

2016-1374  
2016-07-05



Bayer CropScience

GROUP	7, 9	FUNGICIDE
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## **LUNA TRANQUILITY® FUNGICIDE**

For control of listed diseases on bulb vegetables, grapes, pome fruit, small berries, tomato and potatoes.

COMMERCIAL

SUSPENSION

REGISTRATION NUMBER: 30510 PEST CONTROL PRODUCTS ACT

GUARANTEE:

Fluopyram	125 g/L
Pyrimethanil	375 g/L

Contains 1,2-benzisothiazolin-3-one at 0.03% and 5-chloro-2-methyl-4-isothiazolin-3-one at 0.0008% and 2-methyl-4-isothiazolin-3-one at 0.00027% as preservatives..

READ THE LABEL AND BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 1 – 200 L

Bayer CropScience Inc.  
Suite 200, 160 Quarry Park Blvd. SE  
Calgary, AB T2C 3G3

**For product information, call 1-888-283-6847.**

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

LUNA TRANQUILITY Fungicide is a broad spectrum fungicide with preventative, systemic, and curative properties recommended for the control of certain crop diseases. LUNA TRANQUILITY Fungicide is best suited for use in a preventative treatment program.

#### DIRECTIONS FOR USE:

Refer to the attached booklet for specific use directions for each crop and detailed instructions on rates, diseases controlled, application timing and technique.

#### PRECAUTIONS:

**KEEP OUT OF REACH OF CHILDREN.** Avoid contact with the skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools, and recreation areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or [www.bayercropscience.ca](http://www.bayercropscience.ca).

#### PROTECTIVE CLOTHING AND EQUIPMENT:

During mixing, loading, application, clean-up and repair activities, workers must wear long sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves.

#### RE-ENTRY RESTRICTION:

For pome fruits and bulb vegetables, **DO NOT** enter, or allow worker reentry, within 24 hours after application to carry out hand thinning activities. For grapes, **DO NOT** enter, or allow worker entry, within 24 hours after application to carry out cane turning, girdling, training, tying, pruning, thinning and leaf pulling activities. For all other worker activities, do not enter or allow worker entry into treated areas within 12 hours after application.

#### FIRST AID:

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If in eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre 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 by mouth-to-mouth, if possible. Call a poison control centre

or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

#### TOXICOLOGICAL INFORMATION:

Treat symptomatically. Medical Personnel should contact Bayer's Medical Information Services, Toll-Free: 1-800-334-7577.

#### ENVIRONMENTAL PRECAUTIONS

TOXIC to birds. TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

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 wash waters. This product may contaminate water through runoff. This product has a 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.

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.

#### STORAGE

Do not contaminate water, food, or feed by storage or disposal. Do not store below freezing. If stored for 1 year or longer, shake well before using. Store the tightly closed container away from feeds, seeds, fertilizer, plants and foodstuffs. Do not use or store in or around the home. Keep the product in the original container during storage. In case of fire, leaking or damaged containers, call toll free 1-800-334-7577.

#### DISPOSAL

Recyclable Container Disposal:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

**Disposal of Unused, Unwanted Product:**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

**Disposal of Unused Spray Solution:**

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, away from water supplies, ditches, and irrigation canals.

**NOTICE TO USER:**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

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LUNA TRANQUILITY® is a registered trademark of Bayer CropScience.



Bayer CropScience

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# LUNA TRANQUILITY Fungicide®

## Table of Contents:

## Section Number:

GENERAL INFORMATION	Notice	1
	The Product	2
SAFETY AND HANDLING	Precautions	3
	First Aid and Toxicological Information	4
	Environmental Precautions	5
	Storage	6
	Disposal	7
DIRECTIONS FOR USE	Application Information and Precautions	8
	Crop, Disease, Rate, Timing	9
	Rotational Crop Restrictions	10
	Mixing Instructions	11
	Resistance Management Recommendations	12

## FOR MORE INFORMATION CONTACT:

Bayer CropScience Inc.  
Suite 200, 160 Quarry Park Blvd. SE  
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## GENERAL INFORMATION

### SECTION 1: NOTICE

#### NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

### SECTION 2: THE PRODUCT

LUNA TRANQUILITY Fungicide is a broad spectrum fungicide with preventative, systemic, and curative properties recommended for the control of certain crop diseases. LUNA TRANQUILITY Fungicide is best suited for use in a preventative treatment program.

