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 Marp-N-Tek is Eden's trademark for its proprietary harpin protein technology]

#### **Dry Powder**

**ACTIVE INGREDIENT:** 

OTHER INGREDIENTS: ..... 97.0% Total: .....

EPA Reg. No. 69834-6 EPA Est. No. 69834-

KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUCION ...

EDEN BIOSCIENCE

Si usted no antiende la etiqueta, bus alguien para que se la explique a ust detalle (If you do not understand the find someone to explain it to you.)

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Read the entire label before using this product.

Read "LIMIT OF WARRANTY AND LIABILITY" before buying or using. If terms are not acceptable, return at once unopened.

#### **PRECAUTIONARY STATEMENTS**

# HAZARD 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 toilet.

#### **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.

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.

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 Seed Treatment 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 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 EDEN BIOSCIENCE field representative or EDEN BIOSCIENCE Customer Service for specific compatibility information for Messenger Seed Treatment and other labeled products.

## **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

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

Field Crops

| rielu Crops   |                  |
|---|------------------|
| Crop  | Rate             |
| LEGUME VEGETABLES   | 0.35 – 5 oz      |
| Such as Beans, Peas, Lentils, and Soybeans                | per 100 lbs seed |
| LEGUME FRESH and WET PROCESSING VEGETABLES                | 1                |
| Such as: Peas, Green bean, and Shap beans                 |                  |
| COTTON  | ]                |
| TUBER CROPS   | 1                |
| Such as: Potato, Sweet Potato, Yams                       | 1                |
| FORAGE CROPS  | 1                |
| Such as: Alfalfa hay, Timothy hay                         | 1                |
| CORN (grain, silage or popcom)                            | 1                |
| OIL AND SEED  | ]                |
| CROPS   |                  |
| Such as: Canola (rape seed), Jojoba, Mint (peppermint and |                  |
| spearmint), Safflower, Sesame, Sunflower                  | ]                |
| PEANUT  |                  |
| ROOT CROPS  | 1                |
| Such as: Beets, Carrots, Ginger Root, Ginseng, Parsnips,  | Ť                |
| Radish, Rutabagas, Tumips                                 |                  |
| RICE  | 1                |
| SMALL GRAINS  |                  |
| Such as: Barley, Flax, Oats, Rye, Wheat,                  | 1                |
| SORGHUM   | 1                |
| SUGARÇANE   | ]                |
| TUBER CROPS   | 1                |
| Such as: Potato, Sweet Potato, and Yams                   | <u> </u>         |

#### Tobacco

`. **.** . .

|           | Crop           | Rate              |
|-----------|----------------|-------------------|
| TOBACCO   |                | 0.35 - 5 oz.      |
| Ali types |                | per 100 lbs. seed |
| D         | -I O II E - '4 |                   |

#### Berries and Small Fruit

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

## Trees and Vines

| Сгор  | Rate                             |
|---|----------------------------------|
| AVOCADO   | 0.35 - 5 oz.<br>per 100 lbs seed |
| CITRUS<br>Such as: Grapefruit, Mineolas, Lemon, Lime, Orange, Pumelo,<br>Tangelo, Tangerine |                                  |
| NUT TREES<br>Such as: Almond, Filbert, Macadamia, Pecan, Pistachio, Walnut                  |                                  |
| POME FRUIT Apple, Pear STONE FRUIT Such as: Cherry, Olive, Nectarine, Peach, Plumb, Prune   |                                  |
| VINE CROPS<br>Such as: Grape (juice, raisin, table, and wine), Kiwifruit, Hops              |                                  |
| TREES<br>Conifer<br>Broadleaf   |                                  |

## **Turf and Ornamentals**

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

**Specialty Crops** 

| Сгор                              | Rate             |
|-----------------------------------|------------------|
| ALOE                              | 0.35 - 5 oz.     |
| BANANA                            | per 100 lbs seed |
| COFFEE                            | 1                |
| FIGS                              | 1                |
| HERBS                             |                  |
| Such as: Basil, Chives, Cilantro, |                  |
| MANGO                             | ł                |
| PAPAYA                            | <b>,</b>         |
| PINEAPPLE                         | 1                |
| TARO ROOT                         |                  |

