

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

August 17, 2018

Adora Clark, Ph.D. Fungicide Federal Team Lead Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, NC 27419

Subject: PRIA Label and CSF Amendment –Replacing Basic and Alternate CSF 1;

updating label- multiple revisions including adding me-too Grasses Grown For

Seed Use

Product Name: Aprovia Fungicide EPA Registration Number: 100-1471 Application Date: April 6, 2018

Decision Number: 541290

#### Dear Dr. Clark:

The amended label and CSF(s) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

Please note that the record for this product currently contains the following CSF(s):

- Basic CSF dated 11/15/16
- Alternate CSF 1 dated 11/15/16

If you have any questions, please contact Fatima Sow by phone at (703) 347-8308, or via email at sow.fatima@epa.gov.

Sincerely,

Hope Johnson, Product Manager 21 Fungicide Branch Registration Division (7505P) Office of Pesticide Programs

Enclosure

## BENZOVINDIFLUPYR GROUP 7 FUNGICIDE

## Aprovia® Fungicide

Active Ingredients:

 Benzovindiflupyr\*:
 9.63%

 Other Ingredients:
 90.37%

 Total:
 100.00%

\*CAS No. 1072957-71-1

Aprovia Fungicide is formulated as an Emulsifiable Concentrate (EC) and contains 0.83 lb of benzovindiflupyr active ingredient per gallon.

#### 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.)

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1471

EPA Est.

	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.				
	Call a poison control center or doctor for treatment advice.				
If swallowed	Call a poison control center or doctor immediately for treatment advice.				
	Have person sip a glass of water if able to swallow.				
	Do not induce vomiting unless told to by a poison control center or doctor.				
	Do not give anything by mouth to an unconscious person.				
If 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	Take off contaminated clothing.				
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.				
Call a poison control center or doctor for treatment advice.					
Have the product contain	ner or label with you when calling a poison control center or doctor, or going for treatment.				
	NOTE TO PHYSICIAN				
	Probable mucosal damage may contraindicate the use of gastric lavage.				
HOT LINE NUMBER					
	For 24-Hour Medical Emergency Assistance (Human or Animal)				
	Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident)				
	Call				
	1-800-888-8372				

\_\_\_\_ gallons
Net Contents

ACCEPTED

Aug 17, 2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 100-1471

#### PRECAUTIONARY STATEMENTS

#### **Hazards to Humans and Domestic Animals**

#### **DANGER/PELIGRO**

Corrosive to the eyes. Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if swallowed. Harmful if inhaled. Avoid breathing vapor or spray mist. Wash 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 use.

## **Personal Protective Equipment (PPE)**

## **Applicators and other handlers must wear:**

- Protective eyewear (goggles, face shield, or safety glasses)
- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves (butyl rubber or nitrile rubber)
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing or loading

## **User Safety Requirements**

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Follow the 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 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**

Benzovindiflupyr is toxic to fish, aquatic invertebrates and mammals. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated area.

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

## **Surface Water Advisory**

This product may impact surface water quality due to runoff of rain water or irrigation water. This is especially true for poorly draining soils and soils with shallow ground water. A 15-foot level vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of benzovindiflupyr from runoff water and sediment. Do not cultivate within 15 feet of the aquatic areas to allow growth of a vegetative filter strip. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

## **Physical or Chemical Hazard**

Do not mix or allow coming in contact with oxidizing agent. Hazardous Chemical reaction may occur.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## **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.

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:

- Protective eyewear (goggles, face shield, or safety glasses)
- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant gloves (butyl rubber or nitrile rubber)
- Chemical-resistant footwear plus socks

FAILURE TO FOLLOW DIRECTIONS AND RESTRICTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR DISEASE CONTROL, AND/OR ILLEGAL RESIDUES.

#### PRODUCT INFORMATION

Aprovia Fungicide is a broad-spectrum product and is for use for the control of many important plant diseases. Aprovia Fungicide provides excellent disease control of many rusts, leaf spots and powdery mildews. Aprovia Fungicide is primarily applied as a foliar spray and can be used in block, alternating spray, or tank-mix programs with other crop protection products. All applications must be made according to the use directions that follow.

#### **USE INFORMATION**

#### **Use Instructions**

**Application:** Thorough coverage is necessary to provide good disease control. Make no more spray solution than is needed for application. Avoid spray overlap, as crop injury may occur.

**Adjuvants:** For best performance, the addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended. When an adjuvant is to be used with this product, Syngenta recommends the use of a Chemical Producers and Distributors Association certified adjuvant unless otherwise restricted for a specific crop.

**Efficacy:** Under certain conditions conducive to extended infection periods, use another registered fungicide for additional applications if maximum amount of Aprovia Fungicide has been used. If resistant isolates to Group 7 fungicides are present, efficacy can be reduced for certain diseases. The higher rates in the rate range and/or shorter spray intervals may be required under conditions of heavy infection pressure, with highly susceptible varieties, or when environmental conditions are conducive to disease.

Integrated Pest Management (IPM): Aprovia Fungicide should be integrated into an overall disease and pest management strategy whenever the use of a fungicide is required. Cultural practices known to reduce disease development should be followed. Consult your local agricultural authorities for additional IPM strategies established for your area. Aprovia Fungicide may be used in State Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.

## **Resistance Management**

## BENZOVINDIFLUPYR GROUP 7 FUNGICIDE

Aprovia Fungicide is a Group 7 fungicide in the succinate dehydrogenase inhibitor (SDHI) class. Fungal pathogens can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, use of this product should conform to resistance management strategies established for the crop and use area. Consult your local or State agricultural authorities for resistance management strategies that are complementary to those in this label. Resistance management strategies may include rotating and/or tank mixing with products having different modes of action or limiting the total number of applications per season. Syngenta encourages responsible resistance management to ensure effective long-term control of the fungal diseases on this label. Aprovia Fungicide should not be alternated or tank mixed with any fungicide to which resistance has already developed.

As part of a resistance management strategy:

- Apply no more than 2 sequential applications unless otherwise stated in the crop section.
- When tank mixing or alternating, use an effective partner one that provides

- satisfactory disease control when used alone at the mixture rate.
- Apply early to keep fungal populations low.
- Incorporate integrated pest management (IPM) practices into your program which can help reduce disease development and spread.
- To help manage fungicide resistance, do not use Aprovia Fungicide for commercial transplant production.

