METALAXYL	GROUP	4	FUNGICIDE
TEBUCONAZOLE	GROUP	3	FUNGICIDE
IMIDACLOPRID	GROUP	4	INSECTICIDE

# TEBUSTAR IN ST

# SPECIMEN LABEL

## **ACTIVE INGREDIENTS:**

Imidacloprid: 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-lidazolidinimine1.538%Tebuconazole: Alpha-[2-(4-chlorophenyl)ethyl]-alpha-0.461%(1,1-diimethyl-ethyl)-1H-1,2,4-triazole-1-ethanol0.461%Metalaxyl: N-(2,6-dimethylphenyl)-N-(methoxyacetyl)alanine methyl ester0.615%OTHER INGREDIENTS:97.386%TOTAL:100.00%

Contains 0.13 pound active ingredient of imidacloprid, 0.05 pound active ingredient of metalaxyl and 0.04 pound active ingredient of tebuconazole per gallon.

# KEEP OUT OF REACH OF CHILDREN

# **CAUTION**

See inside booklet for additional FIRST AID, PRECAUTIONARY STATEMENTS and complete DIRECTIONS FOR USE.

Seed Treater

Manufactured for: ALBAUGH, LLC 1525 NE 36th Street, Ankeny, IA 50021



FIRST AID				
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, 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 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
· ·	th you when calling a poison control center or doctor, or going for treatment.  ON Emergencies Call CHEMTREC toll free at 1-800-424-9300			

# **PRECAUTIONARY STATEMENTS**

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# **CAUTION**

Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wear protective eye wear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves (made of nitrile rubber >14 mils, butyl rubber >14 mils, neoprene rubber >14 mils, barrier laminate >14 mils, polyvinyl chloride (PVC) >14 mils and Viton >14 mils and
- Protective eyewear.

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:

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

# **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to birds and aquatic invertebrates and toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Exposed treated seeds may be hazardous to birds. In the event that treated seeds are spilled and cannot be salvaged, completely cover them with soil. Do not contaminate water when disposing of equipment washwaters or rinsate.

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.

# PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur.

# STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited. Do not reuse empty containers.

PESTICIDE STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in a cool dry location. Protect from excessive heat.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at your EPA regional office for guidance.

CONTAINER DISPOSAL: Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling, if available 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.

(non-refillable  $\leq$ 5 gallons): 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  $\frac{1}{4}$  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.

(non-refillable >5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ 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. 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.

Refillable containers: 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 the container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

# **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 agriculture 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 interval. 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 nitrile rubber >14 mils, butyl rubber >14 mils, neoprene rubber >14 mils, barrier laminate >14 mils, polyvinyl chloride (PVC) >14 mils and Viton >14 mils and
- shoes plus socks.

#### **RESTRICTION:**

- When applying both metalaxyl-containing 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.
- When using formulations that do not contain dye, to comply with 40 CFR 153.155, all seed treated with an economic poison must be colored to distinguish and prevent subsequent inadvertent use as a food for man or feed for animals.

Allow seed to dry before bagging.

Store away from feed and foodstuffs.

#### SEED BAG LABEL REQUIREMENTS

The Federal Seed Act requires that bags containing pesticide treated seeds shall be labeled with the following statements;

- This seed has been treated with TEBUSTAR® IM ST (Imidacloprid, tebuconazole, and metalaxyl).
- Do not use for feed, food or oil purposes.
- User is responsible for ensuring that the seed bag meets all requirements under the Federal Seed Act.

In addition, the U.S. Environmental Protection Agency requires the following statements on bags containing seeds treated with TEBUSTAR® IM ST:

- Store away from food and feedstuffs.
- Wear long-sleeved shirt, long pants and chemical-resistant gloves when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seed spilled during loading.
- Dispose of all excess treated seed. Leftover treated seed may be doublesown around the headland or buried away from water sources in accordance with local requirements. Do not contaminate water bodies when disposing of planting equipment wash waters.
- Do not allow children, pets, or livestock to have access to treated seed.
- Treated seed must be planted into the soil at a depth greater than 1 inch.

# **PRODUCT INFORMATION**

TEBUSTAR® IM ST is a combination of the insecticide, Imidacloprid and the systemic fungicides, Tebuconazole and Metalaxyl that aid in the control or suppression of the following seed, seedling and soilborne diseases of wheat, barley, oats and triticale:

stinking smut, flag smut, loose smut, early season Septoria disease complex, general seed rots, Pythium damping-off, early season Rhizoctonia root rot, early season common root rot, seedborne Fusarium scab, early season Fusarium foot rot,

early season suppression of powdery mildew and rust.

Imidacloprid offers suppression of wireworm activity on seed and young seedlings.

Restriction: Do not graze livestock on treated areas for 45 days after planting.

