

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

June 21, 2017

Ms. Miriam Frugis
Registration Manager
Bayer CropScience, LP
P. O. Box 12014
2 T.W. Alexander Drive
Research Triangle Park, N.C. 27709

Subject: Label Amendment – Adding footnote to clarify crop group 1B and adding new

disease for pome fruit

Product Name: **Luna Tranquility** EPA Registration Number: 264-1085 Application Date: February 27, 2017

Decision Number: 527058

Dear Ms. Frugis:

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

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

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

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

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with FIFRA section 6. If you have any questions, please contact Eleanor Thornton by phone at 703-305-6799, or via email at Thornton.eleanor@epa.gov.

Shaja B. Joyner, Product Manager 20

Fungicide-Herbicide Branch Registration Division 7505P

Enclosure



GROUP 7 9 FUNGICIDE

LUNA® TRANQUILITY

Broad spectrum fungicide for control of plant diseases.

Almond; Berry, low growing, except cranberry, subgroup 13-07G; Bushberry subgroup 13-07B; Caneberry subgroup 13-07A; Fruit, pome, group 11-10; Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F; Ginseng; Lemons; Onion, bulb, subgroup 3-07A; Onion, green, subgroup 3-07B; Peach subgroup 12-12B; Plum subgroup 12-12C; Pistachio; Tomato; Vegetable, root, except sugar beet, subgroup 1B; Vegetable, tuberous and corm, subgroup 1C.

ACTIVE INGREDIENT:	
FLUOPYRAM*	11.3%
PYRIMETHANIL*	
OTHER INGREDIENTS:	<u>54.9%</u>

TOTAL:

Contains 1.04 lbs FLUOPYRAM and 3.12 lbs PYRIMETHANIL per gallon

*/CAS Numbers 650066 25 4 and 52112 20 0\

*(CAS Numbers 658066-35-4 and 53112-28-0) **EPA Reg. No. 264-1085**

SUSPENSION CONCENTRATE

EPA Est. No.

100.0%

KEEP OUT OF REACH OF CHILDREN CAUTION

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

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 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, and 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 emerger	ncy 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.	

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

NOTE TO PHYSICIAN: Treat Symptomatically.

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.

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, 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. 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 Fluopyram. 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.

This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

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.

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

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 \geq 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

Almond; Berry, low growing, except cranberry, subgroup 13-07G; Bushberry subgroup 13-07B; Caneberry subgroup 13-07A; Fruit, pome, group 11-10; Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F; Ginseng; Lemons; Onion, bulb, subgroup 3-07A; Onion, green, subgroup 3-07B; Peach subgroup 12-12B; Plum subgroup 12-12C; Pistachio; Tomato; Vegetable, root, except sugar beet, subgroup 1B; Vegetable, tuberous and corm, subgroup 1C.

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 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.

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.

Greenhouse Application

LUNA TRANQUILITY may be used on cucumbers, tomatoes and strawberries and other low-growing berries (except cranberries) as foliar, soil, or soil-less mix applied treatment only in greenhouses with good resistance management programs. See crop-specific use directions. Crop safety has not been confirmed on all cultivars. Plant compatibility testing is recommended when first using under your greenhouse conditions. 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. For greenhouse uses apply only in well-ventilated plastic tunnel houses or glass houses. Ventilate for at least 2 hours after application. Prevent intense sunlight exposure for several hours after application. Solutions should be used within one day of mixing.

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. LUNA TRANQUILITY Fungicide has not been sufficiently tested when applied through irrigation systems to assure consistent product performance for all labeled uses. The following application techniques are provided for user reference but do not constitute a warranty of fitness for application 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, guick-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 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

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.

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.

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.

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 PYRIMETHANIL.

ROTATIONAL CROP RESTRICTIONS

Areas treated with this product may be replanted immediately following harvest with any crop for which FLUOPYRAM and PYRIMETHANIL tolerances exist. This includes: Almonds; Berry, low growing, except cranberry, subgroup 13-07G; Bushberry subgroup 13-07B; Caneberry subgroup 13-07A; Lemons; Fruit, pome, group 11-10; Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F; Ginseng; Onion, bulb, subgroup 3-07A; Onion, green, subgroup 3-07B; Pistachios; Peach subgroup 12-12B; Plum subgroup 12-12C; Tomato subgroup 8-10A; Vegetable, root, except sugarbeet, subgroup 1B; Vegetable, tuberous and corm, subgroup 1C.