**Rotational Crops Restrictions:** See the following table for the crop rotational restrictions:

	Planting Time From Last Fungicide
Rotational Crops	Application
Bulb vegetables, Crop Group 3-07	
Canola	
Cereals (wheat, barley, triticale, rye, oat)	
Corn	
Corn, sweet	
Cotton	
Cucurbit vegetables	
Fruiting vegetables	
Grasses grown for seed (bluegrass,	0 days
bromegrass, fescue, orchardgrass, and	0 days
ryegrass only)	
Legumes, dry, subgroup 6C	
Peanuts	
Potatoes	
Soybean	
Sugarcane	
Tomatoes	
Tuberous & Corm subgroup 1C	
All other crops Intended for Food and Feed	6 months/180 days

**Crop Tolerance:** Plant tolerance has been found to be acceptable for all crops on the label, however, not all possible tank-mix combinations have been tested under all conditions. When possible, it is recommended to test the combinations on a small portion of the crop to ensure that a phytotoxic response will not occur as a result of application.

**Greenhouse Restrictions:** DO NOT apply to tomatoes grown in greenhouses.

**Spray Drift Management:** To avoid spray drift, do not apply when conditions favor drift beyond the target area. The interaction of many equipment and weather related factors determine the potential for spray drift. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

#### MIXING AND APPLICATION METHODS

## **Spray Equipment**

#### **Nozzles**

- Equip sprayers with nozzles that provide accurate and uniform application.
- Nozzles should be the same size and uniformly spaced across the boom.
- Calibrate sprayer before use.
- It is suggested that screens be used to protect the pump and to prevent nozzles from clogging.
- Screens placed on suction side of pump should be 16-mesh or coarser.
- Do not place a screen in the recirculation line.
- Use 50-mesh or coarser screens between the pump and boom, and where required, at the nozzles.
- Check nozzle manufacturer's recommendations.

## **Pump**

- Use a pump with capacity to:
  - (1) Maintain 35-40 psi at nozzles.
  - (2) Provide sufficient agitation in tank to keep mixture in suspension this requires recirculation of 10% of tank volume per minute.
- Use a jet agitator or liquid sparge tube for agitation.
- Do not air sparge.

For more information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural recommendations.

## **Mixing Instructions**

- Aprovia Fungicide is an emulsifiable concentrate (EC) formulation.
- Prepare no more spray mixture than is required for the immediate operation.
- Thoroughly clean spray equipment before using this product.
- Agitate the spray solution before and during application.
- Rinse spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.

#### Aprovia Fungicide Alone (No Tank Mix)

- Add ½-⅔ of the required amount of water to the spray or mixing tank.
- With the agitator running, add Aprovia Fungicide to the tank.
- Continue agitation while adding the remainder of the water.
- Begin application of the spray solution after Aprovia Fungicide has completely dispersed into the mix water.
- Maintain agitation until all of the mixture has been sprayed.

**Aprovia Fungicide + Tank Mixtures:** Aprovia Fungicide is usually compatible with all tank-mix partners listed on this label. To determine the physical compatibility of Aprovia

Fungicide with other products, use a jar test. Using a quart jar, add the proportionate amounts of the products to 1 qt of water. Add wettable powders and water dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

**Tank Mixtures:** All directions for use, crops/sites, use rates, dilution rates, precautions, and limitations which appear on the tank-mix product label must be observed.

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.

## Mixing in the Spray Tank

- Add  $\frac{1}{2}$ - $\frac{2}{3}$  of the required amount of water to the spray or mixing tank.
- With the agitator running, add the tank-mix partner(s) into the tank in the same order as described above.
- Allow the material to completely dissolve and disperse into the mix water. Continue agitation while adding the remainder of the water and Aprovia Fungicide to the spray tank.
- Allow Aprovia Fungicide to completely disperse.
- Spray the mixture with the agitator running.

#### **Application Instructions**

Aprovia Fungicide may be applied with all types of spray equipment commonly used for making ground and air applications. Proper adjustments and calibration of spraying equipment to give good canopy penetration and coverage is essential for good disease control.

#### **Ground Application – Broadcast Spray**

- Apply in a minimum of 10 gallons of water per acre, unless specified otherwise.
- Restriction: Do not apply through any ultra-low volume (ULV) spray system.
- Thorough coverage is necessary to provide good disease control.

## **Ground Application – In-Furrow or Banded Application**

• To calculate the total ounces per acre when the rate is given as oz product per 1000 linear feet, use the following equation:

43,560 ft <sup>2</sup> Acre	divided by row width	n (ft)	= the numbe	r of	linear feet Acre
Linear feet Acre	divided by 1000 ft	Χ	oz product 1000 linear ft	= <u>o</u>	z product Acre

Refer to directions in crop sections for gallons per acre and timing.

## **Ground Application Directions**

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

- Do not apply within 15 ft of bodies of water such as lakes, reservoirs, rivers, permanent streams, natural ponds, marshes or estuaries.
- Shut off the sprayer when row ends.
- Do not cultivate within 15 ft of aquatic areas in order to allow growth of a vegetative filter strip.
- Do not apply when weather conditions favor drift to aquatic areas. Do not apply when gusts or sustained winds exceed 10 mph.
- Do not apply during a temperature inversion. Mist or fog may indicate the presence of an inversion in humid areas.
- For perennial crops: Spray last three rows windward of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas. Adjust or turn off top nozzles to prevent spray going over the tops of trees. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row or passing tree gaps in the rows.

## **Aerial Application**

- Aerial application is prohibited in New York State.
- Use only on crops where air applications are allowed.
- Thorough coverage is necessary to provide good disease control.
- Apply in a minimum of 2 gallons of water per acre unless specified otherwise.
- Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur.
- Do not apply through any ULV spray system.

### **Aerial Spray Precautions**

- Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orientating nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic area. Avoid spraying during conditions of low humidity and/or high temperatures.

## **Aerial Spray Restrictions**

OBSERVE THE FOLLOWING RESTRICTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT

# STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES AND COMMERCIAL FISH PONDS.

- Do not apply by air within 150 ft of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish ponds.
- For aerial applications, mount the spray boom on the aircraft so as to minimize the drift caused by wing tip vortices. Use the minimum practical boom length, which must not exceed 75% of wing span or rotor diameter.
- Release spray at the lowest height consistent with pest control and flight safety. Do
  not make applications more than 10 feet above the crop canopy.
- Do not apply when weather conditions favor drift to aquatic areas. Do not apply when gusts or sustained winds exceed 10 mph.
- Do not apply during a temperature inversion. Mist or fog may indicate the presence of an inversion in humid areas.

