

Luna

Net Contents:

2.5 Gallons

GROUP 7 9 FUNGICIDE

Broad spectrum fungicide for control of plant diseases

Total 100.0% Contains 1.04 lbs FLUOPYRAM

and 3.12 lbs PYRIMETHANIL per gallon *(CAS Numbers 658066-35-4 and 53112-28-0)

EPA Reg. No. 264-1085

OF CHILDREN CAUTION

FOR ADDITIONAL PRECAUTIONARY
STATEMENTS:
See Inside Booklet.

9917274A

Produced for:
Bayer CropScience LP
P.O. Box 12014, 2 T.W. Alexander Drive
Research Triangle Park, North Carolina 27709
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Product of Germany

FIRST AID

IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person. 	
IF ON SKIN:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. 	
IF INHALED:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. 	
For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577. In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.		
NOTE TO PHYSICIAN: Treat Symptomatically.		

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

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

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 (if more options are needed, follow the instructions for category C on an EPA chemical-resistance category selection chart).

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:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- User should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, was thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses, do not apply directly to water, to areas where surface water is present, or to intertidal areas below the high water mark. Do not contaminate water when disposing of equipment washwaters. Drift or runoff from treated areas is hazardous to fish and aquatic invertebrates in neighboring areas. This product has a high potential for runoff several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. 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 for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

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This product has properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

DIRECTIONS FOR USE STOP - READ THE LABEL BEFORE USE

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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is: coveralls over long-sleeved shirt and long pants, socks and shoes, and chemical-resistant gloves made of any waterproof material such as natural rubber ≥ 14 mils.

PRODUCT INFORMATION

LUNA® TRANQUILITY is a broad-spectrum fungicide with preventative, systemic, and curative properties labeled for the control or suppression of certain crop diseases.

LABELED USES

Apple and Potato.

RESISTANCE MANAGEMENT

The active ingredients in LUNA TRANQUILITY belong to two different fungicide groups, the pyridinyl-ethyl-benzamides (Group 7) and the anilinopyrimidines (Group 9). 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 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 requirements: 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 ground application equipment, a minimum of **50** gallons of water per acre for tree crops and **10** gallons of water per acre for field and vegetable crops is required.

Aerial Application

For aerial application equipment, a minimum of 15 gallons of water per acre for tree crops and 5 gallons of water per acre for field and vegetable crops is required.

Air-Blast Application

Air-assisted or air-blast sprayers move spray droplets into the crop canopy using a forced-air system. The fan should be set up to deliver only enough air volume to penetrate the canopy and provide good coverage. Adjust deflectors or other aiming devices to direct spray only to the target area. Equip sprayers with nozzles that provide accurate and uniform application.

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) 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. LUNA TRANQUILITY Fungicide 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 system 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

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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) Irrigation Equipment

With stationary systems, an effectively designed in-line Venturi applicator unit is preferred to support even and quick distribution. However, a positive-displacement pump can also be used. 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.

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 soluble packaging (wait for it to completely dissolve), wettable powders and water-dispersible granular products, liquid flowables and suspension concentrates, and emulsifiable concentrates last. Maintain agitation throughout spraying. Non-ionic surfactants at a maximum of 0.125% v/v may be added to spray mixtures. 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.

LUNA TRANQUILITY is physically compatible with most commonly used fungicide, herbicide, insecticide, and foliar nutrient products. However, the compatibility of LUNA TRANQUILITY 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 LUNA TRANQUILITY 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.

GENERAL RESTRICTIONS AND LIMITATIONS

Do not apply more than the maximum seasonal rate for each specific crop from any combination of products containing FLUOPYRAM or PYRIMETHANIL.

ROTATIONAL CROP RESTRICTIONS

Areas treated with this product may be replanted immediately following harvest with any crop for which a both FLUOPYRAM and a PYRIMETHANIL tolerance exist. This includes: almonds, apple, pistachio, potato, strawberry, and wine grapes. Alfalfa, cotton, dried beans, sugarbeet, peanuts, and watermelon may be planted into treated areas 30 days after the last application. Canola, cereal grains (except rice) and soybean may be replanted 30 days following fluopyram application on potato only.