The following crops may be replanted after 30 days after the last application of LUNA TRANQUILITY: Alfalfa; Brassica, Head and Stem, Subgroup 5A; Brassica Leafy Greens, Subgroup 5B; Carrot; Cherry subgroup 12-12A; Cottonseed subgroup 20C; Dill seed; Fruit, citrus, group 10-10; Grain, cereal, group 15 (except corn and rice) [which include: barley, buckwheat, millet (pearl and proso), oats, rye, sorghum, teosinte, triticale, and wheat]; Corn, field, grain; Corn, pop, grain; Corn, sweet; Herb subgroup 19A; Hop, dried cones; Leafy greens subgroup 4A; Leaf petioles subgroup 4B (except watercress); Legume Vegetables (except cowpea and dried peas); Melon subgroup 9A; Nut, tree, group 14-12; Peanut; Pepper/Eggplant subgroup 8-10B; Rapeseed subgroup 20A; Soybean; Squash/cucumber subgroup 9B; Sugarbeet, roots; Sugarcane (in region 3), Sunflower subgroup 20B.

Do not rotate to crops other than those listed above.

USE DIRECTIONS FOR SPECIFIC CROPS

Almond		
Disease Control	Application Rate	Product Instructions
Brown rot blossom blight (Monilinia laxa) (Monilinia fructicola) Shot hole (Wilsonomyces carpophilus) Alternaria (Alternaria alternata) Scab (Cladosporium carpophilum) Jacket rot Green fruit rot (Botrytis cinerea)	12 to 27 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 14-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.
Disease Suppression	Application Rate	Product Instructions
Leaf blight (Seimatosporium lichenicola) Rust (Tranzschelia discolor) Powdery mildew (Sphaerotheca pannosa) (Podosphaera tridactyla)	27 fl oz/acre	Apply at the critical timings for disease suppression. 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 shorter intervals.

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 2.1 lbs pyrimethanil per acre per year, including soil and foliar uses.
- Do not apply LUNA TRANQUILITY within 30 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.

Berry, low growing, except cranberry, subgroup 13-07G

Bearberry; Bilberry; Blueberry, Lowbush; Cloudberry; Lingonberry; Muntries; Partridgeberry; Strawberry; cultivars, varieties, and/or hybrids of these.

Disease Control	Application Rate	Product Instructions
Gray mold (Botrytis cinerea)	16 to 27 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 14-day interval.
Powdery mildew (Sphaerotheca macularis)		When disease pressure is severe, use the higher rates and/or shorter intervals.
Disease Suppression	Application Rate	Product Instructions
Rhizopus fruit rot (<i>Rhizopus</i> spp.)	27 fl oz/acre	Apply at the critical timings for disease suppression. Refer to University and/or extension guidelines for best application timings. Continue as needed on a 7- to 14-day
Phomopsis leaf blight and fruit rot (Phomopsis obscurans)		interval. When disease pressure is severe, use the shorter intervals.
Leaf spot (Mycosphaerella fragariae)		

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 2.1 lbs pyrimethanil per acre per year, including soil and foliar uses.
- Do not apply LUNA TRANQUILITY within 1 day of harvest.
- To limit the potential for development of disease resistance to these fungicide classes, do not make (field and greenhouse use) 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.

Caneberry subgroup 13-07A and Bushberry subgroup 13-07B

Caneberry subgroup: Blackberry; Loganberry; Raspberry, Red And Black; Wild Raspberry; cultivars, varieties, and/or hybrids of these.

Bushberry subgroup: 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	Product Instructions
Powdery mildew (Sphaerotheca spp.) Monilinia blight and mummy berry	13.6 to 27 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 14-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.
(Monilinia spp.) Alternaria leaf spot and fruit rot (Alternaria spp.)		
Gray mold (Botrytis cinerea) Leaf spot and blotch (Mycosphaerella spp.) (Septoria spp.)	16 to 27 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 14-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 2.1 lbs pyrimethanil per acre per year, including soil and foliar uses.
- May be applied the day 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.

Fruit, pome, group 11-10

Apple; Azarole; Crabapple; Loquat; Mayhaw; Medlar; Pear; Pear, Asian; Quince; Quince, Chinese; Quince, Japanese; Tejocote; cultivars, varieties and/or hybrids of these.

Disease Control	Application Rate	Product Instructions
Grey mold¹ (Botrytis cinerea) Scab (Venturia spp.)	11.2 to 16 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 disease pressure is severe, use the higher rates and/or shorter intervals.
Powdery mildew (Podosphaera leucotricha)		

Restrictions:

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 1.6 lbs pyrimethanil per acre per year, including soil and foliar uses.
- Do not apply LUNA TRANQUILITY within 72 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.

