

# **Seed Treatment**

For early season protection of seedlings against insect injury and soilborne diseases for barley, wheat, and oats.

ACTIVE INGREDIENT:	
Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl)alanine methyl ester	
Tebuconazole: Alpha-[2-4(chlorophenyl)ethyl]-alpha-(1,1-dimethyl-ethyl)-	
1H-1,2,4-triazole-1-ethanol	
Fludioxonil: 4-(2,2-Difluoro-1,3-benzodioxol-4-yl)-1H-pyrolle-3-carbonitrile	
OTHER INGREDIENTS:	
TOTAL:	100.00%
Contains:	

1.00 pound Imidacloprid per gallon (120.0 grams per liter)

0.05 pound Metalaxyl per gallon (6.4 grams per liter)

0.04 pound Tebuconazole per gallon (4.8 grams per liter)

0.03 pound Fludioxonil per gallon (3.84 grams per liter)

# KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

### SEE INSIDE BOOKLET FOR FIRST AID, ADDITIONAL PRECAUTIONARY STATEMENTS, AND DIRECTIONS FOR USE

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

EPA REG. NO. 55146-119 EPA EST. NO. 228-IL-002 Manufactured For NUFARM AMERICAS INC. AGT DIVISION 11901 S. Austin Avenue Alsip, IL 60803



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

Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance selection chart.

#### Applicators and other handlers must wear:

•Long-sleeved shirt and long pants,

•Shoes plus socks,

•Chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), Viton).

**Note:** Persons involved in bagging treated seed, sewing or moving bags of treated seed, or cleaning up bagging areas or seed treatment equipment are pesticide handlers and must wear the PPE required on this label for pesticide handlers.

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/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.

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 the poison control center or doctor.</li> <li>DO NOT give anything to an unconscious person.</li> </ul>			
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 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 ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</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 by mouth- to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>			
HOT LINE NUMBER				
	ainer or label with you when calling a poison control center or doctor, or going for treatment. You may also contact nergency medical treatment information.			

## PHYSICAL AND CHEMICAL HAZARDS

DO NOT place product near or allow product to come into contact with strong oxidizing substances (such as potassium permanganate).

## **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to birds and aquatic invertebrates. This pesticide is toxic to fish. For terrestrial uses, do not apply directly to water, or 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. Exposed treated seeds may be hazardous to birds. Cover or incorporate spilled treated seeds.

Imidacloprid is highly toxic to bees. Ensure that planting equipment is functioning properly in accordance with manufacturer specifications to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.

**Groundwater Advisory:** Metalaxyl is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

## **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 only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry 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 **24 hours**.

Exception: If the seed is treated with the product and the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinylchloride (PVC) or Viton.
- Shoes plus socks.

# **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. The following plant-back intervals must be observed for listed crops.

ROTATIONAL PLANT-BACK INTERVALS*						
	30-DAY PLANT-BACK					
Artichoke	Crambe	Oats	Soybean	Cereals, including		
Barley	Cucurbits	Okra	Strawberry	buckwheat		
Borage	Eggplant	Pepinos	Sugarbeet	rice		
Brassica (cole)	Flax	Pepper	Sunflower			
leafy vegetables	Groundcherry	Popcorn	Tomatillo			
Bulb vegetables	Leafy petiole vegetables	Potato	Tomato			
Canola	Leafy vegetables	Rapeseed	Triticale			
Cilantro	Legume vegetables	Rye	Root and Tuber			
Corn, Field	(succulent or dried,	Safflower	vegetables			
Corn, Sweet	including Soybean)	Sorghum	Watercress			
Cotton	Millet		Wheat			
Cranberry	Mustard seed					

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

\* For all other crops not listed on an imidacloprid label, or for crops for which no tolerance for the active ingredient has been established, a 12-month plant-back interval should be observed.

**NOTIFICATION** of the crop rotational restriction must be conveyed to the grower by appropriate seed tag labeling or bag printing on all seed units.

## **USE RESTRICTIONS**

- **DO NOT** use as a planter (hopper) box treatment.
- **DO NOT** use treated seed for feed, food, or oil purposes.
- Store treated seed away from feeds and foodstuffs.
- **DO NOT** allow children, pets, or livestock to have access to treated seed.
- The maximum application rate for imidacloprid (including seed treatments, foliar applications, soil applications) is 0.5 lbs per acre per year.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Exposed treated seed may be hazardous to birds. Cover or incorporate spilled treated seed. Excess or leftover seed may be doublesown around the headland or buried away from bodies of water in accordance with local requirements.

## SEED TREATMENT

This product is a combination of Imidacloprid insecticide and a mixture of the fungicides Metalaxyl, Tebuconazole, and Fludioxonil. When used on listed crops, the fungicide mixture in this product provides more consistent control when disease pressure is high. This product aids in the control or suppression of the following insects, seed, seedling and soilborne diseases of Barley, Wheat, and Oats.

