

7969-154

12-15-99

12-2-99 NVA 99-4-79-0139 Options A & B

10/10

**ACCEPTED**

12/15/99

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 7969-154

# Sovran®

fungicide

**For use on apples, grapes, pears and other pome fruit, and pecans**

**Active ingredient**

Kresoxim-methyl: (methyl (E)-2-methoxyimino-2-[2-(o-tolyloxymethyl) phenyl] acetate) .....	50.0%
<b>Inert ingredients</b> .....	50.0%
<b>Total</b> .....	100.0%

EPA Reg. No. 7969-154

EPA Est. No. \_\_\_\_

**KEEP OUT OF REACH OF CHILDREN.**

## CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

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

**Net contents:**

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## 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.

### 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.

**If swallowed:** Call a physician or Poison Control Center. Immediately drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger or, if available, by administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person.

### Personal Protective Equipment (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

### 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 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 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.

### Environmental Hazards

This pesticide is toxic to freshwater and estuarine fish and invertebrates. Do not apply directly to water, areas where surface water is present, or intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

### Surface Water Advisory

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water (via both dissolution in runoff water and adsorption to eroding soil), for several days, post-application. These include poorly draining or wet soils with readily visible slopes towards adjacent surface waters, frequently flooded areas, areas over-laying extremely shallow ground

water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and highly erodible soils cultivated using poor agricultural practices such as conventional tillage and down the slope plowing, and areas where an intense or sustained rainfall is forecasted to occur within 48 hours.

### Ground Water Advisory

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

## Directions For Use

It is a violation of federal law to use this product in a manner inconsistent 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.

### 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:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

### Storage and Disposal

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

**Pesticide disposal:** Wastes resulting from using this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Disposal:** Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or 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 Corporation 800-832-HELP

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment.
- Your local poison control center (hospital).
- BASF Corporation (800-832-HELP)

### Steps to be taken in case material is released or spilled:

Wear the personal protective equipment specified on the label. Recover the material for re-use according to label whenever possible. Sweep and/or shovel up the spilled material into an appropriate closed container. Avoid the creation of dusty conditions. Remove and wash clothing and personal protective equipment prior to re-use. Keep the spill out of all sewers and open bodies of water.

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## I. General Information

This package contains **Sovran® fungicide**, a 50% water-dispersible granule (WG). The active ingredient in **Sovran** belongs to a new class of fungicides, the strobilurins. Strobilurins are synthetic analogs of a natural antifungal substance. **Sovran** has a new mode of action and is effective against pathogens resistant to other fungicides.

**Sovran** has a protective effect because it inhibits spore germination and a curative effect because it inhibits mycelial growth and sporulation of the fungus on the leaf surface. **Sovran** can therefore be applied in either pre- or postinfection situations. However, optimum disease control is achieved when **Sovran** is applied in a regularly scheduled protective spray program and is used in a rotation program with other fungicides.

On apples, **Sovran** controls scab, powdery mildew, cedar apple rust, frog-eye leafspot/black rot, flyspeck, sooty blotch, white rot and Brooks fruit spot. On pears and other pome fruits, **Sovran** controls scab and powdery mildew diseases. On grapes, **Sovran** controls powdery mildew, black rot, Phomopsis cane and leaf spot, and downy mildew. On pecans, **Sovran** controls leaf and nut scab. Because of its high specific activity, low vapor pressure, and good rainfastness, **Sovran** has good residual activity against target fungi.

### Sensitive Crop Precaution

**Sovran** may cause injury to certain sensitive cherry varieties such as Van, Sweetheart, Chefan, Somerset, Valera, Vandalay, Cavalier, Coral Champagne, Emperor Francis, Royalton, Schmidt, Summit and Viva. Use special care when applying **Sovran** to prevent contact with these sensitive varieties and other non-target plants. Avoid off-target movement. Consult a BASF representative or local agricultural authorities for more information concerning additional cherry varieties that may be sensitive to **Sovran**.

