1. IDENTIFICATION OF THE SUBSTANCE AND MANUFACTURER

1.1 Product identifier
Trade Name: PESTOFF Brodifacoum Possum Bait

1.2 Relevant identified uses of the substance or mixture and uses advised against
Cereal based baits for possum control.

1.3 Details of the supplier of the safety data sheet
Company: Orillion, 408 Heads Road, Wanganui 4501, New Zealand.
(Orillion is the trading name of Animal Control Products Ltd.)
Telephone: +64 (6) 3445302 or +64 (21) 919 624
Email address: enquiries@orillion.com

1.4 Emergency telephone number
National Emergency Contact number: 111
NZ National Poisons Information Service: 0800 764 766

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Acute oral toxicity: Class 6.9B
Ecotoxic – Toxic to terrestrial animals: Class 9.1D
CAS Registry number of active ingredient: 56073-10-0

2.2 Label Elements:
Hazard Pictogram: Warning

Signal word
Precautionary Statements

Hazard Statements: H373, H413
H373: May cause damage to organs through prolonged or repeated exposure.
H413: May cause long lasting harmful effects to aquatic life

Precautionary Statements: P103b, P260, P273, P314
P103b: Read Label before use.
P260: Do not breath dust
P273: Avoid release to the environment
P314: Get medical advice/attention if you feel unwell.

Storage: P405
Store locked up

Disposal: P501
Dispose of contents/container in accordance with label directions.

2.3 Other Hazards
No data.
3. **COMPOSITION / INFORMATION ON INGREDIENTS**

3.1 Substances
Contains no substances of concern other than the active ingredient.

3.2 Mixtures
Chemical Nature: Brodifacoum 20ppm

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Concentration (% w/w)</th>
<th>Classification EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>C$<em>{31}$H$</em>{23}$O$_3$Br</td>
<td>56073-10-0</td>
<td>0.002%</td>
<td>2588</td>
</tr>
<tr>
<td>Other non-Hazardous ingredients *</td>
<td>Cereals, sugars, waxes and binders</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* do not affect the hazardous classifications of the substance

4. **FIRST AID MEASURES**

Ingestion:
In the event of ingestion, do not induce vomiting. Consult a physician and provide an estimation of the amount of product ingested. In the case of very small amounts of product (< 10 grams) being taken, no symptoms may develop but larger amounts may affect blood clotting times. A physician can assess this and provide Vitamin K1 therapy, as necessary.

Eye Contact:
Wash eyes with water.

Skin Contact:
Wash exposed area thoroughly with soap and water, then rinse.

Contaminated Clothing:
Remove contaminated clothing and wash before re-use. Wear gloves and overalls when handling baits. Do not eat, drink, or smoke. Clothing and gloves should be decontaminated by washing in hot soapy water.

**SYMPTOMS OF POISONING:**

**Early Symptoms:**
No symptoms may be apparent for several days if poisoning has occurred. Can kill if swallowed in large quantities. Nausea and vomiting may occur soon after ingestion.

**Later Symptoms:**
The active constituent (Brodifacoum) is an anticoagulant chemical, which if taken by humans, domestic animals, or pets, will reduce the clotting power of the blood. In some cases, effects from exposure may be delayed for several days or may not be evident unless checked by a physician. Typical overt symptoms of poisoning include bleeding gums, increased tendency to bruising, blood in urine and faeces and excessive bleeding from minor cuts.

**Severe Symptoms:**
Haemorrhagic shock, coma and death may follow in cases of severe poisoning.

**AS THE SYMPTOMS OF POISONING WILL BE DELAYED FOR SEVERAL DAYS, ALWAYS SEEK MEDICAL ADVICE IF POISONING IS SUSPECTED.**

5. **FIRE FIGHTING MEASURES**

The product contains no toxic emissions as vapours, gases, or odours.
The principle hazard route is via ingestion.

**Suitable extinguishing Media:**
Water fog, fine water spray, foam or as appropriate to surrounding materials.

**Unsuitable extinguishing Media:**
None identified.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Wear personal protective equipment.
See protective measures under points 7 and 8.

Methods and materials for containment and clean up:
In the event of major spills, isolate the spill area and take all practicable steps to manage any harmful effects of a spillage including preventing baits from entering streams or waterways. Scoop spilled baits into secure containers. Recover any undamaged bait for later use by placing in appropriately labelled containers and dispose of spoiled bait as directed in the disposal section below. Use a broom to collect fine material and wash down the spill area with copious water only after all spilled bait has been removed.

Environmental Considerations:
Consider possible hazards arising from irrigating spill sites. Brodifacoum is not water soluble but fine bait material may pose a risk to people, pets, livestock, wildlife, and fish.

7. HANDLING AND STORAGE

Precautions for safe handling:
When handling open containers or baits, wear latex or rubber gloves. When loading aircraft or working in windy conditions, wear overalls, goggles, and a dust mask as protection against dust entering the eyes or mouth. Do not eat, drink, or smoke when using the product or handling open containers. Wash protective clothing and equipment after use. Remove the outer layer of clothing and wash hands and exposed skin thoroughly before meals and after any contact.

