66222-156

11-29-2010



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

> OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Anne Stout Makhteshim Agan of North America, Inc. 4515 Falls of Neuse Rd, Suite 300 Raleigh, NC 27609

NOV 29 2010

Subject: Notification Per PR 98-10; Alternate Brand Name MANA Alias 4F EPA Reg. No. 66222-156 Date Submitted: November 10, 2010

#### Alternate Brand Name: Imidacloprid 4F

Dear Ms. Stout:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated November 10, 2010 for the product referenced above. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records. If you have any questions, please contact me at (703) 306-0415 or <u>davis.kable@epa.gov</u>.

Sincerely,

Kable Bo Davis Entomologist Insecticide-Rodenticide Branch Office of Pesticide Programs

Please read instructions on r	everse before con	ing form.				 ) 0-0060. Approval expires 2-28-95
\$-EPA	U Environmenta	Inited States			Registratio Amendmen Other	OPP Identifier Number
		Applicatio	n for Pesticide	e - Section	l	<u></u>
1. Company/Product Number MANA Alias 4F	r		2. EPA Pro Linda Ar	oduct Manager rrington		3. Proposed Classification
4. Company/Product (Name) 66222-156				ion Branch		
5. Name and Address of App Makhteshim Agan of I 4515 Falls of Neuse F Raleigh NC 27609 <i>Check if this</i>	North America, Ir	-	(b)(i), my to:	product is sim g. No		with FIFRA Section 3(c){3) in composition and labeling
		<u> </u>	Section - II			
EPA. I further understand tha FIFRA and I may be subject t	onse to Agency letter below. al page(s) if necessar cloprid 4F with the provisions of F atement of formula for t t if this notification is no to enforcement action a	y. (For section PR Notice 98-10 his product. I un pt consistent with	and EPA regulations nderstand that it is a vi th the terms of PR Noti	olation of 18 USC ice 98-10 and 40	ed ation. NOT slow. NO , and no other cha Sec. 1001 to will	fully make any false statement to
1. Material This Product Will	r		- <u> </u>		r	
Child-Resistant Packaging Yes No * Certification must be submitted	Unit Packaging Yes No If "Yes" Unit Packaging wgt.	No. per container	Water Soluble Pac Yes No If "Yes" Peckage wgt	kaging No. per container	Pl Gi Pl	itainer letal astic lass aper ther (Specify)
3. Location of Net Contents I	Information ontainer	4. Size(s) Ret	ail Conteiner	5. Lo	cation of Label D on label	lirections
6. Manner in Which Label is	Affixed to Product	Lithog Paper Stenci	raph glued led	Other		
			Section - IV			
1. Contact Point (Complete	items directly below f	for identificatio	n of individual to be a	contacted, if nec	essary, to proces	ss this opplication.)
Name Anne Stout			Title Registration Specia	alist		sphone No.((Include Area Code) (-861-4400 ر موجود د
I certify that the stater I acknowledge that an both under applicable I 2. Signature	y knowlinglly false or law.	misleading sta	all attachments there			te.
anne &t	aut		Registration Specialit	st		
4. Typed Name Anne Stout			5. Date 11-1(	0-10		
EPA Form 8570-1 (Rev. 3-94	) Previous editions are	e obsolete.		White - El	PA File Copy (or	iginal) Yellow - Applicant Copy



November 10, 2010

Document Processing Desk (NOTIF) Registration Division (7504P) OPP, USEPA Ariel Rios Building 1200 Pennsylvania Ave, NW Washington DC 20460

Re: MANA Alias 4F: EPA Reg. No. 66222-156 Notification of Alternate Brand Name per PRN 98-10

To Whom It May Concern:

Maktheshim Agan of North America, Inc. is submitting a notification to add an alternate brand name for the product referenced above. The product will be marketed as **Imidacloprid 4F**.

Makhteshim Agan of North America, Inc. certifies the following:

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40CFR 152.46; no other changes have been made to the labeling or the confidential statement of formula for this product. I understand that it is a violation of 18 USC Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under Sections 12 and 14 of FIFRA.

In support of this submission, the following administrative documents are attached:

- Application for registration (EPA Form 8570-1)
- One copy of labeling using the alternate brand name

Should you have any questions regarding this submission, please contact me at 901-861-4400 (annies@manainc.com) or Christie Hitchcock at 919-256-9342 (chitchcock@manainc.com).

