

64137-8

11/02/2007

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Verdera

Primastop Biofungicide Powder

{Additional Brand Name: Prestop Mix}

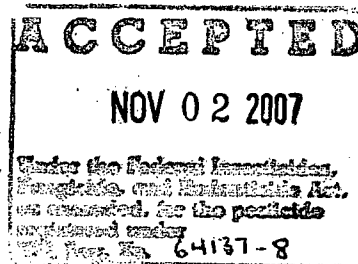
Biofungicide Powder

Active Ingredient:

Gliocladium catenulatum Strain J1446* 37.0%

Other Ingredients 63.0%

*Contains 1.0 x 10⁸ cfu/gram Total 100.0%



Keep Out of Reach of Children

CAUTION

First Aid	
If Swallowed:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on Skin or Clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Immediately rinse skin with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
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 Inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
[Hot Line Number]	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. [You may also contact 1-800-424-9300 for emergency medical treatment information.]	

{Note: The First Aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.}

READ ALL DIRECTIONS BEFORE USING

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed, inhaled or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. Thoroughly wash 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.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

Long-sleeved shirt and long pants.

Waterproof gloves.

Shoes plus socks.

NIOSH-approved respirator with any N, P, R or HE filter.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are provided, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Immediately remove clothing if pesticide gets inside, then thoroughly wash and put on clean clothing.
- Remove personal protection equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, thoroughly wash and change into clean clothing.

Environmental Hazards

For terrestrial uses: Do not apply directly to water, 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 water or rinsate.

Emergency Information

For spill, leak, fire, exposure or accident call CHEMTREC at 1-800-424-9300.

Not for Sale or Use After {Insert Date}

Net Weight: 1.75 oz. (50 g)

[Net Weight: 2.2 pounds (1 kg)]

**Verdera Oy
Luoteisrinne 2
P.O. Box 5
FI-02271 Espoo, Finland**

**EPA Reg. No. 64137-8
EPA Est. 64137-FI-1
Made in Finland
Revision _____**

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 requirements specific to your State or Tribe, consult the State or 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 personal protective equipment (PPE) and restricted-entry interval. The requirements in this box apply only 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 0 hours.

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 pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries and greenhouses.

Do not enter treated area without protective clothing until sprays have dried.

USE RESTRICTIONS

Chemigation: Do not apply PRIMASTOP through any type of irrigation system.

Tank Mixes: Do not tank mix PRIMASTOP with any other pesticide or concentrated fertilizer.

Integrated Pest Control Programs: PRIMASTOP may be used in integrated pest control programs. Always check the compatibility of PRIMASTOP with other biofungicides or chemical pesticides with the local distributor. Do not apply chemical pesticides within 1 to 4 days of PRIMASTOP application except for propamocarb hydrochloride, triadimefon, deltamethrin, malathion, metalaxyl, primicarb and pyrethrins, which may be applied on the same day as PRIMASTOP.

GENERAL

PRIMASTOP controls damping-off, seed rot, root and stem rot, wilt and certain foliar diseases caused by *Rhizoctonia*, *Pythium*, *Phytophthora*, *Fusarium*, *Didymella*, *Botrytis*, *Verticillium*, *Alternaria*, *Cladosporium*, *Helminthosporium*, *Penicillium* and *Plicaria* on greenhouse or field grown vegetables, herbs, ornamentals, tree and forest seedlings and turf.

Incorporate PRIMASTOP in the growth substrate as either an aqueous suspension or a dry powder, applied by drenching or applied as a foliar or field spray. If a spray treatment is used, pay attention to the large particle size (up to 0.5 mm) of the product and use screens and nozzles of appropriate size. Rinse the nozzles and screens as needed. To prevent settling, agitate the aqueous suspension before and during drench and spray treatment.

Use PRIMASTOP on turf and the following greenhouse or field-grown vegetables, herbs, spices, ornamentals, trees and shrubs grown in greenhouses or outdoors:

VEGETABLES

(Including Fruiting, Leafy, Root Crop and Seed/Pod Vegetables such as)

Artichokes	Cucumbers	Parsnips
Asparagus	Eggplant	Peas
Beans	Endive	Peppers
Beets	Garlic	Potatoes
Broccoli	Horseradish	Pumpkins
Brussels Sprouts	Kale	Radishes
Cabbage	Kohlrabi	Rutabagas
Carrots	Leeks	Spinach
Cauliflower	Lentils	Squash
Celery	Lettuce	Strawberries
Chicory	Melons	Tomatoes
Chinese Cabbage	New Zealand Spinach	Turnips
Corn	Onions	Watermelons

HERBS AND SPICES

Aniseed	Fennel	Rosemary
Basil	Lavender	Sage
Caraway	Marjoram	Savory
Chives	Oregano	Thyme
Dill	Parsley	Watercress

