

# Material Safety Data Sheet

## RODENTHOR™ Block Rodenticide

### Section 1 - IDENTIFICATION OF CHEMICAL PRODUCT AND COMPANY

This product is **NOT** classified as Hazardous according to the criteria of NOHSC Australia.

This product is **NOT** Dangerous Goods according to the Australian Dangerous Goods (ADG) Code

This product is approved for use in food handling areas.

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**Substance:** Brodifacoum.

**Trade Name:** RODENTHOR™ Block Rodenticide

**Product Use:** Rodenticide for use as described on the product label.

**Creation Date:** October 2011

**Reviewed on:** 9 May 2012

### Section 2 - HAZARDS IDENTIFICATION

**Risk Phrases:** Poisonous if swallowed.  
**Safety Phrases:** DO NOT touch bait. If on skin and after each baiting, wash thoroughly with soap and water. Wash hands after use.  
**SUSDP Classification:** S6 (Standard for the Uniform Scheduling of Drugs and Poisons).  
**ADG Classification:** Not classified as dangerous goods under transport regulations.  
**UN Number:** None allocated.

### Emergency Overview

**Physical Description & colour:** Solid extruded wax block. Blue.  
**Odour:** Mild characteristic odour.  
**Major Health Hazards:** No adverse health effects are expected if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms that may occur if the product is mishandled are:  
Mild Exposure: Reduction in the clotting ability of the blood, detectable only by medical analysis.  
Moderate Exposure: Bleeding from gums, tendency to bruise easily, blood present in faeces and/or urine, excessive bleeding from minor cuts.  
Severe Exposure: Severe internal bleeding resulting in shock, coma and even death in very severe cases.

### Potential Health Effects

See section 11 for Chronic exposure studies.

**Inhalation:**

**Short term exposure:** Unlikely to have any effect due to presentation of the product.

**Skin Contact:**

**Short term exposure:** Exposure may cause irritation.

**Eye Contact:**

**Short term exposure:** Exposure may cause irritation.

**Ingestion:**

**Short term exposure:** Harmful if swallowed.

**Carcinogen Status:**

**NOHSC:** No significant ingredient is classified as carcinogenic by NOHSC.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** No significant ingredient is classified as carcinogenic by IARC.

### Section 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No	Conc.%	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Brodifacoum	56073-10-0	0.005%	not set	not set
Denatonium benzoate	3734-33-6	0.001%	not set	not set
Other non hazardous ingredients (Food grade)	secret	99.994%	not set	not set

This is a commercial product whose exact ratio of components may vary slightly.

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

### Section 4 - FIRST AID MEASURES

#### General Information:

You should IMMEDIATELY call The Poisons Information Centre if you feel that you may have been poisoned by this product. The number is 13 11 26 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

**Inhalation:** If inhaled, remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a doctor or Poison Information Centre immediately.

**Skin Contact:** Wash affected areas with acidic soap and plenty of water. If irritation develops, seek medical attention.

**Eye Contact:** Rinse immediately with clean water, with eyelids held open, for at least 15 minutes and obtain medical advice.

**Ingestion:** Rinse mouth immediately and then drink plenty of water, induce vomiting, and give more water. Seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

**DOMESTIC ANIMALS:** Immediately transport to a veterinary surgeon. If no signs of intoxication are noted, but bait consumption is suspected, induce vomiting only if ingestion is recent, less than six (6) hours. Use a solution of salty water (2-3 tablespoons salt in a cup of water), place in a soft drink bottle and squirt it down the animal's throat. Vomiting should take place after about 10 minutes. Seek veterinary advice.

**Advice to Doctor:** Brodifacoum, the active constituent of RODENTHOR Block Rodenticide, is a long lasting anticoagulant chemical, which if ingested by humans, domestic animals or pets, can reduce the clotting power of the blood and haemorrhage may result. Vitamin K1 (Phytomenadione) should be administered urgently by medical, appropriate para-medical personnel or veterinarians. If administered intravenously the injection must be given slowly.

**Symptoms and Effects** No adverse health effects are expected if the product is handled in accordance with this Material Safety Data Sheet and the product label. Symptoms that may occur if the product is mishandled are:

Mild Exposure: Reduction in the clotting ability of the blood, detectable only by medical analysis.

Moderate Exposure: Bleeding from gums, tendency to bruise easily, blood present in faeces and/or urine, excessive bleeding from minor cuts.

Severe Exposure: Severe intestinal bleeding and/or internal bleeding resulting in shock, coma and even death in very severe cases.

### Section 5 - FIRE FIGHTING MEASURES

**Fire and Explosion Hazards:** Under normal circumstances there is no risk of an explosion from this product if it is involved in a fire.

