



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

February 14, 2020

Lei Han  
Regulatory Leader  
Dow AgroSciences LLC  
9330 Zionsville Road  
Indianapolis, IN 46268

Subject: PRIA Label Amendment – Reducing the PHI for Crop Subgroup 13-07F and  
Incorporating Registration Review Interim Decision Mitigation for Spinosad  
Product Name: Entrust SC  
EPA Registration Number: 62719-621  
Application Dates: April 23, 2019; February 14, 2020  
Decision Numbers: 550376; 559770

Dear Dr. Han:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Spinosad Final and/or Interim Decision, and has concluded that your submission is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the

website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact me by phone at (703) 308-2972, or via email at [walsh.michael@epa.gov](mailto:walsh.michael@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Walsh", written in a cursive style.

Michael Walsh  
Product Manager 11  
Invertebrate & Vertebrate Branch 2  
Registration Division  
Office of Pesticide Programs

Attachment

**[Sub Label A: Ag Uses]**

(Base label):

<b>SPINOSAD</b>	<b>GROUP</b>	<b>5</b>	<b>INSECTICIDE</b>
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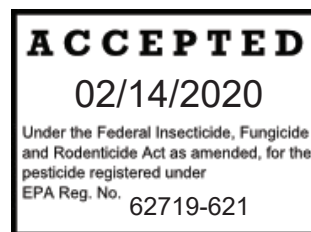
# Entrust® SC

## Naturalyte® Insect Control

**A Naturalyte® insect control product formulated for control of lepidopterous larvae (worms or caterpillars), leafminers, thrips, and red imported fire ants.**

Active Ingredient:

spinosad (a mixture of spinosyn A and spinosyn D) .....	22.5%
Other Ingredients .....	77.5%
Total .....	100.0%



Contains 2 lb of active ingredient per gallon.



Listed by the Organic Materials Review Institute (OMRI) for use in organic production.



**For Organic Production**

### Keep Out of Reach of Children

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### Precautionary Statements

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#### Personal Protective Equipment (PPE)

**Applicators and other handlers must wear:**

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

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

#### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

#### Environmental Hazards

This product is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Applying this product when rain is not predicted for the next 24 hours will help reduce potential risk to aquatic invertebrates by reducing pesticide runoff from the treatment area into water bodies. This product is highly toxic to bees and other pollinating insects exposed to direct treatment, or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and reduce risk to these

organisms. Apply this product only as specified on the label.

### **Agricultural Use Requirements**

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

#### **(Storage and Disposal for rigid containers 5 gal or less)**

##### **Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

#### **(Storage and Disposal for refillable rigid containers larger than 5 gal)**

##### **Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

#### **(Storage and Disposal for nonrefillable rigid containers larger than 5 gal)**

##### **Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**Refer to label booklet for Directions for Use.**

**Notice:** Read the entire label before using. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

**Shake Well Before Use -- Avoid Freezing**

EPA Reg. No. 62719-621

EPA Est. \_\_\_\_\_

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**Produced for  
Dow AgroSciences LLC  
9330 Zionsville Road  
Indianapolis, IN 46268**

**Net Contents \_\_\_\_\_**

(Cover, shipping container):

<b>SPINOSAD</b>	<b>GROUP</b>	<b>5</b>	<b>INSECTICIDE</b>
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# Entrust<sup>®</sup> SC

## Naturalyte<sup>®</sup> Insect Control

**A Naturalyte<sup>®</sup> insect control product formulated for control of lepidopterous larvae (worms or caterpillars), leafminers, thrips, and red imported fire ants.**

Active Ingredient:

spinosad (a mixture of spinosyn A and spinosyn D) .....22.5%  
 Other Ingredients .....77.5%  
 Total .....100.0%  
 Contains 2 lb of active ingredient per gallon.



Listed by the Organic Materials Review Institute (OMRI) for use in organic production.



**For Organic Production**

### Keep Out of Reach of Children

#### **Agricultural Use Requirements**

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

**Refer to inside of label booklet for additional precautionary information including Directions for Use.**

**Notice:** Read the entire label before using. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

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 Indianapolis, IN 46268**

**Net Contents** \_\_\_\_\_

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## Precautionary Statements

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### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

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

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

### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

### Environmental Hazards

This product is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Applying this product when rain is not predicted for the next 24 hours will help reduce potential risk to aquatic invertebrates by reducing pesticide runoff from the treatment area into water bodies. This product is highly toxic to bees and other pollinating insects exposed to direct treatment, or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms. Apply this product only as specified on the label.

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### Directions for Use

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It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

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 4 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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

**Non-Agricultural 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, forests, nurseries, or greenhouses.

Do not enter or allow others to enter the treated area until sprays have dried.

**Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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

**Nonrefillable containers 5 gallons or less:**

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**Refillable containers 5 gallons or larger:**

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

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## Product Information

Entrust® SC is a Naturalyte® insect control product for control of many foliage feeding pests including lepidoptera larvae (worms or caterpillars), Colorado potato beetles, leafminers and thrips infesting labeled crops. This product's active ingredient, spinosad, is biologically derived from the fermentation of *Saccharopolyspora spinosa*, a naturally occurring soil organism. Mix Entrust SC with water and apply as a foliar spray with aerial or ground equipment equipped for conventional insecticide spraying.

## Product Use Precautions

### Integrated Pest Management (IPM) Programs

Entrust SC is recommended for IPM programs in labeled crops. Apply Entrust SC when field scouting indicates target pest densities have reached the economic threshold, i.e., the point at which the insect population must be reduced to avoid economic losses beyond the cost of control. Other than reducing the target pest species as a food source, Entrust SC does not have a significant impact on certain parasitic insects or the natural predaceous arthropod complex in treated crops, including big-eyed bugs, ladybird beetles, flower bugs, lacewings, minute pirate bugs, damsel bugs, assassin bugs, predatory mites or spiders. The feeding activities of these beneficials will aid in natural control of other insects and reduce the likelihood of secondary pest outbreaks. If Entrust SC is tank mixed with any insecticide that reduces its selectivity in preserving beneficial predatory insects, the full benefit of Entrust SC in an IPM program may be reduced.

### Insecticide Resistance Management (IRM)

For resistance management, Entrust SC contains spinosad, a Group 5 insecticide. Any insect population may contain individuals naturally resistant to Entrust SC and other Group 5 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay development of insecticide resistance, the following practices are recommended:

- Carefully follow the specific label guidelines within the use directions sections of this label, especially in regard to IRM recommendations.
- Rotate the use of Entrust SC or other Group 5 insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendation provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one of both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Applications should be targeted against early insect developmental stages whenever possible.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the

- presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist, certified crop advisor, and/or manufacturer for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.
  - For further information or to report suspected resistance, contact your local Dow AgroSciences representative or by calling 800-258-3033.

## Mixing Directions

**Always shake well before use. Avoid freezing.**

### Application Rate Reference Table

Application Rate of Entrust SC (fl oz/acre)	Active Ingredient Equivalent (lb ai/acre)	Acres per Gallon of Entrust SC
1.5	0.023	85
3	0.047	43
4	0.062	32
6	0.094	21
8	0.125	16
10	0.156	13

**Entrust SC - Alone:** Fill the spray tank with water to about 1/2 of the required spray volume. Start agitation and add the required amount of Entrust SC. Continue agitation while mixing and filling the spray tank to the required spray volume. Maintain sufficient agitation during application to ensure uniformity of the spray mix. Do not allow water or spray mixture to back-siphon into the water source.

**Entrust SC - Tank Mix:** When tank mixing Entrust SC with other materials, a compatibility test (jar test) using relative proportions of the tank mix ingredients should be conducted prior to mixing ingredients in the spray tank. If foliar fertilizers are used, the jar test should be repeated with each batch of fertilizer utilizing the mixing water source. Do not use acidifying buffering agents in tank mixes with Entrust SC. Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank mixes. Sparger pipe agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture.

**Mixing Order for Tank Mixes:** Fill the spray tank with water to 1/4 to 1/3 of the required spray volume. Start agitation. Add different formulation types in the order indicated below, allowing time for complete dispersion and mixing after addition of each product. Allow extra dispersion and mixing time for dry flowable products.

Add different formulation types in the following order:

1. Water dispersible granules
2. Wettable powders
3. Entrust SC and other aqueous suspensions

Maintain agitation and fill spray tank to 3/4 of total spray volume. Then add:

4. Emulsifiable concentrates and water-based solutions
5. Spray adjuvants, surfactants and oils
6. Foliar fertilizers

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose.

**Premixing:** Dry and flowable formulations may be premixed with water (slurried) and added to the spray

tank through a 20 to 35 mesh screen. This procedure assures good initial dispersion of these formulation types.

**Spray Tank pH:** A spray tank pH between 6.0 and 9.0 is suggested to achieve maximum performance of Entrust SC. If the water source is outside of this pH range, or if tank mixing other pesticides, adjuvants, or foliar nutrients will cause the pH to fall outside of this range, consider adjusting the spray tank pH to be between 6.0 and 9.0 before adding Entrust SC. To do this, add all other tank mix components first, then check the spray tank pH, adjust if desired, and then add Entrust SC. If you require additional information on how to adjust spray tank pH, contact your Dow AgroSciences representative.

**Use of Adjuvants:** Adjuvants may be used to improve the control of leafminers and thrips in situations where achieving uniform plant coverage is difficult (such as closed crop canopy or dense foliage), or penetration into waxy leaf surfaces is required for pest control.

- Use only adjuvant products labeled for agricultural use and follow the manufacturer's label directions. A nominal concentration of 1 to 2 quarts per 100 gallons (0.25 to 0.5% v/v) is generally sufficient.
- For leafminers and thrips, emulsified crop oils or methylated crop oil plus organosilicone combination products are recommended.
- When using adjuvants, always conduct a jar test to determine the compatibility of the various components in the spray mixture. Crop safety should be evaluated in a small area of the crop whenever there is a significant change in spray mixture ingredients or source of water for the spray mixture.
- Do not use diesel fuel or pure mineral oil.
- Adjuvants may require organic certification; consult your organic certifier.
- When an adjuvant is to be used with this product, Dow AgroSciences recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

## Application Directions

Proper application techniques help ensure thorough spray coverage and correct dosage for optimum insect control. The following directions are provided for ground and aerial application of Entrust SC. Attention should be given to sprayer speed and calibration, wind speed, and foliar canopy to ensure adequate spray coverage.

### MANDATORY SPRAY DRIFT

#### Aerial Applications:

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

#### Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

**SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.  
BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

**IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if application are made improperly or under unfavorable environmental conditions.

**Controlling Droplet Size – Ground Boom**

- Volume – Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure – Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle – Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

**Controlling Droplet Size – Aircraft**

- Adjust Nozzles – Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented with the airflow in flight.

**BOOM HEIGHT – Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

**RELEASE HEIGHT – Aircraft**

Higher release heights increase the potential for spray drift. When applying aurally to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

**SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

**TEMPERATURE AND HUMIDITY**

When making application in hot and dry conditions, use larger droplets to reduce effects of evaporation.

**TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

**WIND**

Drift potential generally increased with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

- Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

**Orchard Spraying Application**

**Dilute Spray Application:** This application method is based upon the premise that all plant parts are thoroughly wetted, to the point of runoff, with spray solution. To determine the number of gallons of dilute spray required per acre, contact your state agricultural experiment station, certified pest control advisor,

or extension specialist for assistance.

**Concentrate Spray Application:** Apply Entrust SC in a manner that achieves uniform coverage of the entire crop canopy, but not past the point of runoff. For optimum control of target pests, complete and uniform spray coverage is essential. The spray volume required to achieve complete and uniform coverage will depend upon tree size and shape, leaf size, and density, and the application equipment used. To determine the required spray volume per acre, contact your state agricultural experiment station, certified pest control advisor, or extension specialist for assistance. Use of tree row volume is appropriate.

### **Chemigation Application**

Entrust SC may be applied through properly equipped chemigation systems for insect control in corn, cranberries, ornamentals and potatoes. Follow use directions for these crops in the Uses section of this label. Do not apply Entrust SC by chemigation to other labeled crops except as specified in Dow AgroSciences supplemental labeling or product bulletins.

**Directions for Sprinkler Chemigation:** Entrust SC may be applied through overhead sprinkler irrigation systems that will apply water uniformly, including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, micro sprinkler, or hand move. Do not apply this product through any other type of irrigation system. Sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units are not recommended.

For continuously moving systems, the mixture containing Entrust SC must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving. If continuously moving irrigation equipment is used, apply in no more than 0.25 inch of water. For irrigation systems that do not move during operation, apply in no more than 0.25 inch of irrigation immediately before the end of the irrigation cycle.

**Directions for Drip Chemigation:** Entrust SC may be applied through surface or buried drip systems or micro-sprinklers. Drip irrigation application procedures are designed to minimize soil adsorption and maximize the bio-availability of Entrust SC to target pests. For best results, make the application in conjunction with continuous drip irrigation or a normal drip irrigation cycle as described in the following steps:

1. **Pre-irrigation:** Moderate pre-irrigation is required. Soil in the vicinity of emitters should be at or above field capacity prior to injection of Entrust SC.
2. **Application Rate:** Apply an amount equivalent to the labeled broadcast application rate for the labeled crop.
3. **Injection:** Prior to injection, fully charge the drip irrigation system and make sure it is in operation. Injection of Entrust SC should occur without interruption following pre-irrigation. Mix Entrust SC in a dilution volume sufficient for a 1- to 4-hour injection period based upon the system calibration. Continuously agitate the mixture in the injection system supply tank throughout the injection cycle. Inject the diluted mixture of Entrust SC into the center of the irrigation water stream using a suitable dip tube to encourage thorough mixing and even distribution within the drip irrigation system. This is especially important if flow is slow or laminar.

**Chemigation Preparation:** The following use directions are to be followed when this product is applied through sprinkler irrigation systems. Thoroughly clean the chemigation system and tank of any fertilizer or chemical residues, and dispose of the residues according to state and federal laws. Flush the injection system with soap or a cleaning agent and water. Determine the amount of Entrust SC needed to cover the desired acreage. Mix according to instructions in the Mixing Directions section above. Continually agitate the mixture during mixing and application.

**Chemigation Equipment Calibration:** In order to calibrate the irrigation system and injector to apply the mixture containing Entrust SC, determine the following: 1) Calculate the number of acres irrigated by the system; 2) Calculate the amount of product required and premix; 3) Determine the irrigation rate and

determine the number of minutes for the system to cover the intended treatment area; 4) Calculate the total gallons of insecticide mixture needed to cover the desired acreage. Divide the total gallons of insecticide mixture needed by the number of minutes (minus time to flush out) to cover the treatment area. This value equals the gallons per minute output that the injector or eductor must deliver. Convert the gallons per minute to milliliters or ounces per minute if needed. Calibrate the injector system with the system in operation at the desired irrigation rate. It is suggested that the injection pump/system be calibrated at least twice before operation and that the system should be monitored during operation.

**Chemigation Operation:** Start the water pump and irrigation system and let the system achieve the desired pressure and speed before starting the injector. Check for leaks and uniformity and make repairs before any chemigation takes place. Start the injection system and calibrate according to manufacturer's specifications. This procedure is necessary to deliver the desired rate per acre in a uniform manner. When the application is finished, allow the entire irrigation and injection system to be thoroughly flushed clean before stopping the system.

**Chemigation Precautions:**

- Lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact state extension service specialists, equipment manufacturers or other experts.
- Do not connect an irrigation system used for pesticide application (including greenhouse systems) to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place with current certification. Specific local regulations may apply and must be followed.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall operate the system and make necessary adjustments should the need arise and continuously monitor the injection.
- Do not apply when wind speed favors drift beyond the area intended for treatment. End guns must be turned off during the application if they irrigate nontarget areas.
- Do not allow irrigation water to collect or run off and pose a hazard to livestock, wells, or adjoining crops.
- Do not enter treated area during the reentry interval specified in the Agricultural Use Requirements section of this label unless required PPE is worn.
- Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.
- Limit application of Entrust SC by drip irrigation systems to coarse textured soils with low organic matter content. Product effectiveness is reduced in soils with significant clay or organic matter.
- Do not tank mix Entrust SC with other pesticides or agricultural products when applying through drip irrigation systems.
- If Entrust SC is applied by drip irrigation, do not make broadcast foliar applications of Entrust SC during the crop cycle.

**Chemigation Specific Equipment Requirements:**

- The system must contain an air gap or approved backflow prevention device, or approved functional check valve, vacuum relief valve (including inspection port), and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. Refer to the American Society of Agricultural Engineer's Engineering Practice 409 for more information or state specific regulations.
- The pesticide injection line must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection chemical supply.
- A pesticide injection pump must also contain a functional interlock, e.g., mechanical or electrical to shut off chemical supply when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection when the water pressure drops too low or water flow stops.
- Use of public water supply requires approval of a backflow prevention device or air gap (preferred) by both state and local authorities.



- Systems must use a metering device, such as a positive displacement injection pump (or flow meter on eductor) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. An electric powered pump must meet Section 675 for "Electrically Driven or Controlled Irrigation Machines" NEC 70.
- To insure uniform mixing of the insecticide in the water line, inject the mixture in the center of the pipe diameter or just ahead of an elbow or tee in the irrigation line so that the turbulence created at those points will assist in mixing. The injection point must be located after all backflow prevention devices on the water line.
- The tank holding the insecticide mixture should be free of rust, fertilizer, sediment, and foreign material, and equipped with an in-line strainer situated between the tank and the injection point.

## Uses

### Asparagus

(Post Harvest Protection of Ferns Only)

#### Pest and Application Rates:

Pest	Entrust SC (fl oz/acre)
asparagus beetle	4 – 6

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of the labeled pest. Make applications **only to asparagus ferns**. Treat when pests appear, targeting eggs at hatch or small larvae. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control asparagus beetle in asparagus fern. Use a higher rate in the rate range for heavy infestations or advanced growth stages of the beetle. Heavy infestations may require repeat applications, but follow resistance management guidelines.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

#### Restrictions:

- **Preharvest Interval:** This use is only for asparagus ferns; do not apply within 60 days of spear harvest.
- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.
- Do not apply more than a total of 18 fl oz of Entrust SC (0.28 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than three applications per crop.
- Do not feed treated ferns to meat or dairy animals.

### Banana and Plantain

(For use in California, Florida, Hawaii and Texas only)

#### Pests and Application Rates:

Pests	Entrust SC	
	(fl oz/acre)	Dilute Spray (oz/100 gal)
banana rust thrips <sup>1</sup> caterpillars Hawaiian flower thrips <sup>1</sup>	8	3.3

<sup>1</sup>Control of thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions. Dilute sprays assume an average volume of 300 gallons per acre.

**Application Timing:** Apply no later than two weeks after bunch emergence and before flower petals senesce and again one to two days before bunch cover.

**Application Rate:** Apply as a directed fine spray toward bunches and spray to runoff.

**Spray Volume:** Dilute sprays are sprayed to the point of runoff. The application rate range for dilute sprays in the table is based upon a spray volume of 300 gallons per acre. Gallonage of dilute sprays will vary depending upon tree size, density of canopy, stage of seasonal growth, and spacing in the orchard.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 8 weeks of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than four applications per crop or apply more than six times per calendar year.

**Berry, Low Growing (Subgroup 13-07G)<sup>1</sup> except cranberry and lowbush berry**

<sup>1</sup>Bearberry; bilberry; blueberry; cloudberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these.

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
armyworms, including beet armyworms European grapevine moth leafrollers light brown apple moth thrips <sup>1</sup>	4 - 6

<sup>1</sup>For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications

**Application Timing:** Treat when pests appear, targeting eggs at hatch or small larvae. For **thrips**, a 3- to 4-day re-treatment schedule may be necessary if there is heavy pest pressure or if the pest population is increasing rapidly. For control of all other pests, a 5- to 7-day re-treatment schedule may be necessary if the crop is growing rapidly or if there is heavy pest pressure. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for larger larvae or moderate to severe pest infestations. Heavy infestations may require repeat applications but follow resistance management guidelines.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- Do not apply more than a total of 18 fl oz of Entrust SC (0.28 lb ai spinosad) per acre per calendar year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than three applications of a Group 5 insecticide per calendar year. See Resistance Management regarding number of applications for specific pests.

**Brassica (Cole) Leafy Vegetables (Crop Group 5)<sup>1</sup>**

<sup>1</sup>Brassica (cole) leafy vegetables (crop group 5) broccoli raab, Brussels sprouts, cabbage, cauliflower, cavalo, Chinese broccoli, Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), collards, kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens

**In the state of Georgia,** do not apply Entrust SC to: broccoli raab, Chinese cabbage (bok choy), collards, kale, mizuna, mustard greens, mustard spinach, rape greens

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
diamondback moth	1.5 – 4
cabbage looper imported cabbageworm	3 – 6
armyworms (including beet armyworm) leafminers <sup>1</sup> thrips <sup>1</sup>	4 – 10
flea beetle (suppression)	4 – 8
Cabbage root maggot (suppression)	5 – 10

<sup>1</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing (except cabbage root maggot):** Treat when pests appear, targeting eggs at hatch or small larvae. For all listed pests, heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate (except cabbage root maggot):** Apply Entrust SC as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for heavy infestations or advanced

growth stages of target pests.

**Resistance Management (except cabbage root maggot):** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. For **diamondback moth and thrips**, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications. Do not make more than three applications of Group 5 insecticides for thrips in a season. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area. Make treatment decisions for the entire farm and consider area wide programs if other growers are in close proximity. Do not make more than six applications of Entrust SC per calendar year for diamondback moth over an entire farm (an area of abutting or nearby fields).

