

# Sativa® IM RTU

### **Seed Treatment**

EARLY SEASON PROTECTION OF SEEDLINGS AGAINST WIREWORM AND SOILBORNE DISEASES FOR BARLEY, OATS, TRITICALE AND WHEAT.

#### **ACTIVE INGREDIENTS:**

Imidacloprid: 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	1.581%
Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl)alanine methyl ester	0.632%
Tebuconazole: Alpha-[2-4(chlorophenyl)ethyl]-alpha-(1,1-dimethyl-ethyl)-1H-1,2,4-triazole-1-ethanol	0.474%
OTHER INGREDIENTS:	97.313%
TOTAL:	100.000%

#### Contains:

- 0.13 pound Imidacloprid per gallon (16.0 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)

# 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 AND ADDITIONAL PRECAUTIONARY STATEMENTS

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

EPA Reg. No. 55146-111

Manufactured for Nufarm Americas Inc. AGT Division 11901 S. Austin Avenue Alsip, IL 60803





Net Contents
2.5 Gal.
(9.46 L)
Nonrefillable Container

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

Harmful if swallowed, Avoid contact with eyes, skin or clothing, Avoid breathing vapor or spray mist,

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants,
- · Shoes plus socks,
- Chemical-resistant gloves: barrier laminate or nitrile rubber ≥ 14 mils or neoprene rubber ≥ 14 mils or Viton ≥ 14 mils.

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	Call a poison control center or doctor immediately for treatment advice. DO NOT induce vomiting unless told to do so by the poison control center or doctor. DO NOT give any liquid to the person. DO NOT give anything by mouth to an unconscious person.			
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15 to 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 ON SKIN OR CLOTHING	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. 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 by mouth-to-mouth, if possible.     Call a poison control center or doctor for further 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 1-877-325-1840 for emergency medical treatment information.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to birds and aquatic invertebrates. 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.

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.

Maximum usage when applying both metalaxyl- and mefenoxam-containing products to the same crop within the same season: Do not apply more than the maximum yearly total application rate for the active ingredient as stated on the label of the product containing the lowest yearly total on that crop.

#### 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 any waterproof material.
- . shoes plus socks, and
- · protective eyewear

#### **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*						
IMMEDIATE PLANT-BACK				30-DAY PLANT-BACK		
Artichoke Barley Borage Brassica (cole) leafy vegetable Canola Cilantro Corn, Field Corn, Sweet	Cucurbits Eggplant Flax Ground cherry Leaf petiole vegetable Leafy vegetable Legume vegetable (succulent or dried, except sovbean)	Pepinos Pepper (including bell, chili, cooking, pimento and sweet) Popcorn Potato Rapeseed Rye	Strawberry Sugarbeet Sunflower Tomatillo Tomato Triticale Turnip Greens Veg. Root and Tuber Watercress	Cereals, including: buckwheat millet rice		
Cotton Crambe Cranberry	Mustard Seed Oats Okra	Safflower Sorghum Soybean	Wheat			

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

**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. DO NOT apply more than 0.5 lbs ai imidacloprid per acre per year.
- The maximum yearly total application rate for metalaxyl/mefenoxam for all applications (including seed treatments, foliar applications, soil applications) is 12.3 lb per acre per calendar year. DO NOT apply more than 12.3 lb total of the active ingredients, metalaxyl and mefenoxam per acre per calendar 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 double-sown around the headland or buried away from bodies of water in accordance with local requirements.

<sup>\*</sup> For all other crops not listed on an imidacloprid label, or for crops for which no tolerance for the active ingredient has been established, there is a 12-month plant-back interval.

#### SEED TREATMENT

This product is a combination of Imidacloprid insecticide and the systemic fungicides Metalaxyl and Tebuconazole. This product aids in the control or suppression of the following seed, seedling and soilborne diseases and wireworm activity on seed and young seedlings in Barley. Oats. Triticale and Wheat.

