

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

October 27, 2022

Marian Bleeke Registration Manager Bayer CropScience 800 N Lindbergh Blvd St. Louis, MO 63169

Subject: PRIA Label Amendment – New Foliar Use in Potatoes for EPA Reg. No. 264-1084; Removal of Hand Harvesting Restriction in Cucurbits; adding alternate brand name Luna Pro.
 Product Name: Propulse
 EPA Registration Number: 264-1084
 Application Date: 06/30/2021
 Decision Number: 577137 and 577145

Dear Marian Bleeke:

The application referred to above, submitted under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable under FIFRA section 3(c)(5).

You must submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) 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.

The alternate brand name, "Luna Pro" has been added to the product record.

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 FIFRA 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) lists 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

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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.

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.

If you have any questions, please contact Yasmin Bowers at 202-566-2507 or Bowers.Yasmin@epa.gov.

Sincerely,

C+ giles - Parker

Cynthia Giles-Parker, Chief Fungicide Branch Registration Division (7505T)

Enclosure – stamped "accepted" label

# **PROPULSE**<sup>®</sup>

FLUOPYRAM FUNGICIDE GROUP 7 PROTHIOCONAZOLE GROUP 3

**FUNGICIDE** 

## [ABN: Luna® Pro]

A fungicide for control of diseases in: Barley; Buckwheat; Canola; Corn; Cotton (subgroup 20C); Crambe; Cucurbits (subgroups 9A/9B); Dried Beans; Lowbush Blueberry and Lingonberry; Millet (Pearl and Proso); Oats; Peanut; Potato; Rapeseed; Rye; Bushberries (subgroup 13-07B); Soybean; Sugarbeet; Triticale; Wheat.

### **ACTIVE INGREDIENTS:**

FLUOPYRAM*:	
PROTHIOCONAZOLE*:	
OTHER INGREDIENTS:	
TOTAL:	100.0%
Contains 1.67 lbs FLUOPYRAM and 1.67 lbs PROTHIOCONAZOLE per gallon	

\*(CAS Numbers 658066-35-4 and 178928-70-6) Net Contents: XX

EPA Reg. No. 264-1084 SUSPENSION CONCENTRATE EPA Est. No.

# **KEEP OUT OF REACH OF CHILDREN**

[See additional precautionary statements and directions for use on label.]

**NET CONTENTS:** 

# ACCEPTED 10/27/2022 Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the

pesticide registered under EPA Reg. No.

264-1084

### PRODUCED FOR



Bayer CropScience LP 800 N. Lindbergh Blvd. St. Louis, MO 63167 1-866-99BAYER (1-866-992-2937)

# FIRST AID

IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice.
	• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	DO NOT give anything by mouth to an unconscious person.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>
	Call a poison control center or doctor for treatment advice.
IF INHALED	Move person to fresh air.
	<ul> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> </ul>
	Call a poison control center or doctor for further treatment advice.
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>
	Call a poison control center or doctor for treatment advice.
In case of spills, p	oisoning or fire call telephone emergency response number 1-800-334-7577 (24 hours a day).
Take container, la	abel or product name and registration number with you when seeking medical attention.
	<b>NFORMATION:</b> Treat Symptomatically. Medical Personnel should contact Bayer's medical , Toll Free: 1-800-334-7577.

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

# **PRECAUTIONARY STATEMENTS**

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, and using tobacco or using the toilet.

### Personal Protective Equipment (PPE):

Applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks, and chemicalresistant gloves made of barrier laminate, butyl rubber (≥14 mils), nitrile rubber (≥14 mils), neoprene rubber (≥14 mils), polyvinyl chloride (≥14 mils), or Viton (≥14 mils).

### **User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, 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.

### USER SAFETY RECOMMENDATIONS

### Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- User should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

### Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained 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 these chemicals and their degradates from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

### **Ground Water Advisory**

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

### DIRECTIONS FOR USE READ THE LABEL AND BROCHURE BEFORE USING It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

**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.

**DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

# Not for sale, distribution, or use in Nassau and Suffolk counties, New York except as permitted under FIFRA 24(c), Special Local Need registration.

### Aerial application is prohibited in Nassau and Suffolk County, New York.

### 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. Some crops have longer crop-specific REIs. Crop-specific REIs are listed in the Directions for Use section associated with the crop.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: coveralls over long-sleeved shirt and long pants, socks and shoes, and chemical-resistant gloves made of barrier laminate, butyl rubber (≥14 mils), nitrile rubber (≥14 mils), neoprene rubber (≥14 mils), polyvinyl chloride (≥14 mils), or Viton (≥14 mils).

### **PRODUCT INFORMATION**

PROPULSE<sup>®</sup> is a broad-spectrum fungicide with preventative, systemic, and curative properties labeled for the control or suppression of certain crop diseases.

### LABELED USES

Barley; Buckwheat; Canola; Corn; Cotton (subgroup 20C); Crambe; Cucurbits (subgroups 9A/9B); Dried Beans; Lowbush Blueberry and Lingonberry; Millet (Pearl and Proso); Oats; Peanut; Potato; Rapeseed; Rye; Bushberries(subgroup 13-07B); Soybean; Sugarbeet; Triticale; Wheat.

## **RESISTANCE MANAGEMENT**

For resistance management, please note that PROPULSE Fungicide contains a Group 3 (prothioconazole) and a Group 7 (fluopyram) fungicide. Any fungal population may contain individuals naturally resistant to PROPULSE Fungicide and other Group 3 (prothioconazole) and Group 7 (fluopyram) 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 PROPULSE Fungicide or other Group 3 (prothioconazole) and Group 7 (fluopyram) fungicide within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides 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/bacterial populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistancemanagement and/or IPM recommendations for specific crops and pathogens.
- For further information or to report suspected resistance contact Bayer CropScience at 1-866-99BAYER (1-866-992-2937). 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 ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser droplet size (ASABE S572. I).
- 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 mph at the application site.
- DO NOT apply during temperature inversions.

### **Ground Applications**

- Apply with the nozzle height recommended 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 droplet size (ASABE S572. I).
- **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. I) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

## **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 manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight. For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1)

### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **RELEASE HEIGHT – Aircraft**

**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. Higher release heights increase the potential for spray drift.

### 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 inversion.

### 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.

### **BOOM-LESS GROUND APPLICATIONS**

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

### **APPLICATION INFORMATION**

Use sufficient water volume to provide thorough and uniform coverage to obtain the most effective disease control. **DO NOT** make applications when conditions favor drift.

