

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** **FAST ACTION RATSAK THROWPAKS**

**Recommended Use:** Pelletised bait for the control of rats and mice in domestic situations.

**Supplier:** Yates, a Division of Orica Australia Pty Ltd  
**ABN:** 99 004 117 828  
**Street Address:** 1 Gow Street,  
Padstow, NSW 2211  
Australia  
**Telephone Number:** +61 2 9781 8800  
**Facsimile:** +61 2 9794 9700  
**Emergency Telephone:** **1 800 033 111 (ALL HOURS)**

## 2. HAZARDS IDENTIFICATION

Based on available information, not classified as hazardous according to criteria of Safe Work Australia; NON-HAZARDOUS SUBSTANCE.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

**Poisons Schedule:** S6 Poison.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Risk Phrases
Brodifacoum	56073-10-0	0.005%	R27/28, R48/24/25, R50/53
Bittering agent	-	<1%	-
Inerts	-	to 100%	-

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

### Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

### Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with soap and water. If irritation occurs, seek medical advice.

### Eye Contact:

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

### Ingestion:

Rinse mouth with water. If swallowed, give a glass of water to drink. If vomiting occurs give further water. Seek immediate medical assistance.

## Medical attention and special treatment:

Brodifacoum is a coumarin anticoagulant. Like warfarin it interferes with the synthesis of prothrombin, disturbing the normal clotting mechanisms and causing an increased tendency to bleed. As a result the effect may be delayed.

HUMAN: Continued administration of Vitamin K1 for periods of several weeks with regular monitoring of the coagulation parameters is necessary. In the early phase of the poisoning, infusion of fresh-frozen plasma is advisable.

## DOMESTIC ANIMALS EXHIBITING SIGNS OF INTOXICATION:

1. Carry out a prothrombin test. Administer parentally 2-5 mg/kg of Vitamin K1. Use the smallest diameter needle feasible and avoid the intravenous route in severely haemorrhagic animals.
2. Repeat prothrombin test about 4 hours after injection. Provided that the prothrombin time has normalised, start daily oral Vitamin K1 treatment and continue for 3-4 weeks.
3. Carry out a prothrombin test 24-48 hours after end of treatment. Continue treatment if signs of poisoning reappear or if prothrombin time is still abnormal.

## 5. FIRE FIGHTING MEASURES

### Hazards from combustion products:

Combustible solid. On burning will emit toxic fumes.

### Precautions for fire fighters and special protective equipment:

Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

### Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

## 6. ACCIDENTAL RELEASE MEASURES

### Emergency procedures:

Collect and seal in properly labelled containers for disposal or re-use.

## 7. HANDLING AND STORAGE

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

### Conditions for safe storage:

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Store in a locked room or place away from children, animals, food, feedstuffs, seed and fertilisers.

### Precautions for safe handling:

Keep out of reach of children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** No value assigned for this specific material by the National Occupational Health and Safety Commission. However, supplier recommended Exposure Standard(s):  
8 hr TWA = 1 mg/m<sup>3</sup>

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TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

## Engineering controls:

Natural ventilation should be adequate under normal use conditions.

## Personal Protective Equipment:

Wear rubber gloves while handling the product. Wash hands after use. Always wash hands before smoking, eating, drinking or using the toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Pellets
<b>Colour:</b>	Pale Green
<b>Odour:</b>	Wheaty
<b>Solubility:</b>	Insoluble in water.
<b>Specific Gravity:</b>	0.7 kg/L (bulk density)
<b>Vapour Pressure (20 °C):</b>	Not applicable
<b>Flash Point (°C):</b>	Not applicable
<b>Melting Point/Range (°C):</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Chemical stability:</b>	Stable under normal conditions of use.
<b>Conditions to avoid:</b>	Avoid contact with foodstuffs.
<b>Incompatible materials:</b>	Incompatible with oxidising agents.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Hydrogen bromide.
<b>Hazardous reactions:</b>	None known.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

<b>Ingestion:</b>	Typical features of brodifacoum poisoning result from an increased tendency to bleed and are dependent upon the degree of exposure: MILD - reduction in the clotting power of blood, detectable only by laboratory analysis. MODERATE - symptoms include bleeding gums, increased tendency to bruise, blood in faeces and urine or excessive bleeding from minor cuts or abrasions. SEVERE - severe gastrointestinal bleeding, massive internal bleeding resulting in shock, coma and death in very severe cases.
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**Substance No:** 00000022252

**Issued:** 14/09/2009  
**Version:** 1

# Material Safety Data Sheet



**Eye contact:** May be an eye irritant.  
**Skin contact:** Contact with skin may result in irritation.  
**Inhalation:** Not a likely route of exposure due to the physical form of the product.

**Long Term Effects:**

No long term risks to humans are associated with this material when handled and used as directed on the label.

**Toxicological Data:** No LD50 data available for the product. For the constituent BRODIFACOUM:

Oral LD50 (rat): 0.4 mg/kg (1)  
Oral LD50 (rabbit): 0.2 mg/kg (1)  
LD50 data for domestic animals include - Oral LD50 (dog): 0.25-1.0 mg/kg.  
Oral LD50 (cat): 25 mg/kg.

Studies in rats and rabbits indicate that this material accumulates in body tissues, principally in the liver and has a very long half-life (150-200 days in rats dosed with 0.25 mg/kg). Thus, in humans, there is a potential for accumulation of small amounts over a long period of time leading to toxic levels within the body.

ADI (Acceptable Daily Intake) for humans is 0.0000005 mg/kg bw/day.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.  
**Terrestrial toxicity:** Hazardous to pigs, dogs and cats. Use of this product for the control of protected native rodents requires permission from wildlife authorities.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:**  
Refer to local government authority for disposal recommendations.

## 14. TRANSPORT INFORMATION

**Road and Rail Transport**

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

**Marine Transport**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

**Air Transport**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

## 15. REGULATORY INFORMATION

**Classification:** Based on available information, not classified as hazardous according to criteria of Safe Work Australia; NON-HAZARDOUS SUBSTANCE.

**Poisons Schedule:** S6 Poison.

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This product is registered in Australia by the Australian Pesticides & Veterinary Medicines Authority (APVMA).

## 16. OTHER INFORMATION

(1) In: 'The Pesticide Manual'. 13th Edition. Ed. CDS Tomlin. British Crop Protection Society, 2003.

### Reason(s) for Issue:

First Issue Primary MSDS

This material safety data sheet has been prepared by SH&E Shared Services, Orica.

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Orica Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact their Orica representative or Orica Limited at the contact details on page 1. Orica Limited's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.