SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: ZP® MOUSE ZINC PHOSPHIDE BAIT
Australian Registration Number: 60832
Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses: Acute Rodenticide - Ready to use
Uses advised against: Use only for the purpose described above

MANUFACTURER:
Bell Laboratories, Inc.
3699 Kinsman Blvd.
Madison, WI 53704, USA
email: registration@belllabs.com

IMPORTER:
Bell Australia Pty Ltd.
Level 18 King George Central
145 Ann Street
Brisbane, QLD 4000

EMERGENCY PHONE NUMBERS:
Poisonings: 131 126 POISON
INFORMATION CENTRE
Others: (02) 9647-2111

SECTION 2. HAZARDS IDENTIFICATION

THIS PRODUCT IS CLASSIFIED AS: NOT HAZARDOUS ACCORDING TO THE CRITERIA OF SWA.
NOT A DANGEROUS GOOD ACCORDING TO AUSTRALIAN DANGEROUS GOODS (ADG) CODE, IATA OR IMDG/IMSBC CRITERIA.

SUSMP Classification: S7
ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.
UN Number: None allocated

GHS Signal word: WARNING
HAZARD STATEMENT:
H302: Harmful if swallowed
AUH029/031: Contact with water or acid liberates gas
PREVENTION
P264: Wash contacted areas thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
RESPONSE
P301+P310: IF SWALLOWED: Immediately call a poison center or doctor
P330: Rinse Mouth
STORAGE
P402+P404: Store in a dry place. Store in a closed container.
DISPOSAL
P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>% By weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Phosphide</td>
<td>1314-84-7</td>
<td>2.0%</td>
</tr>
<tr>
<td>Inert and Non-Hazardous Ingredients</td>
<td>Proprietary</td>
<td>98.0%</td>
</tr>
<tr>
<td>(Unlisted components are non-hazardous)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

**Description of first aid measures**

**Ingestion:** Call physician or emergency number immediately. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call. Do not induce vomiting unless instructed by physician.

**Inhalation:** Not applicable.

**Eye contact:** Hold eye open and rinse slowly with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. If irritation develops, obtain medical assistance.

**Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. If irritation develops, obtain medical assistance.

**Most important symptoms and effects, both acute and delayed**

Ingestion of excessive quantities may cause nausea, abdominal pain, tightness in the chest, eye irritation, or weakness.

**Advice to physician:** There is no specific antidote. Probable mucosal damage may contradict the use of gastric lavage. Sodium bicarbonate can be given orally to neutralize the stomach acidity. The stomach and intestinal tract can be evacuated, oxygen administered and cardiac and circulatory stimulants given.

**Advice to Veterinarian:** For animals ingesting bait and/or showing poisoning signs, induce vomiting by using hydrogen peroxide. Sodium bicarbonate can be given orally to neutralize the stomach acidity. The stomach and intestinal tract can be evacuated, oxygen administered and cardiac and circulatory stimulants given.

SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

Suitable Extinguishing Media: Dry chemical, soda ash, sand, or inert gas.

Unsuitable Extinguishing Media: Avoid water or foam as they may form phosphine gas upon contact with zinc phosphide.

**Special hazards arising from the mixture:** High temperature decomposition or burning in air can result in the formation of toxic or flammable gases, which may include flammable phosphine gas, oxides of phosphorus, and zinc.

**Advice for firefighters:** Wear protective clothing and self-contained breathing apparatus. Fight fire upwind and evacuate downwind as appropriate.

SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Gloves, long sleeve shirt, long pants, shoes, and socks should be worn when handling the bait. Collect spillage without creating dust.

**Environmental precautions:** Do not allow bait to enter drains or water courses. Where there is contamination of streams, rivers or lakes contact the appropriate environment agency.

**Methods and materials for containment and cleaning up**

**For Containment:** Carefully sweep up spilled material immediately. Avoid contact with dust. Place in properly labeled container for disposal or re-use.

**For Cleaning Up:** Wash contaminated surfaces with detergent. Dispose of all wastes in accordance with all local, regional and national regulations.

**Reference to other sections:** Refer to Sections 7, 8 & 13 for further details of personal precautions, personal protective equipment and disposal considerations.

SECTION 7. HANDLING AND STORAGE

**Precautions for safe handling:** Do not handle the product near food, animal foodstuffs or drinking water. Keep out of reach of children. Do not use near heat sources, open flame, or hot surfaces. As soon as possible, wash hands thoroughly after applying bait and before eating, drinking, chewing gum, using tobacco, or using the toilet.

**Conditions for safe storage, including any incompatibilities:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Check packaging - there may be further storage instructions on the label.
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, the product may evolve phosphine gas which presents a serious toxic risk and there are exposure standards for phosphine.

The Exposure Standard for Phosphine: TWA = 0.3ppm (0.42 mg/m³)
STEL = 1.0ppm (1.4 mg/m³)
As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.
No biological limit allocated.

The following Australian Standards will provide general advice regarding safety clothing and equipment:
Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210 No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Respiratory Protection: If handling large quantities of bait to fill hoppers wear a full face-piece respirator with combined dust and gas cartridge or supplied air respirator. Consult AS/NZS 1715 and AS/NZS 1716 for further information.

Eye and Face protection: Eye and face protection is not needed under normal and intended conditions of product use. However if protection is required consult AS/NZS 1336 and AS/NZS 1337 for further information.

