



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 4, 2021

Carolyn Miter
Registrations Specialist
Albaugh, LLC
P.O. Box 2127
Valdosta, GA 31604

Subject: Registration Review Label Mitigation for Metalaxyl and Fludioxonil
Product Name: ST Pre-mix #1
EPA Registration Number: 42750-326
Application Dates: 6/22/2018 and 12/7/2020
Decision Numbers: 568552 and 568469

Dear Ms. Miter:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Metalaxyl and Fludioxonil Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Quinn Gavin by phone at 703-347-0325, or via email at gavin.quinn@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Linda Arrington', with a long horizontal flourish extending to the right.

Linda Arrington, Branch Chief
Risk Management and Implementation Branch 4
Pesticide Re-Evaluation Division
Office of Pesticide Programs

Enclosure

METALAXYL	GROUP	4	FUNGICIDE
FLUDIOXONIL	GROUP	12	FUNGICIDE

ST PRE-MIX #1

Broad-spectrum seed treatment fungicide for protection against certain seed and seed-borne diseases of legumes.

ACTIVE INGREDIENTS:

Fludioxonil:*	1.81%
Metalaxyl**:	11.42%
OTHER INGREDIENTS:	86.77%
TOTAL:	100.00%

*CAS No. 131341-86-1 **CAS Nos. 57837-19-1

Contains 0.16 pound active ingredient of fludioxonil and 1.02 pound active ingredient of metalaxyl per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See additional precautionary statements and directions for use inside booklet.

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> Immediately call a poison center or doctor. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> 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. Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER - For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

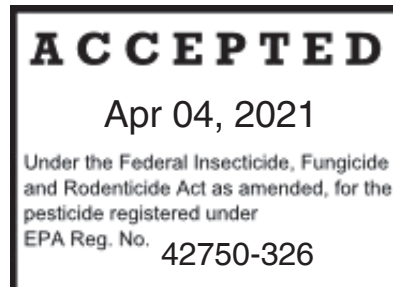
See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 42750-326

EPA Est. No. 42750-MO-002

NET CONTENTS: ____ Gals.

Manufactured By:
ALBAUGH, LLC
ANKENY, IA 50021



PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. 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.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves: made of butyl rubber, nitrile rubber, or polyvinyl chloride
- Shoes plus socks

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.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems 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:

1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
2. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean 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 clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to freshwater and estuarine/marine fish and aquatic invertebrates. Do not contaminate water when disposing of equipment washwater or rinsate.

Groundwater Advisory Statement: 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 AND CHEMICAL HAZARDS

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

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, 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 48 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:

1. Coveralls
2. Chemical-resistant gloves: made of butyl rubber, nitrile rubber, or polyvinyl chloride
3. Shoes plus socks

Failure to follow the directions for use and precautions on this label may result in crop injury, poor disease control, or illegal residues.

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 test 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.

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.

PRODUCT INFORMATION

ST PRE-MIX #1 is a seed treatment fungicide that protects against damping-off and seed rots due to *Pythium*, *Phytophthora*, *Fusarium*, *Rhizoctonia* spp., and early season *Phytophthora* root rot in legumes. ST PRE-MIX #1 also suppresses seed-borne *Sclerotinia* and *Phomopsis* spp., particularly in soybeans. ST PRE-MIX #1 contains the active ingredient metalaxyl that provides protection against *Pythium* and early

season Phytophthora root rot.

ST PRE-MIX #1 also contains the active ingredient fludioxonil that provides protection against certain soil-borne and seed-borne diseases of crop plants. Fludioxonil is active against *Fusarium*, *Rhizoctonia*, *Helminthosporium*, and weakly pathogenic fungi such as *Aspergillus* and *Penicillium*.

RESISTANCE MANAGEMENT

GROUP	4	12	FUNGICIDES
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ST PRE-MIX #1 contains metalaxyl, a Group 4 fungicide, and fludioxonil, a Group 12 fungicide. Metalaxyl belongs to the phenylamide class of chemistry which interferes with fungal RNA synthesis. Fludioxonil belongs to the phenylpyrrole class of chemistry which interferes with osmotic signal transduction.

