

Product name: **RATIMOR BRODIFACOUM WAX BLOCKS**

Creation date: **24.3.2015**

Revision: **24.3.2015**

Version: 1



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## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Product name

**RATIMOR BRODIFACOUM WAX BLOCKS**

Product code

[UK]

### 1.2. USE OF THE SUBSTANCE/PREPARATION

Use

Rodenticide for the extermination of mice and rats  
Type of biocidal product: PT14

Uses advised against

To use only for the purposes stated in this Safety Data Sheet or on the product label. Any other use is prohibited. Rodenticide is not to be used outdoors. Do not use rodenticide unprotected in places where other animals or people move or stay.

### 1.3. COMPANY/UNDERTAKING IDENTIFICATION

Supplier

UNICHEM D.O.O.  
Address: Sinja Gorica 2, 1360 Vrhnika, Slovenia  
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### 1.4. EMERGENCY TELEPHONE

Emergency

112

Supplier

+386 1 755 81 50

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of substance/preparation

Classification according to Reg. 1272/2008

According to the regulation, the chemical is not classified as dangerous. Safety data sheet available for professional user on request.

Classification according to directive 67/548/EEC or. 99/45/EC

According to the regulation, the chemical is not classified as dangerous. Safety data sheet available for professional user on request.



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## 2.2 Label elements

### 2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]

Pictograms not applicable according to Regulation 1272/2008.

P102 Keep out of reach of children.

P103 Read label before use.

P220 Keep away from food, drink and animal feedingstuffs.

P262 Do not get in eyes, on skin, or on clothing.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves (Professional only).

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P404 Store in a closed container.

P405 Store locked up.

P501 Dispose of contents/container in accordance with national regulation.

### 2.2.2. Contains:

-

### 2.2.3. Special provisions

Special hazards are not known or expected.

## 2.3. Other hazards

No information

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

For mixtures see 3.2.

### 3.2. Mixtures

Chemical name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 [CLP]	Classification according to directive 67/548/EEC or 99/45/EC	REACH reg. number
brodifacoum	56073-10-0 259-980-5 607-172-00-1	0,005	Acute Tox. 2; H300 Acute Tox. 1; H310 STOT RE 1; H372 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	T+; R27/28 T; R48/24/25 N; R50/53	-
Denatonium benzoate	3734-33-6 223-095-2 -	0,001	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Acute Tox. 4; H332 Aquatic Chronic 3; H412	Xn; R20/22 Xi; R37/38-41 R52/53	-

## SECTION 4. FIRST AID MEASURES

### 4.1. First-aid measures

#### General measures

Remove affected person from the contaminated area to fresh air or well-ventilated area, providing her basic life functions and protect it from the cold or heat. Never give anything by mouth to an unconscious person.



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Product name: **RATIMOR BRODIFACOUM WAX BLOCKS**Creation date: **24.3.2015**Revision: **24.3.2015**Version: **1**Skin contact

Take off all contaminated clothing. Wash thoroughly with plenty of water and soap! If feeling unwell seek medical help.

Eye contact

Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. If irritation persists, seek professional medical attention.

Inhalation

Remove patient to fresh air-move out of dangerous area. If symptoms persist seek medical attention.

Ingestion

Do not induce vomiting. Rinse mouth with water. In case of doubt or if feeling unwell seek medical help. Show the physician the Safety Data Sheet or label.

**4.2. Symptoms**Skin contact

-

Eye contact

-

Inhalation

-

Ingestion

The product is the anticoagulant rodenticide with characteristic of coumarins.

In case of poisoning bleeding disorders and increased bleeding tendency may occur.

In severe poisoning a strong internal bleeding can cause circulatory collapse and consequent death.

Symptoms may be delayed in onset by days.

**4.3. Indication of any immediate medical attention and special treatment needed**

In case of bleeding or reduced activity of prothrombin is indicated to use antidote vitamin K1 (phytomenadione) at a dose of 10-20 mg (5-10 mg in children) slowly iv or as an infusion. Further treatment: Vitamin K1 (phytomenadione) is administered 6x daily at a dose of 10 mg iv depending on the clinical picture, in most serious poisonings to 125mg / day. Vitamin K3 (menadione) is not effective! Because of the risk of hematoma avoid intramuscular injections. In the case of severe bleeding blood transfusions and further substitution of coagulation factors in the form of fresh frozen plasma or prothrombin complex concentrate are also needed.

