

# **SUGARBEET ROOT**

## General Information

### 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

Canola; Dried Beans; Peanut; Soybean; Sugarbeet, root.

### RESISTANCE MANAGEMENT

The active ingredients in PROPULSE Fungicide belong to two different fungicide groups, the pyridinyl-ethyl-benzamides (Group 7), and the DMI or demethylation inhibitors (Group 3). To maintain long-term effectiveness of this fungicide, follow the specific resistance management guidance listed at the bottom of each crop label. The following practices may delay the development of fungicide resistance.

1. Start spray programs early: Spray programs that begin before pathogens attack keep fungal populations low and reduce the likelihood of resistance. Consult your local extension specialist, certified crop advisor and/or manufacturer representative for recommendations on when to begin spray programs.
2. Alternate products: Use spray programs that include alternation of products from different fungicide groups. Group numbers are listed in a box at the top right of product labels.
3. Use at least the minimum-labeled rate and do not extend spray intervals beyond label specifications: Use of rates below the minimum-labeled rate can shorten the useful life of a fungicide. Furthermore, stretching application intervals too long may leave a crop unprotected, allowing the pathogen population to multiply, and increasing the likelihood for resistance to develop.
4. IPM: Applications of fungicides should be integrated into an overall disease and pest management program. Cultural practices known to reduce disease development should be followed. Consult your local extension specialist, certified crop advisor and/or manufacturer representative for additional IPM strategies established for your area. This product may be used in Agricultural Extension

advisory (disease forecasting or risk assessment) programs, which recommend application timing based on environmental factors favorable for disease development.

#### 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.

Avoid spraying

when windy, high temperature, drought, dusty, low relative humidity, or

temperature inversion

conditions exist.

#### Ground Application

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.

#### Chemigation Application

Apply this product only through center pivot, motorized-lateral move, traveling gun, solid

set or portable (wheel move, side roll, end tow, or hand move) 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, you should contact State Extension

Service specialists, equipment manufacturers or other experts. A person knowledgeable of

the chemigation system and responsible for its operation or under the supervision of the

responsible person, shall shut the system down and make necessary adjustments should the need arise. This product 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 should be discharged into a reservoir tank prior to pesticide introduction. There shall 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 recommended 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. When tank mixing with other pesticides, observe the more restrictive label limitations and precautions. 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. Before applying any tank-mixture not specified on this label, safety to the target crop should be confirmed on a small portion of the crop to be treated to ensure an adverse response will not occur.

#### 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.

#### Limitations, Restrictions, and Exceptions

##### Product Instructions

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.

##### Restrictions:

- 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.
- Do not apply PROPULSE within 7 days of harvest.
- 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.

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

#### Pre-Harvest Interval

7 days

#### Restricted Entry Interval

12 hours

#### Timings

[At the critical timings for disease control.](#)