## SAFETY AND HANDLING

### SECTION 3: PRECAUTIONS

#### PRECAUTIONS:

**KEEP OUT OF REACH OF CHILDREN.** Avoid contact with the skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. If product comes in contact with clothing, remove all contaminated clothing, wash skin with soap and water and dress in clean clothing. Launder applicator clothing separate from other laundry.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools, and recreation areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or [www.bayercropscience.ca](http://www.bayercropscience.ca).

#### PROTECTIVE CLOTHING AND EQUIPMENT:

During mixing, loading, application, clean-up and repair activities, workers must wear long sleeved shirt and long pants, shoes plus socks, and chemical-resistant gloves.

#### RE-ENTRY RESTRICTION:

For pome fruits and bulb vegetables, DO NOT enter, or allow worker reentry, within 24 hours after application to carry out hand thinning activities. For grapes, DO NOT enter, or allow worker entry, within 24 hours after application to carry out cane turning, girdling, training, tying,

pruning, thinning and leaf pulling activities. For all other worker activities, do not enter or allow worker entry into treated areas within 12 hours after application.

#### SECTION 4: FIRST AID AND TOXICOLOGICAL INFORMATION

##### FIRST AID:

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If in eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre 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 by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

##### TOXICOLOGICAL INFORMATION:

Treat symptomatically. Medical Personnel should contact Bayer's Medical Information Services, Toll-Free: 1-800-334-7577.

#### SECTION 5: ENVIRONMENTAL PRECAUTIONS

TOXIC to birds. TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

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. This product may contaminate water through runoff. This product has a 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.

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.



## SECTION 6: STORAGE

Do not contaminate water, food, or feed by storage or disposal. Do not store below freezing. If stored for 1 year or longer, shake well before using. Store the tightly closed container away from feeds, seeds, fertilizer, plants and foodstuffs. Do not use or store in or around the home. Keep the product in the original container during storage. In case of fire, leaking or damaged containers, call toll free 1-800-334-7577.

## SECTION 7: DISPOSAL

### Recyclable Container Disposal:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

### Disposal of Unused, Unwanted Product:

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

### Disposal of Unused Spray Solution:

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, away from water supplies, ditches, and irrigation canals.

SECTION 8: APPLICATION INFORMATION AND PRECAUTIONS
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## DIRECTIONS FOR USE

### APPLICATION INFORMATION:

Thorough coverage of all plant parts to be protected is essential for good disease control. Use sufficient water volume and spray pressure to provide thorough and uniform coverage for optimum disease control.

Ground application equipment:

For Fruit Crops: Apply LUNA TRANQUILITY Fungicide in a minimum spray volume of 500 L/ha.

For Vegetable Crops: Apply LUNA TRANQUILITY Fungicide by ground application equipment in a minimum spray volume of 200 L/ha.

Aerial application equipment:

Potatoes: Application by air is permitted only where specified on the label. Apply LUNA TRANQUILITY Fungicide by aerial equipment in a minimum spray volume of 50 L/ha.

### APPLICATION PRECAUTIONS:

Airblast application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** direct spray above plants to be treated. Turn off outward pointing nozzles at row ends and outer rows. **DO NOT** apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

Aerial application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. To reduce

drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotor span.

**Buffer zones:**

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	Crop		Buffer Zones (metres) Required for the Protection of Freshwater Habitat of Depths:	
			Less than 1 m	Greater than 1 m
Field sprayer	All labelled crops		1	0
Airblast	Grapes, pome fruit	Early growth stage	10	0
		Late growth stage	5	0
Aerial	Potatoes	Fixed wing	10	0
		Rotary wing	5	0

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

**AERIAL APPLICATION-GENERAL INFORMATION:**

1. Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.
2. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment. If you have questions, call 1-888-283-6847 or obtain technical advice from the distributor or your provincial agricultural representative.
3. Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.
4. Apply LUNA TRANQUILITY Fungicide in a minimum of 50 L of water/ha.
5. To ensure proper coverage and distribution and to minimize drift, check to see that swath width and droplet size are adequate, and that wind velocities are low.