## **Application Through Irrigation Systems (Chemigation)**

- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of the product in the water.
- Apply in 0.1-0.25 inches/acre. Excessive water may reduce efficacy.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### Restrictions

- Use only on crops where chemigation is specified on this label.
- Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems. Do not apply this product through any other type of irrigation system.
- Do not connect an irrigation system (including greenhouse systems) used for
  pesticide application to a public water system, unless the pesticide label-prescribed
  safety devices for public water systems are in place.

## **Operating Instructions**

- 1. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quickclosing check-valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. 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.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

## **Center Pivot Irrigation Equipment**

**Restrictions:** (1) Use only with drive systems which provide uniform water distribution. (2) Do not use end guns when chemigating Aprovia Fungicide through center pivot systems because of non-uniform application.

- Determine the size of the area to be treated.
- Determine the time required to apply 1/8-1/2 inch of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. When applying Aprovia Fungicide through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution. Run the system at 80-95% of the manufacturer's rated capacity.
- Using water, determine the injection pump output when operated at normal line pressure.
- Determine the amount of Aprovia Fungicide required to treat the area covered by the irrigation system.
- Add the required amount of Aprovia Fungicide and sufficient water to meet the injection time requirements to the solution tank.
- Make sure the system is fully charged with water before starting injection of the Aprovia Fungicide solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
- Maintain constant solution tank agitation during the injection period.
- Continue to operate the system until the Aprovia Fungicide solution has cleared the sprinkler head.

#### Solid Set, Hand Move, and Moving Wheel Irrigation Equipment

- Determine the acreage covered by the sprinklers.
- Fill injector solution tank with water and adjust flow rate to use the contents over a 20 to 30-minute interval. When applying Aprovia Fungicide through irrigation equipment use the lowest obtainable water volume while maintaining uniform distribution.
- Determine the amount of Aprovia Fungicide required to treat the area covered by the irrigation system.

- Add the required amount of Aprovia Fungicide into the same quantity of water used to calibrate the injection period.
- Operate the system at the same pressure and time interval established during the calibration.
- Stop injection equipment after treatment is completed. Continue to operate the system until the Aprovia Fungicide solution has cleared the last sprinkler head.

## SPECIFIC INSTRUCTIONS FOR PUBLIC WATER SYSTEMS

- 1. 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 out of the year.
- 2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3. The pesticide injection pipeline must contain a functional, automatic, quickclosing check valve to prevent the flow of fluid back toward the injection pump.
- 4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

## **Overview of Key Information**

Crop*	Maximum Product Rate/A/application (fl oz/A)	Maximum total fl oz/A/ year	Pre-Harvest Interval (PHI) (days)	Minimum Re- treatment Interval (days)
Blueberries (lowbush only)	10.5	10.5	365	na
Bulb Crop Group 3-07 Dry Bulb Group 3-07A Onions, Green Group 3- 07B	10.5	42	7	7
Rapeseed Subgroup 20A (Canola)	10.5	10.5	30	na
Cereals	7	14	Feekes 10.5.4	14
Corn	7	14	7	14
Corn, sweet	10.5	21	7	14
Cottonseed Subgroup 20C(Cotton)	10.5	21	45	14
Cucurbit Vegetables Crop Group 9	10.5	42	0	7
Fruiting Vegetable Crop Group 8-10 (tomatoes/peppers)	10.5	42	0	7
Grape and Small Fruit Vine Climbing (Subgroup 13- 07F)	10.5	31.5	21	14
Grasses Grown for Seed (bluegrass, bromegrass, fescue, orchardgrass and ryegrass only)	8.2	16.4	20	14
Pea and Bean, Dried Shelled, Except Soybean, Subgroup (6C)	8.5	17	14	14
Peanuts	13.7 10.5	31.5	30	21 14
Pome Fruit Group 11-10	7	27.6	30	7
Potatoes	13.7 (in furrow)	13.7	na	na
Soybean (forage, hay, hulls, and seed)	7	14	14	14
Sugarcane	10.5	31.5	30	14
Vegetables, Tuberous and Corm Subgroup 1C				
(except potatoes)	10.5	21	14	14

<sup>\*</sup>For specific crops in a group and use directions, refer to the Specific Directions for Use.

For best performance, the addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended unless otherwise stated in the specific crop section.

For resistance management, make no more than two sequential applications of a Group 7 fungicide unless otherwise specified in the Directions for Use.

## **SPECIFIC DIRECTIONS FOR USE**

0.000	Tanad Bisassa	Use Rate fl oz product/A	D
Crop	Target Diseases	(lb ai/A)	Remarks
Blueberries (lowbush only)	Septoria leaf spot (Septoria spp.) Leaf rust (Thekopsora minima)	10.5 (0.068)	Apply only in the non-cropping year of production (i.e. vegetative or sprout phase of production). Apply at first sign of diseases.  The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Aprovia Fungicide can be applied by ground or air.

- 1) Make no more than one Aprovia Fungicide application per year.
- 2) Do not apply more than 10.5 fl oz/A/year of Aprovia Fungicide.
- 3) Do not apply more than 0.068 lb ai/A per year of benzovindiflupyr-containing products.
- 4) Do not apply within 1 year of harvest (365 day PHI).
- 5) Aerial application is prohibited in New York State.

		Use Rate fl oz product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Bulb Crop	Powdery Mildew	8.5 – 10.5	Applications should begin prior to
Group 3-07	(Leveillula taurica)	(0.056 - 0.068)	disease development and continue
Dry Bulb Group 3-07A	Purple Blotch ( <i>Alternaria porri</i> )		throughout the season on a 7-14 day schedule.
Onion Garlic Shallot (see others below)  Onions, Green Group 3-07B  Chives Leeks Green	Rust (Puccinia allii)  Stemphyllium leaf blight and stalk rot (S. vesicarium)		No more than two applications of Aprovia Fungicide may be applied on a 7-day interval. All other applications must be applied no closer than a 14-day interval. For resistance management, do not apply more than 2 consecutive applications before switching to a non-Group 7 fungicide.  The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.  Optional language if label has a rate range: If disease pressure is high, use the highest rate.  Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.  Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval.
			interval and highest rate.