## Option A. Resistance Management

The repeated and exclusive use of **Sovran**, as with many other fungicides, may allow less sensitive strains of target fungi to build over time and may reduce disease control. To maintain the performance of **Sovran** in the field, BASF advises strict adherence to the following resistance management strategies:

- Do not apply more than 3 sequential applications of **Sovran**.
- Then alternate to an effective nonstrobilurin fungicide with a different mode of action or different chemistry before applying **Sovran** again.

## Option B. Resistance Management

**Sovran** has a new mode of action and is effective against pathogens resistant to other fungicides, including those resistant to sterol inhibitors, dicarboximides, benzimidazoles, anilinopyrimidines or phenylamides. The repeated and exclusive use of **Sovran**, as with many other fungicides, may allow less sensitive strains of target fungi to build over time and may reduce disease control. **Sovran's** active ingredient, kresoxim-methyl, does exhibit cross resistance to other strobilurin fungicides, such as azoxystrobin and trifloxystrobin. To maintain the performance of **Sovran** and other strobilurin fungicides in the field, the use of this product should conform to resistance management strategies stated for each crop in **Section VI. Crop Specific Information**.

### Cleaning Spray Equipment

Spraying equipment must be cleaned thoroughly before and after applying this product, particularly if a product with the potential to injure crops was used prior to **Sovran**.

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## II. Application Instructions

Apply recommended rates of **Sovran** as instructed by the **VI. Crop-Specific Information**.

**Ground Application:** Apply **Sovran** in sufficient water to ensure thorough coverage of foliage, bloom, and fruit. Thorough coverage is required for optimum disease control. Do not apply when conditions favor drift from target area or when windspeed is greater than 10 mph. Equipment should be checked frequently for calibration.

Under low-level disease conditions, the minimum application rates can be used. Maximum application rates and shortened spray schedules are recommended for severe or threatening disease conditions.

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## III. Additives

No additives or adjuvants are necessary for effective use of **Sovran**. Consult a BASF representative or local agricultural authorities for more information concerning additives.

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## **IV. General Tank Mixing Information**

### **Tank Mix Partners/Components**

**Sovran** can be tank mixed with most recommended fungicides, insecticides, plant growth regulators, adjuvants or additives. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also influence crop tolerance and may not match those under which BASF has conducted testing. Physical incompatibility, reduced disease control, or crop injury may result from mixing **Sovran** with other products. Therefore, before using any tank mix (fungicides, insecticides, plant growth regulators, adjuvants, or additives), test the combination on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of application.

### **Mixing Order**

- 1) **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
  - 2) **Agitation.** Maintain constant agitation throughout mixing and application.
  - 3) **Products in PVA bags.** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
  - 4) **Water-dispersible products.** (such as **Sovran**, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
  - 5) **Water-soluble products.**
  - 6) **Emulsifiable concentrates.**
  - 7) **Water-soluble additives.** (such certain soluble fertilizers).
  - 8) **Remaining quantity of water.**
- Maintain constant agitation during application.

**Option A. V. Restrictions and Limitations**

- **Maximum seasonal use rate:** Do not apply more than a **total of 1.6 pounds** (25.6 ounces) of **Sovran® fungicide** per acre, per season.
- Do not make more than a total of 6 applications of **Sovran** per season, not exceeding the maximum seasonal use rate.
- **Preharvest Interval (PHI):** See **Table 1. Crop-Specific Restrictions and Limitations.**
- **Restricted Entry Interval (REI): 12 hours.**
- Allow a minimum of **7 days** between **sequential applications** of **Sovran**.
- Do not reduce the **Sovran** rates recommended on the label.
- Do not apply through any type of irrigation system.

**Option B. V. Restrictions and Limitations**

- **Maximum seasonal use rate:** Do not apply more than a **total of 1.6 pounds** (25.6 ounces) of **Sovran® fungicide** per acre, per season.
- **Preharvest Interval (PHI):** See **Table 1. Crop-Specific Restrictions and Limitations** for each crop's pre-harvest interval.
- **Restricted Entry Interval (REI): 12 hours.**
- Allow a minimum of **7 days** between **sequential applications** of **Sovran**.
- Do not reduce the **Sovran** rates recommended on the label.
- Do not apply through any type of irrigation system.