### **Ground Application**

**DO NOT** use with handheld application equipment, including backpack or mechanically/manually pressurized hand equipment.

For optimum disease control, apply in sufficient water to ensure thorough coverage of foliage, bloom, and fruit.

### **Aerial Application**

For aerial application equipment, a minimum of **10** gallons of water per acre for tree crops and **2** gallons of water per acre for field and vegetable crops is required. No aerial application is allowed in Nassau and Suffolk County, New York.

### In-furrow at-plant applications

Where permitted by crop specific use directions apply in-furrow during planting operations. Direct applications into the open furrow and cover with soil.

### **Chemigation Application**

Apply PROPULSE only through center pivot, motorized-lateral move, traveling gun, solid set or portable (wheel move, side roll, end tow, or hand move) and drip irrigation systems. **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, 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, must shut the system down and make necessary adjustments should the need arise.

PROPULSE has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. Sprinkler chemigation is usually most effective via an irrigation of one tenth to one fourth inch. The following application techniques are provided for user reference but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users must check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

**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. '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. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), back flow preventer, or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an alternative to the RPZ, the water from the public water system must be discharged into a reservoir tank prior to pesticide introduction.

There must be a complete physical break (air gap) between the flow 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. The pesticide injection

pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. The systems 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. 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.

**DO NOT** apply when wind speed favors drift. Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. Apply pesticide continuously for the duration of the water application. For mixing instructions, please refer to directions in the "Spray mixing and compatibility" section.

This product may be used through two basic types of irrigation systems as outlined in **Sections A and B** below. 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 back flow. Determine which type of irrigation is in place, then refer to the appropriate directions provided below for each type. See crops section on the label for required treatment rates and additional use information.

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

For injections of pesticides, these continuously moving systems must use a positive displacement injection pump of either diaphragm or piston type and be constructed of materials that are compatible with pesticides. They must also be 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 required amount of this product for acreage to be covered into 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, Portable (Wheel Move, Side Roll, End Tow, or Hand Move) and Drip Irrigation Equipment

With stationary systems, an effectively designed in-line Venturi applicator unit is preferred to support even and quick distribution. For solid set systems, determine acreage covered by sprinkler. Fill the tank of injection equipment with water and adjust flow to use contents over 30 to 45 minutes. Mix desired amount of this product 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. Provide chemical supply tank agitation sufficient for mixing until chemigation is completed. Operate entire system at normal pressures as advised by the manufacturer of injection equipment used, for amount of time established during calibration. This product can be injected during the irrigation cycle or as a separate application. Stop injection equipment with any system after treatment is completed and continue to operate irrigation system until this product has been cleared from the last sprinkler head.

## SPRAY MIXING AND COMPATIBILITY

Begin with clean spray equipment and add one-half of the required amount of water to the spray or mixing tank and start agitation. Add the required quantity of fungicide and the tank-mix partner if applicable to the water and complete filling with water to the required total volume. Follow the recommendations of your State Cooperative Extension Service for tank mixing with other products. In general, follow the order beginning first with water conditioners, water soluble packaging (wait for it to completely dissolve), wettable powders and water-dispersible granular products, liquid flowables and suspension concentrates, emulsifiable concentrates, and adjuvants last. Maintain agitation throughout spraying. **DO NOT** allow spray mixture to remain in the tank overnight, or for long periods during the day without agitation.

PROPULSE is physically compatible with most commonly used fungicide, herbicide, insecticide, and foliar nutrient products. However, the compatibility of PROPULSE with all potential tank-mix partners has not been fully investigated. If tank mixing with other pesticides is desirable, conduct a jar test with the volumes and rates typically used in agricultural application. Using a small container of water, add the proportionate amounts of the products: wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 15 minutes. Look for signs of separation, globules, sludge, flakes, or other precipitates. Physical compatibility is indicated if the combination remains mixed or can be remixed readily.

The crop safety of all potential tank-mixes with PROPULSE has not been tested on all crops listed on the label. Before applying any tank-mixture not specified on this label, safety to the target crop must be confirmed on a small portion of the crop listed on the label to be treated to ensure an adverse response will not occur.

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.

## PRODUCT RESTRICTIONS AND LIMITATIONS

**DO NOT** apply more than the maximum yearly rate for each specific crop from any combination of products containing FLUOPYRAM or PROTHIOCONAZOLE.

**DO NOT** use with handheld application equipment, including backpack or mechanically/manually pressurized hand equipment.

# **ROTATIONAL CROP RESTRICTIONS**

The following crops may be planted immediately: Barley; Buckwheat; Canola; Corn; Cotton (subgroup 20C); Crambe; Cucurbits (subgroups 9A/9B); Dried Beans; Lowbush Blueberry and Lingonberry; Millet (Pearl and Proso); Oats; Peanut; Potato; Rapeseed; Rye; Small Berries (Bushberries ) (13-07B); Soybean; Sugarbeet; Triticale; Wheat.

Alfalfa may be replanted 14 days after the last application of PROPULSE.

The following crops can be replanted after 30 days after the last application of PROPULSE: Artichoke, (Globe); Brassica (Cole) leafy vegetables (group 5); Bulb vegetables (group 3-07); Carrot; Citrus (group 10-10); Dill seed; Fruiting Vegetables (group 8-10); Ginseng; Grapes and small vines (except fuzzy kiwifruit) (subgroup 13-07F); Herb (subgroup 19A); Hops; Leafy vegetables (except watercress) (group 4); Legume Vegetables (except cowpea and dried peas); Low-growing berries, except cranberry, strawberry, Lowbush Blueberry and Lingonberry (subgroup 13-07G); Pome fruit (group 11-10); Rapeseed (subgroup 20A); Root vegetables (except sugarbeet)(subgroup 1B); Small Berries (caneberries) (subgroups 13-07A); Sorghum; Stone Fruits (group 12-12); Sugarcane (in region 3); Sunflower (subgroup 20B); Teosinte; Tobacco; Tree Nuts (group 14-12); Tuberous and corm vegetables (subgroup 1D).