Sincerely,

and Strut.

Anne Stout Registration Specialist

Enclosures



N. JIFICATION NOV 2 9 2010

# Imidacloprid 4F **INSECTICIDE**

ACTIVE INGREDIENT

% BY WT.

Imidacloprid; 1-[(6-Chloro-3-pyridinyl)methyl]-	
N-nitro-2-imidazolidinimine	42.3%
OTHER INGREDIENTS:	. <u> </u>
TOTAL	. 100.0%

Contains 4 lbs. of active ingredient per gallon

## **KEEP OUT OF REACH OF CHILDREN** CAUTION

#### EPA Reg. No. 66222-156

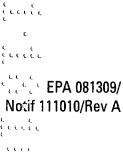
	FIRST AID
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poi- son control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR Clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>

IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF INHALED:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
trol center or doc	container or label with you when calling a poison con- tor or going for treatment. You may also contact -250-9291 for emergency medical treatment information.
NOTE TO PHYSIC symptomatically.	IAN: No specific antidote is available. Treat the patient

For additional precautionary, handling, and use statements, see inside of this booklet.



Manufactured for: Care Makhteshim Aljan Care C of North America, Inc. 4515 Falls of Neuse-Road Suite 300 A N A Raleigh, NC 27609



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#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC), or Viton
- Shoes plus socks

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

#### **ENGINEERING CONTROLS STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

#### USER SAFETY RECOMMENDATIONS

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as
  possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

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.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

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

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## OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH FARM PONDS.

#### **SPRAY DRIFT MANAGEMENT**

The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

#### **For Aerial Applications**

For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter. Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

#### **Importance of Droplet Size**

An important factor influencing drift is droplet size. Small droplets (<150-200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the airstream as much as possible, and by avoiding excessive spray boom pressure.

#### **Wind Speed Restrictions**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy, and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

#### **Restrictions During Temperature Inversions**

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source. 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 mixing.

#### **Mixing and Loading Requirements**

To avoid potential contamination of groundwater, the use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading area and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes, or field drains.

#### **No-Spray Zone Requirements for Soil and Foliar Applications**

Do not apply by ground within 25 feet or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

#### **Runoff Management**

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Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When using Imidacloprid 4F on erodible soils, Best Management Practice for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for recommendations in your use area.

#### **Endangered Species Notice**

Under the Endangered Species Act, it is a federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

#### **Resistance Management**

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

Imidacloprid 4F 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 Imidacloprid 4F and to other Group 4A insecticides.

The active ingredient in Imidacloprid 4F is a member of the neonicotinoid chemical class. Insect pests resistant to other chemical classes have not shown cross-resistance to Imidacloprid 4F. In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential, for each crop season: 1) make only a single soil application of Imidacloprid 4F; 2) foliar applications of products from the same class not be made following a long residual soil application of Imidacloprid 4F or other neonicotinoid products.

If a soil application of Imidacloprid 4F 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 Imidacloprid 4F and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, MANA 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 use Imidacloprid 4F or other Group 4A products from the neonicotinoid chemical class for foliar applications on crops previously treated with 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, MANA Alias 4F, 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, MANA Alias 4F, 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 <a href="http://www.irac-online.org/">http://www.irac-online.org/</a>.

#### **DIRECTIONS FOR USE**

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

#### AGRICULTURAL USE REQUIREMENTS

Use this product 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 intervals. 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. Exception: If the product 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.

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

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 Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC), or Viton

Shoes plus socks

#### **APPLICATION DIRECTIONS**

For soil applications of Imidacloprid 4F, direct product into the seed or root zone of crop. Failure to place Imidacloprid 4F into root zone may result in loss of control or delay in onset of activity. Apply Imidacloprid 4F with ground or chemigation application equipment.

Do not apply imidacloprid 4F in enclosed structures such as planthouses or greenhouses.

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Apply foliar applications of Imidacloprid 4F as a directed or a 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 Imidacloprid 4F on leaves may result in loss of insect control or delay in onset of activity. Apply Imidacloprid 4F with properly calibrated ground or aerial application equipment. Minimum spray volumes, unless otherwise specified on crop-specific application section, are 10 gallons per acre by ground and 5 gallons per acre by air. Imidacloprid 4F may also be applied by overhead chemigation (see additional information in **CHEMIGATION** section of this label below) if allowed in crop-specific application section.