6. Use mechanical flaggers only.

#### AERIAL APPLICATION-USE PRECAUTIONS:

1. Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage.
2. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.
3. Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

#### AERIAL APPLICATION- OPERATOR PRECAUTIONS:

1. DO NOT allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.
2. It is desirable that the pilot has communication capabilities at each treatment site at the time of application.
3. The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.
4. All personnel on the job site must wash hands and face thoroughly before eating and drinking.
5. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.
6. Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-888-283-6847 or obtain technical advice from the distributor or your provincial agricultural representative.

**SECTION 9: CROP, DISEASE, RATE, TIMING**

<b>BULB VEGETABLES:</b>		
Chive (fresh leaves), Chinese chive (fresh leaves), Daylily (bulb), Elegans hosta, Fritillaria (bulb and leaves), Garlic bulb, Garlic bulb (great headed and Serpent), Kurrat, Lady's leek, Leek, Lily (bulb), Onion (Beltsville bunching, Bulb, Chinese bulb, Fresh, Green, Macrostem, Pearl, Potato bulb, Tree tops, and Welsh tops), Shallot (bulbs and fresh leaves), Wild leek.		
<b>Disease Control</b>	<b>Rate (mL/ha)</b>	<b>Use Information</b>
Botrytis leaf blight <i>(Botrytis cinerea)</i> <i>(Botrytis squamosa)</i>  Purple blotch <i>(Alternaria porri)</i>  Stemphylium leaf blight <i>(Stemphylium vesicarium)</i> – Suppression Only.	1200	Begin fungicide applications preventatively. Continue as needed, on a 7- to 12-day interval.  Apply maximum of 2 applications per season for <i>Botrytis</i> . Ensure resistance management recommendations for <i>Botrytis</i> are followed in Section 12.
<b>Restrictions:</b> Do not apply more 3.6 L of LUNA TRANQUILITY FUNGICIDE per hectare per season. Do not apply LUNA TRANQUILITY FUNGICIDE 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 FUNGICIDE or any Group 7 or Group 9 containing fungicide before rotating with a fungicide from a different Group.		

<b>GRAPES</b>		
<b>Disease Control</b>	<b>Rate mL/ha</b>	<b>Use Information</b>
Powdery mildew <i>(Uncinula necator)</i>	600	Begin applications preventatively and continue as needed on a 7-14 day interval. Do not apply more than 3 applications to control powdery mildew if fewer than 12 fungicide applications are made in a season. Where 12 or more fungicide applications are made in total, a maximum of 4 applications of Group 9 containing fungicides can be applied per season.
Botrytis bunch rot / Gray mold <i>(Botrytis cinerea)</i>	1200	Begin applications at early bloom if needed then follow with applications from berry touch to bunch closure. An application can also be made from fruit ripening through to harvest during frequent wet conditions (conducive to infection) or when symptoms of infection are evident. Thorough coverage of bunches is essential.  Apply maximum of 2 applications per season for <i>Botrytis</i> . Ensure resistance management recommendations for <i>Botrytis</i> are followed in Section 12.
<b>Restrictions:</b> Do not exceed 4 L of LUNA TRANQUILITY Fungicide per hectare per season. Do not apply LUNA TRANQUILITY Fungicide 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 Fungicide or any Group 7 or Group 9 containing fungicide before rotating with a fungicide from a different Group.		

**POME FRUIT:**

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

Disease Control	Rate mL/ha	Use Information
Powdery mildew ( <i>Podosphaera leucotricha</i> )	600	Begin applications preventatively. Continue applications as needed on a 7-14 day interval.
Leaf scab ( <i>Venturia inaequalis</i> ) on apple, crabapple and pear only  Leaf scab ( <i>Venturia pirina</i> ) on pear, pear (Asian) and quince only	800	Begin applications at green tip and continue as needed on a 7-14 day interval. LUNA TRANQUILITY Fungicide will provide up to 72 hours of post-infection control of scab.

**Restrictions:** Do not apply more than 4 applications and do not exceed 3.2 L of LUNA TRANQUILITY Fungicide per hectare per season. Do not apply LUNA TRANQUILITY Fungicide within 14 days of harvest for apples, crabapple, mayhaw and medlar and 72 days of harvest for other pome fruits.

To limit the potential for development of disease resistance to these fungicide classes do not make more than 2 sequential applications of LUNA TRANQUILITY Fungicide or any Group 7 or Group 9 containing fungicide before rotating with a fungicide from a different Group.

