

PM 4

2393-521

10/30/97

1/16



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

OCT 30 1997

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Judith A. Thompson  
HACO, Inc.  
P.O. Box 7190  
Madison, WI 53707

S 515304 330/18  
S 532403  
S 532416

Subject: Zinc Phosphide Pellets  
EPA Reg. No. 2393-521  
Application for Amended Registration to Add New Use on Reduced-Tillage and No-Till Corn, dated October 29, 1996;  
Additional Amended Labeling Submitted by FAX August 26, 1997;  
Proposed Supplemental Labeling Submitted by FAX October 24, 1997

Dear Ms. Thompson,

Your application for amended registration for the subject product dated October 29, 1996, which included proposed revised labeling for the container and the accompanying booklet, and your two subsequent submissions of 1) additional amended labeling, dated August 26, 1997, and 2) proposed interim supplemental labeling, dated October 24, 1997, have been reviewed. Your application for amended registration to add a new use for Zinc Phosphide Pellets on reduced-tillage and no-till corn is acceptable. The three sets of amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, are acceptable provided that you modify the labeling as indicated below.

1. The proposed revised labeling for the container and accompanying booklet submitted with your application on October 29, 1996 and the supplemental label submitted by FAX on October 24, 1997 must be revised as follows:
  - a. Change the "USE RESTRICTIONS:" for "REDUCED TILLAGE AND NO-TILL CORN" to read as indicated below.

2/16

**"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*) by in-furrow applications made pre-planting or at-planting in reduced tillage and no-till corn. This product may not be broadcast on the soil surface. The application method described under **"IN-FURROW APPLICATIONS"** (below) is the only one which may be used for this use pattern."

- b. Change the first sentence of **"IN-FURROW APPLICATIONS:"** for **"REDUCED TILLAGE AND NO-TILL CORN"** to read as indicated below.

"Make one application at planting, or pre-planting, at a rate of 4 to 6 pounds per acre."

Please note that on your revised proposed labeling (label amendment faxed August 26, 1997) and your supplemental label this sentence reads "Make one application at or before time of planting..." and that the phrase "at or before time of planting" must be changed to "at planting, or pre-planting."

- 2. The proposed revised labeling for the container and accompanying booklet submitted with your application on October 29, 1996 must also be revised as follows:

- a. Change the first two sentences of the **"BROADCAST BAITING:"** directions for **"NURSERY STOCK - ORNAMENTAL AND NON-BEARING FRUIT TREES"** to read as shown below.

"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."

- b. Change the heading **"GOPHERS"** to **"POCKET GOPHERS"**.

3/16

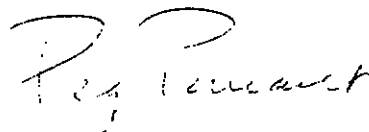
- c. In the last sentence of the directions for "**IN AND AROUND BUILDINGS**" (subheading "RATS AND MICE"), change "30 day" to "30-day".

With respect to the supplemental label, the letter you submitted by FAX on October 24, 1997 indicated that the supplemental label would be attached to the current accepted container label, accompanied by the current accepted booklet label, and that the supplemental label would be for interim use and use for state registrations. This "interim" use would cover the 6 to 8 week period during which the container and booklet labels would be revised as indicated above. **The supplemental label, revised as indicated above, may be used as an attachment to your current accepted labeling until January 30, 1998.** Please note, however, that final printed labeling must be obtained as soon as possible.

Please submit one copy of your revised supplemental label and one copy of your final printed labeling for both the container and booklet before you release the product for shipment. We caution you to refrain from adding any claims or directions to the final printed labels that were not part of the stamped accepted labels. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

Stamped copies of the interim supplemental labeling and the labeling for the container and booklet are enclosed for your records. If you have any questions regarding this letter, please call me at (703) 305-5417 or (703) 305-5404.

Sincerely yours,



Peg Perreault  
Chemical Manager, Team 4  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

4/17/76

**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

October 30, 1997

# HOPKINS ZINC PHOSPHIDE PELLETS

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

For spot treatment in and around buildings, around burrows, in orchards, vineyards and sugarcane fields and on rangelands and noncrop areas. For Broadcasting by ground spreader or aircraft in orchards, sugarcane fields and or noncrop areas. For Broadcasting by ground spreader in vineyards. For use in reduced tillage and no-till corn at time of planting.

**ACTIVE INGREDIENT:**

Zinc Phosphide .....	2.0%	96
<b>INERT INGREDIENTS:</b> .....	<u>98.0%</u>	
Total	100.0%	100

RELI  
7/01/01

EPA Reg. No. 2393-521

EPA EST No. 61282-WI-1

KEEP OUT OF REACH OF CHILDREN

## CAUTION

**STATEMENT OF PRACTICAL TREATMENT**

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:** Immediately call a Poison Control Center or physician, or transport the patient to the nearest hospital. Do not drink water. Do not administer anything by mouth or make the patient vomit unless advised to do so by a physician.