Fungal populations may contain individuals naturally resistant to Group 4 or 12 fungicides 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 alternation with fungicides with a different mode of action and/or tank mixes established for the crop and use area.

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

- Rotate the use of (name of product) or other Group (mode of action group number) 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.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- 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 an Albaugh, LLC representative at 1-800-247-8013 or at www.albaughllc.com.

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.

ALBAUGH 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 your local extension specialist or certified crop advisor.
- Contact your Albaugh, LLC representative.
- Visit the Fungicide Resistance Action Committee (FRAC) on the web at: <http://www.frac.info>.

All applications should be made according to the use directions that follow.

MIXING INSTRUCTIONS FOR SOYBEANS

ST PRE-MIX #1 is formulated as a commercial seed treatment to be used with liquid rhizobia products, using standard mechanical slurry or mist-type seed treatment equipment which accurately measures and mixes a flowable seed treatment. The equipment must provide uniform coverage of ST PRE-MIX #1 on the seed. Uneven seed coverage may not give the desired level of disease control. ST PRE-MIX #1 must be diluted with either water or liquid inoculants prior to application to soybeans. Consult the manufacturer of the application equipment you plan to use for suitability for this application and for instructions on operation and calibration of the equipment.

Do not mix ST PRE-MIX #1 fungicide with other pesticides unless sufficient compatibility, loading rates, and seed and crop safety factors are determined. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

In a clean container large enough to contain the entire mixture add the desired amount of ST PRE-MIX #1. Add half of the required water or liquid inoculant and mix thoroughly. Add the remaining amount of water or liquid inoculant and mix again. The slurry is ready for application to the soybeans. Mix as needed and do not store diluted mixture.

Additional or continuous agitation or mixing of the slurry mixture may be necessary to prevent the ST PRE-MIX #1 from settling out of solution when using water or liquid inoculants.

ST PRE-MIX #1 has been found to be compatible with some liquid inoculant products. ST PRE-MIX #1 may be mixed or applied sequentially with approved liquid inoculants. Consult the maker of the liquid inoculants and a Albaugh, LLC representative for directions before applying ST PRE-MIX #1 with liquid inoculants.

Special Precaution:

ST PRE-MIX #1 is formulated to be compatible with some liquid inoculants. If water is used to further dilute ST PRE-MIX #1 when rhizobia are present, use only nonchlorinated water. Chlorinated water will kill the live rhizobia contained in the inoculant.

MIXING INSTRUCTIONS FOR OTHER LEGUMES

Apply ST PRE-MIX #1 as a water based slurry utilizing standard slurry seed treatment equipment which provides uniform seed coverage. Uneven or incomplete seed coverage may not give the desired level of disease protection. Thoroughly mix the specified amount of ST PRE-MIX #1 into the required amount of water for the slurry treater and dilution rate to be used.

Follow the manufacturer application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the treatment. Allow seed to dry before bagging.

CROP USE DIRECTIONS

Crop	Target Diseases	Use Rate (fl. oz./100 lb seed)
Soybeans	Seed rot, seedling blight, pre and post-emergence damping-off caused by <i>Fusarium</i> spp., <i>Rhizoctonia</i> spp. and <i>Pythium</i> spp. Early season <i>Phytophthora</i> spp. Seedling blight and seed rot caused by <i>Phomopsis</i> spp. Suppression of seed-borne <i>Sclerotinia</i>	2.0*
LEGUMES Chickpea (garbanzo bean) Lentils Peas (<i>Pisum</i> spp.) Beans (<i>Lupinus</i> spp.) (<i>Phaseolus</i> spp.) (<i>Vigna</i> spp.) (fava bean)	Seed rot, seedling blight, pre and post-emergence damping-off caused by <i>Fusarium</i> spp., <i>Rhizoctonia</i> spp. and <i>Pythium</i> spp.	2.0*

*2 fluid ounces of ST Pre-Mix #1 contains 0.016 lbs of metalaxyl and 0.0025 lbs of fludioxonil active.

