

SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006



Product name: Ratimor Difenacoum Wax Blocks

Creation date: 27.03.2023, Revision: 21.03.2024, version: 2.1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

Ratimor Difenacoum Wax Blocks

Product code

[UK]



<https://my.chemius.net/p/aoma9K/en/pd/en>

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 in and around buildings.

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

Manufacturer

UNICHEM D.O.O.

Sinja Gorica 2

1360 Vrhnika, Slovenia

+386 1 755 81 50

unichem@unichem.si

1.4 Emergency Telephone Number

Emergency

112

Manufacturer

+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)

Skin Sens. 1; H317 May cause an allergic skin reaction.

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

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

2.2 Label elements

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



Signal word: DANGER

H317 May cause an allergic skin reaction.
H360D May damage the unborn child.
H373 May cause damage to organs (blood) through prolonged or repeated exposure.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P280 Wear protective gloves.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P405 Store locked up.
P501 Dispose of contents/container in accordance with national regulations.

Contains:
1,2-benzisothiazol-3(2H)-one
difenacoum (ISO)
octhilinone (ISO)

Special provisions
Restricted to professional users.

2.3 Other hazards

PBT/vPvB
No information.

Endocrine disrupting properties
The product does not contain substances with the potential for endocrine disorders.

Additional information
No information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	0,005-0,049	Acute Tox. 4; H302 Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Dam. 1; H318 Aquatic Acute 1; H400; M = 1	Skin Sens. 1; H317; C ≥ 0.05%	/
difenacoum (ISO)	56073-07-5 259-978-4 607-157-00-X	0,005	Acute Tox. 1; H300 Acute Tox. 1; H310 Acute Tox. 1; H330 Repr. 1B; H360D STOT RE 1; H372 Aquatic Acute 1; H400; M = 10 Aquatic Chronic 1; H410; M = 10	Repr. 1B; H360D; C ≥ 0.003% STOT RE 1; H372; C ≥ 0.02% STOT RE 2; H373; 0.002% ≤ C < 0.02%	/

octhilinone (ISO)	26530-20-1 247-761-7 613-112-00-5	0,0015-0,002	Acute Tox. 3; H301 Acute Tox. 3; H311 Skin Corr. 1; H314 Skin Sens. 1A; H317 Eye Dam. 1; H318 Acute Tox. 2; H330 Aquatic Acute 1; H400; M = 100 Aquatic Chronic 1; H410; M = 100 EUH071	Skin Sens. 1; H317; C ≥ 0.0015% oral: ATE = 125 mg/kg bw dermal: ATE = 311 mg/kg bw inhalation: ATE = 0.27 mg/l (dusts or mists)	/
denatonium benzoate	3734-33-6 223-095-2 -	0,001	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335	/	/

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 fluids or provoke vomiting if the victim is unconscious. Call the doctor and give him the information on the packaging and/or on the instructions for use of the preparation.

Following inhalation

Comply with general measures. Remove patient to fresh air - move out of dangerous area. If symptoms develop and persist, seek medical attention.

Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. If symptoms develop and persist, seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. After 5 minutes of rinsing, remove contact lenses, if present, and continue rinsing. If irritation persists, seek professional medical attention.

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. Immediately consult a doctor. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Breathing dust can irritate the respiratory tract. Coughing, sneezing, nasal discharge, labored breathing.

Following skin contact

May cause sensitisation by skin contact (symptoms: itching, redness, rashes). Contact with skin may cause irritation (redness, itching). Powder can cause localised skin irritation in folds of the skin or under tight clothing.

Following eye contact

It can cause shortterm irritation. Dust irritates the eyes (by mechanical means).

Following ingestion

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

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:** Difenacoum is an indirect anti-coagulant. Phytomenadione, Vitamin K1, is antidotal. Determine prothrombin time 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.

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 the event of fire the following is released: poisonous and irritating gases.

5.3 Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. Cool containers at risk with water spray. If possible remove containers from endangered area.

Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (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

For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8). Refer to protective measures listed in Sections 7 and 8.

Precautionary measures

Ensure adequate ventilation.

Emergency procedures

No information.

For emergency responders

No information.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

For containment

No information.

For cleaning up

Take up mechanically and collect in suitable container and dispose according to current regulations.

Other information

No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

Ensure adequate ventilation.

Measures to prevent aerosol and dust generation

Prevent dusting.

Measures to protect the environment

For use only in areas that are inaccessible to infants, children, companion animals and non-target animals.

Other measures

No information.

Advice on general occupational hygiene

Refer to instructions on label and regulations for safety and health at work. Use personal protective equipment. Avoid contact with skin and eyes. Do not eat, drink or smoke while working. Use good personal hygiene practices – wash hands at breaks and when done working with material. In the event of contamination and/or discomfort discontinue work and look for first aid. After working with the product wash yourself and change clothes. Ensure adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Store in original, tightly closed container in a dry place. Store at room temperature. Keep container in a well ventilated place. Protect from direct sunlight. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children. Keep in a locked place. The bait should be stored between 5 – 20 °C (41 – 68 °F). In case of temperatures higher than 25 – 30 °C, the blocks in the packaging may stick together.

Packaging materials

No information.

Requirements for storage rooms and vessels

Keep in properly labelled containers. Close opened containers after use. Put the containers upright to prevent from leaking.

Storage temperature

No information.

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)

Recommendations

The product is intended for use as a rodenticide (biocidal agent). Before using this product read the instructions for use.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

No information.

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values**For product**

No information.

For components

No information.

PNEC values**For product**

No information.

For components

No information.

