1 Identification of the preparation and the supplying Company

1.1 Ratimor Wax Blocks. Rodenticide blocks for rodent control.
1.2 Rodenticide, anticoagulant bait (RB)
1.3 Killgerm Chemicals Ltd, Denholme Drive, Ossett, West Yorkshire, WF5 9NA.
   Tel: +44 (0)1924 268450 Fax: (0)1924 265033 Email: technical@Killgerm.com
1.4 Emergency telephones. National Poisons Information Service 0870 600 6266.
   Killgerm Chemicals Ltd, 01924 268452 (Office hours)

2 Hazards identification

Not classified as hazardous (or dangerous according to 1999/45/EC).

Large quantities would need to be ingested to produce a toxic effect (nose bleed and bleeding gums). Hazardous to mammals including domesticated animals, and birds if ingested. Exposure of non-target animals should be prevented.

3 Composition and information on ingredients

Bromadiolone – 0.005%/w/w – active ingredient, anticoagulant
Contains Bitrex – human taste aversion ingredient
Registration numbers under the “REACH” regulations not assigned.

4 First Aid measures

Do not induce vomiting or give anything to drink or eat if the patient is unconscious. Treat the patient symptomatically.

4.1 Inhalation: Unlikely route of exposure. Remove from exposure. Obtain medical advice if symptoms develop.
4.2 Contact with skin: Take off contaminated clothes and shoes. Wash with soap and water. Seek medical advice.
4.3 Contact with eye: Flush immediately with a large amount of water for 15 minutes. Seek medical advice if irritation develops.
4.4 Ingestion: Wash out mouth. Do not induce vomiting. Do not give anything to eat or drink. Keep patient warm at rest. Seek medical advice immediately.

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Advice for physicians: Bromadiolone is an indirect anticoagulant. Phytomenadione, Vitamin K₂ is antidote. Determine prothrombin times 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.

5 Fire-fighting measures

The product is not-flammable, but is combustible.

5.1 Suitable extinguishing media: Carbon dioxide (CO₂), alcohol-resistant foam, dry powder, water spray, mist or foam.
5.2 Unsuitable extinguishing media: Water jet from a fire hose.
5.3 Fire and explosion hazards: In case of fire, the product emits toxic and irritating fumes.
5.4 Special protective equipments: Wear self-contained breathing apparatus and protective clothing

Other recommendations: Do not breathe fumes. Keep fire-exposed containers cool by spraying with water if exposed to fire.

6 Accidental release measures

6.1 Personal protection: Wear protective equipment. (See paragraph no. 8)
6.2 Environment precautions: Sweep into a suitable container, store material collected and dispose of safely. Avoid release to watercourses and ground. (See paragraph 8.2)
6.3 Clean-up procedures: Sweep up all material first. Then rinse area with water and cleaning agent.

7 Handling and storage

This product is subject to the Food and Environmental Protection Act 1985, and the Control of Pesticides Regulations 1998 made under it. The product must be used and stored in accordance with the product label.

7.1 Handling: Avoid all contact by mouth. Wash hands and exposed part of the body with soap before eating, drinking or smoking and after work. Always use good personal hygiene procedures when handling chemicals. Observe all directions for use and precautions on the product label.
7.2 Storage: Store in original container in dry cool conditions. Keep away from food, drink and animal feeding stuffs. Store in a secure, well ventilated place, inaccessible to children and away from products with an odour.
7.3 Specific use: Product is for control of rats and mice by professional users only.

8 Exposure controls and personal protection

8.1 Exposure limit values – none assigned for bromadiolone.
8.2 Exposure controls
8.2.1 Occupational exposure controls
   (a) Respiratory protection: Not required
   (b) Hand protection: Unlined/Flock lined, synthetic rubber PVC to EN374 (300mm in length) eg. Nitrile.
   (c) Eye protection: Wear goggles to EN166 3459B for clean-up spillage situations only.
   (d) Skin protection: Wear suitable skin protection such as coveralls, basic type eg. heavy duty polycotton or coverall type 5/6.
8.2.2 Environmental exposure controls
Ingredients present in this preparation are classified as toxic and harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Avoid release of the rodenticide and any possible subsequent contamination of the aquatic environment.
9 Physical and chemical properties

9.1. General information
Appearance: Nominal 20 gramme, red coloured, wax block
Odour: Characteristic faint odour

9.2. Important health, safety and environmental information
pH: Not applicable
Boiling point/boiling range: Not applicable
Solidification point: (55 - 60ºc – paraffin)
Flash point: None
Flammability/self ignition/ explosive, oxidising properties: None
Water solubility: Practically insoluble
Viscosity: Not applicable – solid block
Vapour pressure: (2×10^-6 Pa @20ºC – bromadiolone)
Partition coefficient: n-octanol/water: (log Kow=7.3 – bromadiolone)

10 Stability and reactivity
Preparation is stable and not reactive.

10.1 Condition to avoid: high or low temperatures ie below 0ºc and above 40ºc.
10.2 Material to avoid: strong oxidizing materials.
10.3 Hazardous decomposition products: stable under normal conditions. Combustion or thermal decomposition will produce toxic and irritant fumes.

11 Toxicological information
Inhalation: Unlikely route of exposure.
Ingestion: LD50 oral (rat), similar product >2000mg/kg. Large quantities would need to be ingested to produce a toxic effect. If sufficient quantities were ingested, nosebleed and bleeding gums may occur. In severe cases there may be numerous blue-black patches on the skin, abdominal pain, bruising, haematomas of the joints and blood present in urine and faeces.
Skin contact: Unlikely to cause irritation.
Eye contact: Unlikely to cause eye irritation.
Sensitisation effects: None known.
Chronic effects (due to long/repeated exposure): Chronic skin exposure may cause dermatitis.

12 Ecological information
For active ingredient:

12.1 Ecotoxicity: Fish: LC50 (96 hours, different species) = 1.4 – 3.5 mg/L.
Avian: LC50 = 0.264 mg/kg
12.2 Mobility: KOC = 528; classification: immobile (Technical report n.14/07/1997 Chemservice)
12.3 Persistence and degradability: DT50 (soil) = 1.8 – 7.4 days
12.4 Bioaccumulative potential: Log P ow: 3.5 (Studio CH-14/96-B Chemservice)

13 Disposal considerations
Empty containers: EWC Waste Code: 15 01 02. Send to recycling facility if possible.
Unused/recovered materials: EWC Waste Code: 16 03 06. Non-hazard classified. Treat as controlled waste & obtain information from a suitable disposal contractor.

14 Transport information
Not classified.
Not regulated under Road, rail, sea or air transport conditions/routes.

15 Regulatory information
- This preparation has been classified in accordance with The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002, CHIP 3. These implement the Dangerous Preparations Directive- 99/35/EC. This Safety Data Sheet complies with Annex II of the REACH regulations.
- 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.
- Hazard symbols: - None
- Risk phrases: - None
- Safety phrases: - Keep out of reach of children. Keep away from food, drink and animal feeding stuffs. Wear suitable protective clothing and gloves. If swallowed, seek medical advice immediately and show the container label or this data sheet. Avoid release to the environment. Refer to special instructions/ this safety data sheet.
- This product is approved under the Control of Pesticides Regulations 1986.
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.
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.
Incorporates the REACH requirement changes to safety data sheets.