

81853-1

8/7/2012

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

AUG 07 2012

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Walter G. Talarek, P.C.  
Authorized Agent  
Heads up Plant Protectant  
1008 Riva Ridge Drive  
Great Falls, VA 22066-1620

Subject: Heads Up Plant Protectant  
EPA Registration No. 81853-1  
PRIA Amendment for substitution of a new enforcement analytical method  
Decision # 462681  
Application Dated: March 19, 2012  
PRIA Category: B680

Dear Mr. Talarek:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5), is **acceptable** provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c) (5) when the Agency requires all registrants of similar products to submit such data.
2. Submit three (3) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(b). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Ms. Menyon Adams at 703-347-8496 or by email at: [adams.menyon@epa.gov](mailto:adams.menyon@epa.gov). A stamped copy of the label is enclosed for your records.

Sincerely,

James A. Hollis, Chief

SYMBOL	751P						
SURNAME	Adams						
DATE	08/06/12						

Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)

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# HEADS UP® PLANT PROTECTANT

Preplant seed and pretransplant seedling treatment  
for the prevention of fungal and bacterial diseases of plants

### ACTIVE INGREDIENT

Extract of *Chenopodium quinoa*  
saponins (containing approximately  
equimolar amounts of triterpene bidesmosidic  
glycosides of oleanolic acid, hederagenin,  
and phytolaccagenic acid) ..... 61.3%

OTHER INGREDIENTS ..... 38.7%  
TOTAL ..... 100.0%

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

FIRST AID	
<b>If in eyes</b>	- 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 or doctor for treatment advice.
<b>If inhaled</b>	- 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 or doctor for further treatment advice.
HOT LINE NUMBER For 24-hour Medical Emergency Treatment Information 1-866-368-9306 or 1-306-542-7639	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

NET WEIGHT 0.11 lbs. (50 grams)

EPA Registration Number 81853-1

EPA Establishment Number 81853-CAN-1

 FOR ORGANIC PRODUCTION



Heads Up Plant Protectants, Inc.  
Box 519, 428 3<sup>rd</sup> Street  
Kamsack, Saskatchewan S0A 1S0  
Canada  
Telephone: 1-866-368-9306

Patent Numbers 6,743,752 and 6,482,770

# ACCEPTED

AUG 07 2012

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

81853-1

### PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals. Caution.** Causes moderate eye irritation. Harmful if inhaled. Avoid contact with eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment (PPE) Requirements:** Applicators and handlers must wear: long-sleeved shirt and long pants, shoes, socks and waterproof gloves. For spray applications, wear protective eyewear. Follow manufacturer's instructions for maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### User Safety Recommendations

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**Environmental Hazards:** 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 contaminate water when disposing of equipment washwater or rinsate. This pesticide is toxic to fish and aquatic invertebrates. Do not use seed or seedlings treated with this product for animal feed. Do not use treated seed for food, feed or oil purposes. Treat only those seeds needed for immediate use and planting. Do not store excess treated seed beyond planting time. Dispose of excess treated seed by burial away from streams and bodies of water.

### DIRECTIONS FOR USE

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

Do not apply this product through any type of irrigation system.

Use this product only in accordance with the directions for use on the label.

**Use this product thoroughly dissolved and only when mixed with water.** Read entire directions for use and conditions of sale and warranty before using, and if said terms are not acceptable, return the product unused in its unopened container immediately.

Seed treatment on agricultural establishments in hopper-box, or other seed treatment application at or immediately before planting is within the scope of WPS.

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. For any requirement specific to your State and Tribe, consult the State/Tribal agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about the Personal Protective Equipment (PPE), notification to workers, and restricted-entry interval. The requirements of this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water) is: coveralls, socks and shoes and waterproof gloves.

**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticide (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

There are no restrictions.

**GENERAL INFORMATION**

**Heads Up® Plant Protectant** is a preplant seed and pretransplant seedling treatment for the prevention of fungal and bacterial diseases of plants.

**Heads Up® Plant Protectant** is made from plant sources. Apply this product as directed to seeds, roots of transplants, or sprayed on tomato seedlings in trays, as part of a general disease management program.

**TREAT ONLY HEALTHY VIGOROUS SEED OR SEEDLINGS:** Application of **Heads Up® Plant Protectant** to damaged or diseased seed or seed of low quality or vigor will not improve seed performance. Always apply to healthy seed or seedlings that are vigorous and actively growing under stress-free conditions.

**MIXING DIRECTIONS**

**Apply dissolved into solution with water, and thoroughly coat the surface of the seed, roots or leaves. Do not apply in packaged powder form.** Ensure that the product is thoroughly dissolved in solution and the solution agitated before application. Return any unused powder to original container.

Clean application equipment. Prepare only the amount of solution needed to be applied to treat the seeds. Once in solution the product will be subject to bacterial degradation. Mix only enough product that is required for use. Use the solution **IMMEDIATELY AFTER COMPLETE MIXING** and no longer than 4 to 6 hours after mixing. Unused solution should be disposed according to the Storage and Disposal section of this label.

**PREPLANT SEED TREATMENT**

**SITES**

Potatoes, wheat, peas, beans, soybeans and corn

**APPLICATION RATES**

**Wheat, Pea, Bean, and Soybean Seeds**

Mix at a ratio of 0.035 oz. (1 gram) of **Heads Up® Plant Protectant** per 34 ounces (1 liter) of water. 34 ounces (one liter) of this solution will treat 360 lbs. (163.3 kgs.) of legume or cereal seed

# Heads Up® Plant Protectant

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## Corn Seeds

Mix at a ratio of 0.035 oz. (1 gram) of **Heads Up® Plant Protectant** per 34 ounces (1 liter) of water. 34 ounces (one liter) of this solution will treat 180 lbs. (81.6 kgs.) to 360 lbs. (163.3 kgs.) of corn seed.

