SAFETY DATA SHEET



Date of Issue: 26.02.2013

Issue: 2

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: BROMARD with BitrexTM

USE: Anticoagulant bait for rats and mice for use by

professional pest controllers.

COMPANY IDENTIFICATION: Rentokil Products NZ

Level 1, 89 Carbine Road, Mt Wellington, Auckland

Private Bag 92905, Onehunga,

Auckland 1643 Tel (+64) 9 – 573 7740 Fax (+64) 9 – 573 0264

Emergency Telephone Numbers: National Poison Centre

Tel 0800 POISON (0800 764 766)

Emergency Service (Police, Fire, Ambulance)

Dial 111

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Product classified as hazardous according to Schedules 1 to 6 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 of the HSNO Act 1996.

HSNO Classifications: 6.9B, 9.1D

Signal word: WARNING

Hazard statements:

H373 May cause damage to organs through prolonged or repeated exposure

H402 Harmful to aquatic life

Prevention statements:

P103 Read label before use P260 Do not breathe dust.

P273 Avoid release to the environment

3. COMPOSITION: INFORMATION ON INGREDIENTS

Common name	CAS. No	% w/w
Bromadiolone	28772-56-7	0.01
Denatonium benzoate	3734-33-6	< 1.0
Other ingredients (non hazardous)	Proprietary	balance

4. FIRST AID MEASURES

Consult the National Poison Centre, telephone 0800 764 766 [0800 POISON] or a doctor in every case of suspected poisoning.

EYES: Hold eye open and carefully rinse eyes with running water. Remove contact lenses, if present and easy to do. Avoid wash off into unaffected eye. Seek medical advice.

SKIN: Remove contaminated clothing immediately. Wash affected area with soap and water and rinse thoroughly. Wash and dry contaminated clothing before re-use.

INGESTION: Do NOT induce vomiting. If conscious give 1 or 2 glasses of water to drink. If unconscious, place in recover position and Get immediate medical advice.

INHALATION: Unlikely to be an exposure route.

ADVICE TO DOCTOR: Vitamin K1 (Phytomenadione) is used as a specific antidote. Determine prothrombin times not less than eighteen hours after ingestion of bait. If elevated, administer Vitamin K1 until prothrombin time is normal. Continue monitoring prothrombin time for two weeks after ceasing antidote but resume treatment if the prothrombin time increases.

5. FIRE FIGHTING MEASURES

FLASH POINT: Non flammable

EXTINGUISHING MEDIA: Water spray, water fog, foam, CO2, dry chemical.

FIRE & EXPLOSION HAZARDS: Combustible product. Burning will evolve toxic and irritating vapours.

FIRE-FIGHTING EQUIPMENT: Wear self-contained breathing apparatus and personal protection clothing.

6. ACCIDENTAL RELEASE MEASURES

SPILLS: Wear personal protective equipment. Do not allow to contaminate drains, surface or ground water, and soil. Recover product to suitable container for re-use or disposal.

7. HANDLING AND STORAGE

HANDLING: Read label before use. Wear synthetic rubber or PVC gloves. Use as directed on label and to minimize access by children, pets and non-target species. Wash hands and exposed skin before eating, drinking or smoking and after work.

STORAGE: Store in closed original container in a safe place out of reach of children and pets, and away from food, drink and animal feedstuffs.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

EXPOSURE GUIDELINES: No Workplace Exposure Standard (WES) has been set for this substance. **ENGINEERING CONTROLS:** None specified.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Face/Eye protection: Not necessary.

Skin protection: Synthetic rubber or PVC gloves.

Respiratory protection: Not applicable.

