

# Bravo Ultrex®

**GROUP****M5****FUNGICIDE**

## FUNGICIDE

### ACTIVE INGREDIENT:

Chlorothalonil (tetrachloroisophthalonitrile) . . . . . 82.5%

**OTHER INGREDIENTS:** . . . . . 17.5%

**TOTAL:** . . . . . 100.0%

Bravo Ultrex® is formulated as a water-dispersible granule (WDG).

Contains 0.825 lb ai chlorothalonil per pound of product.

**EPA Reg. No. 66222-277**

**EPA Est. No. 37429-GA-001<sup>87</sup>; 37429-GA-002<sup>90</sup>; 37429-GA-003<sup>91</sup>; 65387-AR-002; 50534-TX-001**

Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN DANGER / PELIGRO

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 in eyes** 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. Rinse eye only with water. Do not put eye drops, drugs, or ointments in eyes unless specifically recommended by a medical doctor or a poison control center. Call a poison control center or doctor for treatment advice.

**If inhaled** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If on skin or clothing** 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.

**NOTE TO PHYSICIAN** Possible mucosal damage may contraindicate the use of gastric lavage; chemical adsorbents are recommended to reduce adsorption of the product. Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

If in eyes, the upper and lower lids should be retracted and irrigated, and any particulate matter should be carefully removed from the conjunctival fornix. Irrigation should be continued until the conjunctival sac is neutral on pH testing with universal indicator paper. Fluorescein staining is required to reveal the extent of corneal or conjunctival epithelial loss. Topical antibiotic ointments are indicated when corneal epithelial damage is identified. Use of steroid eye drops is not advocated unless expressly requested by an ophthalmologist.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical treatment information, call 24 hours a day to 1-877-250-9291.

In case of spills, fire, leaks or accidents call 1-800-535-5053.

See additional precautionary statements and directions for use inside booklet.

## How can we help? 1-866-406-6262

**ADAMA****Escanear para Español**

**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic Animals**  
**DANGER/PELIGRO**

Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Causes skin irritation. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Wear protective eyewear. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical-resistant category selection chart.

**Mixers, loaders, applicators, and all other handlers must wear:**

- coveralls over short-sleeved shirt and short pants
- chemical-resistant gloves made of any waterproof material - Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or Viton
- chemical-resistant footwear plus socks
- protective eyewear
- chemical-resistant headgear for overhead exposure
- chemical-resistant apron when cleaning equipment, mixing, or loading
- NIOSH approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or a NIOSH approved respirator with any N, R, P or HE filter

**User Safety Requirements**

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them. 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, enclosed cabs, or aircraft 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.

**User Safety Recommendations**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 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.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**Environmental Hazards**

This product is toxic to aquatic invertebrates and wildlife. DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment washwater or rinsate.

**Groundwater Advisory**

Chlorothalonil is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

**Surface Water Advisory**

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

Attention: This product contains a chemical known to the State of California to cause cancer.

# 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, or pets 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 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, 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 only apply to uses of this product that are covered by the Worker Protection Standard.

### **DO NOT enter or allow workers to enter treated areas during the restricted-entry interval (REI) of 12 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 over short-sleeved shirt and short pants
- chemical-resistant gloves made of any waterproof material - Category A (e.g. barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or Viton)
- chemical-resistant footwear plus socks
- protective eyewear
- chemical-resistant headgear for overhead exposure

**Special Eye Irritation Provisions:** Chlorothalonil in this product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6.5 days entry is permitted only when the following safety measures are provided:

(1) At least one container designed specifically for flushing eyes must be available in operating condition at the WPS-required decontamination site intended for workers entering the treated area.

(2) Workers must be informed, in a manner they can understand:

- that residues in the treated area may be highly irritating to their eyes
- that they should take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes
- that if they do get residues in their eyes, they should immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water
- how to operate the eyeflush container

## PRODUCT INFORMATION

Bravo Ultrex® can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control.

Bravo Ultrex is an excellent fungicide when used according to label directions for control of a broad spectrum of plant diseases. Bravo Ultrex is recommended for use in programs which are compatible with the principles of Integrated Pest Management (IPM), which include the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems which reduce unnecessary applications of pesticides.

Bravo Ultrex is effective for strategic use in programs that attempt to minimize disease resistance to fungicides. Some other fungicides which are at risk from disease resistance exhibit a single-site mode of fungicidal action. Bravo Ultrex, with a multi-site mode of action, may be used to delay or prevent the development of resistance to single-site fungicides. Consult with your Federal or State Cooperative Extension Service representatives for guidance on the proper use of Bravo Ultrex in programs which seek to minimize the occurrence of disease resistance to other fungicides.

## USE PRECAUTIONS AND RESTRICTIONS

- DO NOT use on greenhouse-grown crops.
- DO NOT combine Bravo Ultrex in the spray tank with pesticides, adjuvants, surfactants, or fertilizers unless your prior use has shown the combination physically compatible, effective, and noninjurious under your conditions of use. DO NOT combine Bravo Ultrex with Dipel®, Latron B-1956®, or Latron AG-98 as phytotoxicity may result from the combination when applied to some crops on this label.
- This product must not be applied within 150 feet for aerial applications, or 25 feet for ground applications of marine/estuarine water bodies, unless there is an untreated buffer area of that width between the area to be treated and the water body.

## Spray Drift Precautions

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off target drift movement from aerial applications to agricultural field crops. These requirements do not apply to conifer applications, public health uses, or applications using dry formulations.

