



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Bell Laboratories 3699 Kinsman Blvd. Madison, WI 53704

Attention: Mr. John Lublinkhof

Subject ZP Rodent Bait AG EPA Reg. No. 12455-17

Your submission received August 14, 2012

Decision 468947

1 2012

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Purpose

This submission requests to add an additional container size (1500 lb) on the label for this product, under sec 3 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

NOV

Review

We have reviewed your request to add the additional container size and found it to be acceptable.

Labeling

The labeling submitted with the above letter, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is acceptable, provided you submit one (1) copy of final printed labeling to us, before you ship your product.

Existing stocks

You may distribute or sell existing stocks of this product with current labeling for eighteen (18) months from the date of this letter.

Consequence for non-compliance

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 constitutes acceptance of these conditions.

Questions

If you have questions about this letter, please contact Dan Peacock at 703-305-5407 (by phone), 703-305-6596 (by fax), or <a href="mailto:peacock.dan@epa.gov">peacock.dan@epa.gov</a> (by E-Mail).

Sincerely yours,

John Hebert

Product Manager (07)

Insecticide-Rodenticide Branch Registration Division (7505P)

Enclosures

1. Stamped Label

2. Minimum Type Size Requirements for Final Printed Labels

#### 1

#### RESTRICTED USE PESTICIDE

Due to Hazards 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.

#### **ZP RODENT BAIT AG**

For use in rangeland, pastures, alfalfa, timothy, barley, potatoes, wheat, sugar beets, sugarcane, grape vineyards, fruit and nut tree orchards, macadamia nut orchards, in and around buildings, and other sites to control the list listed in the use directions.

Active Ingredient
Zinc Phosphide
Other Ingredients
Total.

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the 2.0% pesticide registered under:

98.0% pesticide registered under:

100.0%
EPA. Reg. No: /2455-/7

# KEEP OUT OF REACH OF CHILDREN CAUTION

## FIRST AID HAVE LABEL WITH YOU WHEN SEEKING TREATMENT ADVICE (1-877-854-2494)

If you experience signs and symptoms such as nausea, abdominal pain, tightness in chest, or weakness, see a physician immediately. For information on health concerns, medical emergencies, or pesticide incidents, call the National Pesticide Information Center at 1-800-858-7378.

**IF SWALLOWED:** Call a Poison Control Center, doctor, or 1-877-854-2494 immediately for treatment advice or transport the person to the nearest hospital.

Do not give any liquid to the patient. Do not administer anything by mouth. Do not induce vomiting unless told to do so by the poison control center or doctor.

IF ON SKIN OR CLOTHING: Take off contaminated clothing.

Rinse skin immediately with plenty of water for 15-20 minutes.

Call a poison control center, doctor, or 1-877-854-2494 immediately for treatment advice.

**IF INHALED:** Move person to fresh air.

If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

Call a poison control center, doctor, or 1-877-854-2494 immediately for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes.

Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center, doctor, or 1-877-2494 immediately for treatment advice.

#### TREATMENT FOR PET POISONING

If animal eats bait, call veterinarian at once.

#### NOTE TO PHYSICIAN OR VETERINARIAN

Contains the phosphine – producing active, Zinc Phosphide. Probable mucosal damage may contraindicate the use of gastric lavage. 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. See Left Panel for additional precautionary statements.

#### [Left Panel]

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through the skin, or inhaled. Causes moderate eye irritation. Avoid breathing dust. Any person who retrieves carcasses or unused bait following application of this product must wear waterproof gloves.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

All handlers, including loaders and applicators, must wear long sleeve shirt, long pants, shoes, socks, and waterproof gloves.

In addition, 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) and protective eyewear.

Any person who retrieves carcasses or unused bait following application of this product must wear waterproof gloves.

#### **User Safety Requirements:**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. 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.

#### **ENVIRONMENTAL HAZARDS**

This product is extremely toxic to mammals, birds and other wildlife. Dogs, cats and scavenging mammals and birds might be poisoned if they feed upon animals that have eaten this bait. Do not apply directly to water or to intertidal areas below the mean highwater mark. Do not allow bait to be exposed on soil surface. Do not contaminate water when disposing of equipment wash water or rinsate.