# **RESISTANCE MANAGEMENT**

TEBUSTAR® IM ST contains three active ingredients from the following fungicide and insecticide groups:

- Imidacloprid, a Group 4A insecticide in the neonicitinoid family that binds to the insect's nicotinic acetylcholine receptors of the nervous system.
- Tebuconazole, a Group 3 fungicide in the triazole family that is a DeMethylation Inhibitor (DMI) and affects fungal biosynthesis.
- Metalaxyl, a Group 4 fungicide in the phenylamide class of chemistry which interferes with fungal RNA synthesis.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of TEBUSTAR® IM ST or other Group 3 and Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.

- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Albaugh representatives at 1-800-247-8013 or at www.albaughllc.com.

Due to the minimal amount of TEBUSTAR® IM ST applied to the seed that relocates to the upper parts of the plant and the multiple modes of action, the potential for development of resistance is reduced. Seed treatments of TEBUSTAR® IM ST can therefore be followed by foliar use and resistance management guidelines of foliar use fungicides containing the same modes of action as specified on the respective labels.

### **Resistance Management Recommendations**

TEBUSTAR® IM ST contains fungicide active ingredients with two distinct modes of action. Any fungal population may contain individuals naturally resistant to TEBUSTAR® IM ST, and other Group 3 and Group 4 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but specific for individual chemicals, such as enhanced metabolism, may also exist.

Appropriate resistance-management strategies should be followed. To delay the development of fungicide resistance:

- Applications Adhere to the label use directions regarding the consecutive use of TEBUSTAR® IM ST fungicide seed treatment or other target site of action Group 3 and Group 4 fungicides that have a similar site of action on the same pathogens.
- Integrated Pest Management (IPM) Integrate TEBUSTAR® IM ST into an overall disease and pest management program. Follow cultural practices known to reduce disease development. Consult your local extension specialist, certified crop advisor and/or Albaugh representative for additional IPM strategies established for your area. TEBUSTAR® IM ST may be used in Agricultural Extension advisory (disease forecasting) programs, which recommend application timing based on environmental factors favorable for disease development.
- Monitoring Monitor efficacy of all fungicides and insecticides used in the pest management program against the targeted pathogens and insects and record other factors that may influence performance and/or disease development.
- Reporting If a Group 3 or Group 4 target site fungicide or Group 4 insecticide, such as TEBUSTAR® IM ST, appears to be less or no longer effective against a pathogen
  or insect that it previously controlled or suppressed, contact a Albaugh representative, local extension specialist, or certified crop advisor to assist in determining the
  cause of reduced performance.

# **APPLICATION DIRECTIONS**

Wheat, Barley, Oats, Triticale:

Use 5 fluid ounces\* of TEBUSTAR® IM ST per 100 pounds of seed. Apply TEBUSTAR® IM ST using standard slurry or mist-type seed treatment equipment. In some cases, a water and chemical slurry dilution may enhance coverage. A 1 part TEBUSTAR® IM ST with 1 part water dilution may be used. This product is for commercial or on-farm application. Do not apply directly into planter boxes. Uniform application to seed is necessary to ensure seed safety and best pest control. Seed must be sound and well cured prior to treatment. Consult your area agronomist regarding planting depth recommendations for the particular variety to be planted.

\*5 fluid ounces of TEBUSTAR® IM ST contains 0.005 lbs of imidacloprid, 0.002 lbs of metalaxyl and 0.0015 lbs of tebuconazole active.

# **ROTATIONAL CROPS**

Treated areas may be replanted with any crop specified on the TEBUSTAR® IM ST label, or for any crop which a tolerance exists for Imidacloprid, 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	Cranberry	Mustard seed	Sugar beet	Cereals
Barley	Cucurbits	Okra	Tomatillo	(Including, buckwheat,
Brassica (cole)	Eggplant	Pepinos	Tomato	millet, oats, popcorn, rice,
leafy	Ground cherry	Pepper	Triticale	and rye)
Veg.	Leaf petiole veg.	Popcorn	Turnip greens	Safflower
Canola	Leafy veg.	Potato	Veg. Root and Tuber	
Cilantro	Legume veg. (succulent or	Rapeseed	Watercress	
Corn, Field	dried, including Soybean)	Sorghum	Wheat	
Corn, Sweet		Strawberry		
Cotton				

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

# **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If items 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.

Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of Albaugh, LLC. no claims are made to guarantee germination of carry-over seed.

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 Albaugh, LLC. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALBAUGH, LLC MAKES NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILTY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Albaugh, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. ALBAUGH, LLC 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 FORM 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 ALBAUGH, LLC'S ELECTION, THE REPLACEMENT OF PRODUCT.

<sup>\*</sup> 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 must be observed.