ORNAMENTALS

(Including Flowers, Foliage and Potted, Bedding and Seedling Plants such as)

Achillea	Daisy	Matthiola
African Violet	Delphinium	Monarda
Ageratum	Dianthus	Nigella
Alyssum	Dieffenbachia	Pansy
Amaryllis	Freesia	Pelargonium

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Anemone
 Anthurium
 Aster
 Azalea
 Bedding Plants
 Begonias
 Calceolaria
 Campanula
 Carnation
 Centaurea
 Cerastium
 Chrysanthemum
 Cineraria
 Coleus
 Cyclamen
 Daffodils
 Dahlia

Fuchsia
 Gaillardia
 Gazania
 Geraniums
 Gerbera
 Gladiolus
 Gloxinia
 Gypsophila
 Hedera
 Hyacinth
 Impatiens
 Iris
 Kalanchoe
 Liatris
 Lilies
 Lobelia
 Marigolds

Petunias
 Phlox
 Poinsettia
 Poppy
 Primrose
 Rhododendron
 Rose
 Rudbeckia
 Salvia
 Senecio
 Sinningia
 Statice
 Sweet Pea
 Tulips
 Verbena
 Vinca
 Zinnia

TREES AND SHRUB SEEDLINGS

Birch
 Forest Trees
 Fruit Trees

Juniper
 Pine
 Shrubs

Spruce
 Vine Crops
 Woody Ornamentals

OTHERS

Home Ornamentals (grown indoors or outdoors) and Turf

PREPARING AN AQUEOUS SUSPENSION OF PRIMASTOP

To prepare an aqueous suspension of PRIMASTOP, mix product with water and agitate sufficiently to evenly disperse product. Agitate during use to avoid settling. Use the aqueous suspension within 1 day of preparation. Examples of mixing ratios of PRIMASTOP with water are as follows:

Concentration of PRIMASTOP Suspension	Ounces of PRIMASTOP	Gallons of Water	Grams of PRIMASTOP	Liters of Water
0.2%	3.5 oz.	13	100 grams	50 liters
0.5%		5		20 liters
1.0%		2.5		10 liters
2.5%		1.0		4 liters
5.0%		0.5		2 liters

INCORPORATION IN POTTING MEDIA

For vegetables, herbs, ornamentals and tree or forest seedlings grown in greenhouses or indoors, incorporate PRIMASTOP in the potting media. Mix PRIMASTOP in potting mixture at sowing, potting or transplanting as an aqueous suspension or as a dry powder.

When incorporating PRIMASTOP as a dry powder use 3.5-14 oz. of PRIMASTOP per cubic yard of growth substrate (i.e. 0.1-0.5 gram of PRIMASTOP per 1 liter of growth substrate). When incorporating PRIMASTOP as an aqueous suspension, mix 3.5 oz. of the product per 1 gallon of water (2.5% suspension). Use 1-4 gallons per cubic yard of growth substrate (i.e. 0.1-0.5 gram of PRIMASTOP suspension per liter of growth substrate).

Use the higher rate for higher disease pressure. It is important to evenly incorporate PRIMASTOP to assure best performance. Store potting media containing PRIMASTOP below 77°F (25°C) and use within 3 weeks after preparation. Incorporation of PRIMASTOP may be followed with a drench application within 2-6 weeks as described below under soil drench applications.

SOIL DRENCH APPLICATIONS

Use a 0.2-0.5% PRIMASTOP suspension (27-70 oz. PRIMASTOP per 100 gals. of water) for soil drench applications.

Seedling Trays or Beds (Rate per Area): Drench seedling trays or beds with PRIMASTOP at the rate of 1.5-3.5 oz./100 sq. ft. (5-10 g/m²). Use the higher rate for higher crop density or higher disease pressure. For example, use 3.5 oz. PRIMASTOP per 10 gallons of water per 100 sq. ft.

Pots, Plugs or Rockwool Cubes (Rate per 100 Plants): Drench crops grown in pots or rockwool cubes with PRIMASTOP. Use a 0.2-0.5% suspension. Dose rate depends on the root plug/ball size and disease pressure. Use the higher rate for bigger root volume and higher disease pressure. Refer to the following table for application rates on different pot or root plug sizes:

Pot Size (Root Volume)	Fluid Ounces/100 Plants	
	0.2% Suspension	0.5% Suspension
0.5 fl. oz. (15 ml)	5-15	2-6
1.5 fl. oz. (45 ml)	15-40	6-18
3.5 fl. oz. (100 ml)	30-100	12-40
Pot Size (Root Volume)	Gallons/100 Plants	
	0.2% Suspension	0.5% Suspension
17.5 fl. oz. (500 ml)	1.5-4	0.5-1.5
0.5 gal. (1.9 L)	4.5-15	2-6

In Drenching Treatments Use the Following PRIMASTOP Water Suspension: 2.5-7 oz. PRIMASTOP per 10 gallons of water (0.2-0.5% suspension).

