BASF

7969-62

1 of 7

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ACCEPTED

JUN 2 1 1995

Under the ... Act, as amended, for the pesticide registered under ... 7969-62

Ronilan® FL

fungicide

Fungicide

A flowable formulation containing:

Active ingredient	
Vinclozolin: [3-(3,5-dichlorophenyl)-5-ethenyl-5-methyl-2,4-oxazolidinedione]	42.3%
Inert ingredients	58.7%
Total	100.0%

Equivalent to 4.17 pounds active ingredient per gallon

EPA Reg. No. 7969-62 **EPA Est. No. 7969-WG01**

KEEP OUT OF REACH OF CHILDREN.

CAUTION

Precautionary Statements
Hazards to Humans and Domestic Animals
Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Do not get on skin, in eyes, or on clothing. Avoid breathing vapor or spray mist.

Agricultural Use Requirements
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the **Directions For Use** section for information about this standard.

Statement of Practical Treatment
If on skin: Wash with plenty of soap and water. Get medical attention.
If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
If in eyes: Flush with plenty of water. Call a physician if irritation persists. Prolonged exposure or frequently repeated skin contact may cause allergic reactions in some individuals.

See the attached booklet for complete **Precautionary Statements, Directions For Use,** and **Conditions of Sale and Warranty.**

Net contents 2 1/2 gallons

BASF Corporation
P.O. Box 13528, Research Triangle Park, NC 27709-3528

Specimen Label

Precautionary Statements

Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- For exposures in enclosed areas, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC 23-C), or a canister approved for pesticides (MSHA/NIOSH approval prefix TC-14G)
- For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH) approval number prefix TC-21C)

Engineering Controls Statement:

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 CRR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- 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.

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
- Chemical-resistant gloves, such as barrier laminate, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headwear for overhead exposure

Nonagricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, nurseries, or greenhouses.

Environmental Hazards

This product is toxic to fish. 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.

Directions For Use

It is a violation of federal law to use this product in a manner consistent with its labeling.

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.

Storage and Disposal

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

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple-rinse container (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

In Case of Emergency

In case of large-scale spillage regarding this product, call:
CHEMTREC 800-424-9300
BASF Corp 800-832-HELP
In case of medical emergency regarding this product, call:

1. Your local doctor for immediate treatment
2. Your local poison control center (hospital)
3. BASF Corp 1-800-832-HELP

All applicable directions, restrictions, precautions, and **Conditions of Sale and Warranty** are to be followed. This labeling must be in the possession of the user at the time of application.

General Information

Ronilan FL is a contact fungicide for the control of *Botrytis* fruit rot (gray mold) of strawberries and raspberries, *Sclerotinia* 'drop' (watery soft rot) and *Rhizoctonia* (bottom rot) of lettuce, brown rot blossom and twig blight, fruit brown rot, and shot hole on stone fruit, *Sclerotinia* watery soft rot, *Sclerotium* white rot, *Botrytis* neck rots, *Botrytis* leaf blight and purple blotch of onions.

A chemical barrier of **Ronilan FL** must be established and maintained to achieve effective disease control.

Table 1. Application Rates for Strawberries in States Other Than California

Moisture Conditions	Spray* Interval (Days)	Rate (Pints of Product Per Acre)	
		1st Year Plants or Sparse Foliage	Dense Foliage
Frequent natural moisture (intermittent rain, fog, dew) or when using sprinkler irrigation (high disease pressure)	7-9	1 1/2	1 1/2-2
Limited natural moisture or infrequent sprinkler irrigation (low disease pressure)	10-14	1	1 1/2-2
* Use spray interval throughout the bearing cycle.			

Table 2. Application Rates for Strawberries in California

Moisture Conditions	Spray* Interval (Days)	Rate (Pints of Product Per Acre)	
Frequent natural moisture (intermittent rain, fog, dew) or when using sprinkler irrigation (high disease pressure)	7-9	1 1/2	2
* Make no more than four (4) applications per season.			

