

 <b>UNICHEM d.o.o.</b> Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155	<h1>SAFETY DATA SHEET</h1>	Revision: 3
	<h2>RATIMOR Pellets</h2>	Date of issue: <b>20.02.2008</b> Printed: 27.03.2009

### 1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

- 1.1 Trade name: **RATIMOR Pellets**
- 1.2 Use of the preparation: rodenticide, anticoagulant bait (RB)
- 1.3 Supplier: **UNICHEM d.o.o., Sinja Gorica 2, Vrhnika**  
 tel.: +386 (01) 75 58 150 , fax.: +386 (01) 75 58 155

### 2. HAZARDS IDENTIFICATION

- 2.1 Safety hazard: not explosive, not oxidising agent
- 2.2 Hazard to health: Harmful in contact with skin and if swallowed.
- 2.3 Hazard to environment: Toxic to aquatic organisms. Wild mammals and birds may be at greater risk if the product is not used in accordance with its label.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

	SYMBOL	R-Phrases	S-Phrases
<b>Bromadiolon 0,05g/kg</b>	T+,N	R27/28,48/24/25,50/53	S1/2,13,46,49,61
	CAS	EINECS/ELINCS	INDEX No.
	28772-56-7	249-205-9	-
IUPAC: 3-[3-(4'-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxycoumarin CA: 3-[3-(4'-bromo fl,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2H-1-benzopyran-2-one			
	SYMBOL	R-Phrases	S-Phrases
<b>BITREX 0,01g/kg</b>	Xn	R20/22,37,38,41,52/53	S22,26,35,36/37/39,45,61
	CAS	EINECS/ELINCS	INDEX No.
	3734-33-6	223-095-2	-
IUPAC: N-[2-[2,6-dimethyl phenyl]amino]-2-oxoethyl]-N,N-diethylbenzenemethanaminium benzoate			

### 4. FIRST AID measures

Never induce vomiting and do not give anything to drink or eat if the patient is unconscious.  
 Symptomatic treatment.

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- 4.1 **Inhalation:** Unlikely to present an inhalation hazard unless excessive dust is present. In case, move to fresh air. Obtain medical advice immediately.
- 4.2 **Contact with skin:** Take off contaminated clothes and shoes. Wash with water and soap. See medical advice.
- 4.3 **Contact with eye:** Flush immediately eyes with a large amount of water for 15 minutes. Take advice of an ophthalmologist if irritation develops.
- 4.4 **Ingestion:** Wash out mouth. Do not induce vomiting. Do not give anything to eat or drink. Keep patient warm at rest. Seek medical advice immediately.

**General advice:** In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Advice for physicians:** Brodifacoum is an indirect anticoagulant. Phytomenadione, Vitamin K<sub>1</sub>, is antidote. Determine prothrombin times not less than 18 hours after consumption. If elevated, administer Vitamin K<sub>1</sub> 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.

## 5. FIRE-FIGHTING MEASURES

The product is not-flammable, but is combustible. Danger of excessive dust.

- 5.1 **Suitable extinguishing media:** Carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, dry powder, water spray, mist or foam.
- 5.2 **Unsuitable extinguishing media:** Water jet from a fire hose.
- 5.3 **Fire and explosion hazards:** In case of fire, the product emits toxic and irritating fumes.
- 5.4 **Special protective equipments:** Wear self-contained breathing apparatus and protective clothing

**Other recommendations:** Do not breathe fumes. Keep fire exposed containers cool by spraying with water if exposed to fire.

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1 **Personal protection:** Wear protective equipment. (Figure 8)
- 6.2 **Environment precautions:** Sweep into a suitable container and store material collected.
- 6.3 **Clean-up procedures:** Clean up promptly by sweeping or vacuum. Transfer to a suitable labelled container. Subsequently, wash the contaminated area with water, taking care to prevent the washings entering sewers or drains.

**Other information:** -

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## 7. HANDLING AND STORAGE

- 7.1 **Handling:** Wash hands and exposed part of the body with soap after work. Always use good personal hygiene procedures when handling chemicals.
- 7.2 **Storage:** Store in dry cool conditions. Keep away from food, drink and animal feeding stuffs.
- 7.3 **Specific use:** product is meant for diminish unwanted population of rats and mice.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 **Exposure limit values:** (TWA<sub>Flour</sub>: 10 mg/m<sup>3</sup>as dust)
- 8.2. **Exposure controls:**
- 8.2.1 **Occupational exposure controls**
- 8.2.1.1: **Respiratory protection:** Unlikely to present an inhalation hazard unless excessive dust is present. If dust levels approach the MEL's then suitable approved respiratory protection should be worn.
- 8.2.1.2: **Hand protection:** Wear suitable gloves
- 8.2.1.3 **Eyes protection:** Tight fitting goggles if exposed to excessive dust.
- 8.2.1.4: **Skin protection:** Wear suitable cloth.
- 8.2.2 **Environmental exposure protection:** Avoid release to the environment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. General information