**DO NOT** rotate to crops other than those listed above.

# **USE DIRECTIONS FOR SPECIFIC CROPS**

BARLEY		
Disease Control	Application Rate	Application Instructions
Fusarium Head Blight ( <i>Fusarium</i> spp.) (Suppression Only)	8.4 fl oz/acre (0.109 lb/acre	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 14-day interval as long as the maximum annual rate is not exceeded.
Net Blotch (Pyrenophora teres)	fluopyram) (0. 109 lb/acre prothioconazole)	
Powdery Mildew ( <i>Blumeria graminis f. sp.</i> hordei)		
Rusts ( <i>Puccinia</i> spp.)		
Scald ( <i>Rhynchosporium</i> secalis)		
Spot Blotch (Cochliobolus sativus)		

- Maximum single application rate: 8.4 fl oz/acre of PROPULSE (0.109 lb/acre fluopyram and 0.109 lb/acre prothioconazole)
- Maximum annual application rate: 16.8 fl oz of PROPULSE per acre (0.218 lb/acre fluopyram and 0.218 lb/acre prothioconazole) per year.
- Maximum number of applications per year: 2
- Minimum retreatment interval: 14 days
- Regardless of formulation or method of application, **DO NOT** apply more than 0.222 lbs fluopyram or 0.293 lbs prothioconazole per acre per year from all uses, including seed treatment, soil and foliar applications.
- Minimum application volumes: 10 gallons/Acre (Ground); 2 gallons/Acre (Aerial)
- Apply by ground, aerial, or chemigation application equipment.
- Aerial application is prohibited in Nassau and Suffolk County, New York.
- Pre-Harvest Interval (PHI): 32 days
- **DO NOT** harvest hay or allow livestock to graze treated area for 14 days after application.
- To limit the potential for development of disease resistance to this fungicide, DO NOT make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

### BUSHBERRY (subgroup 13-07B)

### See additional use directions for lowbush blueberry and lingonberry

Aronia Berry; Blueberry, Highbush; Blueberry, Lowbush; Buffalo Currant; Chilean Guava; Currant, Black; Currant, Red; Elderberry; European, Barberry; Gooseberry; Cranberry, Highbush; Honeysuckle, Edible; Huckleberry; Jostaberry; Juneberry; Lingonberry; Native Currant; Salal; Sea Buckthorn; cultivars, varieties, and/or hybrids of these.

Disease Control	Application Rate	Application Instructions
Septoria leaf spot ( <i>Septoria</i> spp.)	10.0 - 13.6 fl oz/acre	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 7- to 10-day interval.
Monilinia blight ( <i>Monilinia vaccinii-</i> <i>corymbosi</i> )	(0.130 - 0.177 lb/acre fluopyram) (0.130 - 0.177 lb/acre	When disease pressure is severe, use the shorter intervals as long as the maximum annual rate is not exceeded.
Valdensinia leaf spot ( <i>Valdensinia heterodoxa</i> )	prothioconazole)	
Leaf rust ( <i>Thekopsora minima</i> )		
Anthracnose (Colletotrichum gloeosporioides)		
Botrytis blight ( <i>Botrytis cinerea</i> )		
Alternaria fruit rot ( <i>Alternaria</i> spp.)		
White pine blister rust (Cronartium ribicola)		

### BUSHBERRY (subgroup 13-07B) - Continued

- Maximum single application rate: [13.6 fl oz/acre of PROPULSE (0.177 lb/acre fluopyram and 0.177 lb/acre prothioconazole)]
- Maximum annual application rate: [27.2 fl oz of PROPULSE per acre (0.354 lb/acre fluopyram and 0.354 lb/acre prothioconazole) per year.]
- Maximum number of applications per year: [2 (at 13.6 fl oz/acre PROPULSE).]
- [Note to reviewer: the rates and number of applications listed in the above three bullets must be consistent with the rate(s) listed under 'Application Rate' above. The maximum single rate must not exceed 13.6 fl oz/acre and the maximum annual rate must not exceed 27.2 fl oz/acre of PROPULSE.]
- Minimum retreatment interval: 7 days
- Regardless of formulation or method of application, **DO NOT** apply more than 0.446 lbs fluopyram or 0.356 lbs prothioconazole per acre per year from all uses, including soil and foliar applications.
- Minimum application volume: 10 gallons/Acre (Ground).
- Apply by either ground or chemigation application equipment.
- Pre-Harvest Interval (PHI): 7 days
- To limit the potential for development of disease resistance to this fungicide, DO NOT make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- DO NOT apply Prothioconazole with mechanically pressurized handgun equipment to orchards or vineyards (Bushberry subgroup 13-07B, Low growing berry subgroup, except strawberry subgroup 13-07H); field crops (Cucurbit Vegetables (Crop Group 9), Corn, sweet, Garbanzos (including chickpeas), Lentils); or nursery pine and conifer seedlings (Shortleaf loblolly, Slash, Longleaf and other pines, other conifers, other hardwoods).

BUCKWHEAT; MILLET (Pearl and Proso); OATS; RYE		
Disease Control	Application Rate	Application Instructions
Rusts ( <i>Puccinia</i> spp.)	8.4 fl oz/acre	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings.
Glume Blotch (Stagonospora nodorum)	(0.109 lb/acre fluopyram) (0. 109 lb/acre	
Powdery Mildew ( <i>Erysiphe graminis</i> )	prothioconazole)	
Scald ( <i>Rynchosporium secalis</i> )		
Speckled Blotch (Septoria avenae; Septoria tritici)		
Spot Blotch ( <i>Bipolaris sorokiniana</i> )		
Tan Spot (Pyrenophora tritici- repentis)		

- Maximum single application rate: 8.4 fl oz/acre of PROPULSE (0.109 lb/acre fluopyram and 0.109 lb/acre prothioconazole)
- Maximum annual application rate: 8.4 fl oz of PROPULSE per acre (0.109 lb/acre fluopyram and 0.109 lb/acre prothioconazole) per year.
- Maximum number of applications per year: 1
- Regardless of formulation or method of application, **DO NOT** apply more than 0.222 lbs fluopyram or 0.178 lbs prothioconazole per acre per year from all uses, including seed treatment, soil and foliar applications.
- Minimum application volumes: 10 gallons/Acre (Ground); 2 gallons/Acre (Aerial)
- Apply by ground or aerial spray equipment.
- Aerial application is prohibited in Nassau and Suffolk County, New York.
- Pre-Harvest Interval (PHI): 30 days
- **DO NOT** harvest hay or allow livestock to graze treated area for 14 days after application.
- To limit the potential for development of disease resistance to this fungicide, DO NOT make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

