

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 10, 2022

Marian Bleeke Senior Regulatory Affairs Manager Bayer CropScience 800 N. Lindbergh Blvd. St. Louis, MO 63167

Subject: Label Amendment – Decreasing application rates on barely, buckwheat,

millet, oats, rye, canola, rapeseed, crambe, wheat, and triticale; Adding maximum number of annual applications, maximum annual rate, minimum retreatment interval, equivalent active ingredient rates, and applicable livestock grazing restrictions to crop tables; Adding prothioconazole interim decision mitigation language, spray drift language, and PRN 2017-1 resistance management language.

Product Name: Propulse®

EPA Registration Number: 264-1084

Application Date: April 14, 2021; December 27, 2021

Decision Number: 573366; 580955

#### Dear Ms. Bleeke:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is 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.

In addition, the Agency, in accordance with FIFRA, as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Prothioconazole Final and/or Interim Decision, and has concluded that your submission is acceptable.

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 12 months from the date of this letter. After 12 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

Page 2 of 2 EPA Reg. No. 264-1084 Decision No. 573366; 580955

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.

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 Lindsay DeMers via email at demers.lindsay@epa.gov.

Sincerely,

Shaja B. Joyner, Product Manager 20

Fungicide-Herbicide Branch Registration Division 7505P

Enclosure: stamped "accepted" label

FLUOPYRAM	GROUP	7	FUNGICIDE
PROTHIOCONAZOLE	GROUP	3	FUNGICIDE

## **PROPULSE®**

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; Rapeseed; Rye; Bushberries (subgroup 13-07B); Soybean; Sugarbeet; Triticale; Wheat.

#### **ACTIVE INGREDIENTS:**

FLUOPYRAM*:	17.4%
PROTHIOCONAZOLE*:	17.4%
OTHER INGREDIENTS:	65.2%
OTTER INGREDIENTS	<u>05.2 /0</u>
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

**EPA Est. No.** 

SUSPENSION CONCENTRATE

## **KEEP OUT OF REACH OF CHILDREN**

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

#### **NET CONTENTS:**

## ACCEPTED

05/10/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 2014 1004

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.	
	<ul> <li>DO NOT induce vomiting unless told to do so by a poison control center or doctor.</li> </ul>	
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>	
	<ul> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>	
IF ON SKIN OR	Take off contaminated clothing.	
CLOTHING:	<ul> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> </ul>	
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
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>	
	<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> </ul>	
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	

In case of spills, poisoning or fire call telephone emergency response number 1-800-334-7577 (24 hours a day).

Take container, label or product name and registration number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** Treat Symptomatically. Medical Personnel should contact Bayer's medical information services, 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 chemical-resistant (such as nitrile or butyl) gloves.

#### **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**

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 wash water or rinsate.

## **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. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

## **Ground Water Advisory**

These chemicals and their degradates 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** 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), Com, sweet, Garbanzos (including chickpeas), Lentils); or nursery pine and conifer seedlings (Shortleaf loblolly, Slash, Longleaf and other pines, other conifers, other hardwoods).

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 any waterproof material such as natural rubber  $\geq$  14 mils.

#### PRODUCT INFORMATION

PROPULSE® 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; Rapeseed; Rye; Bushberries(subgroup 13-07B); Soybean; Sugarbeet; Triticale; Wheat.

## FUNGICIDE RESISTANCE MANAGEMENT (FRAC) RECOMMENDATIONS

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 ½ 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

Areas treated with this product can be replanted immediately following harvest with any crop for which both a FLUOPYRAM and a PROTHIOCONAZOLE tolerance exist. 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; 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); Potato and other root, tuberous and corm vegetables (except sugarbeet) (subgroups 1B and 1C); Rapeseed (subgroup 20A); Small Berries (caneberries) (subgroups 13-07A); Sorghum; Stone Fruits (group 12-12); Sugarbeet; Sugarcane (in region 3); Sunflower (subgroup 20B); Teosinte; Tobacco; Tree Nuts (group 14-12).

**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 (Fusarium spp.) (Suppression Only)	8.4 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.
Net Blotch (Pyrenophora teres)	(0.110 lb/acre fluopyram) (0.110 lb/acre prothioconazole)	
Powdery Mildew (Blumeria graminis f. sp. hordei)	,	
Rusts ( <i>Puccinia</i> spp.)		
Scald (Rhynchosporium secalis)		
Spot Blotch (Cochliobolus sativus)		

