

1 Identification of the preparation and the supplying Company

1.1 Bromag (UK-2015-0932)

1.2 A ready to use cereal based rodenticide

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

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1.4 Emergency telephones. Medical professionals should use National Poisons Information Service 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



Reproduction toxicity category 1B H360D May Damage the unborn child.

STOT RE 1 H373 Causes damage to organs through prolonged or repeated exposure

2.2. Label elements

The following precautionary phrases are appropriate (Regulation (EC) 1272/2008):

Signal word: **DANGER**

P102 keep out of reach of children

P103 Read the label before use.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves and clothing

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

To avoid risk to man and the environment comply with the instructions for use. Safety data sheet available for professional user on request.

2.3. Other hazard

None expected under normal conditions of use. This product contains bromadiolone, an indirect anticoagulant. Any signs of poisoning are unlikely to occur until 12-18 hours after ingestion. Thereafter, they will develop progressively and may rapidly appear.

Clinical signs result from an increased bleeding tendency and include: an increase in prothrombin time, bruising easily with occasional gum bleeding, blood in the stool or urine, excessive bleeding from minor cuts and abrasions, pale mouth and cold gums, anorexia and general weakness. More severe cases of poisoning include haemorrhage (usually internal) and shock.

This product is hazardous to mammals including domesticated animals, and birds if ingested.

Exposure of non-target animals should be prevented.

3 Composition and information on ingredients

3.2. Mixtures

Hazardous Components in Product

Ingredient Name	Classification	Concentration	H Phrases
Bromadiolone Technical Material CAS No: 28772-56-7	Acute Toxicity oral category 3. Acute toxicity dermal category 3. Acute toxicity inhalation category 2. STOT RE cat 1. Aquatic Acute category 3	0.005% w/w	H301 H311 H330 H372 H412
Bitrex CAS Number: 3734-33-6	Acute Tox category. 4, Skin Irrit category. 2, Eye Dam category. 1, Aquatic Chronic category 3	0.001% w/w	H302 H332 H315 H318 H412

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

4 First Aid measures

4.1. Description of first aid measures

This product contains an anticoagulant substance. If ingested, symptoms, which may be delayed, may include nosebleed and bleeding gums. In severe cases, there may be bruising and blood present in the faeces or urine.

Antidote: Vitamin K1 administered by medical/veterinary personnel only.

In case of:

- Dermal exposure, wash skin with water and then with water and soap.
- Eye exposure, rinse eyes with eyes-rinse liquid or water, keep eyes lids open at least 10 minutes.
- Oral exposure, rinse mouth carefully with water. Never give anything by mouth to unconscious person. Do not provoke vomiting. If swallowed, seek medical advice immediately and show the product's container or label.

UK medical professionals should contact the National Poisons Information Service (www.npis.org) for further advice.

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

Bromadiolone is an indirect anticoagulant. Vitamin K1 (phytomenadione) is an antidote. In the case of suspected poisoning, determine prothrombin time not less than 18 hours after consumption. If elevated, administer vitamin K1, 40mg/day for adults and 20mg/day for children in divided doses. Continue until prothrombin times normalise. Continue determination of prothrombin time for two weeks after withdrawal of the antidote and resume treatment if elevation occurs in that time. N.B. Vitamin K3 is not effective. For comprehensive medical advice on the treatment of poisoning, contact the nearest Poisons Information Centre.

Take the person out of the contaminated zone and remove stained or splashed clothing

For eye contact: For skin contact:

If ingested, **Transfer the poison victim to a hospital and take the label or package whenever possible. DO NOT LEAVE THE POISON VICTIM ALONE AT ANY TIME**

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

...See 4.2

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

Use water spray, foam, dry chemical or carbon dioxide. Cool the smouldering material with water spray to minimise the possibility of re-ignition. Keep containers and surroundings cool with water spray.

5.2. Special hazards arising from the substance or mixture:

This product is non-flammable, but combustible. May produce toxic fumes of carbon monoxide if involved in a fire.