USE DIRECTIONS FOR SPECIFIC CROPS

APPLE				
Disease Control	Application Rate	Product Instructions		
Scab (Venturia spp.)	11.2 to 16 fl oz/acre	Begin fungicide applications preventatively. Continue as needed on a 7- to 10-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.		
Powdery mildew (Podosphaera leucotricha)	11.2 to 16 fl oz/acre	Begin fungicide applications preventatively, or at green tip. Continue as needed on a 7- to 10-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.		

Restrictions: Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per season. Do not apply LUNA TRANQUILITY within 72 days of harvest. Do not apply with aerial application equipment. To limit the potential for development of disease resistance to these fungicide classes, do not make more than 2 sequential applications of LUNA TRANQUILITY or any Group 7 or Group 9 containing fungicide before rotating with a fungicide from a different Group.

POTATO				
Disease Control	Application Rate	Product Instructions		
Early blight (<i>Alternaria solani</i>)	11.2 fl oz/acre	Begin fungicide applications preventatively. Continue as needed on a 7- to 14-day interval. When disease		
Powdery mildew (Erysiphe cichoracearum) (Leveillula taurica) (Erysiphe spp.)		pressure is severe, use the shorter intervals.		
Disease Suppression	Application Rate	Product Instructions		
Botrytis leaf spot (Botrytis cinerea)	11.2 fl oz/acre	Begin fungicide applications preventatively. Continue as needed on a 7- to 14-day interval. When disease pressure is severe, use the shorter intervals.		
White mold (Sclerotinia sclerotiorum)				
Black dot (Colletotrichum coccodes)				

Restrictions: Do not apply more than 43.6 fl oz of LUNA TRANQUILITY per acre per season. If aerial applications are made do not apply more than 33.6 fl oz of LUNA TRANQUILITY per season. Do not apply LUNA TRANQUILITY within 7 days of harvest. To limit the potential for development of disease resistance to these fungicide classes, do not make more than 2 sequential applications of LUNA TRANQUILITY or any Group 7 or Group 9 containing fungicide before rotating with a fungicide from a different Group.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original container and keep tightly closed when not in use. Store in a cool dry place. Avoid cross-contamination with other pesticides.

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 Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. After triple rinsing procedure, dispose of 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.

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



LUNA® TRANQUILITY

Broad spectrum fungicide for control of plant diseases		
ACTIVE INGREDIENT:		
FLUOPYRAM*		
PYRIMETHANIL*		
OTHER INGREDIENTS:		
Contains 1.04 lbs FLUOPYRAM and 3.12 lbs PYRIMETHANIL per gallon *(CAS Numbers 658066-35-4 and 53112-28-0)	Total 100.0%	

EPA Reg. No. 264-1085

KEEP OUT OF REACH OF CHILDREN CAUTION

FOR ADDITIONAL PRECAUTIONARY STATEMENTS: See Attached Booklet.

IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.
IF ON SKIN:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED	Move person to fresh air. If person is not breathing, call 911 or an

FIRST AID

further treatment advice. For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

ambulance, then give artificial respiration.

preferably mouth-to-mouth if possible.

· Call a poison control center or doctor for

In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: Treat symptomatically.

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

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin or inhaled. contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

FOR ADDITIONAL PRECAUTIONARY STATEMENTS:

See attached label booklet: Personal Protective Equipment (PPE), User Safety Recommendations, and Environmental Hazards

GROUP 7 9 FUNGICIDE

DIRECTIONS FOR USE: See attached booklet. STOP - READ THE LABEL BEFORE USE

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.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in original container and keep tightly closed when not in use. Store in a cool dry place. Avoid crosscontamination with other pesticides.

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 Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. After triple rinsing procedure, dispose of container,

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