

1 Identification of the preparation and the supplying Company

1.1 Bromag Wax Blocks

1.2 Rodenticides for control of rats and mice

1.3 Killgerm Chemicals Ltd, Wakefield Road, Ossett, West Yorkshire, WF5 9AJ.

Tel: +44 (0)1924 268450 Fax: (0)1924 265033 Email: technical@Killgerm.com

1.4 Emergency telephones. Medical professionals should use National Poisons Information Service Tel: 0870 600 6266. Killgerm Chemicals Ltd, 01924 268452 (Office hours)

Non-medical professionals should seek information by contacting NHS 111, Tel :111

2 Hazards identification

2.1. Classification of the substance or mixture



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

2.2. Label elements

Signal word: **Warning**

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

P102 Keep out of reach of children.

P220 Keep away from food, drink and animal feeding stuffs.

P280 Wear protective gloves.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P501 Dispose of contents/container in accordance with local regulation.

2.3. Other hazard No information

3 Composition and information on ingredients

3.2. Mixtures

Hazardous Components in Product

Ingredient Name	Classification	Concentration %w/w	R Phrases	H Phrases
Bromadiolone Cas No:28772-56-7	Acute Tox. 1; STOT RE 1; H372 Aquatic Acute 1; Aquatic Chronic 1; N, T, T+	0.005	R26/27/28 R48/23/24/25 R50/53	H300,H310, H330,H372,H400 H410
Denatonium Benzoate 3734-33-6 223-095-2	Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; Acute Tox. 4; STOT SE 3; Aquatic Chronic 3; Xn; Xi;	0.001	R20 R38-41 R52/53	H302, H315, H318, H332, H335, H412

See section 16 for full text of R-phrases, H phrases and hazard classification of ingredients.

4 First Aid measures**4.1. Description of first aid measures**

Ingestion (swallowing): Do not induce vomiting. Rinse mouth with water. Immediately consult a specialist. Show the physician the Safety Data Sheet or label.

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

Skin contact: Take off all contaminated clothing. Wash thoroughly with plenty of water and soap! If feeling unwell seek medical help.

Eye contact: Immediately flush eyes with plenty of water while keeping eyelids open (at least 15 minutes). Check for and remove any contact lenses. If irritation persists, seek professional medical attention.

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

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. Symptoms 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

Bromadiolone is an anticoagulant which may produce bleeding; this may be delayed for several days after exposure. In case of bleeding or reduced activity of prothrombin is indicated to use antidote vitamin K1 (phytomenadione) at a dose of 10-20 mg (5-10mg in children) slowly iv or as an infusion. Further treatment: Vitamin K1 (phytomenadione) is administered to 6 times daily at a dose of 10 mg iv depending on the clinical picture, in most serious poisonings to 125mg / day. Vitamin K3 (menadione) is not effective! Because of the risk of hematoma avoid intramuscular injections. In the case of severe bleeding blood transfusions and further substitution of coagulation factors in the form of fresh frozen plasma or prothrombin complex concentrate are also needed.

5 Fire-fighting measures**5.1. Extinguishing media:**

Suitable extinguishing media: Carbon dioxide. Dry chemical powder. Alcohol or polymer 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 fire-fighters

Protective actions

In case of fire do not breathe fumes/gases. Cool containers at risk with water spray jet. If possible remove containers from endangered area. Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

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).

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). Refer to protective measures listed in sections 7 and 8. Emergency procedures: Ensure adequate ventilation.

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: Take up mechanically and collect in suitable

container and dispose according to current regulations.

6.4. Reference to other sections: See also sections 8 and 13.

7 Handling and storage

7.1. Precautions for safe handling

7.2. Conditions for safe storage, including any incompatibilities: Store in original, tightly closed container in a dry place. Store at room temperature. Keep container in a well ventilated place. Keep away from food, drink and animal feeding stuffs. Keep out of the reach of children. Keep away from animals. Protect from direct sunlight.