#### **ENDANGERED SPECIES CONSIDERATION**

Notice: The use of this product may pose a hazard to Federally designated endangered/ threatened species. It is a Federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult the nearest U.S. Fish and Wildlife Service regional office or the appropriate State Agency for current information on habitats occupied by endangered species.

Whooping Crane (*Grus americana*). Do not use this product in habitats occupied or occasionally visited by whooping cranes during the period from 30 days before the expected arrival of cranes to 30 days after the time of their usual departure.

**Black-footed Ferret (***Mustela nigripes***)**. Do not use this product within 7 kilometers (4.34 miles) of any prairie dog town to limit risks to the black-footed ferret from exposure to Zinc Phosphide or destruction of its prey base, unless the colony is an isolated black-tailed prairie dog town less than 80 acres in size or an isolated white-tailed prairie dog town less than 200 acres in size, or unless the town had been appropriately surveyed, using methods acceptable to the U.S. Fish and Wildlife Service, and found by the FWS not to be suitable site for ferret reintroductions.

Gray Wolf (Canis lupus) and Grizzly Bear (Ursus actos horribilus). Unless the local U.S. Fish and Wildlife Service office has determined that there are no gray wolves or grizzly bears in the general vicinity of bait applications in Montana and Wyoming, do not apply this product outdoors within occupied habitat of these species.

Attwater's Greater Prairie Chicken (*Tympanuchus cupido attwateri*). Do not use this product in the present occupied range of the Attwater's Greater Prairie Chicken in the following counties: Aransas, Austin, Brazoria, Colorado, DeWitt, Ft. Bend, Galveston, Goliad, Hams, Refugio, Victoria, Waller, and Wharton (Texas). Yellow-Shouldered Blackbird (*Agelaius xanthomaus*) and Puerto Rican Plain

Pigeon (Columba inornata wetmorei). This product must not be used in the following areas in Puerto Rico except in tamper-proof bait boxes:

(1) within 6.3 miles (10 kilometers) of Central Aquirre, Lago Cidra, Ceiba, San German (2) within 9.4 miles (15 kilometers) of La Esperanza, south of Highway 2 from city of Mayaguez to the city of Ponce and all Mona Island

**Utah Prairie Dog** (*Cynomy parvidens*). Do not use this product in critical habitat of the Utah Prairie Dog (Utah).

Salt Marsh Harvest Mouse (Reithrodontomys raviventris). Do not use this product in critical habitat within 0.5 miles 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 confluence of the Sacramento River and the San Joaquin River (California)

Morro Bay Kangaroo Rat (*Dipodomys heermanni morroensis*). Do not use this product in critical habitat within 2.5 miles of Baywood Park which is located on Morro Bay (California)

Giant Kangaroo Rat (Dipodomys ingrens). 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 (California)

Tipton Kangaroo Rat (*Dipodomys nitratoides* nitratoides). Follow the Interim Measures for protecting endangered species in the California Endangered Species Bulletin for the following California counties: Kern, Kings and Tulare (California) Fresno Kangaroo Rat (*Dipodomys nitratoides exilis*). Follow the Interim Measures for protecting endangered species in the California Endangered Species Bulletin for the following California counties: Fresno, Kern, Kings, Madera and Merced (California) 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 (California) San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*). Follow the Interim Measures for protecting endangered species in the California Endangered Species Bulletin for the following California counties: San Bernardino and Riverside (California) Northern Idaho Ground Squirrel (*Spermophilus brunneus brunneus*). Do not use this product within 0.5 miles in critical habitat of the Northern Idaho Ground Squirrel in Adams and Valley counties, Idaho.

#### **NET WEIGHT:**

4 lb. - 1500 lb. containers

**BATCH CODE:** 

Manufactured by:

Bell Laboratories, Inc.
3699 Kinsman Blvd.

Madison, WI 53704

EPA REG. NO. 12455- 17

EPA EST. NO. 12455-WI-1

#### STORAGE AND DISPOSAL

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:** 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 HANDLING:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Dispose of bags in an approved waste disposal facility or by incineration.

