UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460-0001



OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 17, 2014

Jennifer J. Klika HACCO, Inc. 110 Hopkins Drive Randolph, WI 53956

Subject: Amendment to revise headings, clarify use sites, revise text for voles EPA Registration No.: 61282-49 Decision No.: 492155 Primary Brand Name: Prozap Zinc Phosphide Pellets Submission Date: <u>May 1, 2014</u>

Dear Ms. Klika:

The label referred to above, submitted under FIFRA, as amended, is **acceptable**. Please submit one final printed copy for the above mentioned label before releasing the product for shipment. If you have any questions, please contact Gene Benbow at (703) 347-0235 or via email at <u>benbow.gene@epa.gov</u>.

Sincerely,

Muy Sum Ok for

Meredith F. Laws, Chief Insecticide-Rodenticide Branch Registration Division (7505P) Office of Pesticide Programs Date: June 17, 2014

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

ACTIVE INGREDIENT:

Zinc Phosphide	
OTHER INGREDIENTS:	
TOTAL	
TOTAL	

EPA Reg. No. 61282-49

EPA Est. No. 61282-WI-01

KEEP OUT OF REACH OF CHILDREN CAUTION

Please See Inside Booklet for Additional Precautionary Statements

Net Contents:

A range from 4 lbs. to 100 lbs.

10 lbs. 50 lbs. 100 lbs.

ACCEPTED 06/17/2014 Under the Federal Insecticide, Fungicide

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 61282-49

Manufactured By: HACCO, Inc. 110 Hopkins Drive Randolph, WI 53956

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. Avoid contact with eyes, skin, or clothing.

Personal Protective Equipment

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.

FIRST AID HAVE LABEL WHEN OBTAINING TREATMENT ADVICE 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 1-800-498-5743 immediately for treatment advice or transport the patient 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 on Clothing:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center, doctor, or 1-800-498-5743 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 1-800-498-5743 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 5 minutes, then continue rinsing eye. Call a poison control center, doctor, or 1-800-498-5743 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. Probably mucosal damage may				
contraindicate the use of gastric lavage. For animal ingesting bait and/pr 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 Inside Booklet for additional precautionary statements.				
For 24-hour emergency information on this product, call 1-800-498-5743 (US & Canada) or 1-				
651-523-0318 (all other areas).				

ENVIRONMENTAL HAZARDS

This product is extremely toxic to birds, fish and other wildlife. Wildlife feeding on treated bait may be killed. Dogs, cats, and other predatory 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 areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes.

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.

Zinc Phosphide Pellets Page 4 of 19 June 2nd, 2014

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 tamperproof 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: 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) Zinc Phosphide Pellets Page 5 of 19 June 2nd, 2014

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.

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 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 non-target 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 non-target 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, 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.

Note: Bait stations are mandatory for outdoor, above-ground use. Tamper-resistant bait stations must be used if children, pets, 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 of 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 or 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.

Zinc Phosphide Pellets Page 6 of 19 June 2nd, 2014

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 or these rodents have been confirmed. Because Norway/roof rat infestations may occur in areas father 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 alternate food as possible, determine dry, acid-free areas where rats 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

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.

HOUSE MICE: Apply 1 teaspoon amount of bait at each placement location. Space placements at 8- to 12-foot intervals. Larger placements (up to 2 level teaspoons may be needed at points of very high house mouse activity. Maintain an uninterrupted supply of fresh bait for at least 15 days or until there are no longer signs of new feeding by house mice.

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 AGRICULTURAL SITES

Use Restrictions for all 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 Bait, Leftover Bait Information Applicable for All Agricultural Uses

- 1. Spilled and Excess Bait: 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.
- **2. Carcasses:** 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, NUT, CITRUS AND AVOCADO TREE ORCHARDS

VOLES AND WHITE FOOTED MOUSE

USE RESTRICTIONS: For control of Meadow (*Microtus pennsylvanicus*), Prairie (*M. ochrogaster*), Pine (*M. pinetorum*), California (*M. californicus*), Oregon (*M. oregoni*), Mountain (*M. montanus*), and Townsend's (*M. townsendi*) Voles and White-footed Mouse (*Peromyscus leucopus*) in pome fruit (apple, pear), stone fruit (peach, cherry, apricot, plum, prune, nectarine), citrus fruit, avocado 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 side 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).

AERIAL 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), citrus fruit, avocado 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.

Zinc Phosphide Pellets Page 8 of 19 June 2nd, 2014

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 Prozap[®] Zinc Phosphide Pellets.

HAND BAITING: 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.

MACADAMIA NUT ORCHARDS AND ADJACENT NONCROP AREAS

ROOF RATS

USE RESTRICTIONS: For control of roof rats (*Rattus rattus*) 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 stations. 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.

