

Blossom Protect™

A BIOLOGICAL BACTERICIDE
FOR PREVENTING FIRE BLIGHT IN POME FRUITS AND WALNUT BLIGHT IN WALNUTS



KEEP OUT OF REACH OF CHILDREN
CAUTION

Active Ingredients:

<i>Aureobasidium pullulans</i> strain DSM 14940*	25.80%
<i>Aureobasidium pullulans</i> strain DSM 14941*	25.80%
Other Ingredients:	48.40%
Total	100.00%

EPA Reg. No. 86174-4
EPA Est. No. 86174-AUT-001

Net Contents: 2.5 Lbs (1.1 kg)

*Contains a total minimum of 8.8×10^8 cfu/gram of active ingredient.

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	
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately 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.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
HOTLINE 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 neoprene rubber, natural rubber, butyl rubber or nitrile rubber gloves and protective eyewear. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- long-sleeved shirt and long pants
- protective eyewear
- neoprene rubber, natural rubber, butyl rubber or nitrile rubber gloves
- shoes plus socks

Mixers/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 manufacturer's 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)(4-5)), 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 be provided 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 interval (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
- Protective eyewear
- neoprene rubber, natural rubber, butyl rubber or nitrile rubber 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 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: Blossom Protect is a microbial plant protection product consisting of two strains of *Aureobasidium pullulans*. *Aureobasidium pullulans* is a ubiquitous microorganism in the environment.

Blossom Protect must be used as a preventative measure before the occurrence of infection with the causal agent of fire blight, *Erwinia amylovora*, and walnut blight, *Xanthomonas arboricola* pv. *juglandis*. Apply Blossom Protect only during primary bloom, prior to or when environmental conditions for the growth of *Erwinia amylovora* or *Xanthomonas arboricola* pv. *juglandis* are present.

Mode of Action: The microorganisms in Blossom Protect colonize on the blossoms of the trees and compete with the pathogen for space and nutrients. Using competitive inhibition, Blossom Protect prevents the development of fire blight and walnut blight by colonizing the blossom and reducing the ability of the bacteria to thrive. FRAC Code: NC (not classified)

Compatibility: Not all chemicals or fertilizers can be mixed with Blossom Protect during application. Many fungicides are not compatible and may be detrimental to Blossom Protect. Do not tank mix with copper-based products. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures. For product compatibility information, contact Westbridge Agricultural Products.

Phytotoxicity: Perform a phytotoxicity test on a few trees before large-scale application.

Preparation of Blossom Protect Spray Mixture: Ensure the temperature of the spray mixture is below 86°F (30°C). Maintain agitation of the spray mixture.

In 50-200 gallons water per acre, add 1.25 lbs of Blossom Protect per acre.
Metric Units: In 467-1868 L water per hectare, add 1.4 kg of Blossom Protect per hectare.

To accelerate the propagation of *Aureobasidium pullulans* in the flower, the addition of Buffer Protect to the mixture is beneficial. If using Buffer Protect, prepare the spray mixture as directed below.

In 50-200 gallons of water per acre, add 1.25 lbs of Blossom Protect + 8.75 lbs of Buffer Protect per acre. Add Blossom Protect to the spray mix last.
Metric Units: In 467-1868 L water per hectare, add 1.4 kg of Blossom Protect + 9.8 kg of Buffer Protect per hectare.

Application Instructions: Apply the spray mixture while maintaining agitation. Use the prepared Blossom Protect Spray Mixture within 8 hours after tank-mixing. Apply Blossom Protect to thoroughly wet the blossoms and foliage. Apply as a foliar application using ground equipment only. Do not apply Blossom Protect through any type of irrigation system. Do not apply spray mixture aerially. Do not apply when fruit is present.

Pome fruit: Applications the day before predicted infection conditions (according to disease forecasting models) provide optimum protection against fire blight. If the risk for fire blight is high, up to four applications provide optimum protection. Spray Blossom Protect at 10%, 40%, 70% and 90% bloom, according to the Biologische Bundesanstalt, Bundessortenamt und Chemische Industrie (BBCH) scale: BBCH 61-69. The BBCH scale is used to identify the phenological development stages of a plant.

• 61: Beginning of flowering: about 10% of flowers open • 62: About 20% of flowers open
• 63: About 30% of flowers open • 64: About 40% of flowers open • 65: Full flowering: at least 50% of flowers open, first petals falling
• 67: Flowers fading: majority of petals fallen • 69: End of flowering: all petals fallen.

For susceptible pome fruit varieties, the product may contribute to russetting when applied during late blossom and wet conditions. Cool, wet weather conditions can increase the potential for russetting.

Walnuts: For walnut blight, up to six applications may be needed between 10% and 100% bloom.

For application rates refer to the Application Table below. One, 2.5 pound (1.1 kg) container of Blossom Protect treats 2 acres.

APPLICATION TABLE

	Disease Controlled	Rate	Time of Application
POME FRUITS such as: Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear, Quince	Fire Blight (<i>Erwinia amylovora</i>)	Use 1.25 lbs of Blossom Protect per 1 acre. Adjust spray volume to assure thorough coverage.	Up to 4 treatments at 10%, 40%, 70% and 90% bloom
WALNUTS	Walnut Blight (<i>Xanthomonas arboricola</i> <i>pv. juglandis</i>)	Use 1.25 lbs of Blossom Protect per 1 acre. Adjust spray volume to assure thorough coverage.	Up to 6 treatments between 10% bloom and 100% bloom

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Blossom Protect 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. After storage times under the specified conditions have been exceeded, do not use and dispose of product in accordance with the instructions below.

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 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 ingredient 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:



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