1. The distance of the outer most nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information**.

## Aerial Drift Reduction Advisory Information

[This section is advisory in nature and does not supersede the mandatory label requirements.]

### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable conditions (see **Wind, Temperature**).

### Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting the nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift potential.

### Boom Length

For some use patterns, reducing the effective boom length to less than  $\frac{1}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

### Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

### Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

### Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

## APPLICATION

Dosage rates on this label indicate pounds of Bravo Ultrex per acre, unless otherwise stated. Under conditions favoring disease development the high rate specified and shortest application interval should be used.

The required amount of Bravo Ultrex should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of Bravo Ultrex in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations. Apply Bravo Ultrex in sufficient water to obtain adequate coverage of foliage. Gallonage to be used will vary with crop and amount of plant growth. For field and row crops, spray volume usually will range from 20 to 150 gallons per acre (200 to 1400 liters per hectare) for dilute sprays and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground sprays and aircraft applications. For tree and orchard crops, apply Bravo Ultrex in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

### Application and Calibration Techniques for Chemigation

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set or portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

DO NOT apply this product through irrigation systems connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

**Always inject Bravo Ultrex into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.**

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

Posting of areas to be chemigated is required when (1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or (2) when the chemigated area is open to the public.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

This sign is in addition to any sign posted to comply with the Worker Protection Standard.

Bravo Ultrex may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

#### A. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

For injection of pesticides, these continuously moving systems must use a positive displacement injection pump, of either diaphragm or piston type, constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Thoroughly mix recommended amount of Bravo Ultrex for acreage to be covered into the same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until Bravo Ultrex has been cleared from last sprinkler head.

#### B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of Bravo Ultrex for acreage to be covered with water so that the total mixture of Bravo Ultrex plus water in the injection tank is equal to the quantity of water used during calibration, and operate entire system at normal pressures recommended by the manufacturer of injection equipment used, for amount of time established during calibration. Agitation is recommended. Bravo Ultrex can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until Bravo Ultrex has been cleared from last sprinkler head.

#### APPLICATION INSTRUCTIONS

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
Asparagus	Rust ( <i>Puccinia asparagi</i> )	1.8 to 3.6 (1.5 to 3.0)	Use water volumes of 25 to 50 gallons per acre. Begin applications following final harvest of spears. Repeat applications at 14- to 28-day intervals (the minimum retreatment interval is 14 days), depending on disease pressure. Use the higher rate and shorter interval if disease severity begins to increase during the season or weather conditions are conducive for severe epidemics. Apply by ground.
	Purple spot ( <i>Pleospora herbarum</i> )		
	Cercospora blight ( <i>C. asparagi</i> )		

##### Specific Use Restrictions:

- Do not apply more than 11 pounds of Bravo Ultrex (9.0 lb ai) per acre during each growing season.
- Do not apply within 190 days of the harvest of spears in the following season.

Bean (Snap)	Rust ( <i>Uromyces appendiculatus</i> )	1.25 to 2.7 (1.0 to 2.2)	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens and repeat as necessary (the minimum retreatment interval is 7 days) to maintain control. Apply by ground, air, or chemigation.
	Botrytis blight (gray mold) ( <i>B. cinerea</i> )	2.7 (2.2)	

##### Specific Use Restrictions:

- Do not apply more than 10.9 pounds of Bravo Ultrex (9.0 lb ai) per acre during each growing season.
- Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
<b>Beans (Dry)</b> (except soybeans) bean, adzuki bean, broad bean, dry bean, lablab bean, navy bean, kidney bean, lima bean, moth bean, mung bean, pink bean, pinto bean, tepary bean, urd bean, yardlong catjang chickpea (garbanzo) cowpea lupin, grain lupine bean, rice bean, runner bean, jackbean pea, blackeyed pea, southern	Rust ( <i>Uromyces appendiculatus</i> ) Anthracnose ( <i>Colletotrichum lindemuthianum</i> ) Downy mildew ( <i>Phytophthora nicotianae</i> ) Cercospora leaf blight ( <i>C. cruenta</i> ) Ascochyta blight ( <i>A. phaseolorum</i> )	1.25 to 1.8 (1.0 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage and repeat at 7- to 10-day intervals (the minimum retreatment interval is 7 days). For use only on beans to be harvested dry with pods removed. Do not apply more than 4 times per growing season. Apply by ground, air, or chemigation.

**Specific Use Restrictions:**

- Do not apply more than 7.3 pounds of Bravo Ultrex (6 lb ai) per acre during each growing season.
- Do not apply within 14 days before harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
<b>Blueberries</b>	For suppression of: Anthracnose (ripe rot) ( <i>C. gloeosporoides</i> ) Mummy berry ( <i>M. vaccinicorymbosi</i> )	2.7 to 3.6 (2.2 to 3.0)	Bravo Ultrex should be integrated into an overall disease management strategy which includes alternation with a fungicide with a different mode of action. Diseases may only be suppressed and fruit russetting may occur under heavy disease pressure or unfavorable environmental conditions. Use 2.7 to 3.6 lb in sufficient water to obtain adequate coverage, normally 20 to 100 gallons per acre. Begin applications at budbreak (green tip). Repeat applications through early bloom and repeat at 10-day intervals (the minimum retreatment interval is 10 days). Under heavy disease pressure, use the higher rate. Do not combine Bravo Ultrex in spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and noninjurious under your conditions of use. Do not combine Bravo Ultrex with Dipel, Latron AG-98 or Latron B-1956 as phytotoxicity may result from the combination when applied to the crops on this label. Apply by ground or air.

