



Contains fluazinam, the active ingredient used in Omega® 500F.

ACTIVE INGREDIENT:	(% by weight)
Fluazinam*	40.0%
OTHER INGREDIENTS:	60.0%
TOTAL	100.0%
*3-chloro-N-[3-chloro-2,6-dinitro-4-trifluoromethyl)phenyl]-5-trifluoromethyl-2-pyridinamine (CA)	
Contains 4.17 pounds fluazinam per gallon (500 grams per liter)	
EPA Reg. No.: 91234-98	

KEEP OUT OF REACH OF CHILDREN WARNING - AVISO

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.)
 See below for additional Precautionary Statements.

FIRST AID	
If on skin:	<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.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
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 do so by the poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	
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 SafetyCall at 1-844-685-9173 for emergency medical treatment information.	

**For Chemical Emergency
 Spill, Leak, Fire, Exposure, or Accident
 Call CHEMTREC Day or Night
 Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)**

Orbus™ 4 F is not manufactured, or distributed by ISK Biosciences Corporation, seller of Omega® 500F.



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

Causes skin irritation. Harmful if absorbed through skin. Causes moderate eye irritation. Harmful if inhaled or swallowed. **DO NOT** get on skin or on clothing. Avoid contact with eyes. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before use.

Personal Protective Equipment (PPE)

Applicators, flaggers, and other handlers must wear coveralls worn over long-sleeved shirt, long pants, socks and chemical resistant footwear, chemical resistant gloves made of any waterproof material including polyethylene or polyvinyl chloride, and protective eyewear. Airblast applicators must also wear chemical-resistant headgear. When mixing and loading, or when cleaning equipment, also wear a chemical resistant apron.

DO NOT allow contact of contaminated clothing with unprotected skin.

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 exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

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.

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, including a spill or equipment break-down. **DO NOT** allow contact between contaminated sprayer parts and unprotected skin. Ensure sprayer is washed down daily.

User Safety Recommendations

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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

This product is toxic to fish and aquatic invertebrates. **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when cleaning equipment or disposing of equipment wash waters or rinsate. **DO NOT** apply when weather conditions favor drift from treated areas. Runoff and drift from treated areas may be hazardous to aquatic organisms in neighboring areas.

Surface Water Advisory

DO NOT cultivate within 25 feet of permanent water bodies (lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, and estuaries) so as to allow growth of a vegetative filter strip. **DO NOT** apply aerially within 150 ft. of marine/estuarine areas.

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 agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box 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 12 hours. Refer to use directions for each crop to see additional REI restrictions for high exposure activities (i.e., hand weeding) greater than 12 hours.

PPE required for early entry to the treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is: coveralls worn over long-sleeved shirt and long pants, socks and chemical-resistant footwear, chemical resistant gloves made of any waterproof material, and protective eyewear.

Orbus 4 F may cause allergic skin reactions in a small number of sensitive individuals. To prevent the potential for an allergic reaction: when entering treated crops, wear protective clothing (coveralls, socks and shoes) to avoid contact of unprotected skin with foliage; wash all protective clothing (coveralls) regularly, preferable daily; remove PPE immediately after leaving treated area, wash thoroughly, as soon as possible, and change into clean clothing; keep and wash PPE separately from other laundry; when entering treated crops, avoid contact of unprotected skin with treated foliage. People who have been sensitized to **Orbus 4 F** must not use or have further contact with the product.

FAILURE TO FOLLOW THE USE DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

Orbus 4 F may be applied with all types of spray equipment normally used for ground applications. Aerial application or application through sprinkler irrigation systems is not allowed unless specific directions are given for a crop. See the crop table, and application and calibration instructions below.

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 is responsible for considering all these factors when making decisions. Where states have more stringent regulations, they must be observed.

USE RESTRICTIONS

- **DO NOT** apply this product with mechanically pressurized handgun equipment.
- **DO NOT** allow spray mixture to stand overnight or for prolonged periods.
- In the State of New York, **DO NOT** apply within 100 feet of surface water. Aerial application is prohibited in the State of New York.

MIXING AND SPRAYING

Orbus 4 F can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control.

Apply **Orbus 4 F** in sufficient water to obtain adequate coverage of the foliage. Gallonage to be used will vary with crop and amount of plant growth. Spray volume will usually range from 20 to 100 gallons per acre for dilute sprays, and 5 to 10 gallons per acre for concentrate ground and aerial sprays. For aerial applications, apply **Orbus 4 F** in a minimum of 5 gallons of water per acre.

Dosage rates on this label indicate fluid ounces of **Orbus 4 F** per acre, unless otherwise stated. Under conditions that favor disease development, the high rate specified and the shortest application interval need to be used.

NOTE: Slowly invert container several times to ensure uniform mixture.

The required amount of **Orbus 4 F** must be added slowly into the spray tank during filling. With concentrate sprays, premix the required amount of **Orbus 4 F** 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.

Prepare only the amount of spray required for immediate use. Spraying equipment must be thoroughly cleaned immediately after the application.



TANK MIX COMPATIBILITY

Orbus 4 F is physically compatible (no nozzle or screen blockage) with many products specified for control of diseases and insects on vegetable crops. **Orbus 4 F** is generally compatible with other insecticides, fungicides, fertilizers and micronutrient products provided sufficient free water is available for dispersion of all the tank mix products. However, the physical compatibility of **Orbus 4 F** with tank mix partners must be evaluated before use. A jar test must be conducted with intended tankmix pesticides prior to preparation of large volumes. Use the following procedure: 1) Pour the specified proportions of the products into a suitable container of water, 2) Mix thoroughly and 3) Allow to stand 5 minutes. If the combination remains mixed or can be re-mixed readily, it is considered physically compatible. Any physical incompatibility in the jar test indicates that **Orbus 4 F** must not be used in the tank-mix.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

ROTATIONAL CROP (PLANTBACK) RESTRICTIONS

Areas treated with **Orbus 4 F** may be replanted with crops on this label immediately after the last treatment. All other crops can be planted 30 days after the last application.

