

71771-4

04/01/2008

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Mr. Scott Thenell
Regulatory Consultant
Plant Health Care, Inc. c/o S. Thenell Company
1181 Keaveny Court
Walnut Creek, CA 94597-2465

APR 01 2008

Subject: Plant Health Care, Inc., Messenger Seed Treatment
EPA Registration No. 71771-4
-Agency-initiated amendment to add instructions for promptly using seed treated on the farm (pre-plant)
Application Dated 02/29/2008

Dear Mr. Thenell:

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 of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit two (2) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of a final printed label.

Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions. If you have any questions contact Jeannine Kausch at 703-347-8920 or by email at: kausch.jeannine@epa.gov.

A stamped copy of the label is enclosed for your records.

Sincerely,



Sheryl Reilly, Ph.D., Chief
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)

Enclosures

CONCURRENCES								
SYMBOL	7511P	7511P	7511P					
SURNAME	KAUSCH	Reynolds	Reilly					
DATE	03/31/2008	4/1/08	4/1/08					

EPA Form 1320-1A (1/90)

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Messenger® Seed Treatment Master Label Index
Section A:..... Pre-plant Seed Treatment
Section B:..... Non-Agricultural Use Seed Treatment

Section A Pre-plant Seed Treatment

Messenger® Seed Treatment
Pre-plant Seed Treatment

[OPTIONAL TAG LINES – For use individually or in combination on labels: A biochemical pesticide seed treatment that: Activates plant growth and defense systems; Plant Health Regulator; Improves stand establishment; Suppresses nematode egg production; Enhances crop growth, quality and yield; Increases Root Mass; Improves standability; Decreases lodging; Increases plant stamina and vigor; Activates plant growth and defense systems; Aids in management of post-harvest diseases; Enhances plant health; Facilitates integrated Pest Management Programs; with Harp-N-Tek™: Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology]

Dry Powder

ACTIVE INGREDIENT:

Harpin Protein: 3.0%

OTHER INGREDIENTS: 97.0%

Total: 100.0%

EPA Reg. No. 71771-4

EPA Est. No. 71771-PA-01

KEEP OUT OF REACH OF CHILDREN

CAUTION

Net Weight:

PLANT HEALTH CARE, INC.
William Pitt Way, Pittsburgh, PA 15238-1330
1-800-421-9051 • www.planthealthcare.com

Read the entire label before using this product.

Read WARRANTY AND DISCLAIMER before buying or using. If terms are not acceptable, return at once unopened.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes and socks
- Particulate dust mask, when mixing

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

ACCEPTED

APR 01 2008

**Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 71771-4**

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 cleaning equipment or disposing of equipment wash waters or rinsate.

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 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 or Tribe, consult the 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 personal protective equipment (PPE), notification to workers, and restricted entry interval. The requirements in this box 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 restricted entry interval (REI) of 4 hours.

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 plant, soil, or water is:

- Coveralls;
- Waterproof gloves; and
- Shoes and socks.

PRODUCT INFORMATION

Messenger stimulates the plant's natural growth and defense systems, enhancing overall plant health. Healthier plants exhibit increased plant stamina and vigor, leading to one or more of the following benefits: improved stand and root establishment, suppressed nematode egg production, increased marketable yield, and enhanced quality. Messenger Seed Treatment works best when used in conjunction with good crop management practices.

GENERAL INSTRUCTIONS

GROWTH ENHANCEMENT AND MARKETABLE YIELD

Use Messenger Seed Treatment to increase plant health and vigor, to assist in the management of certain diseases, to suppress nematode egg production, to improve stand and root establishment, and to enhance crop quality and marketable production.

SITES

Messenger Seed Treatment may be used for greenhouse, shadehouse, nursery, outdoor home and garden, and field production on all crops listed on this label.

USE ADVISORIES

USE PROMPTLY

Use product promptly to minimize absorption of water. Reseal opened packets to minimize exposure to air and moisture. Use opened packets within 3 weeks.

MIXING

Messenger Seed Treatment may be used in addition to other commercial seed treatments and in conjunction with other dry hopper

box treatments. Messenger Seed Treatment should only be applied to dry seed. Do not mix Messenger Seed Treatment with water.

Check with your local Plant Health Care field representative for specific compatibility information for Messenger and other labeled products.