**Specific Use Restrictions:**

- Do not apply more than 10.9 pounds of Bravo Ultrex (9.0 lb ai) per acre during each growing season.
- Do not apply after full bloom or within 42 days of harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
<b>Cabbage</b> <b>Chinese Cabbage</b> (tight-headed varieties only)	Alternaria leaf spot ( <i>Alternaria</i> spp.)  Downy mildew ( <i>Peronospora parasitica</i> )	1.4 (1.2)	Use in sufficient water to obtain adequate coverage. Begin applications after transplants are set in field, or shortly after emergence of field-seeded crop, or when conditions favor disease development. Repeat at 7- to 10-day intervals or as necessary (the minimum retreatment interval is 7 days) to maintain control. Apply by ground, air, or chemigation.
<b>Cauliflower</b> <b>Broccoli</b> <b>Chinese Broccoli</b> <b>Brussels Sprouts</b>	Ring spot (California only)	1.4 (1.2)	For field-seeded brussels sprouts, begin applications at time of early sprout development or when conditions favor disease development. Repeat at 7- to 10-day intervals or as necessary (the minimum retreatment interval is 7 days) to maintain control.

**Specific Use Restrictions:**

- Do not apply more than 14.5 pounds of Bravo Ultrex (12 lb ai) per acre during each growing season.
- Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
<b>Carrot</b>	Cercospora leaf spot ( <i>C. carotae</i> )  Alternaria leaf blight ( <i>A. dauci</i> )	1.4 to 1.8 (1.2 to 1.5)	Use in sufficient water to obtain adequate coverage. Start applications when disease threatens and repeat at 7- to 10-day intervals or as necessary (the minimum retreatment interval is 7 days) to maintain control. Apply by ground, air, or chemigation.

**Specific Use Restrictions:**

- Do not apply more than 18.2 pounds of Bravo Ultrex (15 lb ai) per acre during each growing season.
- Bravo Ultrex may be applied the day of harvest.

<b>Celery</b>	Early blight ( <i>Cercospora apii</i> ) Late blight ( <i>Septoria apicola</i> ) Basal stalk rot ( <i>Rhizoctonia solani</i> )	1.8 to 2.7 (1.5 to 2.2)	Use in sufficient water to obtain adequate coverage. Start applications when transplants are set in the field and repeat at a 7-day interval as needed to maintain control (the minimum retreatment interval is 7 days). Apply by ground, air, or chemigation.
	Pink rot (suppression - 7-day schedule)	2.7 (2.2)	
	Early blight ( <i>Cercospora apii</i> ) Late blight ( <i>Septoria apicola</i> )	1.4 to 1.8 lb per 100 gal (1.2 to 1.5 lb ai per 100 gal)	For celery seedbeds, apply in a spray volume of 125 gallons per acre twice weekly or as needed to maintain control. Start applications shortly after crop emergence. Use the higher rate under severe disease conditions.

**Specific Use Restrictions:**

- Do not apply more than 21.8 pounds of Bravo Ultrex (18 lb ai) per acre during each growing season.
- Do not apply within 7 days of harvest.

<b>Corn</b> (sweet)	Helminthosporium leaf blights	0.7 to 1.8 (0.6 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development and repeat at a 7-day interval as required to maintain control (the minimum retreatment interval is 7 days). Under severe disease conditions, use 1.4 to 1.8 pounds of Bravo Ultrex per acre. Apply by ground, air, or chemigation.
<b>Corn</b> (grown for seed)	Rust ( <i>Puccinia</i> spp.)		

**Specific Use Restrictions:**

- Do not apply more than 10.9 pounds of Bravo Ultrex (9 lb ai) per acre during each growing season.
- Do not apply within 14 days of harvest.
- Do not apply to sweet corn to be processed.
- Do not allow livestock to graze in treated fields.
- Do not ensile treated corn or use as livestock forage.



CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
Cranberry	Fruit rots Lophodermium leaf/twig blight ( <i>L. hypophyllum</i> )	3.8 to 6.0 (3.1 to 5.0)	Apply at early bloom and repeat at 10- to 14-day intervals (the minimum retreatment interval is 10 days). Under severe disease conditions, use 6.0 pounds of Bravo Ultrex (5.0 lb ai) per acre rate on a 10-day schedule. Do not apply Bravo Ultrex more than 3 times per season. Apply by ground, air, or chemigation. When applying by chemigation, use 300 gallons of water per acre through solid set systems only.

**Specific Use Restrictions:**

- Do not apply more than 18.2 pounds of Bravo Ultrex (15 lb ai) per acre during each growing season.
- Do not apply within 50 days before harvest.
- Do not apply to beds when flooded or allow release of irrigation water from beds for at least 3 days following application.