**Table 1. Crop-Specific Restrictions and Limitations**

<b>Crop</b>	<b>Minimum Time from Application to Harvest (PHI)</b>	<b>Maximum Rate Per Acre Per Application</b>	<b>Maximum Rate Per Acre Per Season</b>
Apple	30 days	6.4 ounces	25.6 ounces
Grape	14 days	6.4 ounces	25.6 ounces
Pear, Quince, Crabapple, Loquat, Mayhaw, Oriental Pear	30 days	6.4 ounces	25.6 ounces
Pecan	45 days	4.8 ounces	25.6 ounces

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**Option A. VI. Crop-Specific Information**

**Apple**

**Application Information**

Make dilute applications of **Sovran**<sup>®</sup> fungicide in sufficient spray volume to ensure thorough coverage. The rate of **Sovran** is dependent on numerous factors, including varietal susceptibility, weather conditions and disease pressure. Refer to **Table 2** for specific recommendations for disease control. For concentrate sprays use the equivalent rate per acre determined for dilute spray.

For scab control, apply **Sovran** as a protectant at 1/2-inch green or when environmental conditions become favorable for primary scab and continue on a 10-14 day interval. During periods of rapid shoot growth, use a 10 day interval. For curative scab applications, up to a maximum of 96 hours after the beginning of the scab infection period, use the high rate of **Sovran** and a 10 day interval as described in **Table 2**.

For powdery mildew, cedar apple rust, and frog-eye leafspot/black rot control, begin applying at 1/2-inch green and continue preventative applications on a 10-14 day interval. To control flyspeck, sooty blotch, white rot (bot rot) and Brooks fruit spot, apply **Sovran** at first or second cover and continue on a 10-14 day interval.

During periods of heavy infection pressure, use the higher rates of **Sovran** shown in **Table 2**, making sure not to exceed the maximum seasonal use rate. Refer to the section **I. General Information for Resistance Management** guidelines.

**Pear, Quince, Crabapple, Loquat, Mayhaw, Oriental Pear**

**Application Information**

Make dilute applications of **Sovran** in sufficient spray volume to ensure thorough coverage. Apply **Sovran** at the rates and intervals described in **Table 3**. For concentrate sprays, use the equivalent rate per acre determined for dilute spray. Use **Sovran** as a protectant against scab and powdery mildew, beginning applications at 1/2 inch green or when environmental conditions are favorable for disease development. Continue spraying on a 10-14 day interval. Use the higher rate of **Sovran** when heavy infection pressure exists or is anticipated. Refer to the section **I. General Information for Resistance Management** guidelines.

**Table 2. Sovran Application Rates and Timing on Apple**

Disease	Application Interval	Sovran Rates	
		Rate per 100 gallons of water	Rate per acre <sup>1</sup>
Scab	Begin at 1/2-inch green or when conditions are conducive for disease development; repeat at 10-14 day intervals.	1.0-1.6 ounces	4.0-6.4 ounces <sup>2</sup>
Cedar apple rust Frog-eye leafspot/ black rot Powdery mildew	Begin at 1/2-inch green and repeat at 10-14 day intervals.		
Brooks fruit spot Flyspeck Sooty blotch White rot (Bot rot)	Apply <b>Sovran</b> at first or second cover and repeat at 10-14 day intervals.		

<sup>1</sup> The rates are based on a standard dilute spray of 400 gallons per acre.

<sup>2</sup> Do not use more than 6.4 ounces per acre per application. At 4.0 ounces per acre, a maximum of 6 treatments per season can be applied. At 6.4 ounces per acre, a maximum of 4 treatments per season can be applied.