- Maximum single application rate: 8.4 fl oz/acre of PROPULSE (0.110 lb/acre fluopyram and 0.110 lb/acre prothioconazole)
- Maximum annual application rate: 16.8 fl oz of PROPULSE per acre (0.220 lb/acre fluopyram and 0.220 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, including soil and foliar uses.
- 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 (Septoria spp.)	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. When
Monilinia blight ( <i>Monilinia vaccinii-</i> <i>corymbosi</i> )	(0.177 lb/acre fluopyram) (0.177 lb/acre	disease pressure is severe, use the shorter intervals.
Valdensinia leaf spot (Valdensinia heterodoxa)	prothioconazole)	
Leaf rust ( <i>Thekopsora minima</i> )		
Anthracnose (Colletotrichum gloeosporioides)		
Botrytis blight (Botrytis cinerea)		
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 (0.355 lb/acre fluopyram and 0.355 lb/acre prothioconazole) per year.
- Maximum number of applications per year: 2
- 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.
- 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), Com, 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)	(0.110 lb/acre fluopyram) (0.110 lb/acre	
Powdery Mildew (Erysiphe graminis)	prothioconazole)	
Scald (Rynchosporium secalis)		
Speckled Blotch (Septoria avenae; Septoria tritici)		
Spot Blotch ( <i>Bipolaris sorokiniana</i> )		
Tan Spot ( <i>Pyrenophora tritici-</i> <i>repentis</i> )		

- Maximum single application rate: 8.4 fl oz/acre of PROPULSE (0.110 lb/acre fluopyram and 0.110 lb/acre prothioconazole)
- Maximum annual application rate: 8.4 fl oz of PROPULSE per acre (0.110 lb/acre fluopyram and 0.110 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, including soil and foliar uses.
- 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.
Powdery mildew (Erysiphe cruciferarum)	(0.129 lb/acre fluopyram) (0.129 lb/acre	
Alternaria blackspot (Alternaria 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, including soil and foliar uses.
- 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 Grown For Seed, and Popcorn **Disease Control** Application Rate | Application Instructions Apply at the critical timings for disease control. Refer to Anthracnose Leaf Blight 13.6 (Colletotrichum fl oz/acre University and/or extension guidelines for best application graminicola) timings. Continue as needed on a 7- to 14-day interval. (0.177 lb/acre When disease pressure is severe, use the shorter intervals. Eye Spot fluopyram) (Aureobasidium zeae) (0.177 lb/acre Application is not advised at times when corn is under severe prothioconazole) environmental stress conditions. Gray Leaf Spot (Cercospora zeaemaydis) Northern Corn Leaf Blight (Setosphaeria turcica)<sup>1</sup> Northern Corn Leaf Spot (Cochliobolus carbonum)1 Southern Corn Leaf Blight (Cochliobolus heterostrophus)1 Rusts (*Puccinia* spp.) <sup>1</sup>The above diseases are also known as Helminthosporium leaf blights 6.0 - 13.6Rhizoctonia rots In-furrow spray during planting directed on or below seed. (Rhizoctonia spp.) fl oz/acre (0.078 - 0.177)lb/acre fluopyram) (0.078 - 0.177)

lb/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 (0.355 lb/acre fluopyram and 0.355 lb/acre prothioconazole) per year.
- Maximum number of applications per year: 2
- 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, including soil and foliar uses.
- 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.

Disease Suppression	Application Rate	Application Instructions
Target Spot Corynespora leaf spot (Corynespora cassiicola)  Rust (Puccinia spp.)  Cercospora leaf spot (Cercospora spp.)  Alternaria leaf spot (Alternaria spp.)  Ascochyta blight (Ascochyta 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. Overhead chemigation is also effective for these diseases.
Pest Suppression	Application Rate	Application Instructions
Damping off (Rhizoctonia solani)  Fusarium Wilt (Fusarium spp.)	13.6 to 17.0 fl oz/acre (0.177 – 0.222 lb/acre fluopyram) (0.177 – 0.222 lb/acre prothioconazole)	For pest suppression, only apply specified dosage in the following methods:  In-furrow at planting directed on or below seed Chemigation into root-zone through low-pressure drip or trickle irrigation. Drip line must be in close proximity to plants.
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)	For pest suppression, only apply specified dosage in the following methods:  In-furrow at planting directed on or below seed  Chemigation into root-zone through low-pressure drip or trickle irrigation. Drip line must be in close proximity to plants.

## 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, including soil and foliar uses.
- 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, 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 (Fusarium oxysporum) (Fusarium 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. When disease pressure is severe, use the shorter intervals.  Drip treatment is effective for control of this disease.
Gummy stem blight (Didymella spp.)  Southern blight (Sclerotium roflsii)  Powdery mildew (Sphaerotheca fuliginea / Podosphaera xanthii) (Erysiphe cichoracearum)	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. 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.
- 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, including soil and foliar uses.
- Pre-Harvest Interval (PHI): 7 days

## CUCURBITS (subgroups 9A, 9B) - 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.
- Hand harvesting is prohibited.
- 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), Com, 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. When disease pressure is severe, use the higher rates and/or shorter intervals.
Ascochyta blight (Ascochyta spp.)  Mycosphaerella blight (Mycosphaerella pinodes)  Gray mold¹ (Botrytis spp.)  Anthracnose (Colletotrichum lindemuthianum)	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. 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 (Fusarium 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, including soil and foliar uses.
- Apply by ground, aerial, or chemigation application equipment.
- 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 Glomerella cingulata Phyllosticta vaccinii Physalospora vaccinii Allantophomopsis lycopodina Allantophomopsis cytisporea Fusicoccum putrefaciens Penicillium spp. Phomopsis vaccinii Colletotrichum acutatum Botrytis spp. Monilinia spp. Valdensinia leaf spot (Valdensinia heterodoxa)	fl oz/acre  (0.134 lb/acre fluopyram) (0.134 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 10-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.