CANOLA; RAPESEED; CRAMBE		
Disease Control	Application Rate	Application Instructions
Sclerotinia stem rot (Sclerotinia sclerotiorum)	9.9 fl oz/acre	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 14-day interval as long as
Powdery mildew (Erysiphe cruciferarum)	(0.129 lb/acre fluopyram) (0.129 lb/acre	the maximum annual rate is not exceeded.
Alternaria blackspot ( <i>Alternaria</i> spp.)	prothioconazole)	

- Maximum single application rate: 9.9 fl oz/acre of PROPULSE (0.129 lb/acre fluopyram and 0.129 lb/acre prothioconazole)
- Maximum annual application rate: 19.8 fl oz of PROPULSE per acre (0.258 lb/acre fluopyram and 0.258 lb/acre prothioconazole) per year.
- Maximum number of applications per year: 2
- Minimum retreatment interval: 14 days
- Regardless of formulation or method of application, DO NOT apply more than 0.269 lbs fluopyram or 0.356 lbs prothioconazole per acre per year from all uses, including seed treatment, soil and foliar applications.
- Minimum application volumes: 10 gallons/Acre (Ground); 2 gallons/Acre (Aerial)
- Apply by ground, aerial, or chemigation application equipment.
- Aerial application is prohibited in Nassau and Suffolk County, New York.
- Pre-Harvest Interval (PHI): 36 days
- To limit the potential for development of disease resistance to this fungicide, **DO NOT** make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

CORN Sweet Corn; Field Corn; Fie	eld Corn Grown For	Seed, and Popcorn
Disease Control	Application Rate	Application Instructions
Anthracnose Leaf Blight ( <i>Colletotrichum</i> graminicola) Eye Spot ( <i>Aureobasidium zeae</i> ) Gray Leaf Spot ( <i>Cercospora zeae-</i> maydis) Northern Corn Leaf Blight ( <i>Setosphaeria turcica</i> ) <sup>1</sup> Northern Corn Leaf Spot ( <i>Cochliobolus</i> <i>carbonum</i> ) <sup>1</sup> Southern Corn Leaf Blight ( <i>Cochliobolus</i> <i>heterostrophus</i> ) <sup>1</sup> Rusts ( <i>Puccinia</i> spp.) <sup>1</sup> The above diseases are also known as Helminthosporium leaf blights	13.6 fl oz/acre (0.177 lb/acre fluopyram) (0.177 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 7- to 14-day interval as long as the maximum annual rate is not exceeded. When disease pressure is severe, use the shorter intervals. Application is not advised at times when corn is under severe environmental stress conditions.
Rhizoctonia rots ( <i>Rhizoctonia</i> spp.)	6.0 - 13.6 fl oz/acre	In-furrow spray during planting directed on or below seed.
	(0.078 - 0.177 Ib/acre fluopyram) (0.078 - 0.177 Ib/acre prothioconazole)	

### CORN - Continued

- Maximum single application rate: [13.6 fl oz/acre of PROPULSE (0.177 lb/acre fluopyram and 0.177 lb/acre prothioconazole)]
- Maximum annual application rate: [27.2 fl oz of PROPULSE per acre (0.354 lb/acre fluopyram and 0.354 lb/acre prothioconazole) per year.]
- Maximum number of applications per year: 2
- [Note to reviewer: the rates listed in the first two bullets must be consistent with the rate(s) listed under 'Application Rate' above. The maximum single rate must not exceed 13.6 fl oz/acre and the maximum annual rate must not exceed 27.2 fl oz/acre of PROPULSE, and the maximum number of applications must remain at two.]
- Minimum retreatment interval: 7 days
- Regardless of formulation or method of application, **DO NOT** apply more than 0.446 lbs fluopyram or 0.712 lbs prothioconazole per acre per year from all uses including seed treatment, soil and foliar applications.
- Minimum application volumes: 10 gallons/Acre (Ground); 2 gallons/Acre (Aerial)
- Apply by either ground, aerial, or chemigation application equipment.
- Aerial application is prohibited in Nassau and Suffolk County, New York
- Pre-Harvest Interval (PHI): 0 day sweet corn ears and forage, field corn forage, and field corn grown for seed; 14 days grain and fodder of field corn and popcorn.
- For sweet corn, the Restricted-Entry Interval (REI) is 24 hours.
- To limit the potential for development of disease resistance to this fungicide, **DO NOT** make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

# COTTON (Subgroup 20C)

Cottonseed; cultivars, varieties and other hybrids of these.

Cottonseed; cultivars, varieties and other hybrids of these.		
Disease Suppression	Application Rate	Application Instructions
Target Spot Corynespora leaf spot ( <i>Corynespora cassiicola</i> ) Rust ( <i>Puccinia</i> spp.) Cercospora leaf spot ( <i>Cercospora</i> spp.) Alternaria leaf spot ( <i>Alternaria</i> spp.) Ascochyta blight ( <i>Ascochyta</i> spp.)	8.5 to 13.6 fl oz/acre (0.111 – 0.177 lb/acre fluopyram) (0.111 – 0.177 lb/acre prothioconazole)	Apply PROPULSE at the first sign of disease. Repeat applications as needed on a 14-day interval if favorable conditions for disease development persist, as long as the maximum annual rate is not exceeded. Overhead chemigation is also effective for these diseases.
Pest Suppression	Application Rate	Application Instructions
Damping off ( <i>Rhizoctonia solani</i> ) Fusarium Wilt ( <i>Fusarium</i> spp.)	13.6 to 17.0 fl oz/acre (0.177 – 0.222 lb/acre fluopyram) (0.177 – 0.222 lb/acre prothioconazole)	<ul> <li>For pest suppression, only apply specified dosage in the following methods:</li> <li>In-furrow at planting directed on or below seed</li> <li>Chemigation into root-zone through low-pressure drip or trickle irrigation. Drip line must be in close proximity to plants.</li> </ul>
Nematodes	13.6 fl oz/acre (0.177 lb/acre fluopyram) (0.177 lb/acre prothioconazole)	Apply with overhead chemigation in sufficient water volume to move PROPULSE into the root zone
	13.6 to 17.0 fl oz/acre (0.177 – 0.222 lb/acre fluopyram) (0.177 – 0.222 lb/acre prothioconazole)	<ul> <li>For pest suppression, only apply specified dosage in the following methods:</li> <li>In-furrow at planting directed on or below seed</li> <li>Chemigation into root-zone through low-pressure drip or trickle irrigation. Drip line must be in close proximity to plants.</li> </ul>