#### **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 only for the sites, pests, and application methods described on this label.

## USES ASSOCIATED WITH BUILDINGS AND STRUCTURES TO CONTROL NORWAY RATS, ROOF RATS, AND HOUSE MICE

IMPORTANT: Do not expose children, pets, or other nontarget animals to rodenticides. To help 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 by 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 bait stations when they are lifted, units must be secured or otherwise immobilized. Even stronger bait stations are needed in areas open to hoofed livestock, raccoons, bears, 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.

**Note:** Bait stations are mandatory for outdoor, above-ground use. Tamper-resistant bait stations must be used if children, pests, non-target mammals, or birds may access the bait.

### USE RESTRICTIONS: IN AND AROUND BUILDINGS AND STRUCTURES

This product may only be used to control Norway rats, roof rats and house mice in and within 100 feet of man-made structures constructed in a manner so as to be vulnerable to commensal rodent invasions and/or to harboring or attracting rodent infestations. Examples of such structures include homes and other permanent or temporary residences, food processing facilities, industrial and commercial buildings, trash receptacles, agricultural and public buildings, transport vehicles (ships, trains, aircraft), docks and port of terminal buildings and related structures around and associated with these sites. Fence and perimeter baiting, beyond 100 feet from a structure as defined above, is prohibited. This product must not be applied directly to food or feed crops. Do not broadcast bait.

#### **Inside Burrows**

This product may be applied to active rodent burrows to control Norway rats, and roof rats within or beyond 100 feet of buildings and man-made structures, provided that infestations of these rodents have been confirmed. Because Norway/roof rat infestations may occur in areas farther than 100 feet from buildings and man-made structures when the rodents have ample supplies of food and cover, efforts should be made to remove food trash, garbage, clutter and debris. Bait must be placed not less than 6 inches into active Norway/roof rat burrows. Do not broadcast bait.

**SELECTION OF TREATMENT AREAS:** After removing as much food, water and harborage as possible, determine dry, acid-free areas where rats and 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 rats and mice or their signs have been observed.

APPLICATION DIRECTIONS FOR RATS: Apply 1 to 2 teaspoon amounts of bait per placement. For outdoor use, place bait in active rat burrows or tamper-resistant bait stations. Maintain an uninterrupted supply of fresh bait until all signs of feeding have stopped. Do not treat the same area at less than 30 day intervals.

APPLICATION DIRECTIONS FOR MICE: Apply 1 teaspoon of bait per placement at 8 to 12 foot intervals. For outdoor use, place bait in tamper-resistant bait stations. Maintain an uninterrupted supply of fresh bait until all signs of feeding have stopped. Do not treat the same area at less than 30 day intervals.

**FOLLOW-UP:** Using waterproof gloves, collect and properly dispose of all dead animals and excess bait properly in accordance with "Pesticide Disposal" instructions. Use detergent and hot water to wash spoons for application into burrows. Do not use spoon for mixing, holding or transferring food or feed. To discourage reinfestation, limit sources of rodent food, water, and harborage as much as possible.

#### USES ASSOCIATED WITH NON-BUILDING AGRICULTURAL SITES

#### Use Restrictions for all Non-Structural Agricultural Sites

- 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 this application.
- Do not apply on roads, near residential areas, or over water.
- Do not broadcast over crops unless use directions specifically permit aerial application.
- Apply bait on warm clear days.

# Disposal of Spilled and Excess Bait, and Carcasses Information Applicable for All Agricultural Uses

<u>Spilled and Excess Bait:</u> Wearing waterproof gloves, clean up any spilled bait immediately and collect excess bait from application equipment. If bait cannot be applied according to label directions, properly dispose of it according to the "Pesticide Disposal" text.

<u>Carcasses:</u> Wearing waterproof gloves, bury carcasses of ground squirrels (18 inches deep) in holes dug on site or in inactive burrows. Cover and pack with soil. Alternately, use other disposal methods that state and local authorities allow.

