

## **FIELD CROPS: POTATO - SOIL TREATMENT (PESTS/DISEASES SUPPRESSED)**

### General Information

#### RESISTANCE MANAGEMENT

Some insects will develop resistance to insecticides after repeated use. Conform use of this product to resistance management strategies established for the use area.

ADVISE FOUR contains a Group 4A insecticide. Insect biotypes with acquired or inherent tolerance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species. This may eventually result in partial or total loss of control of those species by ADVISE FOUR and to other Group 4A insecticides.

The active ingredient in ADVISE FOUR insecticide is a member of the neonicotinoid chemical class. Insect pests resistant to other chemical classes have not shown cross-resistance to ADVISE FOUR. In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential, it is recommended that for each crop season: 1) only a single, soil application of ADVISE FOUR be made; 2) foliar applications of products from the same class not be made following a long residual, soil application of ADVISE FOUR, or other neonicotinoid products.

If a soil application of ADVISE FOUR has not been made during a crop season and foliar applications are to be made, avoid using a block of more than three consecutive applications of ADVISE FOUR and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Winfield Solutions, LLC strongly encourages the rotation to a block of applications with effective products with a different mode of action before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect's ability to develop resistance to this class of chemistry.

Do not make foliar applications of ADVISE FOUR or other Group 4A products from the neonicotinoid chemical class on crops previously treated with a long-residual, soil-applied products from the neonicotinoid chemical class.

Other Group 4A, neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Clutch, Couraze, Galiant, Impulse, Intruder, Leverage, Nuprid, Pasada, Provado, Trimax Pro, and Venom.

Other Group 4A, neonicotinoid products used as soil/seed treatments include Admire Pro, Advise, Alias, Belay, Couraze, Cruiser, Gaucho, Macho, Macho Max, Nuprid; Platinum, Venom and Widow.

Contact your Cooperative Extension specialist, certified crop advisor, and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://www.irac-online.org/>.

#### DIRECTIONS FOR USE

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

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed crops & commercially grown ornamentals that are attractive to pollinators:

##### 1. FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met.

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

##### 2. FOR FOOD/FEED CROPS AND COMMERCIALY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO

## POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

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.

Shake well before using.

## APPLICATION DIRECTIONS

For soil applications of ADVISE FOUR, direct product into the seed or root-zone of crop. Failure to place ADVISE FOUR into root-zone may result in loss of control or delay in onset of activity. ADVISE FOUR may be applied with ground or chemigation application equipment.

Apply foliar applications of ADVISE FOUR as a directed or broadcast foliar spray. Thorough coverage of foliage is necessary without runoff for optimum insecticidal efficacy. Use adequate spray volumes, properly calibrated application equipment and spray adjuvant if necessary to obtain thorough coverage. Failure to provide adequate coverage and retention of ADVISE FOUR on leaves and fruit may result in loss of insect control or delay in onset of activity. Apply ADVISE FOUR through properly calibrated ground or aerial application equipment. Minimum specified

spray volumes unless otherwise specified on crop specific application sections are 10 gallons/Acre by ground application and 5 gallons/Acre through aerial equipment. The rate of ADVISE FOUR applied affects the length of the plant protection. Use specific higher rates when infestations occur later in crop development or where pest pressure is continuous. ADVISE FOUR will generally not control insects infesting flowers, blooms, or fruit. Additional crop protection may be required for insects feeding in, or on these plant parts, and for insects not listed in the crop-specific, pests- controlled sections of this label. Additionally, specific ADVISE FOUR application instructions are also provided in the crop-specific sections of this label.

Suppression, or less than complete control of certain diseases and insect pests, including reduced feeding, may also result from an ADVISE FOUR application. Control of these pest/diseases may require supplemental crop protection measures.

Additional information on ADVISE FOUR used for these crops and other questions may be obtained from the Cooperative Extension Service, PCAs, consultants or local Winfield Solutions, LLC representatives.

Apply only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in non-soil medias such as perlite, vermiculite, rock wool, or other soil less media, or plants growing hydroponically. Pre-mix ADVISE FOUR with water or other appropriate diluent prior to application. Keep ADVISE FOUR and water suspension agitated to avoid settling.

Restrictions:

- Do not apply more than 0.5 lb active ingredient (AI) per acre, per year, regardless of formulation or method of application unless otherwise specified within a crop specific section.
- Do not use ADVISE FOUR on crops grown for production of true seed intended for private or commercial planting unless allowed under state specific 24(c) labeling.
- Do not apply ADVISE FOUR in enclosed structures such as planthouses or greenhouses except as specifically indicated in the TOBACCO, CUCURBIT VEGETABLES, FRUITING VEGETABLES and GREENHOUSE VEGETABLES, (Mature plants in production greenhouses): Cucumber, Tomato only sections of this label.

CHEMIGATION DIRECTIONS FOR USE

Types of Irrigation Systems

Foliar chemigation applications of ADVISE FOUR may be made to crops through overhead sprinkler systems if specified in crop-specific application sections. Soil chemigation applications of ADVISE FOUR may only be made to crops through chemigation as specified in crop-specific application sections and only through low-pressure systems specified for a given crop. Restriction: Do not apply ADVISE FOUR through any other type of irrigation systems.

#### Water Volume

Make ADVISE FOUR chemigation applications as concentrated as possible. Retention of ADVISE FOUR on target site of insect infestation is necessary for optimum activity. Do not use ADVISE FOUR in water volumes exceeding 0.1 inch/Acre. See crop specific application sections of the label for more information.

#### Uniform Water Distribution and System Calibration

The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

#### Chemigation Monitoring

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

#### Drift

Do not apply when wind speed favors drift beyond the area intended for treatment.

#### Required System Safety Devices

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. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closing, 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. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreased to the point where pesticide distribution is adversely affected. 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.

#### Using Water from Public Water Systems

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. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system must 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 to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. 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. 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. 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 fitting with a system interlock.

#### ROTATIONAL CROPS

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for

crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

#### IMMEDIATE PLANT-BACK:

All crops on this label plus the following crops not on this label: barley, canola, corn (field, pop, and sweet), rapeseed, sorghum, sugarbeet, and wheat

#### 30-DAY PLANT-BACK:

Cereals (including buckwheat, millet, oats, rice, rye and triticale), and safflower

#### 12-MONTH PLANT-BACK:

All Other Crops

Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

#### Limitations, Restrictions, and Exceptions

##### POTATO – soil treatment

##### Restrictions:

- Maximum ADVISE FOUR allowed per year when making soil applications: 10.0 fluid ounces per acre (0.31 lb AI per acre)

##### Applications: Apply specified dosage in one of the following methods:

- In-furrow spray during planting directed on seed pieces or seed potatoes.
- Subsurface side-dress on both sides of the row covered with 3 or more inches of soil.
- Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil.
- Narrow band directed below the eventual seed row in a bedding operation 7 or fewer days before planting. For effective pest control or suppression. Place ADVISE FOUR applications below soil-surface and in contact with seed piece or within root-zone. For potatoes grown on highly permeable soils with shallow water table, at-plant applications of ADVISE FOUR may be made in a 2 to 4 inch band (width of planter shoe opening) and completely covered.

##### Method

[Soil Treatment](#)

[In-furrow spray](#)

Restricted Entry Interval

12 hours

Timings

[At-Plant](#)