### COTTON (Subgroup 20C) - Continued

- Maximum single application rate: [17.0 fl oz/acre of PROPULSE (0.222 lb/acre fluopyram and 0.222 lb/acre prothioconazole)]
- Maximum annual application rate: [17.0 fl oz/acre of PROPULSE (0.222 lb/acre fluopyram and 0.222 lb/acre prothioconazole).]
- Maximum number of applications per year: [2 (at 8.5 fl oz/acre PROPULSE) or 1 (at 17.0 fl oz/acre PROPULSE)]
- [Note to reviewer: the rates and number of applications listed in the above three bullets must be consistent with the rate(s) listed under 'Application Rate' above. The maximum single rate must not exceed 17.0 fl oz/acre and the maximum annual rate must not exceed 17.0 fl oz/acre of PROPULSE.]
- Minimum retreatment interval: 14 days
- Regardless of formulation or method of application, **DO NOT** apply more than 0.446 lbs fluopyram or 0.534 lbs prothioconazole per acre per year from all uses including seed treatment, soil and foliar applications.
- Minimum application volumes: 10 gallons/Acre (Ground); 5 gallons/Acre (Aerial)
- May be applied by ground, aerial, or chemigation application equipment.
- Aerial application is prohibited in Nassau and Suffolk County, New York
- Pre-Harvest Interval (PHI): 30 days
- To limit the potential for development of disease resistance to this fungicide, DO NOT make more than 2 sequential applications any Group 7 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

### CUCURBITS (subgroups 9A, 9B)

**Melon subgroup:** Citron Melon; Muskmelon (hybrids and/or cultivars of Cucumis Melo including True Cantaloupe, Casaba, Crenshaw Melon, Golden Pershaw Melon, Honeydew Melon, Honey Balls, Mango Melon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon); Watermelon.

**Squash/Cucumber subgroup:** Chayote (Fruit); Chinese Waxgourd; Cucumber; Gherkin; Gourd, Edible; *Momordica* spp.; Pumpkin; Squash, Summer; Squash, Winter.

Disease Control	Application Rate	Application Instructions
Fusarium wilt Fusarium blight ( <i>Fusarium oxysporum</i> ) ( <i>Fusarium</i> spp.)	13.6 fl oz/acre (0.177 lb/acre fluopyram) (0.177 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 5- to 10- day interval as long as the maximum annual rate is not exceeded. When disease pressure is severe, use the shorter intervals. Drip treatment is effective for control of this disease.
Gummy stem blight ( <i>Didymella</i> spp.) Southern blight ( <i>Sclerotium roflsii</i> ) Powdery mildew ( <i>Sphaerotheca fuliginea /</i> <i>Podosphaera xanthii</i> ) ( <i>Erysiphe cichoracearum</i> )	10.3 to 13.6 fl oz/acre (0.134 - 0.177 lb/acre fluopyram) (0.134 - 0.177 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 5- to 10- day interval, as long as the maximum annual rate is not exceeded. When disease pressure is severe, use the shorter intervals.

- Maximum single application rate: [13.6 fl oz/acre of PROPULSE (0.177 lb/acre fluopyram and 0.177 lb/acre prothioconazole)]
- Maximum annual application rate: [34.2 fl oz/acre of PROPULSE (0.446 lb/acre fluopyram and 0.446 lb/acre prothioconazole).]
- Maximum number of applications per year: [3 (at 11.4 fl oz/acre PROPULSE) or 2 (at 13.6 fl oz/acre PROPULSE)]
- [Note to reviewer: the rates and number of applications listed in the above three bullets must be consistent with the rate(s) listed under 'Application Rate' above. The maximum single rate must not exceed 13.6 fl oz/acre and the maximum annual rate must not exceed 34.2 fl oz/acre of PROPULSE.]
- Minimum retreatment interval: 5 days
- Apply up to one (1) soil application and two (2) foliar applications.
- Apply by ground or chemigation application equipment.
- Minimum application volume: 10 gallons/Acre (Ground).
- Regardless of formulation or method of application, **DO NOT** apply more than 0.446 lbs fluopyram or 0.534 lbs prothioconazole per acre per year from all uses, including soil and foliar applications.

### CUCURBITS (subgroups 9A, 9B) – Continued

- Pre-Harvest Interval (PHI): 7 days
- To limit the potential for development of disease resistance to this fungicide, **DO NOT** make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- DO NOT apply Prothioconazole with mechanically pressurized handgun equipment to orchards or vineyards (Bushberry subgroup 13-07B, Low growing berry subgroup, except strawberry subgroup 13-07H); field crops (Cucurbit Vegetables (Crop Group 9), Corn, sweet, Garbanzos (including chickpeas), Lentils); or nursery pine and conifer seedlings (Shortleaf loblolly, Slash, Longleaf and other pines, other conifers, other hardwoods).

### DRIED BEANS

### (See separate use directions for soybean)

Dried Cultivars Of Bean (*Lupinus* spp.) (includes Grain Lupin, Sweet Lupin, White Lupin, and White Sweet Lupin); (*Phaseolus* spp.) (includes Field Bean, Kidney Bean, Lima Bean (Dry), Navy Bean, Pinto Bean; Tepary Bean; Bean (*Vigna* spp.) (includes Adzuki Bean, Blackeyed Pea, Catjang, Crowder Pea, Moth Bean, Mung Bean, Rice Bean, Southern Pea, Urd Bean); Broad Bean (Dry); Chickpea; Guar; Lablab Bean; Lentil