Appearance: Red pellets  
 Odour: Specific – according to aroma

### 9.2. Important health, safety and environmental information

pH: n.a.  
 Boiling point/boiling range: n.a.  
 Solidification point: n.a.  
 Flash point:: -  
 Flammability: none  
 Self ignition:: none  
 Explosive properties: none.  
 Oxidizing properties: none.  
 Density: 0.6-0.7 g/cm<sup>3</sup>  
 Water solubility: insoluble  
 (19 mg/L @ 20°C – bromadiolone)  
 Viscosity: -  
 Vapour pressure: (2×10<sup>-6</sup> Pa @20°C – bromadiolon)  
 Partition coefficient: n-octanol/water (log Kow=7.3 – bromadiolon)

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9.3 **Other information:** n.a.: not applicable

## 10. STABILITY AND REACTIVITY

10.1 **Condition to avoid:** high temperature, flame and sparks.

10.2 **Material to avoid:** strong oxidizers

10.3 **Hazardous decomposition products:** stable under normal conditions. Combustion or thermal decomposition will produce toxic and irritant fumes.

## 11. TOXICOLOGICAL INFORMATION

All data is about the active ingredient – BROMADIOLONE.

### 11.1 Acute toxicity:

Oral:  $LD_{50}$  (rat) = 1.125 mg/kg (WHO)  
 $LD_{50}$  (rat) = 18,000 mg/kg – for bait  
 $LD_{50}$  (mouse) = 1.75 mg/kg

Dermal:  $LD_{50}$  (rat) = 2.1 mg/kg

Inhalation:  $LC_{50}$  (4h, rat) = 5.0 – 19.3 mg/m<sup>3</sup>

### 11.2 Irritant potential:

Eyes: Slightly irritating (rabbits)

Dermal: Non irritating

Sensitization: Unknown

## 12. ECOLOGICAL INFORMATION

All data is about the active ingredient – BROMADIOLONE.

12.1 **Ecotoxicity:** Fish:  $LC_{50}$  (96 hours, different species) = 1.4 – 3.5 mg/L.

Avian:  $LC_{50}$  = 0.264 mg/kg

12.2 **Mobility:**  $K_{OC}$  = 528; classification: immobile ( Technical report n.14/07/1997 Chemservice)

12.3 **Persistence and degradability :**  $DT_{50}$  (soil) = 1.8 – 7.4 days

12.4 **Bioaccumulative potential:** Log  $P_{ow}$ : 3.5 (Studio CH-14/96-B Chemservice)

12.5 **Results of PBT assessment:** no data

**Other information:** As the product contains 50 ppm bromadiolone, unlikely to be hazardous to aquatic life. Do not dispose material in sewers and waterways..

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### 13. Disposal consideration

Disposal should be in accordance with local, state or national legislation. Make container unusable.

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### 14. Transport information

There are no regulatory restrictions affecting the transport of the product. Transport conditions should be in accordance with section 7.2.

UN No.: 0; Not restricted.

**Road, rail:**

Class: -

ADR / RID: -

group: -

**Sea**

Class: -

IMO / IMDG: -

group: -

**Air**

Class

ICAO / IATA: -

Group:-

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### 15. REGULATORY INFORMATION

15.1 **Symbols and labelling:** Xn – harmful

15.2 **Special risks (R):** -

R21/22 – Harmful in contact with skin and if swallowed.

R48/21/22 – Harmful danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.

R 51 – Toxic to aquatic organisms

15.3 **Safety advices (S):**

S 2 – Keep out of the reach of children.

S13 – Keep away from food, drink and animal feedingstuffs.

S20/21 – When using do not eat, drink or smoke.

S36/37 – Wear suitable protective clothing and gloves.

S46 – If swallowed, seek medical advice immediately and show this container or label.

S 61 - Avoid release to the environment. Refer to special instructions / Safety data sheets.

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### 16. OTHER INFORMATION

All the information of this safety data sheet is based on our actual knowledge as well as on EEC regulations.

The product has not to be employed for different uses than those indicated in section 1.

**Training:** Workers should be trained avoid skin contact with the bait.

**R-sentences in the document:**

R20/22 – Harmful by inhalation and if swallowed.

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R27/28 – Very toxic in contact with skin and if swallowed.

R36/38 – Very toxic by inhalation, in contact with skin and if swallowed.

R38 – Irritating to skin.

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R41 – Risk of serious damage to eyes.

R48/24/25 – Toxic danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.

R50/53 – Toxic danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.

R52/53 – Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-sentences in the document:**

S1/2 – Keep locked up and out of the reach of children.

S22 – Keep locked up and out of the reach of children.

S24 – Keep locked up and out of the reach of children.

S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 – After contact with skin, wash immediately with plenty of water with soap.

S35 – This material and its container must be disposed of in a safe way.

S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.

S45 – In case of accident or if you feel unwell, seek medical advice immediately.

S49 – Keep only in the original container

S60 – This material and its container must be disposed of as hazardous waste