FIELD AND ROW CROPS:

Apply **Orbus 4 F** in sufficient water to obtain adequate coverage of foliage. Gallonage to be used will vary with crop and amount of plant growth. Spray volume usually will range from 20 to 60 gallons per acre (200 to 600 liters per hectare) for dilute sprays and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground sprays. Application through sprinkler irrigation systems is not allowed unless specific directions are given for a crop. See application and calibration instruction below.

INTEGRATED PEST MANAGEMENT

Orbus 4 F is an excellent disease control agent when used according to label directions for control of a broad spectrum of plant diseases. **Orbus 4 F** is advised for use as part of an Integrated Pest Management (IPM) program, which may include the use of disease resistant crop varieties, cultural practices, biological control agents, pest scouting and disease forecasting systems aimed at preventing economic pest damage. Practices known to reduce disease development advised to be followed. Consult your state cooperative extension service or local agricultural authorities for additional IPM strategies established in your area. **Orbus 4 F** may be used in State Agricultural Extension advisory (disease forecasting) programs that advise application timing based on environmental factors which favor disease development.

RESISTANCE MANAGEMENT

For resistance management, **Orbus 4 F** contains a Group 29 fungicide. Any fungal population may contain individuals naturally resistant to **Orbus 4 F** and other Group 29 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of **Orbus 4 F** or other Group 29 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicide from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Atticus, LLC at 984-465-4800. You can also contact your pesticide distributor or university extension specialist to report resistance.

MANDATORY SPRAY DRIFT

Aerial Applications

- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Ground Applications

- Apply with the nozzle height specified by the manufacturer, but no more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boom-less Ground Applications:

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.
- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size - Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT - Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.



TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

WIND

- Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.**
- Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

HANDHELD TECHNOLOGY APPLICATIONS:

Take precautions to minimize spray drift.

APPLICATION AND CALIBRATION TECHNIQUES FOR SPRINKLER IRRIGATION

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 must contact State Extension Service specialists, equipment manufacturers or other experts.

Restrictions:

DO NOT apply Orbus 4 F 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 must be present so as to discontinue pesticide injection and make necessary adjustments, if 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 Orbus 4 F 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 that 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.

Orbus 4 F 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 specified amount of this product 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 this product has been cleared from the 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 30 to 45-minute period. Mix desired amount of **Orbus 4 F** for acreage to be covered with water so that the total mixture of this product plus water in the injection tank is equal to the quantity of water used during calibration. Agitation is advised. **Orbus 4 F** 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 this product has been cleared from last sprinkler head.



DIRECTIONS FOR USE

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions	
Apples	Diseases Controlled Apple Scab (<i>Venturia inaequalis</i>)	10 to 13.8 fl. oz. (0.33-0.45)	Apply Orbus 4 F as a broadcast spray on a preventative basis. For scab control begin applications at green tip or when conditions are favorable for primary scab development. Repeat applications at 7- to 10-day intervals. The high rate and shortest intervals are for more susceptible varieties and heavy disease pressure.	
	Flyspeck (<i>Zygothiala jamaicensis</i>)	10 to 13.8 fl. oz. (0.33-0.45)		
Mayhaw	Sooty blotch (disease complex)	13.8 fl. oz. (0.45)	Follow a similar early season program for control of Hawthorn leaf blight in Mayhaw.	
	Bitter rot (<i>Colletotrichum cingulata</i>)		For control of flyspeck and sooty blotch begin applications before disease occurs and continue on a 7- to 10-day schedule. Use the higher rate and shorter interval when disease pressure is high.	
	Black rot (<i>Botryosphaeria obtusa</i>)	13.8 fl. oz. (0.45)	For control of bitter rot, black rot, Brooks spot, cedar apple rust, two-spotted spider mite and European red mite begin applications before disease occurs or mites are present, continue on a 7- to 10-day schedule and shorten application intervals when disease pressure or mite infestations are high. When Orbus 4 F is used as a cover spray, initiate the applications at petal fall and continue applications on a 7- to 10-day schedule to within 28 days of harvest.	
	Brooks spot (<i>Mycosphaerella pomi</i>)		For diseases and mites that are only suppressed use the high rate of 13.8 fl. oz. (0.45 lb ai/A) and make applications on a 7-day interval.	
	Cedar apple rust (<i>Gymnosporangium juniperivirginianae</i>)		Orbus 4 F applied as cover sprays on a 7- to 10-day schedule will provide control/suppression of mites, however if applications of Orbus 4 F are discontinued then the application of a specific miticide may be required.	
	Diseases Suppressed Alternaria blotch (<i>Alternaria mali</i>)	13.8 fl. oz. (0.45)	Applications are based on a tree size requiring a dilute spray of 200 gallons per acre.	
	White rot (<i>Botryosphaeria dothidea</i>)		(See use directions at the beginning of this section for Hawthorn leaf blight control.)	
	Quince rust (<i>Gymnosporangium clavipes</i>)			
		Mites Controlled Two-spotted spider mite (<i>Tetranychus urticae</i>)	13.8 fl. oz. (0.45)	
		European red mite (<i>Panonychus ulmi</i>)		
	Mites Suppressed Apple rust mite (<i>Aculus schlechtendali</i>)	13.8 fl. oz. (0.45)		
	Hawthorn leaf blight (<i>Monilinia johnsonii</i>)			

Restrictions

- **DO NOT** apply more than 13.8 fl. oz. of **Orbus 4 F** (0.45 lb ai) per acre per single application.
- **DO NOT** make more than 13 applications per year when using reduced application rates.
- **DO NOT** apply more than 138 fl. oz. of **Orbus 4 F** (4.50 lb ai) per acre per year.
- Minimum Re-treatment interval is 7 days.
- **DO NOT** apply within 28 days of harvest.
- Restricted Entry Interval (REI) = 12 hours.