Cucurbits	Target spot ( <i>Corynespora cassiicola</i> )	1.4 to 1.8 (1.2 to 1.5)	Use in sufficient water to obtain adequate coverage. Begin applications when plants are in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7-day intervals (the minimum retreatment interval is 7 days). Note: Spraying mature watermelons may result in sunburn of the upper surface of the fruit. Do not apply Bravo Ultrex to watermelons when any of the following conditions are present: 1. Intense heat and sunlight 2. Drought conditions 3. Poor vine canopy 4. Other crop and environmental conditions which may be conducive to increased natural sunburn Do not combine Bravo Ultrex with anything except water for application to watermelons unless prior use has shown the combination to be non-injurious to watermelons under your conditions of use. Apply by ground, air, or chemigation.
Cucumber	Anthracoise ( <i>Colletotrichum</i> spp.)		
Cantaloupe	Downy mildew ( <i>Pseudoperonospora cubensis</i> )		
Muskmelon	Cercospora leaf spot ( <i>C. citrullina</i> )	1.8 to 2.7 (1.5 to 2.2)	
Honeydew melon	Gummy stem blight/vine decline ( <i>Didymella bryoniae</i> )		
Watermelon	Alternaria leaf blight ( <i>A. cucumerina</i> )		
Squash	Alternaria leaf spot ( <i>A. alternata</i> )		
Pumpkin	Scab ( <i>Cladosporium cucumerinum</i> )		
	Powdery mildew ( <i>Sphaerotheca</i> only)		

**Specific Use Restrictions:**

- Do not apply more than 19.1 pounds of Bravo Ultrex (15.75 lb ai) per acre during each growing season.
- Bravo Ultrex may be applied the day of harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
<b>Fruiting Vegetables:</b> (except tomato) Eggplant Groundcherry Okra Pepino Pepper (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper) Tomatillo	Anthracoise ( <i>Colletotrichum</i> spp.) Botrytis leaf mold ( <i>Botrytis cinerea</i> ) Cercospora leaf spot ( <i>Cercospora</i> spp.) Powdery mildew ( <i>Leveillula taurica</i> )	1.4 (1.2)	Use in sufficient water to obtain adequate coverage. Begin applications as a foliage, flower, and fruit spray when disease is expected. Repeat applications at 7- to 10-day intervals. Apply by ground, air or chemigation.

**Specific Use Restrictions:**

- Do not apply more than 10.9 pounds of Bravo Ultrex (9.0 lb ai) per acre during each growing season.
- Do not apply within 3 days of harvest (3-day PHI).

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
Grasses Grown for Seed	Stem rust Leaf rust Stripe rust Septoria leaf spot Glume blotch Bipolaris and Drechslera leaf spots	0.9 to 1.4 (0.75 to 1.2)	Use in sufficient water to obtain adequate coverage. Begin applications during stem elongation when conditions favor disease development. Reapply at flag (top) leaf emergence and repeat applications at 14-day intervals (the minimum retreatment interval is 14 days). Apply by ground, air, or chemigation.
	Selenophoma (eyespot)	0.9 to 1.8 (0.75 to 1.5)	

**Specific Use Restrictions:**

- Do not apply more than 5.4 pounds of Bravo Ultrex (4.5 lb ai) per acre during each growing season.
- Do not apply within 14 days of harvest.
- Do not allow livestock to graze in treated areas or feed treated plant parts to livestock.

Mango	Anthrachnose ( <i>Colletotrichum</i> spp.)	1.8 to 3.1 (1.5 to 2.6)	Use a water volume of 20 to 300 gallons per acre. Begin applications at early bloom and repeat on a 7- to 14-day interval until early fruit development. Begin the season with the 1.8 lb rate on a 14-day interval (the minimum retreatment interval is 7 days). If disease pressure is severe, use the higher rate and shorter interval. Use during bloom and fruit set up until fruit reach one-inch diameter. May cause spotting on fruit larger than one inch in diameter. Apply by ground or air.
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**Specific Use Restrictions:**

- Do not apply more than 29 pounds of Bravo Ultrex (24.0 lb ai) per acre during each growing season.
- Do not apply within 21 days of harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
Mint (Indiana, Michigan and Wisconsin only)	Rust ( <i>Puccinia menthae</i> ) Septoria leaf spot ( <i>S. menthae</i> )	1.2 (1.0)	Use in sufficient water to obtain adequate coverage, normally 20 to 150 gallons per acre for dilute sprays and 5 to 10 gallons per acre for concentrate ground and aircraft applications. Begin applications when emerging plants are 4 to 8 inches high. Repeat applications at 7- to 10-day intervals or as necessary to maintain control (the minimum retreatment interval is 7 days). Do not apply more than 3 times per season.

**Specific Use Restrictions:**

- Do not apply more than 3.6 pounds of Bravo Ultrex (3 lb ai) per acre during each growing season.
- Do not apply within 80 days of harvest.
- Do not feed fresh or extracted mint hay from treated fields to livestock.

CROP	DISEASES (Pathogen)	Oz Product/1000 sq ft	APPLICATION DIRECTIONS
Mushrooms	Verticillium brown spot and dry bubble	2.5 – 5.0 oz	Apply as a drench to the mushroom bed surface in at least 12.5 gallons of water per 1000 sq ft of mushroom bed. Make two applications as follows: <ul style="list-style-type: none"> <li>First application – apply 5.0 oz of Bravo Ultrex within two days of top-dressing the spawn-colonized mushroom compost with a casing layer.</li> <li>Second application – apply 2.5 oz of Bravo Ultrex at pinning.</li> </ul>

**Specific Use Restrictions:**

- Make no more than two applications per cropping cycle.
- Do not apply more than 7.5 oz of Bravo Ultrex per cropping cycle.
- Do not apply within 5 days of first harvest.