¹Not for use in CA without a supplemental label.

Fruit, small vine climbing, except fuzzy kiwifruit, subgroup 13-07F

Amur River Grape; Gooseberry; Grape; Kiwifruit, Hardy; Maypop; Schisandra Berry; cultivars varieties, and/or hybrids of these.

Disease Control	Application Rate	Product Instructions
Powdery mildew (Uncinula necator) Botrytis bunch rot / Gray mold (Botrytis cinerea)	16 to 27 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 12- to 14-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 1.4 lbs pyrimethanil per acre per year, including soil and foliar uses. 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.

Ginseng ¹		
Disease Control	Application Rate	Product Instructions
Alternaria blight (Alternaria panax) Botrytis blight (Botrytis cinerea)	16 to 27 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-day interval. When disease pressure is severe, use the higher rates.
Powdery mildew (<i>Erysiphe</i> spp.)		

Restrictions:

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 2.1 lbs pyrimethanil per acre per year, including soil and foliar uses.
- Do not apply LUNA TRANQUILITY within 30 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.

¹Not for use in CA without a supplemental label.

Lemons ¹		
Disease Suppression	Application Rate	Product Instructions
Alternaria (Alternaria spp.)	27 fl oz/acre	Apply at the critical timings for disease suppression. Refer to University and/or extension guidelines for best application timing.
Penicillium rot (Penicillium spp.)		Continue as needed on a 7- to 21-day interval.

Restrictions:

- Do not apply more than 27 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 0.7 lbs pyrimethanil per acre per year, including soil and foliar uses.
- Minimum 30-day interval between soil applications.
- 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.

¹Not for use in CA without a supplemental label.

Onion, bulb, subgroup 3-07A and Onion, green, subgroup 3-07B

Onion, bulb subgroup: Daylily, Bulb; Fritillaria, Bulb; Garlic, Bulb; Garlic, Great-Headed, Bulb; Garlic, Serpent, Bulb; Lily, Bulb; Onion, Bulb; Onion, Chinese, Bulb; Onion, Pearl; Onion, Potato, Bulb; Shallot, Bulb; cultivars, varieties, and/or hybrids of these.

Onion, green subgroup: Chive, Fresh Leaves; Chive, Chinese, Fresh Leaves; Elegans Hosta; Fritillaria, Leaves; Kurrat; Lady's Leek; Leek; Leek, Wild; Onion, Beltsville Bunching; Onion, Fresh; Onion, Green; Onion, Macrostem; Onion, Tree, Tops; Onion, Welsh, Tops; Shallot, Fresh Leaves; cultivars, varieties, and/or hybrids of these.

Disease Control	Application Rate	Product Instructions
Botrytis leaf blight, neck rot (Botrytis squamosa) (Botrytis allii) Purple blotch (Alternaria porri) Stemphylium leaf blight / stalk rot¹ (Stemphylium vesicarium)	16 to 27 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 14-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.
Cladosporium leaf blotch (Cladosporium allii)	27 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 14-day interval. When disease pressure is severe, use the shorter intervals.
Disease Suppression	Application Rate	Product Instructions
White rot (Sclerotium cepivorum)	27 fl oz/acre	Apply at the critical timings for disease suppression. 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 shorter intervals.

Restrictions:

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 2.1 lbs pyrimethanil per acre per year, including soil and foliar uses. 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.

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Peach subgroup 12-12B and Plum subgroup 12-12C

Peach subgroup: Peach; Nectarine; cultivars, varieties, and/or hybrids of these.

Plum subgroup: Apricot; Apricot, Japanese; Jujube, Chinese; Plum; Plum, American; Plum, beach; Plum, Canada; Plum, cherry; Plum, Chickasaw; Plum, Damson; Plum, Japanese; Plum, Klamath; Plumcot; Plum, prune; Sloe; cultivars, varieties, and/or hybrids of these.

Disease Control	Application Rate	Product Instructions
Brown rot blossom blight Fruit rot (Monilinia spp.) Scab (Cladosporium carpophilum) Jacket rot Green fruit rot (Botrytis cinerea) Shot hole (Wilsonomyces carpophilus) Powdery mildew Rusty spot (Podosphaera spp.) (Sphaerotheca pannosa)	12.0 to 27 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 14-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.
Disease Suppression	Application Rate	Product Instructions
Peach leaf curl (<i>Taphrina</i> spp.)	27 fl oz/acre	Apply at the critical timings for disease suppression. 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 shorter intervals.