Other: None specified.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Paste Colour: Blue

Odour No perceptible odour

Melting point (${}^{\circ}$ C): $\sim 45 {}^{\circ}$ C

Flash point (°C):

Auto ignition temperature (°C):

Density at 20°C, g/cm³:

Solubility in water:

PH:

Non flammable

Not known

1.0

Insoluble

Not applicable

10. STABILITY AND REACTIVITY

STABILITY (CONDITIONS TO AVOID): Avoid extremes of temperature (below 0C or above 40 °C). **INCOMPATIBILITY (MATERIALS TO AVOID):** None identified.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic and irritating vapours when heated or burnt. HAZARDOUS POLYMERIZATION: Not known to occur.

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS: This section includes possible adverse effects, which might occur if this product is not handled in the recommended manner.

EYE: May be slightly irritating to the eye.

SKIN: May be slightly irritating to skin.

INGESTION: The acute oral LD₅₀ for the rat for Bromadiolone active is 0.56 mg/kg. However formulated bait product is not acutely toxic. Refer to possible chronic adverse health effects as an indirect anti-coagulant under SYSTEMIC EFFECTS heading.

INHALATION: Product is not classified as having acutely toxic effects by inhalation route.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Anticoagulants reduce the clotting power of blood so internal and external hemorrhages occur. This will cause death if sufficient quantities are consumed. Symptoms of poisoning are bleeding gums, pallor, hemorrhage at elbows, knees and buttocks, blood in urine and faeces, and very occasionally paralysis due to cerebral hemorrhage.

CANCER INFORMATION: No adverse effects identified.

TERATOLOGY (BIRTH DEFECTS): No adverse effects identified.

REPRODUCTIVE DEFECTS: No adverse effects identified.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): No adverse effects identified.

12. ECOTOXICITY INFORMATION

ENVIRONMENTAL FATE: Classified as 9.1D; harmful to aquatic life as product has biocidal effects. **MOVEMENT AND PARTITIONING:** Not determined for product.

DEGRADATION AND PERSISTENCE: Bromadiolone has a Log_{POW} that is > 3, indicating a potential to bioaccumulate. However the concentration of this active present in the product is very low.

ECOTOXICOLOGY: Product is used as vertebrate toxic agent (rodenticide).

13. DISPOSAL CONSIDERATIONS

Bait and bait containers must be disposed of in accordance with label instructions and in accordance with local regulations. All rodent bodies if seen must be recovered if possible and disposed of safely. Do not place carcasses in refuse bins or on normal rubbish collections.

14. TRANSPORT REGULATIONS

TRANSPORT:

UN Number: Not classified

HAZCHEM: - Class: -

Packing Group: III (or IV) - refer section 15

DANGEROUS GOODS SEGREGATION:

This product is not classified as a Dangerous Good for Land Transport. Please consult the Land Transport Rule: Dangerous Goods 2005 and NZS 5433:2012 *Transport of Dangerous Goods on Land* for further information.

15. REGULATORY INFORMATION

HSNO Register: HSR001603

Refer to www.epa.govt.nz for applicable Controls under the HSNO Act 1996.

Registered as a Vertebrate Toxic Agent (VTA) pursuant to the ACVM Act 1997 No. V004023. See www.foodsafety.govt.nz for registration conditions

16. OTHER INFORMATION

Date of Issue: 26.02.2013

Reason for issue: Change to company address details, review and change product hazardous

classifications, update changes to other information and names.

Replaces: Safety Data Sheet dated 10.09.2010

Abbreviations:

EPA Environmental Protection Authority
HSNO Hazardous Substances and New Organisms
Prothrombin Term used to measure clotting time of blood

STEL Short Term Exposure Limit
TWA Time Weighted Average
WES Workplace Exposure Standard

References:

EPA website www.epa.govt.nz Supplier Safety Data Sheets

Before using any product, read its label carefully and ensure that you understand its contents. This information is, to the best of our knowledge and belief, accurate and reliable at the date of publication. The information relates only to the specific material designated and may not be valid for such material if it is used in combination with any other material(s). Rentokil Initial Limited disclaims any liability for loss or damage suffered from the use of this information. This does not affect your statutory rights. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for his/her own particular use.

END of SAFETY DATA SHEET