**Specific Use Directions for cabbage root maggot:**

For cabbage root maggot suppression, apply Entrust SC at 5 to 10 fl oz/acre. For 20-inch plant row spacing, i.e. two plant lines per 40 inch bed, apply Entrust SC at 0.19 to 0.38 fl oz per 1000 linear feet of plant row. For 30-inch plant row spacing, apply Entrust SC at 0.29 to 0.57 fl oz per 100 linear feet of plant row. Use proportional amounts for other row spacings, but do not exceed 10 fl oz per acre of Entrust SC per application. Application volume of at least 100 gallons of water per acre is recommended. Performance may be reduced at lower application volumes. Optimum application timing is based on field scouting. Begin applications when adult activity is observed in or near the field.

For direct seeded crops, an application should be made when the crop has developed to about the second true leaf stage and a second application should be made two to three weeks later. Direct the spray in a narrow band at the base of the plants and on the adjacent soil. The recommended width of the spray band is four inches.

For transplanted crops, an application should be made immediately after transplanting and a second application should be made two to three weeks later. Application to a narrow band of soil within 24 hours before transplanting is permitted, provided that the transplants are placed accurately within the band of treated soil and there is minimal disturbance of the treated soil during transplanting.

A third application may be needed under high cabbage root maggot pest pressure conditions, such as when there is a large amount of debris from a previous brassica crop or when adjacent brassica fields are being harvested. For optimum control, direct the spray in a narrow band at the base of the plants.

Do not make more than three applications of Group 5 insecticides (spinetoram and spinosad) per crop cycle for cabbage root maggot suppression.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per calendar year.
- Do not apply to seedling cole crops grown for transplant within a greenhouse, shade house, or field plot.

**Bulb Vegetables (Crop Group 3-07A & 3-07B)<sup>1</sup>**

<sup>1</sup>Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, bulb; onion, Chinese, bulb; onion, Beltsville bunching; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
armyworms dipteran leafminers European corn borer fleabeetle loopers	3 – 6
thrips (suppression) <sup>1</sup>	4 – 8

<sup>1</sup>Control of thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants under Mixing Directions. If thorough coverage is desired, then high pressure (>70 psi) directed sprays with dual directed nozzles can assist leaf penetration of onion.

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small larvae. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for larger larvae or heavier infestations.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than five applications per calendar year.

**Bushberries (Subgroup 13-07B)<sup>1</sup>****(Insect Suppression)**

<sup>1</sup>Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; currant, black; currant, red; elderberry; European, barberry; gooseberry; cranberry, highbush; honeysuckle, edible; huckleberry; jostaberry; Juneberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these.

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
armyworms blueberry gall midge cherry fruitworm cranberry fruitworm currant fruitfly European grapevine moth fireworms leafrollers light brown apple moth	4 - 6

Pests	Entrust SC (fl oz/acre)
loopers spotted wing drosophila thrips <sup>1, 2</sup>	

<sup>1</sup>Control of thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

<sup>2</sup>See special use restrictions below for Fresno, Kern, and Tulare counties in California.

**Application Timing:** Treat when pests appear, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** The amount of Entrust SC applied per acre will depend upon plant size and volume of foliage present and pest pressure. Use a lower rate in the rate range for light infestations and/or small plants and a higher rate in the rate range for heavy infestations and/or larger plants.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Do not make more than three applications of Group 5 insecticides for thrips in a season. Only two applications are allowed per acre per year in Fresno, Kern, and Tulare counties in the state of California (See special use restrictions). Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 6 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per calendar year. See Resistance Management and Special Use Restrictions regarding number of applications for specific pests and specific locations.

**Special Use Restrictions for Fresno, Kern, and Tulare Counties in California**

- Thrips (suppression) rate: The Entrust SC use rate is 6 fl oz/acre.
- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 6 days apart.
- Do not apply more than a total of 12 fl oz of Entrust SC (0.188 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than two applications per calendar year.

**Caneberries (Subgroup 13-07A)<sup>1</sup>**

<sup>1</sup>Caneberries (subgroup 13A) blackberry, loganberry, red and black raspberry, cultivars and/or hybrids of these

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
armyworms European grapevine moth green fruitworm leafrollers light brown apple moth raspberry fruitworm sawfly	4 - 6

**Application Timing:** Treat when pests appear, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** The amount of Entrust SC applied per acre will depend upon plant size and volume of foliage present and pest pressure. Use a higher rate in the rate range for larger larvae or moderate to severe infestations and/or larger plant volume.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per calendar year.

## Coffee

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
lepidopterous larvae, such as: armyworms, banana moth, cutworms, loopers	4 – 6
coffee leafminer <sup>1</sup>	6 – 10

<sup>1</sup>Control may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** Treat when pests appear, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** The amount of Entrust SC applied per acre will depend upon plant size and volume of foliage present and pest pressure. Use a higher rate in the rate range for larger larvae or moderate to severe infestations and/or larger plant volume.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop
- **Maximum Number of Applications:** Do not make more than six applications per calendar year.

## Corn (Field, Sweet, Seed, Popcorn) and Teosinte

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
armyworms (including fall armyworm) European corn borer	1.5 - 6
beet armyworm corn earworm southwestern corn borer western bean cutworm	3 - 6

**Application Timing:** Scout for **European corn borer** and **armyworms** with enough regularity to monitor egg laying and egg hatch. Time applications of Entrust SC to coincide with peak egg hatch of each generation. Frequent treatments may be necessary when the crop is growing rapidly, during silking or under heavy pest pressure. For **corn earworm** control, a 1- to 2-day re-treatment schedule may be necessary at silking. For control of all other pests, a 5- to 7-day re-treatment schedule may be necessary if the crop is growing rapidly or if there is heavy pest pressure.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for heavy infestations or advanced growth stages of target pests.

**Spray Delivery:** For control of **first generation European corn borer** and **armyworms**, apply broadcast or as a directed spray into the leaf whorls. For control of **corn earworm**, apply broadcast or direct spray to ear zone. Use sufficient spray volume and nozzle pressure to ensure thorough wetting of the silks.

**Chemigation:** Entrust SC may be applied to corn by chemigation at labeled rates. Refer to the Chemigation Application section.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

**Sweet Corn, Popcorn, Seed Corn**

- **Preharvest Interval:** Do not apply within 28 days of fodder harvest, 1 day of grains harvest or 7 days of forage harvest.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per calendar year.



**Field Corn and Teosinte**

- **Preharvest Interval:** Do not apply within 28 days of grain or fodder harvest or 7 days of forage harvest.
- Do not apply more than a total of 12 fl oz of Entrust SC (0.188 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than three applications per calendar year.

**Cottonseed (Subgroup 20-C)<sup>1</sup>**

<sup>1</sup>Cottonseed; cultivars, varieties, and/or hybrids of these.

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
European corn borer cotton bollworm (pre-bloom) cotton leafperforator tobacco budworm	3 - 6
armyworms (including beet armyworm, fall armyworm) cotton bollworm (post-bloom) leafminers loopers (including soybean looper, cabbage looper) saltmarsh caterpillar thrips	4 – 6

**Application Timing:**

**Tobacco Budworm and/or Cotton Bollworm:** For the most effective control, scout fields twice per week and apply Entrust SC when the majority of the population is within the time of blackhead egg stage to 1/8-inch larval length. The following table illustrates the size of development of worms in relation to age and stage of development (instar) as a guide to timing treatments for optimum control:

<b>Age (Days)</b>	<b>Average Size (Inches)</b>	<b>Instar<sup>1</sup></b>
Hatch	1/16	1st
3	1/4	2nd
5	1/2	3rd
8	7/8	4th
10	1	5th

<sup>1</sup>**Note:** A scouting schedule of only once per week is risky since hatching worms will have grown to 3rd instar before the next scouting observation has determined the need to spray.

**Beet Armyworm:** Economic thresholds vary with local conditions and sampling methods. The following is an example of one such method: apply Entrust SC when field scouting reveals three or more occurrences of egg hatch or larval feeding per 100 feet of row.

**Loopers:** Economic thresholds vary with local conditions and sampling methods. The following is an example of one such method: apply Entrust SC when field scouting reveals four larvae per 1 foot of row or 25% defoliation.

**Application Rate:** Use a higher rate in the rate range and higher spray volume when one or more of the following is true: tobacco budworms or bollworms are more than 1/4 inch in length; target pest population

is 2X above state threshold level; or foliage canopy is tall/dense and worms are present in the lower part of the canopy. Heavy infestations may require repeat applications, but follow resistance management guidelines.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area. For **tobacco budworm** and/or **cotton bollworm** where early season conservation of beneficial insects is practical, use Entrust SC to control the 1st and 3rd generation of tobacco budworm and/or cotton bollworm. Where conservation of beneficial insects is not as critical (for example, fields have received non-selective early season treatments for boll weevil or lygus bugs), use Entrust SC to control either the 2nd or 3rd generation of tobacco budworm and/or cotton bollworm.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 28 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart for high rates of application.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per growing season for all methods of application, including foliar, soil and seed treatment uses.

**Cranberry**  
(Insect Suppression)

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
armyworms currant fruitfly European grapevine moth fireworms leafrollers light brown apple moth loopers sparganothis fruitworm thrips	4 – 10

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small larvae. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Application rate within the rate range will depend upon plant size and volume of foliage present and pest pressure. Use a higher rate in the rate range for larger larvae or moderate to severe infestations and/or larger plant volume.

**Chemigation:** Entrust SC may be applied to cranberries by chemigation at labeled rates. Refer to the Chemigation Application section.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 21 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per calendar year.

**Cucurbit Vegetables (Crop Group 9)<sup>1</sup>**

<sup>1</sup>Cucurbit vegetables (crop group 9) cucumber, edible gourds, muskmelons (cantaloupe, honeydew, etc.), pumpkin, summer squash, watermelon, winter squash

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
armyworms cabbage looper melon worm pickleworm rindworms	4 – 8
leafminers <sup>1</sup> thrips <sup>1</sup>	6 – 8

<sup>1</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** Treat when pests appear, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional area local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for heavy infestations or advanced growth stages of target pests.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 3 days of harvest for all crops except cucumbers. Do not apply within 1 day of harvest for cucumbers.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per season for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per crop.

**Dates****Pests and Application Rates:**

Pest	Entrust SC	
	(fl oz/acre)	Dilute Spray (fl oz/100 gal)
carob moth	8	2.7

**Application Timing:** Apply Entrust SC as a foliar spray when pests appear or in accordance with local conditions. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a concentrate or dilute spray using conventional, power operated spray equipment ensuring good coverage (see Orchard Spraying Application section under Application Directions).

**Spray Volume:** Dilute sprays are sprayed to the point of runoff. The application rate for dilute sprays in the table is based upon a spray volume of 300 gallons per acre. Gallonage of dilute sprays will vary depending upon tree size, density of canopy, stage of seasonal growth, and spacing in the orchard.