#### FRUIT AND NUT TREE ORCHARDS (DORMANT)

#### **VOLES and WHITE FOOTED MICE**

**USE RESTRICTIONS:** For control of Meadow, Prairie, Pine, California, Oregon, Mountain, and Townsend's Voles (<u>Microtus</u> spp) and White-footed Mouse (<u>Peromyscus leucopus</u>) in pome fruit (apple, pear), stone fruit (peach, cherry, apricot, plum, prune, nectarine) and nut tree orchards (almonds, walnuts, pistachios, pecans, filberts). Apply only after fall harvest (including drops), before new spring growth and when no rain or snow is expected for three consecutive days. Do not graze animals in treated areas.

#### HAND BAITING:

Place bait near bases of each infested tree at 2-4 locations, either on surface trails or at mouth of holes leading to underground burrow systems. Cover bait artificially (e.g., mats, boards) or by pulling overhanging grass over bait. Do not allow bait to be exposed on bare ground. Do not disturb the runway system. Apply teaspoon amount (4 grams) per placement, 2 - 3 lb/A (0.04 - 0.06 lb ai/A).

#### TRAILBUILDER:

Set equipment to drop one teaspoon quantity of bait (4 grams) at 4-5 foot intervals in the artificial trail, made by the machine, just inside the drop line on both sides of the trees. Apply at the rate of 2 - 3 lb/A (0.04 - 0.06 lb ai/A.

#### **GROUND BROADCAST:**

Broadcast evenly by cyclone seeder or by hand. Concentrate in areas with heaviest vegetative cover. Do not broadcast on bare ground. Apply at the rate of 6 - 10 lb/A (0.12 - 0.2 lb ai/A)

#### AFRIAL BROADCAST:

Do not broadcast on bare ground. Apply at the rate of 6 - 10 lb/A (0.12 - 0.2 lb ai/A)

#### **GROUND SQUIRRELS**

**USE RESTRICTIONS:** For control of California ground squirrels (Spermophilus beecheyi) and Richardson's ground squirrels (S. richardii) in pome fruit (apple, pear), stone fruit (peach, cherry, apricot, plum, prune, nectarine) and nut tree orchards (almonds, walnuts, pistachios, pecans, filberts). Apply only after fall harvest (including drops), before new spring growth and when no rain or snow is expected for three consecutive days. Do not graze animals in treated areas.

**PREBAITING (Mandatory):** Prebait with a 50/50 mixture of ground corn and wheat to enhance acceptance by California and Richardson's ground squirrels. Apply the prebait mixture at 6 lbs per acre 1-2 days prior to using ZP Rodent Bait Ag.

**HANDBAITING:** Apply 4 grams (one teaspoon) of bait on the ground near active burrows.

**BAITING:** Treat once during treatment period. Broadcast bait using hand or ground-driven dispensing devices not to exceed 6 lbs per acre (0.12 lb ai/A). Dispose of excess bait from application equipment by burial.

#### **POCKET GOPHERS**

**USE RESTRICTIONS**: For control of plains pocket gophers (<u>Geomys bursarius</u>), southeastern pocket gophers (<u>G. pinetis</u>), yellow-faced pocket gophers (<u>Pappogeomys castanops</u>) and pocket gophers (<u>Thomomys spp.</u>) pome fruit (apple, pear), stone fruit (peach, cherry, apricot, plum, prune, nectarine) and nut tree orchards (almonds, walnuts, pistachios, pecans, filberts). Bait must be applied directly into pocket gopher's underground burrow systems or into underground tunnels created by burrow-builder machines. Do not apply bait above ground. Apply only after fall harvest (including drops), before new spring growth and when no rain or snow is expected for three consecutive days. Do not graze animals in treated areas.

**HAND BAITING:** Follow the directions indicated below to locate and treat pocket gophers' burrow systems.

Locating Underground Runways: Use a specially designed gopher probe, 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 (4 grams) 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 bait. Applied in this manner, one pound of bait will treat one to eight acres, depending upon the number of pocket gopher burrow systems present.