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Brassica Leafy Greens Subgroup 4-16B	Club root (<i>Plasmodiophora brassicae</i>)	Transplant: 6.45 fl. oz. / 100 gallons (0.21) Soil Incorporation: 41.6 fl. oz./A (1.36)	Application Directions: Transplant Soil drench: Immediately after transplanting, make a single application at the rate listed here (6.45 fl. oz./100 gal or 0.21 lb ai/A) using 3.4 fluid ounces of this transplant solution per plant. Up to 955 gallons of this transplant solution containing 61.6 fl. oz. of Orbus 4 F (2.01 lbs. a.i.) can be used per acre per year. Soil Incorporation: Alternatively, if desired and for soil with low infiltration rates, apply 41.6 fl. oz. (1.36 lb ai) per acre in a minimum bandwidth of 9 inches along the planting row and incorporate to a soil depth of 6 to 8 inches with a precision incorporator in the same operation. Apply in a water volume of at least 50 gallons per acre. Transplant the seedlings into the treated band. If planting into a bed, a broadcast application can be made prior to forming the bed. Note: This product may delay the start of harvest by up to 8 days, cause some plant stunting, and shorten the harvest period, without adverse effects on the final yield.

Includes all members of Crop Group 4-16B, Brassica Leafy Greens: Arugula; Chinese broccoli (gai lon); broccoli raab (rapini); Abyssinian cabbage; Chinese cabbage (bok choy); seakale cabbage; collards; garden cress; upland cress; hanover salad; kale; maca, leaves; mizuna; mustard greens; radish, leaves; rape greens; wild rocket; shepherd's purse; turnip greens; watercress; and cultivars, varieties, and/or hybrids of these commodities.

Restrictions

- **DO NOT** apply within 20 days of harvest on leafy greens including mustard greens.
- Turnip roots from turnip plants treated with **Orbus 4 F** must not be used for human or livestock consumption.
- Restricted Entry Interval, REI = 2 days, for workers conducting hand set irrigation activities and 12 hours for all other activities.

Soil Incorporation Restrictions

- **DO NOT** apply more than 41.6 fl. oz. of **Orbus 4 F** (1.36 lb ai) per acre per single application via soil incorporation as a one-time application.
- **DO NOT** apply more than 41.6 fl. oz. of **Orbus 4 F** (1.36 lb ai) per acre per year via soil incorporation.
- **DO NOT** make more than 1 application per year.

Transplant Soil Drench Restrictions

- **DO NOT** apply more than 6.45 fl. oz./100 gal or 0.21 lb ai/A per single application via transplant soil drench per plant.
- **DO NOT** apply more than 61.6 fl. oz. of **Orbus 4 F** (2.01 lb ai) per acre per year via transplant soil drench as a one-time application.
- **DO NOT** make more than 1 application of **Orbus 4 F** per plant per year.



Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Brassica Head and Stem Vegetable Group 5-16 Kohlrabi Cabbage & Chinese Cabbage (Tight-heading varieties) Only	Club root <i>(Plasmodiophora brassicae)</i> Downy Mildew <i>(Peronospora parasitica)</i> Alternaria leafspot <i>Alternaria</i> spp.	Transplant: 6.45 fl. oz. / 100 gallons (0.21) Soil Incorporation: 41.6 fl. oz./A (1.36) Foliar: 15.35 fl. oz./A (0.50)	Application Directions: Transplant Soil drench: Immediately after transplanting, make a single application at the rate listed here (6.45 fl. oz./100 gal or 0.21 lb ai/A) using 3.4 fluid ounces of this transplant solution per plant. Up to 955 gallons of this transplant solution containing 61.6 fl. oz. of Orbus 4 F (2.01 lbs. a.i.) can be used per acre per year. Soil Incorporation: Alternatively, if desired and for soil with low infiltration rates, apply 41.6 fl. oz. (1.36 lb ai) per acre in a minimum bandwidth of 9 inches along the planting row and incorporate to a soil depth of 6 to 8 inches with a precision incorporator in the same operation. Apply in a water volume of at least 50 gallons per acre. Transplant the seedlings into the treated band. If planting into a bed, a broadcast application can be made prior to forming the bed. Note: This product may delay the start of harvest by up to 8 days, cause some plant stunting, and shorten the harvest period, without adverse effects on the final yield. Foliar Application: For Cabbage & Chinese Cabbage only, initiate applications when disease first appears or when conditions are favorable for disease development and repeat on a 7-day interval. Up to 6 foliar applications can be applied.

Includes all members of Crop Group 5-16, Brassica Head and Stem Vegetables: broccoli; Brussels sprouts; cabbage; Chinese cabbage (napa); cauliflower; and cultivars, varieties, and/or hybrids of these commodities.

Restrictions

- **DO NOT** apply within 20 days of harvest on leafy greens including mustard greens.
- **DO NOT** apply within 50 days of harvest on heading vegetables including broccoli.
- Restricted Entry Interval, REI = 2 days, for workers conducting hand set irrigation activities and 12 hours for all other activities.
- **DO NOT** exceed the combined total of 153.7 fl. oz. of **Orbus 4 F** (5.01 lbs. ai.) per acre per year for all applications.

Soil Incorporation Restrictions

- **DO NOT** apply more than 41.6 fl. oz. of **Orbus 4 F** (1.36 lb ai) per acre per single application via soil incorporation as a one time application.
- **DO NOT** apply more than 41.6 fl. oz. of **Orbus 4 F** (1.36 lb ai) per acre per year via soil incorporation as a one time application.
- **DO NOT** make more than 1 application of **Orbus 4 F** per year via soil application and transplant.

Foliar Application Restrictions (Cabbage & Chinese Cabbage Only)

- **DO NOT** apply more than 92 fl. oz. of **Orbus 4 F** (3.00 lb ai) per acre per year to cabbage via foliar applications.
- **DO NOT** apply within 7 days of harvest on cabbage and Chinese cabbage.
- Re-treatment interval for Foliar Applications is 7 days.
- **DO NOT** apply more than 15.35 fl. oz. of **Orbus 4 F** (0.50 lb ai) per acre per single application via foliar application.
- **DO NOT** make more than 6 applications of **Orbus 4 F** per year via foliar application.