**Resistance Management:** Do not make more than three consecutive applications of Group 5 insecticides (spinetoram and spinosad) within a crop season. If additional treatments are required after three consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than three applications of Entrust SC for carob moth control.

**Fig**

**Pests and Application Rates:**

Pests	Entrust SC	
	(fl oz/acre)	Dilute Spray (fl oz/100 gal)
navel orangeworm	4 – 10	1 – 2.5

**Application Timing:** Apply Entrust SC as a foliar spray when pests appear or in accordance with local conditions. Apply as a concentrate or dilute spray using conventional, power operated spray equipment (see Orchard Spraying Application section under Application Directions). Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** The amount of Entrust SC applied per acre will depend upon tree size and volume of foliage present and pest pressure. Use a higher rate in the rate range for large trees or heavy infestations.

**Spray Volume:** Dilute sprays are sprayed to the point of runoff. The application rate range for dilute sprays in the table is based upon a spray volume of 400 gallons per acre. Gallonage of dilute sprays will vary depending upon tree size, density of canopy, stage of seasonal growth, and spacing in the orchard.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than four applications per calendar year.

**Fruit, Citrus (Crop Group 10-10)<sup>1</sup>**

<sup>1</sup>Australian desert lime; Australian finger lime; Australian round lime; Brown River finger lime; Calamondin; Citron; Citrus hybrids; Grapefruit; Japanese summer grapefruit; Kumquat; Lemon; Lime; Mediterranean mandarin; Mount White lime; New Guinea wild lime; Orange; Pummelo; Russell River lime; Satsuma mandarin; Sweet lime; Tachibana orange; Tahiti lime; Tangelo; Tangerine (Mandarin); Tangor; Trifoliate orange; Uniq fruit; Cultivars; varieties and/or hybrids of these

**Pests and Application Rates :**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
citrus leafminer citrus orangedog citrus thrips <sup>1</sup> European grapevine moth light brown apple moth	4 – 10

<sup>1</sup>Control of thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** Treat when pests appear or in accordance with local economic thresholds. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional area use recommendations for your area.

**Application Rate:** The amount of Entrust SC applied per acre will depend upon tree size and pest pressure. Use a lower rate in the rate range for light infestations and/or small trees and a higher rate in the rate range for heavy infestations and/or large trees.

**Resistance Management:** Citrus thrips are present most of the time on the crop during the growing season and have demonstrated a high potential to develop resistance to insect control products. Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. For **citrus thrips**, rotate to another class of effective products for the next two applications after using two applications of Entrust SC within a season. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 6 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than three applications per calendar year.
- Do not apply to citrus nurseries or citrus in greenhouses.

**Fruit, Pome (Crop Group 11-10)<sup>1</sup>**

<sup>1</sup>Apple; Azarole; Crabapple; Loquat; Mayhaw; Hook. & Arn.; Medlar; Pear; Pear, Asian; Quince; Quince, Chinese; Quince, Japanese; Tejocote; Cultivars, varieties and/or hybrids of these.

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
leafminers <sup>1</sup> spotted tentiform western tentiform	4 - 10
apple maggot (suppression) codling moth European grapevine moth leafrollers oblique-banded pandemis light brown apple moth oriental fruit moth thrips <sup>1</sup> tufted apple budmoth	6 - 10

<sup>1</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** Optimal timing for **leafminers** and **leafrollers** may vary between species and geographic location. For **leafminers**, monitor the moth flights and infestation densities of both the sap-feeding and tissue-feeding stage. For optimum control, treat at first appearance of leaf mining activity. For **leafrollers**, monitor the moth flights and the infestation densities of the larval stages. Repeat application as necessary to maintain control. Closely follow regional spray recommendations for **codling moth** and **oriental fruit moth** treatments based upon biofix dates and pheromone trap catches. **Codling moth** and **oriental fruit moth** larvae must be controlled before they penetrate the fruit. **Codling moth** and **oriental fruit moth** applications will provide control for no more than 10 days. Repeat application as necessary to maintain control. Consult with your Dow AgroSciences representative, state agricultural experiment station, certified pest control advisor or extension specialist for specific application timings in your area.

**Application Rate:** The amount of Entrust SC applied per acre will depend upon tree size and pest pressure. Use a lower rate in the rate range for light infestations and/or small trees and a higher rate in the rate range for heavy infestations and/or larger trees.

**Resistance Management:** Do not make more than three consecutive applications of Group 5 insecticides (spinetoram and spinosad) within a crop season. If additional treatments are required after three consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area. Do not treat consecutive generations of codling moth, oriental fruit moth, and leafrollers.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 10 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- Do not apply more than three sprays targeted at leafrollers per season.
- **Maximum Number of Applications:** Do not make more than four applications per calendar year.

**Fruit, Small, Vine Climbing, except fuzzy kiwifruit (Subgroup 13-07F)<sup>1</sup>**

<sup>1</sup>Amur river grape; gooseberry; grape; kiwifruit, hardy; Maypop; schisandra berry; cultivars varieties, and/or hybrids of these.

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
climbing cutworms European grapevine moth grape berry moth grape leafroller grape leaf skeletonizer light brown apple moth omnivoruous leafroller orange tortrix redbanded leafroller thrips	4 - 8

**Application Timing:** Treat when pests appear, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Carefully adjust equipment and spray volume to assure thorough uniform coverage of infested parts of the crop. Use a higher rate in the rate range for larger larvae or moderate to severe infestations and/or larger plant volume.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 3 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per season west of the Rocky Mountains, and no more than 23 fl oz of Entrust SC (0.36 lb ai spinosad) per acre per season east of the Rocky Mountains for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than five applications per calendar year.

**Fruit, Stone (Crop Group 12-12)<sup>1</sup>**

<sup>1</sup>Stone fruits (crop group 12-12) Apricot; Apricot, Japanese; Capulin; Cherry, black; Cherry, Nanking; Cherry, sweet; Cherry, tart; Jujube, Chinese; Nectarine; Peach; Plum; Plum, American; Plum, beach; Plum, Canada; Plum, cherry; Plum, Chickasaw; Plum, Damson; Plum, Japanese; Plum, Klamath; Plumcot; Plum, prune; Sloe; cultivars, varieties, and/or hybrids of these.

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC</b>	
	<b>(fl oz/acre)</b>	<b>Dilute Spray (fl oz/100 gal)</b>
cherry fruit fly, such as: black cherry eastern cherry western cherry fruit fly (suppression) European grapevine moth	4 - 8	1.3 – 2.7

Pests	Entrust SC	
	(fl oz/acre)	Dilute Spray (fl oz/100 gal)
green fruitworm lepidopteran leafminers <sup>1</sup> such as: spotted tentiform western tentiform leafrollers, such as: fruit tree oblique-banded pandemis redbanded variegated light brown apple moth oriental fruit moth peach twig borer thrips <sup>1</sup> western cherry fruit fly		

<sup>1</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** Peach twig borer applications can be made dormant, delayed dormant or as summer sprays. Optimal timing for **lepidopteran leafminers** and **leafrollers** may vary between species and geographic location. For **lepidopteran leafminers**, monitor the moth flights and the infestation densities of both the sap-feeding and tissue-feeding stages, but for optimal control, treat before significant tissue-feeding miners are observed. For **leafrollers**, monitor the moth flights and the infestation densities of the larval stages and re-treat as necessary to maintain control; thorough coverage is necessary for optimal control. For **cherry fruit fly, western cherry fruit fly** and **other related species**, maintain protective sprays at 7-days intervals while adults are present and fruit is susceptible to attack. For **oriental fruit moth**, no more than 10 days of residual control can be expected. If longer residual is required, make a second application of Entrust SC or other insecticide labeled for **oriental fruit moth**. For **thrips**, a 3- to 4-day re-treatment schedule may be necessary at flowering. After flowering, a 5- to 7-day re-treatment schedule may be followed. For **cherry fruit fly**, maintain protective sprays at 7-day intervals while adults are present and fruit is susceptible to attack. For all pests, consult with your Dow AgroSciences representative, state agricultural experiment station, certified pest control advisor or extension specialist for specific application timings in your area.

**Application Rate:** Use a higher rate in the rate range for large trees, heavy infestations, or advanced growth stages of target pest, especially if spray volume or coverage is marginal.

**Spray Volume:** Dilute sprays are sprayed to the point of runoff. The application rate range in the table is based upon a spray volume of 300 gallons per acre. Gallonage of dilute sprays will vary depending upon tree size, density of canopy, stage of seasonal growth, and spacing in the orchard.

**Resistance Management:** Do not make more than three consecutive applications of Group 5 insecticides (spinetoram and spinosad) within a crop season. If additional treatments are required after three consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area. Do not treat consecutive generations of oriental fruit moth and leafrollers.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days of harvest for apricots, within 7 days of harvest for cherries, and other stone fruit crops, or within 1 day of harvest for nectarines, peaches, plums and prunes.



- **Minimum Treatment Interval:** Unless otherwise stated, do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not apply more than three sprays targeted at leafrollers per season.

## Grass Crops, Grass Grown for Seed, Pastures and Rangeland

### Pests and Application Rates:

Pests	Entrust SC (fl oz/acre)
beet armyworm fall armyworm southern armyworm true armyworm	2 – 4

**Application Timing:** Scout at least weekly and consider the impact of both pests and beneficials. Treat when economic thresholds are exceeded, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations applicable to your area.

**Application Rate:** Use a higher rate in the rate range for heavy infestations or advanced growth stages of target pests.

**Resistance Management:** Do not apply more than three times in any 21-day period. Whenever Entrust SC is applied up to three times in succession, follow it by no use of Entrust SC for a 21-day period or rotation to another insecticide class.

### Restrictions:

- **Preharvest Interval:** Do not apply within 3 days of harvest for hay or fodder. There is no preharvest interval for forage.
- Do not apply more than a total of 12 fl oz of Entrust SC (0.188 lb ai spinosad) per acre per season for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per season.

## Herbs (Subgroup 19A)<sup>1</sup>

### (Insect Suppression)

<sup>1</sup>Herbs (subgroup 19A) angelica, balm, basil, borage, burnet, camomile, catnip, chervil (dried), chive, chive (Chinese), culantro (leaf), clary, coriander (leaf), costmary, curry (leaf), dillweed, horehound, hyssop, lavender, lemongrass, lovage (leaf), marigold, marjoram, nasturtium, parsley (dried) pennyroyal, rosemary, rue, sage, savory (summer and winter), sweet bay, tansy, tarragon, thyme, wintergreen, woodruff, wormwood

### Pests and Application Rates:

Pests	Entrust SC (fl oz/acre)
armyworms loopers thrips (suppression)	4 – 6

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small

larvae. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for larger larvae or high infestations and/or larger plant volume. Heavy infestations may require repeat applications, but follow resistance management guidelines.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- Do not apply more than a total of 30 fl oz of Entrust SC (0.47 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than five applications per calendar year or more than three applications per crop.