**BURROW BUILDER**: Follow manufacturer's instructions for the type of equipment used. Calibrate equipment to drop a teaspoon quantity (4 grams) of bait at 4-5 foot intervals in the artificial burrow made by the machine. Apply at a rate of 2-3 lbs. of bait per acre (0.04 – 06 lb ai/A). Pick up and disposal of all spilled bait according to "Pesticide Disposal" instructions.

#### MACADAMIA NUT ORCHARDS AND ADJACENT NONCROP AREAS

**USE RESTRICTIONS**: For control of roof rats (<u>Rattus rattus</u>) in macadamia nut orchards and adjacent noncrop areas. Do not graze animals in treated areas.

**SPOT TREATMENT**: Bait must be placed in bait stations 1) on the ground at tree bases or 2) or in trees. Place 1-2 teaspoons (4-8 grams) of bait per bait station. 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 1-2 teaspoons (4-8 grams) 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 (0.1 lb ai/A) in orchard using a ground device or by hand. Aircraft may be used to treat adjacent noncrop areas if the Hawaii Dept of Health recommends and supervises such applications. The number of applications shall not exceed four (4) per year. The total amount of bait applied shall not exceed 20 pounds per acre (0.4 lb ai/A) per year.

#### NONBEARING NURSERY STOCK, CONIFER/CHRISTMAS TREE, POPLAR/COTTONWOOD, ORNAMENTAL, AND NONBEARING FRUIT TREE PLANTATIONS

**USE RESTRICTIONS:** For control of meadow voles, prairie voles, pine voles, California voles, Oregon voles, mountain voles, and Townsend's voles (<u>Microtus spp.</u>) in nursery

stock, and conifer/Christmas tree, poplar/cottonwood, ornamental, and non-bearing fruit tree plantations. Do not apply by air.

BROADCASTING BAITING: Under infested nursery stock, conifer/Christmas trees, poplar/cottonwood trees, ornamental trees, or non-bearing fruit trees, broadcast bait evenly by cyclone seeder or by hand. Concentrate in areas with the heaviest vegetative cover. Do not broadcast on bare ground. Apply at a rate of 6-10 lbs per acre (0.12 - 0.2 lb ai/A).

HAND BAITING: Near the base of infested nursery stock, conifer/Christmas trees, poplar/cottonwood trees, ornamental trees, or non-bearing fruit trees, place teaspoonful quantities (4 grams) of bait at 2-4 locations, either on surface trails or at the mouth of holes leading to underground burrow systems. Cover bait artificially (e.g., mats, boards) or by pulling overhanging grass over bait. Do not allow bait to be exposed on bare ground. Do not disturb the runway system. Bait at a rate of 2-3 lbs. per acre (0.04 – 0.06 lb ai/A) of infested stock.

### NON-RESIDENTIAL LAWNS, ORNAMENTALS, GOLF COURSES, AND PARKS

#### **VOLES**

**USE RESTRICTIONS**: For control of meadow voles, prairie voles, pine voles, California voles, long-tailed voles, Oregon voles, mountain voles and Townsend's voles (Microtus spp.) in lawns, ornamentals, golf courses, parks, and nurseries. Bait must not be applied on roads, over water or where plants are grown for food or feed.

**HAND BAITING**: For voles, place teaspoonful quantities (4 grams) of bait, either on surface trails or at the mouth of holes leading to underground burrow systems. Cover bait artificially (e.g., mats, boards) or by pulling overhanging grass over bait. Allow bait to fall through to the ground surface but do not apply bait to bare ground. Do not place bait in heaps or piles.

**BAIT STATIONS:** Place bait in tamper-resistance bait stations if children, pets, or nontarget mammals or birds may access the bait.

#### POCKET GOPHERS

**USE RESTRICTIONS**: For control of plains pocket gophers (<u>Geomys bursarius</u>), southeastern pocket gophers (<u>G. pinetis</u>), yellow-faced pocket gophers (<u>Pappogeomys</u>

<u>castanops</u>) and pocket gophers (<u>Thomomys spp.</u>) in non-residential lawns, ornamentals, golf courses, and parks. Bait must be applied directly into pocket gopher's underground burrow systems or into underground tunnels created by burrow-builder machines. Do not apply bait above ground.