- Dose rate depends on the root plug/ball size and disease pressure.
- Use the highest rates of PRIMASTOP (7 oz. /10 gallons) for the biggest pots or under high disease pressure.
- Seedling Trays, Beds or Pots less than 4 inches deep (rate per area): Use 12.5-25 oz. of PRIMASTOP per 40 gallons of water per 800 sq. ft. (5-10g of PRIMASTOP per m²).
- Pots, Plugs or Rockwool Cubes 4 to 6 inches deep (rate per area): Use 12.5-25 oz. of PRIMASTOP per 80 gallons of water per 800 sq. ft. (5-10 g of PRIMASTOP per m²).
- Pot Volumes around 0.5 to 1 gallon or 2 to 4 liters (rate per pot): Use 2.5-6 oz. of PRIMASTOP per 10 gallons of water per 100 pots (0.2-0.5 g of PRIMASTOP per liter of growing substrate).

Timing of Treatments: Drench vegetables, herbs and ornamentals at sowing.

SPRAY APPLICATIONS

When a spray treatment is used, pay attention to the large particle size (up to 0.5 mm) of the product and use screens and nozzles of appropriate size. Rinse the nozzles and screens as needed. To prevent settling, agitate the aqueous suspension before and during drench and spray treatment.

FOLIAR SPRAY

Spray or spread an aqueous suspension of PRIMASTOP on the plant stems or foliar parts for control of *Didymella* or *Botrytis*. Use a water suspension of 14-140 oz. PRIMASTOP per 100 gallons of water (0.1%-1.0% suspension). Treat plants to the point of run-off using a rate of 0.4-4 oz. of PRIMASTOP per 100 sq. ft. (or 1-10 grams of PRIMASTOP per square meter). Use concentrations up to 5% under high disease pressure. Repeat foliar spray every 2-8 weeks if necessary.

FIELD SPRAYING APPLICATIONS

After planting, spray fields with an aqueous suspension of 14-140 oz. PRIMASTOP per 100 gallons of water (0.1%-1.0% suspension) and apply at the rate of approximately 3 gallons of the suspension per 100 sq. ft. (i.e., 0.4-4 oz. of PRIMASTOP per 100 sq. ft.). Use approximately 1220 gallons of PRIMASTOP suspension (0.1-1.0%) per acre. Repeat spray applications, if necessary, every 2 to 8 weeks during the growing season.

TURF APPLICATIONS

Spray turf with an aqueous suspension of 9 lbs. (140 oz.) PRIMASTOP per 100 gallons of water (11 g/l) and apply at the rate of approximately 100 gallons of PRIMASTOP suspension per acre (10 kg/ha). Repeat spray applications, if necessary, every 4 to 8 weeks during the growing season.

TREATMENT OF CUTTINGS, BULBS OR TUBERS

Before planting, dip cuttings in a suspension of 1 oz. PRIMASTOP per gallon of water. Before planting or storage, dip bulbs or tubers in a suspension of 1 oz. PRIMASTOP per gallon of water. Incorporate PRIMASTOP in the storage mixture, such as sand or peat, at a rate up to 0.2 oz. PRIMASTOP per 1.5 gallons (1 gram per liter) of storage mixture.

STORAGE AND DISPOSAL

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

Pesticide Storage: PRIMASTOP consists of living microbes. Unopened packages [containers] can be stored up to one year in a cool (below 46°F, 8°C), dry place and for 3 weeks at room temperature (maximum 77°F, 25°C). Tightly seal opened packages [containers], store in a cool, dry place and use within one month.

Pesticide Disposal: Dispose of wastes resulting from the use of this product on site or at an approved waste disposal facility.

Container Disposal {Pouches}: Nonrefillable container. Do not reuse or refill this pouch. Completely empty pouch into application equipment, then offer for recycling, if available, or dispose of empty pouch 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 _____. **[Container Disposal {Plastic Cans:}** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and reseal. 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; or if allowed by state and local authorities, by burning (if burned stay out of smoke). Batch Code _____.]

WARRANTY & DISCLAIMER

Verdera Oy warrants only that this product conforms to the product description on this label and is reasonably fit for the purposes set forth in the Directions for Use when used in accordance with them. However, ineffectiveness

or other unintended consequences may result because of such factors as the use, storage or handling of the product contrary to the label instructions, all of which are beyond the control of Verdera Oy. To the extent permitted by applicable law, Verdera Oy shall not be liable for indirect or consequential damages resulting from the use, storage or handling of this product contrary to label directions and/or precautionary statements. To the extent permitted by applicable law, VERDERA OY MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

[] Denotes alternate/optional language

{ } Denotes language that does not appear on the market labeling