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Aprovia Fungicide can be applied by ground, air, or chemigation. Use a minimum of 10 gal/A for ground applications. Use a minimum of 5 gal/A for aerial applications. For chemigation, apply in 0.1-0.25 inches/A of water. Chemigation with excessive water may lead to a decrease in efficacy.

Complete List of Bulb Crop (dry bulb) Crop Group 3-07A: 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; cultivars, varieties, and/or hybrids of these

Complete List of Green Onion Crop Group 3-07B: chive, fresh leaves; chive, Chinese, fresh leaves; elegans hosta; fritillaria, leaves; kurrat; lady's leek; leek; leek, wild; onion, Beltsville bunching; onion, fresh; onion, green; onion, macrostem; onion, tree, tops; onion, Welsh, tops; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these

- 1) Do not apply more than 42 fl oz/A/year of Aprovia Fungicide.
- 2) Do not exceed 10.5 fl oz/A product per application.
- 3) Do not exceed 4 applications per year.
- 4) Do not apply more than 0.27 lb ai/A/year of benzovindiflupyr-containing products.
- 5) Do not apply within 7 days of harvest (7 day PHI).
- 6) Aerial application is prohibited in New York State.

		Use Rate fl oz	
		product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Rapeseed	Alternaria black spot	7	For Phoma control, apply during the
Subgroup	(Alternaria brassicae)	(0.046)	rosette stage between 2nd true leaf and
20A	Black leg/Phoma		bolting.
(Canola)	(Leptosphaeria		
	maculans)		For Alternaria, make an application at
For listing of	Cercospora leaf spot		the end of flowering/early pod set. For
crops in this	(C. brassicicola)		other foliar diseases, apply at first sign
group, see	Head rot		of disease.
below.	(Rhizoctonia solani)		For head not apply at 500/ flawering
	Leaf spot and pod rot (Alternaria alternata)		For head rot, apply at 50% flowering.
	Powdery mildew		The addition of a
	(Erysiphe polygoni)		spreading/penetrating type adjuvant
	Suppression of:		such as organo-silicon blends with
	Southern blight		either non-ionic surfactants (NIS) or
	(Sclerotium rolfsii)		vegetable based crop oils (COC); or
			vegetable based COC (not mineral); or
			NIS with at least 90% concentration is
			recommended.

Complete list of Oilseed subgroup 20A: Borage, crambe, cuphea, echium, flax seed, gold of pleasure, hare's ear mustard, lesquerella, lunaria, meadowfoam, milkweed, mustard seed, oil radish, poppy seed, rapeseed, sesame, sweet rocket and cultivars and/or hybrids of these.

- 1) Make no more than one Aprovia Fungicide application per year.
- 2) Do not apply more than 7 fl oz/A/year of Aprovia Fungicide.
- 3) Do not apply more than 0.046 lb ai/A per year of benzovindiflupyr-containing products.
- 4) Do not apply within 30 days of harvest (30 day PHI).
- 5) Aerial application is prohibited in New York State.

		Use Rate fl oz	
		product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Cereal	Leaf Rust	4 - 7	Apply Aprovia Fungicide prior to
	(Puccinia recondita f.sp.	(0.026-0.046)	disease development. Make
Wheat	tritici)	,	applications no closer than 14 days
Barley	Stripe Rust		apart.
Oats	(P. striiformis)		
Triticale	Stem Rust		Apply 7 oz/A in the spring for
Rye	(P. graminis)		suppression of early season diseases.
	Crown Rust		
	(P. coronata)		For disease control on the flag leaf,
	Septoria Leaf and Glume		apply 7 oz/A from Feekes 8 thru
	Blotch		Feekes 10.5.4 (Zadok's 71).
	(Septoria tritici,		
	Stagonospora nodorum)		The addition of a
	Tan Spot		spreading/penetrating type adjuvant
	(Pyrenophora tritici-		such as organo-silicon blends with
	repentis)		either non-ionic surfactants (NIS) or
	Net Blotch		vegetable based crop oils (COC); or
	(Pyrenophora teres)		vegetable based COC (not mineral); or
	Powdery Mildew		NIS with at least 90% concentration is
	(Blumeria spp.)		recommended.
	Barley scald		
	(Rhynchosporium		Optional language for lowest use rate:
	secalis)		Apply 4 oz/A in a tank mix with a
	Spot Blotch		labeled rate of a registered fungicide
	(Cochliobolus sativus)		containing FRAC groups 3 and 11.
	Black point		Apply in spring for early disease
	(C. sativus, Alternaria		control or Feekes 8 through Feekes
	spp.)		10.5.4 for disease control on flag leaf.
	Helminthosporium leaf		
	spot		
	(Dreschlera avenae)		

- 1) Do not apply more than 14 fl oz/A/year of Aprovia Fungicide.
- 2) Do not apply more than 0.092 lb ai/A per year of benzovindiflupyr-containing products.
- 3) Do not exceed 7 fl oz product/A per application.
- 4) Do not exceed 2 applications per year.
- 5) Do not apply after Feekes 10.5.4 (watery ripe).6) Aerial application is prohibited in New York State.

		Use Rate fl oz	
Crop	Target Diseases	product/A (lb ai/A)	Remarks
Corn	Anthracnose leaf blight (Colletotrichum	4 – 7 (0.026-0.046)	Apply 7 oz/A prior to disease onset when conditions are conducive for
Field	graminicola)	,	disease. Make applications no closer
Popcorn	Gray leaf spot (Cercospora sorghi)		than 14 days apart.
Including cultivars, varieties, and/or hybrids of	Rust, common (Puccinia sorghi) Rust, southern (P. polysora) Physoderma brown spot		For resistance management, make no more than 2 applications before alternating to another fungicide with a non-Group 7 mode of action.
these and others in this group	(P. maydis) Yellow leaf blight (Phyllosticta maydis)		The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.
			Optional language for lowest use rate: Apply 4 oz/A in a tank mix with a labeled rate of a registered fungicide containing FRAC groups 3 and 11.