The maximum number of applications of a Group 7 containing fungicide should be limited to 1 per season when the total number of sprays in a program is 1 to 2, and 2 per season when the total number of sprays is 3 to 5. A third application can be made when a total of 6-11 sprays are made in a program. Where 12 or more sprays are applied, a fourth application is allowed.

**APPLES: Tank-mixes**

Disease	Products	Rate	Remarks
Apple scab ( <i>Venturia inaequalis</i> )	LUNA TRANQUILITY Fungicide	800 mL/ha	Begin applications at green tip and continue as needed on a 7-14 day interval.
	plus DITHANE DG Rainshield NT	3 kg/ha	A maximum of 4 applications per year may be made.  PHI of 45 days.

When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both labels.

<b>POTATOES:</b>		
<b>Disease Control</b>	<b>Rate mL/ha</b>	<b>Use Information</b>
Early blight <i>(Alternaria solani)</i>  Brown leaf spot <i>(Alternaria alternata)</i>	600	Begin fungicide applications preventatively. Continue as needed on a 7- to 14-day interval. When disease pressure is severe, use the shorter intervals. Tops or greens should not be used for food or feed.
White mold <i>(Sclerotinia sclerotiorum)</i>  Black dot – suppression only <i>(Colletotrichum coccodes)</i>	800	
<p><b>Restrictions:</b> Application is permitted by air or ground application equipment. Do not apply more than 3.2 L of LUNA TRANQUILITY Fungicide per hectare per season. Do not apply LUNA TRANQUILITY Fungicide 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 Fungicide or any Group 7 or Group 9 containing fungicide before rotating with a fungicide from a different Group.</p>		

**SMALL BERRIES (caneberries and bushberries, and low growing berries, CG 13-07A, B and G):**

Crop Sub Group 13-07A: Caneberries

**Blackberry** *Rubus* spp., (including Andean Blackberry, Artic blackberry, Bingleberry, Black satin berry, Boysenberry, Brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, Common blackberry, Coryberry, Darrowberry, Dewberry, Dirksen thornless berry, Evergreen blackberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, Lowberry, Lucretiaberry, Mammoth blackberry, Marionberry, Mora, Mures deronce, Nectarberry, Northern dewberry, Olallieberry, Oregon evergreen berry, Phenomenalberry, Rangeberry, Ravenberry, Rosberry, Shawnee blackberry, Southern dewberry, Tayberry, Youngberry, Zarzamora, and cultivars, varieties, and/or hybrids of these.

**Raspberry** *Rubus* spp. (*Rubus occidentalis*, *Rubus strigosus*, *Rubus idaeus*) (including Bababerry, Black raspberry, Blackcap, Framboise, Frambueso, Himbeere, Keriberry, Mayberry, Purple raspberry, Red raspberry, Thimbleberry, Tulameen, Wild raspberries, Yellow raspberry) and cultivars, varieties, and/or hybrids of these.

Crop Sub Group 13-07B: Bushberries (except highbush cranberry)

Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; currant, black; currant, red; elderberry; European barberry; gooseberry; honeysuckle, edible; huckleberry; jostaberry; Juneberry (Saskatoon berry); lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these

Crop Sub Group 13-07G: Low growing berry subgroup (except bearberry and cranberry)

Bilberry; blueberry, lowbush; cloudberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these

Disease Control	Rate mL/ha	Use Information
Powdery mildew ( <i>Sphaerotheca</i> spp.)	1200	Begin fungicide applications preventatively. Continue as needed, on a 7- to 14-day interval. When disease pressure is severe use shorter intervals.
Botrytis gray mold ( <i>Botrytis cinerea</i> )	1200	Begin fungicide applications preventatively. Make first application at early flowering and repeat applications as required at 7-10 day intervals.  In order to maximize latent disease control post harvest, apply the last application on the day of harvest.  Apply maximum of 2 applications per season for <i>Botrytis</i> . Ensure resistance management recommendations for <i>Botrytis</i> are followed in Section 12.
Common leaf spot ( <i>Mycosphaerella fragariae</i> ) (on strawberry only)	1200	Begin fungicide applications preventatively. Continue as needed, on a 7- to 14-day interval. When disease pressure is severe use shorter intervals.