Skin Protection: PVC or chemical resistant gloves must be worn when opening the container and using the product. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information. Trousers, long sleeved shirt or overalls and closed in shoes or safety footwear should be worn as a general precaution. Consult AS/NZS 2210 and AS/NZS 2919 for further information.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Appearance/Color: Grey granular pellet
Odor: Garlic-like
Odor Threshold: Not applicable, odor not associated with a hazardous material.
pH: Not applicable, is not dispersible with water.
Melting point: No data
Boiling point: Not applicable to rodenticide bait
Flash point: No data
Evaporation rate: Not applicable, is a solid.
Flammability: No data
Upper/lower flammability or explosive limits: No data
Vapor Pressure: No data
Vapor Density: No data
Relative Density: 1.35 g/mL @ 20°C
Solubility (water): Not water soluble
Solubility (solvents): No data
Partition coefficient: n-octanol/water: No data
Auto-ignition temperature: No data
Decomposition temperature: No data
Viscosity: Not applicable, is not a liquid.

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Stable when stored in original container in a cool, dry location.
Chemical stability: Stable when stored in original container in a cool, dry location.
Possibility of hazardous reactions: Refer to Hazardous decomposition products
Conditions to avoid: Avoid extreme temperatures (below 0°C or above 40°C).
Incompatible materials: Avoid water, acidic materials.
Hazardous decomposition products: Avoid exposure to acidic conditions, light, heat, and extreme humidity. Exposure to acidic conditions may result in the liberation of flammable phosphine gas. Oxides of zinc and phosphide.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects
Acute Toxicity
LD50, oral (ingestion): >2000 mg/kg (rats) (Zinc phosphide Rat LD50 oral: 21.0 mg/kg bw).
**LD50, dermal (skin contact):** > 5001 mg/kg (rats) (Zinc phosphide rabbit LD50 dermal: 2000 - 5000 mg/kg bw).

**LC50, inhalation:** Product is a granular pellet and therefore exposure by inhalation is not relevant.

**Skin corrosion/irritation:** Not irritating to skin.

**Serious eye damage/irritation:** Slight eye irritation potential

**Respiratory or skin sensitization:** Dermal sensitization: Not a Sensitizer (Guinea pig maximization test).

**Germ cell mutagenicity:** Contains no components known to have a mutagenetic effect.

**Carcinogenicity:** Contains no components known to have a carcinogenetic effect.

<table>
<thead>
<tr>
<th>Components</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Phosphide</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**Reproductive Toxicity:** No data

**Aspiration Hazard:** Not applicable. Product is a granular pellet.

**Target Organ Effects:** None

### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity Effects:** This product is extremely toxic to fish, birds and other wildlife. Dogs and predatory and scavenging mammals and birds might be poisoned if they feed upon animals that have eaten this bait. Do not apply this product directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff also may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash water or rinsate.

**Persistence and degradability:** Product is inherently biodegradable. Zinc phosphide rapidly decomposes in water.

**Bioaccumulative potential:** Not determined. Zinc phosphide water solubility is extremely low (< 0.1mg/l).

**Mobility in Soil:** Not determined. Mobility of zinc phosphide in soil is considered to be limited.

**Other adverse effects:** None.

### SECTION 13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage or disposal.

**Disposal:** Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

### SECTION 14. TRANSPORT INFORMATION

**UN Number:** This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

### SECTION 15. REGULATORY INFORMATION

**AICS:** All of the significant ingredients in this formulation are compliant with NICNAS regulations.

### SECTION 16. OTHER INFORMATION

This SDS contains only safety-related information. For other data see product literature.

**Acronyms:**

- **ADG Code:** Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
- **AICS:** Australian Inventory of Chemical Substances
- **SWA:** Safe Work Australia, formerly ASCC and NOHSC
- **CAS number:** Chemical Abstracts Service Registry Number
- **Hazchem Code:** Emergency action code of numbers and letters that provide information to emergency services especially firefighters
- **IARC:** International Agency for Research on Cancer
- **OSHA:** Occupational Health and Safety Administration (USA)
- **NFPA:** National Fire Protection Agency (USA)
- **HMIS:** Hazardous Materials Identification System (USA)
- **NOS:** Not otherwise specified
- **NTP:** National Toxicology Program (USA)
- **R-Phrase:** Risk Phrase
- **SUSMP:** Standard for the Uniform Scheduling of Medicines & Poisons
- **UN Number:** United Nations Number

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health: 2 (caution)</th>
<th>Flammability: 1 (slight)</th>
<th>Reactivity: 0 (stable)</th>
<th>Specific Hazard: None</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health: 2 (moderate)</td>
<td>Flammability: 1 (slight)</td>
<td>Reactivity: 0 (minimal)</td>
<td>Protective Equipment: B</td>
</tr>
</tbody>
</table>

**Disclaimer:** The information provided in this Safety Data Sheet has been obtained from sources believed to be reliable. Bell Laboratories, Inc. provides no warranties; either expressed or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your consideration and investigation. The user is responsible to ensure that they have all current data, including the approved product label, relevant to their particular use.

---

Trade Name: ZP Mouse Zinc Phosphide Bait Australia
Supplier: Bell Laboratories, Inc.
Date Created: December 2016
Page 4 of 4