**HAND BAITING:** Follow the directions indicated below to locate and treat pocket gophers' burrow systems.

Locating Underground Runways: Use a specially designed gopher probe, 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 (4 grams) 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 bait. Applied in this manner, one pound of bait will treat one to eight acres, depending upon the number of pocket gopher burrow systems present.

BURROW BUILDER: Follow manufacturer's instructions for the type of equipment used. Calibrate equipment to drop a teaspoon quantity (4 grams) of bait at 4-5 foot intervals in the artificial burrow made by the machine. Apply at a rate of 2-3 lbs. of bait per acre (0.04 – 06 lb ai/A). Pick up and disposal of all spilled bait according to "Pesticide Disposal" instructions.

#### ALFALFA

**USE RESTRICTIONS**: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles and Townsend's voles (<u>Microtus spp.</u>) in alfalfa. All applications must occur shortly after a cutting of the hay, and/or prior to the next growth's attaining a length of 2 inches. Alfalfa forage from treated areas must not be harvested until it reaches maturity. This use is restricted to Montana, California, Idaho, Oregon, and Washington.

BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply at a rate of up to 10 lbs. per acre (0.2 lb. ai/A). For voles,

make two applications per year separated by a minimum interval of 25 days. A maximum of 20 lbs per acre (0.24 lb ai/A) may be applied per year. Do not apply by air when wind velocity exceeds 10 mph. Do not apply in piles or permit piles to be formed by equipment.

#### TIMOTHY AND TIMOTHY / ALFALFA and MIXTURES PRODUCED FOR HAY

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (<u>Microtus spp</u>) in timothy and timothy/alfalfa mixtures. Do not apply by air. Do not apply to actively growing timothy or timothy/alfalfa mixtures. This use is restricted to California, Idaho, Oregon and Washington. Do not apply to timothy or timothy/alfalfa mixtures within 60 days of harvest. Do not graze animals in treated areas.

BROADCAST BAITING: Broadcast bait using by 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 lbs. per acre (0.1-0.2 lb ai/A), 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. A maximum of 20 lbs (0.4 lb ai/A) per acre may be applied annually.

#### TIMOTHY PRODUCED FOR SEED

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus spp.) in timothy during the non-growing season. Do not apply by air. Do not apply to actively growing timothy or timothy/alfalfa or timothy/clover mixtures. A minimum of 158 days must pass between an application of ZP Rodent Oat Bait Ag and any livestock foraging activity. This use is restricted to Idaho, Oregon and the state of Washington. Do not graze animals in treated areas.

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

#### **GRAPE VINEYARDS**

**USE RESTRICTIONS**: For control of deer mice (<u>Peromyscus maniculatus</u>), white-footed mice (<u>P. leucopus</u>), oldfield mice (<u>P. polionotus</u>, except for threatened or endangered

subspecies), meadow voles, prairie voles and pine voles (<u>Microtus spp.</u>), and meadow jumping mice (<u>Zapus hudsonius</u>) in grape vineyards. Do not use this product in areas of Alabama and Florida that are occupied by threatened or endangered subspecies of the oldfield mouse. Do not graze animals in treated areas.

**BROADCAST BAITING**: Broadcast bait evenly on the ground between the rows by cyclone seeder or by hand. Wear rubber gloves during hand-broadcast operations. Apply bait at a rate of 6-10 lbs. per acre (0.12-0.2 lb ai/A). Do not apply by air.

#### RANGELAND, PASTURES, and ADJACENT NONCROP AREAS

#### **KANGAROO RATS**

**USE RESTRICTIONS:** This product may only be used to control Ord'kangaroo rat (<u>Dipodomys ordii</u>), Banner-tailed kangaroo rat (<u>D. spectabilis</u>) and Merriam's kangaroo rat (<u>D. merriami</u>) in rangleland, pastures and adjacent noncrop areas.

**BAITING:** Place one tablespoon (12 grams) of bait at 2 locations on opposite sides of mounds in feeding runs within 3 ft of active burrow entrances.