- 1) Do not apply more than 14 fl oz/A/year of Aprovia Fungicide.
- Do not apply more than 0.092 lb ai/A per year of benzovindiflupyr-containing products.
   Do not exceed 7 fl oz product/A per application.
- 4) Do not exceed 2 applications per year.
- 5) Do not apply within 7 days of harvest (7 day PHI).
- 6) Aerial application is prohibited in New York State.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Corn, Sweet	Anthracnose leaf blight (Colletotrichum graminicola) Gray leaf spot (Cercospora sorghi) Rust, common (Puccinia sorghi) Rust, southern (P. polysora) Physoderma brown spot (P. maydis) Yellow leaf blight (Phyllosticta maydis)	4 – 10.5 (0.026-0.068)	Apply 10.5 oz/A prior to disease onset when conditions are conducive for disease. Make applications no closer than 14 days apart.  For resistance management, make no more than 2 applications before alternating to another fungicide with a non-Group 7 mode of action.  The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.  Optional language if label has a rate range: If disease pressure is high, use the highest rate  Optional language for lowest use rate: Apply 4 oz/A in a tank mix with a labeled rate of a registered fungicide containing FRAC groups 3 and 11.

- 1) Do not apply more than 21 fl oz/A/year (equivalent to 0.136 lb ai benzovindiflupyr per acre per year) of Aprovia Fungicide.
- 2) Do not apply more than 0.136 lb ai/A per year of benzovindiflupyr-containing products.
- 3) Do not exceed 10.5 fl oz product/A per application.
- 4) Do not exceed 2 applications per year.
- 5) Do not apply within 7 days of harvest (7 day PHI).

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Cottonseed	Ascochyta blight	7 – 10.5	For postemergence protection of <i>R</i> .
Subgroup	(A. gossypii)	(0.046-0.068)	solani damping off, apply Aprovia
20C	Rust		Fungicide in a 3-7 inch band over the
(Cotton)	(Puccinia schedonnardi) (P. cacabata)		top of the plant. See Application Directions for Ground: In-Furrow or
	Rhizoctonia leaf, stem		Banded.
	diseases		Daniesa.
	(R. solani)		For foliar disease, make an application
	Corynespora leaf spot		at the onset of disease or when
	(C. cassiicola)		conditions are conducive for disease.
			Apply no closer than a 14 day interval.
			For resistance management, make no
			more than 2 applications before alternating to another fungicide with a
			non-Group 7 mode of action.
			The addition of a
			spreading/penetrating type adjuvant
			such as organo-silicon blends with
			either non-ionic surfactants (NIS) or
			vegetable based crop oils (COC); or vegetable based COC (not mineral); or
			NIS with at least 90% concentration is
			recommended.
			Optional language if label has a rate
			range: If disease pressure is high, use the highest rate.
			Line Highest fate.

- 1) Do not apply more than 21 fl oz/A/year (equivalent to 0.136 lb ai benzovindiflupyr per acre per year) of Aprovia Fungicide.
- 2) Do not apply more than 0.136 lb ai/A per year of benzovindiflupyr-containing products.
- 3) Do not exceed 10.5 fl oz product/A per application.
- 4) Do not exceed 2 applications per year.
- 5) Do not apply within 45 days of harvest (45 day PHI).
- 6) Aerial application is prohibited in New York State.

		Use Rate fl oz product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Crop Cucurbit Vegetables Crop Group 9: For listing of crops in this group, see below.	Target Diseases  Cercospora leaf spot (C. citrullina) Gummy stem blight /vine decline (Didymella bryoniae) Alternaria leaf blight (A. cucumerina) Alternaria leaf spot (A. alternata) Scab (Cladosporium cucumerinum) Powdery mildew (Sphaerotheca and Erysiphe) Anthracnose (Colletotrichum spp.)		Remarks  Applications should begin prior to disease development and continue throughout the season on a 7-10 day schedule, making no more than 2 consecutive applications before switching to non-Group 7 fungicide.  The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.
Anntination	Target spot (Corynespora cassiicola) Septoria leaf blight (S. cucurbitacearum) Belly rot (Rhizoctonia solani) Suppression of: Southern blight (Sclerotium rolfsii)		apply more than 2 consecutive applications before switching to a non-Group 7 fungicide.  Optional language if label has a rate range: If disease pressure is high, use the highest rate.  Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.  Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.

Complete list of Cucurbit Vegetables Crop Group 9: Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon

- 1) No more than two applications of Aprovia Fungicide may be applied on a 7-day interval. All other applications must be applied no closer than a 14-day interval.
- 2) Do not apply more than 42 fl oz/A/year of Aprovia Fungicide.
- 3) Do not apply more than 0.272 lb ai/A per year of benzovindiflupyr-containing products.
- 4) Do not exceed 10.5 fl oz product/A per application.
- 5) Do not exceed 4 applications per year.
- 6) May be applied the day of harvest (0 day PHI).
- 7) Aerial application is prohibited in New York State.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Fruiting	Anthracnose	7 – 10.5	Begin applications prior to disease
Vegetable	(Colletotrichum spp.)	(0.046-0.068)	development and continue throughout
Crop Group	Cercospora leaf spot		the season on a 7-14 day interval.
8-10 (except	(C. capsici)		
tomatoes),	Gray leaf spot		For resistance management, do not
see	(Stemphyllium solani)		apply more than 2 consecutive
TOMATO	Powdery mildew		applications before switching to a non-
section)	(Oidiopsis sicula)		Group 7 fungicide.
	Suppression of:		
See the	Southern blight		The addition of a
Tomato	(Sclerotium rolfsii)		spreading/penetrating type adjuvant
section for			such as organo-silicon blends with
specific			either non-ionic surfactants (NIS) or
directions.			vegetable based crop oils (COC); or
			vegetable based COC (not mineral); or
			NIS with at least 90% concentration is
			recommended.
			Optional language if label has a rate
			range: If disease pressure is high, use
			the highest rate.
			Optional language if label has a single
			rate and interval range: If disease
			pressure is high, use the shortest
			interval.
			Optional language if label has a rate
			range and interval range: If disease
			pressure is high, use the shortest
			interval and highest rate.

Complete list of Fruiting vegetables (except for types of tomatoes) Crop Group 8-10: African eggplant, bell pepper; cocna; eggplant, garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; nonbell pepper; roselle; scarlet eggplant; sunberry

- 1) No more than two applications of Aprovia Fungicide may be applied on a 7-day interval. All other applications must be applied no closer than a 14-day interval.
- 2) Do not apply to greenhouse tomatoes.
- 3) Do not apply more than 42 fl oz/A/year of Aprovia Fungicide.
- 4) Do not apply more than 0.272 lb ai/A/year of benzovindiflupyr-containing products.
- 5) Do not exceed 10.5 fl oz product/A per application.
- 6) Do not exceed 4 applications per year.
- 7) May be applied the day of harvest (0 day PHI).
- 8) Aerial application is prohibited in New York State.

