

# Botector®

A BIOLOGICAL FUNGICIDE FOR THE PROTECTION OF POME FRUITS FROM THE LABELED STORAGE DISEASES; GRAPES AND TOMATOES FROM BOTRYTIS CINEREA; BERRIES FROM ANTHRACNOSE, BOTRYTIS CINEREA, PHOMOPSIS SPP., AND RHIZOPUS FRUIT ROT; STONE FRUITS AND ALMONDS FROM MONILINIA SPP. AND BLOSSOM BLIGHT; AND HAZELNUTS FROM ANISOGRAMMA ANOMALA



For Organic Production

## Active Ingredients:

*Aureobasidium pullulans* strain DSM 14940\* .....40%

*Aureobasidium pullulans* strain DSM 14941\* .....40%

**Other Ingredients:**.....20%

**Total**.....100%

\*Contains a minimum of  $1.06 \times 10^9$  cfu/gram of active ingredient.

## KEEP OUT OF REACH OF CHILDREN CAUTION

See back panel for First Aid and additional Precautionary Statements

EPA Reg. No. 86174-3  
EPA Est. No. 86174-AUT-001  
Net Weight: 20 oz (0.57 kg)

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand the label, find someone to explain it to you in detail.)



### FIRST AID

<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to by a poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>

### 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 the National Poison Control Hotline at 1-800-222-1222 for emergency medical treatment information 24 hours a day, 7 days a week.

### PRECAUTIONARY STATEMENTS

#### Hazards To Humans And Domestic Animals

**CAUTION.** Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Wear waterproof gloves. Remove and wash contaminated clothing before reuse.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- shoes plus socks
- long-sleeved shirt and long pants
- waterproof gloves

Mixer/loaders and applicators must wear a NIOSH-approved particulate respirator with any N, R, or P filter with NIOSH-approval number prefix TC-84A; or a NIOSH approved powered air purifying respirator with a HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturers' instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### ENGINEERING CONTROLS

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### IMPORTANT:

When reduced PPE is worn because a closed system is being used, handlers must provide all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

### USER SAFETY RECOMMENDATIONS

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

For terrestrial uses: 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.

### 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.

**IMPORTANT:** Read the entire label before using this product.

### 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 intervals (REI). The requirements in 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 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 plants, soil or water) is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

### OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

#### Spray Drift Reduction Management:

The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator. Use the following as a guide for reducing drift onto non-target sites.

#### Buffer Zone Requirements:

**Ground/Foliar Applications:** Do not apply by ground within 25 feet of lakes; reservoirs; rivers; permanent streams, marshes or natural ponds; estuaries and commercial fish farm ponds.

**Wind Speed Restrictions:** Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications, determine drift potential at any given wind speed. Do not apply when winds are greater than 10 mph and avoid gusty and windless conditions. Avoiding applications when wind direction is toward the aquatic area can reduce risk of exposure to sensitive aquatic areas.

#### Runoff Management:

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When used on erodible soils, consult your local Soil Conservation Service before using this product in your area. Do not apply if soil is saturated with water. Do not apply under conditions that favor runoff from drift.

#### Product Information:

Botector consists of two strains of *Aureobasidium pullulans*. *Aureobasidium pullulans* is a ubiquitous microorganism in the environment. Botector must be used as a preventative measure before infection by certain pathogens. The product competes for space and nutrients with the labeled pathogens. Using competitive inhibition, Botector is effective against fruit rot on pome fruits due to *Penicillium* spp., *Botrytis cinerea*, *Monilinia* spp., *Nectria galligena* and *Pezicula* spp. Botector is effective against *Botrytis cinerea* on berries, grapes and tomatoes, as well as, Anthracnose, *Phomopsis* spp. and Rhizopus fruit rot in berries. Botector is effective against *Monilinia* spp. and blossom blight in stone fruits and almonds, as well as *Anisogramma anomala* in hazelnuts (filberts). FRAC Code: NC (not classified).

Botector can be applied up to the day of harvest.

