Safety Data Sheet

NON-Hazardous Substance, NON-Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Ratsak Professional Pellets**

Synonyms:	**Product Code**	**Bar Code**
Ratsak Professional Pellets, 1.5kg	54210	9310428542107
Ratsak Professional Pellets, 3kg	54211	9310428542114
Ratsak Professional Pellets, 8kg	54212	9310428542121
Ratsak Professional Pellets, 12kg	54213	9310428542138

Recommended use: Pelletised, ready to use bait for the control of rats and mice in industrial situations.

Supplier: Yates, a division of DuluxGroup (Australia) Pty Ltd
ABN: 67 000 049 427
Street Address: 1956 Dandenong Road Clayton VIC 3168 Australia
Telephone: 1300 369 074

Emergency telephone number: **Australia – 1800 033 111** **New Zealand – 0800 734 607**

2. HAZARDS IDENTIFICATION

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

Poisons Schedule (Aust): S6

***CAUTION: Accidental poisoning of pets may be fatal. DO NOT HEAP PELLETS. Observe behavior after pellets have been applied. The bittering agent in the pellets should ensure the animals spits them out shortly after tasting. However, occasionally an animal may continue eating the product. If this occurs, remove the animal at once from the area.*

DANGEROUS GOODS CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
Brodifacoum	56073-10-0	0.05 g/kg
Ingredients determined to be non-hazardous	-	Balance
		100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

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

Skin contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

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, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Seek medical advice.

PPE for First Aiders: Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Brodifacoum is a coumarin anticoagulant. It interferes with the synthesis of prothrombin, disrupting the normal clotting mechanism of the blood and leading to an increased tendency to bleed. As a result effects may be delayed.

HUMAN – Treatment for brodifacoum poisoning is the administration of Vitamin K1 for as much time as it takes (sometimes weeks) for blood parameters to return to normal. In the early phase of poisoning, the infusion of fresh-frozen plasma containing clotting agents is advisable.

DOMESTIC ANIMALS EXHIBITING SIGNS OF POISONING – Treatment involves the administration of Vitamin K1.

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 if possible in severely haemorrhagic animals.
2. Repeat prothrombin test 4 hours following the first treatment of Vitamin K1. Provided that the prothrombin test has normalised, start daily oral Vitamin K1 treatment for 3 to 4 weeks.
3. After 1 to 2 days, following cessation of Vitamin K1 treatment repeat the prothrombin test. Continue Vitamin K1 treatment if prothrombin time is still abnormal or if signs of poisoning reappear.

5. FIRE-FIGHTING MEASURES

Hazchem Code: Not applicable.

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Combustible material.

Fire fighting further advice: On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS
Wear protective equipment to prevent skin and eye contamination. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage.

LARGE SPILLS
Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.

Dangerous Goods – Initial Emergency Response Guide No: Not applicable.

7. HANDLING AND STORAGE

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

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

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

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by Safe Work Australia or Department of Labour New Zealand.

Biological Limit Values: As per the “National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)” the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Use only in well ventilated areas. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal protection equipment: OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.

Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid skin and eye contact and the inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Pale-green pellets with a wheaty odour.

Solubility:	Insoluble in water.
Bulk Density (kg/L):	0.7
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 ℃):	N Av
Flash Point (℃):	N App
Flammability Limits (%):	N App
Autoignition Temperature (℃):	N App
Melting Point/Range (℃):	N Av
Boiling Point/Range (℃):	N Av
Decomposition Point (℃):	N Av
pH:	N Av
Viscosity:	N Av
Total VOC (g/Litre):	N Av
Partition Coefficient (LogPow):	8.5 (Brodifacoum)

(Typical values only - consult specification sheet)
N Av = Not available N App = Not applicable

10. STABILITY AND REACTIVITY

Reactivity: No reactivity hazards are known for the material.

Chemical stability: This material is thermally stable when stored and used as directed.

Hazardous reactions: No known hazardous reactions.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

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: Inhalation of dust may produce respiratory irritation.

Skin contact: Repeated or prolonged skin contact may lead to irritation.

Ingestion: Typical features of brodifacoum poisoning result from an increased tendency to bleed and are dependent upon the degree of exposure:

MILD – A reduction in the clotting power of the blood, detectable only by laboratory analysis.
MODERATE – Symptoms include bleeding gums, increased tendency to bruise, blood in the faeces and urine and excessive bleeding from minor cuts or abrasions.
SEVERE – Symptoms include severe gastrointestinal bleeding, massive internal bleeding resulting in shock, coma and even death in severe cases.

Eye contact: May be an eye irritant.

Acute toxicity

Inhalation: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >20 mg/L

Skin contact: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

For the active constituent,
BRODIFACOUM:
Dermal LD50 (rabbit): 3.16 mg/kg

Ingestion: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

For the active constituent,
BRODIFACOUM:
Oral LD50 (rat): 0.4 mg/kg
Oral LD50 (rabbit): 0.2 mg/kg

Oral LD50 (dog): 0.25 - 1.0 mg/kg
Oral LD50 (cat): 25 mg/kg

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

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes.
Skin: this material has been classified as not corrosive or irritating to skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser.
Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as non-hazardous.
Acute toxicity estimate (based on ingredients): > 100 mg/L

For the active constituent,
BRODIFACOUM:
96hr LC50 (rainbow trout): 0.015 mg/L
48hr LC50 (Daphnia magna): 0.98 mg/L

Long-term aquatic hazard: No information is available to complete an assessment.

Ecotoxicity: Very toxic to terrestrial species.
This use of this product for the control of native rodents requires permission from wildlife authorities.

Persistence and degradability: The active constituent is not readily biodegradable.

Bioaccumulative potential: The active constituent is bioaccumulative.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see “Section 8. Exposure Controls and Personal Protection” of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT
Not classified as Dangerous Goods by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail” and the “New Zealand NZS5433: Transport of Dangerous Goods on Land”.

MARINE TRANSPORT
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

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)
Basel Convention (Hazardous Waste)
International Convention for the Prevention of Pollution from Ships (MARPOL)

This material/constituent(s) is covered by the following requirements:

- The Standard for the *Uniform Scheduling of Medicines and Poisons (SUSMP*) established under the *Therapeutic Goods Act (Commonwealth*).
- All the constituents of this material are listed on the *Australian Inventory of Chemical Substances (AICS)*.
- The *Agricultural and Veterinary Chemicals Act (Commonwealth)* and/or applicable Commonwealth, State or Territory control-of-use legislation.

16. OTHER INFORMATION

Literary reference

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Reason(s) For Issue: Format Change

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

This SDS 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 DuluxGroup (Australia) Pty Ltd and DuluxGroup (New Zealand) Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS 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.