		Use Rate fl oz	
Crop	Target Diseases	product/A (lb ai/A)	Remarks
Grape and	Powdery mildew	7 – 10.5	For powdery mildew, begin at bud
Small Fruit Vine Climbing	(Erysiphe necator) Alternaria rot (A. alternata)	(0.046-0.068)	break and apply on a 14-21 day interval.
(Subgroup 13-07F)	Angular leaf spot (Mycosphearella angulata) Anthracnose (Elsinoe ampelina) Black Rot		For Phomopsis diseases, apply at bud break, before shoots are 0.5 inches in length, and then again when shoots are 5-6 inches in length.  For Black rot - begin when shoot
	(Guignardia bidwellii) Leaf Blight (Pseudocercospora vitis)		length is 1-3 inches and continue on a 14 day interval.
	Phomopsis cane and leaf spot (P. viticola) Rotbrenner (Pseudopezicula		For all other diseases, begin applications prior to disease onset when conditions are conducive for disease.
	tracheiphila) Septoria leaf spot (S. ampelina)		For resistance management, make no more than 2 sequential applications before alternating to non-Group 7 fungicide.
			The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.
			Optional language if label has a rate range: If disease pressure is high, use the highest rate.
			Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.
Application	For boot regulte, sufficient wat	or volume must be	Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Aprovia Fungicide can be applied by ground application.

Complete list of Small fruit vine climbing subgroup 13-07F, except fuzzy kiwifruit: Amur river grape, gooseberry, grape; kiwifruit (hardy); maypop; schisandra berry

- 1) Do not apply more than 31.5 fl oz/A/year of Aprovia Fungicide.
- 2) Do not apply more than 0.204 lb ai/A per year of benzovindiflupyr-containing products.
- 3) Do not apply within 21 days of harvest (21 day PHI).
- 4) Do not exceed 10.5 fl oz product/A per application.
- 5) Do not exceed 3 applications per year.

		Use Rate fl oz	
Crop	Target Diseases	product/A (lb ai/A)	Remarks
Grasses Grown for Seed (bluegrass, bromegrass, fescue, orchardgrass and ryegrass only)	Ergot Stem Diseases Powdery Mildew (Erysiphe graminis) Rusts (Puccinia spp.) Selenophoma Stem Eyespot (Selenophoma spp.)	4 - 8.2 (0.026 - 0.053)	Apply when disease infection is noticeable and increasing - primarily in the late spring or early summer timeframe. To maximize control of severe rust pressure, apply on a 14-day interval until seed is mature. It is important to begin applications early in the season.
			For resistance management, do not apply more than 2 consecutive applications before switching to a non-Group 7 fungicide.  The addition of a
			spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.
			Optional language if label has a rate range: If disease pressure is high, use the highest rate.
			Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.
Application 5	had a first and		Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.

- 1) Only for use on the following cool season grasses: bluegrass, bromegrass, fescue, orchardgrass, and ryegrass.
- 2) Do not exceed 8.2 fl oz product per application.
- 3) Do not apply more than 16.4 fl oz/A of Aprovia Fungicide per year.
- 4) Do not apply more than 0.11 lb ai/A per crop of benzovindiflupyr-containing products.
- 5) Do not exceed 2 applications per year.
- 6) Minimum application interval: 14 days
- 7) Aerial application is prohibited in New York State.
- 8) Do not apply to Bermuda grass grown for seed.
- 9) Do not feed hay cut within 20 days of last application.
- 10) Do not graze treated areas within 140 days of the last application.
- 11) Do not apply within 20 days of harvest (20-day PHI).

		Use Rate fl oz product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Pea and	Alternaria blight	7 – 8.5	Begin applications prior to disease
Bean, Dried	Alternaria leaf spot	(0.046-0.056)	onset when conditions are conducive
Shelled,	(A. alternata)		for disease. Apply Aprovia Fungicide
Except	Ascochyta blight		on a 14 day schedule.
Soybean,	(A. rabiei)		
Subgroup	Powdery mildew		For resistance management, make no
6C	(Leveillula taurica)		more than 2 sequential applications
	Rust		before alternating to a non-Group 7
For listing of	(Uromyces ciceris-		fungicide.
crops in this	arietini)		
group, see	Asian Soybean Rust		The addition of a
below.	(Phakopsora pachyrhizi)		spreading/penetrating type adjuvant
	Anthracnose		such as organo-silicon blends with
	(Colletotrichum spp.)		either non-ionic surfactants (NIS) or
	Cercospora leaf spot		vegetable based crop oils (COC); or
	(Cercospora spp.)		vegetable based COC (not mineral); or
	Mycosphaerella blight		NIS with at least 90% concentration is
	(Mycosphaerella spp.)		recommended.
	Suppression of:		
	Southern blight		Optional language if label has a rate
	(Sclerotium rolfsii)		range: If disease pressure is high, use
			the highest rate.

**Dried shelled pea and bean (except soybean) subgroup 6C:** Dried cultivars of bean (*Lupinus*); bean (*Phaseolus*) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean); bean (*Vigna*) (includes adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean); broad bean (dry); chickpea; guar; lablab bean; lentil; pea (*Pisum*) (includes field pea); pigeon pea

- 1) Do not apply more than 17 fl oz/A/year of Aprovia Fungicide.
- 2) Do not apply more than 0.112 lb ai/A/year of a benzovindiflupyr-containing product.
- 3) Do not apply within 14 days of harvest (14 day PHI).
- 4) Do not exceed 8.5 fl oz product/A per application.
- 5) Do not exceed 2 applications per year.
- 6) Aerial application is prohibited in New York State.