Onion (dry bulb) and Garlic	Botrytis leaf blight (Botrytis spp.)	0.9 to 2.7 (0.75 to 2.2)	Use in sufficient water to obtain adequate coverage of tops. Bravo Ultrex is recommended for use with disease monitoring systems which adjust fungicide rates and frequency of application according to disease hazard. Apply Bravo Ultrex as follows:			
	Botrytis neck rot (suppression)			Low Disease Hazard & Prior to Infection	Low Disease Hazard & Some Disease Present	High Disease Hazard
	Purple blotch (Alternaria porri)		Rate per Acre	0.9 lb	1.25 lb	2.7 lb
	Downy mildew (suppression) (Peronospora destructor)		Frequency	10 days	7-10 days	7 days
			For suppression of neck rot (Botrytis spp.) during storage, a minimum of three weekly applications prior to lifting, using 1.25 to 2.7 lb of Bravo Ultrex per acre, is recommended. The minimum retreatment interval is 7 days. Apply by ground, air, or chemigation.			

**Specific Use Restrictions:**

- Do not apply more than 18.2 pounds of Bravo Ultrex (15 lb ai) per acre during each growing season.
- Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
Onion (green bunching)	Botrytis leaf blight (Botrytis spp.)	1.4 to 2.7 (1.2 to 2.2)	Use in sufficient water to obtain thorough coverage of tops. Begin applications prior to favorable infection periods, and repeat at 7- to 10-day intervals for as long as conditions favor disease (the minimum retreatment interval is 7 days). Use the high rate and a 7-day schedule of applications when heavy dew or rain persist. Apply by ground, air, or chemigation.
Leek	Purple blotch (Alternaria porri)		
Shallots	Downy mildew (suppression) (Peronospora destructor)		
Onion and Garlic (grown for seed)			

**Specific Use Restrictions:**

- Do not apply more than 8.2 pounds of Bravo Ultrex (6.75 lb ai) per acre during each growing season.
- Do not apply within 7 days of harvest on garlic.
- Do not apply within 14 days of harvest on green bunching onions, leeks or shallots.

Papaya	Alternaria fruit spot (A. alternata) Anthracnose (Colletotrichum spp.) Stem end rot (A. alternata, Colletotrichum spp.)	1.4 to 2.7 (1.2 to 2.2)	Apply with ground equipment only, in sufficient water to obtain adequate coverage of fruit and leaves. Begin treatment when conditions favor development of disease and continue treatments at 14-day intervals until weather conditions no longer favor disease development (the minimum retreatment interval is 14 days).
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**Specific Use Restrictions:**

- Do not apply more than 8.2 pounds of Bravo Ultrex (6.75 lb ai) per acre during each growing season.
- Bravo Ultrex may be applied the day of harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
<b>Parsnip</b>	Alternaria leaf spot ( <i>Alternaria</i> spp.) Downy mildew ( <i>Plasmopara crustosa</i> ) Anthracnose ( <i>Colletotrichum</i> spp.) Botrytis blight (gray mold) ( <i>B. cinerea</i> ) Bottom rot ( <i>Rhizoctonia</i> )	1.4 to 1.8 (1.2 to 1.5)	Apply in sufficient water to obtain adequate coverage. Make the first application at the first sign of disease or when conditions are favorable for infection. Continue applications on a 7- to 10-day schedule (the minimum retreatment interval is 7 days). Do not apply more than 4 times per season. Apply by ground, air, or chemigation.
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"> <li>Do not apply more than 7.3 pounds of Bravo Ultrex (6 lb ai) per acre during each growing season.</li> <li>Do not apply within 10 days of harvest.</li> </ul>			

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
<b>Passion Fruit</b>	Alternaria fruit and leaf spot ( <i>Alternaria</i> spp.) Anthracnose ( <i>Colletotrichum</i> spp.) Cercospora fruit spot	1.8 (1.5)	Apply with ground equipment in sufficient water to obtain adequate coverage of fruit and leaves. Begin applications during late bloom and repeat at 14-day intervals until weather conditions no longer favor disease development (the minimum retreatment interval is 14 days.)
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"> <li>Do not apply more than 9.1 pounds of Bravo Ultrex (7.5 lb ai) per acre during each growing season.</li> <li>Do not apply within 7 days of harvest.</li> </ul>			
<b>Peanut</b>	Early leaf spot ( <i>Cercospora arachidicola</i> ) Late leaf spot ( <i>Cercosporidium personatum</i> ) Pepper spot ( <i>Leptosphaerulina crassiasca</i> ) Rust ( <i>Puccinia arachidis</i> ) Web blotch ( <i>Phoma arachidicola</i> )	0.9 to 1.36 (0.75 to 1.1)   1.36 (1.1)	Apply in sufficient water for coverage when leaf wetness first occurs or 30 to 40 days after planting; repeat at 14-day intervals (the minimum retreatment interval is 14 days). When conditions favor late leaf spot or when rust or web blotch occur, apply 1.36 pounds of Bravo Ultrex per acre at 14-day intervals for the remainder of the season. Apply by ground, air, or chemigation. If applying by chemigation, use 1.36 pounds of Bravo Ultrex per acre. It is recommended to alternate chemigation applications with ground or aerial applications.
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"> <li>Do not apply more than 10.9 pounds of Bravo Ultrex (9 lb ai) per acre during each growing season.</li> <li>Do not apply within 14 days of harvest.</li> <li>Do not allow livestock to graze in treated areas.</li> <li>Do not feed hay or threshings from treated fields to livestock.</li> </ul>			

