 UNICHEM d.o.o. Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155	SAFETY DATA SHEET	Revision: 5
	RATIMOR WAX BLOCKS	Date of issue: 13.11.2012
		Printed: 09.01.2013

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

1.1 PRODUCT NAME: **Ratimor Wax Blocks**

Authorization Number: UK-2012-0655

1.2 USE OF THE SUBSTANCE/PREPARATION:

Biocidal product. Ready-for-use rodenticide (PT 14) for the control of rats and mice. For further details please refer to product label.

1.3 MANUFACTURER:

UNICHEM d.o.o.
 Sinja Gorica 2, Vrhnika, Slovenia,
 Tel.: +386 (01) 75 58 150 , fax.: +386 (01) 75 58 155
www.unichem.si
unichem@unichem.si

1.4 SUPPLIER:

UNICHEM d.o.o.
 Sinja Gorica 2, Vrhnika, Slovenia,
 Tel.: +386 (01) 75 58 150 , fax.: +386 (01) 75 58 155
www.unichem.si
unichem@unichem.si

1.5 EMERGENCY TELEPHONE NUMBER: nearest National Poisons Information Centre Tel.: 0845 4647 or 08454 24 24 24

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF PREPARATION ACCORDING TO DIRECTIVE 99/45/EC

According to the directive on preparations, the product is not classified as dangerous.

2.2 LABEL ELEMENTS

2.2.1. Symbol letter(s):

According to the directive on preparations, the symbol is not needed.

2.2.2. Risk phrases:

In accordance with the regulations risk phrases are not required.

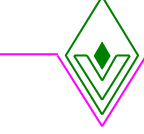
2.2.3. Safety phrases:

S1/2 Keep locked up and 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.

S37 Wear suitable gloves (for professional users only).

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

2.3 OTHER

Unlikely to cause harmful effects under normal conditions of handling and use. Harmful to Wildlife. 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

Hazardous ingredients

Chemical name	conc. [%]	CAS EC Index	Symbols/Classification 67/548/EEC	Classification 1272/2008 (CLP)
Bromadiolone	0,005	28772-56-7 249-205-9 /	T+; R26/27/28 T; R48/23/24/25 N; 50/53	Acute Tox. 1, H310 Acute Tox. 1, H300 Acute Tox. 1, H330 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Denatonium benzoate	0,001	3734-33-6 223-095-2 /	Xn; R20/22-37/38-41-52/53	Acute Tox. 4, H332 Acute Tox. 4, H302 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1 H318 Aquatic Chronic 3, H412

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

4. FIRST AID MEASURES

GENERAL MEASURES: In case of accident or if you feel unwell, seek medical advice immediately (show to physician Safety data sheet and label).

4.1 INHALATION: Move the exposed person to fresh air. Obtain medical advice immediately. Unlikely to present an inhalation hazard as the product is supplied as a paste.

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4.2 **SKIN CONTACT:** May cause irritation to skin. Remove contaminated clothing. Wash off immediately with plenty of soap and water. If irritation persists obtain medical attention. Contaminated clothing should be washed and dried before re-use.

4.3 **EYE CONTACT:** May cause irritation to eyes. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. If irritation persists, seek professional medical attention.

4.4 **INGESTION:** If swallowed, seek medical advice immediately and show the Safety Data Sheet or label. Rinse mouth with water. Do not provoke vomiting, seek medical advice first.

GENERAL MEASURES: If you feel unwell and if symptoms persist seek medical advice.

ADVICE FOR DOCTORS: Bromadiolone is an anticoagulant which may produce bleeding; this may be delayed for several days after exposure. If there is no active bleeding the INR (prothrombin time) should be measured on presentation and 48-72 h. after exposure. If the INR is greater than 4, administer Vitamin K1 (phytomenadione) 5-10 mg by slow intravenous injection (100 µg/kg body weight for a child).

ANTIDOTE: Vitamin K1

Bromadiolone is an anticoagulant which may produce bleeding; this may be delayed for several days after exposure.

5. FIRE-FIGHTING MEASURES

5.1 **SUITABLE EXTINGUISHING MEDIA:** Carbon dioxide. Dry chemical powder. Alcohol or polymer foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 **UNSUITABLE EXTINGUISHING MEDIA:** Full water jet.

5.3 **SPECIAL EXPOSURE HAZARDS:** In case of fire do not breathe fumes/gases.

5.4 **SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:** Wear: Self-contained breathing apparatus. Suitable gloves and boots.

5.5 **ADDITIONAL INFORMATION:** Cool containers at risk with water spray jet. If possible remove containers from endangered area. Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1 **PERSONAL SAFETY PRECAUTIONS:** Use personal protective equipment: protective clothing, gloves and eye/face protection. See section 8. Ensure adequate ventilation.

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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 CLEAN-UP PROCEDURES: Stop leak if without risk. Absorb product (with inert liquid-binding material: sand, diatomite, acid binders, universal binders, sawdust), collect it in special container and dispose it according to valid regulations on handling with waste. Rinse contaminated area with water! Do not flush into surface water or sanitary sewer system.

