

# SAFETY DATA SHEET according to Regulation 1907/2006



UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia  
tel.: +386 1 7558 150, fax: +386 1 7558 155  
unicchem@unicchem.si, [www.unicchem.si](http://www.unicchem.si)

Product name: **Ratimor brodifacoum Fresh Bait**

Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**

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

### 1.1. Product identifier

#### Product name

**Ratimor brodifacoum Fresh Bait**

#### Product code

[UK]



[chemius.net/S4C18](http://chemius.net/S4C18)

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Relevant identified uses

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. Do not use rodenticide unprotected in places where other animals or people move or stay.

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

UNICHEM D.O.O.

Address: Sinja Gorica 2, 1360 Vrhnika, Slovenia

Tel.: +386 1 755 81 50

Fax: +386 1 755 81 55

[www.unicchem.si](http://www.unicchem.si)

e-mail: [unicchem@unicchem.si](mailto:unicchem@unicchem.si)

### 1.4. Emergency telephone number

#### Emergency

112

#### Supplier

+386 1 755 81 50

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 (CLP)

Repr. 1A; H360D May damage the unborn child.

STOT RE 2; H373 May cause damage to organs (blood) through prolonged or repeated exposure.

# SAFETY DATA SHEET according to Regulation 1907/2006

Product name: **Ratimor brodifacoum Fresh Bait**  
Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**

...continued from previous page  
  
UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia  
tel.: +386 1 7558 150, fax: +386 1 7558 155  
unicchem@unicchem.si, [www.unicchem.si](http://www.unicchem.si)

## 2.2 Label elements

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



Signal word: **Danger**

H360D May damage the unborn child.

H373 May cause damage to organs (blood) through prolonged or repeated exposure.

P201 Obtain special instructions before use.

P280 Wear protective gloves.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

### 2.2.2. Contains:

brodifacoum (CAS: 56073-10-0, EC: 259-980-5, Index: 607-172-00-1)

### 2.2.3. Special provisions Restricted to professional users.

## 2.3. Other hazards

No information

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

For mixtures see 3.2.

### 3.2. Mixtures

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	REACH Registration No.
brodifacoum	56073-10-0 259-980-5 607-172-00-1	0,005	Acute Tox. 1; H300 Acute Tox. 1; H310 Acute Tox. 1; H330 Repr. 1A; H360D STOT RE 1; H372 Aquatic Acute 1; H400 [M=10] Aquatic Chronic 1; H410 [M=10]	-
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	-

## SECTION 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

#### General notes

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. Place patient stably in side position for transportation.

Product name: **Ratimor brodifacoum Fresh Bait**  
Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**

## Following inhalation

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

## Following skin contact

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

## Following eye contact

Immediately flush eyes with running water, keeping eyelids open. If irritation persist, seek professional medical attention.

## Following 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. Most important symptoms and effects, both acute and delayed

### Inhalation

Excessive exposure to spray mist, fog, or vapour may cause respiratory irritation.  
Coughing, sneezing, nasal discharge, labored breathing.

### Skin contact

Contact with skin may cause irritation (redness, itching).

### Eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

### 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 the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). **ADVICE FOR DOCTORS:** Brodifacoum is an indirect anti-coagulant. Phytomenadione, Vitamin K1, is antidotal. In the case of suspected poisoning, determine prothrombin times not less than 18 hours after consumption. If elevated, administer vitamin K1 and continue until prothrombin times normalise. Continue determination of prothrombin time for three days after withdrawal of antidote and resume treatment if elevation recurs in that time.

## SECTION 5. FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

#### Unsuitable extinguishing media

Full water jet.

### 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. In case of fire or heating do not breathe fumes/vapours.

Product name: **Ratimor brodifacoum Fresh Bait**  
Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**

## 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) .

## Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

## 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. Prevent access to unprotected personnel. Do not breathe vapour or mist. Avoid contact with skin and eyes.