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
Potato	Early blight ( <i>Alternaria solani</i> )	0.7 -then-	<p>Begin applications at the low rate when vines are first exposed and leaf wetness occurs. Repeat applications at 5- to 10-day intervals (the minimum retreatment interval is 5 days).</p> <p>Begin applying the higher label rates at 5- to 10-day intervals when any one of the following events occur:</p> <ul style="list-style-type: none"> <li>• Vines close between rows</li> <li>• Late blight forecasting measures 18 disease severity values (DSV)</li> <li>• The crop reaches 300 P-days</li> </ul> <p>Increase water spray volume as canopy density increases. Use the highest rate and shortest interval when plants are rapidly growing and disease conditions are severe. Apply by ground, air, or chemigation. Do not exceed a 10-day interval between applications when using chemigation.</p>
	Late blight ( <i>Phytophthora infestans</i> ) Botrytis vine rot ( <i>B. cinerea</i> )	0.9 to 1.36 (0.6 -then- 0.75 to 1.1)	

**Specific Use Restrictions:**

- Do not apply more than 13.6 pounds of Bravo Ultrex (11.25 lb ai) per acre during each growing season.
- Do not apply within 7 days of harvest.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
Soybean	Anthraxnose ( <i>Colletotrichum truncatum</i> )		<p>Apply in sufficient water to obtain complete coverage, using at least five gallons of water per acre for aerial application. Use the three application program in areas having a history of moderate to severe disease intensity. The minimum retreatment interval is 14 days.</p> <p>Apply by ground, air, or chemigation.</p>
	Diaporthe pod and stem rot ( <i>D. phaseolorum</i> )		
	Frogeye leaf spot ( <i>Cercospora sojina</i> )	1.4 to 2.2 (1.2 to 1.8)	<p><b>Two application program:</b> For determinate varieties, make the first application at R3 stage (early pod set) and the second application at R5. For indeterminate varieties, make the first application when largest pods are 1-1½ inches in length. Make the second application 14 days later.</p>
	Purple seed stain ( <i>C. kikuchii</i> ) Cercospora leaf blight ( <i>C. kikuchii</i> ) Septoria brown spot ( <i>S. glycines</i> ) Rust (suppression) ( <i>Phakopsora pachyrhizi</i> )	0.9 to 1.4 (0.75 to 1.2)	
	Stem canker ( <i>Diaporthe phaseolorum</i> )	0.9 (0.75)	<p><b>Three application program:</b> For determinate varieties, make the first application at the beginning of flowering (R1), the second at early pod set (R3), and the third at the beginning of seed formation (R5). For indeterminate varieties, make the first application one week after first flowering and continue applications at 14-day intervals.</p> <p>Apply in 10 to 20 gallons of water per acre as a band treatment directing spray to provide coverage of entire plant. Make the first application at time of emergence of the second trifoliate leaves (V2). If conditions favor stem canker disease, make a second and a third application. Make all applications at 14-day intervals.</p>

**Specific Use Restrictions:**

- Do not apply more than 5.4 pounds of Bravo Ultrex (4.5 lb ai) per acre during each growing season.
- Do not apply within 6 weeks of harvest.
- Do not feed soybean hay or threshings from treated fields to livestock.

CROP	DISEASES (Pathogen)	Lb Product/A (lb ai/A)	APPLICATION DIRECTIONS
Tomato	<b>FOLIAGE</b> Early blight ( <i>Alternaria solani</i> ) Late blight ( <i>Phytophthora infestans</i> ) Gray leaf spot ( <i>Stemphyllium botryosum</i> ) Gray leaf mold ( <i>Fluvia fluvia</i> ; <i>Cladosporium</i> ) Septoria leaf spot ( <i>S. lycopersici</i> ) Target spot ( <i>Corynespora cassiicola</i> )	1.3 to 1.8 (1.1 to 1.5)	Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occurs and disease threatens. Apply on a 7- to 10-day interval for foliage diseases. For fruit diseases, begin at fruit set and apply on a 7- to 14-day interval. Use the highest rate and shortest interval specified when disease conditions are severe. The minimum retreatment interval is 7 days.  Apply by ground, air, or chemigation.
	<b>FRUIT</b> Anthracnose ( <i>Colletotrichum</i> spp.) Alternaria fruit rot (black mold) ( <i>A. alternata</i> ) Botrytis gray mold ( <i>B. cinerea</i> ) Late blight fruit rot ( <i>P. infestans</i> ) Rhizoctonia fruit rot ( <i>R. solani</i> )	1.8 to 2.6 (1.5 to 2.2)	
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"><li>Do not apply more than 18.3 pounds of Bravo Ultrex (15.1 lb ai) per acre during each growing season.</li><li>Bravo Ultrex may be applied the day of harvest.</li></ul>			

### Tree and Orchard Crops

Apply Bravo Ultrex in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

Application with ground equipment is preferable to aerial application, because ground applications generally give better coverage of the tree canopy. If application with ground equipment is not feasible, Bravo Ultrex may be applied with aircraft using at least 20 gallons per acre. The minimum volume for application by aircraft to conifer stands and Christmas trees is 10 gallons per acre.

When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of Bravo Ultrex listed may be used. DO NOT allow livestock to graze in treated areas.