7. HANDLING AND STORAGE

7.1 HANDLING: Use good personal hygiene practices-wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Ensure adequate ventilation. Do not breathe vapours/mist. Avoid contact with skin and eyes. Avoid formation of dust. Refer to instructions on label and regulations for safety and health at work. For use only in areas that are inaccessible to infants, children, companion animals and non-target animals. Wash hands and exposed part of the body before meals and after work.

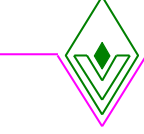
7.2 STORAGE: Keep away from food, drink and animal feedingstuffs, in cool, dry and good ventilated area. Keep out of the reach of children and domestic animals. Keep away from oxidising substances.

7.3 SPECIFIC USE(S): Ready for use rodenticide containing 50 ppm Bromadiolone.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 EXPOSURE LIMIT VALUES

Propane-1,2-diol (Propane-1,2-diol particulates)	WEL 8-hr limit ppm: - WEL 15 min limit ppm: -	WEL 8-hr limit mg/m ³ : 10 WEL 15 min limit mg/m ³ : -
Propane-1,2-diol (Propane-1,2-diol total vapour and particulates)	WEL 8-hr limit ppm: 150 WEL 15 min limit ppm: -	WEL 8-hr limit mg/m ³ : 474 WEL 15 min limit mg/m ³ : -
Sugar (Sucrose)	WEL 8-hr limit ppm: - WEL 15 min limit ppm: -	WEL 8-hr limit mg/m ³ : 10 WEL 15 min limit mg/m ³ : 20
Paraffin wax	WEL 8-hr limit ppm: - WEL 15 min limit ppm: -	WEL 8-hr limit mg/m ³ : 2 WEL 15 min limit mg/m ³ : 6
Paraffin wax (Paraffin wax, fume)	WEL 8-hr limit ppm: - WEL 15 min limit ppm: -	WEL 8-hr limit mg/m ³ : 2 WEL 15 min limit mg/m ³ : 6

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8.2 OCCUPATIONAL EXPOSURE CONTROLS:

Use good personal hygiene practices-wash hands at breaks and when done working with material. Avoid contact with eyes and skin. Do not eat, drink or smoke while working. Keep away from food, drink and animal feedingstuffs Keep away from direct sun-light or other heat sources and sources of ignition. Prevent dusting.

8.3 **RESPIRATORY PROTECTION:** Unlikely to present an inhalation hazard unless excessive dust is present. If levels approach the WEL, then suitable approved respiratory protection should be worn (mask with particle filter).

8.4 **SKIN PROTECTION:** The standard workers' clothing, rubber boots.

8.5 **HAND PROTECTION:** Protective rubber gloves.

8.6 **EYES PROTECTION:** Chemical splash goggles if exposed to excessive dust.

8.7 **PROTECTIVE EQUIPMENT:** Wear protective clothing. Rubber boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid
Colour	Red
Appearance:	Red wax block
Odour:	Characteristic
Solidification point:	N/A
Melting point:	~ 60 (for the wax)°C
Boiling point:	N/A
Flash point:	N/A
Self igniting:	N/A
Auto flammability:	No evidence of flammable properties based on consideration of the components and experimental use.
Danger of explosion:	Product does not present an explosion hazard. No evidence of explosive properties based on consideration of the components and experimental use.
pH: value (10 g/l) at 20°C:	N/A
Relative density/ bulk density	1,17 g/cm ³ (20°C)
Solubility in with water:	Practically insoluble
N/A: data is not applicable	

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10. STABILITY AND REACTIVITY

- 10.1 **STABILITY:** Product is stable under normal conditions according to handling and storage.
- 10.2 **CONDITIONS TO AVOID:** No special precautions required. Consider the directions for use and storage. Protect from heat, direct sunlight, open fire, free sparks.
- 10.3 **MATERIALS TO AVOID:** Oxidising agents.
- 10.4 **HAZARDOUS DECOMPOSITION PRODUCTS:** Under normal use conditions no hazardous decomposition products expected. In case of fire/explosion vapours dangerous for health are spread.

11. TOXICOLOGICAL INFORMATION

11.1 TOXICOLOGICAL INFORMATION FOR PRODUCT

Inhalation: Unlikely to present an inhalation hazard as the product is supplied as a paste.

Skin contact: Contact with skin may cause irritation.

Eye contact: Contact with eyes can cause irritation.

Ingestion: Bromadiolone is an anticoagulant which may produce bleeding; this may be delayed for several days after exposure.

Carcinogenic effects: No evidence to suggest anticoagulant rodenticides are carcinogenic.

Mutagenic effects: No evidence to suggest anticoagulant rodenticides are mutagenic.

Toxic for reproduction: The chemical is not classified as toxic for reproduction.

