

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

SEP 30 2003

HACO, Inc.  
P.O. Box 7190  
Madison, WI 53707

Attention: Ms. Judith A. Thompson

**Subject** PROZAP® Zinc Phosphide Pellets  
EPA Reg. No. 2393-521  
Your amended application of September 23, 2003  
Additional New Uses

**Purpose** This submission revises the labeling for this product, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to add additional regional uses (alfalfa, barley, dry beans, potatoes, sugar beets, timothy, and wheat).

**Label approval** The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable, provided that you submit one copy of final printed labeling with the following changes before you release the product for shipment:

1. Revise your "**Endangered Species Considerations**" by adding the new entries, as indicated in Enclosure 1.
2. Revise the use directions for the new uses as indicated in Enclosure 2.

Make sure that you follow the minimum type size requirements in the attachment for your final printed labeling.

**Existing Stocks** Existing stocks of previously approved labels may be used for 18 months.

2 7 15

**Consequence for non-compliance** This registration will be subject to cancellation in accordance with FIFRA sec. 6(e) if you do not comply with this condition. Your release for shipment of the product bearing the amended labeling constitutes acceptance of this condition.

A stamped copy of the labeling is enclosed for your records.

**EPA Contact** If you have questions about this letter, please contact me at 703-305-5407 (by phone), 703-305-6596 (by fax), or [peacock.dan@epa.gov](mailto:peacock.dan@epa.gov) (by E-Mail).

Sincerely yours,



Daniel B. Peacock, Biologist  
Insecticide-Rodenticide Branch  
Registration Division (7504C)

- Enclosures**
1. Additional "Endangered Species Considerations"
  2. Revised Application Directions
  3. Stamped Label
  4. Minimum Type Sizes for Final Printed Labels

**Letter Filed** Dan Peacock, Disk 125, A:\Zinc Phosphide\2393-521.ltr.-revised by dan,wpd

3 8 15

Prozap® Zinc Phosphide Pellets  
Container Label  
Page 1 of 3  
September 22, 2003

**RESTRICTED USE PESTICIDE**  
**DUE TO HAZARD TO NON-TARGET SPECIES**  
For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification.  
**ACCEPTED**

with COMMENTS  
In EPA Letter Dated:

**PROZAP®**

SEP 30 2003  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 2393-521

# ZINC PHOSPHIDE PELLETS

For spot treatment in and around buildings, around burrows, in orchards, vineyards and sugarcane fields and on rangeland and noncrop areas. For Broadcasting by ground spreader or aircraft in orchards, sugarcane fields and/or noncrop areas. For Ground Broadcasting in vineyards, in bushberries and in caneberries. For Broadcast use in California, Idaho, Oregon and Washington by ground spreader or aircraft in alfalfa. For Ground Broadcast use in Idaho, Oregon and Washington in timothy and timothy mixtures. For Broadcasting by ground spreader or aircraft in Idaho, Oregon, and Washington in barley, potatoes, sugar beets and wheat. For Ground Broadcasting in Idaho, Oregon and Washington in dry beans. For use in reduced tillage and no-till corn and in cucurbits at time of planting.

**ACTIVE INGREDIENT:**

Zinc Phosphide..... 2.0%  
**INERT INGREDIENTS:**.....98.0%  
Total.....100.0%

EPA Reg. No. 2393-521

EPA Est. No. 61282-WI-1

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

See inside booklet for additional precautionary statements and directions for use.

<b>First Aid</b>	
Have label with you when obtaining treatment advice.	
Any persons applying zinc phosphide products and experiencing signs and symptoms such as nausea, abdominal pain, tightness in the chest, or weakness, should be seen by a physician immediately.	
If swallowed	<ul style="list-style-type: none"> <li>• Call a poison control center, doctor or 1-800-301-7976 immediately for treatment advice or transport the patient to the nearest hospital.</li> <li>• Do not drink water.</li> <li>• Do not administer anything by mouth.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
If inhaled	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li> </ul>
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
• Call a poison control center, doctor, or 1-800-228-5635, ext. 136 immediately for treatment advice.	

4 8 15

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

Keep away from humans, domestic animals and pets. May be fatal or harmful if swallowed. Avoid eye or skin contact. Do not breathe dust. Avoid contamination of feed or foodstuffs. Do not mix with food or feed. Avoid contact with acids. Store in a dry place. Do not store around the home. Wash all utensils, spoons, or measuring devices thoroughly after using.