## Hops, Dried Cones

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
armyworms loopers thrips (suppression)	4 – 6

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small larvae. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for larger larvae or high infestations and/or larger plant volume. Heavy infestations may require repeat applications, but follow resistance management guidelines.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- Do not apply more than a total of 30 fl oz of Entrust SC (0.47 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than five applications per calendar year.

**Leafy Vegetables (Except *Brassica*) (Crop Group 4)<sup>1</sup>, Leaves of Root and Tuber Vegetables (Crop Group 2)<sup>2</sup> and Leaves of Legume Vegetables (Crop Group 7A)<sup>3</sup>, Turnip Greens, and Watercress**

<sup>1</sup>Leafy vegetables (except *Brassica*) (crop group 4) amaranth, arugula, cardoon, celery, celtuce, chervil, Chinese celery, Chinese spinach, corn salad, dandelion, dock, edible-leaved chrysanthemum, endive (escarole), Florence fennel, garden cress, garden purslane, garland chrysanthemum, head lettuce, leaf lettuce, leafy amaranth, New Zealand spinach, orach, parsley, radicchio (red chicory), rhubarb, spinach, Swiss chard, tampala, upland cress, vine spinach, winter cress, winter purslane, yellow rocket

<sup>2</sup>Leaves of root and tuber vegetables (crop group 2) bitter cassava, black salsify, carrot, celeriac (celery root), chicory, dasheen (taro), edible burdock, garden beet, oriental radish (daikon), parsnip, radish, rutabaga, sugar beet, sweet cassava, sweet potato, tanager, true yam, turnip, turnip-rooted chervil

<sup>3</sup>Leaves of legume vegetables (crop group 7A) any cultivar of bean and field pea (except soybean)

#### Pests and Application Rates:

Pests	Entrust SC (fl oz/acre)
diamondback moth	1.5 - 3
cabbage looper imported cabbage worm	3 - 6
armyworms (including beet armyworm)	4 - 8
leafminers <sup>1</sup> thrips <sup>1</sup>	6 - 10

<sup>1</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** Scout at least weekly and consider the impact of both pests and beneficials. Treat when economic thresholds are exceeded, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for heavy infestations or advanced growth stages of target pests.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

#### Restrictions:

- **Preharvest Intervals:**

**Leafy vegetables (including watercress):** Do not apply within 1 day of harvest.

**Leaves of root, tuber and legume vegetables:** Do not apply within 3 days of harvest.

- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.

- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.

- **Maximum Number of Applications:** Do not make more than six applications per year.

- Do not apply to seedling leafy crops grown for transplant within a greenhouse or shade house.

#### Legume Vegetables (Succulent and Dried Beans and Peas) (Crop Group 6)<sup>1</sup>

<sup>1</sup>Legume vegetables (succulent and dried beans and peas) (crop group 6) adzuki bean, blackeyed pea, chickpea, cowpea, crowder pea, edible-pod pea, English pea, fava bean, field bean, field pea, garbanzo bean, garden pea, green pea, kidney bean, lentil, lima bean, lupins, mungbean, navy bean, pigeon pea, pinto bean, runner bean, snap bean, snow pea, sugar snap pea, tepary bean, wax bean, yardlong bean

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
European corn borer (eggs and larvae)	3 - 6
armyworms corn earworm loopers	4 - 6
leafminers <sup>1</sup> thrips <sup>1</sup>	4.5 - 6

<sup>1</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Heavy infestations may require repeat applications, but follow resistance management guidelines. Treat when pests appear, targeting eggs at hatch or small larvae. For **European corn borer**, initiate when moth flights first appear and use the lower rate of the rate range to control eggs and larvae every three days before they enter the plant. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for heavy infestations or advanced growth stages of target pests.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- **Maximum Number of Applications:** Do not make more than six applications per crop.

**Succulent Beans and Peas:**

- **Preharvest Interval:** Do not apply within 3 days of harvest.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per season for all methods of application, including foliar, soil and seed treatment uses.

**Dried Beans and Peas:**

- **Preharvest Interval:** Do not apply within 28 days of harvest.
- Do not apply more than a total of 12 fl oz of Entrust SC (0.188 lb ai spinosad) per acre per season for all methods of application, including foliar, soil and seed treatment uses.
- Do not feed forage or hay to meat or dairy animals.

**Nongrass Animal Feeds (Forage, Fodder, Straw, and Hay) (Crop Group 18)<sup>1</sup>**

<sup>1</sup>Nongrass animal feeds (forage, fodder, straw, and hay) (crop group 18) alfalfa, clover, crown vetch, kudzu, lespedeza, lupin, milk vetch, sainfoin, trefoil, vetch, velvet bean

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
alfalfa weevil (suppression) beet armyworm fall armyworm southern armyworm true armyworm	2 – 4

**Application Timing:** Scout at least weekly and consider the impact of both pests and beneficials. Treat when economic thresholds are exceeded, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations applicable to your area.

**Application Rate:** Use a higher rate in the rate range for heavy infestations or advanced growth stages of target pests.

**Resistance Management:** Do not apply more than three times in any 21-day period. Whenever Entrust SC is applied up to three times in succession, this should be followed by no use of Entrust SC for a 21-day period or rotation to another insecticide class.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 3 days of harvest for hay or fodder. There is no preharvest interval for forage.
- Do not apply more than a total of 12 fl oz of Entrust SC (0.188 lb ai spinosad) per acre per season for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per season.
- Do not allow cattle to graze from treated area until spray has dried.

**Ornamentals (Herbaceous and Woody) Growing Outdoors, in Nurseries (Including Conifer Seed Orchards), or in Greenhouses**

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC fl oz/gallon</b>	<b>Entrust SC fl oz/100 gallons</b>	<b>Entrust SC fl oz/acre</b>
chrysomelid leaf feeding beetles, such as: elm leaf (1) viburnum leaf (larvae) willow leaf (1) European grapevine moth lepidopterous larvae, such as: azalea caterpillar bagworm beet armyworm cabbage looper California oakworm cankerworm diamondback moth E. tent caterpillar fall webworm Florida fern caterpillar geranium budworm gypsy moth light brown apple moth oblique banded leafroller oleander caterpillar orange striped oakworm spruce budworm tussock moths (hickory, whitemarked) W. tent caterpillar winter moth yellownecked caterpillar (2) sawfly larvae, such as: European pine pear redheaded pine shore fly thrips (exposed) in greenhouse settings, such as: (3) Cuban laurel western flower	0.03 (0.9 mL)	3 (88.7 mL)	12 (354.9 mL)
dipterous gall midges pinyon spindlegall thrips (exposed) in outdoor settings, such as: Cuban laurel western flower (3)	0.05 (1.5 mL)	5.5 (162.7 mL)	22 (650.6 mL)
dipterous leafminers, such as: serpentine (4) emerald ash borer (5) lewis mites Nantucket pine tip moth spider mites, such as: spruce two-spotted (6) (See 6 below for mite suppression/control expectations)	0.1 (3 mL)	10 (296 mL)	29 (858 mL)

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

**Pest-Specific Use Directions (for pest control in the greenhouse or nursery, also refer to Greenhouse Pest Resistance Avoidance Recommendations):**

1. **Elm leaf beetle** and **willow leaf beetle** (adults and larvae): For effective control, apply in the spring or early summer when feeding is observed.
2. For effective control of the following lepidopterous larvae:
  - **Bagworms:** Apply when bags are small and larvae are actively feeding.
  - **Beet armyworms:** Apply when larvae are small.
  - **Tent caterpillars** and **fall webworms:** Apply early when webs are first observed and direct the spray into the web and surrounding foliage within at least 3 feet of the nest.
  - **Gypsy moth larvae:** Apply when larvae are small and all eggs have hatched.
  - **Spruce budworms:** Apply when larvae are exposed and actively feeding.
3. **Exposed thrips (Cuban laurel and western flower):** For effective control, apply early at first signs of infestation and repeat until infestation is controlled. For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications.
4. **Serpentine leafminers:** For effective control, apply early when stippling or mining of leaves is first observed and repeat until infestation is controlled. Three sequential applications at 7-day intervals can maximize control. Addition of a nonionic spray adjuvant such as DYNE-AMIC spray adjuvant at 0.1% v/v in greenhouse settings has been shown to enhance control of leafminers (follow surfactant manufacturer's label directions).
5. Apply to foliage and bark of tree when adult **emerald ash borer** are first observed emerging from the bark or when adult emerald ash borer are first noticed feeding on the leaves of the tree. Reapply every 7 to 10 days until no additional adult emerald ash borer activity is observed. Application to trees already heavily infested may not prevent the eventual loss of the tree due to existing pest damage and tree stress.
6. **Spruce spider mites** and **two-spotted spider mites:** Apply when spider mites are first observed prior to webbing and before mite populations have become severe. Reapply after 7 to 10 days (3 to 5 days in greenhouses and structures that can be altered to be closed or open) to contact newly hatched nymphs and repeat until infestation is managed. **Uniform coverage of both upper and lower leaf surfaces is critical.**

**Note:** Control of spider mites with Entrust SC in certain research trials has been variable. The variability between these evaluations is not well understood but may be due to late application timing when mite populations and webbing were severe, poor spray coverage of both the upper and lower leaf surfaces, or interaction of the leaf surface with residues of Entrust SC. Addition of a nonionic spray adjuvant such as Activate Plus, DYNE-AMIC, Joint Venture, Phase, and Thoroughbred at 0.1% v/v in greenhouse settings and at label rates in outdoor settings has been shown to improve spray coverage and enhance control of spider mites (follow surfactant manufacturer's label directions).

**Application Timing:** Dilute Entrust SC in water and apply using suitable hand or power-operated application equipment (such as portable pump-up, backpack, hydraulic, boom) in a manner to provide complete and uniform plant coverage. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area. Use of Entrust SC in lath and shadehouses is permitted.

**Application Rate:** Entrust SC may be used up to a maximum labeled rate of 0.1 fl oz per gallon (10 fl oz per 100 gallons, 29 fl oz per acre) per application on trees and ornamentals as a general treatment regardless of the target insect pest. Use pest specific rates when a single insect pest or group of insect pests within a rate category is the only intended target.

**Spray Volume:** Attempt to penetrate dense foliage, but avoid over-spraying to the point of excessive runoff. Uniform coverage of both upper and lower leaf surfaces is critical for effective insect control.

**Chemigation:** Entrust SC may be applied to ornamentals by chemigation at labeled rates. Refer to the Chemigation Application section.

**Phytotoxicity:** Entrust SC has been tested alone on a wide variety of herbaceous and woody ornamental plants without phytotoxic symptoms. However, because it is not possible to test all possible tank mix combinations (including adjuvants) and ornamental plant species, varieties, and cultivars, and because environmental factors and varietal and plant stage of growth may affect phytotoxic expression, it is recommended that a small group of test plants be treated at the anticipated use rate of Entrust SC either alone or in tank mix combinations and observed for at least 5 to 7 days to determine phytotoxicity before treating large numbers of those plants. **Note:** The professional user assumes responsibility for determining if Entrust SC is safe to treated plants when applied either alone or in tank mixtures under commercial growing conditions. Research has demonstrated that some spotting of saintpaulia (African violet) flowers may occur.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Minimum Treatment Interval:** Except for greenhouses and structures that can be altered to be closed or open, do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.