#### **GROUND SQUIRRELS**

**USE RESTRICTIONS:** For control of California ground squirrels (<u>Spermophilus</u> <u>beecheyi</u>) and Richardson's ground squirrels (<u>S. richardii</u>) in rangeland, pastures and adjacent noncrop areas. Product must not be applied on roads, near residential areas, over water or where plants are grown for food or feed.

**PREBAITING (Mandatory):** Prebait with a 50/50 mixture of ground corn and wheat to enhace bait acceptance by California and Richardson's ground squirrels. Apply the prebait mixture at 6 lbs per acre 2-3 days prior to using ZP Rodent Bait Ag.

**BAITING**: Treat only once during treatment period. Broadcast bait in a 10-15 foot swath using hand or ground-driven dispensing devices not to exceed 6 lbs per acre (0.12 lb ai/A) Dispose of excess bait from application equipment by burial.

#### **BUSHBERRIES AND CANEBERRIES**

**USE RESTRICTIONS**: For control of meadow voles, prairie voles, and pine voles (<u>Microtus spp.</u>) in bushberries (highbush and lowbush blueberries, currants, elderberries, gooseberries and huckleberries) and in caneberries (blackberries, red raspberries, black raspberries, loganberries, and cultivars or hybrids of these

caneberries). 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.

BROADCAST BAITING: This product may be broadcast by cyclone seeder, or by hand. When applying by hand, throw tablespoon amounts (12 grams) 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 lbs per acre (0.12-0.2 lb ai/A) per application. Maximum application per growing season is 20 lbs per acre (0.4 lb ai/A).

#### **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 reduced tillage and no-till corn and in cucurbits, including and limited to chayote, Chinese waxgourd, citron melon, cucumber, gherkin, edible gourd. Momordica spp., muskmelon, pumpkin, squash [summer and winter], and watermelon. Only in-furrow treatments are permitted for these crops. Do not broadcast bait. Do not apply this product within the occupied habitats of the endangered species or subspecies of kangaroo rats.

IN-FURROW APPLICATION ONLY: Equipment designed for in-furrow treatments must be used to apply this product in cucurbits, reduced tillage and no-till corn. Make one application pre-planting, or at-planting, at a rate of 4 to 6 lbs. of bait per acre (0.08-0.12 lb/A). Collect and remove excessive quantities of bait deposited on surface soil or crop residues during spills or equipment malfunctions.

#### CALIBRATION / ROW

Row spaces	4 lbs/A Rate	5 lbs / A rate	6 lbs / A rate
Inches	oz. Per 1000 ft	oz. Per 1000 ft	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
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#### BARLEY

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (Microtus spp.) and Richardson's ground squirrels (Spermophilis richardsonii) in growing-season and preplant applications in barley. Do not apply this product to barley within 50 days of harvest. This use is restricted to Montana, Idaho, Oregon and Washington. Do not graze animals in treated areas.

**PREBAITING (Mandatory):** Prebait with a 50/50 mixture of ground corn and wheat to enhance bait acceptance by Richardson's ground squirrels. Apply the prebait mixture at 6 lbs per acre 2-3 days prior to using ZP Rodent Bait Ag.

BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate up to 6 lbs. (0.12 lb active ingredient) per acre. Make only one application per year if Richardson's ground squirrels are being targeted. If voles are being targeted, a second bait application may be made after a minimum interval of 25 days. A maximum of 12 lbs per acre (0.24 lb ai/A) may be applied per year. All applications must be made prior to the boot stage.

#### **BEANS (DRY)**

**USE RESTRICTIONS**: For control of prairie voles (<u>Microtus ochrogaster</u>), meadow voles (<u>M. pennsylvanicus</u>), house mice (<u>Mus musculus</u>); deer mice (<u>Peromyscus maniculatus</u>), white-footed mice (<u>P. leucopus</u>), Ord's kangaroo rats (<u>Dipodomys ordii</u>), in dry beans during the 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 Washington.