		Use Rate fl oz product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Peanut	Early Banded Application Suppression of: Southern stem rot (Sclerotium rolfsii) Rhizoctonia limb rot (R. solani) Cylindrocladium black rot (C. crotalaria) White mold (Sclerotinia minor)	0.7 – 10.5 oz/1000 linear row feet (0.0046-0.068 lb ai/1000 linear feet)	Optional directions: For suppression of early season soil-borne diseases, apply Aprovia Fungicide in a 7-10 inch banded application over the top of the peanuts shortly after emergence (approximately 14-21 days after planting). If twin-row peanuts, widen the band to cover both rows. Apply in a minimum of 10 gal water per acre.  And/or optional directions: Aprovia Fungicide may be applied as a broadcast spray at 13.7 oz/A instead of a band. Do not apply more than 13.7 oz/A. Refer to instructions in
	Broadcast Application Early leaf spot (Cercospora arachidicola) Late leaf spot (Cercosporidium	10.5 – 13.7 (0.046-0.089)	Application Section to calculate total oz per acre when applying in a band.  For leaf spots and other foliar diseases, begin foliar applications 30-40 days after planting or at the first appearance of disease. Apply 10.5 oz/A on a 14 day schedule or 13.7 oz/A on a 21-28 day schedule. Use
	personatum) Web blotch (Phoma arachidicola) Rust (Puccina arachidis) Pepper Spot (Leptosphaerulina crassiasca) Southern stem rot (Sclerotium rolfsii)		the higher use rate under the following conditions: foliar disease present, conditions highly favorable for diseases, or delayed application timing (40-45 days). Check with local extension/forecasting systems to determine if an extended interval up to 21 days is suitable for your area.  For control of Southern stem rot and
	Rhizoctonia limb rot (R. solani) Suppression of: Cylindrocladium black rot (C. crotalaria) White mold (Sclerotinia minor)		limb rot, broadcast Aprovia Fungicide either:  a. 10.5 oz/A 3 times on a 14 day interval starting as early as 21-45 days after planting b. 13.7 oz/A 2 times on a 21-28 day interval beginning ca. 45-60 days after planting or when conditions are conducive for disease.
			Optional language: An early (14-21 days after planting) application broadcast or in a 7-10 inch band over the row can be used for early season infections.
			For resistance management, make no more than 2 applications before alternating to a non-Group 7 fungicide.
			The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or

		Use Rate fl oz product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
			vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.
			Optional language if label has a rate range: If disease pressure is high, use the highest rate.
			Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.
Annibari			Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest interval and highest rate.

- 1) Do not apply more than 31.5 fl oz/A/year of Aprovia Fungicide.
- 2) Do not apply more than 0.204 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not exceed 13.7 fl oz product/A per application.
- 4) Do not exceed 3 applications per year.
- 5) Do not apply within 30 days of harvest (30 day PHI).
- 6) Aerial application is prohibited in New York State.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
			pressure is high, use the shortest interval.  Optional language if label has a rate range and interval range: If disease pressure is high, use the shortest
			interval and highest rate.

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Aprovia Fungicide can be applied by ground or air.

**Pome Fruit Crop Group 11-10:** Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties, and/or hybrids of these

- 1) No more than two applications of Aprovia Fungicide may be applied on a 7-day interval. All other applications must be applied no closer than a 14-day interval.
- 2) Do not apply more than 27.6 fl oz/A/year of Aprovia Fungicide.
- 3) Do not apply more than 0.184 lb ai/A per year of benzovindiflupyr-containing products.
- 4) Do not exceed 7 fl oz product/A per application.
- 5) Do not exceed 4 applications per year.
- 6) Do not apply within 30 days of harvest (30 day PHI).
- 7) Aerial application is prohibited in New York State.

Crop	Target Diseases	Use Rate fl oz product/A (lb ai/A)	Remarks
Potato	Rhizoctonia canker (R. solani)	0.7 – 13.7 oz/1000 linear row feet	Make an in-furrow application at planting. Apply the spray in a narrow band over the seed piece. Do not
	Suppression of: Black dot (Colletotrichum coccodes) Silver scurf (Helminthosporium solani)	(0.0046-0.089 lb ai/1000 linear feet)	apply more than 13.7 oz/A. Refer to instructions in Application Section to calculate total oz per acre when applying in a band.

- Specific Use Restrictions:

  1) Do not apply more than 13.7 fl oz/A/year of Aprovia Fungicide.

  2) Do not apply more than 0.089 lb ai/A/year of benzovindiflupyr-containing products.

  3) Do not apply within 14 days of harvest (14 day PHI).

		Use Rate	
		fl oz product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Soybean	Anthracnose	4-7	Begin applications prior to disease
(forage, hay,	(Colletotrichum	(0.026-0.046)	onset when conditions are conducive
hulls, and	truncatum)	,	for disease. Apply Aprovia Fungicide
seed)	Alternaria leaf spot (Alternaria spp.)		no closer than a 14 day schedule.
	Brown spot		The addition of a
	(Septoria glycines)		spreading/penetrating type adjuvant
	Cercospora blight and leaf		such as organo-silicon blends with
	spot		either non-ionic surfactants (NIS) or
	(C. kikuchii)		vegetable based crop oils (COC); or
	Frogeye leaf spot		vegetable based COC (not mineral); or
	(Cercospora sojina)		NIS with at least 90% concentration is
	Pod and stem blight		recommended.
	(Diaporthe		
	phaseolorum)		Optional language if label has a rate
	Powdery Mildew		range: If disease pressure is high, use
	(Microsphaera diffusa)		the highest rate.
	Aerial Web Blight		Ontional language for lawest use rate.
	(Rhizoctonia solani)		Optional language for lowest use rate:
	Asian Soybean Rust (Phakospora		Apply 4 oz/A in a tank mix with a labeled rate of a registered fungicide
	pachyrrhizae)		containing FRAC groups 3 and 11.
	Target Spot		containing rivae groups 5 and 11.
	(Corynespora		
	cassiicola)		
	Suppression:		
	Southern blight		
	(Sclerotium rolfsii)		

- 1) Do not apply more than 14 fl oz/A/year of Aprovia Fungicide.
- 2) Do not apply more than 0.092 lb ai/A/year of a benzovindiflupyr-containing product.
- 3) Soybean forage may be fed or harvested at 0 day PHI.
- 4) Do not exceed 7 fl oz product/A per application.
- 5) Do not exceed 2 applications per year.
- 6) Do not apply within 14 days of harvest of grain, hay or silage.
- 7) Aerial application is prohibited in New York State.

		Use Rate fl oz product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Sugarcane	Brown Rust ( <i>Puccinia</i> melanocephela)	7 - 10.5 (0.046 - 0.068)	Applications should begin prior to disease development and continue throughout the season on a 14 - 28 day schedule.
	Orange Rust		
	(Puccinia kuehnii)		For resistance management, do not apply more than 2 consecutive applications before switching to a non-Group 7 fungicide.
			The addition of a spreading/penetrating type adjuvant such as organo-silicon blends with either non-ionic surfactants (NIS) or vegetable based crop oils (COC); or vegetable based COC (not mineral); or NIS with at least 90% concentration is recommended.
			Optional language if label has a single rate and interval range: If disease pressure is high, use the shortest interval.