**SECTION 5. FIRE-FIGHTING MEASURES****5.1. Extinguishing media**Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Alcohol or polymer foam.

Unsuitable extinguishing media

Full water jet.



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## 5.2. Special hazards arising from the substance or mixture

### Hazardous combustion products

In case of heating harmful vapours/gases can be generated.

## 5.3. Advice for firefighters

### Protective actions

Cool containers at risk with water spray jet. If possible remove containers from endangered area. Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

### Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective clothing for fire-fighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137) .

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

##### **Protective equipment**

Use personal protective equipment (Section 8).

##### **Emergency procedures**

Ensure adequate ventilation.

#### 6.1.2. For emergency responders

-

### 6.2. Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental entry into water or ground occurs, inform responsible authorities.

### 6.3. Methods and material for containment and cleaning up

#### 6.3.1. For containment

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#### 6.3.2. For cleaning up

Collect in a suitable container and dispose according to regulations.

#### 6.3.3. Other information

-

### 6.4. Reference to other sections

See also sections 8 and 13.

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## SECTION 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

#### 7.1.1. Protective measures

**Measures to prevent fire**

Ensure adequate ventilation.

**Measures to prevent aerosol and dust generation**

Prevent dusting.

**Measures to protect the environment**

-

#### 7.1.2. Advice on general occupational hygiene

Use good personal hygiene practices-wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe dust.

### 7.2. Conditions for safe storage, including any incompatibilities

#### 7.2.1. Technical measures and storage conditions

Keep in locked place. Keep out of the reach of children. Keep in cool and good ventilated area. Keep away from food, drink and animal feedingstuffs Protect from open fire, heat and direct sunlight.

#### 7.2.2. Packaging materials

-

#### 7.2.3. Requirements for storage rooms and vessels

-

#### 7.2.4. Storage class

-

#### 7.2.5. Further information on storage conditions

-

### 7.3. Specific end use(s)

**Recommendations**

-

**Industrial sector specific solutions**

-

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION



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## 8.1. Control parameters

### 8.1.1. Occupational Exposure limit values

No information

### 8.1.2. Information on monitoring procedures

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

### 8.1.3. DNEL values

No information

### 8.1.4. PNEC values

No information

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering control

#### Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices-wash hands at breaks and when done working with material.

#### Technical measures to prevent exposure

Provide good ventilation and local exhaust in the area with increased concentration.

### 8.2.2. Personal protective equipment

#### Eye and face protection

Safety glasses with side protection. (EN 166)

#### Hand protection

Protective gloves (EN 374).

#### Appropriate materials

Material	Thickness	Penetration Time	Remark
PVC	mm		
Butyl	mm		

#### Skin protection

Cotton protective clothing (EN ISO 13688) and shoes that cover the entire foot (EN ISO 20345).

#### Respiratory protection

Not needed under normal use and adequate ventilation.

#### Thermal hazards

-

### 8.2.3. Environmental exposure controls

-

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. General information

-	<b>Physical state:</b>	solid
-	<b>Colour:</b>	blue
-	<b>Odour:</b>	mild, characteristic

### Important health, safety and environmental information

-	<b>pH</b>	No information
-	<b>Melting point</b>	55 – 66 °C
-	<b>Boiling point/boiling range</b>	No information
-	<b>Flashpoint</b>	No information
-	<b>Evaporation rate</b>	No information
-	<b>Ignition temperature</b>	No information
-	<b>Explosion limits (vol%)</b>	No information
-	<b>Vapour pressure</b>	No information
-	<b>Vapour density</b>	No information
-	<b>Density</b>	No information
-	<b>Solubility</b>	<b>Water:</b> Insoluble
-	<b>Partition coefficient n-octanol/water (log Kow)</b>	No information
-	<b>Auto-ignition temperature</b>	No information
-	<b>Decomposition temperature</b>	No information
-	<b>Viscosity</b>	No information
-	<b>Explosive properties</b>	No information
-	<b>Oxidising properties</b>	No information

### 9.2. Other information

-	<b>Remarks:</b>	
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## SECTION 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

-

### 10.2. Chemical stability

Product is stable under normal conditions according to handling and storage.