5.3. Advice for fire-fighters:

Wear self-contained breathing apparatus

6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures: Personnel dealing with accidental spills and release of the mixture should wear personal protective equipment described in section 8 under "spillage"

6.2. Environmental precautions: In case of accidental spills keep away from drains, surface and ground water.

6.3. Methods and material for containment and cleaning up: Sweep up spilled material carefully. Avoid raising dust. Place in marked receptacle ready for disposal. Contact supplier for advice on disposal. See also section 13

6.4. Reference to other sections: Refer to section 8 and 13 for additional information.

7 Handling and storage**7.1. Precautions for safe handling**

FOR USE ONLY BY PROFESSIONAL OPERATORS. AVOID ALL CONTACT BY MOUTH. PREVENT ACCESS TO BAIT by children, birds and non-target animals particularly dogs, cats, pigs and poultry. Search for and remove rodent bodies at frequent intervals during treatment (unless used in sewers). Collect and dispose of the remains of bait and any remaining rodent bodies after treatment (unless used in sewers). You must ensure that you comply with legislation regarding the correct disposal of waste. For further guidance, contact the Environment Agency or your local Scottish Environment Protection Agency (SEPA) office. HARMFUL TO WILDLIFE. DO NOT PLACE BAIT where food, feed or water could become contaminated (except when used in sewers). IF YOU FEEL UNWELL, seek medical advice (show the label where possible).

WASH HANDS AND EXPOSED SKIN before meals and after use.

EMPTY CONTAINER COMPLETELY and dispose of safely.

When working in rodent infested areas it is recommended that synthetic rubber/PVC gloves be worn to protect against rodent borne disease. Always attach labels to any containers used to carry bait decanted from the main container. Do not remove inner liner from outer bag. STORE UNUSED SACHETS in a safe place. DO NOT STORE part used sachets (place packs). Where appropriate, secure the bait (place pack/sachet) at its placement site to reduce the likelihood of its removal by rodents (or by surges of water if intended for use in sewers). Do NOT open sachets.

7.2. Conditions for safe storage, including any incompatibilities

STORE IN ORIGINAL CONTAINER, tightly closed, in a safe place. Store in a cool dry place. Protect from frost.

7.3. Specific end use(s)

For use as a rodenticide

8 Exposure controls and personal protection

8.1. Control parameters

No specific national limit values have been established

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		Half mask respirator to EN140 plus P class filter to EN 143 to required (nominal) protection factor (minimum).
Gloves	Unlined/Flock lined, synthetic rubber/PVC to EN 374. (300mm in length) e.g. Nitrile.	Unlined/Flock lined, synthetic rubber/PVC to EN 374. (300mm in length) e.g. Nitrile
Overall	Basic type e.g. Heavy duty polycotton or coverall type 5/6.	Coverall type 5/6.
Goggles/ Face shield		Goggles to EN 166 3459B.

9 Physical and chemical properties

9.1. General information

Appearance: A green/blue whole wheat grain bait

Odour: characteristic wheat odour.

Odour Threshold: not applicable

pH: no available data

Melting point/freezing point: no available data

Initial boiling point and boiling range: no available data

Flash point: no available data

Evaporation rate: not applicable

Flammability: Will burn in fire

Upper/lower flammability or explosive limit: not applicable

Vapour pressure: not applicable

Vapour density: not applicable

Relative density: 0.7

Solubility(ies): Insoluble

Partition coefficient: no available data

Auto-ignition temperature: no available data

Decomposition temperature: no available data

Viscosity: not applicable

Explosive properties: None

Oxidising properties. no available data

9.2. Other information: No available data.

10 Stability and reactivity

10.1. Reactivity: Not reactive mixture

10.2. Chemical stability: Mixture is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3. Possibility of hazardous reactions: None anticipated

10.4. Conditions to avoid: Avoid extremes of temperature

10.5. Incompatible materials: Store away from strong oxidising agents

10.6. Hazardous decomposition products: Carbon monoxide and oxides of nitrogen, toxic and irritants released if mixture is involved in a fire.