Transplant Soil Drench Restrictions

- **DO NOT** apply more than 6.45 fl. oz./100 gal or 0.21 lb ai/A per single application via transplant soil drench per plant.
- **DO NOT** apply more than 61.6 fl. oz. of **Orbus 4 F** (2.01 lb ai) per acre per year via transplant soil drench.
- **DO NOT** make more than 1 application of **Orbus 4 F** per year via soil application and transplant.

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Bushberry, Crop Subgroup 13-07B	Twig blight and fruit rot <i>(Phomopsis vaccinii)</i> Anthracnose (Ripe rot) <i>(Colletotrichum acutatum)</i> <i>(C. gloeosporioides)</i> Botrytis fruit rot <i>(Botrytis cinerea)</i>	20 fl. oz. (0.65)	Application Directions: Applications for fruit rots need to be made on a 7- to 10-day interval, corresponding roughly to applications at green tip, pink tip, early bloom, full bloom, blossom drop and small green fruit to some blue fruit. Use adequate water to provide coverage of foliage, flowers and fruit.

Includes all members of the Crop Subgroup 13-07B, Bushberry: aronia berry, blueberry (highbush and lowbush), Chilean guava, currant (buffalo, black, red, and native), elderberry, European barberry, gooseberry, highbush cranberry, edible honeysuckle, huckleberry, jostaberry, juneberry, lingonberry, salal, sea buckthorn, and cultivars, varieties, and/or hybrids of these.

Restrictions

- **DO NOT** apply more than 20 fl. oz. of **Orbus 4 F** (0.65 lb ai) per acre per single application.
- **DO NOT** use more than 120 fl. oz. of **Orbus 4 F** (3.91 lb ai) per acre per year.
- **DO NOT** make more than 6 applications of **Orbus 4 F** per year.
- **DO NOT** use an adjuvant in the spray mixture with **Orbus 4 F** on this crop.
- **DO NOT** apply within 30 days of harvest (30-day PHI).
- Re-treatment Interval is 7 days.
- Restricted Entry Interval, REI = 12 hours.



Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Carrot	Southern Blight (<i>Sclerotium rolfsii</i>) Sclerotinia Rot (<i>Sclerotinia sclerotiorum</i>) Alternaria Blight (<i>Alternaria dauci</i>)	16 fl. oz. (0.52)	Application Directions: The initial application for control of southern blight and sclerotinia rot needs to be made approximately 45 days prior to harvest or earlier if disease appears. If required, a second application can be made 14 days after the initial application. Apply in 30 to 50 gallons of water per acre as a directed band spray over the crop. For control of alternaria blight initiate applications when disease conditions are favorable for disease development or when disease symptoms first appear. Repeat applications as needed at a 7-day interval.

Restrictions

- **DO NOT** apply more than 16 fl. oz. of **Orbus 4 F** (0.52 lb ai) per acre per single application.
- **DO NOT** make more than 8 applications of **Orbus 4 F** per year.
- **DO NOT** apply more than 128 fl. oz. of **Orbus 4 F** (4.17 lb ai) per acre per year.
- **DO NOT** apply within 7 days of harvest (7-day PHI).
- Restricted Entry Interval (REI) = 12 hours.
- Re-treatment Interval is 7 days.

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Ginseng	Rhizoctonia root rot (<i>Rhizoctonia solani</i>) Alternaria blight (<i>Alternaria panax</i>) Botrytis blight (<i>Botrytis cinerea</i>) White mold (<i>Sclerotinia spp.</i>)	16-24 fl. oz. (0.52-0.78)	Application Directions: For control of rhizoctonia root rot use 16 fl. oz./A (0.52 lb ai/A) beginning at transplant then continue on a 14-day interval. For control of alternaria blight, botrytis blight, and white mold, use 16 fl. oz./A (0.52 lb ai/A) beginning when the disease first appears or when conditions are favorable for disease development. Repeat applications as needed on a 7- to 14-day interval. Make a uniform application of the fungicide in a minimum of 100 gallons of water per acre. Under conditions favorable for severe disease development, use the 24 fl. oz. (0.78 lb ai/A) rate.

Restrictions

- **DO NOT** apply more than 24 fl. oz. of **Orbus 4 F** (0.78 lb ai) per acre per single application.
- **DO NOT** make more than 6 applications of **Orbus 4 F** per year when using reduced application rate.
- **DO NOT** apply more than 96 fl. oz. of **Orbus 4 F** (3.13 lb ai) per acre per year.
- **DO NOT** apply within 30 days of harvest (30-day PHI).
- Restricted Entry Interval, REI = 12 hours.
- Re-treatment Interval is 7 days.

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Lettuce, Head and Leaf	Sclerotinia Drop (<i>Sclerotinia minor</i> , <i>Sclerotinia sclerotiorum</i> .)	16-24 fl. oz. (0.52-0.78)	Application Directions: Orbus 4 F needs to be applied at 16-24 fl. oz. (0.52-0.78 lb ai) per acre as either a foliar band or broadcast spray or as a soil drench application at thinning. Use at least 50 gallons of water per acre. Use the higher rate in fields with a history of moderate to severe disease incidence. Orbus 4 F may be used with all types of lettuce, however, DO NOT apply after thinning as phytotoxicity may occur.

Restrictions

- **DO NOT** apply more than 24 fl. oz. of **Orbus 4 F** (0.78 lb ai) per acre per application.
- **DO NOT** apply more than 4 applications at the maximum rate per year.
- **DO NOT** exceed 96 fl. oz. of **Orbus 4 F** (3.13 lb ai) per acre per year.
- **DO NOT** use an adjuvant with **Orbus 4 F** on this crop.
- **DO NOT** apply within 30 days of harvest (30-day PHI).
- For use on lettuce only in the State of Arizona and in the Imperial Valley of California.
- Restricted Entry Interval, REI = 12 hours.
- Re-treatment Interval is 14 days.



Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Edible-podded Bean Legume Vegetables, Crop Subgroup 6-19A Succulent Shelled Bean, Crop Subgroup 6-19C Dried Shelled Bean, except soybean, Crop Subgroup 6-19E	White mold, (<i>Sclerotinia sclerotiorum</i>) Gray mold, (<i>Botrytis cinerea</i>)	8-13.6 fl. oz. (0.26-0.44)	Application Directions: For control of white and gray molds, make the first application at 10-30% bloom (i.e. when 10-30% of the plants have at least one (1) open bloom). If needed, a second application may be applied 7 to 10 days later. Use adequate water to provide coverage of foliage and flowers. Under conditions favorable for severe disease development, use the 13.6 fl. oz. (0.44 lb ai/A) rate. Orbus 4 F may be applied through sprinkler system irrigation equipment on beans. See irrigation use directions preceding this section.
Edible-podded Pea Legume Vegetable, Crop Subgroup 6-19B Succulent Shelled Pea, Crop Subgroup 6-19D Dried Shelled Pea, Crop Subgroup 6-19F	<i>Ascochyta</i> blight (Ascochyta spp.) Anthracnose (<i>Colletotrichum pisi</i>) White mold (<i>Sclerotinia sclerotiorum</i>) <i>Mycosphaerella</i> blight	13.6 fl. oz. (0.44) 8-13.6 fl. oz. (0.26-0.44) 8-13.6 fl. oz. (0.26-0.44) 13.6 fl. oz. (0.44)	For control of <i>Ascochyta</i> and <i>Mycosphaerella</i> blights, Anthracnose, and white mold in peas, make the first application at 10-30% bloom (i.e. when 10-30% of the plants have at least one (1) open bloom). If needed, a second application may be applied 7 to 10 days later. Use adequate water to provide coverage of foliage and flowers.
<p>Edible-podded Bean Legume Vegetables proposed Subgroup 6-19A, includes: Bean (<i>Phaseolus</i> spp.; includes French bean, garden bean, green bean, scarlet runner bean, snap bean, kidney bean, navy bean, wax bean); Bean (<i>Vigna</i> spp.; includes asparagus bean, catjang bean, Chinese longbean, cowpea, moth bean, mung bean, rice bean, urd bean, yardlong bean); goa bean (asparagus pea and winged bean); guar bean; jackbean; lablab bean; sword bean; vegetable soybean (edamame); velvet bean; winged pea; cultivars, varieties, and/or hybrids of these commodities.</p> <p>Succulent Shelled Bean proposed Subgroup 6-19C, includes: Bean (<i>Phaseolus</i> spp.; includes lima bean scarlet runner bean, wax bean); Bean (<i>Vigna</i> spp.; includes blackeyed pea, moth bean, catjang bean, cowpea, crowder pea, southern pea); Bean (<i>Lupinus</i> spp.; includes Andean lupin, blue lupin grain lupin, sweet lupin, white lupin, white sweet lupin, and yellow lupin); broad bean (fava bean); jackbean, goa bean (asparagus pea and winged bean); lablab bean; vegetable soybean (edamame); velvet bean; cultivars, varieties, and/or hybrids of these commodities.</p> <p>Dried Shelled Bean (except soybean) proposed Subgroup 6-19E, includes: African yam-bean; American potato bean; Bean (<i>Lupinus</i> spp.; includes Andean lupin, blue lupin, grain lupin, sweet lupin, white lupin, white sweet lupin and yellow lupin); Bean (<i>Phaseolus</i> spp.; includes black bean, cranberry bean, dry bean, field bean, French bean, garden bean, great northern bean, green bean, kidney bean, lima bean, navy bean, pink bean, pinto bean, red bean, scarlet runner bean, tepary bean and yellow bean); Bean (<i>Vigna</i> spp.; includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); guar bean; goa bean (asparagus pea and winged bean); horse gram; jackbean; lablab bean; morama bean; sword bean; winged pea; velvet bean; vegetable soybean (edamame); cultivars, varieties, and/or hybrids of these commodities.</p> <p>Edible-podded Pea Legume Vegetables proposed Subgroup 6-19B, includes: Pea (<i>Pisum</i> spp.; includes dwarf pea, edible podded pea, green pea, snap pea, snow pea, sugar snap pea); grass-pea; lentil; pigeon pea; chickpea (garbanzo); cultivars, varieties, and/or hybrids of these commodities.</p> <p>Succulent Shelled Pea proposed Subgroup 6-19D, includes: chickpea (garbanzo); Pea (<i>Pisum</i> spp.; includes English pea, garden pea, green pea); pigeon pea; lentil; cultivars, varieties, and/or hybrids of these commodities.</p> <p>Dried Shelled Pea proposed Subgroup 6-19F, includes: Pea (<i>Pisum</i> spp.; includes field pea, dry pea, garden pea, green pea); chickpea (garbanzo); lentil; grass-pea; pigeon pea; cultivars, varieties, and/or hybrids of these commodities.</p>			
Restrictions <ul style="list-style-type: none"> • DO NOT use more than 27.2 fl. oz. of Orbus 4 F (0.886 lbs. a.i.) per acre per crop cycle. • DO NOT apply more than 2 applications at the rate of 13.6 fl. oz. (0.443 lbs. a.i.) per acre per crop cycle. • DO NOT apply more than 3 applications at the rate of 8 fl. oz. (0.261 lbs. a.i.) per acre per crop cycle. • Restricted Entry Interval, REI = 12 hours. • Re-treatment Interval is 7 days. 			
Bean (Edible-podded, Succulent Shelled, Dried Shelled): <ul style="list-style-type: none"> • DO NOT apply to more than 3 crop cycles per acre per year for beans. • DO NOT apply more than 81.6 fl. oz. of Orbus 4 F (2.66 lbs. a.i.) per acre per year. • DO NOT make more than 9 applications per year when using the reduced application rate. • DO NOT apply within 30 days of harvest for dry and Lima beans (30-day PHI). • DO NOT apply within 14 days of harvest for edible-podded and succulent shelled beans (14-day PHI). 			
Pea (Edible-podded, Succulent Shelled, Dried Shelled): <ul style="list-style-type: none"> • DO NOT apply to more than 2 crop cycles per acre per year for peas. • DO NOT apply more than 54.4 fl. oz. (1.77 lbs. a.i.) of Orbus 4 F per acre per year. • DO NOT make more than 6 applications per year when using the reduced application rate. • DO NOT apply within 30 days of harvest for dry shelled peas (30-day PHI). • DO NOT apply within 30 days of harvest of field pea vines or hay (30-day PHI). • DO NOT apply within 14 days of harvest for edible-podded and succulent shelled peas (14-day PHI). 			