USE OF TREATED SEED

Treat only seed needed for immediate use, minimizing the interval between treatment and planting. Do not store excess treated seed beyond planting time.

APPLICATION INSTRUCTIONS

Apply Messenger Seed Treatment as a dry pre-plant seed treatment. Product may be applied to dry seed using standard seed treatment equipment or applied directly to the hopper box. When applying directly to the hopper box, fill half the hopper box with seed and sprinkle the appropriate half-rate of Messenger Seed Treatment over seed. Finish filling the hopper box with seed and sprinkle the remaining Messenger Seed Treatment over the new seed. Messenger Seed Treatment may be used in addition to commercial seed treatments and in conjunction with other dry hopper box treatments.

CROPS AND APPLICATION RATES

Vegetable, Cucurbit, Cole, and Other Crops

Crop	Rate
FRUITING VEGETABLES Such as: Tomato, Pepper, Okra, Eggplant	0.35-5 oz per 100 lbs. seed
CUCURBITS Such as: Cucumber, Melon, Squash	
LEAFY and COLE CROPS Such as: Bok Choy, Broccoli, Cabbage, Cauliflower, Celery, Chard, Lettuce, Spinach	
ONION GARLIC SCALLION	
SWEET CORN	

Field Crops

Crop	Rate
LEGUME VEGETABLES Such as: Beans, Peas, Lentils, and Soybeans	0.35-5 oz per 100 lbs. seed
LEGUME FRESH and WET PROCESSING VEGETABLES Such as: Peas, Green bean, and Snap beans	
COTTON	
TUBER CROPS Such as: Potato, Sweet Potato, Yams	
FORAGE CROPS Such as: Alfalfa hay, Timothy hay	
CORN (grain, silage or popcorn)	
OIL and SEED CROPS Such as: Canola (rape seed), Jojoba, Mint (peppermint and spearmint), Safflower, Sesame, Sunflower	
PEANUT	
ROOT CROPS Such as: Beets, Carrots, Ginger Root, Ginseng, Parsnips, Radish, Rutabagas, Turnips	
RICE SMALL GRAINS Such as: Barley, Flax, Oats, Rye, Wheat SORGHUM	
SUGARCANE	

Tobacco

Crop	Rate
TOBACCO All types	0.35-5 oz per 100 lbs. seed

Berries and Small Fruit

Crop	Rate
BERRIES AND SMALL FRUIT Such as: Blackberry, Blueberry, Boysenberry, Cranberry, Current, Raspberry, Strawberry	0.35-5 oz per 100 lbs. seed

Trees and Vines

Crop	Rate
AVOCADO	0.35-5 oz per 100 lbs. seed

CITRUS Such as: Grapefruit, Mineola, Lemon, Lime, Orange, Pummelo, Tangelo, Tangerine	
NUT TREES Such as: Almond, Filbert, Macadamia, Pecan, Pistachio, Walnut	
POME FRUIT Apple, Pear	
STONE FRUIT Such as: Cherry, Olive, Nectarine, Peach, Plum, Prune	
VINE CROPS Such as: Grape (juice, raisin, table, and wine), Kiwifruit, Hops	
TREES Conifers Broadleaf	

Turf and Ornamentals

Crop	Rate
TURF GRASS	0.35-5 oz per 100 lbs. seed
ORNAMENTALS (Bulbs, Seeds or Tubers) Such as: Flowers, Bedding Plants, Foliage Plants, ornamentals	

Specialty Crops

Crop	Rate
ALOE BANANA COFFEE FIGS HERBS Such as: Basil, Chives, Cilantro MANGO PAPAYA PINEAPPLE TARO ROOT	0.35-5 oz per 100 lbs. seed

Grasses Grown For Seed

Crop	Rate
TURF GRASSES Such as: Blue Grasses, Fescues, Rye Grasses	0.35-5 oz per 100 lbs. seed
FORAGE GRASSES Such as: Fescues, Orchard Grasses, Timothy, Bromes, Wheat Grasses, Other Native Species	

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE

Close partially used bags and keep product away from exposure to air, sunlight, moisture, or heat. Do not store in temperatures over 110°F for more than seven days.

PESTICIDE DISPOSAL

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

CONTAINER DISPOSAL

Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then 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.