CROP	DISEASES (Pathogen)	Lb Product PER (lb ai per)		APPLICATION DIRECTIONS
		Acre	100 gal*	
Almonds	Blossom blight/brown rot ( <i>Monilinia</i> spp.)	3.6 (3.0)	1.2 (1.0)	Use water volumes of 20 to 300 gallons per acre. For blossom blight, begin application at popcorn (pink bud) and follow with an application at full bloom. If weather is still conducive for disease development, another application may be made at petal fall.  For control of shot hole, make an application in the autumn at leaf fall. In the spring, make the first application at budbreak, followed by an application at shuck split to control nut infections and to control scab. For control of anthracnose, apply 3.6 lb/A of Bravo Ultrex.  Apply by ground or air.
	Shot hole ( <i>Wilsonomyces carpophilus</i> )			
	Scab ( <i>Venturia carpophila</i> )			
	Anthracnose ( <i>Colletotrichum acutatum</i> )			
Specific Use Restrictions:				
<ul style="list-style-type: none"><li>Do not apply more than 22.8 pounds of Bravo Ultrex (18.75 lb ai) per acre during each growing season (leaf fall through shuck split).</li><li>Do not apply within 150 days of harvest.</li></ul>				

CROP	DISEASES (Pathogen)	Lb Product PER (lb ai per)		APPLICATION DIRECTIONS
		Acre	100 gal*	
Filberts (Hazelnuts)	Eastern filbert blight ( <i>Anisogramma anomala</i> )	3.6 (3.0)	1.2 (1.0)	Use a water volume of 20 to 300 gallons per acre. Begin applications at the onset of disease or when weather conditions favor disease development. Make applications on a 14- to 28-day schedule, using the shorter interval under heavy disease pressure (the minimum retreatment interval is 14 days). Apply by ground or air.

**Specific Use Restrictions:**

- Do not apply more than 11 pounds of Bravo Ultrex (9 lb ai) per acre during each growing season.
- Do not apply within 120 days of harvest.
- Do not apply through irrigation.
- Do not apply with oils, surfactants or fertilizers.
- Do not apply within one week of an oil-based pesticide application.

CROP	DISEASES (Pathogen)	Lb Product PER (lb ai per)		APPLICATION DIRECTIONS
		Acre	100 gal*	
Peach Nectarine Apricot Cherry Plum Prune	Leaf curl ( <i>Taphrina deformans</i> ) Shot hole ( <i>Wilsonomyces carpophilus</i> )	2.8 to 3.8 (2.3 to 3.1)	0.9 to 1.25 (0.75 to 1.0)	For best control of both diseases apply at leaf fall in late autumn, using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels use the high rate of application and apply once or twice more in mid to late winter before budswell. If the leaf fall application is not practical, application of Bravo Ultrex for control of leaf curl may be made at any time prior to budswell the following spring. Where shot hole occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections. Apply by ground or air.
	Lacy (russet) scab (plum/prune)	2.8 to 3.8 (2.3 to 3.1)	0.9 to 1.25 (0.75 to 1.0)	Make one application at popcorn (pink, red or early white bud) and a second application at full bloom. If weather conditions favor disease development, make an additional application at petal fall.
	Cherry leaf spot ( <i>Blumeriella jaapii</i> ) Scab ( <i>Cladosporium carpophilum</i> ) Black knot (cherry, plum) ( <i>Apiosporina morbosa</i> )	2.8 to 3.8 (2.3 to 3.1)	0.9 to 1.25 (0.75 to 1.0)	In addition to the bloom application listed above, make one application at shuck split. Do not apply Bravo Ultrex after shuck split and before harvest. If additional disease control is needed before harvest, use another registered fungicide. For control of cherry leaf spot after harvest, make one application to foliage within 7 days after fruit is removed. In orchards with a history of high leaf spot incidence, make a second application 10 to 14 days later. Apply by ground or air.

**Specific Use Restrictions:**

- Do not apply more than 18.8 pounds of Bravo Ultrex (15.5 lb ai) per acre during each growing season.
- The minimum retreatment interval is 10 days.

CROP	DISEASES (Pathogen)	Lb Product PER (lb ai per)		APPLICATION DIRECTIONS
		Acre	100 gal*	
Pistachio	Alternaria late blight suppression ( <i>A. alternata</i> )	5.4 (4.5)	2.7 (2.2)	Use a water volume of 20 to 200 gallons per acre. Make the first application at the beginning of the blossom period followed by an application at full bloom. Make additional applications as required on a 28-day schedule (the minimum retreatment interval is 28 days). For Septoria and Botrytis, use the higher rate if disease pressure is severe.  NOTE: Use of this product may result in speckling or reddening of the fruit hull (epicarp). This effect is superficial and has not resulted in any change in nut quality. Apply by ground or air.
	Botryosphaeria blight ( <i>B. dothidea</i> )			
	Septoria leaf spot ( <i>S. pistacina</i> )	3.6 to 5.4 (3.0 to 4.5)	1.8 to 2.7 (1.5 to 2.2)	
	Botrytis blight ( <i>B. cinerea</i> )			
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"><li>Do not apply more than 27 pounds of Bravo Ultrex (22.5 lb ai) per season.</li><li>Do not apply within 14 days of harvest.</li></ul>				

### Conifers

Apply Bravo Ultrex in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Applications may be made by ground or air. DO NOT allow livestock to graze in treated areas.