Acute toxicity: LC50 for the biocidal product is expected to be $\gg 5$ mg/l/4h and the product does therefore not meet the criteria for classification for acute inhalation toxicity.
LD50/oral approx 22,5 g/kg (rat) (calculated)

11.2 TOXICOLOGICAL INFORMATION FOR COMPONENTS/CONSTITUENTS

Bromadiolone: Oral LD50 (rat) = < 5 mg/kg
Dermal LD50 (rat) = 23 mg/kg

Propane-1,2-diol: Oral (rat) LD50 = >2000 mg/kg

Denatonium benzoate: Oral (rat) LD50 = 749 mg/kg
Inhalation (rat) LC 50/4 h = 0, 2 mg/l

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12. ECOLOGICAL INFORMATION

12.1 ECOTOXICITY:

Bromadiolone: Daphnia LC50/48h = 5.79 mg/L
Rainbow trout LC50/96h = 2.89 mg/l

Propane-1,2-diol: Daphnia EC50/48h > 100 mg/l
Fish LC50/96h = 100 mg/l

OTHER INFORMATION: As the product contains 50ppm bromadiolone, unlikely to be hazardous to aquatic life. Do not allow to enter ground water, water course or sewage system. Harmful to wildlife. Read all precautions before use.

13. DISPOSAL CONSIDERATIONS

13.1. WASTE CHEMICAL: Dispose of in compliance with all local and national regulations.

13.2. PACKAGING: Dispose completely emptied container according to regulations.

13.3 REMARKS

Non-professionals : **Dispose of dead rodents** in accordance with local requirements. In the UK poisoned rodents should be double bagged using plastic bags and either disposed of in a household waste bin with a secure lid to prevent access of wildlife or pets or collected by a specialist waste contractor or the local authority.

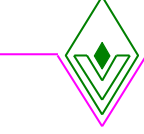
Professionals : Dispose of dead rodents in accordance with local requirements. In the UK poisoned rodents (waste code 20 01 99) should be disposed of at a suitably permitted incinerator, landfill or burial site by the waste producer or a registered waste carrier. For further information on disposal contact the Environment Agency (<http://www.environment-agency.gov.uk>) or SEPA (<http://www.sepa.org.uk>).

Remove all baits after treatment and dispose of them in accordance with local requirements.

Non-professionals: In the UK waste bait should be double bagged in plastic bags and disposed of in a household waste bin with a secure lid to prevent access of wildlife or pets or taken to a civic amenity site. For information on civic amenity sites contact the local authority.

Professionals: In the UK waste bait is hazardous waste (code 20 01 19). For information on disposal contact the Environment Agency (<http://www.environment-agency.gov.uk>) or SEPA (<http://www.sepa.org.uk>).

14. TRANSPORT INFORMATION

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Not dangerous according to ADR.

UN No.: /	Road, rail (ADR / RID):	Sea (IMO / IMDG)	Air (ICAO / IATA)
UN class: /	Label: toxic for environment	Label: /	Label: toxic for environment
UN packing group: /	Class: /	Class: /	Class: /
	Item no.: /	group: /	Group: /

15. REGULATORY INFORMATION

15.1. INFORMATION ON LAWS

- 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

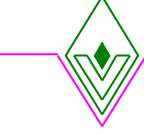
The product is classified as non hazardous and is labelled in accordance with Biocides Directive 98/8 EEC. Read the label before use.

16. OTHER INFORMATION

16.1. LIST OF RELEVANT R PHRASES

Text of hazard (H) indications mentioned in section 2-3:

Skin Irrit. 2	Skin irritation, category 2
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity category 1
Acute Tox. 1	Aspiration hazard, category 1
Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity — repeated exposure, category 1
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Eye Dam. 1	Serious eye damage, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, category 3
H332	Harmful if inhaled.
H335	May cause respiratory irritation

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H302	Harmful if swallowed.
H310	Fatal in contact with skin
H300	Fatal if swallowed
H330	Fatal if Inhaled
H372	Causes damage to organs through prolonged or repeated exposure
H315	Causes skin irritation.
H318	Causes serious eye damage
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

Text of symbols and risk (R) phrases mentioned in section 2-3 of the sheet:

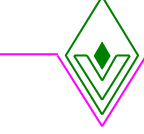
T	Toxic
T+	Very toxic
N	Dangerous for the environment
Xn	Harmful
R20/22	Harmful by inhalation and if swallowed.
R26/27/28	Very toxic by inhalation in contact with the skin and if swallowed.
R37/38	Irritating to respiratory system and skin.
R41	Risk of serious damage to eyes.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R27/28	Very toxic in contact with skin and if swallowed.
R48/23/24/25	Toxic: danger of serious damage to health by prolonged exposure if by inhalation in contact with the skin and if swallowed.

16.2. SOURCES OF KEY DATA USED TO COMPILE THE DATA SHEET:

UK Competent Authority Product Assessment Report, Ratimor wax blocks Frame Formulation containing Bromadiolone, UK, 2012;
 Varnostni list, Ratimor wax blocks, Unichem d.o.o., datum izdaje:1.2.2010

16.3. FURTHER INFORMATION: Approved under the Biocides Directive 98/8 EEC.

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

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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.