WARRANTY AND DISCLAIMER

CONDITIONS OF SALE AND EXCLUSIVE WARRANTY

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness of the product, or other unintended consequences may result because of such factors as horticultural practices, use with other products (unless otherwise expressly provided in the Directions for Use of this product), presence of other materials, the manner of use or application, and various environmental conditions, including but not limited to weather conditions and moisture conditions. To the extent consistent with applicable law, all of the aforementioned risks are beyond the control of Plant Health Care, Inc. and the Buyer shall assume all such risks.

EXCLUSIVE WARRANTIES

Plant Health Care, Inc. warrants that at the time of first sale of this product it conforms to the chemical description on the label and under normal conditions is reasonable fit for the purposes referred to in the Directions for Use, subject to inherent risks referred to above. To the extent consistent with applicable law, if this product does not perform as warranted above, customer's sole remedy for breach of that warranty shall be replacement of the product or refund of the purchase price paid, at the option of Plant Health Care, Inc. TO THE EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY

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OR OTHERWISE, INCLUDING BUT NOT LIMITED TO WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND SATISFACTORY QUALITY.

LIMITATION OF LIABILITY

To the full extent allowed by law, Plant Health Care, Inc. excludes for itself and its suppliers any liability, whether based in contract or tort (including negligence), for incidental, consequential, indirect, special, or punitive damages of any kind, or for loss of revenue or profits, loss of business, or crop injury arising out of or in connection with the sale, use, injury, performance, or failure of this product, even if Plant Health Care, Inc. or its authorized reseller has been advised of the possibility of such damages, and limits its liability to replacement of the product or a refund of the purchase price paid, at the option of Plant Health Care, Inc. This disclaimer of liability for damages will not be affected if any remedy provided herein fails of its essential purpose.

ASSUMPTION OF RISK

To the extent consistent with applicable law, Buyer and Users of this product assume the risk of any use contrary to the Directions for Use and/or all of the risks inherent in the use of this product as set forth above. Plant Health Care, Inc. offers this product, and the Buyer and User accept it, subject to the foregoing Conditions of Sale and Exclusive Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Plant Health Care, Inc.

PROMPT NOTICE OF CLAIM

Plant Health Care, Inc. must have prompt notice as soon as Buyer or User has reason to believe they may have a claim (not to exceed twenty-one days from the date of application) so that an inspection of the affected property and growing crops may be made. To the extent consistent with applicable law, unless Buyer and Users shall promptly notify Plant Health Care, Inc. of any claims, they shall be barred from obtaining any remedy.

TANK MIXES

To the extent consistent with applicable law, tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of User, Applicator, and/or Application Advisor. Read and follow the entire label of each product to be used in a tank mix with this product.

LIMITED USE LICENSE AND PATENTS

The contents of this package and/or the use of the contents are covered by U.S. Patent Nos. 5,849,868, 5,859,324, 5,776,889, 5,977,060, and 6,277,814 as well as pending patent applications. The purchase of this package grants the Buyer a license, under these patents and patent applications, to use its contents only for treating plants, plant seeds, and other plant parts as described herein.

©2008 Plant Health Care, Inc. Messenger® is a registered trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product.

Section B. Non-Agricultural Use

This product is Toxicity Category IV for all routes of exposure, thus the inclusion of PPE is not a requirement for non-WPS uses such as this section.

Messenger® Seed Treatment

[OPTIONAL TAG LINES – For use individually or in combination on labels and/or accompanying materials:

Seed Treatment for strong, healthy plants; Home, Yard & Garden; A Biochemical Plant Activator For Healthier Plants; Promotes Plant Growth; Helps Manage Disease; For Home and Garden Use; For Healthier Plants; Healthier Plants Better Blooms; Plant Health Regulator; Growth Stimulator; Larger Harvests; Easy to Use; Broad Spectrum; Promotes Plant Growth for Superior Gardens; Breakthrough Technology; Revolutionary; Effective; Economical; Improves the health of every plant you grow!; Improves the health of every plant in your garden!; Improves the health of every plant you grow in your garden! Fruits • Garden Flowers & Shrubs • House Plants • Vegetables • Grass Seed; Boost overall growth and production; Improve plant stamina & vigor; Strengthen a plant's resistance to disease; Harp-N-Tek is Plant Health Care's trademark for its proprietary harpin protein technology; Delivering stronger and healthier plants; with Harp-N-Tek™]

ACTIVE INGREDIENT:

Harpin Protein: 3.0%

INERT INGREDIENTS: 97.0%

Total: 100.0%

EPA Reg. No. 71771-4

EPA Est. No. 71771-PA-01

KEEP OUT OF REACH OF CHILDREN

Net Weight:

[OPTIONAL – Packed for:]

PLANT HEALTH CARE, INC.

