS : 310-194-1 CAS : 1332-58-7</span>
>50.0 ≤ 100.0	Mica <span style="float: right;">EINECS : 310-127-6 CAS : 12001-26-2</span>
≤ 10.0	Quartz (silica, respirable crystalline) <span style="float: right;">EINECS : 238-878-4 CAS : 14808-60-7</span>

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

<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.
<b>Note To Doctor</b>	For further information contact the National Poisons Information Service. Vitamin K1 is a known antidote.

#### 5 FIRE FIGHTING MEASURES

<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 or irritant vapours.

#### 6 ACCIDENTAL RELEASE MEASURES

<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>	Spills should be swept up carefully, avoiding the formation of a dust cloud, and transferred to a suitable container for subsequent disposal.

#### 7 HANDLING AND STORAGE (SEE ALSO BOX 8)

<b>Handling</b>	Wear suitable gloves and a suitable dust mask when using and applying the product.
<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.

#### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Exposure Standard - Directive EC/98/24 (1<sup>st</sup> IOELV Directive)</b>	Workplace Exposure Limit (WEL) for dusts is 10 mg/m <sup>3</sup> (8 hour Time Weighted Average (8hr TWA)) for inhalable dust and 4 mg/m <sup>3</sup> (8hr TWA) for respirable dust. WEL for silica, respirable crystalline (quartz) is 0.1 mg/m <sup>3</sup> long-term exposure (8hr TWA). WEL for respirable kaolin is 2 mg/m <sup>3</sup> long-term exposure (8hr TWA). WEL for respirable mica is 0.8 mg/m <sup>3</sup> long-term exposure (8hr TWA) and total inhalable mica is 10 mg/m <sup>3</sup> long-term exposure (8hr TWA)
<b>Engineering Controls</b>	Quartz is referred to as silica, respirable crystalline in Directive EC/98/24 (1 <sup>st</sup> 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:
<b>Eye Protection</b>	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.
<b>Hand Protection</b>	Suitable hand protection such as gloves.
<b>Skin Protection</b>	Label advice indicates none necessary under normal handling and use. However, consider other precautionary requirements.
<b>Breathing Protection</b>	Suitable respiratory protection such as a suitable dust mask.
<b>Environmental Exposure Controls</b>	Use only in accordance with instructions given.

#### 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance and Odour</b>	A blue dust with no perceptible odour.		
<b>pH</b>	Not applicable.	<b>Solubility in Water</b>	Virtually insoluble.
<b>Density</b>	Approx. 0.37 g/cm <sup>3</sup>	<b>Solubility in Other Solvents</b>	Virtually insoluble.
<b>Flash Point</b>	Not applicable.	<b>Explosive Properties</b>	Contains no explosive components.
<b>Flammability</b>	Non-flammable.	<b>Combustibility</b>	Non-combustible.
<b>Boiling Point/Range</b>	Not applicable.	<b>Oxidising Properties</b>	Contains no oxidising components.
<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.

## 10 STABILITY AND REACTIVITY

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

## 11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

<b>Acute Toxicity</b>	Oral	LD <sub>50</sub> (rat): 1532 mg/kg.
	Inhalation	Not determined.
	Dermal	LD <sub>50</sub> (rat): >2000 mg/kg.
<b>Corrosivity/Irritation</b>	Skin	Non-irritant (rabbit).
	Eyes	This product may be slightly irritating to eyes.
	Respiratory tract	Not determined.
<b>Sensitisation</b>	Skin	No evidence of sensitisation.
	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>		Contains crystalline silica. Prolonged inhalation may cause silicosis which may increase the risk of lung cancer. There is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required.
<b>Reproductive Toxicity</b>	Fertility Development	Product does not contain any components known to have effects on fertility.
<b>Other Information</b>		Product does not contain any components known to be toxic to the reproductive system. 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

<b>General Information</b>	The bromadiolone and denatonium benzoate in this product are 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.
<b>Ecotoxicity Data</b>	<u>For bromadiolone:</u> LC <sub>50</sub> (Fish <i>Oncorhynchus mykiss</i> ) (96hr): >1.4 mg/L LC <sub>50</sub> (Fish <i>Lepomis macrochirus</i> ) (96hr): >3.0 mg/L E <sub>b</sub> C <sub>50</sub> (algae: <i>Scenedesmus subspicatus</i> ) (72h): 017 mg/L
<b>Mobility</b>	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>	Bromadiolone is not considered volatile and is not expected to volatilise to air in significant quantities.
<b>Bioaccumulative Potential</b>	<u>For Bromadiolone</u> The log Pow is greater than 3, which indicates the potential to bioaccumulate.
<b>Other Adverse Effects</b>	None known.

## 13 DISPOSAL CONSIDERATIONS

<b>Disposal of Waste / Containers</b>	Under normal circumstances, waste / empty containers will be disposed of by Rentokil Initial.
<b>Note for Disposal</b>	The best means of disposal of any product is through proper use according to the label. Disposal must be in accordance with Local, State or National Requirements.

14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED)			
UN No.	Not classified.		RIS Code
Transport Category	Not required.	UK Hazchem EAC	Not required. PSB22 / PSB100
ADR 2007 (International Road)	Class Not required.	ADR HIN	Not required.
Proper Shipping Name	Not required.		Labels  Not required.
Limited Quantity Exemptions	Not required.		
Special Requirements	Not required.	Packing Group	
IMDG 2006 (Sea)	Class Not required.	IMDG EMS	Not required.
Proper Shipping Name	Not required.		Labels  Not required.
Limited Quantity Exemptions	Not required.		
Special Requirements	Not required.	Packing Group	
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))	
Storage Pictograms	 <p>Store away from food and feedstuffs. Keep out of reach of children, uninformed persons and animals.</p>
Activity Pictograms	Not required.
Advice Pictograms	 <p>Do not inhale dust. Wear protective clothing - synthetic rubber/PVC gloves and a dust mask when handling or applying the dust. Wash with soap and water immediately after use.</p>
Warning Pictograms	 <p>Toxic to animals.</p>
Legislation	Classification and labelling is in compliance with the Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 1947 (Act no. 36 of 1947). 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	1 kg polyethylene lined paper bag and a 300g polyethylene bottle.
Revisions	Not required.
SDS 022-11	

## BROMATROL CONTACT DUST

SDS No. 022-RSA

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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. 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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