**Nut, Tree (Crop Group 14-12)<sup>1</sup>**

<sup>1</sup>Tree nuts (crop group 14) African nut-tree; Almond; Beechnut; Brazil nut; Brazilian pine; Bunya; Bur oak; Butternut; Cajou nut; Candlernut; Cashew; Chestnut; Chinquapin; Coconut; Coquito nut; Dika nut; Ginkgo; Guiana chestnut; Hazelnut (Filbert); Heartnut; Hickory nut; Japanese horse-chestnut; Macadamia nut; Mongongo nut; Monkey-pot; Monkey puzzle nut; Okari nut; Pachira nut; Peach palm nut; Pecan; Pequi; Pili nut; Pine nut; Pistachio; Tropical almond; Walnut, black; Walnut, English; Yellowhorn; Cultivars, varieties, and/or hybrids of these

**Pests and Application Rates:**

Pests	Entrust SC	
	(fl oz/acre)	Dilute Spray (fl oz/100 gal)
codling moth	4 - 10	1 - 2.5
European grapevine moth		
fall webworm		
filbert worm		
hickory shuckworm		
light brown apple moth		
navel orange worm		
oblique banded leafroller		
peach twig borer		
pecan nut casebearer		
redhumped caterpillar		
walnut caterpillar		
walnut husk fly		

**Application Timing:** Apply Entrust SC as either a dormant or a foliar spray when pests appear or in accordance with local conditions. Apply as a concentrate or dilute spray using conventional, power



operated spray equipment (see Orchard Spraying Application section under Application Directions). Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Use of Crop Oils:** Crop oils labeled for agricultural use may be added to the dormant spray solution for suppression of overwintering mites and scale insects. Consult specific oil labels and University of California recommendations for precautions and restrictions regarding the use of oils in nut and fruit trees.

**Application Rate:** The amount of Entrust SC applied per acre will depend upon tree size and volume of foliage present and pest pressure. Use a higher rate in the rate range for large trees or heavy infestations.

**Spray Volume:** Dilute sprays are sprayed to the point of runoff. The application rate range in the table is based upon a spray volume of 400 gallons per acre. Gallonage of dilute sprays will vary depending upon tree size, density of canopy, stage of seasonal growth, and spacing in the orchard.

**Resistance Management:** Do not make more than three consecutive applications of Group 5 insecticides (spinetoram and spinosad) within a crop season. If additional treatments are required after three consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest of all tree nuts and pistachios.
- **Minimum Treatment Interval:** Do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not apply more than three sprays targeted at leafrollers per season.

**Peanut**

(Not for Use in California)

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
armyworms, including: beet armyworm fall armyworm true armyworm yellowstriped armyworm cabbage looper corn earworm European corn borer green cloverleaf worm red-necked peanut worm saltmarsh caterpillar soybean looper tobacco budworm velvetbean caterpillar	3 - 6

**Application Timing:** Regularly monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small larvae. Consult your Dow AgroSciences representative,

extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Use a higher rate in the rate range for larger larvae or moderate to severe infestations and/or larger plant volume.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 3 days of nut harvest or within 14 days of forage.
- **Minimum Treatment Interval:** Do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than three applications per calendar year.
- **Grazing Restrictions:** Do not allow grazing of crop residue or harvest of crop residue for hay until 14 days after the last application.

## Peppermint and Spearmint

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
armyworms cutworms dipteran leafminers <sup>1</sup> loopers thrips (suppression) <sup>1</sup>	4 – 10

<sup>1</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions. Control in peppermint and spearmint has been variable; high pressure directed sprays can assist leaf penetration of peppermint and spearmint.

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small larvae. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Heavy infestations may require repeat applications, but follow resistance management guidelines. Use a higher rate in the rate range for heavier infestations or advanced growth stages of target pests.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.

- **Maximum Number of Applications:** Do not make more than four applications per calendar year or more than three applications per crop.

## Pineapple

(Insect Suppression)

(For use in Hawaii only)

### Pests and Application Rates:

Pests	Entrust SC (fl oz/acre)
lepidopteran larvae such as: armyworms banana moth fruit borer caterpillar ( <i>Thecia basilides</i> ) <i>Gummosos-Batrachedra commosae</i> pineapple caterpillar pink cornworm sugarcane bud moth	4 - 6

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small larvae. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Heavy infestations may require repeat applications, but follow resistance management guidelines.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

### Restrictions:

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per calendar year.

## Pomegranate

### Pests and Application Rates:

Pests	Entrust SC	
	(fl oz/acre)	Dilute Spray (fl oz/100 gal)
carob moth filbert moth leafrollers, such as: oblique-banded omnivorous fruit tree	4 – 8	1.3 – 2.7

Pests	Entrust SC	
	(fl oz/acre)	Dilute Spray (fl oz/100 gal)
pandemis redbanded variegated light brown apple moth navel orangeworm oriental fruit moth peach twig borer thrips <sup>1</sup> western cherry fruit fly		

<sup>1</sup>Control of thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing.

**Application Timing:** Optimal timing for **leafrollers** may vary between species and geographic location. Monitor the moth flights and the infestation densities of the larval stages. Thorough coverage is necessary for optimal control. Consult with your Dow AgroSciences representative, state agricultural experiment station, certified pest control advisor or extension specialist for specific application timings in your area.

**Application Rate:** Use a higher rate in the rate range for large trees, heavy infestations, or advanced growth stages of target pest, especially if spray volume or coverage is marginal.

**Spray Volume:** Dilute sprays are sprayed to the point of runoff. The application rate range in the table is based upon a spray volume of 300 gallons per acre. Gallonage of dilute sprays will vary depending upon tree size, density of canopy, stage of seasonal growth, and spacing in the orchard.

**Resistance Management:** Do not make more than three consecutive applications of Group 5 insecticides (spinetoram and spinosad) within a crop season. If additional treatments are required after three consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area. Avoid treating consecutive generations of oriental fruit moth and leafrollers.

#### Restrictions:

- **Preharvest Interval:** Do not apply within 7 days of harvest.
- **Minimum Treatment Interval:** A 10- to 14-day re-treatment schedule may be necessary to maintain control if the crop is growing rapidly or if there is heavy pest pressure.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not apply more than three sprays targeted at leafrollers per season.

## Quinoa

### Pests and Application Rates:

#### Insect Suppression Only

Pests	Entrust SC (fl oz/acre)
armyworms <sup>1</sup> loopers leafminers <sup>2</sup>	3 - 6
thrips <sup>2</sup>	6

Pests	Entrust SC (fl oz/acre)
cutworms	

<sup>1</sup>With the exception of yellowstriped armyworm and western yellowstriped armyworm.

<sup>2</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants under Mixing Directions.

**Application Timing:** Scout weekly throughout the season to monitor and track populations of **leafminers** and **thrips** to determine when economic thresholds are exceeded. Scout weekly throughout the season to monitor and track pest and beneficial populations. For tracking **lepidopterous larvae**, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when economic thresholds are exceeded, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for heavy infestations, advanced growth stages of target pests, or difficult spray coverage situations.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications. Do not make more than three applications of Group 5 insecticides for thrips in a season. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 21 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.
- Do not apply more than a total of 19 fl oz of Entrust SC (0.30 lb ai spinosad) per acre per year.
- **Maximum Number of Applications:** Do not make more than three applications per calendar year.

**Root and Tuber Vegetables (Crop Group 1)<sup>1</sup> and Artichoke**

<sup>1</sup>Root and tuber vegetables (crop group 1) arracacha, arrowroot, bitter cassava, black salsify, carrot, celeriac, chayote root, chicory, Chinese artichoke, chufa, dasheen, edible burdock, edible canna, garden beet, ginger, ginseng, horseradish, Jerusalem artichoke, leren, oriental radish, parsnip, potato, radish, rutabaga, salsify, skirret, Spanish salsify, sugar beet, sweet cassava, sweet potato, tanier, true yam, turmeric, turnip, turnip-rooted chervil, turnip-rooted parsley, yam bean

**Pests and Application Rates:**

Crops	Pests	Entrust SC (fl oz/acre)
black salsify carrot chicory ginseng horseradish parsnip salsify skirret Spanish salsify turnip-rooted chervil turnip-rooted parsley	armyworms dipteran leafminers European corn borer fleabeetle loopers thrips <sup>1</sup>	3 - 6
celeriac edible burdock oriental radish radish rutabaga turnip		
arracacha arrowroot artichoke bitter cassava chayote root Chinese artichoke chufa dasheen edible canna garden beet ginger Jerusalem artichoke leren potato sugar beet sweet cassava sweet potato tanier true yam turmeric, yam bean	Colorado potato beetle European corn borer	3 - 10
	armyworms artichoke plume moth dipteran leafminers ( <i>Liriomyza</i> ) loopers thrips <sup>1</sup>	4.5 - 10

<sup>1</sup>Control of thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small larvae. When plants are growing rapidly, repeat applications may be necessary to protect new foliage. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for larger larvae or heavier infestations. Heavy infestations may require repeat applications but follow resistance management guidelines.

**Chemigation:** Entrust SC may be applied to potatoes by chemigation at labeled rates. Refer to the Chemigation Application section.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area. Do not apply Entrust SC to consecutive generations of **Colorado potato beetle** and do not make more than two applications per single generation of Colorado potato beetle.

**Restrictions:**

- **Garden beet and sugar beet**

**Preharvest Interval:** Do not apply within 3 days of harvest.

**Minimum Treatment Interval:** Do not make applications less than 7 days apart.

Do not apply more than a total of 21 fl oz of Entrust SC (0.33 lb ai spinosad) per crop for all methods of application, including foliar, soil and seed treatment uses.

**Maximum Number of Applications:** Do not make more than four applications per crop.

- **Black salsify, carrot, chicory, ginseng, horseradish, parsnip, salsify, skirret, Spanish salsify, turnip-rooted chervil, turnip-rooted parsley:**

**Preharvest Interval:** Do not apply within 3 days of harvest.

**Minimum Treatment Interval:** Do not make applications less than 5 days apart.

Do not apply more than a total of 21 fl oz of Entrust SC (0.33 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.

**Maximum Number of Applications:** Do not make more than four applications per calendar year.

- **Arracacha, arrowroot, bitter cassava, chayote root, Chinese artichoke, chufa, dasheen, edible canna, ginger, Jerusalem artichoke, leren, potato, sweet cassava, sweet potato, tanier, true yam, turmeric, yam bean**

**Preharvest Interval:** Do not apply within 7 days of harvest.

**Minimum Treatment Interval:** Do not make applications less than 7 days apart.

Do not apply more than a total of 21 fl oz of Entrust SC (0.33 lb ai spinosad) per crop for all methods of application, including foliar, soil and seed treatment uses.