**Personal Protective Equipment**

All handlers, including loaders and applicators, and anyone who retrieves carcasses or unused bait after application must wear:

- gloves.

Anyone who applies bait by ground equipment, such as a push type spreader or cyclone spreader, must wear:

- dust mask.

Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE), such as gloves and dust mask. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

---

**User Safety Recommendations:**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
  - Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 

**ENVIRONMENTAL HAZARDS**

This product is toxic to wildlife and fish. Birds and other wildlife feeding on treated pellets may be killed. Do not apply to open ground, roads and areas in which no vegetation occurs. Pick up and properly dispose of all spilled toxic pellets. 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. Do not apply where runoff from this product will enter an aquatic system. Do not contaminate water when disposing of equipment washwaters. Check for and dispose of excess or spoiled pellets and carcasses daily until the pellets are expended or are removed.

**Notice:** It is a federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. The use of this product may pose a hazard to Federally designated endangered/threatened species. Suggested measures to protect endangered species in your county may exist in an EPA "Interim Measures" pamphlet. You may call EPA's Endangered Species Hotline, 1-800-447-3813, to find out if an "Interim Measures" pamphlet exists for your county and have one sent to you. You can also consult your local county extension office or pesticide state lead agency to determine whether they have imposed any requirements in your area to protect endangered and threatened species.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Before using this product, read on this label and the attached booklet all Precautionary Statements and all sections of the Directions for Use that are relevant to the sites where you intend to use this product and to the type(s) of rodents that you intend to control.

**STORAGE AND DISPOSAL**

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

**STORAGE:** Keep dry. Protect from direct contact with water or excessive moisture. Store in a well ventilated area not accessible to children, pets, domestic animals or wildlife. Keep away from heat and open flame. Once opened, do not store bag for prolonged period. In case of puncture, use clear overslip bag and securely close.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

5 7 15

---

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

---

**NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.**

Manufacturer and Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Manufacturer, and Buyer and User assume the risk of any such use. MANUFACTURER AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall MANUFACTURER OR SELLER be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF MANUFACTURER AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF MANUFACTURER OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Manufacturer and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Manufacturer.

*Manufactured for:* **HACO, Inc.**  
P.O. Box 7190, Madison, WI 53707 U.S.A.

**NET CONTENTS: 50 LBS (22.68 Kg)**

CODE: 0.U.NE 1 2 3 4 5 (RR/NE)

LA220206

6 8 15

## RESTRICTED USE PESTICIDE

DUE TO HAZARD TO NON-TARGET SPECIES

For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

# PROZAP® ZINC PHOSPHIDE PELLETS

For spot treatment in and around buildings, around burrows, in orchards, vineyards and sugarcane fields and on rangeland and noncrop areas. For Broadcasting by ground spreader or aircraft in orchards, sugarcane fields and/or noncrop areas. For Ground Broadcasting in vineyards, in bushberries and in caneberries. For Broadcast use in California, Idaho, Oregon and Washington by ground spreader or aircraft in alfalfa. For Ground Broadcast use in Idaho, Oregon and Washington in timothy and timothy mixtures. For Broadcasting by ground spreader or aircraft in Idaho, Oregon, and Washington in barley, potatoes, sugar beets and wheat. For Ground Broadcasting in Idaho, Oregon and Washington in dry beans. For use in reduced tillage and no-till corn and in cucurbits at time of planting.

### ACTIVE INGREDIENT:

Zinc Phosphide..... 2.0%

INERT INGREDIENTS:.....98.0%

Total.....100.0%

EPA Reg. No. 2393-521

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

See inside booklet for additional precautionary statements and directions for use.

### First Aid

Have label with you when obtaining treatment advice.

Any persons applying zinc phosphide products and experiencing signs and symptoms such as nausea, abdominal pain, tightness in the chest, or weakness, should be seen by a physician immediately.

If swallowed	<ul style="list-style-type: none"><li>• Call a poison control center, doctor or 1-800-301-7976 immediately for treatment advice or transport the patient to the nearest hospital.</li><li>• Do not drink water.</li><li>• Do not administer anything by mouth.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li></ul>
If on skin or clothing	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li></ul>
If inhaled	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.</li></ul>
If in eyes	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li></ul>
<ul style="list-style-type: none"><li>• Call a poison control center, doctor, or 1-800-228-5635, ext. 136 immediately for treatment advice.</li></ul>	

7 7 15

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
CAUTION**

Keep away from humans, domestic animals and pets. May be fatal or harmful if swallowed. Avoid eye or skin contact. Do not breathe dust. Avoid contamination of feed or foodstuffs. Do not mix with food or feed. Avoid contact with acids. Store in a dry place. Do not store around the home. Wash all utensils, spoons, or measuring devices thoroughly after using.