For diseases that infect aboveground plant parts (such as fruit rots and leaf blights caused by *Botrytis*), thorough spray coverage of the plant parts to be protected is essential.
For diseases that infect plant parts at the soil surface or below ground (such as white rot on onions), thorough spray coverage of the soil and stem base is essential. Refer to the following sections for specific information. If other diseases are a problem, an additional fungicide will be needed.
The repeated exclusive use of **Ronilan FL**, as is the case with the exclusive use of other fungicides, may result in the buildup of resistant strains of *Botrytis* and loss of disease control.
A spray program alternating other fungicides with **Ronilan FL** may delay the buildup of resistant strains. If treatment becomes ineffective due to the presence of a resistant strain of *Botrytis*, then prompt use of other fungicides is necessary to maintain disease control.

Mixing Instructions:
Partially fill the spray tank with clean water and begin agitation. Add the required amount of **Ronilan FL** to the tank and fill tank to the total volume required. Maintain agitation to keep the material in suspension and apply with properly calibrated spray equipment.
Ronilan FL is physically compatible with most pesticides used in a tank mix. To assure compatibility of **Ronilan FL** with with other products, add correct proportions in a small container with water. Mix thoroughly and let the mixture stand for five minutes. The mixture is compatible if te combination remains mixed, or can readily be remixed.

Strawberries
Time and Rate of Application for States Other Than California
Thorough spray coverage of the blossoms and developing fruit is essential. For full season control of *Botrytis* disease, the following spray program is recommended.
The first application should be made no later than 10% primary bloom at rates indicated (see **Table 1**). The interval between subsequent applications will vary according to weather conditions and resultant disease pressure.
A rate of 1 1/2 pints of product per acre is generally recommended. One pint of **Ronilan FL** per acre should be used only when low disease pressure can be predicted. Two pints of **Ronilan FL** per acre should be used when the foliage is dense or disease pressure is high. If a heavy rainfall occurs any time during this spray program, or if a wet period (light rain, fog, or dew) lasting more than 24 hours occurs, immediate re-treatment is necessary at a rate of 1 1/2-2 pints of product per acre as soon as conditions will allow the spray to dry on the plants.

Time and Rate of Application for California
Thorough spray coverage of blossoms and developing fruit is essential for good disease control.
For full season control of *Botrytis* disease, fungicides may need to be applied at 7-14-day intervals throughout the production cycle. When using **Ronilan FL**, the first application should be made no later than 10% primary bloom. If conditions favorable for high disease pressure persist after the first application, re-treat 7-9 days later.
To reduce the hazard of resistance developing, further use of **Ronilan FL** should be reserved for periods of high disease pressure or highest economic return. A rate of 1 1/2 pints of product per acre is generally recommended. Two pints of product per acre should be used when foliage is dense and disease pressure is high. **Make no more than a total of four applications of Ronilan FL per season.**

Method of Application
Ground Equipment: Apply **Ronilan FL** in not less than 100 gallons of spray solution per acre to obtain thorough coverage of the developing fruit. An operating pressure of 60-150 psi is recommended to obtain adequate penetration of the spray through the canopy. Cone-type nozzles are recommended. Spray booms with at least 3 nozzles per row (1 over row, 2 side drops) are recommended.
Air Equipment: Apply **Ronilan FL** in not less than 20 gallons of spray solution per acre. Thorough spray coverage of the developing fruit is essential.

Restrictions and Limitations for Strawberries
Do not apply more than a total of 12 pints of product per acre in one season, except in California where the total is restricted to 6 pints in no more than four applications.
Ronilan FL does not control *Rhizopus* rot of strawberries in the field or in storage. There may be a competitive relationship between *Botrytis* and *Rhizopus* incidence such that control of *Botrytis* may result in an increase of *Rhizopus* rot in stored fruit.

