

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: RABBAIT[®] Aqueous Pindone Concentrate

Recommended Use: For use in the preparation of baits for the control of rabbits

Restricted chemical product under S93(3)(b)&(c). Only to be supplied to or used by an authorised person. Only to be used to treat grain or carrots for the preparation of baits for the control of rabbits, in accordance with the directions of the appropriate state or territory government department.

Supplier Details

Company: Animal Control Technologies (Australia) Pty Ltd
Address: 46-50 Freight Drive Somerton Vic 3062, Australia
Telephone number: 03 9308 9688 (Monday to Friday, 8:00a.m. – 5:00p.m. EST)
Emergency telephone number: Poisons Information Centre 13 11 26 (24 hours)

2. HAZARDS IDENTIFICATION

Hazard classification: Classified as hazardous according to the criteria of ASCC.
Not classified as dangerous goods of Class 6.1 Toxic, according to the Australian Dangerous Goods Code (7th Edition).

Risk phrase(s): HARMFUL: DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE IF SWALLOWED. (R48/22)

Safety phrase(s): Keep locked up and out of reach of children. Wear suitable gloves. In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

Poisons schedule number: S6

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Name:	CAS Number:	Proportion (w/w):	Classification	Risk phrase
Pindone, sodium salt	83-26-1	25g/L	Xn>=1% conc. </+ 3%	R48/22
Other ingredients not determined to be hazardous	N/A	up to 100%		

4. FIRST AID MEASURES

First aid: For advice, if poisoning occurs, contact the Poisons Information Centre (phone toll free 13 11 26 anywhere in Australia) or a doctor. Have this MSDS or the label with you.

Swallowed: If swallowed, do not induce vomiting. Hazardous, seek medical attention in Effects are cumulative and delayed in action.

Eye:	If in eyes, hold eyelids apart and flush continuously with running water. Continue to flush until advised to stop by the Poisons Information Centre or a doctor, or, for at least 15 minutes. May cause irritation.
Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Then wash skin with soapy water.
Inhaled:	This product is a low inhalation hazard. Unlikely route of exposure.
Advice to doctor:	Vitamin K ₁ (phytomenadione) only, can be used as an antidote if patient shows signs of anticoagulant poisoning (bleeding, haemorrhage). Repeat as necessary based on monitoring of prothrombin (PT) times. It is important to ascertain the route of exposure and the quantity of bait exposed to. Prolonged PT times may not be evident until 48h after exposure but are usually prolonged at 24h. PT times generally reach a maximum at 36-72h after exposure. Symptoms include anaemia, shortness of breath during exertion, fatigue, excessive bleeding from minor cuts, nose bleeds and bleeding from the gums. Life threatening symptoms include complications from massive gastrointestinal bleeding and intracranial haemorrhage.

5. FIRE FIGHTING MEASURES

Fire & explosion hazards:	The bait is not flammable and will not auto-ignite. Packaging is combustible.
Suitable extinguishing media:	Water spray, foam, carbon dioxide, dry chemical powder
Hazards from combustion:	In case of fire do not inhale fumes. Wear mask and gloves. Hazardous products of combustion may include oxides of carbon and unidentified pyrogenic substances.
Fire fighting	
Special advice in case of fire	Emergency workers should wear full protective equipment and supplied-air breathing apparatus. Toxic or irritant gases, vapours or particulates may be generated in a fire. Spray water on containers to cool. Contain contaminated fire-fighting water.

6. ACCIDENTAL RELEASE MEASURES

Small spill or leak:	While wearing PVC gloves, mop-up excess liquid using absorbent sponge or towel. Prevent spillage from entering drains or watercourses. Dispose of sponges or towels in accordance with local regulations.
Emergency procedures:	Initial Emergency Response Guide: none
Accidental release measures	If spill is of significant quantity, move non-essential persons away. Seal leak. Remove leaking packages and place in over-bin. Do not allow to enter drains or sewer. Sweep up and pack in properly labelled container for disposal. Negotiate disposal with waste authority for jurisdiction.
Occupational release:	As for accidental release. Wear impervious gloves and eye protection.

7. HANDLING AND STORAGE

Safety Directions

Splashed liquid may irritate the eyes. Avoid contact with eyes. Wash hands after use. Keep away from foodstuffs and beverages. Do not eat, drink or smoke when using the product.

Precautions for safe handling: To avoid risks for man and environment the instructions for use are to be followed. Wear elbow length PVC gloves when handling this product and wash hands and gloves thoroughly with soap and water after use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

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. Store on a floor providing containment.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National exposure standards: No ASCC exposure standard allocated. However, for information, note that the following standards exist:

OSHA Regulations TWA = 0.1 mg/cu.m

NIOSH Regulations IDLH = 100 mg/cu.m

The Time Weighted Average (TWA) is the concentration of the substance in the worker's breathing zone, exposure to which over 8-hour days, 5-day weeks over a working lifetime, should not cause any undue discomfort or health impairment to nearly all workers. The Short Term Exposure Limit (STEL) means a 15 minute TWA exposure which should not be exceeded and should not be repeated within 60 minutes or more than four times per day.

Biological limit values: No biological limit allocated.

Engineering controls: The product formulation dilutes the concentration of Pindone.

Personal Protective Equipment (PPE)

Respirator: Not required for handling packages of the product. If dried product or dry baits are handled, respiratory protection should be used. Consult AS/NZS 1715 for selection.

Eye Protection: Avoid contact with eyes. When decanting liquid or making baits or cleaning-up a spill, use chemical goggles complying with AS 1337 / 1337.