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Onion, Bulb Crop Subgroup 3-07A,	Botrytis Leaf Blight (<i>Botrytis squamosa</i>) Botrytis Neck Rot (<i>Botrytis allii</i>) Downy Mildew (<i>Peronospora destructor</i>) Purple Blotch (<i>Alternaria porri</i>)	16 fl. oz. (0.52)	Application Directions: Initiate applications when conditions are favorable for disease development or when first disease symptoms appear. Repeat applications on a 7 to 10-day schedule. Use sufficient water to obtain adequate coverage but no less than 5 gallons per acre. Orbus 4 F may be applied through sprinkler system irrigation equipment on onions. See irrigation use directions preceding this section.

Includes all members of the Crop Subgroup 3-07A, Onion, Bulb, including: daylily, bulb; fritillaria, bulb; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; lily, bulb; onion, bulb; onion, Chinese, bulb; onion, pearl; onion, potato, bulb; shallot, bulb; and cultivars, varieties, and/or hybrids of these.

Restrictions			
<ul style="list-style-type: none"> • DO NOT apply more than 16 fl. oz. of Orbus 4 F (0.52 lb ai) per acre per single application. • DO NOT apply more than 96 fl. oz. of Orbus 4 F (3.13 lb ai) per acre per year. • DO NOT make more than 6 applications of Orbus 4 F (3.13 lb ai) per acre per year. • DO NOT use an adjuvant with Orbus 4 F on this crop. • DO NOT apply within 7 days of harvest (7-day PHI). • Restricted Entry Interval, REI = 24 hours for hand weeding activities and 12 hours for all other activities. • Re-treatment Interval is 7 days. 			

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Cucurbit Vegetables, Melon Subgroup 9A	Phytophthora Blight (<i>Phytophthora capsici</i>) Downy Mildew (<i>Pseudoperonospora cubensis</i>) Alternaria Leaf Spot (<i>Alternaria cucumerina</i>) Gummy Stem Blight (<i>Didymella bryoniae</i>)	12- 24 fl. oz. (0.39-0.78)	For Phytophthora blight control the first application may be made at 24 fl. oz./A (0.78 lb ai/A) as a banded soil drench at transplant or when the plants have the first true leaves. Subsequent foliar applications for Phytophthora blight and downy mildew need to be made at 12-16 fl. oz./A (0.39-0.52 lb ai/A) on a 7 - 10-day interval beginning when disease first appears or when conditions are favorable for disease development. Use the low rate when conditions are favorable for disease development or when disease pressure is low to moderate. Use sufficient water to provide coverage of the foliage. For Phytophthora blight and gummy stem blight, applications need to be directed to provide coverage of the lower stem area. Use the low rate and longest interval for preventative applications and when disease pressure is low. Increase the rate and decrease the interval as disease pressure increases. For high disease pressure use the 24 fl. oz. rate on a weekly interval. Orbus 4 F may be applied through sprinkler system irrigation equipment on cantaloupe. See irrigation use directions elsewhere on the Orbus 4 F label.

Includes all members of the Cucurbit Vegetables, Melon Crop Subgroup 9A, including: Citron melon; Muskmelon, including hybrids and/or varieties of *Cucumis melo* (including true cantaloupe, cantaloupe, casaba, Santa Claus melon, Crenshaw melon, honeydew melon, honey balls, Persian melon, golden pershaw melon, mango melon, pineapple melon, snake melon); and watermelon, including hybrids and/or varieties of *Citrullus spp.*

Restrictions			
<ul style="list-style-type: none"> • DO NOT apply more than 24 fl. oz. of Orbus 4 F (0.78 lb ai) per acre per single application. • DO NOT make more than 12 applications of Orbus 4 F per acre per year when using reduced application rates. • DO NOT apply more than 144 fl. oz. of Orbus 4 F (4.69 lb ai) per acre per year. • DO NOT apply within 30 days of harvest (PHI = 30 days) • Restricted Entry Interval (REI) = 12 hours. • Re-treatment Interval is 7 days. 			

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Cucurbit Vegetables, Squash/Cucumber Subgroup 9B	Phytophthora blight (<i>Phytophthora capsici</i>) Downy mildew (<i>Pseudoperonospora cubensis</i>) Gummy stem blight (<i>Didymella bryoniae</i>)	12-24 fl. oz. (0.39-0.78)	For Phytophthora blight control the first application may be made at 24 fl. oz./A (0.78 lb ai/A) as a banded soil drench at transplant or when the plants have the first true leaves. Subsequent foliar applications for Phytophthora blight and downy mildew need to be made at 12-16 fl. oz./A (0.39-0.52 lb ai/A) on a 7 - 10-day interval beginning when disease first appears or when conditions are favorable for disease development. Use the low rate when conditions are favorable for disease development or when disease pressure is low to moderate. Use sufficient water to provide coverage of the foliage. For Phytophthora blight and gummy stem blight, applications need to be directed to provide coverage of the lower stem area. Use the low rate and longest interval for preventative applications and when disease pressure is low. Increase the rate and decrease the interval as disease pressure increases. For high disease pressure use the 24 fl. oz. rate on a weekly interval. Orbus 4 F may be applied through sprinkler system irrigation equipment on cucurbits. See irrigation use directions elsewhere on the Orbus 4 F label.