**Personal Protective Equipment**

All handlers, including loaders and applicators, and anyone who retrieves carcasses or unused bait after application must wear:

- gloves.

Anyone who applies bait by ground equipment, such as a push type spreader or cyclone spreader, must wear:

- dust mask.

Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE), such as gloves and dust mask. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

---

**User Safety Recommendations:**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
  - Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 

**ENVIRONMENTAL HAZARDS**

This product is toxic to wildlife and fish. Birds and other wildlife feeding on treated pellets may be killed. Do not apply to open ground, roads and areas in which no vegetation occurs. Pick up and properly dispose of all spilled toxic pellets. 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. Do not apply where runoff from this product will enter an aquatic system. Do not contaminate water when disposing of equipment washwaters. Check for and dispose of excess or spoiled pellets and carcasses daily until the pellets are expended or are removed.

**Notice:** It is a federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. The use of this product may pose a hazard to Federally designated endangered/threatened species. Suggested measures to protect endangered species in your county may exist in an EPA "Interim Measures" pamphlet. You may call EPA's Endangered Species Hotline, 1-800-447-3813, to find out if an "Interim Measures" pamphlet exists for your county and have one sent to you. You can also consult your local county extension office or pesticide state lead agency to determine whether they have imposed any requirements in your area to protect endangered and threatened species.

**ENDANGERED SPECIES CONSIDERATIONS:**

Whooping crane (*Grus americana*)

Do not use this product 30 days prior to arrival and 30 days after the whooping crane leaves known crane habitat.

Attwater's greater prairie chicken (*Tympanuchus cupido attwateri*)

Do not use this product in the presently occupied range of the Attwater greater prairie chicken in the following Texas counties: Aransas, Austin, Brazoria, Colorado, DeWitt, Fort Bend, Galveston, Goliad, Harris, Refugio, Victoria, Waller, and Wharton.

Yellow-shouldered blackbird (*Agelaius xanthomus*) and Puerto Rican plain pigeon (*Columba inornata wetmorei*)

This product must not be used in the following areas except in tamper-proof bait boxes (within 10 kilometers of Central Aquirre, Lago Cidra, Ceiba, San German: 15 kilometers of La Esperanza: South of Highway 2 from city of Mayaquez to the city of Ponce and all of Mona Island, Puerto Rico).

Utah prairie dog (*Cynomys parvidens*)

Do not use this product in the range of the Utah prairie dog. (Utah)

Salt-marsh harvest mouse (*Reithrodontomys raviventris*)

Do not use this product within ½ mile of salt marsh vegetation and/or brackish water wetlands which are located 1) near or adjacent to San Pablo Bay and San Francisco Bay or 2) in the Sacramento River below or adjacent to the confluence of the Sacramento River and the San Joaquin River. (California)

8 7 15

**ENDANGERED SPECIES CONSIDERATIONS: (cont.)**

Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*)

Do not use this product within 2 ½ miles of Baywood Park which is located on Morro Bay. (California)

Aleutian Canada goose (*Branta canadensis leucoparia*)

Do not use this product from October to March in the Federally closed goose hunting areas in the state of California. See current Duck and Goose Hunting game laws for current map.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**READ THIS LABEL:** Read this entire label and follow all use directions and use precautions.

**Use Restrictions:** Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. Keep all other persons out of the treated area during the application.

**LIMITATIONS**

The Following Limitations apply to the Agricultural Areas listed on this label: Pellets must not be applied on roads, near residential areas, or over water. Do not broadcast over growing crops other than alfalfa, barley, beans (dry), potatoes, sugar beets, sugarcane, and wheat. Apply pellets on warm, clear days. Do not graze animals in treated areas.

**ALFALFA**

\* **USE RESTRICTIONS:** For control of vole complex (*Microtus spp*) complex in alfalfa. All applications must occur shortly after a cutting of the hay, and/or prior to the new growth attaining a length of 2 inches. Alfalfa forage from treated areas must not be harvested until it reaches maturity. This use is restricted to California, Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by air or ground driven dispensing devices. A maximum of 2 applications by air or ground may be made at the rate of 4 to 6 pounds per acre. The second application may not be made to the same field or to other areas of the same field within 30 days. Do not apply by air when wind velocity exceeds 10 mph. Do not apply in piles or permit piles to be formed by equipment.