### 10.3. Possibility of hazardous reactions

-

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**10.4. Conditions to avoid**

Avoid high temperatures.

**10.5. Incompatible materials**

Strong oxidizing agents.

**10.6. Hazardous decomposition products**

Under normal use conditions no hazardous decomposition products expected. In case of fire/explosion vapours dangerous for health are spread.

**SECTION 11. TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****11.1.1. Acute toxicity****For components**

Chemical name	exp. route	Type	species	Time	value	Method	Remark
brodifacoum (56073-10-0)	dermal	LC <sub>50</sub>	rat		7,48 mg/kg		
brodifacoum (56073-10-0)	oral	LD <sub>50</sub>	rat		< 0,27 mg/kg		
Denatonium benzoate (3734-33-6)	oral	LD <sub>50</sub>	rat		749 mg/kg		
Denatonium benzoate (3734-33-6)	inhalation	LD <sub>50</sub>	rat	4 h	0,2 mg/l		

**11.1.2. Skin corrosion/irritation, serious eye damage/irritation, aspiration hazard**

No information

**11.1.3. Respiratory or skin sensitisation**

No information

**11.1.4. Carcinogenicity, Mutagenicity, Reproductive toxicity****Carcinogenicity**

No information

**(Germ cell) mutagenicity**

No information

**Reproductive toxicity**

No information

**Summary of evaluation of the CMR properties**

No information

**11.1.5. STOT-single and repeated exposure**

No information



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## SECTION 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### 12.1.1. Acute (short-term) toxicity

##### For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism	Method	Remark
brodifacoum (56073-10-0)	EC <sub>50</sub>	0,04 mg/L	72 h	algae			
	EC <sub>50</sub>	0,25 mg/L	48 h	crustaceans	<i>Daphnia magna</i>		
	LC <sub>50</sub>	0,042 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>		

#### 12.1.2. Chronic (long-term) toxicity

No information

### 12.2. Persistence and degradability

#### 12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information

#### 12.2.2. Biodegradation

No information

### 12.3. Bioaccumulative potential

#### 12.3.1. Partition coefficient n-octanol/water (log Kow)

No information

#### 12.3.2. Bioconcentration factor (BCF)

No information

### 12.4. Mobility

#### 12.4.1. Known or predicted distribution to environmental compartments

No information

#### 12.4.2. Surface tension

No information

#### 12.4.3. Adsorption/Desorption

No information

### 12.5. Results of PBT and vPvB assessment

No evaluation.

### 12.6. Other adverse effects

No information

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## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### 13.1.1. Product / Packaging disposal

##### **Waste chemical**

Disposal must be made according to official regulations: to leave it to authorized collector/remover/transformer of hazardous waste. It is not allowed to empty into ground or the aquatic environment.

##### **Packaging**

Completely emptied container dispose according to regulations.

#### 13.1.2. Waste treatment-relevant information

-

#### 13.1.3. Sewage disposal-relevant information

-

#### 13.1.4. Other disposal recommendations

-

## SECTION 14. TRANSPORT INFORMATION

### 14.1. UN number

-

### 14.2. UN proper shipping name

Not dangerous according to ADR.

### 14.3. Transport hazard class(es)

-

### 14.4. Packing group

-

### 14.5. Environmental hazards

NO

### 14.6. Special precautions for user

-

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

-

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## SECTION 15. REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
- Dangerous preparations directive (99/45/EC) as amended
- Dangerous substances directive (67/548/EEC) as amended

#### 15.1.1. Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

not applicable

### 15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16. OTHER INFORMATION

#### Indication of changes

-

#### Key literature references and sources for data

-

#### List of relevant R phrases

- R20/22 Harmful by inhalation and if swallowed.
- R27/28 Very toxic in contact with skin and if swallowed.
- R37/38 Irritating to respiratory system and skin.
- 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 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.

#### List of relevant H phrases

- H300 Fatal if swallowed.
- H302 Harmful if swallowed.
- H310 Fatal in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H372 Causes damage to organs through prolonged or repeated exposure .
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

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The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.