Conditions for safe storage, including any incompatibilities:
Store in original container, tightly closed, under lock and key and away from feed or foodstuffs. Keep out of reach of children, pets, and livestock.

Incompatible Materials:
None identified.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:
Not Applicable (not assigned)

Engineering Measures:
Decontamination is through microbial decomposition in a biologically active medium.

Personal Protection Equipment:
Operators using or handling the product in open containers must wear gloves. Do not smoke, drink, or eat while handling the product. When working around aircraft, wear a suitable dust mask to prevent inhalation of airborne particles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour:
Pellets have a solid cylindrical form, are dyed blue or green and may have an odour of cinnamon, fruit flavouring or chocolate.

<table>
<thead>
<tr>
<th>Property</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State:</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance:</td>
<td>Cylindrical blocks</td>
</tr>
<tr>
<td>Odour:</td>
<td>Cinnamon, fruit, or chocolate</td>
</tr>
<tr>
<td>Odour Threshold:</td>
<td>Not relevant</td>
</tr>
<tr>
<td>pH:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting point/range:</td>
<td>Not relevant</td>
</tr>
</tbody>
</table>
Boiling point/range: Not relevant
Flash Point: No Data Available
Evaporation rate: No Data Available
Flammability: No Data Available
Upper/lower flammability or explosive limits: No Data Available
Vapour Pressure: Not relevant
Vapour density: Not relevant
Relative Density: No Data Available
Water Solubility: Brodifacoum is not water soluble.
Lipid Solubility: No Data Available
Partition coefficient (N-octanol/water): No Data Available
Auto-ignition Temperature: No Data Available

10. STABILITY AND REACTIVITY

Brodifacoum cereal based pellets are stable and non-reactive under normal storage and use conditions.

11. TOXICOLOGICAL INFORMATION

The baits present a very low hazard to operators unless taken orally.

Toxicity Data for the Active Ingredient - Various Species *

<table>
<thead>
<tr>
<th>Species (Oral)</th>
<th>LD50 - active</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Laboratory Rat</td>
<td>0.26 mg/kg B/W</td>
</tr>
<tr>
<td>Brush-tailed possum</td>
<td>0.8 mg/kg B/W</td>
</tr>
<tr>
<td>Dog</td>
<td>3.56mg/kg B/W</td>
</tr>
<tr>
<td>Cat</td>
<td>25.0 mg/kg B/W</td>
</tr>
<tr>
<td>Mouse</td>
<td>0.4mg/kg B/W</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Use the products only for the purpose indicated and, in the manner, prescribed by the product label.

Brodifacoum may persist for many months in the fatty tissue, liver, and kidneys of sub-lethally poisoned animals. Mortally poisoned animals may present a secondary poisoning risk to carnivorous birds and mammals. Tertiary poisoning risks for example when feral pigs eat poisoned possums and are subsequently taken and eaten by pig hunters. Take steps to mitigate any potential non-target exposure by wildlife, domestic animals, or humans. Studies have shown that brodifacoum concentrations will decline within decaying carcasses.

Improper disposal of unwanted pesticide is unlawful. If wastes cannot be disposed of according to label instructions contact your local Regional Council hazardous waste advisor for guidance

13. DISPOSAL CONSIDERATIONS

Product which is surplus or spoiled should be disposed of by burying with other organic material on the active tip face of an appropriately managed landfill or buried within the biologically active layer of soil elsewhere within a secure area. Ensure that a good covering of earth is applied over the bait immediately to prevent access by scavenging birds. Avoid deep disposal.

Alternatively, burn unwanted bait material in a suitably constructed and appropriately located incinerator and bury any residues as above. As the smoke and fumes produced by burning is irritating and potentially harmful, ensure wind does not carry smoke plume towards populated areas.
14. TRANSPORT INFORMATION

Not classified Dangerous Goods as toxicity falls below Packing Group III threshold
Maximum transport quantity when for use as tools of trade: No Limits

15. REGULATORY INFORMATION

Registered Pesticides:
PESTOFF Brodifacoum Possum Bait– V004991.
HSNO Approval
HSR001612

16. OTHER INFORMATION

Special Precautions & Other Comments
Do not use poisoned or contaminated animals for food or feed.

This product is toxic to most wildlife. Birds and mammals feeding on carcasses of contaminated animals may be killed. Take measures to minimise the chance of baits entering any body of water. Apply the product only as specified by its label directs.

Where practicable, exposed bodies of all poisoned animals should be collected and destroyed by complete burning or deep burial at a landfill approved for hazardous wastes.

CONSULT NEAREST POISON CONTROL CENTER FOR CURRENT INFORMATION

All information contained in this data sheet is as accurate and up to date as possible. Since Orillion cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application.

Revised by: ADC - January 2021