

TURFGRASS - CONTROL OF MOLE CRICKETS AND FOR SUPPRESSION OF CHINCH BUG AND CUTWORMS

General Information

RESISTANCE MANAGEMENT

Certain insects may develop resistance to insecticides after repeated use. Use different resistance management practices such as rotating classes of insecticides to help delay or minimize insect resistance.

This product contains the active ingredient imidacloprid, which is a Group 4A insecticide. Repeated use of Group 4A insecticides may lead to insect pests that become resistant to imidacloprid or other neonicotinoids (Group 4A) insecticides.

To reduce the chances of development of resistance to Group 4A insecticides, do not make more than three (3) consecutive foliar applications of this product and/or other Group 4A insecticides with similar modes of action. In addition, Nufarm strongly recommends the use of other insecticides with a different mode of action prior to or after application of this product. This strategy of insecticide rotation in concert with other IPM practices is considered an effective way to delay or minimize an insect's ability to develop resistance to this class of chemistry.

Some Group 4A neonicotinoid products used as foliar treatments include the active ingredients thiamethoxam (found in Actara and Centric), acetamiprid (found in Assail and Intruder), thiacloprid (found in Calypso), and imidacloprid (found in Leverage, Provado, and Trimax). Some Group 4A neonicotinoid products used as soil treatment include thiamethoxam (found in Platinum) and imidacloprid (found in Admire).

Additional information on insect resistance management may be obtained from your local Extension specialist, certified crop advisor and/or product manufacturer, or from the Insecticide Resistance Action Committee (IRAC) on the Web at <http://iraconline.org/>.

USE INFORMATION

Thorough uniform coverage is necessary to achieve optimal control. A spray

adjuvant may be used to improve coverage. This product may not knock down established and heavy insect populations. Two applications may be required to achieve control; retreat if needed and as directed on this label. Tank mix this product with other insecticides as specified for knockdown of pests or for improved control of other pests.

USE RESTRICTIONS (All Uses)

- DO NOT make a foliar application of any chloronicotinyl insecticide for resistance management purposes following a soil application of this product on the same crop.
- DO NOT use product packets in a tank mix with products that contain boron or release free chlorine; the PVA packet reacts with boron or free chlorine to produce a plastic that is not soluble in water. NOTE: Normal chlorinated water is acceptable for mixing.
- DO NOT use this product on commercial sod farms.
- DO NOT allow livestock to graze in treated areas or use clippings from treated areas for feed or forage unless specified otherwise on this label.
- DO NOT apply this product to soils that are waterlogged or saturated.
- DO NOT allow runoff or puddling of irrigation water following application.
- DO NOT allow leachate to run off for the first 10 days after application or reduced efficacy may result.
- DO NOT exceed the total 5.375 packets (8.6 oz.) of this product (0.4 lb. AI)/Acre per year specified for the uses indicated on this label.

ROTATION CROPS RESTRICTIONS

Crops which are listed on imidacloprid labels or crops that have existing tolerances for imidacloprid may be planted in treated areas as soon as practical after the last imidacloprid application. Crops that are not found on an imidacloprid label, or crop that do not have existing tolerances for imidacloprid, may not be planted in treated areas for 12 months after the last application.

Refer to the table in the label for plantback intervals for different crops. Note that if cover crops are planted any time after an application of this product, those crops may not be grazed or harvested for food or feed.

APPLICATION THROUGH IRRIGATION SYSTEMS (CHEMIGATION)

Apply this product at rates specified on this label either alone or in tank mixture

with other pesticides and chemicals registered for application through irrigation systems. The normal dilution ratio is 1:10 to 1:200, depending on the system. Always meter the product into the irrigation water during the first part of the irrigation cycle. Mix the product separately prior to injection. Agitate as necessary if the mixture is allowed to stand more than 24 hours.

- DO NOT connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- Apply this product only through micro-irrigation (individual spaghetti tube), drip irrigation, overhead irrigation, and ebb and flood or hand-held or motorized calibrated irrigation equipment. DO NOT apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from non-uniform distribution of treated water.
- Be sure to remove scale, pesticide residue and other foreign matter from the tank and entire irrigation system prior to application.
- A person knowledgeable of the chemigation system and responsible for its operation, or a person who is under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- If you have any questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

SAFETY DEVICES FOR IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES:

If the source of water for your irrigation system is a public water supply, follow the instructions below.

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill

pipe.

3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

SAFETY DEVICES FOR IRRIGATION SYSTEMS NOT CONNECTED TO A PUBLIC WATER SUPPLY:

1. The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where the pesticide distribution is adversely affected.
6. Systems must use a metering pump such as a positive displacement injection

pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

7. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

Limitations, Restrictions, and Exceptions

APPLICATION TO TURFGRASS (Lawns)

Use this product for the control of listed soil-inhabiting pests as directed on turfgrass.

The active ingredient in this product has sufficient residual activity so that applications can be made preceding the egg-laying activity of the target pests. Base the need for an application on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods.

Application Instructions

The use of accurately calibrated equipment normally used for the application of turfgrass insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off-target drift. Check calibration periodically to ensure that equipment is working properly.

Make applications prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch. Apply this product in sufficient water to provide adequate distribution in the treated area.

Rainfall or irrigation must occur within 24 hours of application to move this product vertically through the thatch and into the soil.

Wait until after sufficient rainfall or irrigation has occurred to mow the grass.

Application Instructions

Mole Crickets: Make applications before or during the peak egg-hatching period. This product may be applied with a curative insecticide when adults or large nymphs are present and actively tunneling.

Chinchbugs: Make applications before hatching of first instar nymphs.

Restrictions

- DO NOT apply more than 5.375 packets (8.6 oz.) (0.4 lb. of active ingredient) per acre per year.
- DO NOT make applications when turfgrass areas are water-logged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated turf area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile.
- DO NOT allow children or pets to enter treated areas until sprays have dried.
- DO NOT allow this product to contact plants in bloom if bees are foraging the treatment area.
- DO NOT graze treated areas or use clippings from treated areas for feed or forage.
- DO NOT allow runoff or puddling of irrigation water following application.
- DO NOT use for seed production.

Method

[Spray](#)

Rates

[field rates 0](#)

[field rates 1](#)

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Restricted Entry Interval

12 hours

Exception: If the product is applied by drenching, 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.

Timings

[Chinchbugs: Prior to the hatching of the first instar nymphs.](#)

[Mole Crickets: Prior to or during the peak egg hatching period.](#)