**Maximum Number of Applications:** Do not make more than four applications per crop.

- **Artichoke**

**Preharvest Interval:** Do not apply within 2 days of harvest.

**Minimum Treatment Interval:** Do not make applications less than 7 days apart.

Do not apply more than a total of 21 fl oz of Entrust SC (0.33 lb ai spinosad) per crop for all methods of application, including foliar, soil and seed treatment uses.

**Maximum Number of Applications:** Do not make more than four applications per crop.

- **Celeriac, edible burdock, Oriental radish, radish, rutabaga, turnip and other root vegetables not specifically listed:**

**Preharvest Interval:** Do not apply within 3 days of harvest.

**Minimum Treatment Interval:** Do not make applications less than 5 days apart.

Do not apply more than a total of 18 fl oz of Entrust SC (0.28 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.

**Maximum Number of Applications:** Do not make more than three applications per calendar year.

### Small Cereal Grains and Grain Amaranth

Small cereal grains barley, buckwheat, milo, oats, pearl millet, proso millet, rye, sorghum, triticale, wheat

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
cereal leaf beetle	2 - 6

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
armyworms corn earworm (headworm) grasshoppers (suppression) southwestern corn borer	3 - 6

**Application Timing:** Scout for **armyworms** and **grasshoppers** with enough regularity to monitor egg laying and egg hatch and treat when thresholds are reached. Time applications of Entrust SC to coincide with peak egg hatch and/or small larval stage of growth of each generation.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for heavy infestations, advanced growth stages of target pests, or difficult spray coverage situations.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

#### **Restrictions:**

- **Preharvest Interval:** Do not apply within 21 days of grain or straw harvest or within 3 days of forage, fodder or hay harvest.
- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.
- Do not apply more than a total of 19 fl oz of Entrust SC (0.30 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than three applications per calendar year.
- Do not allow cattle to graze treated area until spray has dried.

## **Soybean**

#### **Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
green clover worm soybean looper true armyworm velvet bean caterpillar	2.25 - 3
armyworms, such as: beet armyworm fall armyworm yellowstriped armyworm corn earworm (podworm) saltmarsh caterpillar	3 - 4

**Application Timing:** Treat when field counts or crop injury indicates damaging pest populations are present or developing. Time applications to treat small larvae and use sufficient spray volume to ensure good coverage.

**Application Rate:** Use a higher rate in rate range for heavy infestations and/or difficult spray coverage situations.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of



Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 28 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.
- Do not apply more than a total of 10 fl oz of Entrust SC (0.186 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than four applications per calendar year.
- Do not feed treated forage or hay to meat or dairy animals.

**Spices (Except Black Pepper) (Subgroup 19B)<sup>1</sup>**

<sup>1</sup>Spices (except black pepper) (subgroup 19B) allspice, anise (seed), annatto (seed), black caraway, caper (buds), caraway, cardamom, cassia (buds), celery (seed), cinnamon, clove (buds), common fennel, coriander (seed), culantro (seed), cumin, dill (seed), Florence fennel (seed), fenugreek, grains of paradise, juniper (berry), lovage (seed), mace, mustard (seed), nutmeg, poppy (seed), saffron, star anise, vanilla, white pepper

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
lepidopteran larvae	4 - 6
flea beetles dipteran leafminers <sup>1</sup> thrips <sup>1</sup>	6 - 10

<sup>1</sup>Suppression of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants under Mixing Directions.

**Application Timing:** For determining when to treat, scout with enough regularity to monitor the population size of each of the labeled pests. Treat when pests appear, targeting eggs at hatch or small larvae. Consult your Dow AgroSciences representative, extension specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for larger larvae or heavy infestations. Heavy infestations may require repeat applications, but follow resistance management guidelines.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 14 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 10 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai of spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than five applications per calendar year.

**Tree Farms or Plantations**

**Conifers, including Christmas trees, and deciduous trees**

**Pests and Application Rates:**

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
European grapevine moth lepidopterous larvae, such as: bagworm fall webworm gypsy moth hemlock looper jackpine budworm pine tip moth redhumped caterpillar spruce budworm tent caterpillar tussock moths light brown apple moth sawfly larvae, such as: European pine pear redheaded pine	2 - 8

**Application Timing:** Time applications to reach larvae when small or just hatching. Repeat application as necessary to maintain control, but follow resistance management guidelines. Consult with your Dow AgroSciences representative, state agricultural experiment station, certified pest control advisor or extension specialist for information on application timing for specific pests in your area.

**Application Rates:** The rate of Entrust SC applied per acre will depend upon tree size and severity of infestation. Use a higher rate in the rate range for large trees or heavy infestations. Apply in sufficient volume to ensure thorough coverage.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per year for all methods of application, including foliar, soil and seed treatment uses.

**Tropical Tree Fruits<sup>1</sup>****(Insect Suppression)**

<sup>1</sup>Tropical tree fruits acerola, atemoya, avocado, biriba, black sapote, canistel, cherimoya, custard apple, feijoa, guava, ilama, jaboticaba, longan, lychee, mamey sapote, mango, papaya, passionfruit, pulasan, rambutan, sapodilla, soursop, Spanish lime, star apple, starfruit, sugar apple, ti leaves, wax jambu (wax apple), white sapote

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
European grapevine moth katydids lepidopterous larvae avocado leafroller citrus peelminer cutworms fruit tree leafroller naval orange worm orange tortrix western tussock moth light brown apple moth thrips <sup>1</sup>	4 - 10

<sup>1</sup>Control of thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

**Application Timing:** Treat when pests appear or in accordance with local economic thresholds. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** The amount of Entrust SC applied per acre will depend upon tree size and pest pressure. Use a lower rate in the rate range for light infestations and/or small trees and a higher rate in the rate range for heavy infestations and/or large trees.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Intervals:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 7 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** In order to prevent or delay resistance development in thrips, do not apply Entrust SC more than two times per year.
- For resistance management purposes, do not apply to tropical tree fruits grown in nurseries or in greenhouses.

**Vegetable, Fruiting (Crop Group 8-10))<sup>1</sup> and Okra**

<sup>1</sup>African eggplant; Bush tomato; Cocona; Currant tomato; Eggplant; Garden huckleberry; Goji berry; Groundcherry; Martynia; Naranjilla; Okra; Pea eggplant; Pepino Pepper, bell; Pepper, nonbell; Roselle; Scarlet eggplant; Sunberry; Tomatillo; Tomato; Tree tomato; Cultivars, varieties and/or hybrids of these

**Pests and Application Rates:**

Pests	Entrust SC (fl oz/acre)
lepidopterous larvae (maintenance only)	1.5 – 3
Colorado potato beetle European corn borer European grapevine moth	3 – 6

<b>Pests</b>	<b>Entrust SC (fl oz/acre)</b>
hornworms light brown apple moth loopers tomato fruitworm	
armyworms (including beet armyworm) flea beetle (suppression) flower thrips <sup>1,2</sup> thrips palmi <sup>1,2</sup> tomato pinworm	4 - 8
leafminers <sup>1</sup> ( <i>Liriomyza</i> spp.)	6 – 10

<sup>1</sup>Control of leafminers and thrips may be improved with the addition of an adjuvant to the spray mixture. See Use of Adjuvants section under Mixing Directions.

<sup>2</sup>For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications.

**Application Timing:** Scout weekly throughout the season to monitor and track populations of **leafminers** and **thrips** to determine when economic thresholds are exceeded. Scout weekly throughout the season to monitor and track pest and beneficial populations. For tracking **lepidopterous larvae**, scout with enough regularity to monitor the population size of each of the labeled pests. Time applications of Entrust SC to coincide with peak egg hatch in species without overlapping generations. Consult current pest management recommendations for specific guidelines.

**Application Rate:** Apply as a foliar spray at the rate specified to control target pests. Use a higher rate in the rate range for heavy infestations or advanced growth stages of target pests.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area. Do not apply Group 5 insecticides to consecutive generations of Colorado potato beetle and do not make more than two applications per single generation of Colorado potato beetle.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 1 day of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 4 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per crop for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than six applications per calendar year.
- Do not apply to seedling fruiting vegetables and okra grown for transplant within a greenhouse, shade house, or field plot.

**Fire Ants – Mound Application in Turfgrass and Ornamentals, in Greenhouses, and in Other Outdoor Production Areas**

<b>Dilution Rate</b>	
<b>Entrust SC fl oz per 1 gallon (mL/gal)</b>	<b>Entrust SC fl oz per 10 gallons (mL/10 gal)</b>

0.05 (1.5)	0.5 (14.8)
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**Fire ants such as red imported:** Apply diluted Entrust SC to individual fire ant mounds as a drench application. Use 1 to 2 gallons per mound depending upon the mound size. For mounds less than 8 inches in diameter, use 1 gallon of dilution per mound. Use a higher volume, up to 2 gallons, on mounds 8 inches or larger in diameter. Apply approximately 10% of the dilution volume around the perimeter of the mound out to about 12 inches and pour the remaining volume directly on the mound. Do not disturb mounds prior to application. If possible, apply following a recent rainfall. For best results, apply in cool weather, 65 to 85°F, or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays should not be used as they may disturb the ants and cause migration, reducing control.

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### Terms and Conditions of Use

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To the extent permitted by law, if terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

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### Warranty Disclaimer

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Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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### Inherent Risks of Use

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It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

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### Limitation of Remedies

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To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

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EPA accepted \_\_/\_\_/\_\_

**[Sub Label B: Non-Ag Uses]**

(Base label):

<b>SPINOSAD</b>	<b>Group</b>	<b>5</b>	<b>INSECTICIDE</b>
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**Entrust<sup>®</sup> SC****Naturalyte<sup>®</sup> Insect Control**

**A Naturalyte<sup>®</sup> insect control product for use in commercial seed coating as seed treatment to control seedcorn maggot and onion maggot.**

**For Commercial Seed Treatment Only**

Active Ingredient:

spinosad

(a mixture of spinosyn A  
and spinosyn D) .....

22.5%

Other Ingredients .....

77.5%

Total .....

100%

Contains 2 lb of active ingredient per gallon.



Listed by the Organic Materials Review Institute (OMRI) for use in organic production.

**For Organic Production****Keep Out of Reach of Children****Precautionary Statements****Personal Protective Equipment (PPE)****Applicators and other handlers must wear:**

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

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

**User Safety Recommendations**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**Environmental Hazards**

This product is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when

disposing of equipment washwaters. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Applying this product when rain is not predicted for the next 24 hours will help reduce potential risk to aquatic invertebrates by reducing pesticide runoff from the treatment area into water bodies. This product is highly toxic to bees and other pollinating insects exposed to direct treatment, or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms. Treated seed exposed on soil surface may be hazardous to wildlife. Cover or collect seeds spilled during loading. Apply this product only as specified on the label.