Skin protection: When decanting liquid and when preparing and distributing the bait wear elbow-length PVC gloves. For cleaning-up a spill, wear impervious gloves such as PVC coated cotton gloves complying with AS/NZS 2161.2.

Ventilation: Not required for handling intact packages.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Dark green liquid.	Flashpoint:	Not flammable.
Vapour pressure:	Not applicable.	Vapour density:	Not applicable.
Flammability limits:	Not flammable.	Boiling point:	100°C (water).
Solubility in water:	All proportions (100%).	Specific gravity:	1.06g/mL at 25°C.

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal storage and handling conditions.
Incompatible materials:	None identified.
Thermal decomposition:	None at normal temperatures.
Dangerous reactions:	None known.
Reactivity:	Stable.
Conditions to avoid:	Exposure to elevated temperatures and light.
Hazardous decomposition:	No significant decomposition expected at normal temperatures.
Hazardous decomposition products:	No specific data
Polymerisation:	No hazardous polymerisation will occur.

11. TOXICOLOGICAL INFORMATION

Acute oral rat LD₅₀ = 280mg/kg/bw. For the 100% active ingredient (source RTECS NK6300000). See also http://pmep.cce.cornell.edu/profiles/rodent/rodent_M_Z/pindone/pindone_prf_0185.html

Mechanism of Action

<i>Acute:</i>	Pindone causes a depression in the liver function to activate vitamin K. This in turn causes a decrease in blood clotting factors (II, VII, IX and X) causing an antiprothrombin effect (the inability for the blood to clot). Large single doses can cause acute poisoning. Pindone has a cumulative effect, causing anticoagulation poisoning with a long latent period between ingestion and symptoms. Anticoagulant effects may persist for days or weeks depending on the dose consumed. Patients with hepatic dysfunction, malnutrition or a bleeding diathesis are at greater risk.
Swallowed:	Poisonous if swallowed. Symptoms include bleeding from nose, gums, blood in stool, blood in urine, bruising, fatigue and shortness of breath during exertion, anaemia.
Eye:	Avoid contact with eyes. May be irritating.
Skin:	Avoid contact with skin. May be mildly irritating on prolonged or frequent contact.
Inhaled:	Harmful if inhaled.
<i>Chronic:</i>	Repeated minor exposure may cause anticoagulant effects see acute toxicological information above.

12. ECOLOGICAL INFORMATION

Do not contaminate streams, rivers or waterways with the chemical or used containers. Information on non-target animal distribution, conservation status, habitat preference, diet, tolerance to 1080, body weight and size of home range can be used to reduce poisoning risks posed by baiting programs. Time baiting programs when non-target species are least active or least susceptible.

Ecotoxicity: Active ingredient is classified as a marine pollutant. Concentration of product is below cutoffs as a classification as a dangerous good.

Persistence and degradability Losses from baits may occur during outdoor exposure. The chemical is more mobile in sand than clay soils. The active ingredient is expected to be biologically degradable over time and will not accumulate in soil or water. Tests of pindone over 71 days found no significant losses in concentration though a percentage change noted indicating bacterial decomposition of pindone over time (Parker and Etheridge 2002).

An NRA review of Pindone (May 2002) is available at <http://www.apvma.gov.au/chemrev/pindone2.pdf>

13. DISPOSAL CONSIDERATIONS

Triple rinse and bury rinsate and empty containers in a local authority landfill. If no landfill is available, bury the containers below 0.5m in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers should not be burnt. Do NOT re-use containers for any other purpose.

14. TRANSPORT INFORMATION

This product is not classified as dangerous goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th Edition). It has been assessed under Class 6.1 – Toxic substances and under Class 9 - Miscellaneous dangerous substances and articles. The toxicity of this product places it below cut off criterion for classification for both these categories.

15. REGULATORY INFORMATION

Poisons schedule number: **S6** All ingredients are present in AICS

The APVMA registration number is 40158/1102

16. OTHER INFORMATION

Date of Preparation of this MSDS: 30 May 2013

This Material Safety Data Sheet (MSDS) has been developed using the following references:

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edn. [NOHSC:2011(2003)]
Australian Dangerous Goods Code 7th Edition. (2007)

Parker, R.W. and Etheridge, J.L. (2002) *Behaviour of Pivalyn in Soil Systems*, Report to Animals Control Technologies from Alan Fletcher Research Station, Queensland Department of Natural Resources, Unpublished.

Reigart, R. and Roberts, J. editors (1999) *Recognition and Management of Pesticide Poisoning 5th Edition*, EPS Office of Pesticides Programs, Washington D.C.

ACRONYMS USED IN THIS MSDS

SUSDP	Standard for the Uniform scheduling of Drugs and Poisons.
ADG Code	Australian Dangerous Goods (ADG) Code.
CAS No.	Chemical Abstracts number.
UN No.	United Nations identifying number for DG.
R-phrases	Risk phrases identifying main hazard of ingredient or product.
S-phrases	Safety phrases identifying main safety measures to be used.
ASCC	Australian Safety and Compensation Commission.
NOHSC	National Occupational Health and Safety Commission.
NTP	National Toxicology Programme (USA).
IARC	International Agency for Research on Cancer.
AICS	Australian Inventory of Chemical Substances.
HAZCHEM	Code for information for emergency services.

The physical values and properties described in this MSDS are typical values based on scientific literature and material produced to date, and are believed to be reliable. Animal Control Technologies provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. The information is supplied upon the condition that the persons receiving information will make their own determination as to the suitability for their purposes prior to use of this product. Due care should be taken to ensure that the use of this product and its disposal is in compliance with all relevant Federal, State and Local Government regulations.

End of MSDS