- Do not use on Cherries.
- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 2.1 lbs pyrimethanil per acre per year, including soil and foliar uses.
- Do not apply LUNA TRANQUILITY within 2 days of harvest.
- Do not make more than 2 applications of a group 9 fungicide within 30 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.

Pistachio		
Disease Control	Application Rate	Product Instructions
Botryosphaeria panicle and shoot blight (Botryosphaeria dothidea) Alternaria late blight	16 to 27 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 14-day interval. When disease pressure is severe, use the higher rates and/or shorter intervals.
(Alternaria alternata)		and/of shorter intervals.
Blossom and shoot blight (Botrytis cinerea)		
Septoria leaf spot (Septoria pistaciarum)		

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 2.1 lbs pyrimethanil per acre per year, including soil and foliar uses.
- Do not apply LUNA TRANQUILITY within 30 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.

Tomato			
Disease Control	Application Rate	Product Instructions	
Early blight (Alternaria solani) Black mold (Alternaria alternata)	11.2 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 14-day interval. When disease pressure is severe, use the shorter intervals.	
Gray leaf spot (Stemphyllium spp.)			
Septoria leaf spot (Septoria lycopersici)			
Target spot (Corynespora cassiicola)			
Gray mold ¹ (Botrytis cinerea)			
Disease Suppression	Application Rate	Product Instructions	
Powdery mildew (Oidiopsis taurica / Leveillula taurica) (Sphaerotheca spp.)	11.2 fl oz/acre	Apply at the critical timings for disease suppression. 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 shorter intervals.	

Restrictions:

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 1.4 lbs pyrimethanil per acre per year, including soil and foliar uses.
- Do not apply LUNA TRANQUILITY within 1 day of harvest.
- To limit the potential for development of disease resistance to these fungicide classes, do not make (field and greenhouse use) 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.

Note:

- For greenhouse uses apply only in well-ventilated plastic tunnel houses or glass houses.
- Ventilate for at least 2 hours after application.

¹Not for use in CA without a supplemental label.

Vegetable, root, except sugar beet, subgroup 1B1 and Vegetable, tuberous and corm, subgroup 1C1

Root vegetables (except sugar beet) subgroup: Beet, Garden; Burdock, Edible; Carrot; Celeriac; Chervil, Turnip-Rooted; Chicory; Ginseng; Horseradish; Parsley, Turnip-Rooted; Parsnip; Radish; Radish, Oriental; Rutabaga; Salsify; Salsify, Black; Salsify, Spanish; Skirret; Turnip.

Tuberous and corm vegetables subgroup: Arracacha; Arrowroot; Artichoke, Chinese; Artichoke, Jerusalem; Canna, Edible; Cassava, Bitter And Sweet; Chayote (Root); Chufa; Dasheen; Ginger; Leren; Potato; Sweet Potato; Tanier; Turmeric; Yam Bean; Yam, True.

Disease Control	Application Rate	Product Instructions	
White mold ¹ (Sclerotinia sclerotiorum)	11.2 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 14-day interval. When disease pressure is severe, use the shorter intervals.	
Early blight (Alternaria solani)	8.0 - 11.2 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 14-day interval.	
Brown spot ¹ (<i>Alternaria alternata</i>)		When disease pressure is severe, use the higher rates and/or shorter intervals.	
Botrytis leaf spot ¹ (<i>Botrytis cinerea</i>)			
Black dot ¹ (Colletotrichum coccodes)			
Ascochyta leaf spot ¹ (Aschochyta cynarae)			
Powdery mildew¹ (Erysiphe cichoracearum) (Leveillula taurica) (Erysiphe spp.)			

Restrictions:

- Do not apply more than 54.7 fl oz of LUNA TRANQUILITY per acre per year.
- Apply using ground, aerial, or chemigation equipment.
- Regardless of formulation or method of application, do not apply more than 0.446 lbs fluopyram or 1.4 lbs pyrimethanil per acre per year, including soil and foliar uses.
- 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.

¹Not for use in CA without a supplemental label.

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 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.

LUNA TRANQUILITY 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 includes a prepaid license under which purchaser agrees to employ the purchased quantity of LUNA TRANQUILITY 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 other than those specified on this label are not licensed through the purchase of this product.

NET CONTENTS:

PRODUCED FOR



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LUNA TRANQUILITY (PENDING) 02/27/2017, 06/09/2017, 06/21/2017