**BARLEY, POTATOES, SUGAR BEETS, and WHEAT**

\* **USE RESTRICTIONS:** For control of vole complex (*Microtus spp*) complex in barley, potatoes, sugar beets, and wheat. Do not apply bait post harvest or pre-plant. Do not apply this product to sugar beets and potatoes within 30 days of harvest, or to wheat and barley within 50 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by air or ground driven dispensing devices. A maximum of 2 applications by air or ground may be made at the rate of 4 to 6 pounds per acre. The second application may not be made to the same field or to other areas of the same field within 30 days. Do not apply by air when wind velocity exceeds 10 mph. Do not apply in piles or permit piles to be formed by equipment.

**BEANS (DRY)**

**USE RESTRICTIONS:** For control of prairie voles (*Microtus ochrogaster*), meadow voles (*M. pennsylvanicus*), house mice (*Mus musculus*), deer mice (*Peromyscus maniculatus*), white-footed mice (*P. leucopus*), thirteen-lined ground squirrels (*Spermophilus tridecemlineatus*), Ord's kangaroo rats (*Dipodomys ordii*), banner-tailed kangaroo rats (*D. spectabilis*), and Merriam's kangaroo rats (*D. merriami*) in dry beans. Do not apply within 30 days of harvest. Do not treat any area more than once per growing season. Do not apply by air. This use is restricted to California, Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** Broadcast pellets using hand or ground-driven dispensing devices. Do not exceed six pounds per acre.

**BUSHBERRIES and CANEBERRIES**

**USE RESTRICTIONS:** For control of meadow, prairie and pine voles (*Microtus spp.*) in bushberries [blueberries (highbush and lowbush), currant, elderberry, gooseberry, and huckleberry] and in caneberreries [blackberry, raspberry (black and red), loganberry, and cultivars or hybrids of these caneberreries]. Only apply this product in the dormant season: after final harvest and not later than the beginning of leaf emergence in the spring. Do not apply when ground is snow covered. Do not apply by air. Minimum preharvest interval is 70 days.



9 7 15

**BROADCAST BAITING:** This product may be broadcast by cyclone seeder, or by hand. When applying by hand (wear rubber gloves during hand broadcast operations), throw tablespoon amounts into heavy cover along bushes, rock outcrops, and fence lines. Make up to 2 applications at a minimum interval of 21 days, at the rate of 6 to 10 pounds per acre per application.

**CHRISTMAS TREE, ORNAMENTAL, AND NON-BEARING FRUIT TREE PLANTATIONS AND NURSERY STOCK**

**USE RESTRICTIONS:** For control of meadow, prairie and pine voles (*Microtus spp.*) in Christmas tree, ornamental, and non-bearing fruit tree plantations and nursery stock.

**BROADCAST BAITING:** Broadcast evenly by cyclone seeder or by (gloved) hand under infested nursery stock and/or non-bearing fruit trees. Concentrate treatments in areas with the heaviest vegetation cover. Do not broadcast bait on bare ground. Apply at a rate of 6-10 pounds per acre.

**HAND BAITING:** Near the base of infested stock, place teaspoonful quantities of pellets in 2-4 locations, either on surface trails or at the mouths of holes leading to underground burrow systems. Do not allow pellets to be exposed on bare ground. Do not disturb the runway system. Bait at a rate of 2-3 pounds per acre of infested stock.

**CUCURBITS, REDUCED TILLAGE AND NO-TILL CORN**

**USE RESTRICTIONS:** For control of prairie voles (*Microtus ochrogaster*), meadow voles (*M. pennsylvanicus*), house mice (*Mus musculus*); deer mice (*Peromyscus maniculatus*), white-footed mice (*P. leucopus*), thirteen-lined ground squirrels (*Spermophilus tridecemlineatus*), Ord's kangaroo rats (*Dipodomys ordii*), banner-tailed kangaroo rats (*D. spectabilis*), Merriam's kangaroo rats (*D. merriami*), and cotton rats (*Sigmodon hispidus*) in cucurbits [includes chayote, Chinese waxgourd, citron melon, cucumber, gherkin, edible gourd, *Momordica spp.*, muskmelon, pumpkin, squash (summer and winter), and watermelon.] and in reduced tillage and no-till corn.

