ZP® AG™ PELLETS

SAFETY DATA SHEET


DATE OF ISSUE: January 2015

PREPARED BY: CAR

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: ZP® AG™ PELLETS
EPA Registration Number: 12455-17-3240

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Acute Rodenticide - Ready to use – Restricted Use
Uses advised against: Use only for the purpose described above

MANUFACTURER/SUPPLIER:
Motomco
3699 Kinsman Blvd.
Madison, WI 53704, USA
Email: sds@motomco.com
Phone: 608-244-2904
Medical or Vet Emergency: 877-854-2494 or 952-852-4636
Spill or Transportation Emergency: 800-424-9300 (CHEMTREC)

2. HAZARD IDENTIFICATION

Classification according to Regulation OSHA 1910.1200(d): Not classified

See Section 15 for information on FIFRA applicable safety, health, and environmental classifications.

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>
</tbody>
</table>

4. FIRST AID MEASURES

Description of first aid measures

Ingestion: Call physician or emergency number immediately. Do not drink water. Do not give anything by mouth or induce vomiting unless instructed by physician.

Inhalation: Move person to fresh air. If not breathing, call an ambulance, then give artificial respiration, preferably mouth to mouth, if possible.

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.
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.

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.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not handle the product near food, animal foodstuffs or drinking water. 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: Store only in original container in a cool, dry place, inaccessible to pets and wildlife. Do not contaminate water, food or feed by storage or disposal. Keep containers closed and away from other chemicals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc Phosphide</td>
<td>Not Established</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls: Not required
Occupational exposure limits: Not established

Personal Protective Equipment:
Respiratory protection: Persons loading pellets or baits into aircraft or mechanical ground equipment and persons loading/applying with a hand-pushed or hand-held equipment, such as a push-type spreader or cyclone spreader, must wear a dust/mist filtering respiration (MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with a R, P, or HE filter).
Eye protection: Protective eyewear.
Skin protection: Gloves, long sleeve shirt, long pants, shoes, and socks should be worn when handling the bait.
Hygiene recommendations: Keep and wash PPE separately from other laundry. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash hands thoroughly after applying bait and before eating, drinking, chewing gum, using tobacco or using the toilet, and change into clean clothing.
9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Color:</td>
<td>Grey granular pellet</td>
</tr>
<tr>
<td>Odor:</td>
<td>Garlic-like</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>Not applicable, odor not associated with a hazardous material.</td>
</tr>
<tr>
<td>pH:</td>
<td>Not applicable, ZP AG Pellets is not dispersible with water.</td>
</tr>
<tr>
<td>Melting point:</td>
<td>Not applicable to rodenticide bait</td>
</tr>
<tr>
<td>Boiling point:</td>
<td>Not applicable to rodenticide bait</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Not applicable, ZP AG Pellets does not contain components classified as flammable.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not applicable, ZP AG Pellets is a solid.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits:</td>
<td>Not applicable, ZP AG Pellets does not contain components classified as flammable or explosive.</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>Not applicable to rodenticide bait</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>NA: ZP AG Pellets is a solid</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>1.35 g/mL @ 20°C</td>
</tr>
<tr>
<td>Solubility (water):</td>
<td>Not water soluble</td>
</tr>
<tr>
<td>Solubility (solvents):</td>
<td>Not applicable to rodenticide bait</td>
</tr>
<tr>
<td>Partition coefficient:</td>
<td>n-octanol/water:</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>Not applicable, ZP AG Pellets does not contain components classified as flammable.</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not applicable to rodenticide bait</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not applicable, ZP AG Pellets is not a liquid.</td>
</tr>
</tbody>
</table>

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.

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: ZP AG Pellets is an 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: ZP AG Pellets contains no components known to have a mutagenetic effect.

Carcinogenicity: ZP AG Pellets contains no components known to have a carcinogenic 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: ZP AG Pellets: No data

Aspiration Hazard: Not applicable. ZP AG Pellets is a granular pellet.

Target Organ Effects: None

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: ZP AG Pellets is inherently biodegradable. Zinc phosphide rapidly decomposes in water.

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

Mobility in Soil: Not determined for ZP AG Pellets. Mobility of zinc phosphide in soil is considered to be limited.

Other adverse effects: None.
13. DISPOSAL CONSIDERATIONS

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

Pesticide Storage: Store only in original container in a cool, dry place inaccessible to children and pets. Keep containers closed and away from other chemicals.

Pesticide Disposal: Wastes resulting from the use of this product may be placed in trash or delivered to an approved waste disposal facility.

Container Handling: Non-refillable container. Do not reuse or refill this container. [Plastic:] Offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill; or by incineration. In most states, burning is not allowed. [Paper:] Dispose of empty container by placing in trash, at an approved waste disposal facility or by incineration. In most states, burning is not allowed.

14. TRANSPORT INFORMATION

UN number: Not regulated
UN proper shipping name: Not regulated
Transport hazard class(es): Not regulated
Packing group: Not regulated

Environmental Hazards
DOT Road/Rail: Not considered hazardous for transportation via road/rail.
DOT Maritime: Not considered hazardous for transportation by vessel.
DOT Air: Not considered hazardous for transportation by air.

Freight Classification: LTL Class 60
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

Special precautions for user: None

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:
FIFRA: This pesticide product is regulated by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The safety, health, environmental, and hazard information required on the pesticide label is listed below and reflected throughout this SDS. The pesticide label also includes other important information, including directions for use.

Signal Word: CAUTION

Precautionary Statements: Contains phosphine producing active ingredient, zinc phosphide. Harmful if swallowed or inhaled. Keep away from children, domestic animals and pets. Do not get in eyes, on skin or on clothing.

Potential Health Effects:
Eye Contact: May cause irritation
Skin Contact: Non-irritating to the skin
Ingestion: Harmful if swallowed

TSCA: All components are listed on the TSCA Inventory or are not subject to TSCA requirements
CERCLA/SARA 313: Not listed
CERCLA/SARA 302: Not listed

16. OTHER INFORMATION

For additional information, please contact the manufacturer noted in Section 1.

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health: 2 (caution)</th>
<th>Flammability: 0 (will not burn)</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: 0 (minimal)</td>
<td>Reactivity: 0 (minimal)</td>
<td>Protective Equipment: B</td>
</tr>
</tbody>
</table>

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