Specimen Label

SULFOXAFLOR	GROUP	4C	INSECTICIDE
SPINETORAM	GROUP	5	INSECTICIDE

CORTEVA™ agriscience

XXpire®

INSECTICIDE

For control or suppression of listed pests: aphids, leaf-feeding beetles, lepidopterous larvae, sawfly larvae, lace bugs, mealybugs, plant bugs, thrips, whiteflies, and scales in ornamentals (herbaceous and woody) growing in greenhouses and nurseries.

Active Ingredients:

spinetoram (a mixture of spinetoram-J and spinetoram-L)	20%
sulfoxaflor	20%
Other Ingredients	60%
Total	100.0%

Contains 40% active ingredient on a weight basis

FIRST AID	
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.	

Precautionary Statements

Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-676

Keep Out of Reach of Children

CAUTION

Causes Moderate Eye Irritation

Avoid contact with eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This product is highly toxic to bees exposed through contact during spraying and while spray droplets are still wet. Toxicity is reduced when spray droplets are dry. This product is toxic to bees exposed to treated foliage for up to 3 hours following application. Do not apply this pesticide to blooming, pollen-shedding, or nectar producing parts of plants if bees may forage on the plants during this time period.

Risk to managed bees and native pollinators from contact with pesticide spray or residues can be minimized by limiting applications to times when managed bees and native pollinators are least active, e.g. 2 hours prior to sunset or when the temperature is below 50º F at the site of application.

Refer to the Directions for Use for crop specific restrictions and additional advisory statements to protect pollinators.

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

Directions for Use

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 state or tribal 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, restricted entry interval, and notification to workers (as applicable). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- 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 in nurseries, greenhouses, and on sod and seed farms. Adults, children, and pets should not contact treated surfaces until the spray has 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.

Storage and Disposal (Cont.)

Nonrefillable rigid 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 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 rigid containers larger than 5 gal:
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 rigid containers larger than 5 gal:
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 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.

Product Information

XXpire® insecticide is used for control or suppression of listed pests:aphids, leaf-feeding beetles, lepidopterous larvae, sawfly larvae, lace bugs, mealybugs, plant bugs, thrips, whiteflies, and scales infesting ornamentals (herbaceous and woody) growing in greenhouses and nurseries. Mix the suspension concentrate of XXpire with water and apply as a foliar spray with aerial or ground equipment suitable for conventional insecticide spraying.

Use Restrictions

- Not for residential use.
- Do not apply XXpire to edible plants/crops in greenhouses.
- Do not treat pets.
- Do not graze livestock in treated areas.
- Do not apply directly to fish pools and other bodies of water that may contain fish.
- Do not apply to seedlings of edible crops for transplanting or to any other stage of edible crops growing in greenhouses
- Do not treat seedling plants grown for transplant in greenhouses, shade houses, or field plots.

  XXpire may only be aerially applied to commercially grown ornamentals. XXpire must be used in accordance the Directions for Use on this label or exemptions under FIFRA.

Integrated Pest Management (IPM) Programs
XXpire is recommended for IPM programs in labeled ornamentals. Apply XXpire 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, XXpire 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 XXpire is tank mixed with any insecticide that reduces its selectivity in preserving beneficial predatory insects, the full benefit of XXpire in an IPM program may be reduced.

Insecticide Resistance Management (IRM)
For resistance management, please note that XXpire contains a Group 4C (sulfoxaflor) and a Group 5 (spinetoram) insecticide. Any insect population may contain individuals naturally resistant to XXpire and other Group 4C or Group 5 insecticides. The resistant individuals may dominate the insect population if these insecticides are used repeatedly in the same fields/application sites. Appropriate resistance-management strategies should be followed.

To delay development of insecticide resistance, take the following steps:
- Rotate the use of XXpire or other Group 4C and 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 pest) between the individual components of a mixture. In addition, consider the following recommendations by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and applied at 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 the resistance is already developing to one or 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.
- 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, or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, you may contact your company representative by calling 800-258-3033.

Mixing Directions

Application Rate Chart for Crop Uses

Application Rate of XXpire (oz/acre)	Total Active Ingredient Equivalent (lb ai/acre)	Active Ingredient (each active, lb ai/acre)
7	0.18	0.088
6.5	0.16	0.081
6	0.15	0.075
5.5	0.14	0.069
5	0.13	0.063
4.5	0.11	0.056
4	0.10	0.050

XXpire - Alone: Fill the spray tank with water to about 1/2 of the required spray volume. Start agitation and add the required amount of XXpire. 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.