**IN-FURROW APPLICATION ONLY:** Do not broadcast. Only use equipment designed for In-Furrow delivery and properly adjusted to avoid crushing pellets into pieces too small to be effective. Make one application at planting, or pre-planting, at a rate of 4 to 6 pounds per acre. Collect excessive quantities of pellets deposited on surface soil or crop residues during equipment malfunctions or spills.

CALIBRATION / ROW			
Row Spaces Inches	4 lbs / A rate oz. per 1000 ft	5 lbs / A rate oz. per 1000 ft	6 lbs / A rate oz. per 1000 ft
20	2.5	3.1	3.7
30	3.7	4.6	5.5
36	4.4	5.5	6.6
38	4.7	5.8	6.9

**GRAPE VINEYARDS**

**USE RESTRICTIONS:** For control of meadow, prairie and pine voles (*Microtus spp.*), white-footed mice (*Peromyscus spp.*), and meadow jumping mice (*Zapus spp.*). Do not broadcast bait pellets over growing crops when the pellets may lodge on the plant. Do not apply to bare ground.

**BROADCAST BAITING:** Broadcast pellets evenly on the ground between the rows by cyclone seeder or by hand (wear rubber gloves during hand broadcast operation). Apply pellets at a rate of 6-10 pounds per acre. Do not apply by air.

**MACADAMIA NUT ORCHARDS AND ADJACENT NONCROP AREAS**

**USE RESTRICTIONS:** For control of Roof rats (*Rattus rattus*) in Macadamia Nut orchards and adjacent noncrop areas.

**SPOT TREATMENT:** Baits may be placed in bait stations on the ground or in stations in nut orchard trees. Place 4-8 grams (1-2 teaspoons) of bait in stations at the base of each tree and in each station in trees. Uneaten bait must be removed from trees prior to shaker harvest or from ground prior to mechanized harvest. Orchards may be treated up to 30 days prior to a harvesting round.

**BURROW TREATMENT:** Place 4-8 grams (1-2 teaspoons) of bait in each burrow in the orchard. No preharvest interval is required provided nuts are not retrieved from burrows.

**BROADCAST BAITING:** Broadcast at the rate of five (5) pounds of bait per acre in orchard using a ground device or by hand. Aircraft only may be used to treat adjacent noncrop areas if recommended and supervised by the Hawaii Department of Health. The number of applications shall not exceed four (4) per year. The total amount of bait applied shall not exceed 20 pounds per acre per year.

**ORCHARDS & GROVES**

**USE RESTRICTIONS:** For control of meadow, prairie and pine voles (*Microtus spp.*) in orchards and groves. This product is to be applied during the dormant season. Apply pellets after harvest while the orchard or grove is in a non-bearing phase. Do not apply to bare ground.

**SPOT OR TRAIL BAITING:** Place 1 teaspoon of pellets in surface trails or at the mouths of holes leading to underground burrow systems. Two to four bait spots should be made near the base of each infested tree. Do not disturb the runway system, and cover pellets by pulling overhanging grass back in place. Use 2-3 pounds pellets per acre.

**BAIT PLACEMENT STATION:** Place 2.5 ounces under at least two established stations per tree. These stations should be established 2-3 months prior to the baiting period by placing rectangular pieces (at least 15" x 15") of asphalt shingles, fiberboard rays, wood or metal at the tree dripline.

**BROADCAST BAITING:** This product may be broadcast by aircraft, cyclone seeder, or by hand. When applying by hand (wear rubber gloves during hand broadcast operations), throw tablespoon amounts into heavy cover along tree rows, rock outcrops, and fence lines. Pellets should be applied at the rate of 6 to 10 pounds per acre.

#### RANGELAND

##### PRAIRIE DOGS

**USE RESTRICTIONS:** For control of prairie dogs, black-tailed (*Cynomys ludovicianus*), white-tailed (*C. leucurus*), and Gunnison's (*C. gunnisoni*) on rangeland in Western United States: (Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah and Wyoming) on rangeland.

**PREBAITING:** To increase acceptance of treated pellets by prairie dogs, prebait with one teaspoon of untreated wheat per mound, one or two days prior to using toxic pellets. Establish observation period during prebaiting.

**BAITING:** After all or most of the prebait has been eaten, apply pellets only to areas where prebait was consumed. Apply pellets by hand as a six-inch bait spot on edge of each mound or in adjacent feeding area.