Fire decomposition products from this product will produce dense black smoke containing possible hazardous products of combustion. Combustion or thermal decomposition may evolve toxic or irritant vapours. Exposure to decomposition products may be a hazard to health. Specific hazards include carbon monoxide. Take appropriate protective measures.

Fire-fighters should wear full protective gear, including self-contained breathing apparatus (AS/NZS 1715, 1716). If possible and without risk, remove intact containers from exposure to fire. Otherwise, spray unopened containers with water to keep cool.

Whenever possible, contain fire-fighting water by bunding area with sand or earth to prevent it entering any bodies of water.

**Extinguishing Media:** Carbon dioxide, water spray, dry agent, or foam.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

## Section 6 - ACCIDENTAL RELEASE MEASURES

**Accidental release:** Clear area of all unprotected personnel. Wear chemical resistant clothing buttoned to the neck and wrist and elbow-length PVC or nitrile gloves. Contain spill. Stop leak by manoeuvring the container. Shovel product into a clean drum, remove from the storage area and label. Do NOT flush to drains or sewers. Do NOT contaminate streams, rivers or water courses.

## Section 7 - HANDLING AND STORAGE

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** Keep out of reach of children. Store in the closed, original container in a cool, well-ventilated area. Do NOT store for prolonged periods in direct sunlight. Check packaging - there may be further instructions on the label.

## Section 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

**Exposure Limits TWA (mg/m<sup>3</sup>) STEL (mg/m<sup>3</sup>)**

Exposure limits have not been established by NOHSC for any of the significant ingredients in this product.

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean.

**Eye Protection:** Avoid contact with eyes.

**Hand Protection:** DO NOT touch bait. If on skin and after each baiting, wash thoroughly with soap and water.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Physical Description & colour:** Solid extruded wax block. Blue.

**Odour:** Mild characteristic odour.

**Boiling Point:** N/A.

**Freezing/Melting Point:** N/A.

**Volatiles:** None.

**Vapour Pressure:** No data.

**Vapour Density:** No data.

**Specific Gravity:** N/A.

**Water Solubility:** Not soluble in water.

**Autoignition temp:** N/A.

## Section 10 - STABILITY AND REACTIVITY

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact Ensystem for advice on shelf life properties.

**Conditions to Avoid:** Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** No particular incompatibilities.

**Polymerisation:** This product is unlikely to undergo polymerisation processes.

## Section 11 - TOXICOLOGICAL INFORMATION

**Toxicity for Product:**

**Oral toxicity:** Tests on rats show this product has a low toxicity following single doses of undiluted product. (LD<sub>50</sub> > 5,000 mg/kg)

**Dermal toxicity:** Tests on rats show product has a low toxicity following skin contact with undiluted product. (LD<sub>50</sub> > 5,000 mg/kg)

**Inhalation:** Due to the presentation of RODENTHOR (solid), inhalation is not considered to be a relevant route of exposure.

**Skin irritation:** Non-irritant

**Eye Irritation:** Non-irritant

**Sensitisation:** Not a skin sensitiser

**Chronic:** Brodifacoum technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence was obtained of mutagenic, carcinogenic, teratogenic, neurotoxic or reproductive effects. Excessive exposure slows blood clotting time and can cause bleeding, shock and death.

## Section 12 - ECOLOGICAL INFORMATION

Non-toxic to earthworms. Practically non-toxic to fish and aquatic organisms. Brodifacoum is persistent in soil and water and has a high potential to bioaccumulate.

## Section 13 - DISPOSAL CONSIDERATIONS

**Disposal: Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.** Break, crush, puncture and bury empty containers and dispose of unused bait in a local authority landfill. If no landfill is available, bury the containers or unused bait below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt. DO NOT use containers which have held bait for any other purpose. Dispose of carcasses safely by burning or burying in an approved landfill.

## Section 14 - Transport Information

**ADG Code:** This product is NOT classified as Dangerous Goods.  
**UN Number:** None allocated.

## Section 15 - REGULATORY INFORMATION

**AICS:** All of the significant ingredients in this formulation are to be found in the public AICS Database.

## Section 16 - OTHER INFORMATION

**This MSDS contains only safety-related information. For other data see product literature.**

**Acronyms:**

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail
<b>AICS</b>	Australian Inventory of Chemical Substances
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<b>Hazchem Number</b>	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs & Poisons
<b>UN Number</b>	United Nations Number

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user must review this MSDS in the context of how the product will be handled and used in the workplace.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Ensystem so we can attempt to obtain additional information from our suppliers

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Please read all labels carefully before using product.