8.2 Exposure controls**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. Keep away from foodstuffs, beverages and feed.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Good ventilation.

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	/	/	/
Natural rubber	/	/	/

Skin protection

Cotton protective clothing 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. In case of dusting use respiratory protection. Use a half-mask EN 140:1998/AC:1999 with a particle filter P (EN 143:2021) or half-mask EN 149:2001+A1:2009.

Thermal hazards

No information.

Environmental exposure controls**Substance/mixture related measures to prevent exposure**

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Important health, safety and environmental information

Physical state	solid
Shape	No information.
Colour	green
Odour	characteristic
Odour threshold	No information.
Melting/freezing point or softening point	No information.
Boiling point or initial boiling point and boiling range	No information.
Flammability (solid, gas)	No information.
Explosion limits (vol%)	No information.
Flash point	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	No information.
Viscosity	No information.
Solubility (Water)	Insoluble
Partition coefficient n-octanol/water (log value)	No information.
Vapour pressure	No information.
Density / weight	No information.
Relative vapour/gas density	No information.
Particle characteristics	No information.

9.2 Other information

Information with regard to physical hazard classes

Explosive properties	Product is not explosive.
Oxidising solids	Not oxidising.

Other safety characteristics

No information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

No information.

10.4 Conditions to avoid

Avoid high temperatures.

10.5 Incompatible materials

No information.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released. Carbon oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) Acute toxicity

For product

Exposure route	Type	Species	Time	value	Method	Remark
oral	LD ₅₀	rat	/	> 2000 mg/kg bw	/	/
dermal	LD ₅₀	rat	/	> 2000 mg/kg bw	/	/

For components

Name	Exposure route	Type	Species	Time	value	Method	Remark
denatonium benzoate	oral	LD ₅₀	rat	/	584 mg/kg	/	/
denatonium benzoate	dermal	LD ₅₀	rabbit	/	> 2000 mg/kg	/	/
difenacoum (ISO)	oral	LD ₅₀	rat	/	> 1.8 mg/kg bw	/	/
difenacoum (ISO)	dermal	LD ₅₀	rat	/	> 51.1 mg/kg bw	/	/

(b) Skin corrosion/irritation

No information.

Additional information

The product is not classified as irritating to skin and eyes.

(c) Serious eye damage/irritation

No information.

(d) Respiratory or skin sensitisation

No information.

Additional information

May cause an allergic skin reaction.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

May cause harm to the unborn child.

(h) STOT-single exposure

No information.

(i) STOT-repeated exposure

No information.

Additional information

May cause damage to organs through prolonged or repeated exposure.

(j) Aspiration hazard
No information.

Symptoms related to the physical, chemical and toxicological characteristics
No information.

Interactive effects
No information.

11.2 Information on other hazards

Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

Other information

No information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short-term) toxicity
For components

Name	Type	value	Exposure time	Species	organism	Method	Remark
denatonium benzoate	LC ₅₀	> 1000 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
denatonium benzoate	LC ₅₀	> 1000 mg/L	96 h	fish	<i>Salmo gairdneri</i>	/	/
denatonium benzoate	EC ₅₀	13 mg/L	48 h	crustacea	<i>Daphnia magna</i>	/	/
difenacoum (ISO)	LC ₅₀	0.1 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
difenacoum (ISO)	LC ₅₀	0.52 mg/L	48 h	daphnia	<i>Daphnia magna</i>	/	/
difenacoum (ISO)	ErC ₅₀	0.51 mg/L	72 h	algae	<i>Selenastrum capricornutum</i>	/	/

Chronic (long-term) toxicity
No information.

12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination
No information.

Biodegradation
No information.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)
For components

Name	value	Temperature °C	pH	Concentration	Method
denatonium benzoate	1.78	/	/	/	/
difenacoum (ISO)	> 3	/	/	/	/

Bioconcentration factor (BCF)
No information.

12.4 Mobility in soil

Known or predicted distribution to environmental compartments
No information.

Surface tension
No information.

Adsorption/Desorption
For components

Name	Type	Criterion	value	Evaluation	Method	Remark
denatonium benzoate	Soil	Henry constant (H)	- 1.63E-21 atm m3/mol	/	/	25 °C

12.5 Results of PBT and vPvB assessment

No evaluation.

12.6 Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

12.7 Other adverse effects

No information.

12.8 Additional information

For product
No ecotoxicological data available. Avoid release to the environment.

For components
difenacoum (ISO)
The substance is not readily biodegradable. The substance has the potential to accumulate.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / Packaging disposal
Waste chemical

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste. Do not allow product to reach drains/sewage systems. Do not dispose together with household garbage.

Waste codes / waste designations according to LoW
No information.

Packaging
Completely emptied and cleaned containers leave to approved waste disposal authorities in charge. Dispose of in accordance with applicable waste disposal regulation.

Waste codes / waste designations according to LoW
No information.

Waste treatment-relevant information
No information.

Sewage disposal-relevant information
No information.

Other disposal recommendations
No information.

SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number or ID number			
Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.
14.2 UN proper shipping name			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.3 Transport hazard class(es)			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.4 Packing group			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.5 Environmental hazards			
NO	NO	NO	NO
14.6 Special precautions for user			
Limited quantities Not given/not applicable	Limited quantities Not given/not applicable		Limited quantities Not given/not applicable
14.7 Maritime transport in bulk according to IMO instruments			
	Not given/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) 2020/878)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)
not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents
No information.

Special instructions

Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers.

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

2.2 Label elements

Key literature references and sources for data

No information.

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

H300 Fatal if swallowed.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H360D May damage the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs (blood) through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.



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

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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.