CROP	DISEASES (Pathogen)	Lb Product PER (lb ai per) Acre	APPLICATION DIRECTIONS
<b>Conifers</b> (including Christmas trees) For use in 1) conifer nursery beds 2) Christmas tree and bough production plantations and 3) tree seed orchards	Swiss needlecast ( <i>Phaeocryptopus gaumannii</i> )	2.5 to 5.0 (2.1 to 4.1)	One to Two Applications: In Christmas tree plantations or conifer stands make one application in the spring when new shoot growth is 1/2 to 2 inches in length. Under high disease pressure, a second application may be made 10-14 days after the first application. When using aerial applications, use the highest rate.
	Interior needle blight ( <i>Mycosphaerella</i> spp. and <i>Phaeocryptopus nudus</i> )		
	Sclerodermis canker ( <i>Gremmeniella abietina</i> )	1.25 to 2.5 (1.0 to 2.1)	Multiple Applications: Make the first application in spring when new shoot growth is 1/2 to 2 inches in length. Make additional applications at 3- to 4-week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week schedule. When using aerial applications, use the highest rate.
	Swiss needlecast ( <i>P. gaumannii</i> )		
	Interior needle blight ( <i>Mycosphaerella</i> spp. and <i>Phaeocryptopus nudus</i> )		
	Sirococcus tip blight ( <i>S. conigenus</i> )	1.8 to 3.2 (1.5 to 2.6)	
	Rhizosphaera needlecast ( <i>Rhizosphaera</i> spp.)	5.0 (4.1)	
	Scirrhia brown spot ( <i>Mycosphaerella dearnessii</i> )		



CROP	DISEASES (Pathogen)	Lb Product PER (lb ai per) Acre	APPLICATION DIRECTIONS
<b>Conifers</b> (including Christmas trees) For use in 1) conifer nursery beds 2) Christmas tree and bough production plantations and 3) tree seed orchards	Cyclaneusma and Lophodermium needlecasts	2.5 to 5.0 (2.1 to 4.1)	Apply in early spring prior to budbreak. Repeat applications at approximately 6- to 8-week intervals, until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrence of needle wetness.
	Rhabdochline needlecast (Douglas-fir)	1.4 to 2.5 (1.1 to 2.1)	Apply at budbreak and repeat at 3- to 4-week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3 to 4 weeks as specified above. In nursery beds, use the high rate on a 3-week schedule.
	Botrytis seedling blight Phoma twig blight	1.4 to 2.5 (1.1 to 2.1)	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7- to 14-day intervals as long as disease favorable conditions persist.
	Weir's cushion rust ( <i>Chrysomyxa weirii</i> )	1.8 to 3.2 (1.5 to 2.6)	Begin applications when 10% of buds have broken and twice thereafter at 7- to 10-day intervals.
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"> <li>Do not use on forests. Do not apply more than 20 pounds of Bravo Ultrex (16.5 lb ai) per acre during each growing season.</li> </ul>			

\*Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

## STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

### Pesticide Storage

Store in a dry place.

### Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### Container Handling [Bag]

Non-refillable 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 by other procedures approved by state and local authorities.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.**

## LIMITATION OF WARRANTY AND LIABILITY

Read the entire directions for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES** and **LIMITATIONS OF LIABILITY**.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of ADAMA. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, ADAMA makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of ADAMA is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, ADAMA disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at ADAMA's election, the replacement of product.

Bravo Ultrex is a registered trademark of an ADAMA Group Company.

Dipel is a registered trademark of Valent BioSciences Corporation.

Latron B-1956 is a registered trademark of J.R. Simplot Company Corporation.

Manufactured for:

Makhteshim Agan of North America, Inc. (d/b/a ADAMA)

8601 Six Forks Road, Suite 300

Raleigh, NC 27615

09-19-2017.v2





# Bravo Ultrex®

## FUNGICIDE

### ACTIVE INGREDIENT:

Chlorothalonil (tetrachloroisophthalonitrile) . . . . . 82.5%

OTHER INGREDIENTS: . . . . . 17.5%

TOTAL: . . . . . 100.0%

Bravo Ultrex® is formulated as a water-dispersible granule (WDG).  
Contains 0.825 lb ai chlorothalonil per pound of product.

EPA Reg. No. 66222-277

EPA Est. No. 37429-GA-001<sup>BT</sup>; 37429-GA-002<sup>BO</sup>; 37429-GA-003<sup>BY</sup>;  
65387-AR-002; 50534-TX-001

Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

## KEEP OUT OF REACH OF CHILDREN DANGER / PELIGRO

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.)

### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

#### DANGER/PELIGRO

Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Causes skin irritation. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Wear protective eyewear. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

See additional precautionary statements and directions for use inside booklet.

**How can we help?**  
**1-866-406-6262**

Manufactured for:  
Makhteshim Agan of North America, Inc.  
(d/b/a ADAMA)  
8601 Six Forks Road, Suite 300  
Raleigh, NC 27615



GROUP M5 FUNGICIDE

### FIRST AID

**If in eyes** 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. Rinse eye only with water. Do not put eye drops, drugs, or ointments in eyes unless specifically recommended by a medical doctor or a poison control center. Call a poison control center or doctor for treatment advice.

**If inhaled** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If on skin or clothing** 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.

**NOTE TO PHYSICIAN** Possible mucosal damage may contraindicate the use of gastric lavage; chemical adsorbents are recommended to reduce adsorption of the product. Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids. If in eyes, the upper and lower lids should be retracted and irrigated, and any particulate matter should be carefully removed from the conjunctival fornix. Irrigation should be continued until the conjunctival sac is neutral on pH testing with universal indicator paper. Fluorescein staining is required to reveal the extent of corneal or conjunctival epithelial loss. Topical antibiotic ointments are indicated when corneal epithelial damage is identified. Use of steroid eye drops is not advocated unless expressly requested by an ophthalmologist.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical treatment information, call 24 hours a day to 1-877-250-9291.

In case of spills, fire, leaks or accidents call 1-800-535-5053.

## STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

### Pesticide Storage

Store in a dry place.

### Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### Container Handling [Bag]

Non-refillable 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 by other procedures approved by state and local authorities.

### CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

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PEEL BACK BOOK HERE

Net Contents

**27.4 pounds**



Escanear para Español