**Table 3. Sovran Application Rates and Timing on Pear, Quince, Crabapple, Loquat, Mayhaw, Oriental Pear**

Disease	Application Interval	Sovran Rates	
		Rate per 100 gallons of water	Rate per acre <sup>1</sup>
Powdery mildew Quince rust Scab	Begin at 1/2-inch green and repeat at 10-14 day intervals.	1.0-1.6 ounces	4.0-6.4 ounces <sup>2</sup>

<sup>1</sup> The rates are based on a standard dilute spray of 400 gallons per acre.

<sup>2</sup> Do not use more than 6.4 ounces per acre per application. At 4.0 ounces per acre, a maximum of 6 treatments per season can be applied. At 6.4 ounces per acre, a maximum of 4 treatments per season can be applied.

**Grape**

**Application Information**

Use **Sovran® fungicide** as a protective spray at 3.2-6.4 ounces per acre as described in **Table 4**.

Make applications of **Sovran® fungicide** in sufficient spray volume to ensure thorough coverage. Do not use less than 10 gallons of water per acre.

Black rot and *Phomopsis* cane and leaf spot control should begin at bud break and continue on a 14-day schedule through 1/4-inch berry. Use 4.8 ounces of **Sovran** per acre during periods of heavy infection pressure.

For powdery mildew control, begin sprays at bud break and continue on a 14-day schedule. For more susceptible grape varieties or under conditions that favor rapid powdery mildew development, use 4.8 ounces of **Sovran** per acre. When disease pressure is low, the spray interval can be extended up to 21 days.

For downy mildew control, begin sprays at bud break and continue on a 7-10 day schedule. Under conditions that favor severe downy mildew development, use 6.4 ounces of **Sovran** per acre making sure not to exceed the maximum seasonal use rate.

Refer to the section **I. General Information** for **Resistance Management** guidelines.

**Pecan**

**Application Information**

The best scab control will be achieved by using **Sovran** on a protective spray schedule. Depending on spray timing and infection pressure apply 2.4-4.8 ounces of **Sovran** as described in **Table 5**. To ensure good coverage, BASF recommends using a minimum of 50 gallons of water per acre.

Refer to the section **I. General Information** for **Resistance Management** guidelines.

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**Table 4. Sovran Application Rates and Timing on Grape**

Disease	Application Interval	Sovran Rates Per Acre <sup>1</sup>
Grape black rot Phomopsis	Begin at bud break and continue on a 14 day interval.	3.2 - 4.8 ounces
Powdery mildew	Begin at bud break and continue on a 14 day interval; under low disease pressure, the interval may be extended up to 21 days.	3.2 -4.8 ounces
Downy mildew	Begin at bud break and continue on a 7-10 day interval.	4.0 - 6.4 ounces

<sup>1</sup> At 4.8 ounces per acre, a maximum of 5 treatments per season can be applied. At 5.6 ounces per acre, a maximum of 4 treatments per season can be applied.

**Table 5. Sovran Application Rates and Timing on Pecan**

Disease	Timing and Application Interval	Sovran Rates Per Acre
Scab	<b>Prepollination:</b> Begin at bud break and continue on a 14 day interval through the end of pollination.	2.4 - 3.2 ounces
Scab	<b>Postpollination:</b> Apply on a 21 day interval until shell hardening.	3.2 - 4.8 ounces

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**Option B. VI. Crop-Specific Information**

**Apple**

**Application Information**

Make dilute applications of **Sovran® fungicide** in sufficient spray volume to ensure thorough coverage. The rate of **Sovran** is dependent on numerous factors, including varietal susceptibility, weather conditions and disease pressure. Refer to **Table 2** for specific recommendations for disease control. For concentrate sprays use the equivalent rate per acre determined for dilute spray.

For scab control, apply **Sovran** as a protectant at 1/2-inch green or when environmental conditions become favorable for primary scab and continue on a 10-14 day interval. During periods of rapid shoot growth, use a 10 day interval. **Sovran** will provide post-infection control of apple scab, up to a maximum of 96 hours after the beginning of the scab infection period. When **Sovran** is applied curatively, applications of **Sovran** should be made as soon as possible following a scab infection period at the high rate and a 10 day interval as described in **Table 2**. A reliable disease forecasting system should be used to accurately predict and record scab infection periods.