Includes all members of the Cucurbit Vegetables, Squash/Cucumber Crop Subgroup 9B, including: Chayote (fruit); Chinese waxgourd (Chinese preserving melon) *Benincasa hispida*; cucumber; gherkin; edible gourd (*Lagenaria spp.* i.e. spaghetti squash, hyotan, cucuzza), (*Luffa acutangula*, *L. cylindrical* i.e. hechima, Chinese okra); Momordica spp. (bitter melon, balsam pear, balsam apple, Chinese cucumber); pumpkin; squash, summer (*Cucurbita pepo* i.e. crookneck squash, straightneck squash, scallop squash, vegetable marrow, zucchini); winter squash, (*Cucurbita maxima*; *C. moschata* i.e. butternut squash, Calabaza, hubbard squash), (*C. mixta*; *C. pepo* i.e. acorn squash); including hybrids and/or varieties of these.

Restrictions			
<ul style="list-style-type: none"> • DO NOT apply more than 24 fl. oz. of Orbus 4 F (0.78 lb ai) per acre per single application. • DO NOT make more than 4 applications of Orbus 4 F at the 24 fl. oz./A (0.78 lb ai/A) rate per year. • DO NOT make more than 8 applications of Orbus 4 F at the 12 fl. oz./A (0.39 lb ai/A) rate per year. • DO NOT apply more than 96 fl. oz. of Orbus 4 F (3.13 lb ai) per acre per year. • DO NOT apply within 7 days of harvest (PHI = 7 days) • Restricted Entry Interval (REI) = 12 hours. • Re-treatment Interval is 7 days. 			



Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Fruiting Vegetable, Tomato Subgroup 8-10A	Southern blight (<i>Athelia rolfsii</i>)	16-24 fl. oz. (0.52-0.78)	<p>To control Southern blight on tomatoes, apply the initial application as a soil directed spray at or within the day of transplanting at 24 fl. oz. (0.782 lbs. a.i.)/A Direct the spray towards the soil and base of the plant along each side of the row. Irrigate within one hour of the application with approximately 1/2 to 1 inch of water to properly move the product into the root zone. Follow the soil directed spray at transplant with up to five foliar applications at 7- to 14-day retreatment intervals.</p> <p>The initial application may be made as a soil drench at transplanting at 24 fl. oz./A (0.78 lb ai/A). Foliar applications must begin 7 days after transplant and continue on a 7- to 14-day schedule. For foliar applications use the low rate and longest interval for preventative applications and when disease pressure is low. For moderate disease pressure use the 16 fl. oz. (0.52 lb ai/A) rate on a weekly interval. For high disease pressure use the 24 fl. oz. (0.78 lb ai/A) rate on a weekly interval.</p> <p>Orbus 4 F may be applied through sprinkler system irrigation equipment on peppers. See irrigation use directions elsewhere on the Orbus 4 F label.</p>
Fruiting Vegetable, Pepper/Eggplant Subgroup 8-10B	Phytophthora blight (<i>Phytophthora capsici</i>)		

Includes all members of Fruiting Vegetable, Tomato Subgroup 8-10A, including: bush tomato, cocona; currant tomato; garden huckleberry; goji berry; groundcherry; naranjilla; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties, and/or hybrids of these.

Includes all members of Pepper/Eggplant Subgroup 8-10B, including: African eggplant; bell pepper; eggplant; martynia; nonbell pepper; okra; pea eggplant; pepino; roselle; scarlet eggplant; cultivars, varieties, and/or hybrids of these.

Restrictions			
<ul style="list-style-type: none"> DO NOT apply more than 24 fl. oz. of Orbus 4 F (0.78 lb ai) per acre per single application. DO NOT make more than 9 applications of Orbus 4 F per acre per year when using reduced application rates. DO NOT apply more than 144 fl. oz. of Orbus 4 F (4.69 lb ai) per acre per year. DO NOT apply within 30 days of harvest (PHI = 30 days). Restricted Entry Interval (REI) = 12 hours. Re-treatment Interval is 7 days. 			

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Papaya	Anthracoese (<i>Colletotrichum gloeosporioides</i>)	20 fl. oz. (0.65)	For control of Anthracnose, apply 20 fl. oz. (0.65) per acre, as a foliar directed airblast spray at 7-day retreatment intervals. Use adequate water to provide coverage of foliage and flowers. Use a minimum spray volume of 80 gallons per acre.

Restrictions			
<ul style="list-style-type: none"> DO NOT apply more than 20 fl. oz./A of Orbus 4 F (0.65 lb ai) per acre per single application. DO NOT apply more than 6 applications of Orbus 4 F per acre per year. DO NOT apply more than 120 fl. oz. of Orbus 4 F (3.91 lbs. a.i.) per acre per year. DO NOT apply within 5 days of harvest (5-day PHI). DO NOT use mechanically-pressurized handguns or aerial application on papaya. Restricted Entry Interval, REI = 12 hours. Re-treatment Interval is 7 days. 			

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Peanuts	Sclerotinia blight (<i>Sclerotinia minor</i>)	16-24 fl. oz. (0.52-0.78)	<p>Application Directions:</p> <p>Apply at 45-70 days after planting or when conditions become conducive to disease development, then make a second application approximately 3-4 weeks later. If disease conditions remain favorable, make a third application approximately 3-4 weeks after the second. If the high rate was used for the first two applications use the low rate for the third application.</p> <p>Orbus 4 F may be applied through sprinkler system irrigation equipment. Use 24 fl. oz. of product (0.78 lb ai) per acre in solid set, portable wheel move, center pivot, motorized lateral move or traveling gun sprinkler irrigation equipment. See irrigation use directions preceding this section.</p>

Restrictions			
<ul style="list-style-type: none"> DO NOT apply more than 24 fl. oz. of Orbus 4 F (0.78 lb ai) per acre per single application. DO NOT make more than 4 applications of Orbus 4 F per acre per year when using reduced application rates. DO NOT use more than 64 fl. oz. of Orbus 4 F (2.09 lbs. a.i.) per acre per year. DO NOT apply within 30 days of threshing for harvest. DO NOT allow livestock to graze in treated areas. DO NOT feed hay or threshings from treated field to livestock. DO NOT apply by aerial application equipment. DO NOT apply within 21 days of harvest. Restricted Entry Interval, REI = 12 hours. Re-treatment interval is 21 days. 			