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

8 Exposure controls and 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

Where exposure may occur engineering controls should be employed. A risk assessment should be carried out and the following PPE may be appropriate /required

PPE	ITEM IN USE	SPILLAGE
Respirators	Not needed under normal use and adequate ventilation. In case of insufficient ventilation wear suitable respiratory protection.	Not needed under normal use and adequate ventilation. In case of insufficient ventilation wear suitable respiratory protection.
Gloves	Protective gloves (EN 374).	Protective gloves (EN 374).
Overall	Cotton protective clothing (EN ISO 13688)	Cotton protective clothing (EN ISO 13688)
Goggles/ Face shield	Tight fitting protective goggles (EN 166).	Tight fitting protective goggles (EN 166).

9 Physical and chemical properties

9.1. General information

Appearance: Solid red blocks

Odour: weak

pH: no data available

Density: 1.17

Flammability: no data available

Boiling point/boiling range:

Vapour density: no data available

Vapour pressure: no data available

Melting point/freezing point: no data available
 Solubility in water: no data available
 Solubility in other solvents: no data available
 Explosive properties: Product is not explosive. Product is not self-igniting.
 Combustibility: no data available
 Oxidising properties: No oxidizing properties.
 Evaporation rate: n/a
 Partition coefficient: no data available
 Decomposition temp: no data available
 Auto-ignition temp: no data available

10 Stability and reactivity

- 10.1. Reactivity:** Stable under recommended transport or storage conditions.
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. Carbon oxides.

11 Toxicological information

11.1 Information on toxicological effects

- (a) acute toxicity;
 For product
 oral LD50 rat > 2000 mg/kg bw
 dermal LD50 rat > 2000 mg/kg bw
 For components
 Bromadiolone (28772-56-7) oral LD50 rat > 0,56 mg/kg bw
 Bromadiolone (28772-56-7) dermal LD50 rat > 1,71 mg/kg bw
 (b) irritation; no available data
 (c) corrosivity; no available data
 (d) sensitisation; no available data
 (e) repeated dose toxicity;
 (f) carcinogenicity; no available data
 (g) mutagenicity; no available data
 (h) toxicity for reproduction; no available data

11.2 Other data: see section 2.3

12 Ecological information

12.1. Toxicity:

For components

Substance (CAS Nr.)	Type	Value	Exposure time	Species	Organism
Bromadiolone (28772-56-7)	LC50	2,86 mg/L	96 h	fish	Oncorhynchus mykiss
	LC50	2 mg/L	48 h	crustacea	Daphnia magna
	EbC50	0,17 mg/L	96 h	algae	Scenedesmus

					subspicatus
--	--	--	--	--	-------------

12.2. Persistence and degradability: no available data

12.3. Bio accumulative potential:

Bromadiolone (28772-56-7) Octanol-water (log Pow) > 3

12.4. Mobility in soil: no available data

12.5. Results of PBT and vPvB assessment: no available data

12.6. Other adverse effects: No information

13 Disposal considerations

13.1. Waste treatment methods

- Empty outer, uncontaminated- classified non-hazardous. EWC code 15 01 02. Consider recycling route.
- Empty outer , contaminated but shaken empty. EWC code 20 01 19.
- Coveralls, gloves, other PPE, contaminated. EWC code 15 02 03. Waste classification non-hazardous. None of hazardous properties apply.
- Spent bait. EWC code 20 01 19. Biocide solid waste. Waste classification hazardous..
- Contact supplier, local authority or Environment Agency for advice about disposal of waste items.

14 Transport information

14.1. UN number: n/a

14.2. UN proper shipping name: Not dangerous according to ADR.

14.3. Transport hazard class(es) : n/a

14.4. Packing group: n/a

14.5. Environmental hazards: No

14.6. Special precautions for user: n/a

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: n/a

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)

- 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

15.2. Chemical safety assessment: Advice on product handling can be found in sections 7 and 8.

16 Other information

This data sheet does not constitute a COSHH assessment.

The information contained within this data sheet is strictly for general guidance only and should not be relied upon over and above this. This data sheet is intended to provide general health and safety guidance on the handling, storage and transportation of the preparation. The information provided in this data sheet is accurate at the date of publication and will be updated as and when appropriate. No liability will be accepted by Killgerm Chemicals Limited for any loss, injury or damage arising from any failure to comply with the information and advice contained within this data sheet and/or failure to comply with the manufacturer's guidelines, product label data and any associated technical usage literature.

List of relevant R phrases

R20 Harmful by inhalation.

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

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

H335 May cause respiratory irritation.

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.