#### 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

-

#### 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.

## 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**

-

##### **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 vapours/mist.

Product name: **Ratimor brodifacoum Fresh Bait**  
Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**

## 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 well ventilated area. Keep away from food, drink and animal feedings. Protect from open fire, heat and direct sunlight.

### 7.2.2. Packaging materials

-

### 7.2.3. Requirements for storage rooms and vessels

Close open containers after use. Put the container upright to prevent from leaking.

### 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

### 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. Avoid contact with eyes and skin. Do not eat, drink or smoke while working. Handle in accordance with good industrial hygiene and safety practice.

##### **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).

# SAFETY DATA SHEET according to Regulation 1907/2006

...continued from previous page



UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia  
tel.: +386 1 7558 150, fax: +386 1 7558 155  
unicchem@unicchem.si, www.unicchem.si

Product name: **Ratimor brodifacoum Fresh Bait**

Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**

## Appropriate materials

Material	Thickness	Penetration Time	Remark
PVC			
Butyl rubber			

## 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. In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

## Thermal hazards

-

## 8.2.3. Environmental exposure controls

-

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

- <b>Physical state:</b>	liquid; paste
- <b>Colour:</b>	blue
- <b>Odour:</b>	mild, characteristic

### Important health, safety and environmental information

- <b>pH</b>	No information
- <b>Melting point/Freezing point</b>	No information
- <b>Initial boiling point/boiling range</b>	No information
- <b>Flash point</b>	No information
- <b>Evaporation rate</b>	No information
- <b>Flammability (solid, gas)</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>	<b>Density:</b> 0,8 g/cm <sup>3</sup>
- <b>Solubility</b>	<b>Water:</b> Insoluble
- <b>Partition coefficient</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>	
-------------------	--



UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia  
tel.: +386 1 7558 150, fax: +386 1 7558 155  
unicchem@unicchem.si, www.unicchem.si

Product name: **Ratimor brodifacoum Fresh Bait**  
Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**

## 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

-

### 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

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

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

May cause harm to the unborn child.

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

##### Additional information

May cause damage to organs through prolonged or repeated exposure.

UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia  
tel.: +386 1 7558 150, fax: +386 1 7558 155  
unicchem@unicchem.si, [www.unicchem.si](http://www.unicchem.si)Product name: **Ratimor brodifacoum Fresh Bait**Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**11.1.6. Aspiration hazard

No information

**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

No information

12.3.2. Bioconcentration factor (BCF)

No information

**12.4. Mobility in soil**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

**12.7. Additional information****For product**

No ecotoxicological data available.

Avoid release to the environment.



## 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 containers leave to approved waste disposal authorities in charge.

#### 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

not applicable

### 14.2. UN proper shipping name

ADR, RID, IMDG, ADN, IATA: Not dangerous according to transport regulations.

### 14.3. Transport hazard class(es)

not applicable

### 14.4. Packing group

not applicable

### 14.5. Environmental hazards

NO

### 14.6. Special precautions for user

not applicable

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

## 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) (including last amendment Commission Regulation (EU) 2015/830)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

#### 15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

not applicable

Product name: **Ratimor brodifacoum Fresh Bait**

Creation date: **24.3.2015** · Revision: **21.2.2017** · Version: **2**



UNICHEM d.o.o., Sinja Gorica 2, 1360 Vrhnika, Slovenia  
tel.: +386 1 7558 150, fax: +386 1 7558 155  
unicchem@unicchem.si, [www.unicchem.si](http://www.unicchem.si)

## 15.1.2. Special instructions

The employment limitations under the regulations to the protection from hazardous materials of pregnant women and young mothers guideline and the protection of young persons act are to be observed.

## 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 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.
- H330 Fatal if inhaled.
- H332 Harmful if inhaled.
- H360D May damage the unborn child.
- 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.



- Provided correct labelling of the product
- Compliance with the local legislation
- Provided correct classification of the product
- Provided adequate transport data

© BENS Consulting | [www.bens-consulting.com](http://www.bens-consulting.com)

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.