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

## Crops Treated + Diseases Controlled

	Crops Treated	Disease Controlled
BERRIES	Strawberry, Raspberry, Blueberry, Blackberry, Huckleberry, Red and Black Currant, Loganberry	Gray mold ( <i>Botrytis cinerea</i> ), Anthracnose, <i>Phomopsis</i> spp., Rhizopus Fruit Rot
GRAPE	American Bunch Grapes (Table Grapes, Wine Grapes and Raisin Grapes), Muscadine Grape and Vinifera Grape	Gray mold ( <i>Botrytis cinerea</i> )
POME FRUIT**	Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear, Quince	Storage diseases: <i>Botrytis cinerea</i> , <i>Penicillium</i> spp., <i>Monilinia</i> spp., <i>Nectria galligena</i> and <i>Pezizula</i> spp.
STONE FRUIT	Apricot, Cherry (including Sweet and Tart), Nectarine, Peach, Plum (including Chickasaw, Damson and Japanese), Plumcot, Prune (fresh)	Blossom blight, Brown rot ( <i>Monilinia</i> spp.)
ALMOND	Almond	Blossom blight, Brown rot ( <i>Monilinia</i> spp.)
HAZELNUT**	Hazelnut (Filbert)	Eastern filbert blight ( <i>Anisogramma anomala</i> )
TOMATO	Fresh and processing tomatoes (greenhouse and field production)	Gray mold ( <i>Botrytis cinerea</i> )

\*\*Use not permitted in California unless otherwise directed by supplemental labeling.

## Preparation of Botector Mixture:

Ensure the temperature of the tank mixture is below 86°F (30°C). Agitate mixture before and during application. Use the spray mixture within 8 hours after tank-mixing.

## Compatibility:

Not all chemicals or fertilizers can be mixed with Botector during application. Many fungicides are not compatible and may be detrimental to Botector. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures. For product compatibility information, contact Westbridge Agricultural Products.

## PRE-HARVEST APPLICATION

Apply specified rate of Botector, as a directed spray to the target crop. Ensure thorough coverage wherever infection is likely to occur. For tomatoes, ensure full plant spray coverage.

## Application Rate

Use sufficient water for adequate and even coverage without runoff:

Crop	Water Volume (gallons/acre)	Amount of Botector (ounces/acre)
BERRIES	100-500	5-10
ALMOND GRAPE POME FRUIT** STONE FRUIT HAZELNUT**	≤50	6
	51 to 100	8
	101 to 200	10
	201 to 300	12
	301 to 500	14
TOMATO	20 to 400	7-14

## Application Instructions

Crop	Time of application	Number of applications
BERRIES	From beginning of bloom until harvest	With intervals of 5-7 days depending on infection pressure
GRAPE*	Between early and late bloom (10-80%)	1-3 applications depending on infection pressure
	Before bunch closure	1 application
	During veraison/ berry softening	1 application
	During ripening	Additional applications, with intervals of 3-7 days depending on infection pressure
POME FRUIT**	Starting 5 weeks before harvest	Up to 6 applications, with intervals of 5-7 days depending on infection pressure
STONE FRUIT ALMOND	at 10, 40, 70 and 90% open flowers	4 applications
	Starting 5 weeks before harvest	Up to 6 applications, with intervals of 5-7 days depending on infection pressure
TOMATO	Starting at emergence or transplant until harvest	Apply every 5 to 10 days depending on growth rate and infection pressure
HAZELNUT**	Starting at bud break	Up to 8 applications, with intervals of 5-7 days depending on infection pressure

\* Treat bunch zone only

\*\*Use not permitted in California unless otherwise directed by supplemental labeling.

## STORAGE AND DISPOSAL:

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

**PESTICIDE STORAGE:** Botector must be stored out of direct sunlight in a cool, dry place. Do not freeze. From date of manufacture, product can be stored: 18 months at room temperature (47°F to 68°F; 9°C to 20°C) or 30 months at cold temperature (34°F to 46°F; 1°C to 8°C). Store only in original container in an area designated for pesticide storage. Keep out of reach of children.

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

**CONTAINER HANDLING:** 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 1/4 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 or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Conditions of Sale:** Seller warrants that this product consists of the ingredients specified and is reasonably fit for the purposes stated on this label when used in accordance with the directions under normal conditions of use. No one is authorized to make any other warranty or guarantee concerning this product. To the extent consistent with applicable law, any liability arising from the handling, storage and use of this product is limited to replacement of product or refund of purchase price.

### Manufactured by:

bio-ferm GmbH  
Technologiezentrum Tulln,  
Technopark 1  
3430 Tulln, Austria



### For Product Information, contact:

Westbridge Agricultural Products  
1260 Avenida Chelsea, Vista, CA  
92081 USA  
Phone: (800) 876-2767