Apply at the rate of one teaspoon per bait spot, during late summer or fall (July-December). Do not apply more than once during this period. Dispose of spilled or unwanted pellets by burial.

#### RANGELAND (cont.)

##### GROUND SQUIRRELS

**USE RESTRICTIONS:** For control of Columbian (*Spermophilus columbianus*) and Richardson's (*S. richardsonii*) ground squirrels, on rangeland.

**BAITING:** Apply pellets by hand as a six-inch bait spot on edge of each mound or in adjacent feeding area. Apply at the rate of one teaspoon per bait spot.

#### RANGELAND AND NONCROP AREAS

**USE RESTRICTIONS:** For control of the Ord's kangaroo rat (*Dipodomys ordii*), banner-tailed kangaroo rat (*D. spectabilis*) and Merriam's kangaroo rat (*D. merriami*) in rangeland vegetation and noncrop areas.

**HAND BAITING:** Place one tablespoon (12 grams) of pellets at 2 locations on opposite sides of mounds. Attempt to place pellets in feeding runs near the entrance to burrows.

#### SUGARCANE

**USE RESTRICTIONS:** For control of Polynesian (*Rattus exulans*), Norway (*R. norvegicus*), Rice (*Oryzomys palustris*), Florida water (*Neofiber alleni*), Cotton (*Sigmodon hispidus*), and Roof rats (*R. rattus*) in sugarcane fields. Do not apply within 30 days of harvest. Do not apply to adjacent noncrop areas. The total number of applications must not exceed four per crop period, and the total amount of pellets applied shall not exceed 20 pounds per acre.

**PREBAITING:** To increase acceptance of treated pellets by rats, broadcast three pounds of untreated wheat per acre one or two weeks prior to using toxic pellets.

**BROADCAST BAITING:** Apply five pounds of treated pellets per acre per treatment. Bait may be broadcast by aircraft, by ground-driven equipment, or by hand (wear rubber gloves during hand broadcast applications).

#### TIMOTHY, TIMOTHY/ALFALFA AND TIMOTHY/CLOVER MIXTURES PRODUCED FOR HAY AND TIMOTHY PRODUCED FOR SEED

**USE RESTRICTIONS:** For control of vole complex (*Microtus* spp) complex in timothy, timothy/alfalfa and timothy/clover mixtures. Do not apply by air. Do not apply to actively growing timothy or timothy/alfalfa or timothy/clover mixtures. This use is restricted to California, Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** Broadcast pellets using hand, cyclone seeder, or ground-driven dispensing devices. A maximum of 2 applications by ground may be made at the rate of 5 to 10 pounds per acre, one in the fall after the last cutting and one in the spring when timothy and timothy-legume mixtures are still dormant. Do not apply in piles or permit piles to be formed by equipment.

#### ALFALFA, LAWNS, GOLF COURSES, OTHER NONCROP AREAS

**USE RESTRICTIONS:** For control of the plains pocket gophers (*Geomys bursarius*), southeastern pocket gophers (*Geomys pinetis*), yellow faced pocket gophers (*Pappageomys castanops*), and the pocket gophers (*Thomomys* spp.) in alfalfa field, lawns, golf course, other and noncrop areas.

**HAND BAITING:**

11 7 15

**Locating Underground Runways:** Use a metal rod, a strong smooth stick or other suitable implement to probe the ground 10 to 15 inches away from fan-shaped gopher mounds. Begin probing on the flat side of the fan. When the main runway has been entered, the probe will drop about 2 inches due to decreased resistance from soil.

**Applying Bait to Runways:** Using a long-handled spoon or mechanical probe, drop one teaspoon of bait into the main runway at each baited point. Cover the opening with sod, a rock, or soil to exclude light. Take care not to cover bait with soil. Depending upon mound density, make two to five bait placements per burrow system. Recover and bury all spilled pellets.

**BURROW BUILDER:** Drop teaspoonful quantity of bait at 4-5 foot intervals in the artificial burrow made by the machine. Apply at a rate of 2-3 pounds per acre.

#### LAWNS AND NONCROP AREAS

**USE RESTRICTIONS:** For control of meadow, prairie and pine voles (*Microtus spp.*), thirteen-lined ground squirrels (*Spermophilus tridecemlineatus*), California ground squirrels (*S. beecheyi*), Columbian ground squirrels (*S. columbianus*), and Richardson's ground squirrels (*S. richardsonii*) in lawns and non crop areas (golf courses and parks). Do not apply on roads, over water or where plants are grown for food or feed.