CROP	INSECT / DISEASE CONTROL	RATE
Barley	<b>Insect Control:</b> Early season protection of seedlings against injury by Aphids (including Bird cherry-oat, English grain, Greenbug, and Russian wheat aphid) and Wireworms. <b>Disease Control:</b> Seed decay caused by <i>Aspergillus, Penicillium,</i> and other species. Early season disease control of <i>Pythium</i> damping-off and Covered smut, Loose smut, Barley stripe (suppression), Early season <i>Rhizoctonia</i> root rot, Early season common root rot, Early season <i>Fusarium</i> foot rot, Early season suppression of powdery mildew and Early season suppression of barley leaf rust.	3.4 to 5.0 fluid ounces
Wheat and Oats	<ul> <li>Insect Control: Early season protection of seedlings against injury by Aphids (including Bird cherry-oat, English grain, Greenbug, and Russian wheat aphid), Wireworms and Hessian fly.</li> <li>Disease Control: Seed decay caused by <i>Aspergillus, Penicillium,</i> and other species. Early season disease control of <i>Pythium</i> damping-off, Stinking smut, Flag smut, Loose smut, Early season <i>Septoria</i> disease complex, Early season <i>Rhizoctonia</i> root rot, Early season common root rot, Early season <i>Fusarium</i> foot rot, Early season suppression of powdery mildew and early season suppression of wheat leaf rust.</li> </ul>	per 100 pounds of seed

**APPLICATION DIRECTIONS:** Apply prior to planting as a slurry treatment. This product is to be used in liquid or slurry treaters only. Mix thoroughly before use or use entire container at one time. Ensure thorough coverage. All tank mixes should be pre-tested to determine physical compatibility between formulations. Follow the most restrictive precautions and limitations on the labeling of all products used in mixtures.

RESTRICTIONS: DO NOT graze or feed livestock on treated areas for 45 days after planting.

# SEED BAG LABELING REQUIREMENTS

Seed commercially treated with this product must be labeled in accordance with all applicable requirements of the Federal Seed Act. The user of this product is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEEDS BE LABELED WITH THE FOLLOWING STATEMENTS:

- This seed has been treated with SATIVA IMF MAX (imidacloprid, metalaxyl, tebuconazole, fludioxonil).
- **DO NOT** use for feed, food, or oil purpose.

THE US ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON BAGS CONTAINING SEEDS TREATED WITH SATIVA IMF MAX (imidacloprid, metalaxyl, tebuconazole, fludioxonil):

- **Pollinator Precautions**: Imidacloprid is highly toxic to bees. Ensure that planting equipment is functioning properly in accordance with manufacturer specifications to minimize see coat abrasion during planting to reduce dust which can drift to blooming crops or weeds.
- **Groundwater Advisory**: Metalaxyl is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and chemical resistant gloves when handling treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Exposed treated seed may be hazardous to birds. Cover or incorporate spilled treated seeds. Excess or leftover seed may be doublesown around the headland or buried away from bodies of water in accordance with local requirements.
- Dispose of seed packaging in accordance with local requirements.
- DO NOT graze or feed livestock on treated areas for 45 days after planting.
- DO NOT contaminate water bodies when disposing of planting equipment wash water.

- DO NOT allow children, pets, or livestock to have access to treated seed.
- In the event of a crop failure or harvest of a crop grown from SATIVA IMF MAX treated seed, the field may be replanted immediately to artichoke, barley, borage, Brassica (cole) leafy vegetables, bulb vegetables, canola, cilantro, corn (field or sweet), cotton, cranberry, crambe, cucurbits, eggplant, flax, groundcherry, leafy petiole vegetables, leafy vegetables, legume vegetables (succulent or dried including soybean), millet, mustard seed, oats, okra, pepinos, pepper, popcorn, potato, rapeseed, rye, safflower, sorghum, soybean, strawberry, sugarbeets, sunflower, tomatillo, tomato, triticale, root and tuber vegetables, watercress, and wheat. For cereals including buckwheat, and rice; the minimum plant-back interval is 30 days from the date SATIVA IMF MAX treated seed was planted. Cover crops for soil building or erosion control may be planted at any time; but do not graze or harvest for food or feed. For all other crops not listed on an imidacloprid label, or for crops for which no imidacloprid, tolerance for the active ingredient has been established, a 12-month plant-back interval must be observed.
- The maximum application rate (including seed treatment, foliar application, and soil application) per acre per year for imidacloprid is 0.5 lbs.
- This seed has been treated with \_X\_ lbs imidacloprid, \_X\_ lbs metalaxyl, \_X\_ lbs tebuconazole, \_X\_ lbs fludioxonil per \_X\_ lbs of seed [or \_X\_ mg per seed].
- Excess treated seed may be used for ethanol production only if (1) by-products are not used for livestock feed and (2) no measurable residues of pesticides remain in the ethanol by-products that are used in agronomic practice.

#### NOTE:

If this product is undyed, the purchaser of this product is responsible for ensuring that all seed treated with this product are adequately dyed with a suitable color to prevent its accidental use as a food for man or feed for animals. Refer to 21 CFR, Part 2.25. Any dye added to treated seed must be cleared for use under 40 CFR, Part 180.1001.

# STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool place, **DO NOT** store in direct sunlight. Protect from freezing temperatures.

**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 [HANDLING]:

**NOTE:** This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container disposal [handling] instructions below that apply to your container type / size.

#### [Nonrefillable Containers 5 Gallons or Less]

**Nonrefillable container. DO NOT** reuse or refill this container. Offer for recycling if available. Triple 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. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

#### [Nonrefillable containers larger than 5 gallons]

**Nonrefillable container. DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling if available. If recycling or reconditioning is not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

**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. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

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5

# STORAGE AND DISPOSAL

### [Refillable containers larger than 5 gallons]

**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. 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. For final disposal, offer for recycling if available. If recycling or reconditioning is not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

## WARRANTY DISCLAIMER

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