- 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 (0.269 lb/acre fluopyram and 0.269 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, including soil and foliar uses.
- Apply by either ground or chemigation application equipment.
- 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), Com, 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> (Cercospora arachidicola)  Late Leaf Spot <sup>1</sup> (Cercosporidium personatum)  Rust <sup>1</sup>	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.
( <i>Puccinia</i> spp.)		
Sclerotinia blight (Sclerotinia minor)  Rhizoctonia Limb Rot, Peg Rot, Pod Rot (Rhizoctonia solani)  Cylindrocladium Black Rot (Cylindrocladium crotalariae) (Suppression Only)  Sclerotium Rot, White Mold, Southern Blight, Southern Stem Rot (Sclerotium rolfsii)	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.  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 acreinch 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 (0.355 lb/acre fluopyram and 0.355 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, including seed treatment, soil and foliar uses.
- Apply by ground, aerial, or chemigation application equipment.
- 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.

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

SOYBEAN				
Disease Control	Application Rate	Application Instructions		
White mold¹ (Sclerotinia sclerotiorum)	6.0 to 8.0 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 10- to 14-		
Brown spot <sup>1</sup> (Septoria glycines)	(0.078 – 0.104 lb/acre fluopyram) (0.078 – 0.104 lb/acre	day interval. When disease pressure is severe, use the shorter intervals.		
Phomopsis stem blight <sup>1</sup> ( <i>Diaporthe phaseolorum</i> )	prothioconazole)			
Asian Soybean Rust ( <i>Phakopsora pachyrhizi</i> )	10.2 fl oz/acre			
Charcoal rot ( <i>Macrophomina</i> phaseolina) <sup>1</sup>	(0.133 lb/acre fluopyram) (0.133 lb/acre prothioconazole)			
Frog Eye Leaf Spot (Cercospora sojina)	prounoconazoio)			
Powdery Mildew (Microsphaera diffusa)				
Rhizoctonia rots (Rhizoctonia spp.)	10.2 fl oz/acre	In-furrow spray during planting directed on or below seed.		
	(0.133 lb/acre fluopyram) (0.133 lb/acre prothioconazole)			

#### 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, including seed treatment, soil and foliar uses.
- Apply by either ground, aerial, or chemigation application equipment.
- 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
Rhizoctonia ( <i>Rhizoctonia</i> spp.)	(0.177 lb/acre fluopyram) (0.177 lb/acre prothioconazole)	14-day interval.
Powdery mildew (Erysiphe polygoni)	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 Rhizoctonia	10.0 to 13.6 fl oz/acre	Soil Application Apply specified dosage using any of the following methods:
( <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 (0.222 lb/acre fluopyram and 0.222 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, including soil and foliar uses.
- Apply by either ground, aerial, or chemigation application equipment.
- Aerial application is prohibited in Nassau and Suffolk County, New York
- 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** 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 (Fusarium spp.) (Suppression Only)	8.4 fl oz/acre (0.110 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.	
Powdery Mildew ( <i>Blumeria graminis</i> f. sp. <i>tritici</i> )	fluopyram) (0.110 lb/acre prothioconazole)		
Rusts ( <i>Puccinia</i> spp.)			
Septoria Leaf and Glume Blotch ( <i>Septoria tritici</i> )			
Stagonospora Blotch (Stagonospora nodorum)			
Tan Spot ( <i>Pyrenophora tritici-</i> repentis)			

- Maximum single application rate: 8.4 fl oz/acre of PROPULSE (0.110 lb/acre fluopyram and 0.110 lb/acre prothioconazole)
- Maximum annual application rate: 16.8 fl oz/acre of PROPULSE (0.219 lb/acre fluopyram and 0.219 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, including soil and foliar uses.
- Apply by either ground, aerial, or chemigation application 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.

#### STORAGE AND DISPOSAL

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

**Storage**: **DO NOT** store below freezing. If stored for 1 year or longer, shake well before using. Store the tightly closed container away from feeds, seeds, fertilizer, plants, and foodstuffs. Keep the product in the original container during storage.

**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 disposed of by use according to label instruction, 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:**

#### Non-Seed Treatment Products in 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.

## Dilutable Non-Seed Treatment Products in 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 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 incineration.

#### Non-Seed Treatment Products in 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 incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

#### Non-Seed Treatment Products in 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."

#### **Non-Seed Treatment Products in 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 incineration.

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) 04/12/2021, 08/24/2021, 08/26/2021. 09/07/2021, 09/14/2021, 03/15/2022, 03/23/2022, 03/24/2022, 03/31/2022