For powdery mildew, cedar apple rust, and frogeye leafspot/black rot control, begin applying at 1/2-inch green and continue preventative applications on a 10-14 day interval. To control flyspeck, sooty blotch, white rot (bot rot) and Brooks fruit spot, apply **Sovran** at first or second cover and continue on a 10-14 day interval.

During periods of heavy infection pressure, use the higher rates of **Sovran** shown in **Table 2**.

**Crop-Specific Restrictions and Limitations**

To limit the potential for development of resistance:

- Do not make more than four (4) applications of **Sovran** or other strobilurin fungicides per season.

- Do not make more than 3 sequential applications of **Sovran**.

- Apply **Sovran** in alternation with labeled non-strobilurin fungicides with a different mode of action. After making two (2) or three (3) sequential **Sovran** applications, switch to a labeled non-strobilurin fungicide for at least two applications before applying **Sovran** again.

**Pear, Quince, Crabapple, Loquat, Mayhaw, Oriental Pear**

**Application Information**

Make dilute applications of **Sovran** in sufficient spray volume to ensure thorough coverage. Apply **Sovran** at the rates and intervals described in **Table 3**. For concentrate sprays, use the equivalent rate per acre determined for dilute spray. Use **Sovran** as a protectant against scab and powdery mildew, beginning applications at 1/2 inch green or when environmental conditions are favorable for disease development. Continue spraying on a 10-14 day interval. Use the higher rate of **Sovran** when heavy infection pressure exists or is anticipated.

**Crop-Specific Restrictions and Limitations**

To limit the potential for development of resistance:

- Do not make more than four (4) applications of **Sovran** or other strobilurin fungicides per season.
- Do not make more than 3 sequential applications of **Sovran**.
- Apply **Sovran** in alternation with labeled non-strobilurin fungicides with a different mode of action. After making two (2) or three (3) sequential **Sovran** applications, switch to a labeled non-strobilurin fungicide for at least two applications before applying **Sovran** again.

**Table 2. Sovran Application Rates and Timing on Apple**

Disease	Application Interval	Sovran Rates	
		Rate per 100 gallons of water	Rate per acre <sup>1</sup>
Scab	Begin at 1/2-inch green or when conditions are conducive for disease development; repeat at 10-14 day intervals.	1.0-1.6 ounces	4.0-6.4 ounces <sup>2</sup>
Cedar apple rust Frog-eye leafspot/ black rot Powdery mildew	Begin at 1/2-inch green and repeat at 10-14 day intervals.		
Brooks fruit spot Flyspeck Sooty blotch White rot (Bot rot)	Apply <b>Sovran</b> at first or second cover and repeat at 10-14 day intervals.		

<sup>1</sup>The rates are based on a standard dilute spray of 400 gallons per acre.

**Table 3. Sovran Application Rates and Timing on Pear, Quince, Crabapple, Loquat, Mayhaw, Oriental Pear**

Disease	Application Interval	Sovran Rates	
		Rate per 100 gallons of water	Rate per acre <sup>1</sup>
Powdery mildew Quince rust Scab	Begin at 1/2-inch green and repeat at 10-14 day intervals.	1.0-1.6 ounces	4.0-6.4 ounces <sup>2</sup>

<sup>1</sup>The rates are based on a standard dilute spray of 400 gallons per acre.



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**Grape**

**Application Information**

Use **Sovran**® fungicide as a protective spray at 3.2-6.4 ounces per acre as described in **Table 4**.

Make applications of **Sovran**® fungicide in sufficient spray volume to ensure thorough coverage. Do not use less than 10 gallons of water per acre.

Black rot and *Phomopsis* cane and leaf spot control should begin at bud break and continue on a 14-day schedule through 1/4-inch berry. Use 4.8 ounces of **Sovran** per acre during periods of heavy infection pressure.

For powdery mildew control, begin sprays at bud break and continue on a 14-day schedule. For more susceptible grape varieties or under conditions that favor rapid powdery mildew development, use 4.8 ounces of **Sovran** per acre. When disease pressure is low, the spray interval can be extended up to 21 days.