**PREBAITING:** To increase acceptance of treated pellets by squirrels, prebait with one teaspoon of untreated wheat around each active burrow 2-3 days prior to using toxic pellets.

**HAND BAITING:** Apply one teaspoon of pellets around each active burrow or runway. Allow pellets to fall through grass to ground surface but do not apply to bare ground. Do not place pellets in piles.

#### NONCROP RIGHTS-OF-WAY

**USE RESTRICTIONS:** For control of California ground squirrels (*Spermophilus beecheyi*) on noncrop rights-of-way next to canal and ditch banks and other noncrop borders during late spring and summer. Do not apply on roads, near residential areas, over water, or where plants are grown for food or feed. Consult local, state and federal game authorities before use to insure this product is used in accordance with regulations.

**PREBAITING:** To increase acceptance of pellets by squirrels, broadcast six pounds of untreated wheat per acre along rights-of-way 2-3 days prior to using toxic pellets.

**BAITING:** Broadcast pellets in a 10-15 foot swath along rights-of-way, using hand or ground-driven dispensing devices. Do not exceed six pounds per acre. Do not treat any area more than once per year. When applying next to canals, apply only to the canal right-of-way between the base of the levee and adjacent properties. Do not treat the canal and levee. Dispose of excess pellets from application equipment by burial.

#### IN AND AROUND BUILDINGS

**IMPORTANT:** Do not expose children, pets, or other nontarget animals to rodenticides. To help to prevent accidents:

1. Store product not in use in a location out of reach of children and pets.
2. Apply bait in locations out of reach of children, pets, domestic animals and nontarget wildlife, or in tamper-resistant bait stations. These stations must be resistant to destruction by dogs and children under six years of age, and must be used in a manner that prevents such children from reaching into bait compartments and obtaining bait. If bait can be shaken from stations when they are lifted, units must be secured or otherwise immobilized. Even stronger bait stations are needed in areas open to hooved livestock, raccoons, bears, or other potentially destructive animals, or in areas prone to vandalism.
3. Dispose of product container, and unused, spoiled, and unconsumed bait as specified on this label.

**USE RESTRICTIONS:** For control of Norway rats (*R. norvegicus*), Roof rats (*R. rattus*), and house mice (*Mus musculus*) in and around homes, industrial, agricultural buildings, and similar man-made structures.

Do not place bait in areas where there is a possibility of contaminating food or surfaces that come in direct contact with food. Do not broadcast bait.

**SELECTION OF TREATMENT AREAS:** Determine areas where rats or mice will most likely find and consume the bait. Generally, these areas are along walls, by gnawed openings, in or beside burrows, in corners and concealed places, between floors and walls, or in locations where rodents or their signs have been seen. Protect bait from rain or snow. Remove as much alternative food as possible.

#### APPLICATION DIRECTIONS:

**RATS:** Apply 1 to 2 teaspoon amounts of bait per placement. Maintain an uninterrupted supply of fresh bait for at least 10 days.

**MICE:** Apply 1 teaspoon amount of bait at 8- to 12-foot intervals. Maintain an uninterrupted supply of fresh bait for at least 15 days.

**RATS AND MICE:** Replace contaminated or spoiled bait immediately. Collect and dispose of all dead animals and leftover bait properly. To prevent reinfestation, limit sources of rodent food, water and harborage as much as possible. If reinfestation does occur, repeat treatment. Do not treat the same area with product at less than 30-day intervals.

12 7 15

### STORAGE AND DISPOSAL

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

**STORAGE:** Keep dry. Protect from direct contact with water or excessive moisture. Store in a well ventilated area not accessible to children, pets, domestic animals or wildlife. Keep away from heat and open flame. Once opened, do not store bag for prolonged period. In case of puncture, use clear overslip bag and securely close.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

Manufacturer and Seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Manufacturer, and Buyer and User assume the risk of any such use. MANUFACTURER AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall MANUFACTURER OR SELLER be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF MANUFACTURER AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF MANUFACTURER OR SELLER, THE REPLACEMENT OF THE PRODUCT.

Manufacturer and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of Manufacturer.

Manufactured for: **HACO, Inc.**  
P.O. Box 7190, Madison, WI 53707 U.S.A.