## Seed Potatoes (as cut or whole tubers used for planting purposes)

Mix at a ratio of 0.035 oz. (1 gram) of **Heads Up® Plant Protectant** per 34 ounces (1 liter) of water. 34 ounces (one liter) of this solution will treat 220 - 582 lbs. (100 - 264 kgs.) of potato seeds.

### APPLICATION

Seeds must be prepared and ready for seeding. The object is to achieve a wet shiny appearance to the seed. This will dry off or be absorbed by the seed; however, the treatment will remain in effect. Treat the seeds by dipping, spraying or dribbling the solution into a rotating auger conveyor or some other approved seed treatment device. Spray applications to seeds within an enclosed spray booth or other enclosed spray device are also acceptable providing thorough coverage is achieved.

For seed potatoes, whether fresh cut or suberized, the **Head Up®** solution **must be applied to germinating seed potatoes**, as indicated by obvious sprouting activity coming from the potato eyes. This sprouting activity can be from peeking to full spout length, but before green leaves appear.

Proper calibration and operation of application equipment is essential. Treat only the seed that you intend to plant and insure all treated seed is used for planting purposes.

### PRETRANSPLANT SEEDLING ROOT TREATMENT

#### SITES

Tomato seedlings

#### APPLICATION RATES

Carefully read and understand this label for use information and restrictions. Mix at a ratio of 0.035 oz. (1 gram) of **Heads Up® Plant Protectant** per 34 ounces (1 liter) of water. Root dip or spray bare roots of transplants until solution is exhausted.

### APPLICATION

#### FOR ROOT AREAS ONLY.

For tomato seedlings also to receive foliar treatment, see directions below.

**Plants should be actively growing and free of stress conditions.**

Seedlings must be prepared and ready for transplanting. Treat roots by dipping the exposed root mass completely and holding submersed for sixty (60) seconds in the **Heads Up®** solution. It is not necessary to completely remove all adhering soil from the root mass; however, for best results, gently shake roots to remove excess adhering soil. When seedlings are started in flats, dip and hold the root area of the whole plant in the flat for 60 seconds in a shallow tray of **Heads Up®** solution. The tray must be deep enough to immerse the plant's roots. Individual seedlings may be treated by removing them from the starter soil and shaking off excess soil, placing them in a container holding the **root mass area only** submersed in **Heads Up®** solution for 60 seconds, and then transplanted. Treat individual seedlings by spraying the exposed root mass until they are completely wet with the **Heads Up®** solution. After root treatment, the individual tomato seedlings may be planted either in flats before being taken to the field or may be taken directly to the field, but the seedlings should be planted immediately. Seedlings planted in flats may be root treated up to four days prior to transplanting. Treat only the seedlings that you wish to plant and insure all treated seedlings are used for planting purposes.

Tomato seedlings may be both root treated and foliar treated. Seedlings may be foliar treated the same day that they are root treated.

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## PRETRANSPLANT SEEDLING FOLIAR TREATMENT

### SITES

Apply only one foliar application of this product to tomato seedlings, up to 6 inches in height, at the time of transplanting or up to 4 days prior to transplanting. Do not apply the product after transplant or when blooms or fruits are present on the plant. No other foliage treatments of Heads Up® solution are permitted.

### APPLICATION RATES

Mix at a ratio of 0.035 oz. (1 gram) of **Heads Up® Plant Protectant** per 34 ounces (1 liter) of water. Apply 0.17 – 0.51 ounces (5 – 15 milliliters) of solution per square foot of started tomato seedlings in trays or until foliage is completely wet.

### APPLICATION

Seedlings must be prepared and ready for planting. Spray one application only to immature seedlings up to 4 days before transplanting. Spray seedlings until foliage is completely wet. Apply indoors in greenhouses or other enclosed structures or outdoors in enclosed spray booths or other enclosed spray devices.

Tomato seedlings may be both root treated and foliar treated. Seedlings may be foliar treated the same day that they are root treated. For tomato seedlings also to receive root dip treatment, see directions above.

### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in original container, tightly sealed, in a dry location.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available, or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

### BATCH CODE:

### CONDITIONS OF SALE AND WARRANTY

Seller's guarantee shall be limited to the contents and merchantability of the product and the terms of the label, and subject thereto. To the fullest extent permitted by law, the buyer assumes all risks to persons or property arising out of use or handling and accepts the product on these conditions. Because the time, place, rate of application and other conditions of use are beyond the Seller's control, Seller's liability from storage, handling and use of this product is limited to replacement of the product or a refund of the purchase price. **Heads Up® Plant Protectant** is applicable as a disease preventive only. The directions for use of this product are based on test plots, greenhouse trials and the opinions of experts. They are believed to be reliable and correct; however, it is not possible to eliminate all possible detrimental effects associated with use, whether they are crop injury, ineffectiveness or other unintended consequences which may occur as a result of weather or other materials, or the manner of use or application, beyond the control of the manufacturer or the seller. To the fullest extent permitted by law, the buyer shall assume all risks.

[The following optional information may or may not be placed on the product's label.]

[The contents of this package are sufficient to dilute to 13.21 US gallons of treatment solution, which treats up to 29,100 lbs. (13,200 kgs.) of potato seeds]

*Heads Up®* is a trademark of Heads Up Plant Protectants, Inc.