



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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

September 15, 2017

Jacob Moore
Regulatory Consultant
D-I-1-4, Inc., A Division of 1,4Group, Inc.
c/o Technology Sciences Group, Inc.
712 5th Street, Suite A
Davis, CA 95616

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment –
Amendment to Revise (Reduce) Some Application Rates
Product Name: 1,4Zap®
EPA Registration Number: 67727-7
Application Date: 4/25/17
OPP Decision Number: 528918

Dear Mr. Moore:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S. Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration

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process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Chris Pfeifer of my team by phone at (703) 308-0031 or via email at pfeifer.chris@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Andrew C. Bryceland". The signature is fluid and cursive, with the first name "Andrew" and last name "Bryceland" clearly legible.

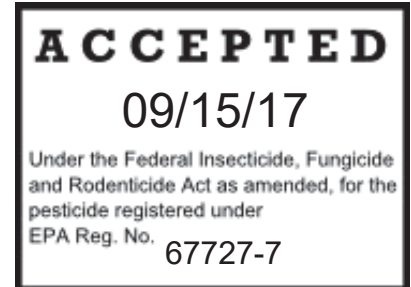
Andrew Bryceland, Team Leader
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

Enclosure

1,4Zap®

Aerosol Grade – (Potato) (Root, Tuber and Bulb (Crop)) Sprout Eliminator

Active Ingredient: 1-Octanol* 99.0%
Other Ingredients: 1.0%
Total: 100.0%
*Contains 6.8 lbs. active ingredient per gallon



**KEEP OUT OF REACH OF CHILDREN
CAUTION**

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals – CAUTION: Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wear coveralls over long-sleeved shirt, long pants, shoes, socks, and protective eyewear (goggles or face shield). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

Environmental Hazards: Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

FIRST AID	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
If in eyes	<ul style="list-style-type: none">• 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 or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
EMERGENCY INFORMATION	
For spill, leak, fire, exposure or accident call PERS 1-800-633-8253.	

Net Contents: _____
(Lot No./Batch No.: _____)

EPA Reg. Number: 67727-7
EPA Est. Number: XXXXX-XXX-XXX

Manufactured for:
D-I-1-4, Inc., a division of 1,4GROUP, Inc.
P.O. Box 860
Meridian, ID 83680 USA

Revision 042517

DIRECTIONS FOR USE

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

NOTICE

- 1,4Zap® is used as an aerosol to eliminate peeps and sprouts (and to enhance the dormancy of potatoes) (and other root and tuber crops, bulb crops, and ornamental flowering bulbs) during the storage phase.
- Applicators and other handlers must wear: coveralls over long-sleeved shirt, long pants, shoes, socks, and protective eyewear (goggles or face shield).
- For reentry into treated areas during application and prior to ventilation or settling of aerosol fog, workers must wear: coveralls over long-sleeved shirt, long pants, shoes plus socks, and chemical resistant (such as nitrile or butyl) gloves; face-sealing goggles, unless a full-face respirator is worn; and a respirator with an organic vapor-removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.
- 1,4Zap® must not be applied to potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs) in the field. Apply only from the outside of the treated storage areas.
- Apply 1,4Zap® after potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs) are harvested and allowed to suberize completely. Apply as an aerosol through forced air distribution systems.
- Let 60 days elapse before using a treated storage area as a temporary holding area for seed potatoes (or other sprouting root, tuber and bulb crops). Air system components (including ducts) and building must be thoroughly ventilated before area is used for storage of seed potatoes (or other sprouting root, tuber and bulb crops) to prevent dormancy effects.
- Do not allow vapors to come in contact with storage areas used for seed potatoes (or other sprouting root, tuber and bulb crops) within 30 days of their planting.

(CROPS)

(1,4Zap® is effective on the following sprouting root and tuber crops:

Beet	Horseradish
Carrot	Parsnip
Cassava	Potato
Dasheen (taro)	Sweet potato
Ginger	Turnip
Ginseng	Yam)

(1,4Zap® is effective on the following sprouting bulb crops:

Garlic	Onion
Leek	Shallot)

(1,4Zap® is effective on the following sprouting ornamentals: Flowering bulbs)

FORCED AIR DISTRIBUTION METHOD

1. Prepare aerosol generating equipment. The discharge from the vaporizer should be located to provide optimum distribution in the storage area. Take precautions to prevent the spray from coming into direct contact with the potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs).
2. Operate recirculation fans continuously during application for at least 1 hour and up to 24 hours after completing application to ensure proper distribution of product.
3. It is advantageous to keep the storage area closed as long as practical to allow for maximum absorption into the potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs).