Rhizopus rot becomes a problem as a result of certain climatic conditions (such as prolonged warm, humid periods) and cultural practices (such as high nitrogen fertilization which may lead to the production of softer fruit). If conditions are conducive for *Rhizopus* development, including those described above, do not use **Ronilan FL.**
Do not use **Ronilan FL** as a plant dip, as injury will occur.
Do not apply this product through any type of irrigation system.
Do not use any spray adjuvants or additives in combination with **Ronilan FL** on strawberries.

Rotational Crop Restrictions for Strawberries in States Other than California
Lettuce (all types) and dry bulb onions may be planted after strawberries.
Any rotational crops may be planted 20 days after treatment that does not exceed 3 pints active ingredient per acre (6 pints product per acre).
Leafy vegetables may be planted 6 months after treatment that does not exceed 6 pints of active ingredient per acre (12 pints of product per acre).
Cucurbits may be planted 2 months after treatment that does not exceed 6 pints of active ingredient per acre (12 pints of product per acre).
Corn may be planted 2 months after treatment that does not exceed 6 pints of active ingredient per acre (12 pints of product per acre), provided only the corn grain is used for food and/or feed purposes.
Other grain crops may be planted 9 months after treatment that does not exceed 6 pints active ingredient per acre (12 pints product per acre).

Rotational Crop Restrictions for Strawberries in California
Lettuce (all types) and dry bulb onions may be planted after strawberries.
Any rotational crops may be planted 20 days after treatment that does not exceed 3 pints of active ingredient per acre (6 pints of product per acre).
Leafy vegetables may be planted 6 months after treatment that does not exceed 4 pints of active ingredient per acre (8 pints of product per acre).
Cucurbits may be planted 2 months after treatment that does not exceed 4 pints of active ingredient per acre (8 pints of product per acre).
Corn may be planted 2 months after treatment that does not exceed 4 pints of active ingredient per acre (8 pints of product per acre), provided only the corn grain is used for food or feed purposes.
Other grain crops may be planted 9 months after treatment that does not exceed 4 pints of active ingredient per acre (8 pints of product per acre).

Lettuce (all types)
Time and Rate of Application
For control of *Sclerotinia* "drop" and *Rhizoctonia* "bottom rot," up to three applications may be made under certain conditions in one season as specified in the rate table. Thorough spray coverage of plant parts to be protected is essential for effective disease control. Do not disturb soil after application.

Method of Application
Apply **Ronilan FL** in not less than 100 gallons of spray solution per acre (broadcast basis) to obtain thorough coverage of the lower leaves, plant stem, and bed surface. An operating pressure of 50-100 psi is recommended. Use cone or flat fan nozzles. Flood-type nozzles should not be used.
To apply **Ronilan FL** to one-row beds, spray booms should have at least 2 nozzles per row. For two-row beds, use three nozzles or more per bed.

Restrictions and Limitations for Lettuce
Do not apply **Ronilan FL** within 28 days of harvest.

Do not apply more than 6 pints of **Ronilan FL** per acre in one season on lettuce.

Do not use **Ronilan FL** as a plant dip, as injury may occur.

Do not apply this product through any type of irrigation system.

Stonefruit
General Information
Ronilan FL fungicide is effective for the control of brown rot blossom and twig blight, shot hole (*Stigmina carpophila*), and fruit brown rot of stone fruit including apricots, cherries, nectarines, and peaches.
Ronilan FL is a contact fungicide, therefore, thorough coverage of plant parts to be protected is essential for effective disease control.

Table 4. Application Rates for Lettuce (All Types)

Application	Timing	Rate (Pints Product per acre)	
		*Low Disease Pressure	*High Disease Pressure
First	**Direct Seeded Lettuce:** Application should be made immediately (within 2 days) after thinning. **Transplanted Lettuce:** Application should be made 7-10 days after transplanting.	1	1 1/2-2
Second	Application should be made 14 days after first spray if cool, wet conditions (which favor disease) occur for periods lasting 48 hours or more.		
Third	**Direct Seeded Lettuce Only:** Application should be made 14 days after second spray if conditions favoring disease occur.		