Disease Control	Application Rate	Application Instructions
White mold (Sclerotinia sclerotiorum)	10.3 to 13.6 fl oz/acre (0.134 – 0.177 lb/acre fluopyram) (0.134 – 0.177 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 7- to 14-day interval as long as the maximum annual rate is not exceeded. When disease pressure is severe, use the higher rates and/or shorter intervals.
Ascochyta blight ( <i>Ascochyta</i> spp.) Mycosphaerella blight ( <i>Mycosphaerella</i> <i>pinodes</i> ) Gray mold <sup>[1]</sup> ( <i>Botrytis</i> spp.) Anthracnose ( <i>Colletotrichum</i> <i>lindemuthianum</i> )	8.0 to 13.6 fl oz/acre (0.104 – 0.177 lb/acre fluopyram) (0.104 – 0.177 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 10- to 14-day interval as long as the maximum annual rate is not exceeded. When disease pressure is severe, use the higher rates and/or shorter intervals. Use higher rate when growing less resistant cultivars. Ensure that the area to be treated is covered uniformly. Good spray coverage and canopy penetration are important for best results.
Rhizoctonia rots ( <i>Rhizoctonia</i> spp.)	6.0 to 13.6 fl oz/acre	In-furrow spray during planting directed on or below seed.
Nematodes Fusarium wilt ( <i>Fusarium</i> spp.)	(0.078-0.177 lb/acre fluopyram) (0.078-0.177 lb/acre prothioconazole)	

### **DRIED BEANS - Continued**

### **Restrictions:**

- Maximum single application rate: [13.6 fl oz/acre of PROPULSE (0.177 lb/acre fluopyram and 0.177 lb/acre prothioconazole)]
- Maximum annual application rate: [34.2 fl oz/acre of PROPULSE (0.446 lb/acre fluopyram and 0.446 lb/acre prothioconazole).]
- Maximum number of applications per year: [5 (at 6.84 fl oz/acre PROPULSE) or 2 (at 13.6 fl oz/acre PROPULSE)]
- [Note to reviewer: the rates and number of applications listed in the above three bullets must be consistent with the rate(s) listed under 'Application Rate' above. The maximum single rate must not exceed 13.6 fl oz/acre and the maximum annual rate must not exceed 34.2 fl oz/acre of PROPULSE.]
- Minimum retreatment interval: 7 days
- Regardless of formulation or method of application, DO NOT apply more than 0.446 lbs fluopyram or 0.534 lbs prothioconazole per acre per year from all uses, including seed treatment, soil and foliar applications.
- Apply by ground, aerial, or chemigation application equipment.
- Minimum application volumes: 10 gallons/Acre (Ground); 5 gallons/Acre (Aerial)
- Aerial application is prohibited in Nassau and Suffolk County, New York
- Pre-Harvest Interval (PHI): 14 days
- To limit the potential for development of disease resistance to this fungicide, **DO NOT** make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- Allow a minimum of 7 days from the last application until cutting or swathing the crop for harvest. Hand harvesting is prohibited.
- **DO NOT** feed hay or threshings or allow livestock to graze in treated areas.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

[<sup>1</sup>Not for use in CA [without a supplemental label.]]

## LOWBUSH BLUEBERRY; AND LINGONBERRY

### See additional use directions under Bushberry

Disease Control	Application Rate	Application Instructions
Fruit rot: Coleophoma empetri	10.3 fl oz/acre	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application
Glomerella cingulata Phyllosticta vaccinii Physalospora vaccinii Allantophomopsis lycopodina Allantophomopsis cytisporea Fusicoccum putrefaciens Penicillium spp.	(0.134 lb/acre fluopyram) (0.134 lb/acre prothioconazole)	timings. Continue as needed on a 7- to 10-day interval as long as the maximum annual rate is not exceeded. When disease pressure is severe, use the higher rates and/or shorter intervals.
Phomopsis vaccinii Colletotrichum acutatum Botrytis spp. Monilinia spp.		
Valdensinia leaf spot ( <i>Valdensinia heterodoxa</i> )		

- Maximum single application rate: 10.3 fl oz/acre of PROPULSE (0.134 lb/acre fluopyram and 0.134 lb/acre prothioconazole)
- Maximum annual application rate: 20.6 fl oz/acre of PROPULSE (0.268 lb/acre fluopyram and 0.268 lb/acre prothioconazole).
- Maximum number of applications per year: 2 (at 10.3 fl oz/acre PROPULSE)
- Minimum retreatment interval: 7 days
- Regardless of formulation or method of application, **DO NOT** apply more than 0.446 lbs fluopyram or 0.313 lbs prothioconazole per acre per year from all uses, including soil and foliar applications.
- Apply by either ground or chemigation application equipment.
- Minimum application volume: 10 gallons/Acre (Ground).
- Pre-Harvest Interval (PHI): 45 days
- To limit the potential for development of disease resistance to this fungicide, **DO NOT** make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- DO NOT apply Prothioconazole with mechanically pressurized handgun equipment to orchards or vineyards (Bushberry subgroup 13-07B, Low growing berry subgroup, except strawberry subgroup 13-07H); field crops (Cucurbit Vegetables (Crop Group 9), Corn, sweet, Garbanzos (including chickpeas), Lentils); or nursery pine and conifer seedlings (Shortleaf loblolly, Slash, Longleaf and other pines, other conifers, other hardwoods).

PEANUT		-
Disease Control	Application Rate	Application Instructions
Early Leaf Spot <sup>[1]</sup> ( <i>Cercospora</i> <i>arachidicola</i> ) Late Leaf Spot <sup>1</sup> ( <i>Cercosporidium</i> <i>personatum</i> )	13.6 fl oz/acre (0.177 lb/acre fluopyram) (0.177 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 14-day interval.
Rust <sup>1</sup> ( <i>Puccinia</i> spp.)		
Sclerotinia blight (Sclerotinia minor) Rhizoctonia Limb Rot, Peg Rot, Pod Rot ( <i>Rhizoctonia solani</i> ) Cylindrocladium Black Rot ( <i>Cylindrocladium</i> <i>crotalariae</i> ) (Suppression Only) Sclerotium Rot, White Mold, Southern Blight, Southern Stem Rot ( <i>Sclerotium rolfsi</i> )	13.6 fl oz/acre (0.177 lb/acre fluopyram) (0.177 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 14-day interval as long as the maximum annual rate is not exceeded. May be applied in furrow.
Nematodes	13.6 fl oz/acre (0.177 lb/acre fluopyram) (0.177 lb/acre prothioconazole)	For nematode control by chemigation using overhead irrigation equipment, application must be made using 0.10 to 0.25 acre- inch of water to move PROPULSE into the soil.

