

VERTOX EXCEL (EU)

Precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P260 Do not breathe dust.</p> <p>P280 Wear protective gloves.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Supplemental label information	<p>EUH 208 Contains 1, 2- Benzisothiazolin-3-one. May produce an allergic reaction.</p>

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Ethyl vanillin	<0.1
CAS number: 121-32-4 EC number: 204-464-7	
Classification Eye Irrit. 2 - H319	
2,2'-Imino Diethanol	<0.1%
CAS number: 111-42-2 EC number: 203-868-0	
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT RE 2 - H373 Aquatic Chronic 3 - H412	
1,2-BENZISOTHIAZOLIN-3-ONE	0.02%
CAS number: 2634-33-5 EC number: 220-120-9	
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	

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BRODIFACOUM (EU)	0.005%
CAS number: 56073-10-0	EC number: 259-980-5
M factor (Acute) = 10	M factor (Chronic) = 10
Classification Acute Tox. 1 - H300 Acute Tox. 1 - H310 Acute Tox. 1 - H330 Repr. 1A - H360D STOT RE 1 - H372 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
Denatonium Benzoate	0.001%
CAS number: 3734-33-6	EC number: 223-095-2
Classification Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Advice for Medical Doctors: Brodifacoum is an indirect anti-coagulant. Phytomenadione, Vitamin K, is antidotal. Determin 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.
Inhalation	Due to the physical nature of this product, exposure by this route is unlikely. Seek medical attention if symptoms persist.
Ingestion	Rinse mouth. Do not induce vomiting. Get medical attention immediately.
Skin contact	May cause irritation to susceptible persons. If skin irritation occurs wash with soap and water. Remove contaminated clothing. Get medical attention if symptoms are severe or persist.
Eye contact	May cause eye irritation to susceptible persons. Rinse immediately with plenty of water and seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

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5.2. Special hazards arising from the substance or mixture

Specific hazards	None known.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	No specific recommendations. For personal protection, see Section 8.
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6.2. Environmental precautions

Environmental precautions	Avoid discharge to the aquatic environment.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Reuse or recycle products wherever possible. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Avoid contact with skin and eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Read label before use.
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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in a cool, dry location. Store only in the original receptacle. Keep containers tightly closed in a well-ventilated place. Take suitable precautions when opening sealed containers, as pressure can build up during storage. Keep away from sources of heat. Keep out of the reach of children. Store away from foodstuffs. Keep away from oxidizing agents.
Storage class	Miscellaneous hazardous material storage.

7.3. Specific end use(s)

Usage description	Ready to use rodenticide containing 50 ppm Brodifacoum.
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SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

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Propane-1,2-diol (Propane-1,2-diol Particulates) WEL 8-Hr limit mg/M3: 10
 Propane-1,2-diol (Propane-1,2-diol total vapour and particulates) WEL 8-Hr limit ppm: 150
 WEL 8Hr limit mg/M3: 474

Sugar (Sucrose) WEL 8-Hr limit mg/M3: 10 WEL 15 min limit mg/M3: 20

Paraffin Wax WEL 8-Hr limit mg/M3: 2 WEL 15 min limit mg/M3: 6

Paraffin Wax (Paraffin wax fume) WEL 8-Hr limit mg/M3: 2 WEL 15 min limit mg/M3: 6

8.2. Exposure controls

Protective equipment

Appropriate engineering controls	No specific ventilation requirements.
Personal protection	Body protection must be chosen depending on activity and possible exposure, for example apron, protecting boots, chemical-protection suit.
Eye/face protection	No specific eye protection required during normal use.
Hand protection	Suitable chemical resistant gloves are recommended for professional users.
Other skin and body protection	Handle in accordance with good hygiene and safety practice. Wearing of closed work clothing is recommended. Avoid contact with the skin, eyes and clothing. Store work clothing separately.
Hygiene measures	Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
Respiratory protection	No specific recommendations. Provide adequate ventilation.
Environmental exposure controls	Not regarded as dangerous for the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Wax Block.
Colour	Red or Blue
Odour	Slight.
Odour threshold	No information available.
pH	No information available.
Melting point	approx. 60 Deg C (for the wax).
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	Not relevant.
Evaporation factor	No information available.
Flammability (solid, gas)	combustible
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	Not relevant.

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Vapour density	Not relevant.
Relative density	1.17
Bulk density	No information available.
Solubility(ies)	Immiscible with water.
Partition coefficient	Not relevant.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Oxidising properties	Not oxidising.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Keep away from: Oxidising agents.

10.4. Conditions to avoid

Conditions to avoid Heat, sparks, flames.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) >2000 mg/kg

Acute toxicity - dermal

Notes (dermal LD₅₀) >2000 mg/kg

Acute toxicity - inhalation

Notes (inhalation LC₅₀) >5 mg/l (Dust)

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

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Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	May damage the unborn child.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	STOT RE 2 - H373 May cause damage to organs through prolonged or repeated exposure.
<u>Aspiration hazard</u>	
Aspiration hazard	Not relevant. Solid.
<u>General information</u>	
General information	Avoid contact during pregnancy/while nursing. May damage fertility. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	See section 4 - First Aid
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	No specific symptoms known.
Route of entry	Ingestion Inhalation Skin and/or eye contact
Toxicity of ingredients	Denatonium Benzoate Oral (Rat) LD50 = 584 mg/kg Brodifacoum Acute Oral ≤5mg/kg Acute Dermal ≤50mg/kg Acute Inhalation ≤0.05mg/kg (Commission Regulation 2016/1179)

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

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12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not relevant.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects Toxic to mammals, including domesticated animals and birds if ingested. Exposure of non-target animals should be prevented.

Toxicity of ingredients Brodifacoum Daphnia EC50/48Hr = 0.25 mg/l Rainbow trout LC50/96Hr = 0.042 mg/l

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information This material and its container must be disposed of in a safe way.

Disposal methods Dispose of in accordance with applicable regional, national, and local laws and regulations. Dispose of Contaminated packaging as unused product unless fully cleaned.

Waste class Waste disposal key number from EWC is 20 01 19 (Pesticides)

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

**Annex II of MARPOL 73/78
and the IBC Code**

SECTION 15: Regulatory information

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

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National regulations	Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits.
EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). EC ₅₀ : 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
Classification abbreviations and acronyms	Repr. = Reproductive toxicity STOT RE = Specific target organ toxicity-repeated exposure
Classification procedures according to Regulation (EC) 1272/2008	STOT RE 2 - H373: Commission Regulation (EU) 2016/1179 Repr. 1A - H360D: Commission Regulation (EU) 2016/1179
Revision date	28/11/2017
Revision	4
Supersedes date	22/06/2017
SDS number	20905

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Hazard statements in full

H300 Fatal if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.
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.
H332 Harmful if inhaled.
H360D May damage the unborn child.
H372 Causes damage to organs (Blood) through prolonged or repeated exposure.
H373 May cause damage to organs (Blood) through prolonged or repeated exposure.
H373 May cause 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.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.