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#### **Grasses Grown For Seed**

| Glasses Glowii Foi Geed                                   |                   |  |
|---|-------------------|--|
| Сгор  | Rate              |  |
| TURF GRASSES  | 0.35 - 5 oz.      |  |
| Such as: Blue Grasses,Fescues, Rye Grasses                | per 100 lbs, seed |  |
| FORAGE GRASSES  |                   |  |
| Such as: Fescues, Orchard Grasses, Timothy, Bromes, Wheat |                   |  |
| Grasses, Other Native Species                             | <u></u>           |  |

#### STORAGE AND DISPOSAL

#### GENERAL

Do not contaminate water, food, or feed by storage and disposal. Keep product away from exposure to air, sunlight, moisture, or heat. Use product within 3 weeks of opening.

#### STORAGE

Store dry and out of direct sunlight. Do not store in temperatures over 110° F for more than seven days.

#### DISPOSAL OF PRODUCT

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

#### **DISPOSAL OF CONTAINER**

Completely empty bag into application equipment. Then 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.

#### LIMIT OF WARRANTY AND LIABILITY

#### 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 should be followed carefully. However, it is interested to be imminished to be reliable and should be followed carefully. However, it is interested to be 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. All of the aforementioned risks are beyond the control of EDEN BIOSCIENCE Corporation and the Buyer shall assume all such risks.

#### **EXCLUSIVE WARRANTIES**

EDEN BIOSCIENCE Corporation 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. 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 EDEN BIOSCIENCE Corporation. 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 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, EDEN BIOSCIENCE Corporation excludes for itself and its suppliers any fiability, whether based in contract or lort (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 EDEN BIOSCIENCE Corporation 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 EDEN BIOSCIENCE Corporation. This disclaimer of liability for damages will not be affected if any remedy provided herein fails of its essential purpose.

#### ASSUMPTION OF RISK

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. EDEN BIOSCIENCE Corporation 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 EDEN BIOSCIENCE Corporation.

#### PROMPT NOTICE OF CLAIM

EDEN BIOSCIENCE Corporation 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. Unless Buyer and Users shall promptly notify EDEN BIOSCIENCE of any claims, they shall be barred from obtaining any remedy.

#### MIXES

Mixing or use of this product with any other product which is not specifically and expressly authorized by the tabel 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 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

# Section B. Non-Agricultural Use – Seed Treatment

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 you grow! Improves the health of every plant you grow in your Garden! Fruits •Garden Flowers & Shrubs • House Plants • Vegetables • Grass See; Boost overall growth and production; Improve plant standama & vigor; Strengthen a plant's resistance to disease; Harp-N-Tek is Eden's trademark for its proprietary harpin protein technology, Delivering stronger and healthier plants; with Harp-N-Tek<sup>TM</sup>; Harp-N-Tek is Eden's trademark for its proprietary harpin protein technology]

#### **ACTIVE INGREDIENT:**

| Harpin Protein:    | 3.0% |
|--------------------|------|
| INERT INGREDIENTS: |      |
| Total:             | 100% |



# **EDEN**

Net Weight:

#### [OPTIONAL - Packed for:]

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[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 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 & Application Instructions for 2 oz. BOTTLE: Place seed in a 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 and 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. Dispose of shaker bag in trash. 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 wash waters 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. © 2004 EDEN BIOSCIENCE Corporation. Messenger®, and EDEN BIOSCIENCE® are registered trademarks of EDEN BIOSCIENCE Corporation. Always read and follow label instructions before buying or using this product.

#### OPTIONAL LANGUAGE for labels and accompanying materials:

MAY BE USED UP TO THE DAY OF HARVEST

#### What does Messenger Seed Treatment do?

- Increases root mass and uniformity in germination
- 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 Seed Treatment 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]

06.0824 US Master MESSENGER SEED TREATMENT M3(ST, H&GST)