#### RESISTANCE MANAGEMENT RECOMMENDATIONS

Sativa® IM RTU contains imidacloprid, a Group 4a insecticide; tebuconazole, a Group 3 fungicides and; metalaxyl, a Group 4 fungicide. Imidacloprid belongs to the neonicitinoid class of chemistry. Tebuconazole belong to the DMI class of chemistry. Metalaxyl belongs to the phenylamide class of chemistry.

Pest populations may contain individuals naturally resistant to active ingredients in Sativa<sup>®</sup> IM RTU and if used repeatedly in the same fields, then resistant members may eventually dominate the population. Because resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies such as an alternation with insecticides and fungicides of a different mode of action and/or tank mixes established for the crop and use area.

Use should be based on an IPM program that includes field sanitation, scouting, historical information related to pesticide use, and crop rotation. The IPM program should also consider cultural, biological, and other chemical control practices.

Nufarm encourages responsible product stewardship to ensure effective long term control of the fungal diseases on this label.

For additional information on Fungicide Resistance Management:

- Contact Nufarm Americas Inc representatives at 1-800-345-3330
- Contact your local extension specialist or certified crop advisor.
- Visit the Insecticide Resistance Action Committee (IRAC) at <a href="http://www.irac-online.org">http://www.irac-online.org</a>. Visit the Fungicide Resistance Action Committee (FRAC) at <a href="http://www.frac.info">http://www.frac.info</a>

CROP	DISEASE OR INSECT	RATE
Barley	Diseases: Stinking Smut, Flag Smut, Loose Smut, Early Season Septoria Disease Complex,	5.0
Oats	General Seed rots, Pythium Damping-off, Early Season Rhizoctonia Root Rot, Early Season	fluid ounces
Triticale	Common Root Rot, Seedborne Fusarium Scab, Early Season Fusarium Foot rot, Early Season	per
Wheat	Suppression of Powdery Mildew and Rust.	100 Pounds of Seed
	Insects: Wireworm suppression on seed and seedling.	

APPLICATION DIRECTIONS: Apply using standard slurry or mist-type seed treatment equipment. In some instances, a water and chemical slurry dilution may enhance coverage. A 1 part Sativa® IM RTU with 1 part water dilution may be used. This product is for commercial or on-farm application. This product is not intended for direct application into a planter box. Uniform application to seed is necessary to ensure seed safety and best disease control. Seed should be sound and well cured prior to treatment. Consult your area agronomist regarding planting depth recommendations for the particular variety to be planted.

#### RESTRICTIONS:

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

#### 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.

#### 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 IM RTU (metalaxyl, tebuconazole and imidacloprid).
- 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 IM RTU (metalaxyl, tebuconazole, and imidacloprid):

- Pollinator Precautions: 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 and Tebuconazole are 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 highly toxic to birds. Cover or incorporate spilled treated seeds. Excess or leftover seed may be double-sown 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 bodies of water 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 IM RTU 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 IM RTU 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 per X lbs of seed for X mg per seedl.
- 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.
- DO NOT use empty seed bags for any other purpose.
- DO NOT store leftover treated seed where there is a chance of it becoming mixed with untreated seed.
- · Store treated seed in cool, dry conditions.
- Surface Water Advisory: This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to runoff that contains this product. A level, well maintained vegetative buffer strip between arest to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall if forecasted within 48 hours.

#### 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 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 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. 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 if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities, 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. 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. Turn the container over onto its other end and tip it back and forth several 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. 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 reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by State and local authorities, by burning. If burned stay out of smoke.

#### 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 disposaing of the container. Cleaning before refilling is the responsibility of the person disposaing of the container. Cleaning before refilling is the responsibility of the person 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

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAND (2) MANUFACTURER AND SELLER MAND (2) MANUFACTURER AND SELLER MAND (2) MANUFACTURER AND SELLER NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

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If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

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