**IF IN EYES:** Flush with plenty of water. Get medical attention if irritation persists.

**IF ON SKIN:** Remove contaminated clothing and wash affected areas with soap and water.

**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. Wear rubber gloves when handling this product. Do not breathe dust. Avoid contamination of feed or foodstuffs. 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.

Zinc Phosphide Pellets  
EPA Reg. No. 2393-521  
Container Label  
Page 2 of 3

5/16

### 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 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.

Zinc Phosphide Pellets  
EPA Reg. No. 2393-521  
Container Label  
Page 3 of 3

**NOTICE OF WARRANTY**

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with this product. Ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of seller. In no case shall the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. Seller makes no warranties of merchantability or fitness for a particular purpose nor any other express or implied warranty except as stated above.

MANUFACTURED FOR:  
HACO, INC.  
P.O. Box 7190  
Madison, WI 53707

7/116

**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

*October 30, 1997*

Under the Federal Insecticide,  
 Fungicide, and Rodenticide Act  
 registered for the pesticide  
 registered under EPA Reg. No.

# HOPKINS ZINC PHOSPHIDE PELLETS

For spot treatment in and around buildings, around burrows, in orchards, vineyards and sugarcane fields and on rangelands and noncrop areas. For Broadcasting by ground spreader or aircraft in orchards, sugar cane fields and or noncrop areas. For Broadcasting by ground spreader in vineyards. For use in reduced tillage and no-till corn 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.

RECEIVED

**STATEMENT OF PRACTICAL TREATMENT**

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:** Immediately call a Poison Control Center or physician, or transport the patient to the nearest hospital. Do not drink water. Do not administer anything by mouth or make the patient vomit unless advised to do so by a physician.

**IF IN EYES:** Flush with plenty of water. Get medical attention if irritation persists.

**IF ON SKIN:** Remove contaminated clothing and wash affected areas with soap and water.

MANUFACTURED FOR:  
 HACO, INC  
 P.O. BOX 7190  
 MADISON, WI 53707

**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. Wear rubber gloves when handling this product. Do not breathe dust. Avoid contamination of feed or foodstuffs. 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.

**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: Arkansas, Austin, Brazoria, Colorado, DeWitt, Fort Bend, Galveston, Goliad, Harris, Regugio, Victoria, Waller, and Wharton

Yellow-shouldered black bird (*Agelaius xanthomus*) and Puerto Rican Plain Pigeon (*Columbia 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 Mayaguez 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).



### ENDANGERED SPECIES CONSIDERATIONS (Cont.):

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)

Morro Bay Kangaroo Rat (*Dipodomys heermanni morroensis*)

Do not use this product within 2½ 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 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.

### 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 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.

### RE-ENTRY STATEMENT

Do not enter treated areas without protective clothing until dusts have settled. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Written or oral precautions must be given to workers engaged in agricultural hand labor who are expected to be in a treated area or in an area about to be treated with this product. Written or oral precautions must include the following information:

**CAUTION:** area treated with zinc phosphide on (date of application). Do not enter treated area the day of application without protective clothing and gloves. Protective clothing at a minimum should include clean long pants, long sleeved shirt, shoes and socks. For accidental exposure, see Statement of Practical Treatments. Oral precautions must be give if there is reason to believe that written precautions cannot be understood by workers. When oral precautions are given, precautions shall be given in a language customarily understood by workers.

### 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 sugarcane. Apply pellets on warm, clear days. Do not graze animals in treated areas.

### GRAPE VINEYARDS

**USE RESTRICTIONS:** For control of meadow, prairie and pine voles (*Microtus spp.*), white-footed 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

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

**SPOT TREATMENT:** Baits may be placed in bait stations on the ground or in stations in 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. 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 may be used to treat adjacent noncrop areas if recommended and supervised by the Hawaii Dept. 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.

11/16

### **NURSERY STOCK - ORNAMENTAL AND NON-BEARING FRUIT TREES**

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

**BROADCAST BAITING:** Under infested nursery stock and/or non-bearing fruit trees broadcast evenly by cyclone seeder or by hand. Concentrate 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.

### **ORCHARDS AND 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 to 3 lbs. 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" by 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**

**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).

**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.

12/16

**COLUMBIAN AND RICHARDSON'S GROUND SQUIRREL.**

**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.

**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 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).

**REDUCED TILLAGE AND NO-TILL CORN**

**USE RESTRICTIONS:** For control of rodents [prairie (*Microtus ochragaster*) and meadow voles (*M. pennsylvanicus*); house mice (*Mus musculus*); white-footed mice (*Peromyscus leucopus*); Thirteen-lined ground squirrel (*Spermophilus tridecemlineatus*), Ord's kangaroo rat (*Dipodomys ordii*), Banner-tailed kangaroo rat (*D. spectabilis*), Merrimam's kangaroo rat (*D. merriami*), and cotton rats (*Sigmodon hispidus*)] in reduced tillage and no-till corn. This product may not be broadcast on soil surface.

