

TRIOX Pty Ltd

Material Safety Data Sheet – PESTMASTER Rat & Mouse Killer

Non hazardous according to criteria of NOHSC Australia.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: **PESTMASTER Rat & Mouse Killer**

Synonyms:

Use: For the control of rats and mice.

Supplier: Triox Pty Ltd
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Emergency telephone number: +613 9372 9977 (9am – 5pm, Monday to Friday)

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL	ENTITY CAS NO.	PROPORTION
Inerts (carrier, attractant etc.)	-	>98%
Denatonium benzoate	3734-33-6	<1%
Brodifacoum	56073-10-0	0.005%
		<hr/> 100%

3. HAZARDS IDENTIFICATION

Based on available information, this material is not classified as hazardous according to criteria of NOHSC Australia.

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

Poisons Schedule (Aust): S6

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

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126; New Zealand 03 474 7000).

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

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Skin contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running 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. Give plenty of water to drink. If vomiting occurs give further water. Seek medical advice.

FOR DOMESTIC ANIMALS:

- Severe signs of poisoning - Immediately transport to veterinarian.
- Early signs of poisoning - Transport to veterinarian.
- No signs, but suspected bait consumption - Induce vomiting only if ingestion is recent (less than six hours). Make up a solution of salty water (2-3 tablespoons of salt per cup of water), place in a soft drink bottle and squirt down animals throat. Vomiting should take place in approximately 10 minutes. Seek veterinarian advice.

Notes to physician: 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. (1)

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. (2)

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 four hours after injection. Provided that the prothrombin time has normalised start daily oral vitamin K1 treatment and continue for three to four 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.

DOMESTIC ANIMALS SUSPECTED OF CONSUMING BAIT:

1. Test prothrombin time daily for up to three days after suspected date of ingestion.
2. Treat with Vitamin K1 if signs of poisoning appear or if prothrombin time increases.
3. Prophylactic oral Vitamin K1 treatment could be carried out.

Poison Information Centres in each State capital city can provide additional assistance. Refer to "The Treatment of Anticoagulant Rodenticide Poisoning' (1998 or later edition), available at most major treatment hospitals, Poisons Information Centres and Crop Care Australasia Regulatory Affairs.

5. FIRE-FIGHTING MEASURES

Specific hazards: Combustible solid.

Fire fighting further advice: Combustible solid. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion.

Suitable extinguishing media: water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

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6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Collect and seal in properly labelled containers for re-use or disposal.

LARGE SPILLS

Wear protective equipment to prevent skin and eye contamination. Collect and seal in properly labelled containers for re-use or disposal. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.

7. HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of dust.

Storage: Store in original containers in a safe place. Keep containers closed when not in use - check regularly for spills. Containers which have held bait should not be used for any other purpose.

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits

No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC Australia).

However, Supplier recommended Hygiene Standard:

	TWA	
	ppm	mg/m ³
Brodifacoum	-	0.002

* Supplier recommended. (3)

The recommended hygiene standard (TWA) is the time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Hygiene 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. 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.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Engineering measures: IN THE WORKPLACE: Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES (S).

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MANUFACTURE, PACKAGING AND TRANSPORT: Avoid skin and eye contact. Wear overalls, safety glasses and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet.

PREPARATION AND USE OF PRODUCT: Do not inhale dust. When using and after use do not touch the bait, use scoop or measure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Green pellets with no odour.

Solubility: Sparingly soluble in water. Pellets breakdown in contact with water.

Specific Gravity (20 C)	:	N Av	Melting Point (C)	:	N Av
Rel Vapour Density (air=1)	:	N App	Boiling Point (C)	:	N App
Vapour Pressure (20 C)	:	N App	Decomp. Point (C)	:	N Av
Flash Point (C)	:	N App	Sublimation Point	:	N App
Flammability Limits (%)	:	N Av	pH	:	N Av
Autoignition Temp (C)	:	N Av	Viscosity	:	N App
% Volatile by volume	:	N Av	Evaporation Rate	:	N App
Solubility in water(17 C)	:	Negligible (n-Butyl acetate=1)			

* Value for the active constituent metaldehyde.

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable for at least 2 years under ambient storage conditions.

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:

Acute Effects

Inhalation: Not expected to present an inhalation hazard. However, if present as a dust, inhalation may result in respiratory irritation.

Skin contact: Contact with skin may result in irritation.

Eye contact: Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Ingestion: Typical features of 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.

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SEVERE - severe gastrointestinal bleeding, massive internal bleeding resulting in shock, coma and death in very severe cases. (1)

Long Term Effects: No long term risks to humans are associated with this material when handled and used as directed on the label. (3)

Acute toxicity / Chronic toxicity

No LD50 data available for the product. However, for the constituent,

BRODIFACOUM:

Oral LD50 (rat): 0.27 mg/kg. (1)
Oral LD50 (dog): 0.25 - 1.0 mg/kg. (1)
Oral LD50 (mice): 0.4 mg/kg. (1)
Oral LD50 (cat): 25 mg/kg. (4)

Fatal dose in humans is approximately 15 mg. (3)

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. (1)

ADI (Acceptable Daily Intake) for humans is 0.0000005 mg/kg/bw/day. (5)

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways. For the active constituent, Brodifacoum (4):

ENVIRONMENTAL FATE, PERSISTENCE AND DEGRADATION

Degraded slowly in soils under aerobic and flooded conditions. The half life in soil is greater than 12 weeks. It is unlikely to leach to groundwater.

AQUATIC TOXICITY

Very toxic to aquatic organisms.

96hr LC50 (rainbow trout): 0.051 mg/L.

96hr LC50 (bluegill sunfish): 0.165 mg/L.

LogPow is 8.5

Risk of bioaccumulation in an aquatic species is high.

TERRESTRIAL TOXICITY

Oral LD50 (chickens): 4.5 mg/kg.

Oral LD50 (mallard duck): 0.31 mg/kg.

13. DISPOSAL CONSIDERATIONS

Dispose of empty containers and unused or untaken bait by burying in an approved dump. Search for and burn or bury all rodent bodies, do not place in refuse bins or in rubbish tips. Ensure baits are removed when rodent activity has ceased.

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.

Marine Transport

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Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport

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

15. REGULATORY INFORMATION

Based on available information, this material is not classified as hazardous according to criteria of NOHSC Australia.

Poisons Schedule (Aust): S6

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Literary reference

1. In 'Handbook of Pesticide Toxicology'. Eds Hayes W Jr and Laws E Jr. Academic Press, 1991.
2. In 'The Treatment of Anticoagulant Rodenticide Poisoning - Advice to Veterinarians. Issue jointly by Zeneca Public Health, Sorex Ltd, Rhone-Poulenc Rhodic SA, Liph SA, Bayer and American Cyanamid Company, 1998.
3. In 'The Pesticide Manual' 11th Ed. Ed. CDS Tomlin. British Crop Protection Society, 1997.
4. ADI List, Commonwealth Department of Health and Family Services. 01/2000

This Material Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd on behalf of its client.

Reason(s) For Issue: Change to ingredients identification and general review.

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Triox Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.