11 Toxicological information**11.1 Information on toxicological effects**

(a) Acute toxicity: Information has been derived from the properties of the individual ingredients. Oral LD50 (rat) >2000mg/kg

Inhalation- Not an anticipated route of exposure. Dermal LD50 (rabbit)>40g/kg

(b) Corrosivity/Irritation: Skin eyes, respiratory tract – no irritation potential expected. Information derived from the properties of the individual ingredients

(c) Sensitisation: contains no known skin or respiratory sensitizers.

(d) Repeated dose toxicity: The product has not been tested. Repeated exposure to small quantities may affect certain organs, Damages the coagulation system.

(e) Mutagenicity/Carcinogenicity: Product does not contain any ingredients known to have such effects.

(f) Reproductive toxicity: This product is classified as a Reproduction toxicity category 1B and may damage the unborn child.

11.2 Other data: see section 2.3

12 Ecological information

12.1. Toxicity: The Bromadiolone in this product is classified as very toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment. However, when used in accordance with instructions, controlled release of this product is not expected to cause environmental contamination

LC50 Fish (96 hour, rainbow trout) 28g/l

LC50 Daphnia (48hr Daphnia magna) 4.8g/l

LD50 Bird (quail) >30 000g/kg

12.2. Persistence and degradability: Degradation in soil is slow. For Bromadiolone, aerobic degradation half-life is 53 days, anaerobic degradation half-life is 60 days.

12.3. Bioaccumulative potential: The active ingredient properties indicate a potential to bioaccumulate.

12.4. Mobility in soil: Mobility potential is very low and will depend principally on the soil type. Bromadiolone and any potential degradation products even if released indirectly to soil in small quantities are not likely to move through the soil profile and are unlikely to reach groundwater in significant quantities.

12.5. Results of PBT and vPvB assessment: Does not meet requirement for assessment

12.6. Other adverse effects: None known

13 Disposal considerations**13.1. Waste treatment methods**

- Empty outer pp 10k bag, uncontaminated- classified non-hazardous. EWC code 15 01 02 consider recycling route.
- Empty outer pp 10k bag, contaminated but shaken empty. EWC code 20 01 19.
- Empty inner liner (10k bag), contaminated but shaken empty. EWC code 20 01 19.
- Empty pp bag plus inner liner, 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:** Not applicable
14.2. UN proper shipping name: Not applicable
14.3. Transport hazard class(es): Not applicable
14.4. Packing group: Not applicable
14.5. Environmental hazards: Not applicable
14.6. Special precautions for user: Not applicable
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

15 Regulatory information

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

Classification & Labelling according to Regulation (EC) No 1272/2008
 Control of Substances Hazardous to Health Regulations 2002 (as amended).
 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).

- Restricted to professional users.
- Refer to other relevant measures such as the Health and Safety at Work etc. Act 1974 and the COSHH regulations and guidance.
- The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by legislation.

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

16 Other information

Use only in accordance with label instructions.
 Operatives using this product should be trained in its use.
 The information in this data sheet should be considered when undertaking a risk assessment under the COSHH regulations.
 Ingredient classification data:
 H301: Toxic if swallowed
 H311: Toxic in contact with skin
 H330: Fatal if inhaled
 H372: Causes damage to organs through prolonged or repeated exposure
 H412: Harmful to aquatic life with long lasting effects
 H302: Harmful if swallowed
 H315: Causes skin irritation
 H332: Harmful if inhaled
 H318: Causes serious eye damage

Date of amendment	Sections amended	notes
15-6-2016	All	Issue 3 of this SDS was written
14-9-2017	Section 2, 3	Updated the classification of the substance and the classifications of the hazardous components
14-9-2017	Section 9	Updated the physical and chemical properties
10-12-2018		Update inline with renewal
7-6-2019	Section 13 and 11	Update of packaging maximum size and toxicological 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.