**IN-FURROW APPLICATIONS:** Make one application at time of planting at a rate of 4 to 6 pounds per acre. Apply only with equipment specially designed or modified to place the pellets in the seed furrow. DO NOT make surface broadcast treatments. Collect excessive quantities of pellets deposited on surface soil or crop residues during equipment malfunctions or spills. Application equipment should be adjusted to avoid crushing pellets into pieces too small to be an effective rodenticide. Equipment is available for In-furrow delivery and to avoid crushing pellets during application. If unsure of your equipment, contact 1-800-642-4699.

CALIBRATION / ROW			
Row Spaces (inches)	4 Lbs./A Rate oz. per 1,000 Feet	5 Lbs./A Rate oz. per 1,000 Feet	6 Lbs./A Rate oz. per 1,000 Feet
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

### GOPHERS

**USE RESTRICTIONS:** For control of the Plains pocket gophers (*Geomys bursarius*), Southeastern pocket gophers (*G. pinetis*), yellow-faced pocket gophers (*Pappageomys castanops*), and *Thomomys spp.* pocket gophers in lawns, golf courses, and other noncrop areas.

**HAND BAITING:** To locate 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. 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.

### ALFALFA AND NONCROP AREAS

**USE RESTRICTIONS:** For control of the Plains pocket gopher (*Geomys bursarius*), Southeastern pocket gopher (*Geomys pinetis*), yellow faced pocket gopher (*Pappageomys castanops*), and the pocket gopher (*Thomomys spp.*) in alfalfa field and noncrop areas.

**HAND BAITING:** Place one teaspoon (4 grams) of bait at 2-4 locations using a mechanical probe or similar device into the underground runway. After bait is dropped into the probe hole, cover the hole.

**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.

### KANGAROO RATS

**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.

### 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.

**HAND BAITING IN NONCROP AREAS**  
**Such as Lawns, Ornamentals, Golf Courses,**  
**Parks and Nurseries**

**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*). 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.

**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 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 this product at less than 30 day intervals.

15/16

**NOTICE OF WARRANTY**

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with this product. Ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of seller. In no case shall the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the buyer. Seller makes no warranties of merchantability or fitness for a particular purpose nor any other express or implied warranty except as stated above.

16/16

**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.

**SUPPLEMENTAL LABELING**  
 (CONTAINS ADDITIONAL INFORMATION WHICH MAY NOT APPEAR ON PACKAGE LABEL.)

# ZINC PHOSPHIDE PELLETS

## FOR USE IN REDUCED TILLAGE AND NO-TILL CORN

THIS LABEL AND THE PACKAGE LABEL AND THE BOOKLET FOR ZINC PHOSPHIDE PELLETS (EPA REG. NO. 2393-521), MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF APPLICATION. ALL APPLICABLE DIRECTIONS, RESTRICTIONS, AND PRECAUTIONS ON THE PACKAGE LABEL AND ON THE BOOKLET AND ON THIS SUPPLEMENTAL LABEL MUST BE FOLLOWED.

EPA Reg. No. 2393-521

EPA Est. No. 61282-WI-1

### DIRECTIONS FOR USE

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

#### REDUCED TILLAGE AND NO-TILL CORN

**USE RESTRICTIONS:** For control of rodents [prairie (*Microtus ochragaster*) and meadow voles (*M. pennsylvanicus*); house mice (*Mus musculus*); white-footed mice (*Peromyscus leucopus*); Thirteen-lined ground squirrel (*Spermophilus tridecemlineatus*), Ord's Kangaroo rat (*Dipodomys ordii*), Banner-tailed kangaroo rat (*D. spectabilis*), Merriam's Kangaroo rat (*D. merriami*), and cotton rats (*Sigmondon hispidus*)] in reduced tillage and no-till corn. This product may not be broadcast on soil surface.

**IN-FURROW APPLICATIONS:** Make one application at or before time of planting at a rate of 4 to 6 pounds per acre. Apply only with equipment specially designed or modified to place the pellets in the seed furrow. DO NOT make surface broadcast treatments. Collect excessive quantities of pellets deposited on surface soil or crop residues during equipment malfunctions or spills. Application equipment should be adjusted to avoid crushing pellets into pieces too small to be an effective rodenticide. Equipment is available for In-furrow delivery and to avoid crushing pellets during application. If unsure of your equipment, contact 1-800-642-4699.

CALIBRATION / ROW			
Row Spaces (inches)	4 Lbs /A Rate oz. per 1,000 Feet	5 Lbs./A Rate oz. per 1,000 Feet	6 Lbs./A Rate oz. per 1,000 Feet
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

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

October 30, 1997

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

2393-521

**HACO, INC.**  
 BOX 7190  
 MADISON, WISCONSIN 53707 U.S.A.