- 1) Do not apply more than 31.5 fl oz/A/year of Aprovia Fungicide.
- 2) Do not apply more than 0.204 lb ai/A/year of benzovindiflupyr-containing products.
- 3) Do not exceed 10.5 fl oz product/A per application.
- 4) Do not exceed 3 applications per year.
- 5) Do not apply within 30 days of harvest (30-day PHI).
- 6) Aerial application is prohibited in New York State.

		Use Rate fl oz product/A	
Crop	Target Diseases	(lb ai/A)	Remarks
Tomato	Early blight	7 – 10.5	Begin applications prior to disease
	(Alternaria solani)	(0.046-0.068)	development and continue throughout
Tomato,	Black mold		the season on a 7-14 day interval.
bush;	(A. alternata)		
Tomato,	Gray leaf spot		For resistance management, do not
currant;	(Stemphylium		apply more than 2 consecutive
Tomatillo;	_ botryosum)		applications before switching to a non-
Tomato, tree	Powdery mildew (Leveillula taurica)		Group 7 fungicide.
including	Septoria leaf spot		The addition of a
cultivars,	(S. lycopersici)		spreading/penetrating type adjuvant
varieties,	Target spot		such as organo-silicon blends with
and/or	(Corynespora		either non-ionic surfactants (NIS) or
hybrids of	cassiicola)		vegetable based crop oils (COC); or
these	Anthracnose		vegetable based COC (not mineral); or
	(Colletotrichum spp.)		NIS with at least 90% concentration is
	Leaf mold		recommended.
	(Fulvia fulva) Rhizoctonia damping off		Optional language if label has a rate
	and fruit rot		range: If disease pressure is high, use
	(R. solani)		the highest rate.
	Suppression of:		the highest rate.
	Southern blight		Optional language if label has a single
	(S. rolfsii)		rate and interval range: If disease
	(======================================		pressure is high, use the shortest
			interval.
			Optional language if label has a rate
			range and interval range: If disease
			pressure is high, use the shortest
			interval and highest rate.

- 1) No more than two applications of Aprovia Fungicide may be applied on a 7-day interval. All other applications must be applied no closer than a 14-day interval.
- 2) Do not apply to greenhouse tomatoes.
- 3) Do not apply more than 42 fl oz/A/year of Aprovia Fungicide.
- 4) Do not apply more than 0.272 lb ai/A/year of benzovindiflupyr-containing products.
- 5) Do not exceed 10.5 fl oz product/A per application.
- 6) Do not exceed 4 applications per year.
- 7) May be applied the day of harvest (0 day PHI).
- 8) Aerial application is prohibited in New York State.

Cron		Use Rate	
Crop	Target Diseases	oz. product/A	Remarks
Vegetables,	Ascochyta Leaf Spot	7 – 10.5	Begin applications prior to disease
Tuberous	(A. cynarae)	(0.046 - 0.068)	development and continue throughout
and Corm,	Black Dot		the season on a 14-day interval.
Subgroup	(Colletotrichum		
1C	coccodes)		For resistance management, do not
	Brown Spot		apply more than 2 consecutive
For listing of	(Alternaria alternata)		applications before switching to a non-
crops in this	Early Blight		Group 7 fungicide.
group, see	(Alternaria spp.)		T. 180 C. 18 C. 4 C.
below.	Powdery Mildew		The addition of a spreading/penetrating
0	(Erysiphe cichoracearum)		type adjuvant such as organo-silicon
See	Rust		blends with either non-ionic surfactants
Potatoes for	(Uromyces betae,		(NIS) or vegetable based crop oils
specific use directions.	Puccinia helianthi)		(COC); or vegetable based COC (not
uirections.	Septoria Leaf Spot		mineral); or NIS with at least 90% concentration is recommended.
	(Septoria spp.) Suppression of:		Concentration is recommended.
	Stem rot		Optional language if label has a rate
	(Sclerotium rolfsii)		range: If disease pressure is high, use
	(Scierollarii rollsii)		the highest rate.
			the highest rate.
			Optional language if label has a single
			rate and interval range: If disease
			pressure is high, use the shortest
			interval.
			into van
			Optional language if label has a rate
			range and interval range: If disease
			pressure is high, use the shortest
			interval and highest rate.

**Application:** For best results, sufficient water volume must be used to provide thorough coverage. Aprovia Fungicide can be applied by ground or chemigation application.

Complete list of Tuberous and corm vegetables subgroup 1C: Arracacha, arrowroot, artichoke (Chinese and Jerusalem), canna (edible), cassava (bitter and sweet), chayote (root), chufa, dasheen (Taro), ginger, leren, potato, sweet potato, tanier, tumeric, yam (bean and true).

- 1) No more than two applications of Aprovia Fungicide may be applied on a 7-day interval. The third application must be applied no closer than a 14-day interval.
- 2) Do not apply more than 21 oz/A/year of Aprovia Fungicide.
- 3) Do not apply more than 0.136 lb ai/A/year of benzovindiflupyr-containing products.
- 4) Do not exceed 10.5 fl oz product/A per application.
- 5) Do not exceed 3 applications per year.
- 6) Do not apply within 14 days of harvest (14-day PHI).

#### **Product Conversion Table**

FI oz product/acre	Lb ai benzovindiflupyr
4.0	0.026
4.2	0.027
7.0	0.046
8.0	0.052
8.2	0.053
8.5	0.056
9.0	0.059
10.0	0.065
10.5	0.068
12.8	0.083
13.7	0.089

#### STORAGE AND DISPOSAL

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

## **Pesticide Storage**

Store in original container only. Store in a cool, dry and well-ventilated place. Protect from excessive heat. Keep container closed when not in use. Do not store near food or feed.

## **Pesticide Disposal**

Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal Law. If these wastes cannot be used 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 in proper disposal methods.

## **Container Handling [less than or equal to 5 gallons]**

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

## **Container Handling [greater than 5 gallons]**

**Refillable container.** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty

the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

## **Container Handling [greater than 5 gallons]**

Non-refillable 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 ½ full with water. Replace 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, or by other procedures approved by state and local authorities.

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

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for: Syngenta Crop Protection, LLC P.O. Box 18300 Greensboro, North Carolina 27419-8300

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