13 7 15

**Enclosure 1**  
**Zinc Phosphide Pellets, EPA Reg. No. 2393-521**  
**Additional "Endangered Species Considerations"**

**Giant Kangaroo Rat (*Dipodomys ingens*)**

Follow the Interim Measures for Protecting Endangered Species in the California Endangered Species Bulletin for the following California counties: Fresno, Kern, Kings, Merced, Monterey, San Benito, San Luis Obispo, Santa Barbara, and Tulare.

**Tipton Kangaroo Rat (*Dipodomys nitratoide nitratoide*)**

Follow the Interim Measures for Protecting Endangered Species in the California Endangered Species Bulletin for the following California counties in the following California counties: Kern, Kings, and Tulare.

**Fresno Kangaroo Rat (*Dipodomys nitratoide exilis*)**

Follow the Interim Measures for Protecting Endangered Species in the California Endangered Species Bulletin for the following California counties: Fresno, Kings, Madera, and Merced.

**Stephan's Kangaroo Rat (*Dipodomys stephens*)**

Follow the Interim Measures for Protecting Endangered Species in the California Endangered Species Bulletin for the following California counties: San Bernardino, San Diego, and Riverside.

**San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)**

Follow the Interim Measures for Protecting Endangered Species in the California Endangered Species Bulletin in the following California counties: San Bernardino and Riverside.

**Pygmy rabbit (*Brachylagus idahoensis*)**

Do not use this product within one mile of alfalfa fields.

14 8 15

**Enclosure 2**  
**Zinc Phosphide Pellets, EPA Reg. No. 2393-521**  
**Revised Application Directions**

**ALFALFA**

**USE RESTRICTIONS:** For control ... reaches maturity. Do not apply this product to alfalfa within 30 days of harvest. This use is restricted to California, Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by air or ground driven dispensing devices. Apply Zinc Phosphide Pellets at a rate up to 10 lbs. (0.2 lb active) per acre. A second application may be after 10 days. A maximum of 20 lbs. (0.4 lb active) per acre may be applied per year. Do not apply ... by equipment.

**BARLEY**

**USE RESTRICTIONS:** For control ... or pre-plant. Do not apply this product to barley within 50 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by air or ground driven dispensing devices. Apply Zinc Phosphide Pellets at a rate up to 6 lbs. (0.12 lb active) per acre. Two applications may be made at a minimum interval of 25 days. A maximum of 12 lbs (0.24 lb active) per acre may be applied per year. All applications must be made prior to the boot stage.

**POTATOES**

**USE RESTRICTIONS:** For control ... or pre-plant. Do not apply this product to potatoes within 30 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by air or ground driven dispensing devices. Apply Zinc Phosphide Pellets at a rate up to 10 lbs. (0.2 lb active) per acre, or two applications of Zinc Phosphide Pellets at the rate of up to 5 lbs. (0.1 lb active) per acre. The maximum application rate per year is 10 lbs. (0.2 lb active).

**SUGAR BEETS**

**USE RESTRICTIONS:** For control ... or pre-plant. Do not apply this product to sugar beets within 30 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by air or ground driven dispensing devices. Apply Zinc Phosphide Pellets at a rate up to 10 lbs. (0.2 lb active) per acre at planting. A second application may be made at this rate. The maximum application rate per year is 20 lbs. (0.4 lb active).

**WHEAT**

**USE RESTRICTIONS:** For control ... or pre-plant. Do not apply this product to wheat within 50 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by air or ground driven dispensing devices. Apply Zinc Phosphide Pellets at a rate up to 6 lbs. (0.12 lb active) per acre. A second applications may be made within 25 days. The maximum application rate per year is 12 lbs. (0.24 lb active).

**Dry Beans**

**USE RESTRICTIONS:** For control ... growing season. Do not apply by air. Do not apply this product to dry beans within 30 days of harvest. This use is restricted to Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by hand or ground driven dispensing devices at a rate of 6 lbs. (0.12 lb active) per acre. No more than one application per growing season is permitted.

**TIMOTHY ... PRODUCED FOR SEED**

**USE RESTRICTIONS:** For control ... growing season. Do not apply by air. Do not apply ... mixtures. A minimum of 158 days must pass between an application of zinc phosphide pellets and any livestock foraging activity. This use is restricted to Idaho, Oregon and the state of Washington.

**BROADCAST BAITING:** This product may be broadcast by hand, cyclone seeder, or ground-driven dispensing devices at a rate of up to 10 lbs. (0.2 lb active) per acre during crop dormancy. A maximum of 20 lbs. (0.4 lb active) per acre may be applied annually.