### PEANUT - Continued

### **Restrictions:**

- Maximum single application rate: 13.6 fl oz/acre of PROPULSE (0.177 lb/acre fluopyram and 0.177 lb/acre prothioconazole)
- Maximum annual application rate: 27.2 fl oz/acre of PROPULSE (0.354 lb/acre fluopyram and 0.354 lb/acre prothioconazole).
- Maximum number of applications per year: 2
- Minimum retreatment interval: 14 days
- Regardless of formulation or method of application, DO NOT apply more than 0.446 lbs fluopyram or 0.712 lbs prothioconazole per acre per year from all uses, including seed treatment, soil and foliar applications.
- Apply by ground, aerial, or chemigation application equipment.
- Minimum application volumes: 10 gallons/Acre (Ground); 5 gallons/Acre (Aerial).
- Aerial application is prohibited in Nassau and Suffolk County, New York
- Pre-Harvest Interval (PHI): 14 days
- **DO NOT** feed hay or threshings or allow livestock to graze in treated areas.
- To limit the potential for development of disease resistance to this fungicide, DO NOT make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

[1Not for use in CA [without a supplemental label.]]

POTATO <sup>[1]</sup>				
Disease Controlled	Application Rate	Application Instructions		
Early blight ( <i>Alternaria solani</i> ) Brown spot ( <i>Alternaria alternata</i> )	8.0 to 10.2 fl oz/acre (0.104 – 0.133 lb/acre fluopyram) (0.104 - 0.133 lb/acre	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 7- to 14-day interval as long as the maximum annual rate is not exceeded.		
Botrytis leaf spot ( <i>Botrytis cinerea</i> )	prothioconazole)			
Black dot ( <i>Colletotrichum</i> <i>coccode</i> s)				
White mold (Sclerotinia sclerotiorum)				
<ul> <li>0.133 lb/acre prothic</li> <li>Maximum annual ap 0.266 lb/acre prothic</li> <li>Maximum number of</li> <li>[Note to reviewer: th consistent with the reviewed 10.2 fl oz/ac</li> <li>Minimum retreatmer</li> <li>Regardless of formutication</li> </ul>	pconazole)] pplication rate: [20.4 fl oz/acr pconazole).] f applications per year: [2 (a e rates and number of appli ate(s) listed under 'Application re and the maximum annual nt interval: <b>7 days</b> llation or method of application	e of PROPULSE (0.133 lb/acre fluopyram and re of PROPULSE (0.266 lb/acre fluopyram and t 10.2 fl oz/acre PROPULSE)] cations listed in the above three bullets must be on Rate' above. The maximum single rate must not l rate must not exceed 20.4 fl oz/acre of PROPULSE.] fon, <b>DO NOT</b> apply more than <b>0.446</b> lbs <b>fluopyram</b> or om all uses, including seed treatment, soil and foliar		
<ul> <li>Apply by ground, ae</li> </ul>	rial, or chemigation applicati not allowed in Nassau and \$			

- Pre-Harvest Interval (PHI): 14 days
- To limit the potential for development of disease resistance to this fungicide, **DO NOT** make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

[<sup>1</sup>Not for use in CA [without a supplemental label.]]

SOYBEAN				
Disease Control	Application Rate	Application Instructions		
White mold <sup>[1]</sup> ( <i>Sclerotinia sclerotiorum</i> ) Brown spot <sup>[1]</sup> ( <i>Septoria glycines</i> ) Phomopsis stem blight <sup>[1]</sup> ( <i>Diaporthe phaseolorum</i> )	6.0 to 8.0 fl oz/acre (0.078 – 0.104 lb/acre fluopyram) (0.078 – 0.104 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 10- to 14- day interval as long as the maximum annual rate is not exceeded. When disease pressure is severe, use the shorter intervals.		
Asian Soybean Rust ( <i>Phakopsora pachyrhizi</i> ) Charcoal rot <sup>[1]</sup> ( <i>Macrophomina phaseolina</i> ) Frog Eye Leaf Spot ( <i>Cercospora sojina</i> ) Powdery Mildew ( <i>Microsphaera diffusa</i> )	10.2 fl oz/acre (0.133 lb/acre fluopyram) (0.133 lb/acre prothioconazole)			
Rhizoctonia rots ( <i>Rhizoctonia</i> spp.)	10.2 fl oz/acre (0.133 lb/acre fluopyram) (0.133 lb/acre prothioconazole)	In-furrow spray during planting directed on or below seed.		

### SOYBEAN - Continued

### **Restrictions:**

- Maximum single application rate: [10.2 fl oz/acre of PROPULSE (0.133 lb/acre fluopyram and 0.133 lb/acre prothioconazole)]
- Maximum annual application rate: [20.4 fl oz/acre of PROPULSE (0.266 lb/acre fluopyram and 0.266 lb/acre prothioconazole).]
- Maximum number of applications per year: [2 (at 6.0 10.2 fl oz/acre PROPULSE]
- [Note to reviewer: the rates and number of applications listed in the above three bullets must be consistent with the rate(s) listed under 'Application Rate' above. The maximum single rate must not exceed 10.2 fl oz/acre and the maximum annual rate must not exceed 20.4 fl oz/acre of PROPULSE, and the maximum number of applications must not exceed 2.]
- Minimum retreatment interval: 10 days
- Regardless of formulation or method of application, DO NOT apply more than 0.446 lbs fluopyram or 0.403 lbs prothioconazole per acre per year from all uses, including seed treatment, soil and foliar applications.
- Apply by either ground, aerial, or chemigation application equipment.
- Minimum application volumes: 10 gallons/Acre (Ground); 2 gallons/Acre (Aerial).
- Aerial application is prohibited in Nassau and Suffolk County, New York
- Pre-Harvest Interval (PHI): 21 days
- To limit the potential for development of disease resistance to this fungicide, DO NOT make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- DO NOT allow livestock to graze soybean forage or hay and DO NOT harvest soybean forage or bean hay for food or feed.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

[<sup>1</sup>Not for use in CA [without a supplemental label.]]

