

| | | |
|---|---------------------------|-------------------------------------|
|  UNICHEM d.o.o. Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155 | SAFETY DATA SHEET | Revision: 4 |
| | RATIMOR Wax blocks | Date of issue: 20.02.2008 |
| | | Printed: 27.02.2009 |

1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

| | |
|------------------------------------|---|
| 1.1 Trade name: | RATIMOR Wax blocks |
| 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: | / |
| 2.3 Hazard to environment: | / |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| | SYMBOL | R-Phrases | S-Phrases |
|---|---------------|--------------------------|--------------------------|
| Bromadiolon 0,05g/kg | T+,N | R26/27/28,48/24/25,50/53 | 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 |
| BITREX 0,05g/kg | Xn | R20/22,38,41,52/53 | 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 | | | |
| | SYMBOL | R-Phrases | S-Phrases |
| Butilhidroksi-toluol 1g/kg | Xn | R41, 22/21/22, 36/37/38 | S22, 26, 36 |
| | CAS | EINECS/ELINCS | INDEX št. |
| | 128-37-0 | 204-881-4 | - |
| IUPAC: (2,6-bis (1,1-dimethylethyl))-4- methylfenol | | | |

| | | |
|---|------------------------------|--|
|  UNICHEM d.o.o. Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155 | SAFETY DATA SHEET | Revision: 4 |
| | RATIMOR Wax blocks | Date of issue: 20.02.2008 Printed: 27.02.2009 |

4. FIRST AID measures

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

4.1 **Inhalation:** Not concerned.

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 K₁, is antidote. Determine prothrombin times not less than 18 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.

5. FIRE-FIGHTING MEASURES

The product is not-flammable, but is combustible.

5.1 **Suitable extinguishing media:** Carbon dioxide (CO₂), 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:** Rinse area with water and cleaning agent.

Other information: -

| | | |
|---|------------------------------|--|
|  UNICHEM d.o.o. Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155 | SAFETY DATA SHEET | Revision: 4 |
| | RATIMOR Wax blocks | Date of issue: 20.02.2008 Printed: 27.02.2009 |

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. Keep in original container.
- 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:** not known
- 8.2 **Exposure controls:**
- 8.2.1 *Occupational exposure controls*
- 8.2.1.1: **Respiratory protection:** Not concerned.
- 8.2.1.2: **Hand protection:** Wear suitable gloves
- 8.2.1.3 **Eyes protection:** Not concerned.
- 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 wax blocks
 Odour: Specific – according to aroma

9.2. Important health, safety and environmental information

pH: n.a.
 Boiling point/boiling range: n.a.
 Solidification point: (55-60 – paraffin)
 Flash point: -
 Flammability: none
 Self ignition: none
 Explosive properties: none.
 Oxidizing properties: none.
 Density: -
 Water solubility: practically insoluble
 (19 mg/L @ 20°C – bromadiolone)
 Viscosity: -
 Vapour pressure: (2×10⁻⁶ Pa @20°C – bromadiolon)
 Partition coefficient: n-octanol/water (log Kow=7.3 – bromadiolon)

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

| | | |
|--|-----------------------------|--|
|  <p>UNICHEM d.o.o. Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155</p> | <h1>SAFETY DATA SHEET</h1> | Revision: 4 |
| | <h2>RATIMOR Wax blocks</h2> | Date of issue: 20.02.2008 Printed: 27.02.2009 |

10. STABILITY AND REACTIVITY

10.1 **Condition to avoid:** high temperature

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: LD₅₀ (rat) = 1.1 mg/kg (WHO)
 LD₅₀ (rat) = 18,000 mg/kg – for bait
 LD₅₀ (mouse) = 1.3 mg/kg

Dermal: LD₅₀ (rat) = 2.1 mg/kg

Inhalation: LC₅₀ (4h, rat) = 5.0 – 19.3 mg/m³

11.2 Irritant potential:

Eyes: Slightly irritating (rabbits)

Dermal: Non irritating

Sensitization: Unknown

12. ECOLOGICAL INFORMATION

For active ingredient:

12.1 **Ecotoxicity:** Fish: LC₅₀ (96 hours, different species) = 1.4 – 3.5 mg/L.

Avian: LC₅₀ = 0.264 mg/kg

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

12.3 **Persistence and degradability :** DT₅₀ (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.

13. Disposal consideration

| | | |
|---|------------------------------|--|
|  UNICHEM d.o.o. Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155 | SAFETY DATA SHEET | Revision: 4 |
| | RATIMOR Wax blocks | Date of issue: 20.02.2008 Printed: 27.02.2009 |

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

| | | |
|---|---------------------------|--|
|  UNICHEM d.o.o. Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155 | SAFETY DATA SHEET | Revision: 4 |
| | RATIMOR Wax blocks | Date of issue: 20.02.2008 Printed: 27.02.2009 |

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:-

15. REGULATORY INFORMATION

15.1 **Symbols and labelling:** /

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

15.3 **Safety advices (S):**

S 2 – Keep out of the reach of children.

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

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.

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.

R26/27/28 – Very toxic by inhalation, in contact with skin and if swallowed.

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

R38 – Irritating to 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 – 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.

| | | |
|---|------------------------------|--|
|  UNICHEM d.o.o. Sinja Gorica 2, 1360 Vrhnika Tel: 01/7558-150 Fax: 01/7558-155 | SAFETY DATA SHEET | Revision: 4 |
| | RATIMOR Wax blocks | Date of issue: 20.02.2008 Printed: 27.02.2009 |

- 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.