When applied as a soil application, optimum activity of Imidacloprid 4F results from applications to the root zone of plants to be protected. The earlier Imidacloprid 4F is available to a developing plant, the earlier the protection begins. Imidacloprid 4F is continuously taken into the roots over a long period of time and the systemic nature of Imidacloprid 4F allows movement from roots through the xylem tissue to all vegetative parts of the plant. This results in extended residual activity of Imidacloprid 4F, the control of insects, and the prevention and/or reduction of virus transmission or symptom expression, and plant health benefits. The rate of Imidacloprid 4F applied affects the length of the plant protection period. Use higher rates when infestations occur later in crop development or where pest pressure is continuous. Imidacloprid 4F 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 Imidacloprid 4F application instructions are also provided in the crop-specific sections of this label.

Suppression or less than complete control of certain insect pests that may carry diseases including reduced feeding may also result from an Imidacloprid 4F application. Complete control of these pests may require supplemental control measures.

Generally, Imidacloprid 4F is not used on crops grown for production of true seed intended for private or commercial planting but may be allowed under state-specific, supplemental labeling. As with any insecticide, minimize exposure of Imidacloprid 4F to honey bees and other pollinators. Do not use Imidacloprid 4F on crops requiring bee pollination during bloom and a minimum of 10 days prior to bloom. Additional information on Imidacloprid 4F uses for these crops and other questions may be obtained from the Cooperative Extension Service, PCAs, consultants, or local Makhteshim Agan of North America, Inc. 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 Imidacloprid 4F with water or other appropriate diluent prior to application. Keep Imidacloprid 4F and water suspension agitated to avoid settling.

Do not apply more than 0.5 lb. active ingredient per acre per crop season regardless of formulation or method of application, unless specified within a crop-specific application section for a given crop.

#### **MIXING INSTRUCTIONS**

To prepare the application mixture, add a portion of the required amount of water to the spray tank and with agitation, add Imidacloprid 4F. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. Imidacloprid 4F may also be used with other pesticides and/or fertilizer solutions. Please see **Compatibility** section of this label. When tank mixtures of Imidacloprid 4F and other pesticides are involved, prepare the tank mixture as instructed above and follow suggested **Mixing Order** below.

#### **Mixing Order**

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When pesticide mixtures are needed, add wettable powders or wettable granules first, Imidacloprid 4F and other suspension concentrate (flowable) products second, and emulsifiable concentrates last. Ensure good agitation as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer/pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

#### **Compatibility**

Test compatibility of the intended mixture before adding Imidacloprid 4F to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Do not use if poor mixing or formation of precipitates that do not readily redisperse occurs which indicates an incompatible mixture.

#### **CHEMIGATION**

**Types of Irrigation Systems:** Make foliar chemigation applications of Imidacloprid 4F to crops through overhead sprinkler systems if specified in crop-specific application sections. Make soil chemigation applications of Imidacloprid 4F only to crops through chemigation as specified in crop-specific application sections and only through low-pressure systems specifically listed for a given crop. Do not apply Imidacloprid 4F through any other type of irrigation system.

Make foliar chemigation applications of Imidacloprid 4F as concentrated as possible. Retention of Imidacloprid 4F on target site of insect infestation is necessary for optimum activity. Do not chemigate Imidacloprid 4F in water volumes exceeding 0.10 inches per 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, contact Cooperative 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.

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**Required System Safety Devices:** The system must contain a functional check valve, vacuum-relief valve, and lowpressure 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 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. 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 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 systems 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 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 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, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection. 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 fitted with a system interlock.

#### **ROTATIONAL CROPS\***

Replant treated areas 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 plantback 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), soybeans, and safflower

**10-MONTH PLANT-BACK:** 

Onion and bulb vegetables

12-MONTH PLANT-BACK:

All Other Crops

\*Plant cover crops for soil building or erosion control at any time, but do not graze or harvest for food or feed.