XXpire - Tank Mix: It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. When tank mixing XXpire 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. 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. XXpire and other water dispersible granules
2. Wettable powders

Maintain agitation and fill spray tank to 3/4 of total spray volume. Then add:
1. Emulsifiable concentrates and water-based solutions
2. Spray adjuvants, surfactants, and oils
3. 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 re-suspended 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 5.0 and 9.0 is suggested to achieve maximum performance of XXpire. If the water source is outside of this pH range, or tank mixing other pesticides, adjuvants, or foliar nutrients will cause the pH to fall outside this range, consider adjusting the spray tank pH to be between 5.0 and 9.0 before adding XXpire. To do this, add all other tank mix components first, then check the spray tank pH and adjust if desired, and then add XXpire. If you require additional information on how to adjust spray tank pH, contact your company representative.

Use of Adjuvants: The addition of agricultural adjuvants to sprays of XXpire may improve initial spray deposits, plant coverage, penetration into waxy leaf surfaces, redistribution and weatherability. Select adjuvants that are recommended and registered for your specific use pattern and follow their use directions.

- 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.
- 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.
- When an adjuvant is to be used with this product, it is recommended to use a Chemical Producers and Distributors Association certified adjuvant.

Phytotoxicity: XXpire 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 specified use rate of XXpire 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. **Important:** The user assumes responsibility for determining if XXpire is safe to treated plants when applied either alone or in tank mixtures under commercial growing conditions.

Application Directions

Spray Drift Management

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 XXpire. Attention should be given to sprayer speed and calibration, wind speed, and foliar canopy density to ensure adequate spray coverage.

Wind Direction and Speed
Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph. Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

Temperature Inversion
Do not make aerial or ground applications into temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Droplet Size
Use only medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASABE Standard S-572 definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size. Exceptions may be indicated for specific crop groups.

Ground Application

To prevent drift from groundboom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy. Shut off the sprayer when turning at row ends. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind directions are toward the aquatic area.

Airblast Sprayer

When using an airblast sprayer, coverage is also improved by operation of the sprayer at ground speeds that assure that the air volume within the plant canopy is completely replaced by the output from the airblast sprayer. Making applications in an alternate row middle pattern may result in less than satisfactory coverage and poor performance in conditions of high pest infestation levels, and/or dense foliage. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in applications, spray must be directed into the canopy.

Aerial Application

XXpire may only be aerially applied to commercially grown ornamentals. Aerial or ground applications in production agriculture or directed ground applications to individual plants are permitted. Avoid making aerial applications in immediate proximity of residential, commercial, government, institutional or other structures where people may be present including homes, apartments, offices, churches, schools, and businesses. Aerial applicators should evaluate conditions existing at the time of application and make appropriate adjustments to reduce drift. Use is limited to directed ground applications when nurseries are located next to urban areas. XXpire must be used in accordance with the Directions for Use on this labels or exemptions under FIFRA.

Apply in spray volume of 3 to 5 gallons or more per acre (10 gallons or more per acre for trees or vine ornamentals). Nozzle configuration should provide a medium to fine droplet size per ASABE S-572 standard (see USDA-ARS or NAAA handbook). Guidance for ASABE S-572 nozzle configuration can be found at the following web site: http://apmru.usda.gov/downloads/downloads.htm. Boom length must be less than 75% of wing or 85% of rotor span and swath adjustment (offset) to compensate for crosswinds. Observe minimum safe application height (maximum 12 feet for agricultural canopies). Use GPS equipment, swath markers or flagging to ensure proper application to the target area. Configure the boom nozzle used (e.g., at NAAA/ Operation Safe Fly-In) for both crosswind and near parallel winds. If application is made parallel to the wind direction, adjust swath width downward. Use swath adjustment (offset) to compensate for crosswinds. Do not apply under completely calm wind conditions. It is best to apply when wind speed is between 2 to 10 mph. Under conditions of low humidity and high temperatures, adjust spray volume and droplet size upward to compensate for evaporation of spray droplets. In tree crops, insect control by aerial application may be less than control by ground application because of the reduced coverage.