TREATMENT OF STORAGE AREAS THAT DO NOT HAVE RECIRCULATING AIR SYSTEMS

These storage areas are more difficult to treat. Additional steps must be taken to treat these storage areas.

1. Prepare aerosol generating equipment. The discharge from the vaporizer should be located to provide optimum distribution in the storage area. Take precautions to prevent the spray from coming into direct contact with the potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs).
2. Completely close off the area to be treated. This may include vent doors in the attic and walk doors around the perimeter. The large truck doors may need to be sealed to prevent excess leakage.
3. Begin the treatment by following the listed steps:
 - A. Start the aerosol generator.
 - B. Adjust the location of the vaporizer so all the storage area receives an equal amount of aerosol fog. It may be necessary to move the vaporizer during the application or make the application in multiple phases. For reentry into treated areas during application and prior to ventilation or settling of the aerosol fog, workers must wear: coveralls over long-sleeved shirt, long pants, shoes plus socks, and chemical resistant (such as nitrile or butyl) gloves; face-sealing goggles, unless a full-face respirator is worn; and a respirator with an organic vapor-removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.
4. For best results wait at least 48 hours before fresh air is introduced into the storage area, then return the storage area to "normal" operation.
5. It is advantageous to keep the storage area closed as long as practical to allow for maximum absorption into the potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs).

TREATMENT IN SMALL CONTAINERS

1. Prepare the application equipment. The discharge from the applicator should be located to provide optimum placement in the storage area. Take precautions to prevent the spray from coming into direct contact with the potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs).
2. It is advantageous to keep the storage area closed as long as practical to allow for maximum absorption into the potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs).

APPLICATION TIMING AND RATES

Apply after potatoes (or other root and tuber crops, bulb crops, or ornamental flowering bulbs) are harvested and allowed to suberize completely. Apply as an aerosol through forced air distribution systems. Apply at rates of up to 5 pounds of active ingredient per 50,000 lbs (500 cwt), which is equivalent to 100 ppm on a product to potato (crop) basis.

While potatoes may be retreated as necessary for effective control, do not exceed the maximum application of 400 ppm during the storage season.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Keep container closed. This product temporarily inhibits germination of potatoes (and other root, tuber and bulb crops).

PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING

(Containers 5 gallons or less) Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

(Containers over 5 gallons) Nonrefillable container. Do not reuse or refill this container Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

CONDITIONS OF SALE

1,4GROUP, Inc. warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to manufacturer, and buyer assumes the risk for any such use. To the extent consistent with applicable law, 1,4GROUP, Inc. makes no other warranties, express or implied, including the implied warranty of merchantability or the implied warranty of fitness for a particular purpose, that extend beyond the statements made on this label. To the extent consistent with applicable law, 1,4GROUP, Inc. disclaims any liability whatsoever for punitive, special, incidental or consequential damages resulting from the use or handling of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses,

1,4Zap®; EPA Reg. No. 67727-7

Label amendment to revise application rate
MASTER LABEL – Label version (7) – Draft 25Apr17

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injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid or at 1,4GROUP, Inc.'s election, replacement of the product.

Optional Label Claims:

Application timing and rates optional conversion information:

1 cwt. = 100 lbs = 2.5 cubic feet; 1 ton = 20 cwt.
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Product benefits:

- Biochemical delays sprouting, so smaller (buds) (sprouts) on (potatoes) (root and tuber crops) (bulb crops) (and) (ornamental flowering bulbs) (and other sprouting crops).
- Reduces respiration, resulting in less water loss.
- Reduces refrigeration and ventilation needs.
- Reduces pressure bruising.
- Firmer (potatoes) (onions) (bulbs) with improved visual appearance.
- Increases potatoes (crops) natural resistance to pathogens.
- Enhance turgidity and sprout desiccation.