**(Storage and Disposal for rigid containers 5 gal or less)**

**Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**(Storage and Disposal for refillable rigid containers larger than 5 gal)**

**Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**(Storage and Disposal for nonrefillable rigid containers larger than 5 gal)**

**Storage and Disposal**

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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



**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**Refer to label booklet for Directions for Use.**

**Notice:** Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-621

EPA Est. \_\_\_\_\_

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**Produced for  
Dow AgroSciences LLC  
9330 Zionsville Road  
Indianapolis, IN 46268**

**NET WEIGHT \_\_\_\_\_**

(Cover, shipping container):

# Entrust<sup>®</sup> SC

## Naturalyte<sup>®</sup> Insect Control

A Naturalyte<sup>®</sup> insect control product for use in commercial seed coating as seed treatment to control seedcorn maggot and onion maggot.

### For Commercial Seed Treatment Only

SPINOSAD	Group	5	INSECTICIDE
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Active Ingredient:

spinosad

(a mixture of spinosyn A  
and spinosyn D) .....

22.5%

Other Ingredients .....

77.5%

Total .....

100%

Contains 2 lb of active ingredient per gallon.



Listed by the Organic Materials Review Institute (OMRI) for use in organic production.

**For Organic Production**

### Keep Out of Reach of Children

Refer to inside of label booklet for additional precautionary information including Directions for Use.

**Notice:** Read the entire label. Use only according to label directions. **Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-621

EPA Est. \_\_\_\_\_

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Produced for  
Dow AgroSciences LLC  
9330 Zionsville Road  
Indianapolis, IN 46268

**NET WEIGHT** \_\_\_\_\_

(Page 1 through end):

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## Precautionary Statements

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### Personal Protective Equipment (PPE)

#### Applicators and other handlers must wear:

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

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

### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

### Environmental Hazards

This product is toxic to aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Applying this product when rain is not predicted for the next 24 hours will help reduce potential risk to aquatic invertebrates by reducing pesticide runoff from the treatment area into water bodies. This product is highly toxic to bees and other pollinating insects exposed to direct treatment, or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms. Treated seed exposed on soil surface may be hazardous to wildlife. Cover or collect seeds spilled during loading. Apply this product only as specified on the label.

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### Directions for Use

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It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

**Not for on-farm use. Not for use on agricultural establishments in hopper-box, planter-box, slurry-box, or other seed treatment applications at or immediately before planting.**

### Storage and Disposal

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

**Pesticide Storage:** Store in original container only. In case of leak or spill, contain material with absorbent materials and dispose as waste.

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

#### Nonrefillable containers 5 gallons or less:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at

about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**Refillable containers 5 gallons or larger:**

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**Nonrefillable containers 5 gallons or larger:**

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

## Commercial Seed Treatment

Entrust® SC is a Naturalyte® insect control product designed to be used as a commercial seed treatment as a component in seed coating blends to protect the germinating seeds and seedlings. Use the required amount of Entrust SC in the seed coating mix to achieve correct rates of active ingredient for the crop seed being treated in the final product. Apply using suitable seed coating equipment to ensure each seed is uniformly coated. Uniform application to seed is necessary to ensure seed safety and best insect control.

Crop (Seeds)	Pests	Entrust SC (mg ai/seed)	Entrust SC (lb ai/100 lb seed)	Maximum Seasonal Application Rate-Seed Use (lb ai/acre)	Maximum Seasonal Application Rate All Uses (lb ai/acre) <sup>1</sup>
bulb vegetables (crop group 3) <sup>2</sup> (excluding dry bulb onion)	onion maggot seedcorn maggot	0.15	3.96 – 6.61	0.99	0.99
dry bulb onion		0.2	5.29 – 6.89	0.27	0.45
dried shelled pea and bean (except soybean) (subgroup 6C) <sup>3</sup> (excluding lentils, cowpea)		0.1 – 0.5	0.03 – 0.2	0.33	
cantaloupe		0.5 – 0.75	2.31 – 3.47	0.1	

Crop (Seeds)	Pests	Entrust SC (mg ai/seed)	Entrust SC (lb ai/100 lb seed)	Maximum Seasonal Application Rate-Seed Use (lb ai/acre)	Maximum Seasonal Application Rate All Uses (lb ai/acre) <sup>1</sup>
cucurbit vegetables (crop group 9) <sup>4</sup> (excluding cantaloupe, pumpkin, watermelon, winter squash)			0.70 – 3.77	0.11	
foliage of legume vegetables (excluding soybean) (subgroup 7A) <sup>5</sup>			0.17 – 0.41	0.33	
pumpkin			0.83 – 1.24	0.05	
winter squash			0.55 – 0.83	0.03	
watermelon			1.10 – 1.65	0.07	

<sup>1</sup>The maximum seasonal application rate is the total of all methods of application – soil, foliar, and seed treatment.

<sup>2</sup>Bulb vegetables (crop group 3) including dry bulb onion, garlic, great-headed (elephant) garlic, green onion, leek, shallot, welch onion

<sup>3</sup>Dried shelled pea and bean (except soybean) (subgroup 6C) including dried cultivars of bean *Lupinus* spp. (includes grain lupin, sweet lupin, white lupin, white sweet lupin), *Phaseolus* spp. (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean), bean *Vigna* spp. (includes adzuki bean, blackeyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean), broad bean (dry), chickpea, guar, lablab bean, lentil, pea *Pisum* spp. (includes field pea), pigeon pea

<sup>4</sup>Cucurbit vegetables (crop group 9) including cucumber, edible gourds, muskmelons (cantaloupe, honeydew, etc.), pumpkin, summer squash, watermelon, winter squash

<sup>5</sup>Foliage of legume vegetables (subgroup 7A) including any cultivar of bean and field pea (except soybean)

#### Specific Use Precautions:

- Do not mix the seed and product with bare hands.
- Seed should be sound and well cured prior to treatment.
- Exposed treated seeds may be hazardous to birds and other wildlife. Dispose of all excess treated seeds and seed packaging by burial away from bodies of water.

#### Specific Use Restrictions:

- Regardless of formulation or method of application, apply no more than 0.45 lb ai (204 g) spinosad per acre per season with soil, foliar and seed treatment uses for the following crops: crops in crop group 3 (see table footnote 2 above for specific crops in crop group), crop group 9 (see table footnote 4 above for specific crops in crop group), and subgroup 7A (see table footnote 5 above for specific crops in crop group).
- Regardless of formulation or method of application, apply no more than 0.188 lb ai (85 g) spinosad per acre per season with soil, foliar and seed treatment uses for the following crops: crops in subgroup 6C (see table footnote 3 above for specific crops in crop group).
- Follow restrictions in the crop section of the label for maximum number of foliar applications allowed per season.
- For use only in commercial seed treatment facilities.
- This product is not intended for use on agricultural establishments in hopper-box, planter-box, or other seed treatment applications at or immediately before planting.
- Do not use treated seed for human consumption, as feed for livestock or poultry, or for oil purposes.
- Label treated seed as follows: “THIS SEED HAS BEEN TREATED WITH SPINOSAD at \_\_ mg ai/seed. DO NOT USE FOR FOOD, FEED OR OIL. STORE AWAY FROM FOOD AND FOODSTUFF. **Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.** Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-

incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated." **Note:** The rate of spinosad in mg ai/seed must be included on the label of the treated seed.

- Treated seed must be planted into the soil at least 1/2 inch deep, using appropriate commercial seeding equipment. To achieve the optimum depth required for maximum germination, refer to the specific planting directions for use on labels of treated seed. To minimize potential exposure to nontarget wildlife, cover or collect any seeds treated with Entrust that may have spilled during planting or loading.
- The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately dyed with a suitable color to prevent its accidental use as food for man or feed for animals. Refer to 21 CFR Part 2.25. Any dye added to treated seed must be cleared for use under 40 CFR Part 180.1001.

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### **Terms and Conditions of Use**

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To the extent permitted by law, if terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

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### **Warranty Disclaimer**

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Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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### **Inherent Risks of Use**

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It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

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### **Limitation of Remedies**

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To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

® <sup>TM</sup> Trademarks of Dow AgroSciences, DuPont or Pioneer and their affiliated companies or respective owners

EPA accepted \_\_/\_\_/\_\_



# Supplemental Labeling

Dow AgroSciences LLC

9330 Zionsville Road

Indianapolis, IN 46268-1054 USA

## Entrust® SC

EPA Reg. No. 62719-621

### Reduced PHI for (Subgroup 13-07F)<sup>1</sup> Fruit, Small, Vine Climbing, except fuzzy kiwifruit

<sup>1</sup>Amur river grape; gooseberry; grape; kiwifruit, hardy; Maypop; schisandra berry; cultivars varieties, and/or hybrids of these.

**This label expires and must not be distributed or used in accordance with this supplemental registration after February 4, 2023.**

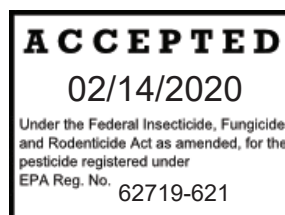
#### ATTENTION

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for Entrust® SC insecticide before applying. Carefully follow all precautionary statements and applicable use directions.
- Use of Entrust SC according to this supplemental labeling is subject to all use precautions and limitations imposed by the label affixed to the container for Entrust SC.

#### Directions for Use

##### Pests and Application Rates:

Pests	Entrust SC (fl oz/acre)
climbing cutworms European grapevine moth grape berry moth grape leaf folder grape leaf skeletonizer light brown apple moth omnivorous leafroller orange tortrix redbanded leafroller thrips	4 - 8



**Application Timing:** Treat when pests appear, targeting eggs at hatch or small larvae. Heavy infestations may require repeat applications, but follow resistance management guidelines. Consult your Dow AgroSciences representative, extension service specialist, certified crop advisor or your state agricultural experiment station for any additional local use recommendations for your area.

**Application Rate:** Carefully adjust equipment and spray volume to assure thorough uniform coverage of infested parts of the crop. Use a higher rate in the rate range for larger larvae or moderate to severe infestations and/or larger plant volume.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides (spinetoram and spinosad). If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. Consult your local Dow AgroSciences representative, extension specialist, certified crop advisor, or state

agricultural experiment station for information on alternative effective products to use in your area.

**Restrictions:**

- **Preharvest Interval:** Do not apply within 3 days of harvest.
- **Minimum Treatment Interval:** Do not make applications less than 5 days apart.
- Do not apply more than a total of 29 fl oz of Entrust SC (0.45 lb ai spinosad) per acre per season west of the Rocky Mountains, and no more than 23 fl oz of Entrust SC (0.36 lb ai spinosad) per acre per season east of the Rocky Mountains for all methods of application, including foliar, soil and seed treatment uses.
- **Maximum Number of Applications:** Do not make more than five applications per calendar year.

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Initial printing.