* Based on previous history of disease infestation in the field or adjacent fields.

Table 5. Stonefruit
Application Rates and Timing For Control of Brown Rot (*Monilinia spp.*) and Shot Hole (*Stigmina carpophilia*)

Crop	Pints of Product* per		Timing
	100 Gallons	Acre	
Apricots Cherries Nectarines Peaches	1/4-1/2 rate is based on 400 GPA	1-2	**Brown Rot Blossom & Twig Blight and Shot Hole** Apply at early bloom Apricots - Red Bud Peaches & Nectarines - Pink Bud Apply again at full bloom if conditions persist which favor disease development. Apply again at petal fall if conditions persist which favor disease development. Do not apply more than 3 bloom treatments.
	Do not exceed 2 pints of product per acre per application.		**Fruit Brown Rot** Apply when conditions favor disease development within 21 days of harvest. Do not apply more than 1 pre-harvest treatment. Do not apply within 14 days of harvest.

* See **Timed Rate of Application** heading

Time and Rate of Application. Depending on conditions that favor disease development, 1-3 applications should be made during bloom for control of brown rot blossom and twig blight. Repeated applications of **Ronilan FL** during the bloom period will provide suppression of shot hole disease. One pre-harvest application should be made for control of fruit brown rot (see **Table 2**).

A rate of 1 1/2 pints of product per acre is generally recommended. A one pint product per acre rate of **Ronilan FL** should be used only when low disease pressure can be predicted. Under high disease pressure, or in conditions very favorable for disease development, use the higher rates specified. For large, mature trees, use the higher rates specified. If more than 400 gallons per acre of dilute spray are applied, use higher rate specified.

Consistency of disease control with low recommended rates can be enhanced by 8-16 oz./100 gallons of a nonionic, high-quality spreader-sticker in tank mix with **Ronilan FL**.

Method of Application
Rates of **Ronilan FL** per 100 gallons are based on an application of 400 gallons per acre of dilute spray.

Refer to the **Application Rates and Timing for Control of Brown Rot** if other than 400 gallons per acre are applied.

Apply **Ronilan FL** as a spray using sufficient water to obtain thorough coverage.

Ground Equipment: Apply a minimum of 50 gallons per acre.

Air Equipment: Apply in a minimum of 15 gallons per acre. Aerial applications recommended for bloom and petal fall applications only.

Mixing Instructions:
Maintain agitation to keep the material in suspension and apply with properly calibrated spray equipment. **Ronilan FL** is physically compatible with most pesticides used in a tank mix on stone fruit. To assure dissolution of water-soluble bags, always add bags prior to the addition of any EC or oil-based formulations.

Restrictions and Limitations for Stonefruit
Do not apply **Ronilan FL** within 14 days of harvest.

Do not apply more than 2 pints of **Ronilan FL** per acre per application.

Do not apply more than 8 pints of **Ronilan FL** per acre per season (maximum of 6 pints at bloom and 2 pints pre-harvest).

Do not apply **Ronilan FL** during rain. Apply when conditions will permit spray to dry on the plants.

Do not apply this product through any type of irrigation system.

Do not graze or feed cover crops from treated orchards to livestock.

Raspberries
Time and Rate of Application
For control of *Botrytis* fruit rot, the following spray program is recommended. The first application should be made no later than 10% primary bloom. Timing of subsequent applications should be made as indicated (see **Table 3**) and will vary according to weather conditions and resultant disease pressure.
Apply **Ronilan FL** at rates ranging from 1-2 pints product per acre. The 2-pint rate will provide an added margin of control above lower rates and, therefore, should be used whenever disease pressure is predictably severe. Use the 1 1/2 pint rate when disease pressure is expected to be moderate. The 1 pint rate should only be used in newly established areas when disease pressure is expected to be low.