Peas: (dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, dry pea, snow pea, sugar snap pea) Pigeon pea, Sword bean.

Beans:

- Bean (*Lupinus* spp.) grain lupin, sweet lupin, white lupin, white sweet lupin
- Bean (*Phaseolus* spp.) field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean
- Bean (*Vigna* spp.) adzuki bean, asparagus bean, black-eyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean)
- Broad bean (fava bean)
- Guar
- Jackbean

If the target soybean fields have a history of high *Phytophthora* pressure then use a tank mix with additional metalaxyl seed treatment product. Alternatively, approved liquid rhizobia inoculants at rates recommended by manufacturer to achieve proper total slurry volumes can be used.

Where mefenoxam/metalaxyl products used allow the same maximum poundage of active ingredient per acre per calendar year:

If more than one product containing mefenoxam/metalaxyl active ingredient is used on an acre during the same calendar year and the mefenoxam/metalaxyl products used allow the same maximum poundage of active ingredient per acre per calendar year, then the total poundage of all such mefenoxam/metalaxyl products used must not exceed any of the specified individual mefenoxam/metalaxyl product maximum poundage of active ingredient allowed per acre per calendar year.

Where mefenoxam/metalaxyl products used allow different maximum poundage of active ingredient per acre per calendar year:

If more than one product containing mefenoxam/metalaxyl active ingredient is used on an acre during the same calendar year and the mefenoxam/metalaxyl products used allow different maximum poundage of active ingredient per acre per calendar year, then the total poundage of all such mefenoxam/metalaxyl products used must not exceed the lowest specified individual mefenoxam/metalaxyl product maximum poundage of active ingredient allowed per acre per calendar year.

USE RESTRICTION: 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.

SEED CONTAINER LABEL REQUIREMENTS

The Federal Seed Act requires that containers of treated seeds shall be labeled with the following statements:

- This seed has been treated with metalaxyl and fludioxonil fungicides.
- Do not use for feed, food, or oil purposes.

In addition, the U.S. Environmental Protection Agency requires the following statements on containers of seeds treated with ST PRE-MIX #1:

- Ground Water Advisory: Metalaxyl is known to leach through soil into groundwater under certain conditions as a result of label use.
- Fludioxonil has properties and characteristics associated with chemicals detected in groundwater. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.
- 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 pesticide remain in the ethanol by-products that are used in agronomic practice.
- Do not allow children, pets, or livestock to have access to treated seed.
- Store away from feeds and foodstuffs.
- Wear long-sleeved shirt, long pants and Chemical-resistant gloves: made of butyl rubber, nitrile rubber, or polyvinyl chloride when handling treated seed.
- Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading and planting.
- Treated seed must be planted into the soil at a depth greater than 1 inch.
- Dispose of all excess treated seed by burying away from bodies of water.
- Do not contaminate water bodies when disposing of planting equipment washwaters.
- Dispose of seed packaging in accordance with local requirements.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in original containers only in a cool, dry place. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Open dumping is prohibited. 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 of the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Non-refillable 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. 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. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ALBAUGH, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold ALBAUGH, LLC and Seller harmless for any claims relating to such factors.

ALBAUGH, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or ALBAUGH, LLC, and (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, ALBAUGH, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall ALBAUGH, LLC be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ALBAUGH, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES,**

INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ALBAUGH, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ALBAUGH, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of ALBAUGH, LLC.

032221

LABEL HISTORY

Not Part of Final printed Label

File Name	Version Mark	Comment
042750-00326.20180622.DRAFT	062218	Registration Review
042750-00326.20201204.DRAFT	120420	EPA Comment Revisions
042750-00326.20210322.DRAFT	032221	2 nd EPA Comment Revisions