SUGARBEET				
Disease Control	Application Rate	Application Instructions		
Cercospora leaf spot (Cercospora beticola)	13.6 fl oz/acre	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 14-day interval as long as		
Rhizoctonia ( <i>Rhizoctonia</i> spp.)	(0.177 lb/acre fluopyram) (0.177 lb/acre prothioconazole)	the maximum annual rate is not exceeded.		
Powdery mildew ( <i>Erysiphe polygoni</i> )	6.0 to 13.6 fl oz/acre			
	(0.078 – 0.177 lb/acre fluopyram) (0.078 – 0.177 lb/acre prothioconazole)			
Pest Suppression	Application Rate	Application Instructions		
Nematodes	10.0 to 13.6 fl oz/acre	<b>Soil Application</b> Apply specified dosage using any of the following methods:		
Rhizoctonia ( <i>Rhizoctonia</i> spp.)	(0.130 – 0.177 lb/acre fluopyram) (0.130 – 0.177 lb/acre prothioconazole)	<ul> <li>In-furrow spray during planting directed on or below seed.</li> <li>Chemigation using overhead irrigation equipment. A minimum of 0.5 inch of water is advised.</li> </ul>		

- Maximum single application rate: [13.6 fl oz/acre of PROPULSE (0.177 lb/acre fluopyram and 0.177 lb/acre prothioconazole)]
- Maximum annual application rate: [27.2 fl oz/acre of PROPULSE (0.354 lb/acre fluopyram and 0.354 lb/acre prothioconazole).]
- Maximum number of applications per year: [2 (at 6.0 13.6 fl oz/acre PROPULSE)]
- [Note to reviewer: the rates and number of applications listed in the above three bullets must be consistent with the rate(s) listed under 'Application Rate' above. The maximum single rate must not exceed 13.6 fl oz/acre and the maximum annual rate must not exceed 27.2 fl oz/acre of PROPULSE, and the maximum number of applications must not exceed 2.]
- Minimum retreatment interval: 14 days
- Regardless of formulation or method of application, DO NOT apply more than 0.446 lbs fluopyram or 0.534 lbs prothioconazole per acre per year from all uses, including seed treatment, soil and foliar applications.
- Apply by either ground, aerial, or chemigation application equipment.
- Minimum application volumes: 10 gallons/Acre (Ground); 5 gallons/Acre (Aerial).
- Aerial application is prohibited in Nassau and Suffolk County, New York
- Pre-Harvest Interval (PHI): 7 days

### SUGARBEET – Continued

- To limit the potential for development of disease resistance to this fungicide, DO NOT make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

WHEAT (Spring; Durum; and Winter); TRITICALE				
Disease Control	Application Rate	Application Instructions		
Fusarium Head Blight ( <i>Fusarium</i> spp.) (Suppression Only) Powdery Mildew ( <i>Blumeria graminis</i> f. sp. <i>tritici)</i>	8.4 fl oz/acre (0.109 lb/acre fluopyram) (0.109 lb/acre prothioconazole)	Apply at the critical timings for disease control. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 14-day interval as long as the maximum annual rate is not exceeded.		
Rusts ( <i>Puccinia</i> spp.)				
Septoria Leaf and Glume Blotch ( <i>Septoria tritici</i> )				
Stagonospora Blotch (Stagonospora nodorum)				
Tan Spot (Pyrenophora tritici- repentis)				

- Maximum single application rate: 8.4 fl oz/acre of PROPULSE (0.109 lb/acre fluopyram and 0.109 lb/acre prothioconazole)
- Maximum annual application rate: 16.8 fl oz/acre of PROPULSE (0.218 lb/acre fluopyram and 0.218 lb/acre prothioconazole).
- Maximum number of applications per year: 2
- Minimum retreatment interval: 14 days
- Regardless of formulation or method of application, **DO NOT** apply more than 0.222 lbs fluopyram or 0.293 lbs prothioconazole per acre per year from all uses, including seed treatment, soil and foliar applications.
- Apply by either ground, aerial, or chemigation application equipment.
- Minimum application volumes: 10 gallons/Acre (Ground); 2 gallons/Acre (Aerial).
- Aerial application is prohibited in Nassau and Suffolk County, New York
- Pre-Harvest Interval (PHI): 30 days
- **DO NOT** harvest hay or allow livestock to graze treated area for 14 days after application.
- To limit the potential for development of disease resistance to this fungicide, **DO NOT** make more than 2 sequential applications of PROPULSE or any Group 7 or Group 3 containing fungicide before rotating with a fungicide from a different Group.
- **DO NOT** use with handheld application equipment, including mechanically pressurized spray gun, backpack or tank pressurized spray gun, or handheld boom applicators.

# STORAGE AND DISPOSAL

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

**Storage**: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. DO NOT walk through spilled material. Dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response telephone number is 1-800-334-7577.

**Pesticide Disposal:** Wastes resulting from using this product may be disposed of on-site or at an approved waste disposal facility. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representatives at the nearest EPA Regional Office for guidance.

#### **Container Handling:**

#### Non-Refillable Containers

#### Rigid, Non-refillable containers (equal to or less than 5 gallons)

Non-refillable container. **DO NOT** reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure 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.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Rigid Non-refillable Containers that are Too Large to Shake (i.e., with capacities greater than 5 gallons or 50 lbs) Non-refillable container. DO NOT reuse or refill this container. Refer to Bottom Discharge Intermediate Bulk Container (IBC) or Top Discharge IBC, Drums, Kegs information as follows.

#### Bottom Discharge IBC (e.g. - Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

#### Top Discharge IBC, Drums, Kegs (e.g.- Snyder 120 Next Gen, Bonar B120, Drums, Kegs)

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

#### Non-Refillable Fiber Drums with Liners

Non-refillable container. **DO NOT** reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

#### Non-Rigid, Non-refillable Containers

Nonrefillable container. **DO NOT** reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

#### **Refillable Containers**

Refillable container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

#### Bottom Discharge IBC (e.g. - Schuetz Caged IBC or Snyder Square Stackable)

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

#### Top Discharge IBC, Drums, Kegs (e.g.- Snyder 120 Next Gen, Bonar B120, Drums, Kegs)

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

End users are authorized to remove tamper evident cables as required to remove the product from the container <u>unless</u> the container is equipped with one way valves and refilling or returning is planned. If this is the case, end users are not authorized to remove tamper evident cables, one way valves or clean container.

### **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

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

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY**: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

PROPULSE is specially formulated and sold by Bayer Group for the control of various pathogens according to the directions on this label. The purchase price of PROPULSE includes a prepaid license under which purchaser agrees to employ the purchased quantity of PROPULSE only for the above-specified uses and to provide notice of the terms and conditions of this license to any subsequent purchaser. Uses of PROPULSE other than those specified on this label are not licensed through the purchase of this product.

PROPULSE (PENDING) 05/23/2022, 05/25/2022, 06/09/2022, 06/10/2022, 06/14/2022, 09/01/2022, 09/29/2022, 10/04/2022