Table 6. Application Rate Table for Raspberries

Moisture Conditions	Spray Interval* (Days)	Rate (Pints of Product Per Acre)
Frequent natural moisture (intermittent rain, fog, or dew) or when using sprinkler irrigation (high disease pressure)	7-9	1 1/2-2
Limited natural moisture or infrequent sprinkler irrigation.	10-14	1-1 1/2

* Use spray interval throughout the bearing cycle.

If a heavy rainfall occurs anytime during this spray program, or if a wet period (light rain, fog, or dew) lasting more than 24 hours occurs, immediate re-treatment is necessary at a rate of 2 pints of product per acre as soon as conditions allow the spray to dry on the plants.

Method of Application
Ground Equipment: Apply **Ronilan FL** in not less than 100 gallons of spray solution per acre (broadcast basis) to obtain thorough coverage of the developing fruit. An operating pressure of 50-100 psi is recommended. Direct spray nozzles toward the fruit-bearing area of the canes.

Restrictions and Limitations for Raspberries
Do not apply more than a total of 8 pints of **Ronilan FL** per acre in one crop season.

Do not apply **Ronilan FL** within 9 days of harvest.

Do not apply **Ronilan FL** during rain. Wait until conditions are such that the spray will dry on the plants.

Do not apply **Ronilan FL** through any type of irrigation system.

Onions
(Dry Bulb Type)
Time and Rate of Application
For control of *Sclerotinia* watery soft rot, *Sclerotium* white rot, and *Botrytis* neck rots, a combination of a soil treatment at planting (soil drench or spray band over the row) and foliar treatments after crop emergence is needed. *Botrytis* leaf blight and purple blotch (*Alternaria porri*) can be controlled only with foliar sprays. The following recommendations are made according to disease type (see tables).

Table 7. Onions (Dry Bulb Type)
Application Rate Table for *Sclerotinia* Watery Soft Rot, *Sclerotium* White Rot, and *Botrytis* Neck Rots

Application*	Timing	Rate, Volume, and Site
First	At planting	**Soil drench:** 2 pints of product per acre in 400 gallons of water per acre applied in a 4-6" band over the row **or** **Spray band:** 2 pints of product per acre in 100 gallons of water per acre applied in 2-4" band over the row.
Second	Up to 3 additional sprays should be applied if disease pressure is high.** If a minimum spray program of 3 sprays is followed, the third application should be made 4-6 weeks before harvest.	**Foliar:** 2 pints of product per acre in a minimum of 100 gallons of water per acre directed at the stem base. Drop nozzles should be used to ensure that spray reaches the stem and surrounding soil.

* A minimum program of 3 treatments is recommended.
** High disease pressure based on previous history of disease infestation in the field or adjacent fields.

Table 8. Onions (Dry Bulb Type)
Application Rate Table for *Botrytis* Leaf Blight and Purple Blotch (*Alternaria porri*)

Application*	Timing	Rate (Pints Product per acre)	
		Low Disease Pressure	High Disease Pressure
First	4-6 weeks after crop emergence or as soon as disease starts to develop	1 1/2	2
Second	2 weeks after first application	1 1/2	2
Third and Subsequent	Up to 3 additional sprays should be applied if conditions occur which favor disease development (such as wet, humid, foggy conditions).**	1 1/2	2

* A minimum program of 2 foliar treatments is recommended. Purple blotch control is achieved when disease pressure is low to moderate.
** Applications should be made with not less than 20 gallons of spray solution per acre (broadcast basis) to obtain thorough coverage. Use cone or flat fan nozzles. Flood-type nozzles should not be used.

Restrictions and Limitations for Onions (dry bulb type)

Do not apply more than a total of 10 pints of **Ronilan FL** per acre in one crop season.

Do not apply within 18 days of harvest.

Do not apply **Ronilan FL** during rain when controlling *Botrytis* leaf blight. Wait until conditions are such that the spray will dry on the plants.

Do not apply **Ronilan FL** through any type of irrigation system.

Do not apply **Ronilan FL** to direct-seeded onions for 4 weeks after emergence.

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASF OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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