<u>NONBEARING NURSERY STOCK, CONIFER/CHRISTMAS TREE,</u> <u>POPLAR/COTTONWOOD, ORNAMENTAL, NON-BEARING FRUIT TREE, NON-BEARING NUT TREE, AND NON-BEARING CITRUS TREE PLANTATIONS</u>

VOLES

USE RESTRICTIONS: For control of meadow voles, prairie voles, pine voles, California voles, Oregon voles, mountain voles, and Townsend's voles (*Microtus spp.*) in nursery stock, and conifer/Christmas tree, poplar/cottonwood, ornamental, non-bearing fruit tree plantations, non-bearing nut tree, and non-bearing citrus tree plantations. Do not apply by air.

BROADCASTING BAITING: Under infested nursery stock, conifer/Christmas trees, poplar/cottonwood trees, ornamental trees, non-bearing fruit trees, non-bearing nut trees, or non-bearing citrus 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).

Zinc Phosphide Pellets Page 9 of 19 June 2nd, 2014

HAND BAITING: Near the base of infested nursery stock, conifer/Christmas trees, poplar/cottonwood trees, ornamental trees, non-bearing fruit trees, non-bearing nut trees, or non-bearing citrus 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

<u>VOLES</u>

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 (*Geomys bursarius*), southeastern pocket gophers (*G. pinetis*), yellow-faced pocket gophers (*Pappogeomys castanops*) and pocket gophers (*Thomomys spp.*) on lawns, golf courses, forest areas, parks, nurseries, Rangelands, grain fields, forage crops, hay crops, timothy crops, alfalfa crops, vineyards, grape vineyards, in pome fruit (apple, pear), stone fruit (peach, cherry, apricot, plum, prune, nectarine), citrus fruit, avocado and nut tree orchards (almonds, walnuts, pistachios, pecans, filberts, and macadamia), tree plantations, and vegetable crops. 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.

<u>Locating Underground Runways:</u> 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.

<u>Applying Bait to Runways</u>: 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.

Zinc Phosphide Pellets Page 10 of 19 June 2nd, 2014

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 - 0.06 lb)ai/A). Pick up and dispose of all spilled bait according to "Pesticide Disposal" instructions.

ALFALFA

VOLES

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles and Townsend's voles (*Microtus spp.*) 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 (0.4 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.

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (*Spermophilus beechevi*), Columbian (Spermophilus columbianus), and Richardson's ground squirrels (S. richardii) in alfalfa.

BAITING: Apply only underground or in bait stations. Apply post-harvest or during dormancy.

TIMOTHY AND TIMOTHY / ALFALFA AND MIXTURES PRODUCED FOR HAY

VOLES

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (Microtus spp) 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.

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (*Spermophilus beecheyi*), Columbian (*Spermophilus columbianus*), and Richardson's ground squirrels (*S. richardii*) in timothy.

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

BAITING: Apply only during crop dormancy. Do not apply over growing crops. Do not graze animals in treated areas.

ALFALFA PRODUCED FOR SEED

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (*Spermophilus beecheyi*), Columbian (*Spermophilus columbianus*), and Richardson's ground squirrels (*S. richardii*) in alfalfa.

BAITING: Apply only underground. Apply post-harvest or during dormancy.

TIMOTHY PRODUCED FOR SEED

VOLES

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 Prozap Zinc Phosphide Pellets 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 grounddriven 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

VOLES, DEER MICE AND WHITE FOOTED MOUSE

USE RESTRICTIONS: For control of deer mice (*Peromyscus maniculatus*), white-footed mice (*P. leucopus*), Oldfield mice (*P. polionotus*, except for threatened or endangered subspecies), meadow voles, prairie voles and pine voles (*Microtus spp.*), and meadow jumping mice (*Zapus hudsonius*) 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.

Zinc Phosphide Pellets Page 12 of 19 June 2nd, 2014

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.

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (*Spermophilus beecheyi*), Columbian (*Spermophilus columbianus*), and Richardson's ground squirrels (*S. richardii*) in grape vineyards.

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.

AERIAL BAITING: Apply bait at a rate of 9-12 lbs. per acre. Apply during dormant season. Do not apply over growing crop when bait may lodge in plant

RANGELAND, PASTURES, AND ADJACENT NONCROP AREAS

KANGAROO RATS

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

HAND 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.

PRAIRIE DOGS

USE RESTRICTIONS: This product may only be used to control black-tailed prairie dogs (Cynomys ludovicianus) and white-tailed prairie dogs (C. leucurus) on rangelands and pasturelands in the States of Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah and Wyoming during the period from July of one year to February of the next year. Only one application within this period is permitted in Kansas, Montana, Nebraska, North Dakota, Wyoming and South Dakota. Do not exceed the application rate. Apply only to rangeland with less than 50% ground cover. 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 application.

PREBAITING (Mandatory): To condition the prairie dogs to accept the grain used in this product readily, prebait each active mound to be treated with a teaspoon amount (4 grams or 0.14 oz) of untreated oats prior to application of toxic bait. Do not apply this product unless the prairie dogs have consumed the prebait.