William Pitt Way, Pittsburgh, PA 15238-1330

1-800-421-9051 • www.planthealthcare.com

[OPTIONAL] See Back Panel for additional precautionary statements

DIRECTIONS FOR USE

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

Messenger Seed Treatment is derived from a naturally occurring protein (harpin). Messenger Seed Treatment stimulates a plant's growth and defense mechanisms to improve the plant's ability to grow and protect itself from stresses caused by adverse environmental conditions. Use Messenger Seed Treatment to boost overall plant growth, vigor, and production, and to aid in the management of disease.

Messenger Seed Treatment may be used on all seeds, tubers, corms or bulbs planted indoors and outdoors, including Fruits, Flowers, Vegetables, Herbs, and Turf.

Wash your hands after use.

Mixing and Application Instructions

For large quantities of seed:

Place seed in plastic or paper bag (or use container in which seed was packed). Add ¼ teaspoon of Messenger Seed Treatment for each pound of seed (each bottle contains 2 teaspoons of Messenger Seed

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Treatment). Shake vigorously to create a light uniform dust on seeds. Follow planting instructions on seed container. Close lid on bottle to minimize exposure to air and moisture. Use opened bottles within one planting season.

For small quantities of seed:

Treat seed in the seed packet or transfer seed to a small paper or plastic bag for treatment. For each teaspoon of seed to be treated, add 2-4 puffs of Messenger Seed Treatment to the seed packet or bag and shake vigorously to create a light, uniform dust on the seeds. Squeeze the bottle to produce a puff (each bottle contains about 400 puffs). Follow planting instructions on seed package. Close lid on bottle to minimize exposure to air and moisture. Use opened bottles within one planting season.

[ALTERNATE Mixing and Application Instructions for 2 oz.

BOTTLE: Place seed in container (or use container in which seed was packed). Add 1 teaspoon of Messenger Seed Treatment for each 4 pounds of seed (each bottle contains enough Messenger Seed Treatment to treat 100 pounds of seed). Shake or stir vigorously to create a light uniform dust on seeds. Follow planting instructions on seed container. Close lid on bottle to minimize exposure to air or moisture. Use opened bottles within one planting season.]

STORAGE AND DISPOSAL

Store dry and out of direct sunlight. Do not store in temperatures over 110° F for more than 7 days. If Empty: Do not reuse this container. Place in trash or offer for recycling if available. If Partly Filled: Call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

PRECAUTIONARY STATEMENTS

ENVIRONMENTAL HAZARDS: Do not apply directly to water. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

NOTICE: Buyer assumes all responsibility for safety and use not in accordance with directions.

The contents of this package and/or the use of the contents are protected by U.S. Patent Nos. 5,849,868, 5,859,324, 5,776,889, 5,977,060, and 6,277,814. REFORMULATION OR REPACKAGING FOR SALE IS PROHIBITED.

©2008 Plant Health Care, Inc. Messenger® is a registered trademark of Plant Health Care, Inc. Always read and follow label instructions before buying or using this product.

OPTIONAL LANGUAGE for labels and accompanying materials:

CAN BE USED UP TO THE DAY OF HARVEST

What does Messenger do?

- Stimulates a plant's defense and growth mechanisms
- Boosts overall growth, vigor, and production
- Aids in the management of disease
- Improves the plant's ability to grow and protect itself from stresses caused by adverse environmental conditions

Use Messenger to increase plant health and vigor, and aid in the management of disease, such as: bacterial leaf spot, black leaf spot, *Botrytis*, *Fusarium* wilt, and powdery mildew.

[BARCODE]

08.0325 US-Master Messenger Seed Treatment [ST, H&GST]