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Tuberous and Corm Vegetables, Subgroup 1C	Late blight (<i>Phytophthora infestans</i>)	5.5 fl. oz. (0.18)	Application instructions: For late blight and white mold control, begin applications when the plants are 6 to 8 inches tall or when conditions favor disease development. Repeat applications at intervals of 7 to 10 days. When white mold pressure is low to moderate, use 5.5 fluid ounces. When conditions favor moderate to high white mold pressure, increase the rate to 8 fluid ounces. Orbus 4 F may be applied by aerial application (except in the State of New York) or through sprinkler system irrigation equipment on potatoes. See irrigation use directions preceding this section.
	White mold (<i>Sclerotinia sclerotiorum</i>)	5.5 to 8 fl. oz. (0.18-0.26)	

Includes all members of Root and Tuber Vegetables, Tuberous and Corm Crop Subgroup 1C: Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufá; dasheen (taro); ginger; leren; potato; sweet potato; taniar; turmeric; yam bean; yam, true; cultivars, varieties, and/or hybrids of these.

Restrictions

- **DO NOT** apply more than 8 fl. oz. of **Orbus 4 F** (0.26 lb ai) per acre per single application.
- **DO NOT** make more than 10 applications of **Orbus 4 F** per acre per year when using reduced application rates.
- **DO NOT** apply more than 56 fl. oz. of **Orbus 4 F** (1.82 lb ai) per acre per year.
- **DO NOT** apply within 14 days of harvest.
- Restricted Entry Interval, REI = 12 hours.
- Re-treatment Interval is 7 days.

Potatoes (continued)	Suppression of Powdery Scab (<i>Spongospora subterranea</i>)	In-furrow 24 - 48 fl. oz. (0.78 - 1.56)	Application Instructions (Planting time treatment): Apply Orbus 4 F in at least 5 to 10 gallons of water per acre. Use Orbus 4 F at the 24 fl. oz. (0.782 lbs. a.i.) per acre rate on fields with a history of low levels of powdery scab or with low numbers of spore balls present in the soil. Apply the 48 fl. oz. (1.564 lbs. a.i.) per acre rate to fields with a history of moderate to heavy disease pressure or with moderate to high numbers of spore balls present in the soil. Apply the product in-furrow, over the seed piece, immediately prior to covering over the seed piece with soil. Orbus 4 F may be applied with a single nozzle placed directly above the seed piece, covering a band of soil approximately 8 inches in width. Alternately, two nozzles may be used. The first nozzle is to be placed directly over the seed piece with the 2nd nozzle directed behind to apply Orbus 4 F to the soil that will be used to cover the seed piece. Orbus 4 F will not provide complete control of this disease as the level of control varies according to the spore load in the soil and the cultivar being grown. Orbus 4 F , will, however, be effective against the pathogen when used as part of a comprehensive disease management program. For best results, apply Orbus 4 F using methods that maximum coverage of the rhizosphere in immediate proximity to the seed piece. Resistance Management: Some plant pathogens are known to develop resistance to products used repeatedly for disease control. Orbus 4 F 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. Orbus 4 F , with a multi-site mode of action, may be used to delay or prevent the development of resistance to single-site fungicides. Consult your Federal or State Cooperative Extension Service representatives for guidance on the proper use of Orbus 4 F in programs that seek to minimize the occurrence of disease resistance to other fungicides. No known resistance has developed to Orbus 4 F and thus it is an excellent partner for those products which specify the use of a protectant or other fungicide which has a different mode of action.
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Restrictions

- **DO NOT** apply more than 56 fl. oz. of **Orbus 4 F** (1.82 lbs. a.i.) per acre per year from all application techniques (In-furrow and foliar).
- If the in-furrow application is used at the 48 fl. oz. rate (1.564 lbs. a.i.), only one additional foliar application at the 8 fl. oz. rate (0.261 lbs. a.i.) is allowed for that year. If the in-furrow application is used at the 24 fl. oz. rate (0.782 lbs. a.i.), up to 4 additional foliar application at the 8 fl. oz. rate (0.261 lbs. a.i.) are allowed for that year.
- **DO NOT** apply within 14 days of harvest.
- Restricted Entry Interval, REI = 12 hours.
- The maximum single in-furrow use rate is 48 fl. oz. (1.564 lbs. a.i.)/A.
- The maximum single foliar use rate is 8 fl. oz. (0.261 lbs. a.i.)/A with the shortest RTI of 7 days.
- Re-treatment Interval is 7 days.

Crop	Diseases	Rate Per Acre (lb ai/A)	Instructions
Soybean	White Mold (<i>Sclerotinia Sclerotiorum</i>)	12-16 fl. oz. (0.39-0.52)	Application instructions: The first application of Orbus 4 F needs to be applied at R1 (early bloom) to R2 (full bloom) stage of development and, if needed, again 10- to 14-days later at early pod formation (R3). As a preventative spray or with conditions favoring low disease pressure use the low rate. For conditions favoring moderate to high disease development use the high rate. Orbus 4 F may be applied by aerial application to soybeans, except in the State of New York.

Restrictions

- **DO NOT** apply more than 16 fl. oz. of **Orbus 4 F** (0.52 lb ai) per acre per single application.
- **DO NOT** apply more than 32 fl. oz. of **Orbus 4 F** (1.04 lb ai) per acre per year.
- **DO NOT** make more than 2 applications of **Orbus 4 F** per acre per year.
- **DO NOT** allow livestock to graze treated areas.
- **DO NOT** feed hay from treated fields to livestock.
- **DO NOT** apply after growth stage R3, early pod formation.
- **DO NOT** apply within 21 days of harvest.
- Restricted Entry Interval, REI = 12 hours.
- Re-treatment Interval is 10 days.



STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used must be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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:

For plastic containers ≤ 5 gallons: 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 and drain for 10 seconds after the flow begins to drip. 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.

For plastic containers > 5 gallons: 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. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following 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. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. All such risks shall be assumed by the user or buyer.

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