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

#### SUGAR BEETS

**USE RESTRICTIONS**: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles and Townsend's voles (<u>Microtus spp.</u>) in growing-season and preplant applications in sugar beets. Do not apply this product to sugar beets within 30 days of harvest. This use is restricted to Idaho, Oregon and Washington.

**BROADCAST BAITING**: This product may be broadcast by air or ground-driven dispensing devices. Apply bait at rates up to 10 lbs. per acre (0.2 lbs. ai/A) at planting. A second application may be made at the same rate. The maximum annual application rate is 20 lbs per acre (0.4 lb. ai/A).

#### **POTATOES**

**USE RESTRICTIONS**: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (<u>Microtus spp.</u>) in growing-season and pre-plant applications in potatoes. Do not apply this product to potatoes within 30 days of harvest. This use is restricted to Idaho, Oregon and Washington.

BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply bait once at a rate up to 10 lbs per acre (0.2 lb ai/A), or make two separate applications at rates of up to 5 lbs per acre (0.1 lb ai/A). The maximum annual application rate is 10 lbs per acre (0.2 lb ai/A).

#### WHEAT

**USE RESTRICTIONS**: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, Townsend's voles (<u>Microtus spp.</u>) and Richardson's ground squirrels (<u>Spermophilus richardsonii</u>) in growing-season and preplant applications in wheat. Do not apply this product to wheat within 50 days of harvest. This use is restricted to Montana, Idaho, Oregon and the state of Washington. Do not graze animals in treated areas.

**PREBAITING (Mandatory):** Prebait with a 50/50 mixture of ground corn and wheat to enhance bait acceptance by Richardson's ground squirrels. Apply the prebait mixture at 6 lbs per acre 2-3 days prior to using ZP Rodent Bait Ag.

BROADCAST BAITING: This product may be broadcast by air or ground-driven dispensing devices. Apply bait at a rate of up to 6 lbs. per acre (0.12 lb. ai/A) per acre. Make only one application per year if Richardson's ground squirrels are being targeted. If voles are being targeted, a second application may be made within 25 days. The maximum application rate per year is 12 lbs. per acre (0.24 lb. ai/A) per acre.

#### SUGARCANE

**USE RESTRICTIONS:** For control of Polynesian rats (<u>Rattus exulans</u>), Norway rats (<u>R. norvegicus</u>), roof rats (<u>R. rattus</u>), rice rats (<u>Oryzomys palustris</u>), Florida water rats (<u>Neofiber alleni</u>), and cotton rats (<u>Sigmodon hispidus</u>) in sugarcane fields. Do not graze animals in treated areas.

**PREBAITING (Strongly Recommended):** Prebaiting with three pounds of untreated steamed crimped oats per acre one or two weeks prior to using toxic bait may enhance bait acceptance by rats.

**BAITING:** Broadcast bait by aircraft, ground-driven devices, or by hand at the rate of 5 lbs. of bait per acre (0.1 lb ai/A). For a <u>36</u> month cycle crop, the maximum number of applications is <u>4</u> per crop or 20 lbs per acre (0.4 lb ai/A) per crop, and the preharvest interval (PHI) is <u>30</u> days. For a <u>24</u> month cycle crop, the maximum number of applications is <u>4</u> per crop or 20 lbs per acre (0.4 lb ai/A) per crop, and the PHI is <u>90</u> days. For a <u>12</u> month cycle crop, the maximum number of application is <u>2</u> per crop or 10 lbs per acre (0.2 lb ai/A) per crop, and the PHI is <u>90</u> days. For all crop cycles, the retreatment interval is <u>30</u> days.

**WARRANTY:** Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use/and or handling is contrary to label instructions.

#### **OPTIONAL GRAPHICS:**

# FOR CONTROL OF



Ground Squirrels



Gophers



**Voles** 

Rats, Mice, Meadow Mice, Deer Mice, & Kangaroo Rats





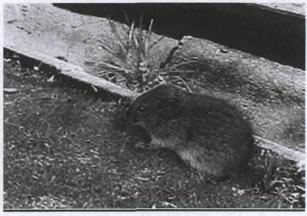




Photo is not representative of a bait placement