For downy mildew control, begin sprays at bud break and continue on a 7-10 day schedule. Under conditions that favor severe downy mildew development, use 6.4 ounces of **Sovran** per acre.

**Crop-Specific Restrictions and Limitations**

To limit the potential for development of resistance:

- On wine and table grapes, do not make more than four (4) applications of **Sovran** or other strobilurin fungicides per season. On grapes for other uses, do not make more than three (3) applications per season.
- Do not make more than 3 sequential applications of **Sovran**.
- Apply **Sovran** in alternation with labeled non-strobilurin fungicides with a different mode of action.

**Pecan**

**Application Information**

The best scab control will be achieved by using **Sovran** on a protective spray schedule. Depending on spray timing and infection pressure apply 2.4-4.8 ounces of **Sovran** as described in **Table 5**. To ensure good coverage, BASF recommends using a minimum of 50 gallons of water per acre.

**Crop-Specific Restrictions and Limitations**

To limit the potential for development of resistance:

- Do not make more than three (3) applications of **Sovran** or other strobilurin fungicides per season.
- Do not make more than 3 sequential applications of **Sovran**.
- Apply **Sovran** in alternation with labeled non-strobilurin fungicides with a different mode of action.

**Table 4. Sovran Application Rates and Timing on Grape**

Disease	Application Interval	Sovran Rates Per Acre
Grape black rot Phomopsis	Begin at bud break and continue on a 14 day interval.	3.2 - 4.8 ounces
Powdery mildew	Begin at bud break and continue on a 14 day interval; under low disease pressure, the interval may be extended up to 21 days.	3.2 -4.8 ounces
Downy mildew	Begin at bud break and continue on a 7-10 day interval.	4.0 - 6.4 ounces

**Table 5. Sovran Application Rates and Timing on Pecan**

Disease	Timing and Application Interval	Sovran Rates Per Acre
Scab	<b>Prepollination:</b> Begin at bud break and continue on a 14 day interval through the end of pollination.	2.4 - 3.2 ounces
Scab	<b>Postpollination:</b> Apply on a 21 day interval until shell hardening.	3.2 - 4.8 ounces

## Crops

This product can be used on the following crops:

Apple  
 Crabapple  
 Grape  
 Loquat  
 Mayhaw/Hawthorn  
 Oriental Pear  
 Pear  
 Pecan  
 Quince

Look inside for complete **Restrictions and Limitations** and **Application Instructions**.

### Diseases listed in this label:

Common Name	Scientific Name
Apple powdery mildew	<i>Podosphaera leucotricha</i>
Apple scab	<i>Venturia inaequalis</i>
Brooks fruit spot	<i>Mycosphaerella pomi</i>
Cedar apple rust	<i>Gymnosporangium juniperi-virginianae</i>
Crabapple scab	<i>Venturia inaequalis</i>
Flyspeck	<i>Zygophiala jamaicensis</i>
Frogeye leafspot/black rot	<i>Botryosphaeria obtusa</i>
Grape black rot	<i>Guignardia bidwellii</i>
Grape downy mildew	<i>Plasmopara viticola</i>
Grape powdery mildew	<i>Uncinula necator</i>
Loquat scab	<i>Venturia inaequalis</i>
Mayhaw/hawthorn scab	<i>Venturia inaequalis</i>
Oriental pear scab	<i>Venturia pyrina</i>
Pear scab	<i>Venturia pyrina</i>
Pecan scab	<i>Cladosporium caryigenum</i>
Phomopsis cane and leaf spot	<i>Phomopsis viticola</i>
Pome fruit powdery mildew	<i>Podosphaera spp.</i>
Quince rust	<i>Gymnosporangium clavipes</i>
Quince scab	<i>Venturia pyrina</i>
Sooty blotch	<i>Gloeodes pomigena</i>
White rot (Bot rot)	<i>Botryosphaeria dothidea</i>

### 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.

Sovran is a registered trademark of BASF Corporation.

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