#### **FIELD CROPS**

#### **COTTON - soil treatment**

Pests Controlled	Rate: Fluid ounces per 1000 row-feet	Rate: Fluid ounces per acre
Cotton aphid, Plant bugs,	0.65	8.5 –10.55
Thrips, Whiteflies		(depending on row-spacing)

#### **Restrictions:**

- Maximum Imidacloprid 4F allowed per crop season when making soil applications: 10.55 fluid ounces per acre (0.33 lb. active ingredient per acre).
- Regardless of formulation or method of application, apply no more than 0.5 lb. active ingredient per acre per season, including seed treatment, soil, and foliar uses.
- Do not apply more than a total of 6 applications of the active ingredient per season.
- Do not graze treated fields after any application of Imidacloprid 4F. See **RESISTANCE MANAGEMENT** section of this label.

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

- In-furrow spray during planting directed on or below seed.
- In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting.
- Chemigation into root zone through low-pressure drip or trickle irrigation.

#### **COTTON - foliar treatment**

Pests Controlled		Rate: Fluid ounces per acre
1 2 11 2	Bandedwinged whitefly, Plant bugs n stink bug, Southern green stink bug, oct)	1-2
Pest Suppressed		Rate: Fluid ounces per acre
Lygus bug ( <i>Lygus hesperus</i> ), Whi whitefly)	teflies (other than bandedwinged	1.52-2
<ul> <li>(0.31 lb. Al per acre)</li> <li>Regardless of formulation or me season, including seed treatme</li> <li>Do not graze treated fields after</li> <li>Apply Imidacloprid 4F through p</li> <li>Do not apply more than a total of Applications: Apply specified rat populations begin to build. Thoro adjuvant to improve coverage. Im Two applications may be required</li> </ul>	ications: 7 days yed per crop season when making folia ethod of application, apply no more tha nt, soil, and foliar uses. r any application of Imidacloprid 4F. properly calibrated ground, aerial, or ch of 6 applications of the active ingredier e per acre as a broadcast or directed to ugh uniform coverage is necessary to nidacloprid 4F may not knock down est	nemigation application equipment. In per season. Foliar spray to an infested area as pest achieve optimum control. Use a spray ablished and heavy insect populations. e-treat if needed. Tank mix Imidacloprid
	Tank Mix Instructions	
Pests Controlled (in addition to	Imidacloprid 4F	Bidrin® 8*
pests listed above)	Rate: Fluid ounces per acre	Rate: Fluid ounces per acre
For early-season control of: Thrips	1-1.52	1.6-3.2
For mid- to late-season control of: Plant bugs, Stink bugs (including Brown stink bug), Grasshoppers, Saltmarsh caterpillar, Cotton leafperforator		4.0-8.0
<b>Restrictions (in addition to Restr</b>	<b>ictions listed above):</b> bel for specific use directions. Observe	all restrictions and precautions that

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## **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Open dumping is prohibited.

**PESTICIDE STORAGE:** Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Do not store diluted spray.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL:**

Nonrefillable Container (five gallons or less): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### LIMITATION OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES AND LIMITATIONS OF LIABILITY**.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Makhteshim Agan of North America, Inc. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Makhteshim Agan of North America, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Makhteshim Agan of North America, Inc. disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Makhteshim Agan of North America, Inc.'s election, the replacement of product.

## Imidacloprid 4F **INSECTICIDE**

ACTIVE INGREDIENT	% BY W
Imidacloprid; 1-[(6-Chloro-3-pyridinyl)methyl	]-
N-nitro-2-imidazolidinimine	42.3%
OTHER INGREDIENTS:	<u>57.79</u>
TOTAL	100.0%

Contains 4 lbs. of active ingredient per gallon

### **KEEP OUT OF REACH OF CHILDREN** CAUTION

#### EPA Reg. No. 66222-156

FIRST AID		
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poi- son control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>	
IF ON SKIN OR Clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	

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. IF INHALED: Move person to fresh air. • If person is not breathing, call 911 or an ambulance; then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact PROSAR at 1-877-250-9291 for emergency medical treatment information. NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.

For additional precautionary, handling, and use statements, see inside of this booklet.



Manufactured for: **Makhteshim Agan** of North America, Inc. 4515 Falls of Neuse Road Suite 300 Raleigh, NC 27609 Notif 111010/Rev A

EPA Est. No. 37429-GA-001<sup>BT</sup>; 37429-GA-002<sup>BO</sup> Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

## **Net Contents: 1 Gallon**

EPA 081309/