Additional Requirements for Aerial Applications: Mount the spray boom on the aircraft to minimize drift caused by wingtip or rotor vortices. Use the minimum practical boom length and do not exceed 75% of the wing span or 80% rotor diameter. Flight speed and nozzle orientation must be considered in determining droplet size. Spray must be released at the lowest height consistent with the pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

Use Directions

Ornamentals: (Herbaceous and Woody) Growing in Greenhouses and Nurseries Restrictions:

Pests [note: consult pest-specific use directions below for pests followed by a number in parenthesis (-)]	XXpire oz/ 3 gallons	XXpire oz/100 gallons	XXpire oz/acre
aphids 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 eastern 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) western tent caterpillar winter moth yellownecked caterpillar (2) sawfly larvae, such as: European pine pear redheaded pine shore fly mealybugs such as: citrus mealybug Lygus bugs thrips	0.06-0.08 (1.7-2.3 g)	2-2.75 (57-78 g)	4-5.5 (0.05-0.069 lb ai/acre each for sulfoxaflor and spinetoram) (114-156 g product/acre)
dipterous gall midges pinyon spindlegall lace bug whiteflies pine needle scale (3)	0.08 (2.3 g)	2.75 (78 g)	5.5 (0.069 lb ai/acre each for sulfoxaflor and spinetoram) (114-156 g product/acre)
scale (3) such as cottony cushion or false oleander (suppression) spider mites, such as: two-spotted (4) (see 4 below for mite suppression/control expectations)	0,10 (3 g)	3.5 (99 g)	7.0 (0.088 lb ai/acre each for sulfoxaflor and spinetoram) (198 g product/acre)

Numbers in parentheses (-) refer to the number for Pest-Specific Use Directions below.

Advisory Pollinator Statement: Notifying known bee-keepers within 1 mile of the treatment area 48 hours before the product is applied will allow them to take additional steps to protect their bees. Also limiting application to times when managed bees and native pollinators are least active, e.g., 2 hours prior to sunset or when temperature is below 50°F at the site of application, will minimize risk to bees.

Restrictions – Greenhouses (A greenhouse is defined as a structure or space enclosed with a nonporous covering inside which plants are produced)

- **Minimum Treatment Interval:** Do not make applications less than 14 days apart.
- Regardless of the crop or pest being treated do not apply XXpire more than 6 times in a 12-month period inside a greenhouse or a structure that can be altered to be closed or open.
- Because generations of a specific pest may overlap, rotate insecticides and miticides and never apply more than 2 consecutive applications of XXpire or products containing the same active ingredient or with the same mode of action (same insecticide group). Use only specified label rates.
- Do not apply to seedlings of edible crops for transplanting or to any other stage of edible crops growing in greenhouses.
- Do not apply more than a total of 21.25 oz of XXpire (0.266 lb ai each of sulfoxaflor and spinetoram) per acre per year. Do not make applications of any product containing sulfoxaflor that total more than 0.266 lb ai per acre per year or any product containing spinetoram that total more than 0.438 lb ai per acre per year.

Restrictions – Nurseries (A nursery is defined as a facility engaged in the outdoor production of plants)

- **Minimum Treatment Interval**: Do not make applications less than 14 days apart.
- Do not make more than two consecutive applications.
- Do not make more than four applications per year.

- Do not apply more than a total of 21.25 oz of XXpire (0.266 lb ai each of sulfoxaflor and spinetoram) per acre per year. Do not make applications of any product containing sulfoxaflor that total more than 0.266 lb ai per acre per year or any product containing spinetoram that total more than 0.438 lb ai per acre per year.
- Do not make more than 1 application during bloom. The single application during bloom must not exceed a rate of 5.5 oz/acre (0.069 lb per acre each of sulfoxaflor and spinetoram). Do not make applications during bloom of any product containing sulfoxaflor that exceed 0.07 lbs/acre.

Pest-Specific Use Directions (for pest control in nurseries, also refer to Insecticide Resistance Management):

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.
   - **Diamondback moth:** 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.
   - **Gypsy moth larvae:** Apply when larvae are small and all eggs have hatched.
   - **Spruce budworms:** Apply when larvae are exposed and actively feeding.
   - **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.
3. **Scale**: Time application to the crawler stage.
4. **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 14 days in greenhouse settings and 14 days in outdoor settings (to contact newly hatched nymphs). **Uniform coverage of both upper and lower leaf surfaces is critical**.

   Important: Control of spider mites with XXpire 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 XXpire. Addition of a nonionic spray adjuvant and at label rates in outdoor settings (see Phytotoxicity) has been shown to improve spray coverage and enhance control of spider mites (follow surfactant manufacturer's label directions).

Application Method: Dilute XXpire 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.

Application Rate: XXpire may be used up to a maximum labeled rate of (3.5 oz per 100 gallons, 7 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.

Terms and Conditions of Use

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. To the extent permitted by law, 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.

Warranty Disclaimer

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.

Inherent Risks of Use

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.

Limitation of Remedies

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.

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

Label Code: CD02-452-021
Replaced Label: CD02-452-020
No LOES number

EPA accepted 11/8/19