**Restrictions:** Do not exceed 4 L of LUNA TRANQUILITY FUNGICIDE per hectare per season. Do not apply LUNA TRANQUILITY FUNGICIDE within 1 day of harvest for strawberry and 7 days of harvest for gooseberries. For other crops, LUNA TRANQUILITY FUNGICIDE 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 FUNGICIDE or any Group 7 or Group 9 containing fungicide before rotating with a fungicide from a different Group.

It is recommended to only use LUNA TRANQUILITY FUNGICIDE to control powdery mildew when the timing of application coincides with the timing of Botrytis gray mold.



<b>TOMATO</b>		
<b>Disease Control</b>	<b>Rate mL/ha</b>	<b>Use Information</b>
Early Blight <i>(Alternaria solani)</i>  Septoria leaf spot <i>(Septoria lycopersici)</i>	800	Begin fungicide applications preventatively. Continue as needed, on a 7 - 12 day interval.
<p><b>Restrictions:</b> Do not exceed 4 L of LUNA TRANQUILITY FUNGICIDE per hectare per season. Do not apply LUNA TRANQUILITY FUNGICIDE within 1 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 FUNGICIDE or any Group 7 / Group 9 containing fungicide before rotating with a fungicide from a different Group.</p>		

SECTION 10:                    ROTATIONAL CROP RESTRICTIONS:
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Do not replant to alfalfa for 14 days after application. Crops listed on this label and other tuberous and corm vegetables, berries, tomatoes and ginseng may be rotated anytime following the last application of Luna Tranquility. All other crops may be replanted 30 days following the last application of Luna Tranquility Fungicide.

SECTION 11:                    MIXING INSTRUCTIONS
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LUNA TRANQUILITY Fungicide must be applied with properly calibrated, clean equipment. Prior to adding LUNA TRANQUILITY Fungicide to the spray tank, ensure that the spray tank is thoroughly clean:

- Add one-half of the required amount of water to the spray or mixing tank and start agitation.
- Add the required quantity of LUNA TRANQUILITY Fungicide to the water and complete filling with water to the required total volume.
- Maintain agitation throughout mixing and spraying.

SECTION 12:                    RESISTANCE MANAGEMENT RECOMMENDATIONS
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For resistance management, LUNA TRANQUILITY Fungicide contains a Group 7 and a Group 9 fungicide. Any fungal population may contain individuals naturally resistant to LUNA TRANQUILITY Fungicide and other Group 7 and Group 9 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance:

- Where possible, rotate the use of LUNA TRANQUILITY Fungicide or other Group 7 and Group 9 fungicides with different groups that control the same pathogens. Do not make more than 2 sequential applications of LUNA TRANQUILITY FUNGICIDE.
- Use tank mixtures with fungicides from a different group when such use is permitted.
- For *Botrytis* control, follow the Fungicide Resistance Action Committee (FRAC) guidelines for Group 9 fungicides:
  - Always alternate applications of LUNA TRANQUILITY Fungicide or other Group 9 fungicides with fungicides having a different mode of action (different Group).
  - In situations where 4 to 6 *Botrytis* treatments are made per crop and season, a maximum of 2 applications of LUNA TRANQUILITY Fungicide or any other Group 9 fungicide are recommended. Where up to 3 treatments are made per season, the number of LUNA TRANQUILITY FUNGICIDE applications is limited to 1. In situations where 7 or more *Botrytis* treatments are made per crop and season, a maximum of 3 applications of LUNA TRANQUILITY Fungicide or any other Group 9 fungicide are recommended.

- For multi-spray crops: The total number of sprays containing Group 7 fungicides in a mixture should not exceed half of the total number of fungicide applications in a season.
- Fungicide use should be based on an integrated disease management program that includes scouting, historical information related to pesticide use and crop rotation and considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications.
- Monitor treated fungal populations for resistance development.
- Notify Bayer CropScience Inc. if reduced sensitivity of the pathogen to LUNA TRANQUILITY FUNGICIDE is suspected.
- If disease continues to progress after treatment with this product, do not increase the use rate. Discontinue use of this product, and switch to another fungicide with a different target site of action, if available.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated disease management program recommendations for specific crops and disease problems in your area.
- For further information and to report suspected resistance, contact a Bayer CropScience representative at 1-888-283-6847 or at [www.bayercropscience.ca](http://www.bayercropscience.ca) .

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