OBSERVATIONS FOR NONTARGET SPECIES

Before applying toxic bait, determine the potential for exposing nontarget organisms. Applicators must conduct daily observations prior to applying toxic bait. Do not apply this product if nontarget species are observed to be feeding on bait. It is a violation of Federal Law to feed treated bait to nontarget species, including protected species, intentionally. Zinc Phosphide Pellets Page 13 of 19 June 2nd, 2014

HAND BAITING APPLICATION ONLY: Using a utility spoon or calibrated, hand-operated, mechanical bait dispenser, apply a teaspoon (4 grams or 0.14oz) of bait per placement, over a six inch diameter circle on the edge of the mound near the opening of only active prairie dog burrows.

FOLLOW-UP: Wearing waterproof gloves collect and properly dispose of all dead, exposed animals and leftover bait that cannot be used according to label directions according to the "Pesticide Disposal" section.

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (*Spermophilus beecheyi*), Columbian (*Spermophilus columbianus*), and Richardson's ground squirrels (*S. richardii*) 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 enhance acceptance by California and Richardson's ground squirrels. Apply the Prebait mixture at 6 lbs per acre 1-2 days prior to using Prozap[®] Zinc Phosphide Pellets.

HAND BAITING: 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.

BUSHBERRIES AND CANEBERRIES

VOLES

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

VOLES, DEER MICE, WHITE FOOTED MICE, KANGAROO RATS, and COTTON RATS

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*), 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.

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

CALIBRATION / ROW

BARLEY

VOLES

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (*Microtus spp.*) 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.

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. If voles are being targeted, a second bait application may be made after a minimum interval of 25 days. A maximum of 12 lbs (0.24 lb active ingredient) per acre may be applied per year. All applications must be made prior to the boot stage.

Zinc Phosphide Pellets Page 15 of 19 June 2nd, 2014

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (*Spermophilus beecheyi*), Columbian (*Spermophilus columbianus*), and Richardson's ground squirrels (*S. richardii*) in barley.

BAITING: Apply only underground. Apply post-harvest or during dormancy.

OATS

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (*Spermophilus beecheyi*), Columbian (*Spermophilus columbianus*), and Richardson's ground squirrels (*S. richardii*) in oats.

BAITING: Apply only underground. Apply post-harvest or during dormancy.

BEANS (DRY)

VOLES

USE RESTRICTIONS: For control of prairie voles (*Microtus ochrogaste*<u>r</u>), meadow voles (*M. pennsylvanicus*), house mice (*Mus musculus*); deer mice (*Peromyscus maniculatus*), white-footed mice (*P. leucopus*), and Ord's kangaroo rats (*Dipodomys ordii*), 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: T his 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.

SUGAR BEETS

VOLES

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

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 year (0.4 lb. ai/A).

Zinc Phosphide Pellets Page 16 of 19 June 2nd, 2014

POTATOES

VOLES

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

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

VOLES

USE RESTRICTIONS: For control of meadow voles, long-tailed voles, California voles, Oregon voles, mountain voles, and Townsend's voles (*Microtus spp.*) in growing-season and preplant applications in wheat. Do not apply this product to wheat within 50 days of harvest. Do not graze animals in treated areas.

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. 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.

GROUND SQUIRRELS

USE RESTRICTIONS: For control of California ground squirrels (*Spermophilus beecheyi*), Columbian (*Spermophilus columbianus*), and Richardson's ground squirrels (*S. richardii*) in wheat.

BAITING: Apply only underground. Apply post-harvest or during dormancy.

SUGARCANE

<u>RATS</u>

USE RESTRICTIONS: For control of Polynesian rats (*Rattus exulans*), Norway rats (*R. norvegicus*), roof (*R. rattus*), rice rats (*Oryzomys palustris*), Florida water rats (*Neofiber alleni*), and cotton rats (*Sigmodon hispidus*) 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 30 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 preharvest interval (PHI) is 30 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.

AIRPORT GRASSES

VOLES

USE RESTRICTIONS: Use this product to reduce potential air-strikes with birds feeding on voles (*Microtus spp*) on grassy areas at airfields. All applications must occur within one to three days after cutting the grass. Do not apply to grass longer than 7.5 inches tall. Do not apply to bare ground or to any paved areas. Do not use grass as feed or forage for livestock.

BROADCAST BAITING: This product may be broadcast by ground driven devices only. Apply Prozap[®] Zinc Phosphide Pellets at a rate of up to 10 pounds (0.2 lb ai/A) per acre. A second application may be made at a minimum interval of 30 days. 2nd application must follow the mowing and grass length use restriction above. A maximum of 20 pounds (0.4 lb ai/A) may be applied per year.

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. If container is not to be recycled, then dispose of bags in an approved waste disposal facility or by incineration. Zinc Phosphide Pellets Page 18 of 19 June 2nd, 2014

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